# THE R.C.A.F. OVERSEAS

THE SIXTH. YEAR

# With a Foreword by

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#### **PREFACE**

Preceding volumes in this series have traced the immortal record of the R.C.A.F. overseas from February î940 to the end of August 1944. This third volume deals with the final surge forward by the Allies to the complete collapse and final surrender of the Nazis in May 1945, followed three months later by the capitulation of their Japanese partners. It completes the story of the operational activities of the R.C.A.F. squadrons overseas in the great war against totalitarianism.

The three volumes have traced the growth of the R.C.A.F. overseas from the small contingent of 1940 to the powerful, well-balanced force it had become by the close of the conflictthe fourth largest air force fighting in the Allied cause. The volumes have presented the record of this force in the British Isles, North Africa, Sicily, Italy, France, Belgium, Holland, Germany, Ceylon, Burma and Iceland, and over the broad waters of the Indian and Atlantic Oceans. They have told the story of what our squadrons accomplished in all kinds of climate, all kinds of weather and under a variety of conditions of hardship. They make no pretense of covering the almost superhuman efforts of the heroic ground crew who made these achievements possible. nor do they attempt to deal with the deeds of those many thousands of Canadians who, either as members of the R.C.A.F. or as officers and airmen of the R.A.F., fought and bled in every part of the world to which the war in the air was carried. Their pages do not record the work of that gallant band of women, the W.D.s, some of whom also gave their lives for their country, and all of whom lived and worked under the same conditions as their brothers-in-arms wherever they were.

The three volumes were not planned as, nor do they profess to be, a history of the R.C.A.F. The plan of the work did not embrace the British Commonwealth Air Training Plan, the essential foundation for victory in the air; it did not include the activities of the operational commands of the R.C.A.F. at home which, if less wellknown than those of the units overseas, were nevertheless important in safeguarding our shores and protecting our shipping routes. The first volumes were written while the war was still in progress and, in consequence, were limited in discussion of tactics or strategy. Little cognizance has been taken of German or Italian records which are only now becoming available and without which a truly historical account cannot be presented

While the end of the war brought a considerable relaxation of security controls it has been deemed advisable, for the sake of uniformity, to continue the use of squadron nicknames. In some instances, especially where no nickname exists, squadron numbers have been used in this volume. To aid in the identification of units a list of nicknames with squadron numbers has been included

As in previous volumes a roll of honour has been appended, together with a list of orders, decorations and medals bestowed on R.C.A.F. personnel and on those members of other Air Forces who served with R.C.A.F. squadrons.

Ranks and decorations mentioned in the text are those held at the time of the incident described, and do not include subsequent promotions or awards.

All photographs are taken from the R.A.F. and R.C.A.F. and are in every instance Crown Copyright. Ranks given in the captions are, as a rule, those held on August 31st, 1945, or, in the case of deceased personnel, those shown on the day of their death.

The Historical Section of the R.C.A.F. wishes to express its appreciation for the help received from those many officers and men who compiled and kept so faithfully the records upon which these three volumes have been founded. Grateful acknowledgement is also made to those who participated in the events described in this volume and who generously reviewed the manuscript and made many valuable suggestions.

#### **FOREWORD**

The R.C.A.F. Overseas: 'The First Four Years narrated the activities of the operational squadrons of the Royal Canadian Air Force overseas from February, 1940, to the end of August, 1943. The second volume, The R.C.A.F. Overseas: The Fifth Year, carried the story through to September, 1944. Now this, the third and last volume, presents the record of what our men did in bringing the conflict to its triumphal conclusion. It is based on the diaries maintained by every fighting unit, but it differs slightly from the other volumes in that some of the controls, exercised for security reasons, have now been relaxed. With the others it forms a trilogy that tells in simple language what was accomplished so heroically by Canadian airmen in almost every part of the world. The deeds of these men rank with those of their fathers who pioneered in Canadian military and naval aviation in the First World War. They are deeds of which Canada can be proud, unsurpassed as they are in the annals of any country in a cause that could not have been better. They are at once a consolation to the bereaved, an inspiration to our youth, and an incentive to all of us to be worthy of the sacrifices that were made. But for them our Canadian way of life would undoubtedly have perished and civilization would have rotted and decayed under a universal dictatorship.

It has not been possible to give the name of every airman who took part in the epic destruction of Nazism and it

is undoubtedly true that many deeds of great valour will never be known. Let those here described be taken as a measure for the rest and may the sacrifices made in the cause of Canadian freedom never be forgotten.

BROOKE CLAXTON

Ottawa, May, 1948.

# SQUADRON NICKNAMES

400 - City of Toronto	422 - Flying Yachtsmen
401 - Ram	423 -
402 - Winnipeg Bears	424 - Tiger
403 - Wolf	425 - Alouette
404 - Buffalo	426 - Thunderbird
405 - Vancouver	427 - Lion
406 - Lynx	428 - Ghost
407 - Demon	429 - Bison
408 - Goose	430 - City of Sudbury
409 - Nighthawk	431 - Iroquois
410 - Cougar	432 - Leaside
411 - Grizzly Bear	433 - Porcupine
412 - Falcon	434 - Bluenose
413 - Tusker	435 - Chinthe
414 - Imperials	436 - Elephant
415 - Swordfish	437 - Husky
416 - City of Oshawa	438 - Wild Cat
417 - City of Windsor	439 - Westmount
418 - City of Edmonton	440 - Beaver
419 - Moose	441 - Silver Fox
420 - Snowy Owl	442 - Caribou
421 - Red Indian	443 - Hornet

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# THE R.C.A.F. OVERSEAS THE SIXTH YEAR

### CHAPTER I

### INTRODUCTION

S the sixth year of the war in Europe opened, the tide of war had turned strongly in favour of the Allies and the forces of Nazism were slowly ebbing away. In the east the Russians had just crossed the German border and within a month the Western Allies were to invade the Reich also. To the south, the city of Marseilles had been captured and the Gothic line was crumbling under the hammer blows of the armies in Italy. The enemy was reeling but he was not yet knocked out.

The unqualified success of these operations, which made the defeat of Germany only a matter of time, permitted a reduction of ,the great air training establishment which had been built up in Canada. Already, by September, 1944, it was clear that requirements to meet future commitments were less than had been anticipated. In November the Minister of National Defence for Air was able to announce that Canada had sufficient aircrew on hand to man and support its own squadrons both at home and abroad "for a war of the same intensity as the present war with Germany and for a period as long as this war has lasted." Earlier in the year a gradual reduction had been started in the intake of pupils for the British Commonwealth Air Training Plan; the closing down of schools was accelerated through the winter of 1944-5, and the Plan was finally ter-

minated on March 31st, 1945.

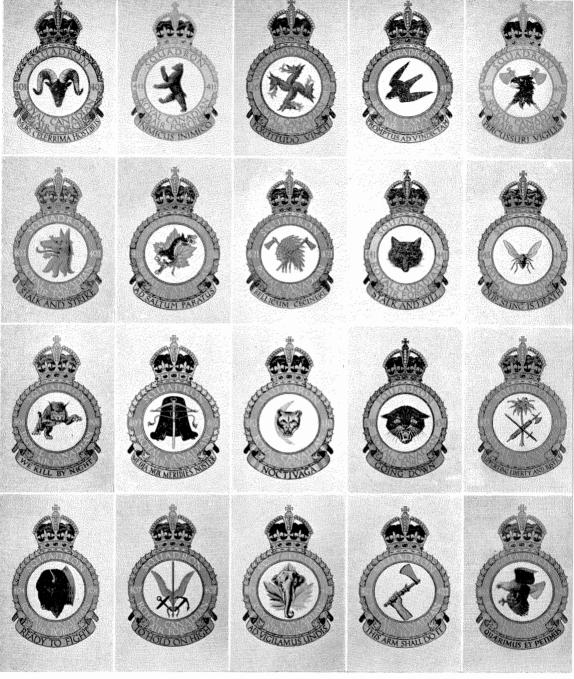
During the five years of its operation the B.C.A.T.P. had graduated 131,553 members of aircrew, of whom 55.4 per cent were members of the R.C.A.F., 32 per cent personnel of the R.A.F., 7.3 per cent of the R.A.A.F., and 5.3 per cent of the R.N.Z.A.F. It had trained pilots, navigators, air bômbers, wireless operator-air gunners, air gunners and flight engineers. Among its graduates were pilots and air. gunners who wore the insignia of the Fleet Air Arm of the Royal Navy, and aircrew whose uniforms or shoulder badges represented many of the nations that had fallen under the Nazi voke and were now being liberated-Czechoslovakia, Poland, Norway, the Netherlands, Belgium and France. Canada's share of the cost of the Plan in money has been estimated at \$1,589,954,609.94. While the value of the B.C.A.T.P. had been called in question in the dark days of June 19.40, when it had been thought desirable to send every aircrew and aircraft to Britain for defence, wiser counsels had prevailed and the Plan had proved its worth in the growing tempo of the bomber attacks on German and German-held targets, in the air supremacy achieved by the fighter pilots, and in the effectiveness of the anti-submarine war.

In addition to its onerous and most important duty of administering and operating the B.C.A.T.P., the R.C.A.F. had built up two powerful forces of operational squadrons at home and overseas and, further, had contributed many thousands of air and ground crew for service with units of the R.A.F. The home-based units played an important part in the Battle of the Atlantic, flew defensive patrols off the Pacific coast, and shared in the operations in Alaska and the Aleutians. Overseas, R.C.A.F. squadrons, totalling 48 at the end of the war<sup>1</sup>, played their part with Bomber, Fighter,

<sup>&</sup>lt;sup>1</sup> This figure includes one squadron, No. 162, which operated overseas with Coastal Command, while remaining under the administrative control of Eastern Air Command of the R C A F



BADGES OF THE R.C.A.F. OVERSEAS: Nos. 405 and 408 Heavy Bomber Squadrons, No. 6 Group Headquarters, Nos. 419, 420, 424 and 425 Heavy Bomber Squadrons, No. 62 Base, Nos. 426, 427, 428, 429, 415, 431, 432, 433 and 434 Heavy Bomber Squadrons, Nos. 435, 436 and 437 Transport Squadrons.



BADGES OF THE R.C.A.F. OVERSEAS: Nos. 401 and 411 Fighter Squadrons, No. 126 (Fighter) Wing, No. 412 Fighter Squadron, No. 400 Fighter Reconnaissance Squadron, Nos. 403, 416, 421, 441 and 443 Fighter Squadrons, Nos. 406, 409 and 410 Night Fighter Squadrons, No. 438 Fighter Bomber Squadron, No. 417 Fighter Squadron, Nos. 404, 407, 413, 422 and 423 Coastal Squadrons.

Coastal and Transport Commands from the North Atlantic to the Indian Ocean and the jungles of Burma. It is the story of these 48 squadrons in the last year of the conflict that is told in this volume.

The R.C.A.F. Overseas, commanded in the. sixth year of the war first by Air Marshal L. S. Breadner, C.B., D.S.C., and then by Air Marshal G. 0. Johnson, C.B., M.C., was under the operational control of the R.A.F. Fourteen heavy bomber squadrons, comprising No. 6 (R.C.A.F.) Group, and one squadron operating with the Pathfinder Force were the R.C.A.F.'s contribution to Bomber Command. In Second Tactual Air Force R.C.A.F. units comprised half of No. 83 Group that operated on the continent in support of the British Second Army. There were nine day fighter squadrons organized in two wings, three fighter bomber squadrons constituting a third wing, and three fighter reconnaissance squadrons in a fourth wing. Another day fighter squadron remained in England, mostly in a defensive capacity, as part of Fighter Command. In addition, three night fighter squadrons carried out defensive patrols. from British or continental bases, against enemy night raiders and flying bombs. One intruder squadron patrolled enemy airfields and worked in cooperation with Bomber Command. This unit became a close support squadron in the winter of 1944 and its intruder duties were taken over by one of the night fighter squadrons. A transport squadron based in Great Britain carried supplies of all kinds to troops on the continent and also played a part in the great airborne operations at Arnhem and Wesel. Less well-known, because their career was brief, were three Air Observation Post squadrons formed only in the last months of the war. Commanded by Canadian Army officers and using Army pilots, though administered and maintained by R.C.A.F. ground personnel, these units were created to meet the needs of the Army in the field.

Of the six Coastal squadrons one, having completed its

work in Ceylon, returned to England early in 1945 Another, based in Iceland, patrolled the North Atlantic shipping lanes, while two more guarded the Northwestern and Southwestern Approaches. A fifth kept watch over the English Channel and the Irish Sea, and the sixth ranged the Norwegian fjords in search of enemy shipping.

In the Mediterranean and Far Eastern theatres, respectively, the R.C.A.F. had a day fighter squadron serving with the Desert Air Force in Italy, and two transport squadrons on the Burma front.

Operations in Europe ceased at midnight on May 8th, 1945, with the unconditional surrender of all the Nazi forces. Before V-E Day consideration had been given to the dispatch of some R.C.A.F. squadrons to the Pacific theatre and to the maintenance of others with the British Air Forces of Occupation for policing Germany. In accordance with these plans No. 6 Group Headquarters and eight heavy bomber squadrons returned to Canada, in June and July 1945, for refitting and training. The eight squadrons were to be equipped with the newest type aircraft, the Lincoln four-engined bomber, which was capable of taking on a heavier load of bombs and carrying them farther than had been possible with its predecessor, the Lancaster. Three transport squadrons were to be included., too, in this "Tiger Force" to ferry troops and supplies wherever they were needed in the widely dispersed Pacific theatre of operations. The sudden and dramatic end of the Japanese war, however, forestalled the dispatch of "Tiger Force" to the Far East

In Europe two of the remaining bomber squadrons were disbanded immediately after V-E day; four were transferred to No. 1 Group as part of the R.A.F.'s striking force, and the remaining bomber unit was equipped with Liberators and transferred to Transport Command. The bomber squadrons in the striking force were employed on bomb disposal, training, and carrying Army personnel to and from the Con-

tinent. The two transport squadrons, which had been operating in the Burmese theatre during the last months of the war, returned to Britain in the late summer of 1945 and joined with the third R.C.A.F. Dakota squadron in ferrying freight, mail and personnel to and from widely scattered bases in Europe.

In addition to the four bomber and four transport squadrons which were retained overseas, the R.C.A.F. contributed to the Army of Occupation a fighter wing of four squadrons and an A.O.P. unit. The fighter reconnaissance and fighter bomber wings were disbanded in August 1945. The other units in 2nd T.A.F. and Fighter Command, as well as all R.C.A.F. squadrons in Coastal Command, had ceased existence by October 31st of that year.

As conditions in Europe became more settled R.C.A.F. commitments overseas were gradually reduced. In October two bomber squadrons were disbanded, followed by a transport unit in December, and another transport squadron and the four squadrons of the fighter wing in March 1946. Three months later the last units, the A.O.P., two bomber and two transport squadrons, had been closed down.

Long before V-E and V-J Days the R.C.A.F. had grappled with the difficult problem of demobilization. The Force reached its peak strength in January 1944 when there were 215,200 men and women under arms. The trend of the war had made some contraction possible before the end of hostilities and on May 31st, 1945, the strength of the R.C.A.F. was 164,846 officers and other ranks, including 11,329 members of the Women's Division. The release of personnel was then accelerated, rising to a peak of almost 34,000 in October. By the end of March 1946 the strength of the Force had been reduced to 31,336 of whom 3165 were W.D.s. At the end of the year the last members of the Women's Division were released, and the Force had contracted to 18,843 officers and other ranks, of whom only 189 were still overseas at Headquarters in London or at-

tached to R.A.F. units.

To bridge the gap between the huge war establishment and the setting-up of a permanent peace-time force, provision was made to retain some personnel, over and above those in the Regular Force, for an "interim period" which terminated on September 30th, 1947. This allowed time for careful consideration of plans .for the postwar R.C.A.F. and tided the Force over the period in which releases were being effected.

The peace-time R.C.A.F. will consist of a Regular Force with an authorised maximum establishment of 16,100 officers and men, an Auxiliary of 4,500 and a Reserve of 10,000. The Regular Force will constitute a highly trained nucleus around which the R.C.A.F. can be expanded in time of national emergency, while the Auxiliary will provide a reserve of fully organized, manned and equipped units which can be mobilized quickly into a tactical air component for operations in conjunction with the Canadian Army, in the same way that R.C.A.F. wings formed a part of the 2nd Tactical Air Force during the war in Europe.

In the squadrons of the Regular and Auxiliary Air Forces the numbers and war-time associations of R.C.A.F. overseas squadrons will be perpetuated. The chapters which follow set forth some of the traditions of high achievement and devotion to duty which these peace-time squadrons inherit.

#### CHAPTER II

# NO. 6 BOMBER GROUP (AUTUMN 1944)

September 1944

HEN the sixth year of the war began No. 6 (R.C.A.F.) Group of Bomber Command had grown to fourteen squadrons, all equipped with Halifax or Lancaster heavy bombers. Group Headquarters, under A/V/M C. M. McEwen, C.B., M.C., D.F.C., was located at Allerton Park, near Knaresborough in Yorkshire. The squadrons were grouped in pairs on stations which were administered from three bases at Linton-onOuse, Leeming and Middleton St. George. Under No. 62 Base (A/C J. L. Hurley) there were six Halifax squadrons, Nos. 408 (Goose) and 426 (Thunderbird) at Linton, Nos. 420 (Snowy Owl) and 425 (Alouette) at Tholthorpe, and Nos. 415 (Swordfish) and 432 (Leaside) at Eastmoor. Four more Halifax squadrons were in No. 63 Base (A/C J. G. Bryans, who was succeeded in January 1945 by A/C F. R. Miller); Nos. 427 (Lion) and 429 (Bison) were at Leeming, and Nos. 424 (Tiger) and 433 (Porcupine) at Skipton-on-Swale. No. 64 Base (A/C R. E. McBurney, who was followed in December by G/C R. S. Turnbull, D.F.C., A.F.C., D.F.M., who a month later handed over to A/C C. R. Dunlap, C.B.E.) had two Lancaster squadrons, Nos. 419 (Moose) and 428 (Ghost) at Middleton St. George, and two Halifax

units, Nos. 431 (Iroquois) and 434 (Bluenose) at Croft. When the Group was operating at maximum strength it was capable of putting over 280 four-engined bombers into the air. Another R.C.A.F. heavy bomber squadron, No. 405 (Vancouver), was stationed at Gransden Lodge as a unit in the famed No. 8 (Pathfinder) finder) Group. Its Lancasters frequently helped to mark the target for No. 6 Group's heavies flying with the main bomber force.

As a whole, September 1944 was only a moderately busy month for the R.C.A.F. Bomber Group. But two features made the month's operations noteworthy. First was the fact that late in September the Group, in common with the others, in Bomber Command, was in some measure released from its tactical role in support of the army in Western Europe. Once again the heavy bombers were able to return to their strategical campaign against the industrial centres of the Reich which had been interrupted in the spring of that year, although they were still frequently called upon to attack tactical targets. Second was the preponderance of daylight operations. In the first period of the Group's existence (January 1943 to March 1944) the blackpainted Lancs and Rallies had made their attacks under cover of darkness. There were some exceptions when they ventured forth by day, but their normal habitat was the night sky. Now, for a time, night raids were the exception rather than the rule. September's daylight effort was highly successful and was accomplished with a remarkably low ratio of loss to the Canadian Group. Six aircraft were for record purposes shown as missing, but of this number three complete crews were saved when their kites ditched in the North Sea. In each of these three cases the crew was sighted and rescue effected by our own search aircraft. The loss in personnel, therefore, was only three crews or one tenth of one percent. This was probably due in large measure to the fact that no fighter opposition was offered during these operations. Significant too was the steady improvement registered by all branches in the Group which reached its acme in a record-breaking performance on the morning of the 27th when 285 aircraft were detailed for two missions and all took off.

Out of twenty raids undertaken by major R.C.A.F. forces in September nineteen were by day, the only exception being a night attack on Kiel in the middle of the month. Eleven raids were against tactical targets. Of the remaining nine, six were directed against synthetic oil plants and three against other strategic objectives. In addition to these forays in which large numbers of R.C.A.F. aircraft took part, small R.C.A.F. Pathfinder forces accompanied R.A.F. formations attacking a rocket storage depot at La Pourchinte on the 1st, Le Havre on the 5th, 6th and 8th, Frankfurt on the night of the 12th, Nordstern the following evening, Biggekerke on the 17th, Cap Gris Nez on the 26th and Bottrop on the 30th. Four Vancouver Pathfinders were lost, but the crew of one was safe.

Minelaying operations were also undertaken by the R.C.A.F. Group on three nights during the month.

The Group's activities opened on the 3rd with attacks on six aerodromes in Holland by nearly 650 aircraft, of which 100 were Canadian Halifaxes. Gilze-Rijen, Eindhoven, Venlo, Soesterberg, Deelen and Volkel were the specific airfields which were to be neutralized in preparation for the great airborne operation a fortnight later. Volkel, the objective assigned to No. 6 Group and a few Pathfinders, lay under 3/10ths cloud which did not interfere with visual identification by most crews. Those who could not pinpoint utilized the target 'indicators and the running commentary of the Master Bomber to good effect. When the bombers withdrew, all the runways were well plastered, many adjoining buildings hit and two ammunition dumps had exploded. The only defence offered was some light and heavy flak in the target area and along the route. No enemy aircraft were able to get airborne to protect their base.

In this attack the R.C.A.F. achieved almost machine-like precision with over 800 bombs dropped in the centre of the airfield. Of these, 50 were bang on one runway and 35 on the other, rendering them both unserviceable. Tarmac in all dispersal areas and on the taxi strips was seriously damaged, two aircraft shelters were wholly destroyed, five were 75 per cent destroyed, two half destroyed and one unroofed. In addition one repair hangar was three-quarters demolished, seven barracks and four other buildings were completely gutted or seriously damaged. The other airfields were also attacked with satisfactory results, the raids on GilzeRijen and Venlo being as outstanding as the one on Volkel.

It was on this raid that F/L R. J. M. Langlois of the Alouette Squadron won his gong. The official citation read, in part, as follows:

When nearing the target the aircraft was hit by anti-aircraft fire. A large piece of shell struck the casing of the port engine. Shortly afterwards the engine became useless. Some other damage had also been sustained but F/L Langlois continued to the target and executed a successful attack.

F/L S. H. Minhinnick of the Goose Squadron also got a D.F.C. for this operation.

It was three days before the Canadian heavies were out again when 140 of them aided by Pathfinders (seven of which were R.C.A.F.) were directed against Emden on Bomber Command's first major attack against this target in well over two years. This was also the first time a German port had been attacked in daylight for a very long time. On the same day Bomber Command made a larger tactical attack against gun positions in the beleaguered port of Le Havre, in which a few Canadian Pathfinder aircraft were involved

Emden was important not only as a harbour but also as the main entrance to the Ruhr Valley via the DortmundEms canal and the home of large shipbuilding and repair works. This was a most successful attack and extremely severe damage was inflicted on a very large scale throughout the city. There was an especially heavy concentration in the centre of the business and residential district of the old town which was virtually devastated, with nearly every building gutted by fire or destroyed.

In addition the Nordsee Werke, important builders of submarines, suffered very heavy loss when their engineering shops were seriously damaged and the foundry 50 per cent destroyed. Berkamer Kleinbohn, builders of steamships, also suffered major damage. In the city, the town hall and 74 out of 46 military installations were completely destroyed while major damage was done to the cattle market, municipal hospital, post and telegraph offices and the state bank. Following this raid, 80 per cent of the fully built-up area of Emden had been destroyed.

The target lay under light 10/10ths cloud at 18,000 feet but visibility was moderately good and the force bombed from between 14,000 and 19,000 feet. Early markers were scattered and soon obscured by smoke so the Master Bomber took over. Despite some radio interference, he directed expertly and achieved a good concentration of bombs on the docks, the inner harbour and adjacent industrial buildings. One stick straddled a 9,000 ton merchant vessel. Several small vessels and barges in various points of the harbour were sunk or grounded. The only defence was flak which was moderate over the target, but more active at Borkum and Juist. There was no fighter opposition against our wellcoordinated protecting cover and no Canadian aircraft were lost.

D.F.Cs: were awarded to F/Os A. L. Delaney of the Moose Squadron, J. C. Lakeman of the Bisons and W. T. G. Watson of the Porcupines for this foray and for general good work. The texts of the awards stated:

F/O Delaney's aircraft was repeatedly hit by pieces of shell. He himself was slightly wounded in the head. Despite this he directed his

pilot on a straight run over the target to execute a successful attack.

On the outward journey, many miles from the target, the starboard inner engine became unserviceable. Some height was lost but, undeterred, F/O Lakeman continued to the target and executed a successful attack. He afterwards flew the aircraft safely back to base.

When crossing the English coast on the outward flight, F/O Watson was compelled to feather the propeller of the port inner engine when the oil cooler became defective. Despite the loss of engine power F/O Watson continued to the target and executed his attack.

On the 9th the R.C.A.F. Heavy Bomber Group began a series of tactical attacks on German pockets of resistance in France which continued, with few interruptions, throughout the month. The Group was out in force against Le Havre on three occasions, the 9th, ioth and 11th; Calais four times on the 10th, 24th, 25th and 26th; Boulogne on the 17th and Cap. Gris Nez on the 28th. Domburg in Holland was the objective on the 23rd after abortive sorties had been made against this target on the 18th and 19th. During the same period the R.C.A.F. Pathfinders contributed to six tactical raids.

On September 5th Bomber Command made the first of seven attacks in a week against Nazi forces holding on to Le Havre. R.C.A.F. heavies or Pathfinders took part in six of the seven operations. W/C H. A. Morrison, D.F.C., of the Canadian Pathfinder Squadron, who was Master Bomber for the attack on the 8th which was made through 7-8/10ths cloud at 2,000 feet, saw that the green target indicators were off the aiming point. After telling the main force to orbit until the markers and possibilities of a successful attack in the difficult weather conditions could be assessed. Morrison did a let down but while on his fourth run and still in broken cloud his aircraft was hit by at least three bursts of flak which did serious damage and started a fire. As the Lanc had become uncontrollable, Howie ordered the crew to bale out and was himself the last to leave the aircraft at Boo feet. Of the crew, the skipper, F/Ls L. W. Queale, D.F.C., R. A. Swartz, D. F. C. and R. B.

Baroni, D.F.C., WO: G. J. D'Arcy and FSs R. Benabo and R. Matcham (R.A.F.) landed safely in our lines while WO W. Kubiak'landed behind the German lines and was held a prisoner for five days until Le Havre was captured by Allied forces. Morrison was awarded the D.S.O.

The next operation against Le Havre on the 9th was abortive due to 10/10ths cloud and all except the Pathfinders had to bring back their loads. The following day two forces totalling 1,000 aircraft were airborne, to which the R.C.A.F. contributed over 200. Cloud cover was patchy but, aided by some visual identification, efficient marking and excellent control by the Master Bomber, a good concentration of bombs was built up and smoke and dust soon obscured the aiming points. Flak was negligible and no fighter cover was needed as once again no enemy aircraft came to the defence of the garrison. There were no casualties.

Following this attack much fresh damage was noted in the besieged port with one very close concentration of craters just to the east of the centre of the town and very heavy general damage to the business and residential section and to barrack buildings. Two artillery batteries were completely demolished while four others suffered from near misses. In addition a stretch 600 yards wide from the beach to the south of the target area was well plastered.

In the final attack on the morning of the 11th, the R.C.A.F. contributed one quarter of a force of over 200. Once again opposition was extremely light and no losses occurred. Weather was clear over the target with excellent visibility and the first crews bombed after visual identification of the aiming point. When smoke partially obscured a second aiming point the Master Bomber gave instructions to cease bombing with the result that 29 of our aircraft abandoned the mission. Other crews however orbited until they saw fresh T.I.s descending around the target area. The Master Bomber gave instructions to bomb on these and a

good concentration was achieved. The next day the Nazi garrison surrendered to a British Division of the Canadian Army.

From Le Havre the attack shifted to Boulogne where another German force was invested by the Canadians while stubbornly clinging to the port. On the 17th Bomber Command sent out a force of nearly 800 heavies to soften the enemy's defences. The R.C.A.F. provided over 200 aircraft, one of which did not return. This kite, flown by F/O J. M. Prentice of the Bisons, picked up some flak which put both starboard engines out of action, holed the wing and started a fire. When the blaze spread the crew baled out over the sea. Another Bison bomber (captain, F/O M. Lanin) witnessed the incident and immediately sent out calls for help. Lanin remained circling over the scene to direct rescue aircraft. A Walrus landed on the sea, picked up the seven men and transferred them to a high speed launch which took them to an English port.

The raid was spread out over the whole morning and was carried out at first under clear skies which closed to 8/10ths cloud before the last waves bombed. Marking was excellent and bombing well concentrated, with the aircraft, when necessary, coming below the clouds to drop their loads. Around most of the aiming points the craters were grouped so thickly as to obliterate roads, buildings and trench systems. In addition two rail bridges and a road bridge had collapsed and many small buildings around the Mont Lambert radar station had been destroyed, while locks and quays in the dock area had suffered substantial damage. Six days later the Canadian Second Corps captured the port and its garrison of 10,000 Nazis.

The attacks on Calais were likewise for the purpose of reducing strong points in the area to open the way for the capture of the port. Here too, extreme accuracy was necessary owing to the nearness of our own troops. Of 630 aircraft which attacked five aiming points on the 10ththe

R.C.A.F. Group supplied 105 on two of the targets. The Vancouver Squadron also contributed twelve aircraft for the Pathfinders. The area was partially covered by cloud when the attack commenced but this dispersed before bombing was oompleted and the majority of crews were able to pinpoint their objectives. Aided by well placed markers, a good concentration was registered on all five APs. No Canadian aircraft were missing.

A force of 190 aircraft set out in the early evening of the 24th to attack more objectives in the Calais district. There was 10/10ths cloud in the target area, with cloud base at about 2000 feet and good visibility below. Many of the crews, including those from the R.C.A.F. Group, bombed below the overcast and achieved a nice patern on three of the five aiming points. The attack on the others was abandoned, however, due to the heavy ground defences which were encountered at the extremely low bombing height. Nevertheless there were no R.C.A.F. casualties.

On the following day, of 875 aircraft that were despatched 575 had to abandon the attack as the low cloud which had covered the target on the previous day still persisted during the first part of the morning. By 10.30 a.m., however, it had cleared somewhat and later waves containing 240 R.C.A.F. aircraft dropped their bombs through breaks in the clouds and achieved a fair concentration under difficult conditions. Again no Canadian crews were lost.

The assault was renewed on the 26th when a force of 725 including 170 R.C.A.F. crews was directed against a series of strong points around Calais and in the Cap Gris Nez area. At the opening of the raid weather conditions were excellent and well-placed markers drew accurate bombing, but before the last wave arrived the weather had deteriorated considerably. Although the defences were negligible, W/C C. W. Palmer, D.F.C., the Commanding Officer of the Vancouver Squadron, was lost with his crew of F/Ls W. Goddard (R.A.F.), A. J. Wilcock, D.F.C., and H. J.

Anderson, D.F.M., F/Os C. E. Laishley (R.A.F.), W. G. Peacock and I. Lauckner, D.F.C. and P/O F. J. A. Frey. Three of the crew who evaded capture, Wilcock, Anderson and Lauckner, stated that while over the target the aircraft was hit in bomb bays, caught fire and crashed. They were the only survivors.

The Calais raids brought three D.F.Cs. and a D.F.M. to members of the R.C.A.F. F/L L. R. Van Kleeck of the Lions and F/Os J. Y. A. Cote and J. R. St. Germain, G.M., of the Alouettes got the D.F.C., while Sgt. J. D. Hamilton of the Leasides, who was later commissioned, was awarded the D.F.M.

Two days later the Calais and Cap Gris Nez defences were visited again by a force of 500 Bomber Command aircraft, following an attack on the 27th in which the R.C.A.F. was not involved. The 250 R.C.A.F. bombers were directed against Cap Gris Nez to attack six defended positions. Cloud and poor visibility made things extremely difficult for the Master Bombers and consequently a proportion of the attacking force was instructed to abandon its task. Bombing generally was accurate and concentrated on the markers on four of the six aiming points. On the 30th Calais fell to the Canadian Second Corps.

The measure of success achieved by these heavy bombardments may be judged from the following message sent by Lt. General H. D. G. Crerar, C.B., D.S.O., G.O.C. in C., First Canadian Army to Air Chief Marshal Sir A. T. Harris, K.C.B., O.B.E., A.F.C., A.O.C.-in-C., Bomber Command:

Our total casualties in the capture of Calais and Gris Nez were under 300 and over 1,000 prisoners were captured. Considering the strength of the defences such a success would have been impossible but for the accurate, consistent and timely effort of Bomber Command.

I hope you will accept my sincere appreciation of all you did for us and pass on to your staff and aircrews and ground staffs my thanks for their indispensable share in this very satisfactory operation. I hope your casualties were light. The last in the series of tactical targets were gun emplacements at Domburg on Waicheren Island, against which a small R.C.A.F. force was directed in two waves on the 23rd. Marking and bombing were good in both attacks. Defences were negligible, consisting solely of slight flak. Photographic interpretation showed a good concentration of bomb craters in the target area, though there were no direct hits on the gun emplacements.

In addition to these operations in direct support of the army the R.C.A.F. played a large part in six attacks of the sustained R.A.F. offensive against synthetic oil plants in Germany. Canadian bombers took part in raids against Castrop-Rauxel on the zith, Wanne-Eickel and Dortmund on the following day; BottropWelheim and Sterkrade-Holten on the 27th and Sterkrade again on the 30th. A few R.C.A.F. Pathfinders joined large forces of the R.A.F. in another attack on Nordstern on the 13th and Bottrop on the 30th.

Castrop-Rauxel was an important centre for synthetic oil, nitric acid and ammonia and had two important tar distillation plants. It was attacked by 105 Canadian Hallies, with a few Pathfinders, in weather that permitted visual identification. This, combined with clear-cut and concise directions from the Master Bomber, produced an excellent pattern of bursts and many explosions, one of which was particularly noteworthy. Flak defences were moderate to intense around the target which was crowned by a column of heavy black smoke as our bombers withdrew. The synthetic oil plant, which was the main target, suffered moderate though general damage with some roofs stripped and others holed. In addition there was minor damage to a coking plant.

The work of S/L B. S. Imrie of the Bluenose Squadron on this raid was cited when he was awarded the D.F.C.

His aircraft was hit by anti-aircraft fire before and during the bombing run, resulting in the stoppage of oil to the starboard outer engine and damage to the main fuel supply to the starboard engine. Both engines ceased to function. The aircraft lost height and was repeatedly hit by anti-aircraft fire. Nevertheless S/L Imrie maintained complete control and his task was completed successfully.

Leaving the target the aircraft was again hit and the elevator control rod partly severed. S/L Imrie reached base safely, where on inspection, forty-two holes were found in the aircraft.

P/O J. Vine of the Swordfish Squadron was also decorated for his work on this attack as was F/O R. A. St. Amour of the Alouettes. F/O M. J. Laderoute, who had completed one tour as a wireless operator/air gunner and was on his second tour with the Bluenose Squadron, was killed by flak during the raid, while flying with F/O George Halcro, a pilot also on his second tour.

On the 12th, Wanne-Eickel lay under an effective smoke-screen when the main body—a force of 100 heavies supplied by the R.C.A.F. Group and led by a few Pathfinders—arrived, so that only the earlier crews were able to bomb visually. The majority of the sticks were accurately placed, though there was some spread to the north-west. Defence consisted of moderate to intense flak in a light barrage around the target area. Though the damage done separately by this and two raids by the U.S.A.A.F. a day or two earlier was not great, the cumulative effect was considerable, and superficial damage was widespread.

F/O J. W. Abell, navigator for F/L R. R. Haw of the Iroquois Squadron, was awarded a D.F.C. for his part in this raid. Though incapacitated by severe wounds in the legs he continued to give expert advice with the result that the pilot was able to bring the aircraft back to base. Another D.F.C. winner was F/O W. C. Kent of the Thunderbirds, whose citation stated in part:

During the bombing run over the target the port outer engine was hit by anti-aircraft fire but F/O Kent continued with his task and then set course for home. Over the German border the starboard inner engine and oil pressure began to fail. The aircraft lost height. When over the North Sea this engine began to lose power but with great skill, F/O

Kent brought the aircraft and its crew safely back to base.

F/O V. T. Woods of the Vancouvers won his gong for a similar feat

During the bombing run, the aircraft was hit by anti-aircraft fire and sustained severe damage but the attack was pressed home. Two petrol tanks had been punctured and, as the bomber turned away from the target, ,a third was pierced. On the homeward flight, F/O Woods used the engines with great skill thus conserving a certain amount of petrol. As the enemy coast was crossed the last remaining tank was pierced. The situation was serious but this pilot succeeded in flying to within four miles of the English coast before the engines failed through lack of petrol. Even so, F/O Woods managed to reach an airfield on the coast and effect a successful crash landing.

F/Os J. L. A. L. Marcotte of the Alouettes and G. J. Quinlan of the Iroquois Squadron were also decorated for this attack.

Among the four crews missing from Wanne-Eickel were two R.C.A.F. A veteran group from the Thunderbirds included F/L P. L. Buck, A.F.C., F/Os R. W. Walter and W. Sloan, FSs K. J. Dugdale and J. M. Deluca, Sgts. P. S. Twynam and H. P. Rose (both of the R.A.F.). It was later learned that Walter, Sloan, Dugdale, Deluca, Twynam and Rose were prisoners. Their aircraft was hit over Holland by predicted flak which knocked the port outer engine off the wing and damaged the port inner, also injuring the skipper and the navigator. They were all able to bale out but F/L Buck died of his injuries. Sloan, the bomb aimer, was captured by soldiers as he landed and taken to Dordrecht and thence to Frankfurt where he was kept in solitary confinement. He was interrogated and, as he refused to give any information beyond his name, was threatened with a long term of solitary confinement or execution. After four days imprisonment Sloan was finally sent to Stalag Luft I in Pomerania where he was released by the Russians on May 1st, 1945. Dugdale, the mid-upper gunner, was arrested when he hit the ground but escaped the guard and remained

with the underground until December 1944 when he tried to get through to the Allied troops. He failed in his first attempt, got through the enemy lines on his second try but aroused suspicion and was recaptured.

The second R.C.A.F. crew was captained by F/O A. Sovran of the Vancouver Squadron and consisted of F/Os V. Crawford, C. J. Robinson, WO L. G. Hardy, FS G. R. Dyelle, Sgts. K. W. Clarke and T. H. Peers (R.A.F.). Four of the seven, Sovran, Peers, Robinson and Clarke, were made prisoners and on their liberation told a story which reads like a fairy tale. Their aircraft was hit by flak, the port wing broke off and the Lanc went into a violent spin. Sovran (pilot), Peers (flight engineer) and Robinson (air bomber) were hurled into the nose of the aircraft. Then the bomber exploded in the air, stunning all the survivors. The pilot recovered to find himself falling free and pulled his ripcord at about 8,000 feet. When Peers came to he found himself still in the nose which had broken off the aircraft. Pulling himself to the edge, he fell out and opened his parachute. Robinson also recovered consciousness in the nose at about 1,000 feet with his parachute, which he had been trying to put on before the aircraft blew up, still in his hand. He had time to clip on his chute and throw himself out as he pulled the ripcord. He landed heavily and dislocated his hip. Clarke, the tail gunner, was thrown free by the explosion. When he came to he saw bits of the aircraft and the dinghy falling beside him. He opened his parachute and floated safely to the ground.

Dortmund was also attacked on the 12th by 102 Canadian aircraft plus some Pathfinders. Good weather prevailed and generally speaking the bombs were well concentrated on the target, though there was some tendency to spread to the west. Numerous fires and explosions, one of which was particularly large, broke out and thick billowing smoke hung over the target. Intense heavy flak in barrage form was put up but no fighters appeared. All our aircraft

returned. Damage was scattered through the synthetic oil plant and a rolling mill just west of the target was gutted.

Bottrop-Welheim was attacked on the 27th by 160 heavies, including soiree Pathfinders, through complete cloud cover which made it difficult to assess results. However, one very large explosion occurred, followed by dense black smoke. All aircraft returned from the operation.

F/O C. M. Hay, a navigator of the Leaside Squadron, put up a wonderful show on this raid which was his third operational trip and received a well merited D.S.O. His citation stated:

While over the target the pilot was severely wounded and lost control of the aircraft which went into a dive. Displaying great presence of mind, F/O Hay took over the controls and succeeded in levelling out. Although inexperienced as a pilot and despite the fact that some of the instruments were unserviceable, he flew the aircraft back to an airfield and landed. On touching down the under-carriage collapsed and the aircraft caught. fire but the crew got clear uninjured.

F/L J. A. Anderson of the Moose Squadron was also awarded the D.S.O. for outstanding skill and persistence on this attack

When over the target intense anti-aircraft fire was encountered. F/L Anderson's aircraft was hit repeatedly by fragments of shrapnel. Both port engines were put out of action. The hydraulic system was rendered unserviceable. The controls were so damaged that it became necessary for two members of the crew to assist their captain by pulling manually on the rudder controls. In spite of this, F/L Anderson executed a good bombing run. He afterwards flew the. severely damaged aircraft to base where he effected a masterly landing.

F/O A. P. McKillop, a member of Anderson's crew, was awarded the D.F.C. for his valuable assistance on the return journey, during which he sustained severe burns to his hands.

One hundred and forty Halifaxes from the R.C.A.F. Group led by a small Pathfinder force ventured forth against another oil target on the same day when the Ster-

krade-Holten synthetic oil and nitrate plant was attacked. Here again weather conditions were unfavourable and many bombed the alternative target at Duisburg. Defences were moderate and no aircraft were lost.

Both targets were again attacked on the last day of the month with the R.C.A.F. Group participating only in the foray against Sterkrade. Once again, owing to difficult weather conditions, the majority of the bombers on instructions of the Master Bomber attacked the alternative objective, Sterkrade town. Explosions followed by black smoke resulted, but the attack was scattered. Several aircraft which did attack the primary reported two oil tanks on fire. F/Os B. A. Mawhinney and K. K. Davis of the Iroquois Squadron were awarded D.F.Cs. for their work on this raid.

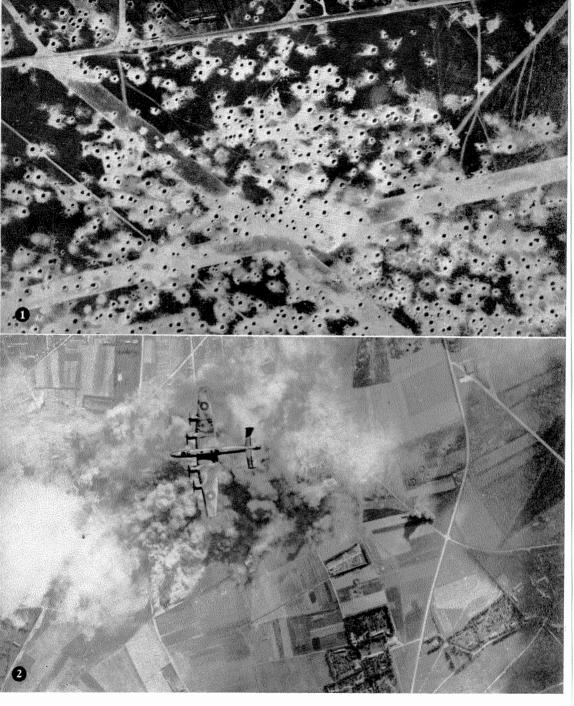
FS D. E. Turnquist, navigator of an aircraft missing from the Thunderbird Squadron, stated that they were hit by flak after bombing the alternative target and that the aircraft blew up before he had time to bale out. He was stunned and when he regained consciousness in mid-air there was nothing to be seen of the aircraft. The other members of the crew were F/Os T. Frederickson (pilot) and A. N. Nicholson, FS I. T. Pelechaty and G. E. Ryan, and Sgts. V. A. McPhee and J. Sullivan (R.A.F.). Nicholson was wounded and captured; the others were lost.

Two aiming points in Osnabrück were attacked by 100 Canadian Hallies, plus Pathfinder aircraft, on the 13th. Thanks to the good weather the crews were able to verify the aiming points and markers visually and an excellent attack developed which caused an extensive area of devastation in the town centre, west of the main station and spreading eastward to the Klockner Werke A.G., which was severely damaged. Other damage was seen in the marshalling yard, railway workshops, the main post-office and the gas works. Defences were slight and there were no casualties.

F/L J. Y. A. Cote, of the Alouette Squadron, was



(1) G/C A. F. Avant, D.S.O., D.F.C., of Houghton, Sask. (2) A/V/M C. M. McEwen, C.B., M.C., D.F.C., A.O.C. No. 6 Group. (3) W/C H. A. Morrison, D.S.O., D.F.C., of Lauder, Man. (4) W/C D. C. Hagerman, D.F.C., of Saskatoon. (5) W/C C. W. Palmer, D.F.C., of Dundalk, Ont. (6) F/L J. A. Anderson, D.S.O., D.F.C., of Winnipeg. (7) F/L C. S. Walker, D.F.C., of Windsor, Ont. (8) W/C V. F. Ganderton, D.F.C., of Edmonton. (9) F/Os J. L. King of Toronto and T. G. Tustin of Big Valley, Alta. (10) P/O M. Gravel of Donnelly, Alta., and his skipper, S/L W. R. Moseley-Williams of North Bay.



(1) Volkel airfield after the attack by No. 6 Group on September 3rd, 1944.
(2) A Halifax on its bombing run over Le Havre.

awarded a bar to his D.F.C. for this raid. The official citation said:

When over the target the bomber was subjected to fire from the ground defences. A shell burst very close to one of the wings. Fragments of shell tore a large hole in the fuselage which was also pierced in many other places. Despite this, F/L Cote pressed home his attack with great coolness and determination.

The only night operation of the month on which a large R.C.A.F. force was airborne was against Kiel on the 15th/16th. The total force numbered 500 of which 200 were Canadian. Weather was clear with good visibility hampered by a smoke screen, though the well-placed markers were always clearly visible through the smoke. Bombing generally was good and, when the aircraft withdrew, fires covering an area of four square miles were rapidly taking hold and could be seen for 100 miles. Smoke rose to 10,000 feet from an enormous explosion in the dock area. Flak was moderate and a few night fighters were in evidence but, thanks to the tactics employed by the bombers, the raid was over before any defence in force could be organized.

Losses were light. However, an experienced crew from the Vancouver Squadron, skippered by F/L R. W. Long, was posted missing, as well as two aircraft from 6 Group. W/O J. Raike was the only other Canadian in Long's crew. The Leasides lost P/O J. C. Gallagher, F/O J. E. G. Leblanc, and Sgts. H. N. McLeod, J. G. G. A. Labelle, C. D. Crowe, D. R. MacCarthy and C. F. Gill (R.A.F.). F/L V. G. Motherwell of the Snowy Owls, with F/Os A. J. MacDonald and I. E. McGowan and FS L. K. Engemoen, Sgs. J. A. Wigley, J. L. Hickson, J. Porter and T. J. Bibby in his crew, was just 100 miles on the homeward journey when the hydraulic system went unserviceable, the undercart and flaps dropped and the bomb doors opened. With great difficulty Motherwell maintained height for an hour and a half but was then forced to ditch. Emergency signals and S.O.S.

were sent out by the wireless operator. Two Halifaxes from their own squadron aided by Air/Sea Rescue Hudsons finally found the dinghy and two A/S/R Walruses were despatched to assist. One of the Walruses landed and picked up the lads while a Hudson made contact with a rescue motor launch and guided it to the Walrus. A successful transfer was made to the R.M.L. and all eight survivors finally reached port. Motherwell was awarded the D.F.C. and Engemoen, the wireless operator, the D.F.M. F/O W. V. A. Glover of the Goose Squadron was also awarded a D.F.C. for his work on this raid as was W/C F. S. McCarthy of the Snowy Owls.

Kiel, the chief naval dockyard and arsenal in Germany, was frequently attacked as it was a high priority target. The total damage inflicted by this attack, together with one by Bomber Command on August 26th/27th and another by the U.S.A.A.F. on August 30th, was very extensive. The areas of destruction ran out from the city marshalling yard along the east bank of the harbour to the suburb of Heinkendorf, a distance of about 6 miles, and along the west bank to the residential area of Ranensburg, about 21/2 miles. In the east the three great shipbuilding yards and the important naval arsenal which formed the city's vital industries were hard hit. Among military targets, the large munitions depot at Monkeberg was burnt out and damage was caused to a marine stores depot and several barrack areas. On the western bank of the harbour an area including the old town, the modern shopping centre and the business and residential districts of the city was devastated by fire. Almost twothirds of the buildings in the fully built up parts of the town were by then either destroyed or seriously damaged. Further severe residential damage was also seen, in the shipyard workers' dwellings east of the big shipyards and in the suburbs of Strand and Monkeberg.

Minelaying operations during September were limited to three nights. Among the reasons for the paucity of. sorties in this period was the fact that the number of "Gardens" available had been considerably reduced owing to the rapid advance of the Allied armies.

Unglamorous and workaday though gardening was, it still had its moments of excitement. On the night of September 12th, F/O R. R. Kingsland of the Bisons was mining enemy waters in Oslo Fjord, when flak damaged both outer engines. The starboard outer propeller sheered off, hitting and rendering the starboard inner propeller u/s, then passed over the fuselage and tore away most of the port fin and rudder. Fire broke out in the starboard inner engine, but was extinguished. Kingsland, however, was unable either to maintain height or hold his course and found it necessary to ditch. Throughout the whole operation, P/O J. H. R. Courtois, the wireless operator, remained at his post sending out distress signals until ordered to ditching position. The pilot brought his aircraft down almost as if it had been a practice ditching rather than the real thing, and all seven crew members scrambled into the dinghy. The WOP's "Mayday!" was picked up at 0140 and Air/Sea Rescue Warwicks and a high-speed launch were despatched. Bison aircraft also assisted in the search. Sixteen hours after the S.O.S. was received the H.S.L. had all seven of the crew aboard. but shortly after found herself out of fuel and a second H.S.L. had to be sent out. It was 1105 hours on the 14th, 33 hours after ditching, before both launches with the Halifax crew aboard arrived at a Scottish port. Kingsland and Courtois were awarded D.F.C.s for this incident and general good work. The other crew members were F/O R. A. Thorne and Sgts. R. J. McCallum, D. R. Russell (R.A.F.), J. A. Denley and P. Nabozniak.

Three R.C.A.F. squadrons changed C.O.s during the month. In the Vancouvers W/C H. A. Morrison, D.S.O., D.F.C., succeeded Palmer who was missing from operations against Cap Gris Nez on the morning of the 26th; W/C E. M. Bryson who had taken over command of the

Lions from W/C J. G. Cribb on August 3ist was followed by W/C V. F. Ganderton, D.F.C., on September 30th; W/C J. K. MacDonald reassumed command of the Leaside Squadron on September 29th, vice W/C A. D. R. Lowe. MacDonald had gone missing in August but evaded capture and returned to England.

The Leaside Squadron had a very successful month in September when they set up a record in the Canadian Bomber Group for the lowest number of non-starters and early returns because of mechanical trouble. Over 225 aircraft were sent out on their bombing missions during the period.

## October 1944

During the six months, April-September, 1944, the German home front had enjoyed a virtual respite from bombing, since tactical commitments absorbed over 85 per cent. of Bomber Command's effort during the period. As a result, the feverish efforts of the Nazi leaders to revive vital war production by patching up bombed factories and providing emergency accommodation for thousands of homeless workers made headway in many halfruined cities during the spring and summer of the year. Thus, whilst the German armies were reeling back across France and Belgium, their heavy losses of war material were partly offset by a relative increase in the supply of new equipment coming from reorganized industry at home.

This period of calm for the home front ended in October. From then on the bombing of industrial centres continued with the greatest possible intensity, although many other demands still had to be met according to military requirements. The German people saw descending upon their industrial regions a storm of devastation which surpassed anything they had previously thought possible. For a time they appeared to watch passively, but—despite the grip of the Gestapo—social disruption, dislocation of essential ser-

vices and administration, combined with widespread industrial damage, brought them to the point where they knew defeat was inevitable. Truly, the Nazis had "sown the wind" during their blitz on England and were now "reaping the whirlwind".

In October the Canadian Bomber Group was employed solely in strategic bombing as no calls for close support to the army were made upon it. Weather did not permit of a maximum effort but consolation was found in the fact that. when-the opportunity presented itself, harder blows were struck than at any time during the Group's history. On the night of the 6th/7th a new Group record was established when 293 aircraft took off to attack Dortmund. Many of the month's thirteen attacks were made under adverse weather conditions, but concentrations were achieved which had not been possible under ideal conditions little more than a year previously, reflecting the improvement in the navigational aids and technique of the crews. All raids but one during the month were directed against German targets, the exception being that against the U-boat pens at Bergen on the 4th. Whereas in recent months synthetic oil plants had borne the brunt of Bomber Command's strategic attacks, October's efforts were mainly directed against German industrial cities and key points in the enemy transportation system. In several cases targets were visited twice in rapid succession by the R.C.A.F. as part of a co-ordinated plan involving repeated bombing of the same objectives by Bomber Command.

The Canadian Group visited Duisburg twice within seventeen hours during the day and night of the 14th; Essen on the night of the 23rd/24th and by day on the 25th; and Cologne on the 28th and the night of 30th/31st, while a small force of Vancouver Squadron Pathfinders was used in a major raid on this target on the following night. Single night visits were paid to Dortmund on the 6th/7th, Bochum on the 9th/10th, Wilhelmshaven on the 15th/16th and Stutt-

gart four nights later. A day trip was made to Bergen on the 4th, and Wanne-Eickel and Homberg-Meerbeck, two oil targets, received visits on the 12th and 25th respectively. In addition the Vancouver Pathfinders joined the R.A.F. for a night visit to Saarbrücken on the 5th/6th and for daylight attacks on Sterkrade on the 6th, Fort Frederik Hendrik on the 11th and gun positions at Walcheren on the 28th and 29th, besides contributing aircraft to most of the Canadian Group operations.

Losses for the month of October were the lowest in the history of Bomber Command when, out of more than 17,500 sorties, only seven-tenths of one per cent of the aircraft failed to return. In common with other formations, the R.C.A.F. Group had relatively few casualties—twenty out of more than 2580 aircraft despatched. This was attributable to several causes. The Nazi front lines had been pushed back, making the flight over occupied territory much shorter, thus reducing the risk of being shot down by flak or intercepted by enemy fighters. Secondly, the enemy's policy of grouping his main defensive fighter forces in the Berlin area had left the whole of South and South West Germany exposed to air attack. In addition, the Luftwaffe was still singularly ineffective, very few sorties being flown against either day or night bombing operations.

This almost complete lack of fighter opposition was due in part to an enforced restriction in activity on the part of the G.A.F. The acute shortage of aircraft fuel, greatly accentuated by Allied attacks on oil targets during the past two months, had become a most important factor limiting its fighting value. Its efficiency also suffered from the loss of the extensive radar warning system in France and Belgium on which it had relied for successful interception of night bombing raids over West and South West Germany and from the failure of the enemy ground control system to cope with the tactics of our bombers. In addition, the single-engined night fighter force was being used increasingly

for daylight operations with a consequent deterioration in its effectiveness against .night attacks. The absence of the Luftwaffe was especially notable during the attack on Cologne on the night of the 30th/31st when 863 heavy bombers attacked without the loss of a single aircraft.

Opening guns of the month's campaign, insofar as the R.C.A.F. was concerned, were fired in the attack on the U-boat pens at Bergen. Following the successful invasion and the progressive fall or investment of various French ports previously used as submarine nests, the Nazis relocated their advanced bases in the land-locked fjords of Norway. These bays, not so readily accessible to aircraft as those across the Channel, proved a boon to the U-boat skippers dispossessed from the French coast and as such became targets of importance. The heavies, therefore, continued their attacks on these bases in co-operation with Coastal Command's direct operations against the U-boats.

In cloudless weather and excellent visibility 123 Canadian aircraft, accompanied by a few Pathfinders, swept in, the first wave attacking the submarine shelters which were still under construction while the second sought out the Uboats in the basin. The attack was concentrated; both aiming points received a good weight of bombs and several explosions were noted. Photographs confirmed the accuracy of the attack. At least one, and probably two, direct hits were registered on the roof of the submarine pens but their unfinished state prevented accurate assessment. In the neighbouring shipyards very heavy damage was caused, three machine shosps being destroyed with two more machine shops and two boiler shops damaged. Severe damage was also done to shipping in the harbour. Two 500-ton Uboats and one 250-ft. merchant vessel were sunk, two floating docks seriously damaged, a 510-ft. merchant vessel was beached and probably seriously damaged and another 500ton Uboat was left with a list

No trouble was experienced from fighters and ground

defences were, for the most part, not particularly formidable. One of our Lancasters crashed in the Cheviot Hills, with the loss of the whole crew, F/Os G. R. Duncan, W. G. Layng and A. Gaddess, P/O J. W. F. Hall (R.A.F.), FS W. R. Karstens and Sgts. D. A. Trott and T. B. Tierney. An Alouette Halifax, captained by F/L Jean Galipeau, was hit by flak over the target and was seen heading back to Norway, but ultimately regained the Scottish coast, under escort by an Air/Sea Rescue aircraft. Galipeau was decorated, the citation, reading:

In spite of heavy anti-aircraft fire a successful bombing run was executed. Shortly after leaving the target, the starboard outer engine became unserviceable and the propeller had to be feathered. A few minutes later the starboard inner engine failed, the aircraft lost height and it seemed as though F/L Galipeau would be forced to bring his aircraft down onto the sea but at the third attempt to restart one of the defective engines he succeeded in so doing. He afterwards flew to an airfield and effected a safe landing.

This attack was also cited when F/O J. A. Montagne, a navigator of the Alouettes, was later awarded the D.F.C.

Two nights later the Canadian Group contributed 293 crews to a 520-plane attack on Dortmund, the Ruhr's second most importan transportation centre. This contribution was the heaviest the Group had ever had airborne on one operation, and, considering the number of aircraft on strength of the squadrons, was almost incredibly large.

The highly successful attack began promptly and a progressively better concentration of bombing produced several large explosions and many fires which were spreading rapidly as the late comers arrived. Defences consisted of moderate heavy flak and a number of searchlights in cones. One experienced crew was lost when F/L W. P. Scott of the Thunderbirds did not return. F/Os W. E. Ames and A. F. Livingstone, P/Os J. H. Mack, J. L. Wilson (R.A.F.), G. W. Brooks and J. T. Short, completed the crew. Scott, Ames, Livingstone and Mack were taken prisoner. The Porcupines

lost a freshman crew skippered by P/O V. G. B. Valentine, with F/O H. R. L. English, WOs J. P. Lee and W. M. Ritchie, FS J. E. Tazuk, and Sgts. A. E. McGraw and A. G. Dollery (R.A.F.). Wilson, Lee and English were taken prisoners. Sgts. J. A. Cadarette and C. Humphrays, gunners in the Goose Squadron aircraft piloted by P/O T. V. Barber, shot down an Me. iog on the raid. This was one of the very few night fighters seen, due to confusion in the German ground control caused by our tactics and an exceptionally successful spoof raid.

Dortmund was very severely damaged by this attack. Transportation facilities were the heaviest sufferers, especially those around the main passenger station where all through tracks were severed and the carriage sidings hit several times. The installations were 80 per cent. unserviceable following the attack while the goods depot was completely out of service. A week later, despite frenzied repair work, the through lines were only functioning at 50 per cent. capacity. Important factories of Vereinigte Stahlwerke were either partly destroyed or seriously damaged and five other engineering works and fifteen factories were knocked out at least temporarily. Considerable fresh damage was inflicted on business and residential property and it was estimated that the total damage to Dortmund now amounted to 70 per cent. of the fully built-up area. The town hall, the Westfallen Halle, a court house, a hospital and several schools were among the public buildings destroyed or damaged in this attack.

F/O T. A. Shore of the Iroquois Squadron was awarded a D.F.C. for expert handling of his aircraft on this raid. Though it was badly damaged by flak over the target and very difficult to control, Tommy Shore brought his plane safely back to the United Kingdom. F/O W. J. N. Burnett of the Porcupines also won the D.F.C. when his aircraft was severely damaged and the bombaimer, FS N. D. Dixon, was badly wounded.

A 200-miles-per-hour gale swept through the aircraft and blew away Flying Officer Burnett's navigational chart, log and instruments. Despite great difficulties and aided only by a small pilot's chart, this officer continued to navigate the damaged aircraft and the mission was successfully completed. Throughout the return flight he also rendered first aid to the injured air bomber.

Dixon was awarded the D.F.M. for devotion to duty which he displayed when his hand was badly injured by an incendiary bomb that fell through the nose of the aircraft. Also decorated for their work on the Dortmund show were F/L M. J. Belanger, D.F.C. of the Alouettes who received a bar to his decoration, and P/O G. Arvanetes, an air gunner, who got the D.F.C.

Three nights later, on the 9th, the R.C.A.F. contributed over 200 aircraft to a force of 440 which made a scattered attack on Bochum, an important centre of the coal and iron industries, that had suffered considerably in 1943. It cannot be contended that this raid was a complete success, as photographs taken immediately following the attack showed only moderate damage, confined to the southwestern part of the town. Night fighters were in action over the target and many indecisive combats took place in the light of fighter flares.

Three R.C.A.F. crews did not return from Bochum. One was captained by W/C G. A. Roy, D.F.C., Commanding Officer of the Tigers, who was captured together with F/Ls G. A. Bumstead and W. Mcllhagga, F/Os H. Grulkey and M. Harding, D.F.C., and P/O A. J. Harvey; the seventh member of the crew, F/O R. 0. Hunter, was lost. Another crew was composed of seven Leaside veterans, F/O R. C. Diamond, F/L W. Nicholson, F/O W. A. Stohlberg, WOs A. G. Sharpe and H. J. Graham, FS M. A. Harrington, and Sgt. K. W. Hutchinson (R.A.F.), all of whom were taken prisoner. When released in the spring of 1945, they stated that their aircraft had been struck by falling high explosive bombs just after they had released their own bombs on the

target. The aircraft dived out of control but the pilot eventually was able to straighten out. It was then found that three engines were useless and that there was a great hole through the roof and floor of the aircraft at the engineer's position (he, luckily, having been at the flare chute releasing the photo flash.) The wings were also damaged, half the tail unit was knocked off, and most of the instruments were unserviceable. Taking a bearing from the target, Diamond managed to turn to port and head in a westerly direction, hoping that they could reach the Allied lines. They were by then out of the bomber stream and going across the Ruhr, where the aircraft was heavily engaged by flak. As they were losing height rapidly, the pilot ordered the crew to bale out when they were approximately over Duisburg at about 3,000 feet. From the third missing crew, P/O A. I. Cohen, F/O G. W. Murphy, FSs J: H. E. Goldfinch, L. F. O'Hara and J. F. McQueen, Sgts. R. F. Emerson and R. A. Campbell of the Moose Squadron, McQueen was the only survivor.

Four D.F.C.s were awarded to R.C.A.F. personnel for this operation. F/Os J. A. Weir and R. M. Fleming of the Swordfish, J. A. C. Bouchard of the Alouette and P/O C. R. Olson of the Ghost Squadron were the officers concerned. This was also one of several sorties mentioned when F/O L. J. Lavallee, an air bomber of the Alouettes, was decorated for outstanding gallantry and devotion to duty.

Wanne-Eickel, a synthetic oil centre in the Ruhr, was the objective of a day raid on the 12th by 110 R.C.A.F. crews assisted by Pathfinders. Early arrivals were able to pinpoint their aimingpoint, but the later waves found a pall of heavy brown smoke lying over the area. With the aid of the Master Bomber an accurate and fairly concentrated attack, which produced one large explosion, was carried out in the face of moderate to intense heavy flak both predicted and in loose barrage form. No enemy aircraft appeared and there were no aircraft losses, although flak caused some

casualties to personnel. F/O F. G. Todd, a veteran Leaside air bomber, was killed, and Sgt. A. K. Cooper, a highly experienced air gunner from the Snowy Owls, was wounded over the target area.

For outstanding work on this attack the following were decorated: F/L G. Slocombe of the Lions, F/L J. E. McAllister and P/O E. A. Moynes of the Swordfish, F/L T. J. MacKinnon and F/O J. A. P. Laforce of the Alouettes, S/L D. K. Buchanan, F/O C. A. McKenzie and FS M. E. Gilmore of the Snowy Owls.

McAllister and Moynes were pilot and air bomber of an aircraft which encountered heavy anti-aircraft fire twenty minutes before reaching the target. The aircraft was damaged in the nose and mid-upper turret and the navigator was severely wounded in the leg. He was taken to the rest position and Moynes rendered first aid. The pilot continued to the target by following the bomber stream and using visual pinpoints, and when the air bomber returned to his post they successfully bombed the target. Moynes then assumed the navigator's duties and directed the aircraft to an emergency landing field, where a tire blew on landing, injuring the rear gunner. The aircraft was so badly damaged it had to be written off.

The attacks on Duisburg on October 14th constituted another milestone in the work of Bomber Command and also in that of the R.C.A.F. Group. The "Thousand Bomber" raids in the spring of 1942 were at that time considered stupendous operations which only could be attempted in the most ideal conditions after many weeks of planning and by scraping the bottom of the barrel for bomber aircraft. Since that time, both the R.A.F. and U.S.A.A.F. had become accustomed to despatching great armadas of bombers as a matter of routine, but the operations against Duisburg were such as to leave the most hardened gasping for breath. On that day, in fact within a period of sixteen hours, two raids, each in excess of 1,000 bomb-

ers, took off for this sprawling agglomeration of top priority industries centred around the world's largest inland port at the junction of the Ruhr and Rhine.

In the two attacks some 2,000 Bomber Command aircraft dropped a total of 9,200 tons of bombs upon the city and its large outlying industrial areas. For the sake of comparison it may be pointed out that during the raids which destroyed Hamburg in 1943 a total of 8,600 tons were dropped; also that the Luftwaffe dropped less than 10,000 tons over a period of several years during the whole of the "Blitz" on London.

The R.C.A.F. Group supplied 25 per cent. of the aircraft for the greatest day's effort in its existence, though its contribution to the raid on Dortmund a week earlier had been larger than that airborne on either of the twin Duisburg raids. The Group contributed over 2,100 tons of bombs to the rain of destruction which fell on the area.

During the daylight attack there was drifting cloud over the target which partly obscured the markers. However, by taking advantage of occasional cloud gaps, crews achieved a good concentration of bombing and by the end of the raid smoke billowed from numberless fires throughout the builtup area. When the bombers made their second attack in two waves late that night the weather had cleared and crews were able to distinguish the Rhine and fires on the docks still burning from the daylight attack.

It was impossible to differentiate between the two raids in assessing the damage as dependable photographic evidence was not available until after the second attack. The cumulative effect of the two, however, was widespread, severe and, for some industries, crippling. In all districts there was fresh damage, and, although areas already devastated and open spaces between the built-up regions had absorbed some of the weight of the attacks, areas previously untouched were almost completely destroyed. Nearly half of the largest and most important industrial plants had been

hit, including August Thyssen Hutte and Demag A. G., where machinery, buildings and equipment were destroyed. Among public utility plants affected were the Thyssen gas and water works, the Homberg gas works and two gasdriven power plants in the Hamborn-Alsum district. Widespread damage was also caused to rail facilities and on the following day there were no signs of activity in any of the yards, sidings or through lines. At least ninety hits were scored on the airfield, the nearby dock areas were heavily cratered and a number of barges were sunk.

Some idea of the resulting chaos may be gleaned from the threatening proclamation issued by the Kreisleiter of the region four days later, in which he declared that,

The city has suffered three heavy air attacks on 14 and 15 October, rendering thousands of Volksgenossen homeless. Nevertheless, warimportant work must go on. . . . Every worker must immediately report in person to the works leader, even if his own dwelling has been damaged or destroyed. . . . Nobody may leave the district without the consent of the works leader and the Labour Office. . . . Damaged dwellings will only be repaired as far as is absolutely necessary. Special attention is drawn to self and neighbourly help.... Inhabitants who still have dwelling space available are expected to move as closely as possible and take into their flats air-raid-damaged workers.

In addition to the damage these raids inflicted, they were noteworthy because of the failure of the whole air defence system of the Reich. The casualties, considering the size of the bomber forces, the location of the target and the great strength of the defences usually encountered in the Ruhr Valley, were unbelievably low, being less than one per cent. of the aircraft despatched.

Nevertheless, while numerically the losses were small, three highly experienced Canadian crews were reported missing. F/L W. H. Janney was skipper of a Ghost Sqadron Lanc which was lost with all its crew, F/O A. V. Batty, P/Os W. H. Killner (R.N.Z.A.F.), A. S. McFeetors and F. A. Harrison, D.F.C., FS P. R. Jones, and Sgt. L. Brother-

hood (R.A.F.). F/L J. Galipeau of the Alouettes, who had won the D.F.C. on the Bergen raid earlier in the month, led another crew consisting of F/O D. A. Butler, FSs L. H. Hogg, C. F. Williamson and J. O. Bazinet, Sgts. C. M. Crabtree, J. L. M. Pare and F. H. Eade, who did not return. Galipeau, Williamson, Bazinet and Pare were taken prisoners and Galipeau gave the following information when he was later released:

The operational flight was my 20th. Everything was normal until we reached Germany. When about twenty miles or so from the target (around 9 o'clock in the morning) there was a fair amount of flak. I saw about five big explosions ahead of me in the air which I thought might have been a/c exploding. Then I saw two Halifax spinning down, one in flames. By that time we were on the bombing run. Just after we released the bombs we received a direct hit in the starboard wing by flak, the shell just going through without exploding. The two starboard boost gauges showed minus 6<sup>3</sup>/<sub>4</sub> lbs. boost after that but the r.p.m. were still O.K. Then the M/U spotted a fire in the wing and told me so. The engineer told me one tank was draining fast. After that I tried to feather the propellers without success. We could not put out the fire. I told the crew we might have to bale out. The only other thing which I could do was to take a chance and dive the a/c a bit in hopes of blowing out the flames. Although this was a very dangerous thing to do I decided to try it but the effort was not successful. By that time one of the tanks whch was on fire was almost drained. I expected the a/c to blow up at any time so reduced the speed to about 160 m.p.h. and told the crew to do an emergency bale-out so as to be out as soon as possible. The two starboard props were just windmilling and made the a/c very hard to control and we were losing height fast. After I saw the B/A leave I checked the intercom to see that everybody was out. Having no answer I started to get out of my seat. I looked back and there was quite a bit of smoke in the a/c. I could not see any one so I baled out. I saw the a/c o in a siral and enter a thin layer of cloud (after my chute was' open).' I went through the clouds after which I saw two or three other chutes. When I got down fairly close to the ground the Germans opened up fire on me with light machine pistol and rifle. I spilled air out of my chute and luckily enough I reached the ground without being hit. I was captured immediately on reaching the ground.

Another missing aircraft was captained by F/O A. M. Roy of the Moose Squadron. His crew was made up of F/O

J. N. R. Therreault, WOs L. C. LeVasseur and R. H. Bowen, FSs H. Sigal and R. G. Manwell and Sgt. G. Adams (R.A.F.). Roy was captured by the enemy and, after his release, stated that while his aircraft was on the bombing run, flak damaged the starboard wing, knocked out two engines and holed a petrol tank which caught fire. He ordered the crew to bale out but the aircraft exploded immediately afterwards and, though knocked unconscious, he was blown clear. Coming to at about 6000 feet, he pulled the rip-cord of his 'chute, floated to ground and was immediately captured by flak gunners. He was the only survivor from the crew

A fourth bomber, piloted by P/O F. K. Augusta of the Bisons, was hit by heavy flak en route to the target and the starboard mainplane began to burn. Augusta flew the blazing Hally to Allied territory near Brussels and the whole crew baled out safely.

On the second raid a veteran air gunner, Sgt. T. R. Munro, was reported missing with a new crew captained by F/O C. T. L. Pidcock. Five of the crew who evaded capture stated that they also were hit by flak immediately after bombing and that the starboard outer engine caught fire. After vainly trying to extinguish the fire and feather the engine, the pilot set course for Holland and gave orders to the crew to bale out when the navigator said they should be over friendly territory. Pidcock and FS F. P. Cartan unfortunately were killed.

F/L A. F. Childs of the Bisons won his D.F.C. on the daylight raid. Twenty minutes before reaching the target the port inner engine failed, but rather than turn back he pressed on to the objective with only three engines, dropped his bombs, then-skilfully nursed the aircraft back to England. The Duisburg raids were also cited when F/Os J. W. R. G. Sicotte, C. A. J. Dionne and V. E. Brimicombe of the Alouettes, H. Knobovitch of the Swordfish, and P/O R. G. Mansfield of the Moose Squadron were awarded their D.F.Cs.

Wilhelmshaven was the target on the night of the 15th/16th when a force of 500 bombers, including 130 from the R.C.A.F. Group and 15 from the Canadian Pathfinder Squadron, attacked the great naval base in conditions of thin 10/10ths cloud, with tops at 18,000 to 20,000 feet. Visibility was poor, but it was possible for crews to identify the ground markers which were accurately placed around the aiming point. Decoys drew some bombing to the western side of the city but later in the attack a good concentration developed in the town area with numerous fires taking hold; one large explosion was reported. Flak was moderate in intensity with a few ineffective searchlights. Some fighters were seen and two combats took place though no claims were made

Damage to the town was heavy and evenly distributed through the built-up areas. At least twelve buildings of the Marine Werft shipbuilding yards (a high priority target) were severely damaged, including the boiler shops, the smithy and joinery shops and the engine-fitting shop. Destruction to residential property was wide-spread and severe, particularly in the centre of the town; and public buildings, including the main passenger station and public utilities, were affected. Many unidentified commercial and industrial premises were gutted or damaged.

The Goose Squadron aircraft piloted by F/L F. L. Smart did not return from this operation. His crew consisted of F/Os J. J. Wolfe, D. L. Brewer, a wireless operator air gunner of long experience, R. A. Roman, Sgts. D. S. Davies, L. J. Dupont and D. E. Morris (R.A.F.). All except .the navigator, F/O Wolfe, were made prisoners of war and the story which they told on release is a fine example of the courage and determination with which Canadian crews carried out their duties.

The pilot stated that about halfway over the North Sea they encountered low cloud and from then on had very poor weather. Climbing to bombing height, they picked up ice. Being early Smart started to climb slowly to lose a few minutes. At about the same time predicted flak began to reach for them but it was at first quite far below in the cloud. Finally one burst reached their height, throwing the aircraft on its side and knocking the ailerons out of control. As they were falling the pilot gave orders over the intercom to get ready to bale out. By the time he got control of the aircraft they had lost a couple of thousand feet. The crew returned to stations and, as Smart could see the target through breaks in the cloud, he started on the bombing run but found he could not get the aircraft to turn fast enough with rudder alone and that flak was being predicted on them again. He said he more or less expected the last burst. which hit the aircraft in the rear, knocking the tail up. As they headed straight for the ground he gave orders to bale out, at the same time trying to regain control of the aircraft. The control column was useless so he put all four engines at full power with no effect. Before the bomb aimer went out he asked if he should jettison the load but Smart forbade this as the bombs would destroy the aircraft when it crashed. With the airspeed around 350 he then attempted to get out. His 'chute pack was stuck and he found it hard to get out of his seat. Before he jumped he looked up the fuselage to see if the gunners had gone but it was too dark to see anything. The bomb aimer, flight engineer and the navigator had left through the front hatch and as the W/Op turned to go he was forced onto the floor by gravity with the pilot on top of him. The pilot finally fell out of the hatch, but the wireless operator had caught his foot and was hanging out with his head banging against the underside of the aircraft. The latter finally freed himself by opening his chute but his right arm was dislocated as he was pulled clear. He landed, buried his chute, mae west and harness and evaded for three days before he was captured. The midupper gunner went out of the rear hatch, floated across the target area and landed in shallow water in the North Sea.

He was shown up by a searchlight and captured by its crew when he walked ashore. The rear gunner also got caught in his turret as he baled out and had to free himself by opening his chute. He landed on the roof of a building when his parachute caught on a chimney.

The Iroquois and Leasides each lost a crew over Wilhemshaven: F/Os A. M. Park, W. H. Sanders and J. G. Hagell, FSs S. Mara, D. H. Proudfoot and W. G. Mann and Sgt. T. H. Oldroyd (R.A.F.); F/L D. W. Speller, F/Os T. F. Fisher and G. L. Gilbert, and Sgts. J. D. Hogg, K. E. Odobas, G. T. Cook and C. Moss (R.A.F.).

P/O G. W. A. Pearce of the Ghost Squadron was awarded a D.F.C. for his work on this raid. The citation read:

In spite of considerable anti-aircraft opposition, this resolute pilot remained over the target for a protracted period to press home a vigorous and successful attack. Pilot Officer Pearce has completed numerous bombing missions and has set a fine example of courage and resolution throughout.

It was four nights before the Canadian bombers were airborne again, when they had a small share in the second of two attacks, totaling 580 aircraft, on Stuttgart. Both operations, which took place within four hours of each other, were carried out in conditions of 10/10ths cloud and, though assessment was difficult, the second wave could see the glow of fires 60 miles before reaching their objective. The majority of our crews bombed on the glow of markers and a fair concentration appeared to have been achieved. Flak defences were slight to moderate and, though fighters were seen in the target area, there were no combats or claims by our aircraft all of which returned.

Damage to Stuttgart was general, though not particularly severe, with the heaviest concentration in the Ostheim and Bad Canstatt districts and lesser areas in Feuerbach - and Zuffenhausen. The Robert Bosch Works, a most impor-

tant target, suffered further serious damage to the power station, foundry and one large building, while minor damage was general throughout the whole establishment. The Sud-deutsche Kühlerfabrik, makers of radiators for aircraft and tanks, and only slightly less important than the Bosch concern, was destroyed by direct hits. Other industries were damaged to a lesser degree.

Transportation facilities were hit, eight tracks of the sidings east of the main station were rendered unserviceable by craters, while derailed and burnt-out wagons blocked almost every line. The main goods station was equally unlucky as were the locomotive depot in the Ehmannstrasse and the station in Bad Canstatt. Infantry barracks were also hit.

It was a different story on the next pair of raids, when over 1000 Lancasters and Halifaxes were sent to attack Essen on the night of the 23rd/24th and 770 in the daylight operation which followed on the 25th. Canadian squadrons despatched 287 aircraft, including some Pathfinders, on the first attack and 46 on the second. Cloud below 10,000 feet completely obscured the target during the heavy night attack, but crews bombed on sky markers which were well maintained during the bombing period. A strong red glow under the clouds increased as the raid progressed. Sky marking was also employed for the daylight attack, owing to the presence of cloud. However, some crews were able to identify ground detail through a break and confirmed that marking of the aiming point was accurate. Large explosions were reported and a good fire area was established. Flak was moderate and fighters were in action but again losses were amazingly low, being eight tenths of one per cent, on the night operation and less than one half of one per cent. on the day attack. It seemed evident that the enemy had not been able to improve his means of early warning; and, what was more to be wondered at, once warning had been obtained, he failed to make good use of it.

Apart from the leading role played by the huge Krupp Works in the manufacture of finished weapons such as tanks, armoured cars, artillery tractors, heavy guns, torpedo tubes, bombs, etc., they turned out a large range of special components and semi-finished products on which a great number of other manufacturers depended. Thus the output of Krupps was of vital importance to the enemy's war industry as a whole and, whenever possible, work had been resumed in the buildings damaged in 1943 and again in March and April 1944. In the five months following the last of these attacks a very considerable amount of repair work had been undertaken, almost every building in the huge works receiving attention.

Photographs taken after the two attacks in October revealed widespread and severe destruction. Nearly two hundred buildings in the Krupp works were damaged and two of the largest buildings—more than 140,000 square yards in area—were virtually destroyed. At least thirteen other factories in the city, two gas works, two power stations, a tramway depot and four railway stations were hit; business and residential property was again widely devastated. The true impact of this damage can only be understood when it is realized that the heavy engineering and armaments sections of the Krupp Works at Essen alone employed over 75,000 people.

"The fact remains," lamented Essen's National Zeitung a week later, "that life in the ruined Rhine and Ruhr towns is becoming increasingly difficult. Today it resembles the front.... Things, which are a matter of course elsewhere, constitute a problem here: water, electricity and gas supply. Food supply demands the utmost effort on the part of all concerned when communications are interrupted, stores destroyed, streets torn up by bomb craters.... If we predict that the difficulties will further increase and may reach a stage when compensation is no longer possible, we do not deserve to be reproached with pessimism, for we are

merely following the logic of events. We do not know when our leaders will be able to use a new means to give the war a different turn and therefore we must be prepared for the fact that we shall be compelled to endure...."

An experienced crew from the Moose Squadron, led by S/L W. C. McGuffin, D.F,C., did not return from the first raid. McGuffin, who was on the fourteenth sortie of his second tour, had F/Os R. Molloy and J. Futoranski, FSs R. C. Schlievert, R. T. Neville and E. Neufeld and Sgt. J. Mallabone (R.A.F.) in his crew. F/O D. C. Pole, an experienced navigator, was lost when the Bison Squadron aircraft skippered by F/O N. C. Muir was posted missing. The other members of the crew were FSs L. J. Innes, P. J. F. Mitchell, G. T. Hallarn and L. J. Moore and Sgt. J. M. Wemyss (R.A.F.). On the second' attack a Ghost Squadron aircraft piloted by F/O F. S. Raftery was also lost. Sgt. R. W. S. Gray, the rear gunner, who was made a prisoner of war, stated that, immediately after bombing, his turret was hit by flak and blown off the aircraft. He was wounded and badly shaken by the explosion but remembers tearing a damaged door off his .turret, leaning back and falling out. He drifted down on his parachute into a field just outside Essen and was picked up immediately on landing. He was the only survivor of the crew which included in addition to Raftery, F/Os H. Wright and H. A. Armstrong, FS I. V. Bartlemay, Sgts. L. E. Toneri and R. C. Knight.

D.F.Cs. were awarded to F/O J. T. Barlow of the Bison Squadron and P/O A. C. Stepenoff of the Alouettes for their share in the night's operations.

Although the Canadian Group did supply aircraft to the attack on Essen on the 25th, the main strength of the R.C.A.F. was directed that day against the Homberg-Meerbeck Synthetic Oil Plant, when the Canadian squadrons put up 199 Halifaxes and 16 Lancasters out of a total force of 243 heavies. The attack was made from above thick 10/10ths cloud and crews had to depend on sky mark-

ing for bombing. The markers, though plentiful, were very difficult to see and scattered over a considerable area and as the operation progressed the Master Bomber ordered crews to bomb on dead reckoning owing to lack of visible flares. An accurate attack on such a small target was not possible under these conditions and little fresh damage was inflicted though scattered hits were obtained on the plant and the railway tracks were cut. No enemy aircraft were seen, moderate heavy flak being the only defence offered. All our aircraft returned.

F/L D. A. Brown of the Goose Squadron was awarded a D.F.C. for his share in this attack. The citation stated that one engine of his aircraft was rendered unserviceable, a propeller also sheared off and fire broke out. The target, however, was successfully bombed. As the aircraft was very difficult to control on the return flight Brown ordered his crew to leave by parachute when back over England and succeeded in executing a masterly landing by himself. F/L V. R. Glover of the Snowy Owls also won his D.F.C. on this operation.

The month closed for the Canadian heavies with a double attack on Cologne, by day on the 28th and by night on the 30th/31st. Bomber Command staged a third raid on the same target on the last night of the month but the R.C.A.F. Group did not participate, although the Canadian Pathfinder Squadron supplied nine aircraft.

The first attack was made by 730 aircraft, 230 of which were despatched by the Canadian Group. Visibility was good at the start of the attack but clouds gathered as bombing progressed and the Pathfinders had to resort to skymarking. However, a concentrated attack developed and many fires were soon raging through the target area. Defences were accurate with moderate heavy flak, but no enemy aircraft were seen. One R.C.A.F. aircraft failed to return. It was the Moose Lanc "L-London", a veteran of 52 sorties, with a new crew, F/Os A. N. Nelligan, J. R. Ficht-

ner and J. A. Nafziger, FS W. H. Herman, and Sgts. W. E. Hawkings (R.A.F.), E. R. Smith and B. E. Greenhalgh.

Even in the already heavily damaged city of Cologne our bombers found new spots at which to strike. This raid fell most heavily on the industrial district of Mulheim, which was almost completely destroyed, with fires still raging nineteen hours later. The area of devastation ran south to Deutz and involved several high priority factories, including a chemical factory and plants producing combustion engines, railway wagons and mine apparatus; steel plant equipment was also damaged. Sulz in the south also suffered, though not so heavily. The Eifeltor marshalling yards had the main building gutted, a large number of tracks cut and many wagons damaged or destroyed.

The second attack by over 900 aircraft, including 250 from the R.C.A.F. squadrons, was carried out without loss through 10/10ths cloud which hampered the enemy defences. An excellent concentration of sky marking was achieved and, although cloud cover prevented precise assessment, the red glow of fires indicated that the attack was proceeding satisfactorily. The Ehrenfeld district was the victim of this raid as well as that by the R.A.F. on the following night, with the industrial and residential areas very severely damaged and the railway station badly smashed.

"It has been a hard blow," declared the Kolnische Zeitung, "full of chaos and bitterness. Not only defiance, but also sobbing, not only defence, but also complaints have been heard in the collapsing town. Districts of the city have sunk like islands in a natural catastrophe and Cologne has acquired new areas of silence and death. By day and night the enemy continuously spreads destruction over us. He has deprived us of gas, water and communication. Bread has become increasingly scarce and a helping of soup is regarded as a gift from heaven. . . ."

To appreciate the cumulative effect on the German war effort of these attacks, it is necessary to remember that this widely devastated city ranks second in the Reich in terms of area and, with nearly three-quarters of a million inhabitants, third in size in population. It is, in fact, only slightly smaller than Birmingham, the second largest English city.

F/O David Bell of the Bison Squadron, who was later reported missing, won his D.F.C. on the daylight attack.

It was his first mission as captain. On the bombing run considerable anti-aircraft fire was encountered and the aircraft was hit. The flight engineer was wounded. Flying Officer Bell promptly directed another member of the crew to render first aid to his injured comrade. Almost as the bombs were released, the aircraft was again hit. The port aileron had broken in half and it became exceedingly difficult to keep the aircraft on an even keel, but, displaying the greatest determination, Flying Officer Bell flew the badly damaged aircraft to the nearest available airfield in this country where he effected a masterly landing. This officer displayed great tenacity and devotion to duty in trying, circumstances.

These attacks were also cited when awards of the D.F.C. were made to F/L D. C. Henrickson of the Bisons, F/O P. H. Legault of the Alouettes and F/O W. H. K. MacDonald of the Snowy Owls.

Mines were laid on six nights during the month. The major part of the mine-laying at that time was being carried out in the Kattegat and Skagerrak and considerable dislocation was caused to the enemy's attempts to transport troops and material from Finland and Norway to the European fronts. From time to time various ports had to be closed for sweeping by the enemy and sailings were postponed. For example, the important port of Oslo was rendered practically useless for a period of seven weeks as a result of 49 mining sorties on five nights in September and October. There was also a rich harvest of ships sunk and damaged.

It may be of interest to note that, according to a Ministry of Economic Warfare estimate, imports and exports urgently required for the German military and economic programme were six and a quarter million tons (approx. 25%)

in arrears in the first eight months of 1944; and of these arrears, at least four million tons were attributable to delays caused by sea-mining. So that even if the immediate effect of a mine-laying operation was not as obvious and spectacular as that of a bombing raid, its invisible results were just as far-reaching.

It must not be assumed, either, that all mine-laying sorties were quiet and safe trips over empty stretches of water. The two following incidents prove that "gardening", as it was referred to in code, had its exciting and dangerous moments.

P/O J. M. Cochrane was the mid-upper gunner of a Porcupine aircraft, flown by F/O W. T. G. Watson, which was detailed for a minelaying mission off Heligoland. When leaving the target area the aircraft was struck by a burst of machine-gun fire from an enemy fighter. Much damage was sustained and the rear gunner, P/O J. Zareikin, was killed. All the aileron controls were severed and evading action could not be taken as the fighter closed in for a second attack. Despite this, P/O Cochrane withheld his fire until the attacker came to close range. Then, with a well-placed burst of fire, he shot the enemy aircraft down. He was awarded the D.F.C.

S/L A.. E. Fentiman of the Tiger Squadron was also decorated for his leadership and determination as a bomber and "gardener". The citation read:

In October 1944, he was detailed to participate in a mine-laying mission. Shortly after leaving base Squadron Leader Fentiman encountered adverse weather. Dense cloud with extreme icing prevailed, preventing the normal manipulation of the controls. Despite this handicap this officer pressed on and released his mines. Squadron Leader Fentiman's initiative and exceptional airmanship coupled with his coolness and courage in the face of danger have always been most praiseworthy.

Two mine-laying aircraft were lost in October. On the night of the 4th/5th an experienced crew of the Lion Squadron did not return: S/L W. R. Mosely-Williams, F/Os P. F.

C. Haydock and J. L. Dougan, P/Os M. Gravel, J. S. Williamson and J. G. Curle and Sgt. R. Thew (R.A.F.). Eleven nights later another experienced crew led by F/L R. D. Guild of the Tiger Squadron was posted missing. Other members were F/L J. G. Lee, whose D.F.C. was gazetted a few days later, F/Os V. L. Riley, J. P. Grace, W. E. Jory and H. J. Loughran and P/O N. A. Smith.

A number of squadrons changed commanding officers during the month. W/C F. W. Ball replaced W/C J. H. L. Lecomte, D.F.C., of the Swordfish; W/C G. J. J. Edwards took over the Snowy Owls from W/C A. G. McKenna, D.F.C.; W/C A. F. Avant, D.F.C., was succeeded by W/C R. L. Bolduc in the Bison Squadron; while W/C J. F. Easton, D.F.C., became C.O. of the Goose Squadron vice W/C A. R. McLernon, D.F.C., and W/C C. C. W. Marshall assumed command of the Tigers when W/C G. A. Roy, D.F.C., was posted missing. The Vancouvers also received a new commander in G/C W. F. M. Newson, D.F.C. and Bar, who took over from W/C H. A. Morrison.

Three C.Os. were decorated with D.F.Cs. during the month, W/Cs Lecomte of the Swordfish, McKenna of the Snowy Owls and A. J. Lewington of the Porcupines.

## November 1944

Lists of damaged factories and charts of built-up areas destroyed provided a grim, though incomplete, picture of the effect of our bomber operations. Intelligence sources, however, yielded occasional glimpses of what they really meant to the Germans. From these sources it was learned, for instance, that by the beginning of November material despatched by rail under urgent priority over relatively short distances did not arrive at its destination for two months, and individual factories were compelled to close as a result of failure of the supply system. Postal services in the Ruhr and other areas were seriously disorganized, letters taking ten days to reach the Ruhr from Central Ger-

many. By this time war workers were being withdrawn from damaged factories for service with the Wehrmacht. One striking example of the direct effect of bombing on the output of war material was provided in a reliable report that the Germans had planned to use their new high-speed U-boats in October, but that production was delayed owing to damage caused to component parts, both under construction and in transit. There were factories engaged in making various components for U-boats in twenty-one of the inland industrial centres seriously damaged by Bomber Command during 1944.

Other valuable sources of information were the reports appearing from time to time in the newspapers of neutral countries. A graphic account of the effect of air attacks on Western Germany appeared in the Stockholm-Tidningen of November 10th:

The experience of the population of this part of Germany forms one of the most terrible dramas ever staged in the world theatre. Life in the bombed towns and industrial districts grows worse every month and every week. The population did not want to evacuate, and the ablebodied people were not allowed to evacuate but had to stay at their places of work. There is no water, gas or light everything has been destroyed by bombing. Communications are broken and the supply services encounter immense difficulties. Stores are bombed and burnt to ashes, and streets and roads are continually being ploughed up by fresh bombs. The authorities have had to make the greatest effort to save the population from the threat of starvation. Only the bare essentials of public life can be maintained. It is already realized in Germany that things will become even worse. Even now the population can barely keep alive. The air raid shelters are only large enough for the women and children, so the men have to stand outside. This state of affairs cannot go on, and a large scale evacuation will now be begun. So many people have now been evacuated from various parts of Germany that it will be difficult to find room for the additional thousands who are expected, from Western Germany.

According to an account by a German soldier who was on leave in Cologne at the end of October, out of a normal population of 800,000, there were some 250,000 remaining

on October 25th, but in the raid on the night of October 30th the town "received its death blow". General evacuation began the next morning and at the end of about a week only some 20,000 people remained, all of them workers or municipal employees, whose families had left.

In November, while Allied armies massed on both the east and west frontiers of Germany, a Swedish correspondent in Berlin observed that,

The almost daily commentaries devoted to the air war are in themselves proof that the bombing is still regarded as perhaps Germany's most serious military problem.

Evidence that the armed forces had lost their popularity in Germany had been accumulating for some time and there were indications that the people of Cologne had grown increasingly rebellious as the war had come nearer to the city. In a letter dated September 3rd a German woman wrote:

I had a letter from Horst today. They had air raid alarms on their way, in Stuttgart and Cologne. He stayed at a soldiers' hostel in Cologne for the night. In the evening they went sight-seeing round the town with three comrades and a soldier. When they were standing before the Cathedral they were hooted at by a mob of people because they were in uniform. Can such things happen in Cologne? It is a shame to think that such a war can bring about things like this.

The above incidents give some idea of the chaos which existed in Germany at that time as the result of bombing and indicated that the unstable foundations of the Third Reich were crumbling and that it would not be long before it crashed in ruins.

As Bomber Command continued its onslaught against the Rhineland and the Ruhr, the Canadian Group made nine major raids in November. Seven of the targets, Oberhausen, Düsseldorf, Bochum, Gelsenkirchen, Castrop-Rauxel, Neuss and Duisburg, lay within a radius of twenty miles, while the other two, Munster and Jülich, were only thirty miles outside that radius. Munster, to the north, owed its

importance to the fact that it was a railway outlet from the Ruhr, while Jülich was attacked on a tactical raid in support of the Army. In addition to supplying Pathfinder aircraft to all the major R.C.A.F. operations except one, the Vancouver Squadron participated in seven raids in which the Group did not share. The objectives were Wanne-Eickel on the 9th and 18th, Dortmund on the 11th, Coblenz on the 10th, Worms and Aschaffenburg on the following night and Freiburg on the 27th.

Operations were affected by the inevitable handicaps of winter, in particular cloud cover over targets. Casualties were rather higher than in the previous 'months. For the first time since the G.A.F. was forced to retreat from its bases in France and Belgium, night fighters appeared to have received sufficiently early warning of the approach of Allied aircraft to enable them to intercept the bomber stream. During the nights of the 1st/2nd, 2nd/3rd, and 4th/5th some 100/150 enemy aircraft reacted to the raids on Oberhausen, Düsseldorf and Bochum and, although these forces did not represent a maximum effort, they were nevertheless rather more successful than they had been of late. This activity dwindled away, however, and at the end of the month our attacks were almost unopposed. Seventeen of the 25 Canadian heavy bombers missing during November were lost on the three raids mentioned.

The first attack, on Oberhausen on the night of the 1st/2nd, was carried out by 250 heavies of the R.C.A.F. Group, accompanied by 38 Pathfinders. Icing occurred all the way to the target and, although the attack was made in good visibility through gaps in thin cloud, only light and scattered damage was inflicted throughout the town area. However, results were more serious in the important Gutehoffnungshütte Oberhausen iron and steel works, where heavy damage was seen in the Siemens-Martin steel shops and the rolling mills, as well as the gas producers and blower house. The Concordia Bergbau coking plant also suffered.

The enemy directed four Gruppen of night fighters into the Ruhr area. They arrived too late to intercept the bombers before the attack began, but large forces intercepted the heavies between the Ruhr and Venlo (Holland) on the homeward route and six of our aircraft were lost, at least three of which were attributed to night fighters. Veteran crews included F/Ls M. J. Dugas and H. J. Goodwin, D.F.C., D.F.M. (R.A.F.), F/O J. E. St. Arnaud, P/O J. P. Crispin, WO J. A. Ranger, FSs J. W. Savoie, F. G. Hull and J. S. Federico of the Alouettes with FS J. A. M. R. Carrier, flying as second pilot; F/O D. D. Connor, P/Os J. B. Ogg and R. C. Joiner, WOs G. W. Leppington, J. T. Patterson and R. B. Page and Sgt. J. M. Campbell of the Iroquois Squadron which was operating for the first time on Lancs after converting from Hallies. Dugas, Goodwin, St. Arnaud, Crispin, Ranger, Federico, Hull, Carrier, Ogg, Patterson, Leppington and Page of these crews were taken prisoner. Sgt. Campbell landed in Holland, successfully evaded capture and returned safely to England. When released in the spring of 1945 F/L Dugas stated that his Halifax had been shot down by flak immediately after bombing. P/O Ogg, navigator of F/O Connor's aircraft, reported that they were attacked .by a night fighter on the second leg of the homeward trip. The port engine and wing caught fire and, after trying for several minutes to put it out, the pilot gave the emergency jump order.

The Thunderbirds lost two crews. In one P/O R. S. Goreham and Sgt. W. E. Morrison were the only survivors; FSs E. E. Courtis and A. C. McLeod, and Sgts. J. F. G. Weedon, A. G. Balfour and R. Charlton (R.A.F.) were lost, as were all the members of a freshman crew which included F/Os W. F. Anderson and G. J. Mullin, FSs C. C. Goble, L. G. Griffith and J. A. McLea, and Sgts. T. R. Edgell and J. Langton (both of the R.A.F.). The Tigers also lost a new crew, P/O A. Jacobs, F/O J. Fraser, FSs W. J. C. Gibson, R. J. Kay, W. Yunsko and H. W. Botterill and Sgt. G. E.

Vernon (R.A.F.) . From the crew of the sixth missing bomber, a Bluenose Halifax, F/O R. J. Halfnight and FS L. Gobel were taken prisoner, but P/O J. C. Badgley (captain) and Sgts. R. W. D. Murphy, .D. F. Brown, A. G. Best and D. Jones (R.A.F.) were lost.

In retaliation, however, our crews destroyed four enemy aircraft in nine combats, with claims for another probable and three damaged. The aircraft captained by P/O L. J. Case of the Goose Squadron was attacked by four enemy aircraft in succession as it was on the homeward journey and his gunners, FSs D. Shutka and T. Romanchuk, scored a double by destroying two Me. 210s, one in flames. Both were awarded the D.F.M. These two keen-eyed and intrepid gunners had a very successful month, sharing in the destruction of another single-engined enemy aircraft and probably destroying a Ju.88, on later raids, in addition to the two Me.210s. FS W. E. P. Thompson and Sgt. J. H. Waugh, in a Snowy Owl aircraft skippered by F/L J. S. Sefton, shot down an Me.109 which hit the ground and exploded; while F/O R. G. Herbert, air bomber for F/O C. B. Gray of the Bisons, accomplished an unusual feat by shooting down an FW.190 with his front gun. The rear gunner saw it catch fire, lose height and crash on the ground. These successes were quoted when Waugh was later awarded the D.F.M., Herbert the D.F.C. and Thompson, who had been commissioned, the D.F.C. also.

Gongs were awarded also to crew members of two bombers each of which had a very shaky do. F/Os R. L. Cox and L. W. Sitlington and FS R. A. Toane of the Moose Squadron received D.F.Cs. and the D.F.M. respectively for an incident described as follows:

These officers and this airman were pilot, wireless operator and rear gunner respectively of an aircraft detailed to attack Oberhausen one night in November, 1944. The target was successfully bombed but, soon after leaving the area, the aircraft, was hit by a hail of bullets from an enemy fighter. Both inner engines were put out of action. The inter-

communication and hydraulic systems were rendered unserviceable. Flying Officer Sitlington was wounded in the face and arm and Flight Sergeant Toane was injured in the face, the arms and leg. The enemy aircraft again came in with guns blazing. The bomber sustained further damage and went into a spiral dive but Flying Officer Cox succeeded in levelling out after considerable height had been lost. Meanwhile Flying Officer Sitlington had shown the greatest coolness and determination in successfully extinguishing a fire which had broken out in his cabin. Flight Sergeant Toane had also proved his courage and resolution. Blood streamed down his face, and, though almost blinded by it, he had remained in his turret to fire his guns at the attacker. Throughout the flight, Flying Officer Cox displayed great skill and coolness and he afterwards flew the severely damaged aircraft to the first available airfield. Here, he effected a successful crash landing.

The aircraft was thoroughly riddled, a complete wreck. The navigator, F/O S. B. Lindsay, also received the D.F.C. In the attack by the FW.190 he was hit on the back and his face was badly lacerated by fragments of shrapnel.

A fire had started in his compartment but he was able to quell it by means of an extinguisher. He afterwards put out another fire which had started in the root of the starboard wing. In so doing his hands were badly burned. Soon afterwards, Flying Officer Lindsay fainted through shock. He soon revived when his injuries had been attended to and resumed his duties. Much of his equipment had been destroyed in the fight. Nevertheless, he navigated the aircraft to base.

WO C. Ferris of the Bluenose Squadron was also awarded the D.F.C. and his bomb-aimer, Sgt. C. A. Barber, the D.F.M. Antiaircraft opposition was encountered by their aircraft during the approach to the target area. The wireless operator (WO S. D. Martin) was killed and the bomb-aimer, flight engineer and navigator were wounded. Despite these harassing circumstances Ferris, as pilot and captain of the aircraft, pressed home the attack and Barber, although he had been severely wounded in the head and some of his equipment was damaged, dropped his bombs on the target.

This operation was mentioned when P/Os J. P. E. Bar-

beau and R. E. Shields of the Alouettes were later decorated with D.F.Cs.

Düsseldorf was the target on the following night (the 2nd/3rd) when the Canadians contributed 220 aircraft from the Group plus sixteen Vancouver Pathfinders to a force of 990 directed against the leading commercial city of Western Germany which, as the Reich's third largest inland port, was also of particular importance as a transportation centre. In addition, Düsseldorf ranked with Essen and Duisburg in engineering and as a producer of armaments and was the site of the administrative departments of practically all the important iron and steel, heavy engineering, and armament concerns in the Rhine and Ruhr districts.

The great armada of bombers attacked in good weather, which allowed the crews to confirm visually the accuracy of the well concentrated markers and to bomb with precision. Huge fires took hold, accompanied by several heavy explosions in the target area which became covered with a pall of smoke rising to 20,000 feet. Flak batteries, cooperating with searchlights, produced a barrage over the target which varied from intense to moderate, deteriorating as the attack progressed. The enemy obtained early reports on the bomber stream and used his fighters to make interceptions over the target and on the homeward course. There was strenuous fighting through the south-eastern Ruhr defences to Düren, and past Aachen well into Belgium.

This attack caused damage in an area hitherto less affected than the rest of this very much devastated town. In the section extending northwards on both sides of the marshalling yards and railway to the suburban districts, many of the important industrial premises received severe damage and rail communications were disrupted. Two factories of the Rheinmetall Borsig A.G., armament manufacturers, suffered heavily while the Mannesmannrbhrenwerke, manufacturers of incendiary bombs and mines, were largely devastated as was the plant of J. G. Schwietzke, producer

of torpedoes and torpedo tubes. Altogether fifty industrial premises suffered fresh damage as did the Derendorf marshalling yards and a military barracks in the Morsenbroich district. Despite an extensive programme of reconstruction undertaken prior to this raid, the ratio of devastation in the fully built-up area of Düsseldorf now stood at 70 per cent.

Canadian losses, though heavy, were not unduly large, but several experienced crews were included in the six missing aircraft. F/O H. Knobovitch of the Swordfish Squadron was lost with F/Os A. B. Orchard, B. B. Anderson, and W. St. C. Huskilson (who was on the last trip of his first tour), FSs J. R. Harper, C. A. R. Seeley, V. L. Valde and S. Kirkpatrick. Two of the crew, Seeley and Kirkpatrick were able to bale out. The Goose Squadron lost four members of an experienced crew when P/O V. B. Gilson, the pilot, F/Os D. A. Staples and L. J. Reaume and FS A. C. Ineson were killed and P/O D. H. Woodworth and Sgts. W. G. Sutton and A. Anderson were injured when their aircraft crashed in Belgium. Sgt. J. D. Griffin, a veteran air gunner, was lost when the Swordfish aircraft piloted by F/O W. H. Regimbai went missing with F/Os R. H. M. Rose and H. Rabkin, P/O G. J. Zbura, and Sgts. V. E. Nelson, M. R. Morton and S. O. Spence (R.A.F.).

F/O W. S. P. Bonar was captain of a- Tiger crew composed of P/Os A. J. W. Cayer and J. E. B. A. Cote, FSs J. A. J. Lambert, A. E. McMullen and A. T. Keeping and Sgt. W. Galbraith (R.A.F.), which did not return. Three of the crew, McMullen, Lambert and Cote, baled out and were made prisoners of war. The following is part of a report made by McMullen, the mid-upper gunner, when he was released:

... We were on time when target was sighted and we were just starting run-up when a Ju. 88. was sighted port beam below by r/gunner and m/gunner. Corkscrew port was given and pilot did evasive action. Enemy a/c crossed quite a way directly underneath and disappeared stbd. down without firing or gunners firing. There was a good moon

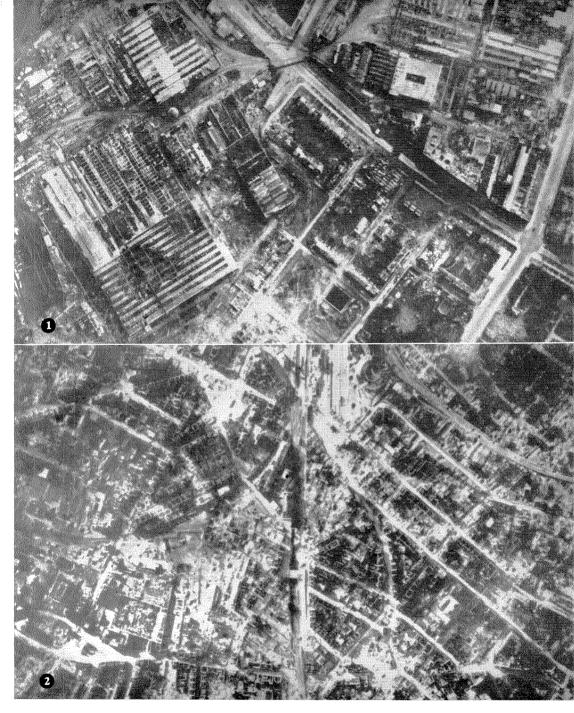
port side and searchlights made visibility quite good. A few minutes later bullets hit us from underneath and pilot did evasive action then levelled out and bullets hit us again. M/U turret went u/s after first burst from enemy aircraft, also call lamp and intercom. The a/c seemed to fly level enough but port aileron and rudder were missing and getting out turret I noticed fire inside. I put on my 'chute as I had seen F/E putting his on and then started to go forward to see if skipper had given orders to bale out. I hadn't gotten to the engineer's compartment when the a/c went into a spin and exploded. After I realized I was falling I pulled my ripcord and chute opened. . . .

A Ghost Squadron aircraft was lost with its crew of F/O J. Holtze, WO L. J. Ruhl, FSs J. Lupinsky and A. G. Samuel, Sgts. M. Dorrell, J. F. J. Bachant and E. Crossley (R.A.F.), while a Thunderbird crew captained by F/L C. W. Boddington also went missing. Four of this latter crew were made prisoners of war–Boddington, who was wounded, F/O R. Mitchell, WO R. Y. Hodgson and Sgt. J. J. Lawlor; the others, F/O R. W. Harrison, FS C. H. F. Campton and Sgt. E. H. Grundy (R.A.F.) were presumed killed.

R.C.A.F. crews engaged in eleven combats and claimed one FW.190 destroyed as their share of a total of four Huns shot down by the whole bomber force. Sgts. J. N. Maguire and E. P. Gardner, gunners in the Goose Squadron Halifax flown by F/L H. D. Bracken, put several bursts into the FW which exploded as it turned away into cloud. This exploit was mentioned when Maguire, later commissioned, received his D.F.C. Another FW.190 and a Ju.88 were also claimed as damaged by Canadian gunners.

The Thunderbirds won three decorations on this raid when F/Os C. S. V. Hamilton and R. J. Brodie received D.F.Cs. and Sgt. T. W. Christie the D.F.M. Hamilton's citation is quoted in part below:

While on the bombing run, severe damage was sustained from anti-aircraft fire and the aircraft became extremely difficult to control. Despite great difficulties he continued his run and pressed home his attack. He then flew on to Belgium where he executed a masterly emergency landing. Flying Officer Hamilton's tenacity and skilful pilo-



Two November Targets: (1) the Rheinmetall-Borsig arms works at Dusseldorf after the attack on the 2nd/3rd; and (2) Bochum, a Ruhr industrial centre, after the raid on the 4th/5th.



F/L R. L. Cox, D.F.C., of Shelburne, N.S.
 F/O T. A. Shore, D.F.C., of Ottawa.
 S/L B. S. Imrie, D.F.C., of Toronto.
 S/L W. C. McGuffin, D.F.C., of Calgary.
 F/O L. W. Sitlington, D.F.C., of Watford, Ont.
 F/L Yvon Cote, D.F.C., of Quebec, with his flight engineer, P/O Don James of St. Albans, England.
 F/O C. M. Hay, D.S.O., of Winnipeg.
 Interrogation after the raid: W/C A. J. Lewington and G/C F. R. Miller question FS N. D. Dixon of Port Carling, Ont., and F/O T. J. Kelly of Toronto.
 FSs Tom Romanchuk and Don Shutka, both of Oshawa, Ont.

tage was responsible for the successful completion of this mission and the safe return of his crew.

#### That of Brodie and Christie read as follows:

This officer and airman were pilot and rear gunner respectively of an aircraft detailed to attack Düsseldorf Soon after the target had been attacked the aircraft was engaged by three enemy fighters. As they closed in, Sergeant Christie opened fire. His bullets struck one of the attackers, causing it to give up the fight. Nevertheless, the other two fighters attacked with great persistence. Flying Officer Brodie's aircraft sustained much damage. Despite this, he manoeuvred with much skill. Meanwhile, Sergeant Christie used his guns to good effect and the enemy aircraft were finally driven off Some time later the bomber sustained further serious damage. Displaying the greatest coolness Flying Officer Brodie maintained control and effected a successful crash landing on an open patch of ground in friendly territory. He displayed a high standard of skill, courage and tenacity on this his first sortie as a captain. Sergeant Christie also proved himself to be a resolute and devoted member of the aircraft crew. This was his first operational mission and his coolness and confidence in such trying circumstances set a fine example.

## F/O J. L. King of the Tigers also won a D.F.C. for a feat described as follows in his citation:

The target was successfully bombed, but later, on the return flight, the aircraft was badly hit by an explosive shell which caused a fire in one of the port wing petrol tanks. Attempts were made to quell the flames but without much success. Flying Officer King thereupon changed course and, displaying great determination, reached friendly territory by taking the shortest possible route. By this time the fire in the petrol tank was burning fiercely. Flying Officer King ordered his crew to leave the aircraft by parachute. He himself remained at the controls to keep the aircraft level whilst his comrades jumped. As they got clear, the burning tank fell away. Flying Officer King, therefore, remained at the controls and searched for a likely place to land. Finally, he brought the aircraft down in a field, aided solely by his landing lights.

# F/L R. D. Hemphill of the Alouettes won his D.F.C. for another courageous and determined sortie.

On the outward flight a leak occurred in the oil supply line to the

starboard inner engine; Flight Lieutenant Hemphill decided to continue his mission although the target was still far distant. When nearing the area, the port inner engine exploded and caught fire.. As much oil had seeped nearby the danger of the fire spreading was great. Sergeant E. A. McAbendroth worked unremittingly to prevent this, however, and finally succeeded in extinguishing the flames. Flight Lieutenant Hemphill had held resolutely to his course and, although some height was lost, went on to execute his bombing attack. The position was now serious. Two engines were out of action, whilst the petrol supply was a cause for misgiving. Despite this, Flight Lieutenant Hemphill set course for home. Eventually, an airfield in this country was reached and a safe landing was effected.

Many other Canadians distinguished themselves during this attack and D.F.Cs. were awarded to P/O S. E. Morris of the Swordfish Squadron and F/O T. G. Tustin of the Tigers. A D.S.O. was also won by F/L G. A. Martin, D.F.C. (R.A.F.) of the Vancouver Pathfinders, whose pilot, F/O H. A. Hannah, was severely wounded by flak and rendered incapable of flying his aircraft. Martin, the air bomber, took over the controls and successfully flew the bomber home. Hannah later died of his wounds.

The next heavy attack was on the night of the 4th/5th when a force of 750 sought out Bochum, one of Germany's chief iron and coal centres, situated in the centre of the Ruhr, with important marshalling yards and several priority industrial establishments. The contingent of 220 aircraft from the Canadian Group and the Vancouver Pathfinder, Squadron formed a larger percentage than on the Düsseldorf operation.

Markers and the main force arrived on time and a concentrated attack developed on a tight cluster of target indicators. The whole area was thickly carpeted with incendiaries, resulting in a solid mass of fires with smoke up to 10,000 feet accompanied by several unusually large explosions.

Once again, however, the enemy obtained early knowledge of the direction of attack and for the first time in some

months intercepted the bomber stream before it reached the target. Opposition was strong with nine Gruppen of night fighters up, and combats occurred all the way in from the Dutch coast, over the target and homewards as far as Belgium. General losses were considerably higher than usual, though R.C.A.F. losses were slightly lower than on the two previous raids. We lost five while our bombers claimed one enemy aircraft destroyed and five damaged, FSs Shutka and Romanchuk downing a single-engined enemy aircraft in flames for their third success of the month.

The Tigers lost a crew skippered by F/O L. R. B. Loving, D.F.C., a second tour pilot. Also in the crew were F/O A. D. Chapman, P/Os G. A. Running, A. L. Flatt, W. C. Davidson and J. P. Durkin and Sgt. B. McGarrity (R.A.F.). The Thunderbird Squadron reported two experienced crews missing, one being captained by F/O H. W. Elder with F/Os O. Cook, L. J. Hopper and J. E. Clements, FSs H. M. Mosley and C. A. Pottage and Sgt. R. Newberry (R.A.F.). Elder and Mosley were able to bale out of their damaged aircraft and were captured. Cook was slightly wounded, but managed to evade and regained our lines; Pottage also was later reported safe. The other crew, composed of F/Os R. E. Jones, D. W. Younger, R. W. Bick, FS A. L. Goheen, a navigator with 21 trips to his credit, FSs N. E. Jennings, E. H. Hyde and Sgt. R. Hollingrake (R.A.F.), were all made prisoners of war. On the way out from the target this aircraft was hit by flak on the port wing root, the controls being cut and the engine, wing and fuselage set on fire. Jones got the aircraft under control by using his engines and trim and ordered the crew to bale out.

Two Halifaxes from the Alouette and Porcupine squadrons were also shot down and all members of the crew captured. F/O D. E. Smith was the Alouette skipper with F/Os L. S. Jamieson and E. M. Knorr, FSs L. J. Gale and A. R. Limacher and Sgts. R. E. Ford and W. A. Clowes (R.A.F.). The Porcupine crew was composed of F/Os R. J. Mount-

ford, R. M. Madill, H. W. Langlands, WOs I. H. Jervis and E. G. Munro, FS J. H. Christie and Sgt. J. S. Bell (R.A.F.). WO Munro, the mid-upper gunner, stated that after baling out he landed in woods near an old mill, hid his 'chute and started walking west. That night he came to a bridge crossed by a railway. In the distance he saw a long freight train heading north and taking two logs from a nearby pile on the embankment he placed them on the track and derailed the train. He kept running and walking, hiding in a bog in the daytime and travelling at night. Finally on November 7th he was captured by a German soldier as he was climbing over a wall in a village and after being taken to German Military Headquarters near Aachen he was removed to Düsseldorf.

A Goose Squadron aircraft captained by F/O H. D. Sokoloff was also reported missing but was discovered next day to have crash-landed at Brussels after it had been severely damaged by fighter attacks. The rear gunner, FS H. D. Hardy, had unfortunately baled out of his turret over Germany before the pilot's order to jump was countermanded. He was captured and released in May 1945.

The Alouettes got two D.F.Cs. on this raid, with F/O J. R. J. M. Desmarais as one of the recipients. His citation stated:

Whilst over the target the aircraft sustained much damage and one engine was set on fire. In spite of this, Flying Officer Desmarais pressed home a most determined attack. The fire in the burning engine was extinguished but the propeller could not be feathered. Nevertheless this resolute pilot succeeded in flying his damaged aircraft to base where he effected a safe landing.

The other gong was won by F/O J. B. MacHale who, despite very serious flak damage to his aircraft before reaching the target area, pressed on, dropped his load and flew the unwieldy aircraft safely back to base.

F/O C. S. Walker of the Tigers was another D.F.C. winner for an exploit described in his citation as follows:

When nearing the target heavy and accurate anti-aircraft fire was encountered. Nevertheless, Flying Officer Walker pressed home a successful attack. Soon after the bombs had been released the aircraft was hit. The port outer engine was put out of action, the mid-upper and rear turrets were rendered unserviceable, and the aircraft was holed in more than 2,000 places by pieces of shrapnel. Despite this, Flying Officer Walker flew back to base and landed his damaged aircraft safely.

FS D. H. Lanctot of the Moose Squadron won the D.F.M. for courage and determination when his aircraft was attacked by two fighters:

During the engagement, Flight Sergeant Lanctot defended his aircraft well but was wounded in the head and arm. In spite of this he remained in his turret and did not inform anyone of his injuries until the enemy aircraft had been driven off.

A previous raid on Bochum had produced only moderate damage but more severe results were evident from an analysis of photographs taken after this attack. They showed over 90 per cent of the fully built-up areas now destroyed with approximately 85 per cent of the business and residential sections completely devastated. Eleven plants of prime importance to the Nazi war effort received injury in varying degrees. Substantial damage was inflicted on all four plants of Vereinigte Stahlwerke while other major producers of railway equipment, pumps and compressors and motor car bodies suffered heavily. Coal mines and byproduct plants were also hit and the municipal gas works were virtually destroyed. Transportation services were seriously affected, with the sidings at the main station rendered completely unserviceable and only two tracks at the passenger station left fit for use.

The R.C.A.F. Group took to the air again on the 6th when they made a daylight attack on Gelsenkirchen as part of a force approximately the same size as that which had gone to Bochum. This town, seven miles north-east of Essen, was noted chiefly for its hydrogenation plants and its coking industry. Two top priority synthetic oil plants and

two very important power stations lay within the boundaries of the district. Other industries included the manufacture of iron and steel goods and sulphuric acid.

The attackers, accompanied by a fighter cover of Mustangs and Spitfires, swept along over 10/10ths cloud from the Dutch coast in a very high tail wind. Cloud thinned out as they approached the target area and they found gaps which enabled them to identify the aiming point and check the accuracy of the markers. Early bombing was concentrated and soon there was a heavy black pall rising above the cloud tops at 10,000 feet. When smoke and dust obscured the target indicators, the Master Bomber instructed crews to attack any targets of opportunity that were visible in the area. The bombing of the town itself caused intense fires north and south of the Central Station marshalling yard and in the vicinity of the Hessler district. South of the Industrie Hafen, the steel casting works of Vereinigte Stahlwerke were damaged by fire.

Defences were formidable on the route through the Ruhr with very accurate heavy flak, but at the target anti-aircraft fire was only moderate and this time losses were lighter, only two Canadian aircraft failing to return. One of these carried a veteran Goose Squadron crew composed of F/Os J. C. Kellond, K. I. Durk and W. A. Gillmeister, FSs T. G. McLeod and D. M. Davies and Sgts. R. C. Robinson and W. A. Woods, all of whom were taken prisoner. When released Kellond reported:

Perfect trip to the moment we were hit. Flak burst under a/c resulted in controls being hit somewhere at a vital point. No visible damage could be seen by the gunners. The flak came from the front lines which at the time were west of the Rhine River. It was a clear day with about 1/10th cloud. I gave orders for the bombs to be released immediately a/c was found to be out of control. Second flak burst came before bombs were gone but outside of causing a/c to rock no one was hurt. Crew were then told to bale out and they carried this out in perfect order. I managed to keep a/c straight and level until all the boys had made their jump. With throttles completely back a/c would not drop its nose

and it finally stalled and went into a spin. From that point on things are not too clear as I had no time to waste in getting out.

The other aircraft, from the Leaside Squadron, was manned by F/Os F. H. Eilertson, F. I. Morrissey, L. J. Hossie, FSs C. D. MacDonald, T. J. McAran, N. E. Stuttle and Sgt. C. Vaughan (R.A.F.). All except Stuttle and McAran were made prisoners of war, so the fatal losses on this operation were two members of one crew.

For the next ten days adverse weather interrupted operations by the Canadian squadrons except for Vancouver Pathfinder contributions to raids on Wanne-Eickel on the 9th and Dortmund on the night of the 11th/12th and one mine-laying operation undertaken by the Group on the same night. Like October, November was very wet and stormy over the British Isles and Western Europe and there was almost continuous cloud over N.W. Germany throughout the month, frequently with thick frontal cloud or heavy cumulo-nimbus, resulting in severe icing conditions. A fundamental difficulty of operational planning in Western Europe was that many times when weather conditions at targets were good, bases were bad and when bases were good, targets were bad.

Immediately after the fall of Walcheren Island on November 10th, all groups of Bomber Command were required to stand by to support an offensive by the U.S. Armies against strongly established enemy positions on the line of the River Roer covering the approaches to the Cologne plain. The fortified towns of Düren, Julich and Heinsberg, situated on the Roer, were allocated for attack by Bomber Command and on November 16th they received a total of 5,689 tons dropped by nearly 1200 aircraft. The targets were clear of cloud and all three attacks were completed successfully. Reconnaissance showed exceptional concentrations of bomberaters and, though it had been intended to repeat attacks on Düren and Jülich, destruction was on such a scale that the Army stated that no further attacks were required.

The R.C.A.F. Group supplied over 200 aircraft to the force of 500 which bombed Jülich with such outstanding results. This attack, owing to the proximity of our forward troops, had to be carefully planned and executed, and was carried out in daylight at 1530 hours. The route was covered by cloud, which mostly disappeared before the target was reached, where visibility was excellent with markers concentrated and accurately placed. Well directed by the Master Bomber, the Lancs and Hallies swept in and bombed with precision, even after the aiming points were obscured by smoke which rose to 8,000 feet. There was no enemy fighter opposition, flak was moderate over the target and all aircraft returned safely. Destruction was complete: the entire built-up area was wiped out and the road bridge across the Roer destroyed. The town was nothing more than an unrecognizable heap of rubble, with a cratered area extending beyond it on all sides.

This attack was mentioned when W/C V. F. Ganderton, D.F.C. of the Lions was subsequently awarded the D.S.O. WO D. L. H. Murray, later commissioned, was also decorated with the D.F.C. for this sortie when, with two engines knocked out by flak and other serious damage to his aircraft, he flew safely to base where he made a successful landing, saving the lives of his crew.

Two days later an important railway junction in West-phalia was the objective when a force of 480 aircraft, over 40 per cent of which were from the R.C.A.F. Group, set out for Munster on another daylight attack. The Dortmund-Ems canal passes through this town which also has an inland harbour. The attack was carried out from between two layers of 10/10ths cloud on sky-markers which were generally scattered over a considerable area, although there were good groups of both reds and greens. Some crews bombed on navigational aids. In the circumstances scattered bombing might have been expected, but the actual results were fair, with the main areas of destruction in the north and

south-east sections of the town. Business and residential property and military installations suffered damage. Two-thirds of the goods station was destroyed and the railway lines were cut in several places.

The approximately eight heavy flak guns guarding Munster put up nothing like the opposition they could have done in clear weather, and none of our crews was missing. However, one aircraft of the Goose Squadron, captained by P/O W. E. Tunis, was hit by flak about twenty minutes after leaving the target and the crew were forced to bale out seven miles south of Ghent. The aircraft broke into flames on crashing and was completely destroyed, but all the crew were safe.

On the night of the 21st/22nd, Bomber Command sent out a huge fleet of over 1100 bombers, directed mainly against five major targets, synthetic oil plants and communication centres, besides a number of smaller objectives. The R.C.A.F. Group took on the synthetic oil plant at Castrop-Rauxel practically single-handed, as it was accompanied by only a few Pathfinders and a handful of aircraft from another Group. Small numbers of R.C.A.F. Pathfinder aircraft also took part in raids on Worms and Aschaffenburg on the same night. Visibility was fair over the target at Castrop-Rauxel, markers were on time and well placed and the main force achieved a good concentration of bombing. Numerous explosions were reported and black smoke was mushrooming up to 8,000 feet as the Canadians withdrew. Damage was extremely severe, with almost every building partially destroyed, including cooling towers, gasholders, oil storage tanks, ammonia plant compressors, gas washing towers and contact oven-houses. The coking plant was also hit

As the attack was carried out before the moon set and the weather was good, enemy night fighters had ideal conditions for interception and a very strong force was airborne to oppose our attack. However, effective radar countermeasures, coupled with simultaneous attacks on Aschaffenburg, Stuttgart, Worms, Hanover and Wesel, so confused the enemy controllers that all serious attempts at interception were defeated and our losses were limited to four aircraft missing, though two others crashed on their return. Our bombers claimed one enemy probably destroyed and three damaged in fifteen combats.

Three experienced crews were lost, two from the Porcupine Squadron and one from the Bisons. The Porcupine crews were made up of P/O A. T. Bond with F/O R. A. Watson, FSs A. E. Robson, J. R. Seymour and R. Allan, Sgts. K. E. C. Slack and J. Weir (R.A.F.) in one aircraft; and F/Os D. F. Guy, C. H. Love and H. A. McLennan, P/O R. D. McLachlan, FSs L. P. Ramey and J. J. Scott and Sgt. T. A. S. Lockey (R.A.F.) in the other. The Bison crew was composed of F/L S. S. Mitchell, F/O J. H. Johnston, WOs R. N. McEachern, R. M. Aimas and FSs G. W. Harris (R.A.F.), C. M. Wert and R. E. Nelson, Bond, Watson, Weir, Slack, Guy, McLennan, McLachlan, Scott, Mitchell and Nelson were taken prisoner. When the war ended Ken Slack, who had in the interval been promoted to Flight Sergeant, made his way to an Allied camp near Schonebeck, south of Madgeburg. About noon on May 9th he and another Canadian airman were in a boat near the bank of the Elbe River when they saw a German soldier in difficulties in the water. Slack at once dived in to help the German, followed by the other Canadian, but the swift current of the river swept him away and he was drowned. A boat manned by American soldiers succeeded in rescuing the second airman and the enemy soldier for whom Slack had given his life.

When they were released Mitchell, the pilot, and Nelson, the rear gunner of the Bison aircraft, reported that they were illuminated at 19,000 feet by a searchlight when about two minutes from the target. A Ju. 88 underneath spotted them and fired a threesecond burst which destroyed the port

fin and rudder and set fire to the port inner engine and wing. The rear gunner returned the fire and the enemy aircraft burst into flames, went into a spin and was seen to explode on the ground. They carried on to the target, dropped their bombs and started back but, as they were losing height and could not put out the fire, orders were given to bale out. Even though a wing dropped off, the pilot stayed with the aircraft till it was at 1,000 feet, attempting to get a dazed crew member out, and was finally thrown out of his escape hatch when the aircraft turned on its back. He pulled his ripcord and landed less than fifty feet from the crashed and flaming aircraft which exploded and sprayed him with oil, burning him severely.

A new crew of the Goose Squadron was also lost over CastropRauxel. F/L A. E. Steeves (pilot) and Sgt. J. A. McPhee were captured by the enemy; F/Os A. B. Rowley and L. W. Frizzell, WO E. K. Wilson and Sgts. L. Basarab and H. E. Clark (R.A.F.) were killed.

The night of the 27th/28th was the occasion of the next R.C.A.F. attack when Neuss, an important inland port on the Rhine and the site of Germany's largest producer of nuts and bolts, was the target. Again the force was made up principally of the Canadian Group which supplied 225 of the 290 aircraft despatched. The attack was made from heights varying between 12,000 and 19,000 feet and crews bombed on the glow of markers, accurately placed and well maintained, below the thin cloud. Two very large explosions were noted and many well-grouped fires were observed at the end of the attack. Due to cloud, reliable photographic cover of this target could not be obtained until the following January and, as two other attacks had taken place during the interval, it was impossible to assess the damage inflicted by this particular operation.

The Luftwaffe had often been deceived by Bomber Command tactics but it rarely suffered such complete defeat as on this occasion when only one bomber reported a night fighter attack during the several operations undertaken that night. This outstanding success was again due to effective concealment of the intention behind the forces' approach. Of the night's total losses, one targetmarking Mosquito on Neuss and one Lancaster on Freiburg, the latter loss was almost certainly caused by a falling bomb, the incident being observed from an aircraft just ahead. All R.C.A.F. aircraft returned safely.

The month's operations closed with a 550 'plane raid on Duisburg on the night of November 30th, to which the Canadian Group contributed 243 Lancasters and Halifaxes. It will be remembered that this target was very heavily attacked on October 14th, when over 2,000 aircraft dropped some 9,000 tons in two raids. The first target indicators quickly disappeared in the 10/10ths cloud which covered the area, but the resulting red glow confirmed good grouping and an effective concentration of sky markers was quickly built up. Most crews bombed on these and the attack was considered successful, in view of the compact stream of aircraft on the bombing run and the resulting fires and explosions. Photographs confirmed that, though somewhat scattered, damage was widespread in an area which stretched from Hamborn in the north to Huckingen in the south. The most important industrial target hit was a tar distillation plant, the eastern half of which suffered considerable damage. Another priority factory, the Niederrheinische Hutte (iron and steel), was severely damaged while the Duisburg Kabelwerk, manufacturers of torpedo nets and cables, suffered moderate loss. The main railway station received one direct hit and tracks were cut in many places.

Heavy flak, mostly aimed at the marking flares, was slight and did not bother the attacking aircraft unduly. There was some night fighter activity, however, with ten combats reported by our crews who claimed three enemy aircraft damaged. Two Bison Squadron aircraft were lost, one with an experienced crew captained by F/O G. W.

Clarke with P/Os C. W. F. Short, F. W. Manchip, WO G. L. Pare, FSs S. M. Ogilvie, R. F. Nimmo and Sgt. L. J. Fry (R.A.F.), who had completed half their first tour. In the second Halifax were F/Os D. Bell and L. G. Watson, FSs W. A. Streich, A. S. Thomson, G. McGregor and J. H. Kitchin and Sgt. P. F. Bolderstone (R.A.F.).

F/O H. A. Fitzgerald, an air bomber of the Snowy Owls, was decorated following this raid, his citation stating that:

... damage was sustained from anti-aircraft fire while on the bombing run and one engine caught fire. Undeterred Flying Officer Fitzgerald completed his bombing run and dropped his bombs on the target. On the return flight he rendered valuable assistance to the navigator as all navigational aids had become unserviceable. This officer has always displayed courage and devotion to duty of a high order.

This sortie was among those cited when F/O J. H. Carpentier of the Alouettes, F/O R. M. Gould of the Lions and F/O J. A. Sefton of the Snowy Owls were later awarded D.F.Cs.

Largely due to the extremely unsuitable weather which persisted throughout November, mine-laying operations were only carried out on a restricted scale by the Canadian Group. Forty-three mine-laying sorties were undertaken, on which 151 mines were laid. The main aim of these operations continued to be the dislocation of the shipping routes and harbours which the Hun was endeavouring to use to remove his surplus men and material from Norway via Denmark to the European fronts; and they had now taken on the aspect of a rat hunt in which we were endeavouring to seal up every bolt-hole which might be used. One experienced crew was lost on this work when F/L J. T. Hardy, F/Os S. G. Hall and J. R. Pollock, FSs H. J. Cook and J. Warburton and Sgts. J. W. L. Patterson and M. Rowntree (R.A.F.) of the Lions crashed into the sea on return from a mining sortie.

November saw several squadrons change commanding officers. W/C G. A. Tambling took over the Porcupines

from W/C A. J. Lewington who completed his second tour at this time; W/C F. R. Sharp assumed temporary command of the Goose Squadron vice W/C J. F. Easton, D.F.C., and W/C W. G. Phelan, D.F.C. replaced W/C G. J. J. Edwards with the Snowy Owls.

W/C A. F. Avant, D.F.C., a former C.O. of the Bisons was awarded a D.S.O. during the month and W/C D. C. Hagerman, D.F.C. of the Moose Squadron, a bar to his decoration. G/C R. J. Lane, D.S.O., D.F.C., a former commanding officer of the Vancouver Pathfinders, also got a bar to his D.F.C.

#### CHAPTER III

### NO. 6 BOMBER GROUP (WINTER 1944-45)

#### December 1944

ILITARY activity on the Western Front reached a climax in mid-December when von Rundstedt launched, in the Ardennes, the largest scale German counter-offensive since D-Day. Its main object was to break through to Antwerp in a spoiling attack to destroy Allied initiative prior to the commencement of our all-out winter offensive on the Reich.

The area of attack was a sixty-mile front between the Eifel region and the Ardennes, from Monschau to Echternach. A high degree of tactical surprise was achieved, but this was to a great extent neutralized by the resistance of the American formations which were overrun and by the rapid reaction of the Allied Command to the danger. The enemy chose a time of bad weather to prevent Allied airpower from being brought to bear, but from the very first Rundstedt's plan began to go wrong as the weather proved fickle with clear and foggy days alternating. The Allied air forces were able to operate on the clear days and Bomber Command achieved some fine results using both visual and blind bombing techniques.

In the advance area attacks were made on important road centres, such as St. Vith and Houffalize, through which army convoys bringing supplies from railheads must pass. As the enemy had only a few routes available in his narrow salient the effect of these operations was considerable. Further back behind the battle area, attacks were made on places where the Nazis had established railheads for unloading troops and supplies. Allied Intelligence discovered that most of the supplies for the battle were coming from the north through Cologne, while troops approached the area through Frankfurt and thence up the Rhine to Coblenz. As regards fuel, the enemy had no large dumps west of the Rhine and was almost certainly dependent on a steady flow from depots on the Elbe. To interfere with the movement of troops, fuel and supplies, many attacks were made on rail centres and marshalling yards at Cologne, Rheydt, Neuss, Trier, Ehrang, Giessen, Frankfurt, Hanau, Mainz, Bingen and elsewhere. The work of the heavy bombers was supplemented by fighter bombers that cut rail lines and attacked rolling stock and motor-transport.

It is now known that the bombing of Rundstedt's communications, particularly the railway network, was a major factor, together with fighter bomber attacks on enemy columns in the battle area, in checking the offensive. There was evidence, reminiscent of the Battle of Normandy, of tanks and self-propelled guns being abandoned for lack of fuel; prisoners complained of the lack of food, and, in one case, a Volksgrenadier Division was forced to move the whole way from Denmark to the front on bicycles.

Many of the targets in the Ruhr valley and elsewhere, which previously had been attacked because of their importance as industrial and manufacturing centres, were now being bombed with their railway stations, marshalling yards, docks, canals and other military traffic and supply routes, as the vital aiming-points. Thus, attacks during the winter of 1944-45 on industrial cities such as Duisburg, Cologne, Düsseldorf and many others, were at the same time blows at the Hun's lines of communication.

R.C.A.F. squadrons in No. 6 Group and the Vancouver Pathfinders of No. 8 Group played a part in twenty bombing operations in December, all but one of which were on objectives in Germany. The majority of the Canadian Group's attacks were designed to dislocate the enemy's transport and supplies, targets in this category including Karlsruhe, Osnabrück, Duisburg docks, and the Cologne/Nippes, Soest, Opladen, Troisdorf and Cologne/Kalk marshalling yards. Other attacks involved war industries at Hagen, the chemical works at Ludwigshafen, the Lohausen airfield at Düsseldorf, troop concentrations at St. Vith and the Scholven synthetic oil plant at Buer. Nine of the raids were on a large scale, with 150 or more aircraft engaged; on the others the Group's participation was limited to 50 or 60 bombers. The Canadian Pathfinders shared in most of these operations and in addition took part in raids on the Urft dam, the Merseburg/Leuna synthetic oil plant, Essen, Ulm .and the Bingen, Rheydt and Bonn marshalling yards.

Most of the operations took place under cover of darkness, only four, being classified as daylight attacks. It was during December that the first serious attempts were made to disrupt Bomber Command's daylight bombing by strong G.A.F. fighter opposition. Little success was achieved due to the presence of strong Allied fighter escorts. It was noticeable that the enemy tended to choose isolated or straggling bombers for his attacks, those in the main stream flying almost unmolested.

The first Canadian operation of the month took place on the night of the 2nd/3rd when the R.C.A.F. supplied 214 aircraft, including Vancouver Pathfinders, for a 500-plane raid on Hagen, one of the most important commercial cities in Westphalia, with large iron and steel works and extensive marshalling yards, goods stations and repair workshops. The Hagen plant of the Accumulatoren-Fabrik A. G. produced 50 per cent of Germany's total requirements for ships' storage batteries, particularly for submarines.

There was scattered cloud from the French coast with tops at 10,000 feet, and moderate to severe icing was encountered. The weather deteriorated over the target and 10/10th cloud up to 16,000 feet obscured the markers, forcing crews to bomb on navigational aids. Several explosions and the glow of fires were seen through the cloud, but it was only natural in the circumstances that the attack was scattered, with damage spread over the entire area of Hagen and the adjoining suburbs. The most concentrated destruction occurred in the built-up area east of the main railway station and in the industrial section in the Ennepe River valley. The Accumulatoren-Fabrik plant, which had been completely repaired after receiving heavy damage in an attack in October 1943, again suffered very severely, as did the main building of Harkort Eicken G.M.B.H., manufacturing steel rods, plates and other war materials.

Flak was light and spasmodic, and the countermeasures introduced to deceive the enemy night fighters seem to have been an unqualified success, as those Jerries who were active about the time of the attack had no opportunity to locate the bomber stream with accuracy in the existing weather conditions. One aircraft of the Porcupine Squadron, captained by F/L W. H. Cook, was missing. FS L. A. Mallory made his way back to Allied territory within a fortnight, but Cook, F/Os J. E. Grant and R. H. Shiells, P/O J. B. Pittman and Sgts. R. E. Ainsworth (R.A.F.) and J. W. Ash were lost. D.F.Cs. were awarded to FIL J. J. Stalberger of the Tigers and F/L J. L. St. Laurent and F/O J. R. H. Lafreniere of the Alouettes for gallantry on this operation. On the outward flight the aircraft piloted by Lafreniere sustained severe damage, the tip of the starboard mainplane being torn away and the top portion of a rudder broken off. In spite of this, Lafreniere went on to the target and executed a successful attack

Two nights later Karlsruhe was the objective for a force of 530 heavies, with the Canadian squadrons again contrib-

uting over 200 Halifaxes and Lancasters. This city, the capital of the province of Baden, was of particular importance at that time as a transport centre, being situated on the main line from Western Germany to Italy, via Switzerland. It is also connected with the Rhine for water-borne traffic by the Stich Canal. The Deutsche Waffen and Munitions Werke A. G., an important small arms ammunition works, had a plant here which, because of the unfavourable proximity of Karlsruhe to the French frontier, had been partly closed during the early stages of the war but was now believed to be working at full capacity and employing several thousand workers.

Although the target was obscured by 8/10ths to 10/10ths cloud, a satisfactory concentration of target indicators was obtained, the glow being clearly visible on the cloud. Occasional glimpses through gaps enabled some assessment of the attack to be made and bombing generally was good. Several large explosions occurred and the glow of fires could be seen for 150 miles on the return journey. Slight to moderate heavy flak, in barrage form, was encountered in the target area and a few enemy fighters were seen, but all aircraft from the Canadian squadrons returned safely.

As this target had been raided by the U.S.A.A.F. in October and November 1944 and photographic cover for damage assessment purposes was not obtainable until January 1945, it was impossible to distinguish among the three attacks. It can be said, however, that considerable damage was done to the whole town, the sum total of destruction now standing at 34 per cent of the built-up area. The industrial section stretching south-east from the docks was severely hit.

Soest, a small but important communications centre and industrial town with large railway repair shops, marshalling yards with a capacity of 4400 wagons a day, and several engineering and metal working firms, was the next target

for the R.C.A.F. on the night of December 5th/6th when 485 heavies operated. Canadian squadrons this time despatched 195 aircraft to attack the marshalling yards.

There was patchy cloud over the target area but it did not interfere with accurate bombing on well placed markers. Fires developed rapidly and throughout the attack explosions were seen, some emitting orange flame and black smoke. The aiming point was a mass of flames as the attack ended, with the glow visible a hundred miles away. Defences consisted chiefly of slight to moderate heavy flak. Some fighter activity was reported, but the main defensive forces again missed contact with the bombers.

Photographs showed that as a result of this attack and one by the U.S.A.A.F. on December 4th, extensive damage was caused to most of the major rail facilities. Both the east-bound and westbound sorting sidings were completely out of action, the transshipment shed was almost completely destroyed and all the buildings of the goods depot were very severely damaged. At the passenger station a large part of a covered loading platform and a medium-sized building were destroyed.

The R.C.A.F. had an unlucky night, losing the only aircraft missing on this operation, one from the Thunderbirds and another from the Bluenose Squadron. In addition, two aircraft collided and crashed before reaching enemy territory, with the loss of both crews. Six of the Thunderbird crew, F/L P. G. Chipman, F/Os C. L. Shipman and P. H. Harris, FS J. Popadiuk and Sgts. D. N. McLaren and H. Rhodes (R.A.F.), were made prisoners of war. The other member of this crew, Sgt. J. Knoke, was lost as were all seven in the Bluenose Halifax, F/Os T. Kowalchuk and K. C. Christian, FSs V. E. Prouse, D. H. Lavalley and G. P. Coughlin, and Sgts. J. M. de Macedo and C. Higginbotham (R.A.F.).

The following night Bomber Command despatched 1269 aircraft on bombing missions, the three main objec-

tives being Osnabrück, the Merseburg synthetic oil plant and Giessen, besides a sharp nuisance attack on Berlin by forty Mosquitoes. Once again the Command scored a tactical victory over the enemy night fighters, making a deep penetration into the vital oil target and two shallower raids into Germany for the loss of only 1.5 per cent of the aircraft involved. The Germans were still inadequately prepared to defend themselves against multiple attacks, as only twice during the long period covered by the three incursions did fighters make contact in force with the bombers, at first as the Osnabrück fleet was leaving the target and, a few minutes later, over Giessen. Both encounters were short and sharp.

The Canadian Group.supplied 200 heavies to the force that bombed Osnabrück. The target was covered by thick cloud with tops extending up to 21,000 feet, haze making horizontal visibility poor. Few markers were seen and most crews bombed on navigational aids and the indistinct glow of fires and markers which forced its way through the clouds. Several large explosions were reported and the reflection of fires could be seen from sixty miles away, but generally speaking bombing was considered to have been scattered throughout the target area.

R.C.A.F. aircraft reported seven combats during which FS O. S. Clarke, rear gunner for F/O W. G. R. Simpson of the Porcupines, destroyed an unidentified enemy fighter. P/Os W. R. Cornell and Gus Supergia, mid-upper and rear gunners in a Lancaster of the Iroquois Squadron, drove off an attacking Ju. 88 after inflicting considerable damage to it. This exploit was cited when they were later awarded the D.F.C. The Osnabrück attack was also mentioned when D.F.Cs. were awarded to F/O G. H. K. Begg of the Vancouver Pathfinders, F/L N. D. Mara of the Porcupines, and F/L J. E. G. Poirier of the Alouettes

Mara, in fact, had a rather hair-raising experience on this operation:

Before reaching the target, trouble was experienced with the port outer engine which began to misfire, followed by large flames from the exhaust. The throttle control kept jumping back to the closed position. Despite this, Flight Lieutenant Mara went on to the target. Whilst on the bombing run, flames once again shot out from the exhaust. Nevertheless, this pilot continued his run and the bombs were released. At this point, two enemy aircraft attempted to close in. Flight Lieutenant Mara evaded them and course was set for home. Soon after crossing the enemy coast, the hydraulic system became unserviceable. The bomb doors fell open and the tail wheel dropped to the down position. Despite this, Flight Lieutenant Mara, when he reached an airfield, effected a safe landing.

Four of our aircraft were lost, including one from the Bison Squadron manned by an experienced crew consisting of F/Os J. M. Prentice and T. Wilson, P/Os S. L. Norejko, E. S. C. Clark and W. E. H. Barty (R.A.F.), Lt. F. M. McRoberts (U.S.A.A.F.) and WO J. C. Copeland. F/L H. D. O'Neil was also along as second pilot.

Another aircraft, of the Leaside Squadron, went missing with F/Os G. H. Speirs and C. W. Wilkinson, P/O C. W. Soles, WO J. G. W. Chalmers, WO P. A. Callaghan, FS H. C. Quinn and Sgt. J. G. Jonas (R.A.F.). Callaghan, Wilkinson, Soles, Jonas and Quinn were later reported prisoners of war. On release they stated that the port outer engine had failed a short distance from the target and that they were unable to feather it. They carried on and bombed, but immediately afterwards the wind-milling propeller came off. damaging the port inner engine, tearing a large hole in the fuselage and knocking out all navigation instruments. The aircraft dropped rapidly to 5,000 feet before the pilot could regain control. He endeavoured to turn for the nearest Allied territory in the vicinity of Arnhem, but with two engines unserviceable the, aircraft could not maintain height and at 3,000 feet the pilot ordered the crew to jump. Five of the crew baled out without mishap but the tail gunner and pilot were unable to clear the aircraft in time.

The other crews missing that night were F/Os B. D.

Hyndman and G. R. Cheesman, FSs G. E. Smith, L. T. Graham, D. L. Marcellus and E. M. Hansen and Sgt. R. D. Ovis (R.A.F.) of the Moose Squadron; and F/Os D. L. C. McCullough, A. M. Garner and A. A. J. Low, P/O H. Pankratz, WO J. R. Lee and Sgts. R. Atkinson (R.A.F.) and J. L. Keown of the Tigers. Garner, Low and Pankratz were taken prisoner.

Due to consistently poor weather, with fog and low cloud keeping our aircraft on the ground, the .R.C.A.F. Group flew only once in the next eleven days, supplying 51 Lancasters to a force of over 300 that attacked the I. G. Farben-Industrie A. G. chemical works at Ludwigshafen on the 15th/ibth. Aircraft arrived early due to unexpectedly strong winds and while orbitting, waiting for markers to go down, observed decoy fires being lit to the N.N.W. and S.W. of the target. They ignored the bait. Visibility was good, target indicators were accurate and well maintained and bombing on the aiming point was heavy and concentrated. Crews reported large explosions and many fires, some burning with green and orange smoke. Defences consisted of moderate heavy flak in barrage form with some fighter activity, but all the Canadian Group Lancasters successfully bombed the primary target and returned safely.

Damage resulting from this attack was severe and concentrated mainly in the area of the chemical works lying between the nitric acid plant to the north and the experimental synthetic oil plant and heavy chemical plant towards the southern end. In other parts of the works damage was caused in the new power plant, the oil refinery, the Buna plant, the marshalling yards and the workshops and storage areas. On the east bank of the Rhine, in the petroleum receiving depot, four storage tanks were destroyed and two damaged.

FS B. L. McKinnon, air bomber of the Moose Squadron, was awarded a D.F.M. for the courage and fortitude he displayed on this operation when severely injured in the foot by bullets from an enemy fighter.

It was not until the night of the 17th that the campaign against German communications was resumed when Duisburg was the target, with the R.C.A.F. supplying almost 50 per cent of the 500 bombers despatched. The weather was again unsatisfactory with 10/10ths cloud at 12,000/18,000 feet over the target. Markers disappeared into the cloud and bombing was done on the glow of fires or with navigational aids. Flak defences, mainly in barrage form, were not heavy but the force was intercepted by fighters after the first ten minutes of the rather scattered and prolonged attack and Canadian crews reported twelve combats over the target and on the first leg of the homeward journey. FSs J. Archibald and D. Burke, gunners in the Bluenose kite skippered by F/O J. Wagman, drove off an attacking Me. jog with an accurate hail of gunfire. It disappeared into cloud, where a red glow was seen, and a few seconds later an explosion occurred on the ground, indicating that it had crashed.

Two R.C.A.F. aircraft were missing and three more were lost on our own side of the lines. One was manned by an experienced crew from the Thunderbird Squadron, consisting of F/Os T. L. Layman, G. W. Law, E. G. Fox and J. P. Mahoney and FSs J. I. Hoyle. (R.A.F.), H. T. Campbell and W. C. Downey. Layman, Law, Mahoney, Campbell and Downey were made prisoners of war. When he was released Layman, the pilot, stated that their aircraft was hit twice by flak bursts just before the target was reached; the first burst set both starboard engines on fire and the second exploded under the mid section, setting the bomb bays and fuselage alight. He feathered the engines and used the graviners but the fire persisted. The aircraft then went into a spiral dive and he signalled to the crew to bale out. A moment or two later the aircraft exploded. Layman regained consciousness below cloud in the glare of target fires, pulled his ripcord and landed in an open field among woods

F/O M. Krakovsky was the only survivor of a veteran

Leaside crew that included F/Os R. L. Cann and G. D. Wilson, P/Os A. G. W. Blayney and M. J. Boylan (R.A.F.), and FSs S. E. Zadorozny and J.W. Green. The same squadron lost five members of a new crew, F/Os D. Hitchcock and G. H. March, FSs E. P. Harvey and A. Ecclestor (R.A.F.) and Sgt. E. J. Farrell; the skipper, F/O D. J. McKinnon, and Sgt. J. H. Harvey were safe. When a Bluenose Halifax crashed F/L J. M. Parrott, F/O S. H. J. Pearce, WOs A. E. Kurtzhals and G. W. Olafsen, FS A. Divitcoff and Sgt. L. H. Janzen were killed; only P/O H. Brown escaped.

F/L J. K. Goldie of the Ghost Squadron was awarded his D.F.C. for exceptional coolness and devotion to duty on this attack and also on the operation against Ludwigshafen. En route to the target part of the oxygen system failed and one member of the crew lost consciousness. Goldie brought his aircraft down to a very low altitude to permit repairs to the system and then continued to the objective.

Damage to Duisburg was scattered throughout the business and residential sections, the docks, the central station and the Meiderich marshalling yards. This town had been the objective of eleven attacks since November 6th, the cumulative results of which were heavy. Of 36 industries rated as priority targets, seventeen showed fresh damage, with five in the severely damaged category, while 35 other factories were hit, with six a total loss and fourteen very severely mauled. Damage to communications was widespread and the marshalling yards were largely unserviceable; craters from earlier raids were not yet filled in.

On December 21st the Nippes marshalling yard at Cologne was the objective for a small force of 135 aircraft, including fifty from the Canadian Group and eight from the Vancouver Pathfinders. Once again bombing had to be done blind over extremely bad cloud conditions and the attack was scattered, with only slight damage inflicted to the north and southbound sidings. Flak defences were weak, only a few fighters were sighted and there were no

combats or claims by our aircraft, all of which returned safely.

On the day before Christmas fourteen bases used by German Air Force single-engined fighters operating over the Ardennes battle area were attacked by the 8th U.S.A.A.F. and the R.A.F. Bomber Command's share consisted of the three airfields most heavily defended by flak-Essen/Mülheim, Düsseldorf/Lohausen and Bonn/Hangelar, the last named being attacked by night. The Americans attacked the other eleven and the total effort, which made these Luftwaffe bases unserviceable, greatly assisted both the Army and the heavies on the days following when the meagre G.A.F. effort available had to be concentrated almost entirely on close support work.

The Lohausen airfield was the target allotted to the R.C.A.F., and 150 heavies led by a small detachment of Pathfinders attacked simultaneously with another Group which took on the Mülheim base. For the Bluenose Squadron this was the first operation on their new Lancaster Xs. Clear weather permitted visual identification and, despite intense and accurate heavy flak, markers and bombing were well placed and concentrated. Smoke and dust laid a pall over the field and fires followed by explosions were seen in the adjacent buildings. Reconnaissance photographs showed craters evenly and profusely distributed over the entire landing ground, with at least 85 on the three runways.

Two.R.C.A.F. aircraft did not return, both falling victim to the vicious flak pumped up. However, eight of the two crews baled out and were taken prisoner by the enemy. They were F/O W. H. Dunwoodie and FS J. A. Chiasson of the Goose Squadron and F/Os T. H. Cowtan and J. L. L. Cartier, P/O J. V. Ranson, FS C. W. Thompson and Sgts. F. A. Hector and G. B. Little of the Moose. The other members of the crews were F/L W. L. Friker, F/O D. G. Kellar, FSs D. C. Tonkin and G. R. D'Amour and Sgt. W. B. Allan

and F/O R. W. Hale.

This raid was mentioned when F/O J. F. Bonner of the Snowy Owls was awarded his D.F.C., the citation reading:

On the run-in to the target his aircraft was repeatedly hit by antiaircraft fire and large holes were torn in the fuselage and wings. Despite this Flying Officer Bonner executed a perfect bombing run. He afterwards flew the badly damaged aircraft back to base.

There were no heavy bomber operations on Christmas Day, fog and. hard frost enforcing a stand-down. Boxing Day, however, saw the R.C.A.F. on direct army support operations again when they supplied 61 Halifaxes to a force of 270 heavies which attacked enemy troop concentrations at St. Vith, an important road and rail centre in Belgium which had been recaptured by the Wehrmacht during its mid-December counter-offensive.

The operation was carried out despite extensive fog over England and only the most experienced crews were used. Clear weather at the target permitted visual identification of the objective and bombing was concentrated and accurate, a shower of high explosives and incendiaries burying the aiming point under a cloud of smoke within four minutes. The Germans had not protected the target with many heavy anti-aircraft guns but elsewhere in the salient there was a good deal of accurate flak. Two aircraft of the force were shot down but all the Canadian aircraft returned safely. German fighters did, not attempt to interfere.

Results were all that could have been asked for. The whole of the town was devastated, with hardly a building remaining intact and craters honeycombing the ground in the vicinity. All roads through and out of the town were cut by numerous craters and rail communications were also severed in a dozen or so places. This operation provided a striking example of the power then embodied in Bomber Command: approximately 275 heavy bombers dropping

about 940 tons of high explosive and 200 tons of incendiary bombs completely wiped out a small town, with a peacetime population of about 5,000, in the space of fourteen minutes. The civilian population had, of course, been turned out by the Germans who were using the place as an advanced army base.

Opladen, a communications centre twelve miles north of Cologne on the River Wupper, with important railway repair shops and two engineering works, was the next objective for the R.C.A.F. on the night of the 27th/28th when it supplied 150 Halifaxes and Lancasters to a force of about 300 aircraft. Enemy night fighters offered considerable resistance to this attack with eight combats reported by the Canadian Group and one Me. 109 claimed as damaged. Two of our aircraft were lost, one from the Moose Squadron, manned by an experienced crew made up. of F/Os F. W. How and R. K. Nickle, F/Os N. R. Springstein, J. A. S.. MacGregor, C. D. B. Hubley and C. R. Tait and Sgt. J. Atkinson (R.A.F.), who all had completed about eighteen trips. There were no survivors from this crew nor from the Ghost one composed of F/Os E. W. Page, S. D. Hewson, A. A. Dixon, R. A. Ebber, K. O. McDivitt and A. T. LeBlanc and Sgt. G. F. Owen (R.A.F.).

Unbroken cloud and bright moonlight confronted the raiders over the target at the unusual H-hour of 0625-that is, less than one hour before morning twilight. Sky markers were plentiful, concentrated and well sustained throughout the attack and bombing was accurate. Both large railway workshops were severely damaged and the tracks leading to them interrupted. The power plant, a stores building and at least four unidentified buildings were damaged in varying degrees. Thirty craters could be seen on the tracks and some rolling stock was derailed or damaged.

The following night the Troisdorf marshalling yards near Bonn, eight miles southeast of Cologne, received the attention of 150 R.C.A.F. Halifaxes aided by a small Path-

finder force. Again there was 10/10ths thin, low cloud cover with good visibility above. Ground markers were plentiful and well concentrated, and formed a distinct and compact glow on which most crews were able to bomb. Fires and explosions were seen with a large mushroom of black smoke rising to 12,000 feet. Defences consisted of slight heavy flak in loose barrage form with a few ineffective searchlights. Some fighters were also seen but there were no combats reported by our aircraft.

Photographs taken three weeks later showed considerable damage to the marshalling yard. One-fifth of a transshipment shed had been destroyed and a road bridge over a railway had partly collapsed. South of the yard severe damage was caused in the gas and electricity works, an instrument plant and two unidentified factories.

Although no aircraft were missing, one Halifax of the Leaside Squadron was badly shot up by flak on the return journey. The port main plane was punctured in numerous places and large pieces were knocked off the leading edge. The port fuel tanks were also holed, the bombsight was demolished and both the port and starboard outer engines were rendered unserviceable. In spite of all this and although deprived of the full services of his wounded navigator, the captain of the aircraft, F/O F. D. Baxter, was determined to bring his damaged aircraft back to England. This he succeeded in doing. F/O E. R. Hancox, the navigator, was badly wounded in the legs and a tourniquet had to be applied to stop the. loss of blood. Notwithstanding his extreme pain, Hancox navigated the aircraft back to the emergency field where Baxter landed. Both were awarded D.F.Cs. for the skill, courage and fortitude they displayed.

On the night of the 29th/30th Canadian squadrons despatched 64 Lancasters as part of a force of 335 heavies attacking the Hydrierwerk Scholven A. G. with No. 6 Group supplying 48 and the Vancouver Pathfinders another sixteen. This synthetic oil plant, situated north of Buer and 7½

miles northwest of Gelsenkirchen, had an annual capacity of 350,000 tons of oil products.

Target indicators were well concentrated and bombing was accurate. One particularly large explosion shot flames up through the low 10/10ths cloud and a column of thick black smoke rose two miles in the air. The main concentration fell on the north-east section of the plant, inflicting severe damage to the main storage tanks and, in addition to fresh damage to the cooling plant and railway tracks, results of the visit were evident throughout the whole establishment.

Defences were moderate, consisting of heavy flak and a few enemy fighters, but R.C.A.F. losses were heavy as three crews of long experience did not return. F/Os F. H. Wilsher, G. G. Fox, J. M. Phillips and H. R. Dryer, P/Os E. R. Kaesmodel, D. J. MacFarlane and A. W. Haley and Sgt. T. R. Harrigan of the Vancouver Squadron made up one crew. The other two were from the Moose Squadron. P/O R. F. Adam, captain of one, had WOs L. P. Wakely, F. S. Dennis and R. G. Rogers, FSs J. C. Rhind and H. C. Tarzwell and Sgt. R. E. Eratt (R.A.F.) with him, while the other was manned by F/Os R. A. McVicar and V. A. Sorrenti, FSs C. R. Conley, W. G. E. Morgan, T. J. Maloney and W. R. McLeod and Sgt. J. Feldman.

Rogers and McLeod were made prisoners of war and when released the reports they gave revealed an amazing coincidence. Each was the rear-gunner of an aircraft which was hit by flak in the same area at the same time. Both Lancs blew up almost immediately and the only survivor of each crew was the rear gunner who was thrown clear by the force of the explosion.

The Kalk marshalling yards, just east of Cologne, were visited by 450 aircraft on the last night of the month with the R.C.A.F. Group despatching 200 heavies and the Vancouver Squadron supplying another nine to the Pathfinder force. The attack opened with a good concentration of skymarkers which tended to scatter in the later stages and

reports indicated that the whole area between the yards and the river was bombed. Several heavy explosions were noted and fires produced a glow which was visible for fifty miles. Moderate heavy flak with a few searchlights were the only defences at the target, though night fighters were seen on the route in and out. R.C.A.F. aircraft reported three combats but no claims were made and none of our aircraft was missing. The marshalling yards, which in 1939 were capable of handling 4500 wagons a day, suffered some damage to the large trans-shipment shed, and the business and residential section to the north also received a share of the bombs.

When F/L C. P. Lundeen, D.F.M. of 'the Tiger Squadron was awarded the D.F.C. this operation was mentioned:

On the outward flight the port inner engine caught fire. Flight Lieutenant Lundeen feathered the propeller and the flames died away. Despite the loss of power from the unserviceable engine Flight Lieutenant Lundeen flew on to the target and executed a good attack.

Enemy road and rail communications leading to the battle area had been under heavy air assault since the opening of the counteroffensive. It was too early to evaluate the full consequences of all these operations but by the end of December it was clear that the counter-offensive had been halted and that a situation was developing similar to that which had existed in France. Allied air attack was forcing the enemy to abandon rail transport at increasingly long distances from the doomed counter-thrust upon which the German High Command had expended great quantities of men and munitions that were later to be urgently needed for the defence of Germany itself.

Despite the necessity for hampering the transport of enemy troops and material from Southern Norway, weather either at base or in the target area made it impossible to lay mines in these waters for the first three weeks of the month. About the middle of December other Groups of Bomber Command were able to carry out a few operations in the Kattegat at the southern end of the shipping routes, but the R.C.A.F. Group had the distinction of being held for special minelaying operations in the narrow fjords leading up to the smaller south Norwegian ports, which the Germans had been forced to use after the main ports in Oslo Fjord had been closed by aircraft-laid mines.

Luckily weather improved as the moon period changed late in the month, and on the nights of the list, 24th, 28th, 29th, and 31st the Canadian Group was able to carry out a total of 61 minelaying sorties, on which 232 mines were laid. Seven Norwegian ports were visited, all twice except one, and crews obtained excellent results in these most difficult waters. Some of the channels were a mere 600 yards wide, and in order to have a chance of getting the mines in the right place it was necessary to drop them from as low as 500 feet. The operation on Christmas Eve was undertaken in weather conditions so difficult that none of the other Groups even took off.

There was, unfortunately, one aircraft of the Bison Squadron missing from an operation on the night of the 28th/29th. It was seen to crash after being hit in the Sandefjord area, where the antiaircraft defences were very considerably augmented by light flak from shipping in the harbour. The crew, veterans of over twenty operations, was composed of F/Os B. E. Drewery, L. J. G. Catheralle, J. P. L. Cullen, P/O A. R. MacDonald, FSs K. E. Kelly and J. R. Giblin and Sgt. J. D. Richmond (R.A.F.).

A number of decorations were won on these hazardous mining operations with D.F.Cs. awarded to S/L W. G. Anderson of the Tigers, F/Ls A. M. MacDonald and R. K. Mitchell of the Bisons and F/L J. F. Smart and F/O J. R. Thackeray of the Lions.

The citation accompanying S/L Anderson's award read as follows:

One night in December, 1944, Squadron Leader Anderson piloted an aircraft detailed for a mine-laying mission in narrow enemy waters. In the runs to the target he was subjected to intense antiaircraft fire from shore batteries and also from ships when flying at a very low level. A cruiser appeared and passed almost directly beneath the aircraft. Squadron Leader Anderson immediately gave orders for his gunners to engage the enemy. During the fight his aircraft sustained some damage but owing to the clever evasive action by this gallant officer it was not extensive.

Thackeray, rear gunner of F/O W. B. Britton's crew, aided by P/O H. M. B. Millward in the mid-upper position, succeeded in destroying a Ju. 88 which attacked their aircraft three times while they were dropping mines in Oslo Fjord. Finally they forced the Nazi into a shallow dive from which it was unable to recover before striking the water.

## Review of 1944

In 1944 many varied duties had been allotted to Bomber Command. The preparation for the invasion of the Continent, tactical support of the Allied Armies, the smashing of rail communications, the oil offensive, the attack on U-boat pens and bases, attacks on V-weapon launching and storage sites, these and other tasks were dealt with and the Command's success undoubtedly played an important and often decisive part in the victories of the Army, and were instrumental in saving the lives of tens of thousands of our soldiers. Yet those successes would not have been possible without the long-sustained and arduous strategic bombing of the German industrial cities, for it was upon these centres that the might of the Wehrmacht and the Luftwaffe was founded. With their destruction the foundation was gone and an ever-increasing weakness became apparent in the ability of the enemy's armed forces to wage modern war.

By the end of the year, out of a total of 57 cities in Germany having a pre-war population of 100,000 or over, 46 had been either virtually destroyed or heavily damaged by Bomber Command's attacks. Even by October, 1944, prior to the great intensification of bombing in the last

quarter of the year, industrial production in Western Germany had already fallen by 33 per cent.

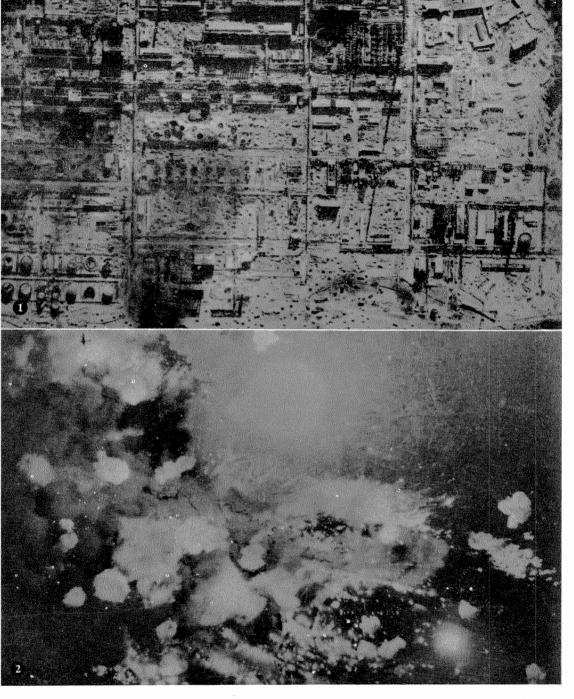
The year was an outstanding period in the annals of the Canadian Bomber Group, remarkable for both the number and variety of operations undertaken. At the beginning of the year the R.C.A.F., together with the other Groups of Bomber Command, was engaged in the strategic bombing of German centres of war production. These operations, sometimes undertaken in extremely unfavourable weather conditions, had to be carried out in the face of determined opposition from both air and ground defences and losses were inevitable, but a substantial toll of hostile fighters was exacted in return.

A new phase was introduced by the series of night attacks on railway facilities and coastal defences in France and Belgium undertaken during the spring. Such operations were entirely different in character from the preceding area attacks as forces employed were in general much smaller and the methods of attack placed a premium on accuracy in navigation and bomb-aiming. The degree of success achieved in these essential pre-invasion operations is now a matter of history.

Subsequent to D-Day, operations became both more numerous and more diverse. Attacks on railway facilities serving the German armies in France were continued; German industrial cities were not entirely neglected; and in addition aircraft of the Group were employed in a tactical role against enemy troop concentrations, strong points and military installations of various kinds. Considerable attention was also devoted to flying-bomb sites in the Pas de Calais. A new feature of operations during this period was the fact that many of them were undertaken by day with fighter escort. Losses were gratifyingly low and the scale of 'effort increased progressively to an August maximum of some 3,700 operational sorties and 14,000 long tons of bombs lifted



Bomber Support for the Army: (1) Julich after the daylight attack on November 16th; the photo, taken two days later, shows many fires still burning; (2) the raid on St. Vith on December 26th.



The wrecked synthetic oil plant at Politz after two heavy attacks in January and February 1945.
 Fires burning and bombs bursting in Pforzheim during the raid on February 23rd/24th; two bombers are silhouetted against the smoke.

After the conclusion of the Battle of France, Bomber Command's main striking power was once again directed against German targets. For the Canadian Group this meant, for the most part, attacks on synthetic oil plants and on communication and supply centres, diversified by a raid on the submarine base at Bergen and active participation in the programme of aerial mine-laying designed to dislocate, axis transportation of war essentials and movement of troops.

At the beginning of the year the operational strength of the Canadian Group was ten heavy bomber squadrons, of which seven were equipped with Halifaxes and three with Lancasters. In February three units, the Snowy Owls, Tigers and Alouettes, that had been away in North Africa, resumed operations with the Group, and in July the Swordfish Squadron was transferred from Coastal to Bomber Command. All four squadrons flew Halifaxes. During the year there were numerous changes in type or mark of aircraft used by the squadrons of the Group, but air and ground crew alike took these conversions in their stride. By the end of the year No. 64 Base (Moose, Ghost, Iroquois and Bluenose Squadrons) had completed the changeover to Lancaster Xs. The other squadrons were flying the Mark III or Mark VII version of the Halifax.

## January 1945

Winter weather seriously handicapped bomber operations during January 1945 and No. 6 Group was able to make only some 1300 sorties on thirteen raids. The targets, on which over 4350 tons of bombs were released, included synthetic oil plants at Merseburg and Zeitz, industrial centres at Ludwigshafen, Nuremberg, Hanover, Munich, Magdeburg and Zuffenhausen and railroad communications at Hanau, Saarbrucken, Grevenbroich and Stuttgart. Only three sea-mining operations could be undertaken due to the persistent bad weather. The Vancouver Pathfinder Squad-

ron shared in seven of No. 6 Group's attacks and, in addition, had a part in three other operations carried out by the Command. R.C.A.F. heavy bomber losses in January totalled 35, including four Vancouver aircraft.

During the first week of the new year the main weight of the bomber offensive was directed against objectives in support of the ground forces; marshalling yards, canals, tunnels and troop concentrations were repeatedly attacked by small or medium forces, while heavy blows were struck at several industrial towns. No. 6 Group's first target for the year was one of the latter objectives, Ludwigshafen, the home of the great I.G. Farben chemical works. A force of over 360 heavy bombers, including about 160 R.C.A.F. aircraft, set out for this target on the night of January 2nd. Weather varied from clear to complete overcast; but even those crews who found no clouds had to contend with the industrial haze which normally lies over manufacturing centres. The Pathfinders did a good job; their markers were punctual, plentiful and well concentrated, setting the stage for an excellent attack. The bomb aimers of the main stream made the most of their opportunity and showered down incendiaries and high explosives in an exceptionally good pattern. Fires blazed up as the incendiaries took hold: then explosion after explosion erupted, culminating in one enormous blast that lit up the whole area. Flak defences, both predicted and in barrage form, diminished as the attack progressed, only to swell again before the main force withdrew. Several aircraft returned bearing evidence of the accuracy of the flak gunners. Searchlights, on the other hand, were ineffective and did little to assist night fighters that came up to engage the invaders. No decisive combats took place and all the Canadian bombers returned.

Subsequent photographic reconnaissance confirmed that the attack had been most effective, causing severe and widespread damage. Prior to this raid one-half of the 700 buildings of the LG. Farben plant had been either destroyed

or damaged. This expedition put 75 more in the same category, while a considerable number of those previously battered received further hits. The principal weight of the bombs fell on the dye-stuffs, -nitrogen, methanol, octane and Lube oil sections of the plant. Photographs taken some days after the attack showed no activity around the extensive works and an examination of the prints indicated that the plant would be out of action for an indefinite period.

Less than an hour after the attack on Ludwigshafen a larger force of 500 heavies, including a small number from No. 6 Group and the Vancouver Squadron, struck at Nuremberg, an important railroad and industrial centre. In addition to its network of railways the city was ringed with factories and plants producing engines, tanks, electric motors, searchlights and other material vital to the Reich's war effort.

Clear weather and excellent visibility enabled the bomber crews to pick out ground detail in the target area where the Pathfinders dropped their target indicators to form a rough triangle almost on the aiming-point. One huge explosion and many smaller ones were observed as the bombs cascaded on the target. Blazes soon dotted the whole built-up area with particularly large fires in the northnorthwest and southeastern sections of the city. Flak and searchlights probed for the raiders at the opening of the attack but rapidly decreased in effectiveness as the raid progressed. Enemy night fighters were on deck and one Lancaster from the Vancouver Squadron did not return. The skipper, W/C K. J. Lawson, D.S.O., D.F.C., (R.A.F.), was a veteran of over go operations. He had three Canadians, S/L N. Crawford, F/O G. E. Geeves and WO D. G. Plyley, one R.A.A.F. and two R.A.F. men in his crew. Plyley, the rear gunner with 41 trips to his credit, was one of two survivors. He later reported that a Jerry fighter attacked their Lanc from below and shot it down out of control Lawson ordered the crew to bale out and with some difficulty Plyley managed

to get out of his turret and parachuted into enemy territory. The other survivor, Sgt. S. Rhodes (R.A.F.) the flight engineer, found himself alone in the nose of the aircraft when it exploded or broke up in the air. He pulled his ripcord and landed in the branches of a tree. Another R.C.A.F. aircraft, the famous "Ruhr Express", pranged on return from this raid. It was the first Lancaster bomber manufactured in Canada.

Prior to this attack on Nuremberg the M.A.N. diesel engine works, severely battered in earlier raids, had been largely repaired, only to receive extensive new damage throughout. The transport sheds suffered major damage; the tank construction shop, hitherto untouched, was virtually destroyed, and almost every other key building in the plant was seriously damaged. A Siemens-Schuckert factory specializing in electric motors was gutted and almost entirely devastated, while another plant engaged in the production of transformers was hit many times. In addition, five other priority targets received some damage. The business-residential section, north and east of the old town, was virtually flattened which meant that approximately 50 per cent of the built-up area of the whole city had now been reduced to rubble.

In the early morning hours of January 5th Bomber Command delivered two blows at Royan to annihilate enemy forces holding out in that town near the mouth of the Gironde. The Vancouver Pathfinders provided fourteen Lancasters for the second force which bombed 90 minutes after the first. Both forces made concentrated attacks, producing great clouds of dust and smoke with one large explosion close to the aiming point.

That night the Vancouvers were out again with large formations from Bomber Command in a double-barrelled attack on Hanover. For the first "barrel" No. 6 Group supplied over 130 Halifaxes and for the second 56 Lancasters while the Vancouvers contributed 13 more Lancs. The total

bomber force exceeded 660 kites. Hanover, on the main railway line between Berlin and the Rhineland, was an important junction with branches reaching Hamburg and Bremen to the north and central German cities to the south. It was also one of the foremost industrial and administrative centres of northern Germany, producing 80 per cent of the Luftwaffe's aero tires, and great quantities of armoured fighting vehicles, gun carriages, tractors and army transports. In addition to the Continental Rubber Works and Hanomag factories, the city also contained numerous other industries of prime importance to the Nazi war economy.

The first force of over 400 bombers was briefed to reach the target shortly after 1900 hours on the evening of the 5th. Weather conditions, however, forced the main stream to cross the North Sea at a greater height than had been planned and as a result the Germans received early radar warning of their approach. Night fighters in considerable strength intercepted our aircraft just over the coast and harried the bomber stream all the way to the target and back. Over Hanover flak and searchlights joined in the defence. The attackers found an almost unbroken blanket of cloud covering the city, with cloud tops varying from 4,000 to 12,000 feet. The Pathfinders dropped sky markers and, on instructions from the Master Bomber, the crews bombed on these, achieving a good concentration. Through the cloud blanket a number of explosions and several particularly large fires were observed. The glow from the latter was still visible on clouds 100 miles away.

There were many combats with aggressive enemy fighters and our losses were relatively heavy with ten R.C.A.F. Halifaxes missing. The Alouettes suffered most heavily, losing three aircraft, but all except five members of the crews were taken prisoner. En route to the target E-Easy, with FS J. T. R. Cauchy at the controls, was hit by flak and then by a fighter. A tank caught fire and soon the whole wing was ablaze. The captain thereupon ordered his

crew to bale out. Cauchy, F/O J. J. P. L'Esperance, FSs R. R. M. Cantin and J. A. Cote and Sgt. E. J. Faulkner were taken prisoners, but WO J. A. F. Piche is presumed to have been killed. It was subsequently learned from German records that FS J. Y. J. C. Lamarre, the seventh member of the crew, was caught near the scene of the crash and shot by his guards when he attempted to escape.

W-William was brought down under similar circumstances. After leaving the target the Halifax was engaged by an enemy aircraft which killed one of the crew, Sgt. S. H. Moore (R.A.F.), and started a fire that spread very rapidly. F/O V. E. Brimicombe, D.F.C., the pilot, tried to reach the stricken flight engineer, but the flames prevented. When Brimicombe finally jumped his clothes were on fire and he received burns about the face. Like his companions, F/Os L. U. Coleman and M. D. Berry, and FSs G. R. DeLong, G. E. Hutton and D. C. MacKeigan, Brimicombe was taken prisoner. All members of the crew had twenty or more sorties in their logbooks.

The third Alouette kite, J-Jig, was also flown by an experienced crew, captained by F/O J. W. A. Seguin. The bombs had been released and the Halifax was on its homeward course when it collided with another aircraft. Part of the nose was torn off and the bomber spun earthward, out of control. The pilot gave orders to abandon aircraft, remaining at the controls himself until the Halifax was down to 7000 feet. When Seguin then tried to get out he had great difficulty and stunned himself on the escape hatch. He came to falling through space face downward, opened his parachute and struck the ground a few seconds later. F/O J. A. M. Bilodeau, P/O J. M. R. Lapierre, FSs J. G. A. B. Cantin and J. J. G. Huet also baled out safely. Lapierre came down in a river and waded to shore. Huet landed heavily and received leg and head injuries. Two members of the crew, FS B. G. Simonin and Sgt. G. B. Noonan (R.A.F.), unfortunately lost their lives.

Jerry night fighters picked off two Leaside Halifaxes en route to Hanover. C-Charlie had just turned on the last leg of the course, south of Bremen, when an enemy aircraft attacked. A wing caught fire and the flames spread rapidly. F/L J. E. Sales and FS C. H. McInnes were killed, and F/O J. L. Marcille, WO R. J. P. Young, FSs S. J. Aikens and J. F. Charles and Sgt. J. Dalton (R.A.F.) were taken prisoners of war. The second Leaside bomber was flown by W/C J. G. Stephenson, A.F.C., who was captured with all his crew. With one engine and the starboard main tanks on fire and the blaze increasing every second, Stephenson ordered his men to jump. All got out safely, although the Winco's 'chute opened inside the aircraft and caught, leaving him suspended outside, hanging against the fuselage. Finally the parachute tore free and Stephenson landed heavily, injuring his knee. The other members of his crew, were F/Os R. G. Donaldson, E., B. Pickthorne and R. T. Bond, all secondtour men, F/O W. E. Fleming, WO W. T. McMahon and Sgt. B. M. Hodges (R.A.F.). Fleming, Pickthorne and Bond evaded capture for a time. The first-named officer parachuted into a forest where he had to leave his 'chute hanging in a tree. After hiking across country through forests and marshes and across two frozen canals, he reached a road and followed it northwards to a small town. It was then early morning, about six hours after the Halifax had been shot down. Fleming decided to walk through the town but had the misfortune to encounter two platoons of Volksturm apparently disbanding after the night's alerts.

Two soldiers discovered him as he tried to hide in the shadows near a house which they were entering. Calling to a companion, they captured Fleming as he started to walk away and led him towards the barracks. Two soldiers entered first whereupon the Canadian, seizing his opportunity, tripped the third man and took to his heels. Shots rang out as Fleming dodged down a side-street. Luck was against him. The street was a dead-end, running into a small lake,

and although Fleming sought cover in the shadow of a fence he was soon caught. While one soldier covered him with a gun two others gave him a beating before marching him back to the barracks.

Bond, the rear gunner, also came down in a forest near Hanover and evaded capture until the following night when he was picked up on the highway to Bremen. Pickthorne, the wireless-operator, hurt his knee on landing and was unconscious for a time. He took cover in a wood for the remainder of the night and next day started walking. Despite the pain in his knee he reached Nienburg where he boarded a train. It did not go far soo he again began walking northwards; from Bremen he struck westwards, heading for Groningen. He hopped a ride on another train until it was stopped by an air raid further up the line. Pickthorne's knee was by this time extremely painful, so he left the train and rested for a day. The next night, a week after his descent into Germany, he was captured as he attemped to board a train carrying tanks.

F/L A. F. Scheelar, piloting A-Able of the Goose Squadron, had bombed the target and was setting course for home when a night fighter made a surprise attack from below. One engine caught fire as the Hally dived steeply. Scheelar then levelled out while he and the flight engineer sought in vain to extinguish the flames. The side of the fuselage was red hot when the pilot coolly gave the bale out order. F/Os D. Elkin, F. A. Winter and W. A. Baker jumped, but immediately after they left the Halifax the aircraft exploded in mid-air. The other members of the crew, Scheelar, F/Os F. T. Leithead and L. J. Benville, and Sgt. J. Daly (R.A.F.), were lost.

Three members of a Swordfish, crew had miraculous escapes when their Halifax was shot down in flames. From the starboard wing the blaze streamed back to the tailplanes and elevators and made the perspex in the rear turret bubble. With all control gone F/O S. H. McFadden told his

crew to bale out. FS F. T. Graves, the rear gunner, managed to get his door open and jumped but the great speed of the aircraft's dive made it extremely difficult for the others to escape. Finally the bomber exploded and threw the pilot and flight engineer, Sgt. J. J. Burton (R.A.F.), free. They were captured together with F/O N. Conner who was wounded. The other members of the crew were F/O E. Rhind and FSs J. A. Rinder and J. T. Clarke.

V-Victor of the Snowy Owls was also brought down by a Hun fighter en route to the target. The Jerry pilot closed twice, wounding the mid-upper gunner, and then came in again for the kill. The Hally began to burn and the crew jumped for it. F/O K. W. Landers, FSs J. H. Warren and D. O. Palmer were captured. Four were lost: F/L L. W. Brand, FSs J. W. Vandenbergh and G. A. Noble and P/O J. W. Walker (R.A.F.).

Similarly Y-Yoke of the Lions was attacked a few minutes before reaching Hanover. The pilot, S/L B. G. Crew, D.F.C., on his second tour, dived away from the night fighter, then straightened out and carried on. But the enemy's bursts had struck. home for the mid-upper gunner reported a fire in the starboard wing and the flight engineer tried in vain to extinguish another blaze in the fuselage. Two of the crew, F/Ls J. S. H. Dodge and J. D. Johnston, D.F.C., both veterans of many raids, parachuted to earth. Dodge landed a few miles north-west of Hanover and managed to evade capture for two days. Johnston was hung up under the aircraft "for what seemed like an hour, but was actually about a minute" before his parachute broke free. F/O H. W. Campbell also fell into the hands of the enemy, but the others, S/L Crew, F/Os C. Kelway and T. Osier, and Sgt. J. G. Smith, were lost, Osier and Smith were members of the R.A.F.

There was no report on the fate of the Bison crew consisting of P/Os G. Hay, F. J. Nicholson (R.A.F.) and R. H. Couzens (R.A.F.), F/O J. L. M. R. Savard, WO J. J.' M.

Tremblay and FSs T. A. Gabriel and F. N. Brown.

The air fighting was not entirely one-sided for the R.C.A.F. Hallies struck back and destroyed at least one of the enemy. S-Sugar of the Tiger Squadron had just crossed the Dutch coast on course for the target when, the midupper gunner, FS W. E. Archer, spotted an FW.190 to starboard, curving in to attack. He opened fire with a burst of 200 rounds at 300 yards and scored hits with the first rounds. Flames broke out in the fighter's starboard wing and spread rapidly over the whole aircraft. As the blazing comet crossed astern of the Hally the rear gunner, FS R. Carnegie, gave it a few more shots for good measure. The rear gunner of a Bison Halifax sent two bursts at a Ju. 88 that was trailing the bomber on its run over the target. Strikes were seen on the enemy, justifying a claim of damaged.

Two and a half hours after the first raid on Hanover a second attack was made by a somewhat smaller force of approximately 260 heavy bombers. In contrast to the earlier waves the crews on, the second raid found clear skies over the target where many fires were still burning. Once again there was a heavy concentration of bombs which started additional blazes and obscured all ground detail in a pall of smoke. Flak batteries were smothered by the attack, but enemy fighters were still active all the way from the coast to the target and back. Losses, however, were much lighter than on the earlier raid. One R.C.A.F. Lancaster of the Moose Squadron did not return, but all of its crew, P/O N. D. Mallen, F/O J. A. F. Miller, WO B. R. Cameron, FS R. S. Dickson, Sgts. P. W. Hall, N. R. Poole and C. Drinka, were safe. En route to the target A-Able was attacked by another aircraft and both inner engines caught fire. The flames were extinguished, but the intercom was dead, the blind flying panel u/s, and the lights out. Jettisoning the bomb load, Mallen set course for an airfield in France, only to find it blanketed with fog. After a search the pilot found

a hole and made a belly-landing in a field near Guise, northeast of St. Quentin. Four of the crew were injured. F/O Miller, the navigator, who had worked out the course. for the emergency landing, immediately took charge, organized a search for help, and then made arrangements to have the injured men taken to hospital. He subsequently received the D.F.C. FS F. R. Hamilton, rear gunner in another Moose Squadron crew, won the D.F.M. when his Lanc was attacked by an enemy fighter that night, and F/O J. C. P. Boyer, an Alouette navigator, received the D.F.C. for his work on the Hanover operations.

The results of the two raids were highly satisfactory. Particularly heavy damage was inflicted on the dense industrial area in the Brink section north of the city where practically no industry escaped and the majority suffered severely. There was also considerable destruction of railroad facilities in Hanover, the south locomotive depot being rendered 70 per cent unserviceable while the central goods station was well knocked about. Much new damage was visited upon an area north of the main railway station which hitherto had escaped lightly. Photographs also revealed that the important Hanomag plant had been hit and the Vahrenwalder Heide airfield well cratered.

On the following night, January 6th, an important communications centre was the target for two waves of bombers, totalling over 460 aircraft. Hanau, a city of 40,000, lies ten miles east of Frankfurt on the Main River and is the junction point for main lines from Frankfurt and Munich to Berlin. Its industries were few in number but of considerable value to the Nazi effort, with a large tire factory of special importance. On the previous day the U.S. 8th Air Force had attacked the marshalling yards and Bomber Command now delivered a follow-up blow. One wave was briefed for the yards while the larger force, which included 185 aircraft from No. 6 Group, had the town as its aiming-point. Solid cloud covered Hanau as the

bombers arrived and bombing was carried out on the sky markers. A. check on the accuracy of their position was provided by the glow of the target indicators on the clouds. Fairly well concentrated at first, the attack tended to scatter in its closing stages.

Enemy opposition consisted of slight to moderate flak, a few ineffective searchlights, some multi-coloured "scare-crows" (intended to simulate an aircraft shot down in flames), and night fighters assisted by fighter flares. Two of the six bombers lost that night came from Canadian squadrons. F/Ls B. M. Adilman and L. K. James, F/Os G. R. Pool, F. J. Nickerson and T. McQuitty, and P/Os A. W. Staves and W. G. Gillissie of the Iroquois Squadron were all on their second tour. The second crew, from the Swordfish unit, consisted of F/Os L. R. Belcher, H. P. Breier, M. Strosberg, H. C. Irvine and S. W. Elgie, FS N. A. Butler and Sgt. L. D. A. Mawson (R.A.F.).

The 1652 tons of bombs dropped on Hanau caused extensive damage, especially in the business and residential section. The Dunlop Tire Works, most of the Heraeus factory buildings and the main passenger station were well plastered with hits. A goods station, damaged in previous raids, was completely destroyed and a large section of a trans-shipment shed put out of commission. This was No. 6 Group's heaviest attack of the month.

For the third night in succession the Canadian bombers were out on January 7th with Munich as the target. The fourth largest city in the Reich and one of its major cultural centres, Munich also was the home of many industries of vital importance to the Nazi war machine; locomotives, aircraft engines, motors, chemicals and rubber tires were but a few of the products which came from its factories. Two waves of 600 bombers undertook to impede, if not stem, their output. After the first attack at 2000 hours, a larger force of almost 400 Lancasters and Mosquitos, including 42 Canadian Lancs, arrived over the city between 2220 and

2259, to find 10/10ths cloud which could not obscure the glow of fires started by the previous group. The second attack was scattered at first as the winds were stronger than forecast. The concentration did improve as the bombing progressed but did not achieve the high standard set on many occasions. Crews reported one great explosion pierced the cloud layer followed by a mushroom of smoke.

Night fighters engaged the bombers in a number of combats. One veteran crew from the Vancouver Squadron did not return; they were F/L L. G. Sparling, F/Os J. Allan and L. W. Splatt, P/O N. L. W. Scott, and FSs D. H. Brown, D. Veri and R. A. Quinn.

Subsequent photographic reconnaissance of the target revealed considerable fresh damage around the main passenger station and also showed that, in addition to the disruption of public utilities, many important public buildings, including the Nazi party headquarters, Law Courts and Ministry of the Interior, had been hit during the attack.

Bad weather then intervened and, except for Mosquito raids and sea-mining, there were no night operations by Bomber Command until January 13th when the marshalling yards at Saarbrucken were attacked in support of military operations on the Western front. In the afternoon the Command made a daylight raid on this target and followed it up in the early evening with a larger force of 260 aircraft, over half of which came from the Canadian group. Favoured by clear weather with a slight haze the Pathfinders marked the target well and the bomb-aimers concentrated their sticks to touch off fires and explosions and produce a good attack. Anti-aircraft fire was moderate, enemy fighter activity only slight, and the R.C.A.F. suffered no loss.

On the following day Saarbrücken was hit again by a group of bombers which included some Vancouver Pathfinders. Defences were negligible and the yards were shrouded in a pall of smoke as the attackers withdrew. These three raids within 48 hours virtually paralyzed the

already badly-battered target. Practically all rail lines were severed and most of the sidings were pock-marked with craters, while several direct hits were scored on the main passenger station, and the freight station received additional damage. When F/L C. D. Benton of the Thunderbirds was decorated with the D.F.C. the attack on Saarbrücken was mentioned. En route to the target one engine in his bomber failed, but, the pilot pressed on and completed his mission.

For three nights the weather remained favourable, permitting attacks on distant oil targets in the Reich as well as marshalling yards and other shorter range objectives. On the 14th No. 6 Group carried out two operations against the railroad communications at Grevenbroich in the Rhineland and the oil plant at Merseburg (Leuna) deep in Saxony. The first attack was virtually a solo, effort for the Canadians as the 134 Halifaxes had only a few PFF aircraft to accompany them. The weather was clear and ground haze did not prevent visual identification of the target, twelve miles southwest of Düsseldorf. The marking was punctual, accurate and well backed up. The main bomber stream was well grouped and everything indicated a very successful attack. In fact the, bombing was extremely well concentrated, but a sudden change in the wind somewhat offset the bombaimers' calculations. Nevertheless many railroad buildings received direct hits or near misses, all the through lines in the yards were cut, and many cars on the, sidings were derailed or damaged. There were some combats during the raid but the R.C.A.F. force suffered no loss. One Hally from the Leaside Squadron had a narrow escape, however. V-Victor, skippered by F/L A. R. A. Bews, had bombed Grevenbroich and was homeward bound when P/O A. D. McInnes, the wirelessoperator, picked up three enemy aircraft on his special equipment, one on each side and the third astern. McInnes warned the crew but no one could see the Jerries. Presently the enemy on the port side closed and opened fire, raking the Halifax from nose to tail. Although the aircraft was damaged by cannon shells no one was injured. There were no further, attacks. McInnes' prompt warning and commentary on the movements of the enemy enabled Bews to take evasive action and undoubtedly saved the bomber from destruction. For these and other services McInnes received the D.F.C. S/L W. C. Pierce and F/O F. M. Covert of the Porcupines and F/L J. M. Wallace of the Leasides were also decorated for their work on this and other occasions. All three officers carried on to their objective despite unserviceable engines in their kites.

Merseburg, the Group's second target that night, lies ten miles south of Halle in Saxony, and was the site of the Leuna Werke, one of Germany's most important synthetic oil and chemical plants. Another priority objective was the I. G. Farben plant producing liquid ammonia and other chemicals. Two waves made the attack, the first of 210 aircraft being followed three hours later by another force of about 340. No. 6 Group put up fifty Lancasters for the second wave and the Vancouvers contributed seven Pathfinder aircraft.

Guided to the target by the glow of fires started by their predecessors, the second wave found all ground detail obscured by cloud. The Pathfinders dropped sky markers punctually and accurately, but the Master Bomber appeared to have difficulty in identifying the exact aiming-point, and in the early stages the bombing was scattered. This was corrected and presently fires and explosions were rolling smoke 8000 feet into the air.

Flak defences were moderate to severe, with numbers of enemy fighters awaiting the bombers. A Bluenose Lanc, flown by F/O A. Purnell, was en route to the target when a twin-engined kite, identified as an Me. 262, attacked and broke away. Both gunners, P/O R. McKay and FS J. Barrett, got in bursts which set fire to the Jerry and caused pieces to fall of . Members of the crew subsequently saw the night fighter explode on the ground 20,000 feet below.

But three experienced R.C.A.F. crews did not return, comprising half of the total loss on the second attack. Two fell to fighters and one to flak. Lancaster W-William of the Moose Squadron was caught in a very heavy barrage of flak over the target and the petrol tanks were holed. F/O N. R. Vatne, who was on the last trip of his tour, tried to reach an airfield in France, but the fuel was draining out so rapidly he had to give the bale-out order when the aircraft was over the Rhine Valley. His six companions, F/Os H. R. Eager and N. V. Hoas, P/O G. J. Woods, FSs F. H. Chatwin and R. C. Woods and Sgt. B. C. Mitchell, were taken prisoner; Vatne was lost. Another Lanc from the Moose Squadron was shot down by a fighter after bombing Merseburg. So violent were the aircraft's gyrations as it fell out of control that the crew could not bale out. Finally the perspex bulge blew out and F/O J. Q. Eddy pulled himself to it with great difficulty and jumped. The other members of the crew were F/L G. O. Tedford, F/O G. D. M. Spencer, P/O C. S. Thomson, FSs H. M. Rumball and A. G. McKay and Sgt. R. G. Williams (R.A.F.). The only survivor of an Iroquois crew skippered by F/O M. A. MacLeod was the rear gunner, FS D. C. Cockwill, who had 20 trips to his credit. The Lancaster was on its bombing run when Cockwill sighted an Me. 109 dead level astern. He opened fire and hit the fighter which at once burst into flames and crashed into the bomber. The latter exploded, blowing off the rear turret. Cockwill pulled the ripcord as he rolled out. While floating to earth an enemy fighter fired a burst which seriously wounded the gunner in the right foot. In addition to the two men named, F/Os C. Gurevitch and G. R. R. H. Craib, WO O. J. Rau, FS C. B. MacDonnell and Sgt. J. Mann (R.A.F.) were in the crew.

The results of the two raids on Merseburg were heartening with almost every important installation in the northern section of the Leuna plant damaged and the whole establishment severely mauled. The heaviest punishment was meted out to the central section where the compressors and water tanks were located. All three injector buildings were virtually destroyed and significant damage was inflicted also upon the water works. Photographs taken six weeks later showed no activity in the synthetic oil section of the plant. Even minor repairs had not been commenced and it was unlikely that oil production could be undertaken for a further two months. In brief, Leuna had had it!

There was another important synthetic oil plant at Zeitz, some twenty miles south and east of Merseburg, in the centre of a brown coal mining district. From the coal synthetic oil was produced at Troglitz, three miles to the north-east, by Braun Kohle Benzin A.G. in a plant which employed 5000 workers and had an output of 320,000 tons. Put out of action in earlier raids the plant had been rebuilt and was again a priority objective. Bomber Command despatched over 310 aircraft on the night of the 16th to stop production once more. No. 6 Group's share was relatively small with fifty Lancasters plus a few from the Vancouvers. It was clear over the target area when the bombers arrived, a covering of snow which threw ground detail into sharp relief affording excellent conditions for the attack. Ably directed by the Master Bomber, both the marking and bombing formed an excellent concentration around the aiming point. Great explosions erupted from the ground, clouds of smoke billowed high into the air, and 100 miles away the rear gunners in the Lancs could see the glow of innumerable fires.

From 50 to 75 searchlights were counted in the target area but they were on the whole ineffective and few aircraft were coned. Flak was intense in volume at first, mostly in barrage form, but diminished later in the attack. Enemy fighters were active. Bomber losses, ten in number, included two R.C.A.F. Lancasters. From the Vancouvers F/L H. L. Payne, F/Os H. E. Novak and D. G. McKay, P/O A. B. Miller, FSs J. A. Bruggeman, B. R. Cunliffe and N. L. L.

Smith and Sgt. H. M. Marshall (R.A.F.) were missing, while the Bluenose Squadron lost F/L A. Kiehlbauch, F/Os G. G. Shaw and N. G. Fadden, P/Os W. T. Wilson, A. G. Carolan and W. D. Martin and FS D. Turner.

When the bombers withdrew from Zeitz-Troglitz severe damage had been inflicted all over the target area with the liquid air, distillation, catalyst and gas purification plants and the south compressor house all very severely damaged. In addition roofs had been blown off the boiler house, the gas generating plant and the injector house. Six weeks later no attempt had been made at rehabilitation and it was apparent that Zeitz, like Leuna, would be inoperative for some months to come.

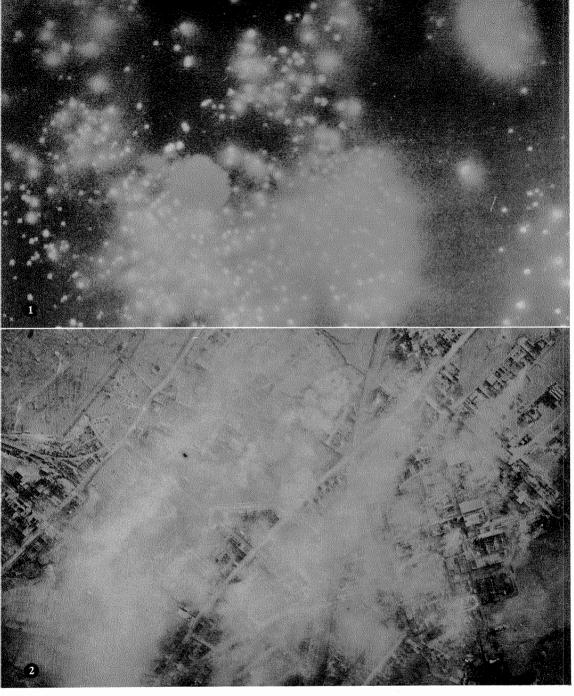
No. 6 Group's major effort that night (January 16th) was directed against Magdeburg, the objective for a force of 330 heavies. Over 100 Canadian Halifaxes and 7 Vancouver Lancasters took part. Magdeburg, on the Elbe River, is the largest city in Saxony and the home of important engineering works, aero-engine factories, an explosive factory and a large synthetic oil plant. It is also one. of the principal, railroad junctions in central Germany, second only to Berlin in importance. In Magdeburg's many suburbs are numerous industries including Junkers, Krupp, Grusonwerk and Polti, as well as large marshalling yards.

Conditions were favourable for a good attack as the stream of Pathfinders and bombers roared over the target. In clear visibility with only a slight haze on the ground the Pathfinders marked the target accurately and profusely with flares and indicators. Thanks to this excellent marking and the able, concise direction of the Master Bomber the bomb aimers grouped their eggs well within the basket.. Widespread fires and explosions hurled smoke over a mile in the air and caused a glow in the sky visible more than 100 miles. Crews had good reason to believe it was an exceptionally effective attack.

In addition to the usual flak defences the Hallies and



(1) G/C J. K. MacDonald and W/C M. W. Gall. (2) F/L R. J. Garvin, D.F.C. (3) FS R. R. Browne with his pilot, F/L C. S. Pope. (4) F/L Roland Laporte. (5) W/C F. C. Carling-Kelly with the Thunderbird mascot. (6) S/L W. G. Anderson. (7) Two Bison air gunners, P/Os W. C. Hay and L. J. Jodrell. (8) F/O D. W. Storms, D.F.M. (9) F/O J. R. Thackeray with his skipper, F/O W. B. Britton. (10) F/O G. D. Kee and FS W. J. G. Cozens. (11) Three Lion pilots, F/O Pat Millard, F/L L. J. Ayers and F/L W. M. Walker, after a raid on Worms. (12) FS W. E. Archer and F/O M. C. Grant.



(1) Fires burning in Dresden during the attacks on February 13th/14th. (2) Smoke still covers Worms a day after Bomber Command's visit on February 21st/22nd.

Lanes had to contend with night fighters which were very active all the way from the Dutch coast to Magdeburg and back. The Jerry pilots were able to get into the bomber stream and wrought considerable damage. In all seventeen bombers failed to return from the night's operation; seven were Canadian Halifaxes, four from the Snowy Owls and one each from the Swordfish, Thunderbird and Bison squadrons. Of the 49 crew members more than half were taken prisoner. Four of the aircraft fell to night fighters; the remainder were victims of the flak barrage.

F/L E. B. McCutcheon, F/Os D. W. Ritchie, J. G. Welk and T. C. Jones (R.A.F.) and P/Os J. G. Skidmore, G. A. Haacke and D. O. MacKey, an experienced crew from the Snowy Owl Squadron, were shot down by a Ju. 88 which scored direct hits from below. Ritchie, Skidmore, Haacke and MacKey escaped by parachute. From another veteran crew, F/L E. W. Watson, F/O Q. J. Louie, P/Os C. W. Way (R.A.F.) and W. J. D. Partridge, FSs D. J. Jacobi and T. E. Lynch and Sgt. A. K. Parker (R.A.F.), brought down by anti-aircraft fire over the target, Jacobi and Lynch were captured. A direct hit from heavy flak also accounted for the Halifax piloted by F/O R. A. Ireland with F/Os W. L. Dennis and W. Webb, FSs L. J. Penny, F. W. Poole and Sam Camerman and Sgt. R. Hutchinson (R.A.F.) in his crew. Poole, the mid-upper gunner, had just fastened on his 'chute when the aircraft blew up; he recovered consciousness only a short distance from the ground. For two days he evaded the Nazis and then was caught. Camerman also was captured.

The fourth Snowy Owl crew, skippered by FS R. E. Harvey, were just beginning their operational tour. The night's experience was enough to shake even battle-tried veterans. Trouble with the navigational equipment caused the Hally to arrive late over the target, but the crew got their bombs away and turned homeward. Then the ordeal began. From Magdeburg to Hanover night fighters—there

appeared to be four Ju. 88s—shadowed the bomber, making frequent passes at it. Seven times the Halifax evaded. Just past Hanover an eighth attack was made and the bomber was hit. One shell exploded in the rear turret, blowing out all the perspex; other shells damaged the tail and set fire to the port inner engine. With flames spreading rapidly Harvey gave the order to jump. The Jerry apparently went down with his victim, for both the rear (FS A. J. R. Little) and mid-upper (FS K. D. Reid) gunners had fired on the Junkers as it closed, and other members of the crew saw an aircraft burst into flames and explode about 1000 feet below. In addition to Little and Reid, F/O C. F. Bryce and Sgts. P. E. O. Morissette and R. J. Wilson fell into the hands of the enemy. Harvey and Sgt. J. F. McCormick were lost.

Night fighters shot down E-Easy of the Bisons near Hanover on its homeward course. The whole crew, almost at the end of their tour, were taken prisoner–F/Os F. H. Biddell and C. E. Chapman, P/O R. H. S. Bourne, FSs R. A. Deck, F. G. Peters and J. R. Phillips and Sgt. R. H. V. Streatfield (R.A.F.). They later reported that the whole of Magdeburg seemed to be burning as they left and made a beautiful target.

Enemy pilots scored again in the Hanover area when they brought down F/L R. H. Galbraith and his Thunderbird crew. Galbraith, F/O J. W. Shirey and Sgt. J. Davidson were lost; F/O R. R. Broadfoot and FSs J. M. MacDonald, A. M. Lacchia and B. W. McNicol were P.O.Ws. One cannon shell came through the floor of the bomber and passed so close to Broadfoot's face he could feel its heat. McNicol, the rear gunner, had to chop the door of his turret open before he could bale out.

In the seventh crew, from a Swordfish Halifax shot down by flak, F/Os D. M. Sloan and T. K. Daniel, FS's R. A. Collins and W. K. Bradley and Sgt. G. V. A. Binne were prisoners. F/L W. F. Borrett, the pilot, and FS P. R.

Mogridge were killed.

No. 6 Group claimed two enemy aircraft destroyed (in addition to the one accounted for by the crew which did not return). FS W. H. Magill, gunner for F/L H. W. MacDonald of the Bison Squadron, opened fire on a single-engined Jerry at 600 yards and continued until the fighter broke away. Two explosions were then seen as the enemy dived away and crashed. Magill's excellent directions to his captain and his accurate fire won him the D F M. Northeast of Brunswick, en route to the target, FS R. L. Siewert, rear gunner in the Goose Halifax skippered by F/O R. M. Wallis, picked off an Me. 410 at 400 yards range and with welldirected bursts set both engines on fire. The bomber crew saw the Jerry pilot take to his parachute while the Me. fell out of control, struck the ground and exploded. Wallis and his crew did not return from their next operation twelve nights later.

Gongs were awarded to S/L W. J. Smith of the Goose Squadron, F/O J. E. Rowe of the Bisons, F%0 P. C. Green of the Moose Squadron, and FS J. E. G., Marcil and P/O J. E. B. Pare of the Alouettes for their work on the Magdeburg raid. Green was air bomber in a kite that was severely damaged in a collision after leaving the target; he gave valuable assistance to the navigator in bringing the bomber home. Marcil and Pare were gunners for P/O G. E. S. Chabot on a sortie packed with thrills. First the kite was coned by searchlights and subjected to heavy flak for many minutes. Although riddled with holes the Halifax continued on its way. A night fighter then approached but the two gunners opened fire first and probably shot it down.

Following this night attack on Magdeburg by the R.A.F. and R.C.A.F., the American 8th Air Force made two daylight raids and Bomber Command a fourth attack the next night. Damage plots of the city include the results of all four raids. They reveal that the greater part of the old city was swept by fire and many important buildings, in-

cluding the Rathaus, Stadt and Central Theatres, Municipal Hospital and Natural History Museum, were badly damaged. Over forty major industries suffered very severely, including two high priority targets, the Friedrich Krupp armament works at Buckau and the Junkers aero-engine plant at Neustadt. Further, both freight stations, the passenger depot, south locomotive shops, and many other railway installations were gutted as were the Ravensburg barracks. Of the built-up area of Magdeburg 60 per cent had been completely destroyed.

For the next eleven nights a deterioration in the weather stopped all large-scale heavy bomber operations except on the 22nd when attacks were made on oil targets at Gelsen-kirchen and Bruckhausen. Of the Canadian units only the Vancouver Pathfinders were involved. Thirteen of their Lancs took part in the raid on the benzol plant at Duisburg/Bruckhausen where the attack was so well concentrated that the target markers, punctual, plentiful and accurate, were at times obliterated by the multitude of bomb bursts. Very severe damage was done throughout the Vereinigte Stahlwerke A.G. where virtually every major building was hit. The raid assessment conservatively estimated that "production capacity has been greatly reduced".

On the 28th the lull enforced by the weather was broken by a two-stage attack on Stuttgart in which several hundred heavies were employed. The first blow was delivered between 8.30 and 9.00 that evening with the marshalling yards in the Kornwestheim section of the city as the objective. The attack was not a success. The weather was poor with limited visibility and low 10/10ths cloud in which the target markers were lost. Furthermore the marking was late, not concentrated, and the bombing as a result was scattered. Some aircraft orbited the target area three or four times in an effort to identify the aiming point. On the other hand flak opposition was slight and few fighters were seen. Btmber losses were limited to two, including one of the 45

R.C.A.F. Lancasters which participated in the operation. The missing aircraft came from the Ghost Squadron and carried S/L H. L. Kay, F/Os R. L. Stapleford, G. J. Liney and J. W. Blades, FSs F. L. Jolicoeur and E. F. Ossington and Sgt. R. W. Gullick (R.A.F.). Despite the fact that the air-speed indicator went u/s after the take-off the bomber, thanks to excellent work by Kay and Stapleford, the pilot and navigator, reached the target on time and dropped its cookies. Then it was hit by a hail of shells, probably from a fighter, and the Lanc, all four motors on fire, dived earthward with such speed that all the windows were blown out. Stapleford and Ossington, the only survivors, had both been wounded in the attack on the bomber. Stapleford, with injuries in the hip, leg, knee and hands, managed to get his head out a window and was sucked out bodily by the slipstream. His wounds did not spare him a beating at the hands of S.S. troopers and he was in hospital until released by the Allied victory.

Three hours after the first raid a second wave attacked the Zuffenhausen section of Stuttgart where the Albert Hirth division of the Heinkel aircraft company was located. This establishment, mainly engaged on research and experimental work, was a target of considerable importance. The weather was still bad with much cloud and erratic winds. Although both target marking and bombing were late as a result of the adverse winds a fair concentration was eventually achieved. Several large explosions flashed through the clouds, which were tinged by the glow of many fires. Both flak and fighters were more aggressive than earlier in the night and losses were heavier. Eight aircraft did not return; once again, as in the first attack, half the missing crews were from R.C.A.F. units.

The Thunderbirds lost their C.O. when W/C F. C. Carling-Kelly and his crew were shot down en route to the target. Both gunners sighted the enemy aircraft as it attacked from the starboard quarter, and directed evasive action. The

Jerry pilot, however, got the Halifax in his sights and let off bursts which killed the rear gunner, F/O P. Hyde, shattered the pilot's panel and bomb-aimer's perspex, wounded the pilot, the flight engineer and bomb-aimer, and started fires in the tail and port wing. The controls also appeared to have been damaged as the bomber dived and could not be pulled out. In addition to Hyde, F/O A. L. Evans and FS S. G. Rundle were lost, but the others were able to bale out over the Black Forest. Sgt. J. A. Bromley (R.A.F.) walked for three days before the military apprehended him near Karlsruhe. Carling-Kelly and F/Os H. J. Dales and D. J. Bird also were captured. Dales, Bird, Hyde and Evans were all on their second tour.

Two Goose Squadron Halifaxes were missing. One was flown by a veteran crew already mentioned, F/Os R. M. Wallis, T. B. Little and H. T. McGovern, FSs P. Myerson (R.A.A.F.), T. P. Quinn and R. L. Siewert and Sgt. L. J. Collinson. McGovern, the only survivor, later reported that an enemy fighter, possibly an FW. 190, attacked three times and caused the heavy bomber to climb steeply, apparently out of control. McGovern was hurled backward and stunned. When he came to he was falling through the air. All that night and the next day he lay in the snow before being discovered. The second Goose crew, skippered by P/O C. L. Johnston, included F/Os N. G. Baily and J. A. O'Brien, both nearing the end of their tour, in addition to P/O J. G. Mortley, FSs F. Henry and B. E. House and Sgt. T. H. Chandler (R.A.F.).

U-Uncle of the Vancouvers was on its bombing run when FS D. A. MacDougall, rear gunner, sighted two Ju. 88s, one on each side of the Lancaster. They tagged along for a time until one dropped back and opened fire. The midupper gunner replied and, according to MacDougall's report, shot the Jerry down with one engine ablaze. But the Lanc was also on fire and fatally stricken. Only MacDougall was able to escape; the remainder of the crew, F/Os F.

H. Cummer and W. B. Turner, FSs E. R. Savage, G. A. Smith and J. M. Rae and Sgt. W. McCabrey (R.A.F.) were lost.

In addition to these casualties over enemy territory the Tigers lost an aircraft in a crash on take-off. W/C E. M. Williams, A.F.C., who was understudying the C.O., was killed together with F/O W. Fleming (beginning his second tour), WOs J. G. Doyle and R. J. Nicolls, FS R. E. Chatfield and Sgt. L. Tongue (R.A.F.). The seventh member of the crew, F/O J. E. H. B. Tremblay (also on his second tour), was injured.

In the course of the night's combats Canadian crews scored a probable and two damaged. Over Stuttgart a Swordfish Hally, skippered by S/L W. F. Brown, was engaged by a twin-engined fighter. The rear gunner,, F/O W. F. Griffiths, who received the D.F.C. for the night's work, coolly withheld his fire while he directed his captain in the necessary avoiding action. Then, when the Jerry was at close range, he tripped his guns, saw the tracers strike home around the cockpit and engines and the enemy spin earthwards with smoke pouring from its engines. That was a probable. One damaged e/a, an Me-410, was credited to a Lancaster from the Vancouver Squadron piloted by F/O W. G. Forsberg, D.F.C. The other, a Ju. 88, was hit by bursts fired by P/O J. H. Davis, mid-upper gunner for F/O L. P. McGuire of the Leasides.

There were no further operations for the Canadian Group before the end of the month.

Persistent unfavourable weather during January restricted sea-mining to three nights in the middle of the month. This was most unfortunate as the military situation presented the mine-layers with a "golden opportunity" which they did not wish to lose. The rapid sweep of the Russian armies westward along the Baltic coast made it necessary for the Nazis to move their shipping hurriedly from ports in that area. Some mines in the right channels

would have paid good dividends, but the met. reports intervened. On the three nights, January 12th, 14th and 16th, when sorties could be made, 119 mines were laid by No. 6 Group.

The first night was tragic. For several months the Group had specialized in mining the Kattegat and south Norwegian waters. Flak had given the crews a lot of trouble, but they had never been bothered to any extent by enemy fighters. It was, therefore, a decided shock to encounter intense opposition this night when fifty aircraft from two Bomber Groups were busy over Kiel and Flensburg. The explanation apparently was that Jerry suspected a raid on Berlin and scrambled large numbers of his night fighters. The minelayers had the misfortune to run foul of them. Three of the twelve Halifaxes sent out by No. 6 Group did not return. All three crews were composed of veterans with 17 to 28 trips to their credit. The Tigers lost F/Os A. M. Mackie and H. D. Christie, WO H. A. Carruthers, FSs J. S. Netzke, F. W. Dobbs and C. H. Hudson and Sgt., J. J. Farguhar (R.A.F.) in one crew, and F/Os M. C. Grant, J. G. Agnew, and M. G. Fife, FSs C. T. Rielly, W. E. Archer and R. Carnegie and Sgt. J. Pollard (R.A.F.) in the other. Grant's crew had laid their mines off the east coast of Denmark when a Ju. 88 made a sudden attack. The mid-upper gunner reported over the intercom that his bursts had hit and set fire to the fighter, but the bomber's controls apparently were shot away. Agnew baled out and was captured. D-Dog of the Bisons was heading for Flensburg Fjord when it too was attacked without warning from dead astern. The rear gunner returned the fire of the Ju. 88 and saw strikes on his target. Battered by cannon shells and bullets, which damaged the mine-dropping equipment and engines and punctured three petrol tanks, the Halifax turned for home, losing height rapidly. The flaps came down. The fuel gauges dropped alarmingly. It was obvious that the aircraft would not be able to cross the North Sea. The crew then tried to

reach Sweden, but even that was too far and they had to bale out over eastern Denmark. F/L A. R, Milner, F/Os H. K. Frair and R. H. Barnes, WO H. L. Johnson, FSs O. H. Sulek and J. G. Small, and Sgt. K. Turner (R.A.F.) were all taken prisoner.

W-William of the Bisons (captain, F/L R. K. Mitchell) was also attacked by a Ju. 88 just after it had released its mines over Flensburg Fjord. The rear gunner, P/O W. C. Hay, opened fire as the fighter crossed dead astern; then the mid-upper gunner, P/O L. J. Jodrell, brought his guns to bear and the Junkers fell through the clouds in flames. Jodrell received the D.F.C. as did F/L R. J. Garvin, captain of a Lion crew that accomplished its task successfully that night.

Mining sorties on January 14th and 16th were completed without unusual incident.

Five squadrons changed commanders during the month. The Thunderbirds were taken over first by W/C F. C. Carling-Kelly (vice W/C C. W. Burgess who had completed his tour) and then, when Carling-Kelly was lost on the Stuttgart raid, by W/C C. M. Black. In the Moose Squadron W/C D. C. Hagerman handed over to W/C M. E. Ferguson; the Snowy Owls passed from W/C W. G. Phelan, D.F.C., to W/C F. S. McCarthy, and the Ghosts from W/C A. C. Hull, D.F.C., to W/C M. W. Gall. The new commander of the Iroquois Squadron was W/C R. F. Davenport, in lieu of W/C F. M. Mitchell

## February 1945

In February the curve of No. 6 Group's bomber effort began to rise once more. On ten nights during the month Canadian heavy bombers were over Germany, making sixteen attacks on oil, industrial, rail and tactical targets. In addition there were four daylight raids, one of which was abortive, and seven sea-mining operations. More than 2220 Halifaxes and Lancasters were despatched on these mis-

sions, during which 5920 tons of high explosives and incendiaries and 245 tons of mines were released. The totals of operations, aircraft and bomb tonnage represented an increase of approximately two-thirds over the previous month. On the other hand, relative losses showed a decrease. Twenty-three bombers were missing over enemy territory and ten more crashed in Britain or on our side of the lines. The R.C.A.F. Pathfinder squadron helped to mark the target on thirteen attacks in which No. 6 Group was engaged and on four other occasions when the Canadian Group was not represented. During these operations it lost three Lancasters. In air combats the Group's bomber crews destroyed eleven enemy fighters, roughly one-fourth of the total number claimed by Bomber Command, and were credited with two probables and two damaged.

An improvement in the weather, which had permitted large-scale offensive operations during the last days of January, continued through the first week of February. No. 6 Group was active five nights out of the eight, making three double attacks and two single operations. The first two-barrelled effort was against Mainz and Ludwigshafen on the 1st/2nd, when Bomber Command sent out over 1100 aircraft. The attack on Ludwigshafen, following closely upon a raid by the U.S.A.A.F., was carried out by a force of more than 350 Lancasters which included about 70 kites from No. 6 Group and the Vancouver Squadron. For the Tigers and Porcupines it was a noteworthy occasion, being their first operation on Lancs after a year on Halifaxes. Conditions were none too favourable for their inaugural effort. There was considerable cloud over the target, forcing most of the crews to bomb on the skymarkers. Through breaks in the cloud layer some were able to pick out the target indicators, while others used the glow on the clouds as their guide. As was to be expected the bombing was somewhat scattered at first, but by the close of the attack large fires were taking hold in the eastern end of the town,

enabling some crews to distinguish buildings and streets through gaps in the clouds. In addition to the usual flak defences enemy night fighters were encountered, dropping flares along the bomber's route. One Jerry, possibly an Me. 410, attempted to attack a Lanc of the Moose Squadron over the target area only to meet a blast of return fire which set off a large bright explosion. For a moment the enemy fighter was lost from sight in the smoke over Ludwigshafen; then it again came into view, a blazing streak arching down through the night sky. F/O D. W. Storms, D.F.M., was the victorious mid-upper gunner.

A brush with another Jerry rounded out an exciting sortie for a Bluenose crew skippered by F/L L. E. Coulter. On the outward flight one engine failed, but this did not deter Coulter from continuing to the target. Over Ludwigshafen a fault in the electrical circuit started a small fire in the bomb-aimer's compartment. This was extinguished, the target was bombed, and course was set for base. During the return flight an enemy fighter attempted to close in, but Coulter skillfully evaded it and reached base. He subsequently received the D.F.C.

The enemy defences brought down a number of bombers, but the only loss suffered by the R.C.A.F. was a Porcupine Lancaster which crashed near base on its return. S/L H. K. Stinson, D.F.C., a second tour captain, F/O D. J. McMillan, P/Os J. T. McShane, R. Pierson and E. H. Thompson (R.A.F.), all four veterans of numerous trips, were killed. F/O A. W. Bellos and P/O R. J. Thompson escaped without injury.

While the six Lancaster squadrons were busy over Ludwigshafen the eight Halifax units of No. 6 Group were bombing Mainz. Over eighty Canadian kites were included in the attacking force of about 325 bombers. Similar weather conditions were encountered. At the beginning of the attack ground markers were well concentrated, but the clouds later closed in and obscured them. A good supply of

sky markers enabled the crews to complete a successful attack. Through the cloud layer the glow of incendiaries and fires was clearly visible, with several explosions adding their evidence of destruction to Mainz. The city, an important rail centre at the junction of the Rhine and Main rivers with a large inland harbour, was one of the major trans-shipment ports on the upper Rhine. Extensive engineering, railway wagon and shipbuilding works added to its economic importance. Frequently bombed in the past, Mainz suffered extensive new damage this night, particularly at each end of the city's centre. The state railway offices, town hall, police and fire stations, law court and central post offices were among the public buildings which received a severe battering.

P/O W. D. Corbett of the Alouettes won the D.F.C. on the Mainz operation for completing the mission with one engine u/s and a second threatening to pack up.

On the 2nd simultaneous attacks were delivered against Wiesbaden by the Lancasters and Wanne-Eickel by the Halifaxes of No. 6 Group. The latter attack was made by a force of 290 bombers, including 96 Canadian Halifaxes and seven Vancouver Lancasters. Sky markers were soon lost in the solid bank of cloud which towered over the target. but their glow remained visible and navigational checks confirmed the accuracy of the Pathfinders' work. It was, of course, difficult to make any accurate observation of the results, although the reflection of bomb bursts and photo flashes indicated the bombing was fairly well concentrated. Several explosions, three of which were particularly large, could be distinguished, followed by a red glow which developed steadily and was visible for 60 miles. Photographic reconnaissance subsequently confirmed that moderate damage was done to the synthetic oil plant at Wanne-Eickel where a fair proportion of the bomb craters lay within the target area. Four bombers did not return, including one Canadian Halifax from the Leaside Squadron flown by F/L G.

H. Thomson, F/Os H. Bloch and J. T. Robinson, WO A. M. Jones and Sgts. R. R. Vallier, W. H. Haryett and R. G. E. Silver who were just beginning their operational tour. A Thunderbird Halifax, skippered by F/O J. Talocka, was hit by heavy flak over Wanne-Eickel and crashed as the pilot attempted an emergency landing at an English base. The pilot and five of the crew, F/Os J. M. Styles and S. G. Arlotte, FSs J. A. Chisamore and A. G. Bradley and Sgt. G. Needham (R.A.F.), were killed. Only the wireless operator, WO S. E. McAllister, escaped.

Wiesbaden, the second objective that night, lies a few miles east of the Rhine opposite Mainz. Noted chiefly as a health resort famous for its mineral waters, the town was a centre of first importance for the assembly or rehabilitation of troops. Some industries and railroad lines added to its significance. Sixty R.C.A.F. Lancasters formed part of the attacking force of 450 bombers which found a solid bank of cloud over the target area, with tops rising to 20,000 feet. The winds varied from those forecast with the result that nearly all the aircraft were late. When the Pathfinders dropped their markers they were soon hidden in the thick clouds and ever, the glow was scarcely visible. Deprived of the customary target marking most of the crews used navigational aids for bombing. The attack in consequence was not well concentrated, the glow of incendiaries dotting an area about fifteen miles square. Photographs later showed clusters of damage well distributed over the whole town with moderate concentrations here and there. Various industries, public buildings and utilities, including the casino, municipal gas works, main railway station and freight sheds, showed signs of damage, principally from fire.

Flak opposition was not severe but over Wiesbaden, as at Wanne-Eickel, some enemy fighters were in evidence. Two of the seven missing bombers came from the Moose and Ghost Squadrons. In each case there was only one survivor. FS W. J. McTaggart, rear gunner in the Moose Lanc,

later reported that his aircraft was shot down by ack-ack just after releasing its bombs. From P/O C. M. Roche, also a rear gunner nearly at the end of his tour, there came a similar report. Just as the bomb-aimer reported "bombs away" there was a terrific explosion. Semi-conscious, Roche had only a vague memory of baling out and landing in the snow near Wiesbaden. A second Ghost bomber was lost in a crash landing near base in which two veteran members of the crew, P/Os R. A.

Playter and J. A. Keating, were killed. In the two missing Lancasters F/Ls D. E. Berry and C. J. Ordin, F/O C. Walford, and P/Os F. E. Hogan, J. C. Harris (R.A.F.), and K. M. Hammond of the Ghost Squadron (all credited with 28 to 30 trips), and P/O B. W. Martin; F/Os J. A. F. McDonald and R. W. Hodgson, FSs P. F. English and R. A. Nisbet and Sgt. J. McAfee (R.A.F.) of the Moose Squadron were missing, believed killed.

The next night, February 3rd, was quieter with the Vancouver Squadron the only R.C.A.F. unit engaged on operations. The target, attacked by 190 Lancasters and Mosquitos, was a benzol plant near Bottrop in Westphalia. In contrast to the previous night the skies were clear. The Pathfinders did a very accurate job; the bombing was well confined and fires, explosions and great columns of black smoke indicated a successful attack. The western section of the Rheinische Stahlwerke A.G. coking plant, in particular, was very badly damaged.

Although enemy fighters swarmed over the target area and along the homeward route, all eight Vancouver Lancs returned safely with one Jerry kite to their credit. West of Bottrop, on the way home, the crew of M-Mike, captained by F/O W. G. Forsberg, D.F.C., sighted and opened fire on a Ju. 88 at 300 yards' range. The night fighter pulled up into a stall and fell away in a curving dive with its port engine on fire. Twelve thousand feet below it exploded on the ground.

No. 6 Group was out in force again on the 4th, despatching 200 Hallies and Lancs for simultaneous attacks on Osterfeld and Bonn. The first was the Group's own target, with a small detachment of Pathfinders to mark the way for the 100 Halifax bombers. The target indicators were dropped punctually but were lost in the clouds which lay in a solid blanket over the objective. Their glow, however, could be distinguished and the bomb-aimers released z65 tons of high explosives over the benzol distillation plant and coke ovens which constituted the target. Except for a series of explosions and the reflection of fires spreading over a wide area it was impossible to assess the results. Later in the month, after a second daylight attack had been made, P.R.U. cover was obtained and revealed severe damage to the benzol plant. Ack-ack defences were moderate to intense and were accurately predicted, as five damaged kites testified. Fighters too were abroad, attempting to engage the bomber stream, but all our aircraft returned. F/L J. E. Creeper of the Bisons put up a good show on this sortie which won him the D.F.C.

F/L J. F. Thomas of the Tigers was likewise decorated for his work during the Bonn attack on the same night. This raid, carried out by over 200 aircraft, approximately half of which came from No. 6 Group, closely resembled the Osterfeld operation. Cloud and bombing conditions were the same, and the results likewise difficult to assess. From photographs taken afterwards it was seen that there were scattered "incidents" throughout the city, with severe damage at least to one factory. Our losses, three bombers, were not severe but they included two Canadian Lancasters from the Moose and Porcupine squadrons. The crews were, respectively, F/L J. P. Barlow, F/Os D. W. Spence, D. J. A. Buchanan, J. A. Gibbs and W. R. Kearns, and P/Os L. J. Edmonds (R.A.F.) and C. T. Sutter; and F/L N. D. Mara, D.F.C., F/Os C. H. Howald, W. L. Melbourne, A. J. Tyrrell, P/Os N. A. Hurst, W. G. Whitton, WO B. T. Sheeran

and Sgt. L. J. Sims (R.A.F.). Mara's crew were all veterans, except Howald who was flying as second dickey. Barlow was at the end of his second tour as were Gibbs, Kearns and Buchanan, and the others in his crew had completed 16 or more sorties each. It was later learned that both aircraft had crashed in Belgium, killing all but Sutter.

After two quiet nights Bomber Command returned to the attack on the 7th with a pair of tactical operations in support of the Canadian First Army's offensive south-east of Nijmegen. Two small towns, Kleve and Goch, directly opposite the Canadian front, were the objectives of powerful blows designed to blot out the towns and block the enemy's main routes into the battle area. The Vancouvers contributed fifteen Pathfinders for the Kleve attack and assisted in illuminating and marking the target with brilliant flares and well concentrated T.Is. The Master Bomber grouped his forces skillfully and directed a most successful operation.

At Goch, where 200 Canadian Halifaxes and Lancasters were numbered among the 460 heavy bombers, the attack also began well. Despite considerable cloud the marking was punctual and accurate and a good concentration of bursts began to cover the town. As the cloud blanket over Goch increased the Master Bomber instructed his crews to descend below the cloud base (4-5,000 feet) and the attack continued until smoke obscured the target and markers. The bursts then tended to scatter and, because of the proximity of our own troops, the Master Bomber gave the order to abandon mission. Partly because of difficulty in hearing the early instructions only one-third of the crews dropped their bombs, but they were sufficient to cause severe and widespread damage especially in the north-western section and the area about the marshalling yards where the lines had been cut by three concentrations of craters. Several blocks of buildings had been levelled, debris and craters closing all the streets in one part of the town.

Over Kleve there had been little opposition, the enemy apparently concentrating his fighters around Goch where there were numerous combats in which five ferries were destroyed and three damaged. Three of the victories were credited to Canadian crews. On the homeward flight an aggressive FW.190 made four attacks on an Alouette Halifax flown by F/O A. R. Lowe with F/O Paul Hall and FS J. W. Hyde as rear and mid-upper gunners. On the third pass both gunners saw their tracers strike all around the fighter. Nevertheless the Jerry pilot came in again to meet another deadly blast of fire. The FW broke away, disappeared for a few seconds and then was seen to hit the ground in flames and burn for five minutes. Half an hour later a second FW.190 was sighted by FS J. Johnston; mid-upper gunner in a Lion kite, as it crossed over the Halifax following an unsuccessful attack. Johnston quickly brought his guns to bear and made the fighter burst into flames. The rear gunner, FS R. P. McKessock, also got in a burst as the 190 dropped away and exploded on the ground. P/O R. S. Grant, rear gunner in a Moose Lancaster, saw a Ju. 88 shoot down two bombers in succession, and was ready when the night fighter turned in to claim a third victim. Grant held his fire for a moment, fearing that parachutes from the destroyed bombers might be in the line of his sights. Then at close range he let loose. Strikes flashed on the Junkers' port engine nacelle and pieces flew off the wing. The Jerry broke away and did not return. It was claimed as damaged.

In the early morning of February 9th, Wanne-Eickel was bombed again, for the fourth time in three weeks. The force of over 200 bombers, including 100 from No. 6 Group and the Vancouvers, found good visibility above the partial cloud cover and, guided by plentiful and well-placed markers, laid a good pattern of bombs over the target area. Several large explosions erupted in and around the synthetic oil plant, followed by a great fire from which the smoke billowed two miles in the air. There were no losses

over enemy territory but three R.C.A.F. bombers crashed in England or on the continent with the loss of eleven of the crews. F/O G. K. Grier of the Swordfish Squadron was killed, and F/O P. Mikalchuk and FSs J. A. Marshall, J. B. Horrigan, G. W. Johnston and J. M. Aicken were captured when their aircraft was brought down by flak over enemyheld Dunkirk. In the Thunderbird Squadron, F/O G. A. Cahoon, FSs J. C. Laing and G. H. Fetherston and Sgts. J. D. Campbell and C. E. Houston were killed. The third crew, a group of Alouette veterans skippered by F/O W. M. Mark, encountered heavy anti-aircraft fire on the return from Wanne Eickel. Subsequently one engine caught fire and, the flames getting out of control, Mark ordered his companions to bale out near Ypres. Coolly he remained at the controls until all had jumped when he took to his own parachute. Two of the crew were injured when they landed, but the others were safe. When Mark later received the D.F.C. his example of courage and coolness on this occasion was cited.

On the same night the Vancouvers represented the R.C.A.F. in an attach on the oil plant at Politz. Two raids, carried out with a 90 minutes' interval, caused very severe and widespread damage to the target. All important installations were hit and at least thirty storage tanks destroyed. It would be several months at least before production could be resumed. The first attack had encountered severe opposition, but the second, in which the Canadian Pathfinders took part, seemingly caught the defences unprepared. One aircraft was lost, a Vancouver Lancaster carrying F/Os H. B. McIntyre and L. H. Mahler, P/Os A. L. J. St. Pierre, T. A. Stone and M. J. Martin and FSs A. M. Fostey and A. E. S. Kiff (R.A.F.). McIntyre was making his 35th sortie.

It was five nights before the Command could carry out any more large scale operations. On the 13th, however, well over 1000 bombers were launched against Germany, aimed at two major targets, Dresden and Bohlen. In addition to being the capital of Saxony, Dresden was an important industrial centre, producing electric motors, precision instruments, chemicals and munitions. Its marshalling yards and harbour also handled a considerable volume of rail and river-borne freight. Shortly after ten o'clock that night a force of over 200 heavies dealt one blow followed three hours later by a much larger armada of more than 500 Lancasters. The Canadian Group provided 67 kites and the Vancouvers ten for the second attack. The results were excellent. Visibility in the air was good and fires started by the first attack served as a beacon for the second bomber stream. Despite the fact that clouds of smoke made it very difficult to identify the aiming point, even with the help of powerful illuminating flares, the Master Bomber skillfully controlled his crews and achieved exceptionally well concentrated bombing in those districts not affected by the first attack. Many new fires broke out until, towards the end of the second raid, the whole of the old city was well ablaze, with numerous smaller fires in other sections. The smoke rose to 15,000 feet with the flames casting a reflection which could be seen 100 miles. The next day a reconnaissance aircraft found the city largely obscured by smoke and even 36 hours later fires were still burning. The photographs showed large areas of devastation in the heart of Dresden, in the main marshalling yards and the adjacent industrial section, and elsewhere great fires had obviously swept unchecked through blocks of the densely populated city. Numerous public buildings had been severely damaged; one main railroad station and two bridges had been hit. Losses, which were light, included one Vancouver Lancaster with a crew of long experience-F/Ls M. O. Frederick and J. K. Knights, D.F.C., F/Os D. B. Olson, J. Armitt, F. M. Gordon, J. A. Kaucharik and E. W. Connolly, and P/O R. A. French. The skipper, F/L Frederick, was wounded and held prisoner for a time.

The R.C.A.F. had a relatively larger role in the Bohlen

raid, providing one-third of the attacking force of Sao bombers. Bohlen, a suburb ten miles south of Leipzig, lies in the brown coal belt of Saxony and, like Merseburg and Zeitz, was the site of an important synthetic oil plant. Thin strato-cumulus cloud covered the target when the heavies arrived. Only the glow of the P.F.F. markers could be seen and they appeared to be rather scattered. Jerry sought to mislead the bomb-aimers by setting off dummy indicators, but the Master Bomber detected the ruse and warned his crews to ignore them. Nevertheless the bombing seemed to be dispersed, although there was one great explosion that lit up the target for five minutes, and several large fires shone through the clouds. The weight of the attack fell on the western section of the Braunkohle Benzin A.G., on the transformer stations of the A.G. Sachsischewerke and on the labour camp where half of the barracks were destroyed or knocked about. All the Canadian aircraft returned.

A distant Saxon target was again the objective on the next night, February 14th, when Bomber Command sent two forces, at three hours' interval, to Chemnitz, a manufacturing centre noted principally for its textile industries. It was also one of the major rail junctions in Saxony with railway repair shops which were among the largest in the whole Reich. In the first stream of 300 bombers there were 120 Halifaxes and Lancasters from No. 6 Group and the Vancouvers, representing every R.C.A.F. heavy bomber squadron save two. Great clouds reaching up to 15,000 feet prevented visual identification of the aiming point and necessitated the use of sky markers. There was no marked concentration of bombing and the numerous fires which left a glow on the clouds were scattered over a large area. The second attack, in which the R.C.A.F. had only seven Vancouver Pathfinders, was likewise dispersed, causing "incidents" in all parts of Chemnitz, but no major sections of devastation

The Canadian bomber crews reported that fighter flares

dotted their course all the way from the front line to the target area and back. Many combats were fought in the course of which a Moose Lancaster probably destroyed a twinengined night fighter. The Jerry was spotted when it dropped a white flare behind the bomber. F/O W. G. Cotter, the rear gunner, and Sgt. S. E. Kranyak, the mid-upper, both fired brief bursts. The fighter then disappeared, but soon afterwards something was seen to crash into the ground and explode.

The Snowy Owls lost a Halifax which crashed after take-off, killing F/Os W. S. Anderson, L. I. Jones, J. C. Sinden and S. A. Hay, FS E. A. H. Sills and Sgt. H. Evans (R.A.F.). Three bombers did not return from Chemnitz. From Sgt. G. A. McLarty, a rear gunner who was making his first operational sortie in a Bluenose Lancaster piloted by F/O D. A. Magrath, it was later learned that the aircraft, after bombing the target, was hit and exploded in midair. McLarty recovered consciousness while falling through space and pulled his ripcord. He landed heavily near Annaberg, southeast of Chemnitz, and was captured. The other members of the crew were F/Os J. J. McElhone, G. M. B. Barlow and L. Medynski, FS G. E. Robertson and Sgt. B. Granka. The Lions also lost a freshman crew when F/O V. S. Roy's Halifax was suddenly attacked by a night fighter on the homeward flight. Fire at once broke out in the centre of the fuselage and port wing. Roy gave orders to abandon aircraft but before the crew could do so the Jerry pilot came in again, firing, and the Hally blew up. FS A. R. Williams, the navigator, and Sgt. H. L. G. Mayer, flight engineer, were thrown clear and parachuted to earth. The bombaimer, Sgt. A. L. Morrison, fell 10,000 feet clinging to a section of the bomber's nose. Like Mayer he landed in some trees and tumbled into the snow. Roy, FS A. N. Scorah and Sgts. A. J. Cybulskie and H. Gallagher were lost. Six members of a Leaside crew were taken prisoner, S/L J. H. Thompson, F/L J. J. Serne, F/Os R. A. A. Borland

and S. A. Harrison, P/O R. D. Thomson and FS R. J. Stringer, all with 15 to 23 trips in their logbooks. Sgt. G. L. Sorrell (R.A.F.) was missing. An hour after leaving the target the Halifax was shot down by a Ju.88 which made two attacks from below, setting fire to both inner engines. The crew baled out as the bomber fell in flames. F/L R. F. Archambault of the Alouettes was awarded the D.F.C. for pressing on to the target despite the fact that some important equipment was unserviceable and the port outer engine out of action.

It was six nights before R.C.A.F. bombers were again over the Reich, but in the interval they took part in an abortive daylight attack on Wesel. Bomber Command was beginning to "soften up" the area in preparation for the airborne crossing of the Rhine at Wesel which took place a month later. On February 16th and the three following days Wesel received a pounding which left widespread damage around the river docks and in military areas south and west of the freight yards. In this destruction No. 6 Group, unfortunately, had no part. The day on which they operated, the 17th, Wesel was clouded over with a double blanket from 2000 feet to 20,000. Any kind of target marking was out of the question and only two of the 110 Canadian kites had released their bombs when the Master Bomber called off the attack. A Snowy Owl Halifax crashed in England on its return, causing the death of six members of the veteran crew, F/Os M. B. Stock, R. B. Trout, R. A. Floripe and D. L. Neil, P/O T. L. O'Kane and Sgt. R. G. Crollie (R.A.F.).

On February 10th, with an improvement in the weather, the nightly onslaught was resumed against oil, transportation and industrial targets. In contrast to the attacks during the earlier part of the month which, with one or two exceptions, were not conspicuously successful, those carried out by No. 6 Group in the last week of February were categorized as good or excellent. The series opened with a two-pronged thrust at Dortmund in the Ruhr and Monheim on

the Rhine between Cologne and Düsseldorf. In the first attack go Lanes from No. 6 Group and the Vancouvers were included in the stream of 500 bombers that found Dortmund virtually covered by a thin layer of cloud. The glow of the well-grouped target indicators was clearly visible and the bombing was, on the whole, concentrated. Fires were getting a firm hold as the heavies withdrew, and were still burning the next day. Dortmund had been heavily pounded in the past; this new attack added many new areas of devastation, particularly in the section south of the city centre. The freight yards, however, escaped further damage.

The Ruhr's famed defences were active, with many searchlights probing the sky and night fighters harrying the bomber stream during the whole of the flight over enemy territory. The R.C.A.F. lost three Lancasters and destroyed at least one, probably two, Ju. 88s. Both successful combats were fought by an Iroquois crew, captained by F/L B. M. Kaplansky, with FSs M. S. Jowett and D. E. Gwynne-Vaughan as gunners. Over the target area the gunners opened fire on an 88 which had been attacking another Lanc. The enemy pilot then turned on the Canadian bomber, but his kite was set on fire and exploded in the air. Two minutes later Kaplansky's crew sighted another Ju. flying on a parallel course 400 yards away. The rear gunner, Gwynne-Vaughan, took careful aim and let off a burst which shot pieces from the starboard wing and tail of the Jerry. When last seen the night fighter was going down into the clouds in a spiral dive.

P-Peter of the Bluenose Squadron (captain, F/O D. Cameron) also had an encounter with a Ju. 88 which got into position in the blind spot below the bomber, and fired a long, steady burst before breaking away. The rear gunner was unable to reply as his turret was u/s, and the mid-upper gunner could not bring his weapons to bear. Cannon shells ripped through the bomber, killing WO H. A. Davey, the wireless-operator, and seriously wounding P/O J. H.

Taggart, the m/u gunner. The intercom, upper turret and port elevator were shot away; the main plane and three fuel tanks were holed, and the R/T and W/T equipment and hydraulic system damaged. Nevertheless Cameron was able to fly the Lancaster home and make a landing.

Despite the activity of enemy fighters all the Canadian losses on the Dortmund raid were apparently due to flak. The Vancouvers lost an international crew composed of S/L H. F. Marcou, A.F.C. and F/O J. T. Ross of the R.C.A.F., F/Os T. W. Downey, B. G. Smoker and J. A. Lewis and FS G. E. Bolland from the R.A.F., F/O R. C. Noice of the R.N.Z.A.F., and T/Sgt. J. W. Verner of the U.S.A.A.F. They had just released their bombs and were holding straight and level for the camera run when flak made a direct hit, setting fire to the port and starboard tanks. Ironically, the bombaimer had just remarked "there is no flak here" when the burst struck. One blaze was extinguished, but the other spread rapidly, forcing the crew to jump for it. Marcou, Downey, Lewis, Ross and Smoker were taken prisoner.

A Moose Lancaster was also set on fire by two direct ack-ack bursts and blew up as the crew baled out. F/O P. H. Owen (on his second tour), P/O A. Kindrat, FSs L. J. Nozzolillo and R. Aitham, and Sgt. T. S. Instone (R.A.F.) got down safely, although Kindrat's 'chute was fastened by only one strap and Altham's right leg caught for a time in the rear turret before he fell free. F/O L. A. Blaney (pilot) and WO D. Hanna were missing.

From an Iroquois crew FSs F. E. Lehman and H. R. Dailey were captured; F/O I. C. MacGugan was reported safe a few weeks later; but P/O J. W. Kopp (captain), WO F. E. Newman, FS L. E. Hoffman and Sgt. W. S. Dickson were lost.

The D.F.M. was awarded to FS W. J. G. Cozens of the Tigers for this sortie. During the bomber run his Lanc was hit by antiaircraft fire and afterwards attacked by a fighter.

Both starboard engines were put out of action, the hydraulic system was damaged and the bomb doors could not be closed. The bomber lost height so rapidly that as soon as the lines were crossed Cozens ordered his crew to abandon aircraft. After five had jumped the Lanc was too low to permit the pilot and his one remaining comrade to bale out. With skill and coolness he made a successful crash landing north of Aachen. Four of the crew were safe in Allied hands, but FSs A. T. Skett and J. Butler drifted down on the enemy side of the lines and were captured. The seventh member of the crew, Sgt. J. R. Kubin, was missing, presumed dead.

The Monheim operation was an exclusive 6 Group show for which I12 Halifaxes were despatched led by a small group of Pathfinders that included two kites from the Vancouver Squadron. Like Düsseldorf, Monheim lay under a blanket of thin cloud through which the glow of the well concentrated red target indicators could be seen. Close around the aiming point almost 280 tons of H.E. were released by the bombers, followed by explosions and great clouds of black smoke. Reconnaissance aircraft flying over Monheim the next day found the target, an important oil refinery, had been well and truly hit. The oil tank area was still burning fiercely and emitting much smoke. Most of the storage facilities had been destroyed and the refinery as a whole had received severe damage.

Once again enemy fighters were very active over the target area and along the homeward route. A twin-engined Jerry was shot down by FS A. C. Watson, mid-upper gunner for F/L W. M. Walker in a Lion Halifax. After several short bursts he saw the starboard engine and wing of the enemy aircraft break into flames and tear away as the Hun plunged earthward to crash and explode.

Another Lion bomber was less fortunate. F/L J. M. Murphy had just crossed the Rhine on his return flight when an aircraft caught fire alongside. Murphy tried to get

away from the glare but before he could do so cannon shells ripped through the Halifax, starting a fire in the nose from which flames blew back into the cockpit. With his face and neck burned, and the cockpit filled with smoke and flames, Murphy finally had to jump. Sgt. G. B. Tate (R.A.F.) did not remember how he got out of the blazing bomber; he recalled only waking up on the ground with an injured shoulder. F/O A. J. Breault, mid-upper gunner, and WO E. A. Perdue, flight engineer, made for the rear door. With difficulty Breault reached it and jumped while flames and sparks shot by. He apparently was close to the ground when he leaped as he was knocked out when he struck and lay unconscious for several hours. Perdue had a miraculous escape. Before he could gain the rear exit he and another of the crew were hurled together by centrifugal force and rendered senseless. "I woke up", Perdue said later, "as if in a dream in the aircraft on the ground. There was only that section left as the aircraft had hit trees and broken up and burst. I didn't seem to be able to see very clearly. . . . I pulled myself up and got out of a hole in the top of the fuselage." The other members of the crew, all seasoned veterans, were F/Os G. F. Mann and E. Essenberg and P/O J. M. Wallace. The first named was later reported safe, although wounded.

The Leasides lost a crew, skippered by F/O E. F. Patzer with F/Os G. B. Henson and A. H. May, P/O F. S. Daley, FSs J. W. B. McIntosh and W. G. Mendenhall and Sgt. C. I. Grant (R.A.F.), all nearly at the end of their tour. Henson, May, Daley and McIntosh were taken prisoner when the Halifax was brought down by flak. Henson landed in a 200-feet deep lignite pit and spent several hours climbing out.

Targets in the Ruhr and the Rhine Valley were attacked again the following night when Duisburg and Worms were the objectives for two forces numbering well over 300 kites each. To the Duisburg expedition the R.C.A.F. contributed 96 Lancasters from No. 6 Group and the Vancouvers. The

attack got off to a poor start as the winds differed from those forecast and most of the bombers were a bit late in arriving, by which time the first markers had disappeared in clouds lying over the target. As a result there was some difficulty in identifying the aiming point. Half-way through the attack, however, the clouds began to clear and the bombing became more concentrated. Streets could then be seen clearly outlined in the light of fires, many of which were burning near the aiming point. Black smoke rose 12,000 feet into the air and the glow over oft-bombed Duisburg was still visible 120 miles distant. Photographs showed fires still burning the next day and confirmed that extensive fresh damage had been inflicted on industrial, business and residential sections, on the railroad shops and yards. The whole of Duisburg was now desolate. The defences of Happy Valley lived up to their reputation but all the Canadian aircraft returned. For one Tiger crew, however, it was a very shaky do. F/L D. E. Sillers had just completed his bombing run when an enemy fighter attacked and severely damaged the Lancaster. One engine was put out of action as well as much of the technical equipment. Both gunners opened fire on the Jerry which broke away and did not return. WO G. Smith, the wireless operator, attempted to repair his damaged instruments, but they had been completely wrecked by cannon shells and bullets. Smith himself received a slight cut on the head. With great coolness and skill Sillers, after evading the fighters, brought his damaged aircraft back to base. He and Smith were decorated with the D F C

The results at Worms were even more successful despite very strong enemy opposition. There was no cloud over the Rhenish city and the target marking was accurate, well concentrated and plentiful throughout the attack. Fires soon took hold, lighting up streets and buildings. Four particularly large explosions rent the sky. When the Canadian bomber crews returned they reported the target area was a

blazing inferno visible for many miles. Mosquitos making a feint attack on the city two hours later said the target was one mass of flames from which smoke rose 10,000 feet. A white pall still covered the centre of Worms the next day making interpretation of the damage photographs very difficult. From these prints and others obtained later in the month it was ascertained that the centre of the city in particular had been swept by fire and a large proportion of the buildings wrecked or gutted. The municipal gas works was three-fifths destroyed.

If damage was heavy so were casualties. Heavy flak, searchlights and many night fighters opposed the bombers, seventeen of which did not return. On the other hand combat claims were entered for eight e/a destroyed, one probable and four damaged. No. 6 Group lost six of the 110 Halifaxes which it had provided for the attacking force of 330 aircraft, and claimed four of the destroyed Jerries.

The Leasides lost three crews, all shot down by enemy fighters. P/Os R. I. Bradley and J. G. Stephen, F/Os J. A. Fraser and R. H. Mueller, and Sgts. V. L. Smith, D. C. Duffy and J. W. Reid were captured when a Ju. 88 with upward firing guns raked their Halifax from below and set it ablaze. Another 88 made a stern attack on F/L E. S. Maguire's aircraft as he was on his bombing run. FS F. T. McLachlan, the rear gunner, directed his skipper in evasive action while he returned the enemy's fire. McLachlan saw strikes on the port engine and wing of the Junkers, but the Hally's port rudder caught fire and the flames spread towards the rear turret. McLachlan continued firing and the pilot corkscrewed until the Jerry broke off. The turret was now beginning to burn and finally his skipper ordered the gunner to bale out. Missing with F/L Maguire were F/Ls J. G. Maguire and C. S. Moir, F/O C. W. McMillan, FS E. J. McClarty and Sgt. A. A. McDonald (R.A.F.).

The third Leaside kite was brought down shortly after leaving Worms. Three times the enemy, possibly two fighters working in conjunction, closed on the bomber and set it on fire despite the pilot's evasive action. The rear gunner, FS S. E. Waterbury, gave a vivid account of the combat:

It was a normal trip till we got up to the target, the flak was light and we hit the target bang on. When we were about one minute out of the area I reported a twin-engined fighter dead astern and gave evasive action to starboard. We both fired at the same time; he did not get us. Then he came in from port again, I gave corkscrew to port and we were firing. The third attack came from starboard, the fighter got us and we were in flames. The fourth attack came from port and the fighter shot away our controls. The skipper gave the order to bale out. The aircraft rolled over on its back and I was in the top of my turret and couldn't get my doors open. It rolled over again and the side of the turret collapsed and I was thrown out, dazed from a bang on the head. When my head cleared I was falling through the air, so I pulled my ripcord and the 'chute opened. It was only fastened by one hook. I landed in some trees O K but scared

The pilot, F/O F. D. Baxter, also came down in some trees and was captured by a member of the Volksturm as he sought a place to cross a river. FS G. E. Armstrong was also taken prisoner. Knocked out when the aircraft rolled on its back as he was buckling on his parachute, Armstrong had no memory of how he got out. F/Os J. A. Bleich and G. E. Creswell, FS A. J. Hunter and Sgt. A. C. Hogg (R.A.F.) were lost.

The Goose Squadron lost two crews: F,'L A. H. Fleming, F/Os H. O. Hinson and G. M. Keech, FSs J. Ga20, A. R. Olson and D. Steele and Sgt. S. A. Powell (R.A.F.) in one, and F/L D. M. Sanderson, F/Os R. B. Smith and W. J. Gilmore, FSs W. W. Wagner, D. E. Sherman and N. P. H. Andersen and Sgt. J. Wilson (R.A.F.) in the other. Fleming's crew were all taken prisoner. A Jerry fighter got their Halifax by working into position below where the bomber was silhouetted against the bright moonlit sky. A burst from the e/a's upward firing guns put the intercom out of action, blew up the oxygen supply and started a roaring fire from the cockpit to the rear door. Gulping fresh air from the

open window Fleming held the aircraft steady until all his companions had jumped. Then he followed them.

P/O W. R. Wilson, the seasoned skipper of a Lion crew, reported that his bomber was hit on the bombing run. With controls immovable and fires in both wings he gave the order to abandon aircraft. The Halifax apparently blew up as Wilson suddenly found himself falling free and opened his parachute. His comrades, F/O L. Webster, WO R. R. Stuart, FSs D. A. Henderson, L. O. Foisy and A. J. McLeod, and Sgt. J. F. W. Taylor (R.A.F.) were presumed killed.

The losses were grievous, but the bombers had taken a toll of the enemy too, destroying four in the space of two minutes. A Bison crew made an FW.190 explode in midair; two Lion crews shot down enemy fighters in flames and a Snowy Owl crew treated another single-engined Jerry in like manner. FS R. R. Browne, the successful Bison rear gunner, received the D.F.M., as did Sgt. W. H. Waddell of the Snowy Owls. The Lion gunners were FS P. A. Bradbury, rear gunner in G-George, and Sgts. J. S. Dalling and M. E. Thompson, rear and mid-upper gunners in R-Roger.

After four operations on two nights the Group had stand-down for a day. On the 23rd two missions were again undertaken, one in mid-afternoon and the other five hours later in the early evening. The daylight target was Essen where over 300 bombers sought to complete the destruction wrought in many previous attacks. The R.C.A.F. contributed about 40 per cent of the force–117 Halifaxes and ten Vancouver Lancasters. Met. conditions were not good. Target indicators were soon obscured in the cloud blanket and even the sky-markers were difficult to see because of the poor horizontal visibility. Nevertheless the bombers were well grouped over the target and, resorting to their radar navigational equipment, released their loads of H.E. and incendiaries. The southern section of the Krupp works felt the main weight of the attack, with hits on the machine

shops, foundry, rolling mill and other buildings. Enemy defences were weak, and very few fighters rose to challenge the daylight intruders over Happy Valley. Flak, however, registered hits on the Halifax flown by F/L W. M. Walker of the Lions. Despite extensive damage to the wings, tail unit, a propeller and the hydraulic system, Walker brought his kite back to base. This was one of three occasions on which he returned with his bomber bearing evidence of the enemy's anti-aircraft fire. At the end of his tour he was awarded the D.F.C. in tribute to his inspiring example of skill and determination.

After the Halifaxes had returned from Essen a force of 56 R.C.A.F. Lancasters, including six from the Vancouvers, took off to join with 300 more heavies of Bomber Command in an attack on Pforzheim, south-east of Karlsruhe on the edge of the Black Forest. Before the war the town had been an important watch-making centre. After 1939 the artisans were employed in the manufacture of precision tools and instruments. Almost every house in Pforzheim indeed was a small workshop. The attack was a conspicuous success. Visibility was good under a clear sky, permitting ready identification of ground detail. The Pathfinders laid their markers in an accurate, tight pattern and the Master Bomber directed his forces in a very concentrated attack to achieve the maximum result. Fires broke out early and spread rapidly until almost the entire town north of the river was a mass of flames through which explosions erupted and smoke poured high into the sky.

Flak was slight but surprisingly accurate and night fighters were out in strength. Bomber losses were relatively heavy although all the R.C.A.F. crews returned. There were many combats in the course of which F/O J. D. M. R. Charbonnéau, rear gunner for F/L M. W. McLaughlin of the Moose Squadron, shot down a Ju.88 that went down on fire and exploded as it hit the ground. The crew of a Bluenose Lanc damaged an Me.zio, which had just shot down

another bomber. When the Messerschmitt turned on the Canadian Lanc FS J. McAlpine and Sgt. G. Fleming, the rear and mid-upper gunners, both opened fire. The rear turret went u/s after the first burst, but Fleming hit the fighter and made it break off the attack. The bomber flew home with a badly damaged starboard wing. An Iroquois kite evaded eight attacks from a Ju. 88 that was finally driven off by the accurate shooting of FS M. S. Jowett, the midupper gunner. On at least four of the passes the night fighter was hit by Jowett's short, well-aimed bursts. The rear gunner, FS D. E. Gwynne-Vaughan, was unable to take part in the action as his turret was unserviceable. The two gunners had already demonstrated their marksmanship and excellent co-operation on the Dortmund raid; both received the D.F.M.

P.R.U. cover of Pforzheim after the raid showed it to be one of Bomber Command's most successful attacks. An area of approximately 640 acres in the centre of the town had been almost entirely devastated, with scarcely a building standing undamaged. In addition to the demolition of the small house-workshops, most of the identifiable factories had been hit or destroyed and two river bridges had been knocked out. The production of precision instrument parts in Pforzheim had been well-nigh wholly stopped.

Two daylight attacks ended the Group's operations in February. The first target was a synthetic oil plant at Kamen, midway between Dortmund and Hamm. The R.C.A.F. supplied approximately one-third of the 320 bombers that reached the objective on the afternoon of the 24th. Kamen was completely obscured by cloud, the markers could not be seen and, on instruction from the Master Bomber, the main force bombed by use of navigational aids. Some black smoke rose above the clouds but otherwise few results could be seen. One aircraft, a Swordfish Halifax, did not return with its crew of WOs L. A. Russell, J. Gallagher and C. C. Craigie, F/O P. Pokryfka, and FSs R.

C. Brown, W. H. Jones and L. Trowsdale (R.A.F.).

On the bombing run a Halifax from the Thunderbird Squadron encountered heavy anti-aircraft fire and was hit. A large piece of shrapnel pierced the fuselage and struck the navigator, F/L P. K. Deane, over the heart, where it lodged in a watch in his breast pocket. Although suffering great pain from a broken rib, Deane refused to leave his post until satisfied that he had done everything possible to assist in executing a successful attack. He was subsequently decorated for this example of the skill, gallantry and devotion to duty displayed throughout his tour of operations. The attack on Kamen was the first in a series of four which inflicted severe damage on the whole synthetic oil plant. In midMarch the plant was completely inactive and no effort had been made to repair the damage.

Met. conditions were similar when Mainz was attacked by day on the 27th by a force of 435 bombers that included 185 Halifaxes and Lancasters from every squadron in No. 6 Group and the Vancouvers. It was indeed the only operation in the month on which all the Canadian bomber squadrons were represented. The object of this attack was to destroy railroad facilities in the area and to impede the movement of enemy armour and troops to the battle area. Cloud hid the target indicators, so the Master Bomber instructed the Pathfinders to release sky markers, the accuracy of which was confirmed by navigational checks. Scattered in the early stages, the bombing improved as the raid progressed until columns of smoke rose through the overcast to 15,000 feet and formed a beacon visible 100 miles. Fighters escorted the bomber stream to and from the target. No Jerries put in an appearance. One of the Bison bombers crashed as it was taking off for the raid and only one of the crew survived. F/Os R. M. Scott, S. T. Carson and K. F. Whitehouse, WO A. Mackie and FSs M. J. Brewer and F. G Fisher were killed

Sea-mining was carried out on seven nights in February

for a total of 85 sorties during which 2456 tons of mines were laid. The Group continued its "private" blockade of the 'smaller ports on the south coast of Norway from which the Nazis were trying to move men and material to other fronts. In addition to seven of these extremely narrow areas the Canadian Group also laid mines in Oslo Fjord, the Kattegat, and the approaches to Bremerhaven and Wilhelmshaven. One feature of the month's work was that the Group for the first time used Lancasters for laying mines from the air. The Tigers and Porcupines, who had just converted to this type, joined with the Halifaxes of the Lion and Bison squadrons in these operations which won unstinted praise from the Director of the Mining Section at the Admiralty. "The enthusiasm and efficiency of (No. 6) Group", he wrote, "and their magnificent contribution to the success of our offensive minelaying campaign, is beyond all praise".

Four minelaying aircraft were lost by the Group, two from the Bisons, and one each from the Lions and Tigers. The heaviest loss was on the 14th, when three crews did not return. S/L W. B. Brittain's Halifax was homeward bound from a sortie to Kiel Bay when two bursts of flak struck it at 12,000 feet over Denmark. The astrodome was blown off and fires began in the port inner engine, main plane and fuselage. When the flames could not be controlled Brittain ordered his men to bale out. F/Os C. J. Driscoll and H. McKay, P/O R. V. Dallin and Sgt. P. DeMetz (R.A.F.) were captured; Brittain made his way to safety, but the other members of the veteran Lion crew, P/Os J. F. Peak and E. M. Ford, were killed.

There were no survivors from the other crews: F/L F. C. Aldworth, F/O E. E. Reaney, FSs K. A. Miller, G. S. Guthrie, V. B. Smith and K. C. McMurchy, and Sgt. L. F. Davis (R.A.F.) of the Tigers; F/L R. C. Charlton, F/Os R. A. Thorne and K. W. Rainford, P/O R. J. McCallum, FSs G. J. L. Barnes and S. E. Bostwick and Sgt. W. Fedorchuk of the

Bisons; and F/L I. B. Benson, F/O V. B. Fleming, WO W. R. Fields, FSs. J. G. R. Buchanan, R. F. Piercy and E. R. Alm, and Sgt. J. G. Baker (R.A.F.) also of the Bisons.

In contrast to January there was but one change in squadron commanders during February, W/C K. A. France taking over the Leasides from S/L S. H. Minhinnick who had succeeded W/C J. K. MacDonald earlier in the month.

## CHAPTER IV

## NO. 6 BOMBER GROUP (SPRING 1945)

## March 1945

THE operations of No. 6 Group rose to a new peak in March 1945 as Bomber Command's long Battle of Germany drew close to final victory. The Canadian bomber squadrons took part in 22 bombing and five seamining operations, sending out more than 2800 aircraft laden with 10,817 tons of bombs and mines. The percentage of aircraft successfully attacking the target (98.2 percent or 2760) set a record for the 28 months that the Group was in operation. Operational serviceability (90 per cent) likewise reached a maximum, thanks to the devoted services of the ground crew personnel. The weight of bombs and mines dropped (10,496.9 tons) and the total of operational flying hours (almost 18,000) were exceeded only once in the history of the Group. The number of bombers missing on operations (37) was the highest for the period covered by this narrative, but the ratio to the number of sorties was not unduly high. Crashes on operational missions added fifteen to the Group's losses for the month.

The Vancouver Pathfinder Squadron operated sixteen times for a total of over 200 sorties. All but four operations were raids in which the Canadian Group also participated. Three Lancasters and their crews were lost.

Several features of the month's operations are noteworthy. The Group made an almost maximum effort with 22 bombing raids in 31 days. Particularly significant was the fact that fourteen of the 22 were daylight attacks. Targets in the Ruhr figured very prominently in the month's list of operations; the Battle of Happy Valley was now in its final stages and these were Bomber Command's last blows to complete the destruction of the Nazi war potential in the congested Ruhr valley. Early in April the Allied Armies overran the towns and cities which once had formed a great industrial area and were now desolate scenes of destruction.

Most of the air fighting in March was compressed into three or four minutes of furious action over Hamburg on the last day of the month, when the Group scored eleven of the month's thirteen successes. Particularly noteworthy is the fact that all eleven combats were with jet-propelled fighters, four of which were destroyed and seven probably destroyed or damaged.

March opened with a daylight attack on Mannheim by more than 450 bombers including 160 from No. 6 Group and ten from the Vancouvers. Owing to a solid bank of cloud over the target the attack was carried out on skymarkers which the Pathfinders released in a concentrated and well-maintained pattern. Opposition was confined to heavy flak; slight to moderate in volume; no enemy fighters appeared on the scene. Mannheim had been largely laid waste in many previous attacks; the latest in the series added considerable fresh damage to the battered city, particularly to factories producing tanks and diesel engines.

The next morning Cologne was visited by a powerful force of almost 700 aircraft in an effort to destroy the approaches to the Rhine crossings and thus block German military traffic to and from the city on which American troops were rapidly closing in. In contrast to the previous day the skies were clear and visibility good. Ground markers guided the air bombers in an accurate, concentrated at-

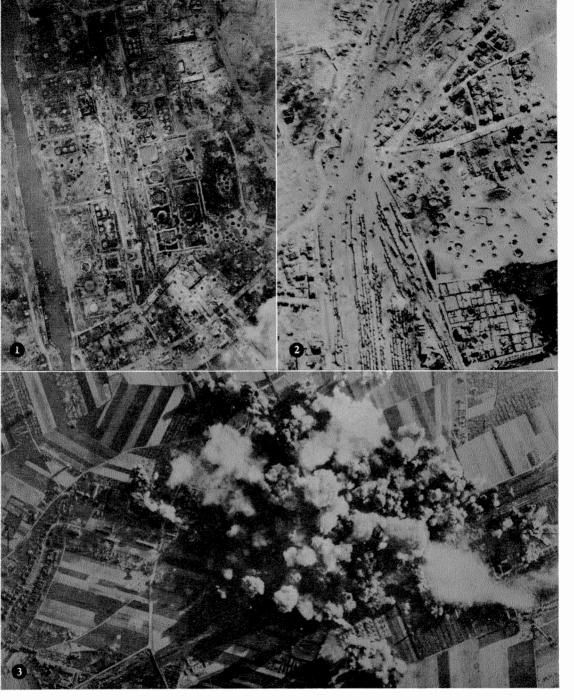
tack until obscured by smoke which, in turn, served as an aiming point. Buildings along the waterfront and around the freight yards began to blaze. Many craters appeared on the roads leading to the Deutz and Hohenzollern bridges across the Rhine. The first bridge was hit and destroyed and the second damaged by near misses which collapsed the superstructure at the western end and blocked traffic. The heavy concentration of bombs around the aiming point caused severe damage to, many industrial establishments, railway installations and yards, as well as business and residential areas.

Once again enemy fighters made no effort to interfere, but flak defences were active and accurate. One of the 190 Canadian bombers did not return with its crew of F/Os H R. Sproule, J. E. Moran and V. D. Mousseau, FSs J. G. Paxton, John Street, and V. T. Hunt and Sgt. A. D. Dennis of the Goose Squadron. The aircraft was hit by flak after bombing the target and crashed on the German side of the lines. Paxton and Street were lost, but the others were able to bale out near the Rhine and were captured. Dennis was held only a few days until.liberated by the advancing Americans. When F/L K. 0. Powell of the Bisons was later awarded the D.F.C. the Cologne attack was mentioned. On the outward journey one engine of his bomber became unserviceable and a second failed on the homeward flight. Despite this serious handicap Powell bombed the target and returned safely to his base.

There was a break of three days before the Group was again over Germany. Then it made four raids in as many nights. The first night attack was against Chemnitz on March 5th/6th, when Bomber Command despatched boo aircraft on a fire raid to destroy the built-up area, industries and railway facilities of the Saxon metropolis. No. 6 Group provided 98 Halifaxes and 84 Lancasters and the Vancouvers made a maximum contribution of sixteen Pathfinders. The attack was successful, despite 10/10ths cloud which



(1) A veteran Alouette Lancaster with its ground crew.
 (2) S/L R. D. Hemphill, D.F.C.
 (3) The bomb-bay of an Alouette Halifax.
 (4) Fl/O Ruth McJannet questions FSs Roy Pearson and Norman Brown after a raid.
 (5) FS D. A. Brown with his skipper, F/L D. E. Sillers.
 (6) Ground crew of the Tiger Squadron with a 4,000-lb. Easter egg which V-Victor laid on the oil refinery at Hemmingstedt.
 (7) W/C J. H. L. Lecomte, centre of front row, with pilots of the Swordfish Squadron in front of "Willie the Wolf".
 (8) Halifax M-Mike of the Bison Squadron completes 95 bombing and mining sorties.
 (9) Bombedup; F/O Bill Egan of Toronto checks his bomb load.



(1) The oil refinery at Misburg, March 1945. (2) The marshalling yards at Schwandorf after No. 6 Group's attack on April 16th/17th. (3) Bombs burst on another German freight yard.

necessitated the use of skymarkers. Bomb flashes penetrating the blanket indicated a good concentration around the aiming point and late arrivals were able to use the glow of fires on the clouds as a guide. Half-way through the attack there was an exceptionally violent explosion on the ground. Thirty-six hours later fires were still blazing in Chemnitz. The old town centre was almost completely obliterated and in the districts to the south most of the buildings had been gutted, with very heavy damage to industrial property; few, if any, factories in the area escaped. This attack, following closely upon three by the U.S.A.A.F., caused great destruction; the cumulative effect was devastation over 60 percent of the built-up area.

But the cost had been heavy, particularly heavy for the Canadian Group. Over the target area anti-aircraft fire had been moderate; over Leipzig to the northwest it had been more intense; and night fighters had engaged the bombers from Chemnitz along the first legs of the homeward course. Among the twenty aircraft which did not return there were six R.C.A.F. Hallies and Lancs. Much more grievous were the losses due to weather and accidents; seven Canadian bombers crashed at the beginning of the raid and four more on the return. The majority of these accidental crashes were apparently due to unusual icing conditions over some of the Yorkshire bases. The loss of seventeen aircraft and iog personnel killed or missing was one of the heaviest blows ever suffered by the Group in a single night.

The Thunderbirds lost three veteran crews in crashes in England and one missing over Chemnitz: S/L E. T. Garrett, F/Os J. L. Atkinson and K. G. Parker, WOs W. G. Miller, J. B. Linstead and H. D. McLeod and Sgt. E. S. Jerome (R.A.F.) were in one crew; F/Os H. S. Watts and F. M. Myers, WO B. J. McCarthy, FSs W. A. Way, M. W. Coones and R. A. Biggerstaff and Sgt. W. A. Togwell (R.A.F.) in another; F/L I. Emerson, F/Os A. M. Hutchison and T. M. Campbell, WO J. N. MacDougall, FS R. H.

Turner and Sgt. W. T. Symes (R.A.F.) in the third; and F/L J. G. Kirkpatrick, F/Os R. E. Fennell and R. E. Stillinger, WO J. A. H. Larson, FSs W. H. Denison and R. B. Gunderson, and Sgt. I. Giles (R.A.F.) were in the missing Halifax. Denison alone survived as a prisoner of war.

From the Alouettes three aircraft were lost with ten of the crews killed, three presumed dead, four prisoners of war and four safe after baling out. F/Os A. R. Lowe, P. Hall and R. E. O. Charron, P/O M. S. H. Anderson, WO J. E. R. Beaudry, FSs J. W. Hyde, J. L. G. Pelletier and J. L. P. Seguin and Sgts. J. L. Lynch and J. D. F. E. Roy were killed; F/O J. J. A. L. Desbiens, FS H. J. M. J. D'Avril, and Sgt. A. E. Minguet were presumed dead; and F/O J. A. Parent, FSs G. E. J. Iremblay, J. L. G. Langevin and L. P. Lamontagne were captured.

The Snowy Owls also lost three Halifaxes. P/O E. W. Clark, F/O W. H. Oakes, FS J. A. Epoch and Sgt. J. B. Kirby (R.A.F.) were killed in a crash in England, and P/Os R. F. Sollie and E. S. Kaechele, F/O R. G. Smith, FS W. Gaba and Sgts. R. O. Battler and R. A. Dinnen (R.A.F.) lost their lives in another accident. There was one survivor from Sollie's crew, FS J. H. Waugh, D.F.M., who was ordered by his pilot to bale out. When the aircraft crashed directly beneath him and exploded, Waugh was shot up into the air and his parachute partially collapsed. After a drop of 400 feet it re-opened and the gunner landed safely. Waugh was later commissioned and awarded the D.F.C.

The third Snowy Owl bomber was flown by F/L V. R. Glover, D.F.C., F/O V. L. McKinnon, P/O J. R. Gordon, WO D. F. Broadfoot, FSs J. J. M. Kastner and H. E. MacKenzie and Sgt. H. W. Slipper (R.A.F.), all of whom had passed the 30-trip mark, together with F/O D. H. Mettrick as second pilot. It was learned later that most of the navigational aids became u/s shortly after the bomber left base. Nevertheless, thanks to the skill of the navigator, P/O Gordon, the pilot was able to reach the target and drop his

bombs. Then an enemy fighter attacked and so seriously damaged the Halifax that the crew had to bale out. Gordon and the m/u gunner had' been wounded, but despite his own suffering Gordon extricated his severely injured comrade and got him out of the aircraft before taking to his own parachute. After his release from prison camp Gordon was awarded the D.F.C. All members of the crew were safe or P.O.W.s except Kastner who was presumed killed.

On returning from Chemnitz a Leaside Halifax crashed in England with the loss of S/L E. A. Hayes, F/Ls J. G. Clothier and G. R. Harris, F/O C. M. Hay, D.S.O. (a second tour man), P/O J. D. Ringrose, FSs M. B. Nielsen and G. M. Orser and Sgt. D. M. Cooke (R.A.F.). The whole crew of a Moose Lancaster was also killed in a crash at the end of the sortie: F/Os C. L. Reitlo, W. N. Dewitt and G. J. Hollinger, FS N. R. Poole, and Sgts. J. E. Hanley, F. R. Leet and J. A. S. King. When an aircraft of the Ghost Squadron crashed on the continent, F/Os W. R. Ashdown and D. A. Wade and Sgt. C. R. Hazelby (R.A.F.) were killed. The Bisons lost F/L M. W. Sanderson, P/O W. R. Strand, WO J. P. Nault, and FSs H. N. Prince, A. S. Leroux, A. G. Caldwell and P. F. Gonroski in another accident on return from this operation.

Missing aircraft, in addition to the three noted previously, came from the Swordfish, Tiger and Iroquois Squadrons with crews, respectively, F/L W. R. Mitchell, F/Os R. C. Barteaux and R. D. Loveridge, P/Os F. T. Mudry, W. D. Mosey and J. R. Gendron, and FSs W. B. Gill and A. E. Ridley (R.A.F.) (all prisoners of war); F/L D. A. Ross, F/Os H. M. Weaver, A. V. Cash and F. E. Seaby, FSs C. Antonek (prisoner of war) and J. M. Atchison, and Sgt. A. K. Rayner (R.A.F.); F/Os S. A. Reid, H. J. Feldhans and H. J. Beaton, WO C. B. MacDonald, and Sgts. H. R. Harris, H. Guttormson and W. A. Salisbury (R.A.F.). It was indeed a tragic night for the Group.

In addition to Gordon and Waugh, mentioned above,

F/Ls J. A. Brassard and J. R. S. Y. Laporte and F/O J. S. Cross (navigator) of the Alouettes and F/Ls L. E. Clarahan of the Goose Squadron and D. C. Gonyea of the Iroquois were decorated for their work on this raid. Despite trouble with an engine, the hydraulics and intercom, despite flak damage and an attack by an enemy fighter Brassard reached the target and delivered his bombs. Laporte, too, completed his mission although handicapped by unserviceable equipment; on the homeward flight his bomber was hit several times by the German ground defences. Cross made a successful attack on Chemnitz despite the handicap of many navigational instruments being useless due to heavy icing. Clarahan had to beat off two attacks by enemy fighters over the target area. The antiaircraft gunners also hit Gonyea's bomber, wounding him severely in the shoulder. Although the pain was intense he flew on to the target and released his bombs. On the return flight his arm became completely useless but Gonvea, with great fortitude, remained at the controls until he had landed his aircraft at base. Then he collapsed.

A Tiger Lancaster piloted by F/L D. E. Sillers fought a brief action with a Ju.88 and drove the enemy off damaged. The Jerry opened fire as the bomber was flying straight and level waiting for the photoflash to go off. Sgt. D. A. Brown, the mid-upper gunner, was on his toes and got in a good burst of 150 rounds that shot pieces off the starboard mainplane. The Ju. did not repeat the attack.

Two nights later (7th/8th) Dessau was the target for a fire raid by 500 heavies of which almost 100 came from the Canadian Group and the Vancouver Pathfinders. Among the many industries which made the city a priority target were the headquarters of the Junkers aircraft company and factories producing jet units. At the opening of the attack cloud covered the target and hid the ground indicators, but skymarkers, navigational aids and the glow of fires were an adequate guide for the bomb-aimers. Incendiaries and ex-

plosives rained down for forty minutes, starting great fires dotted by frequent explosions. When a break appeared in the clouds, fifteen minutes after the attack began, the crews could see that the whole of Dessau appeared to be carpeted with incendiaries. Half an hour later the fires had grown into one huge conflagration casting a glow visible 100 miles. Some hours afterwards an area one mile wide by two miles long was a mass of flames. Two days later P.R.U. aircraft brought back photographs of a devastated city with square after square of gutted buildings. All four Junkers plants had been hit, as well as a large sugar refinery, wagon factory, brewery, machine shop, barracks, gas works, freight yards and many other industries, public buildings, business and residential properties.

To defend Dessau the enemy used decoy skymarkers and target indicators without success; heavy flak was moderately intense and night fighters were very active. Eighteen bombers were lost, but claims were entered for five e/a destroyed and a like number probably destroyed or damaged. Two of the victories were scored by a Vancouver kite, captained by F/O L. E. Larson, which was attacked by three Ju.88s over the target area. At close range the rear gunner, WO R. W. Hainsworth, D.F.M. (R.A.F.), shot down the first with its port engine ablaze. WO H. Robb, the mid-upper gunner (also from the R.A.F.), took on the second Ju. and with a short, accurate burst sent it down in flames also. But the third Jerry closed with great persistence and poured cannon shells into the rear turret, setting it on fire and mortally wounding Hainsworth. Robb and P/O R. B. Van Metre, the wireless-operator, immediately went to the gunner's assistance. By their joint efforts they extinguished the flames, which had already consumed part of Hainsworth's parachute, and released his body from the turret. Then, despite severe burns to his hands, Van Metre returned to his post at the wireless set and carried on his work until the bomber was safely home. Robb was decorated with the C.G.M. and Van Metre with the D.F.C. for courage and resolution in very trying circumstances.

The R.C.A.F. lost three freshman crews, two from the Tigers and one from the Moose Squadron. With F/O T. L. Foley in one Tiger Lanc there were F/Os D. W. B. Robinson, D. A. Standfield and T. S. Lawrence, Sgts. J. Klein, S. Rosu and K. F. Seaman, while F/O W. D. Lighthall had FSs G. W. Laut, J. W. Allan and D. Bellantino and P. W. Davies, Sgts. P. Yanai (R.A.Fr) and J. A. Bellamy. The Moose crew was skippered by F/O B. MacNeill with F/O W. E. Short, FS H. O. Cole and Sgts. E. V. Beach, R. T. Wilson, D. C. Jamieson and R. L. Mitchell. Two of these men, Seaman and Jamieson, reached Allied territory early in April, while Lighthall and Cole were taken prisoner.

While the Lancaster squadrons were bombing Dessau the Group's Halifax crews, 100 strong, were over the Heide oil refinery at Hemmingstedt in Schleswig-Holstein as part of a force of 275 aircraft. The sky was fairly clear, but ground haze made it difficult to identify the oil plant even though the Master Bomber called his main force down to 6,000 feet. The dazzle of the illuminating flares handicapped the bomb-aimers in their effort to distinguish the yellow target indicators around the aiming point. Bombing as a result was not concentrated, although it improved as the attack progressed. Two large explosions, fires and a thick column of black smoke indicated some "incidents" on the ground: nevertheless the raid was not considered a success as the refinery had not been satisfactorily identified. A fortnight later Hemmingstedt was bombed again with better effect

Flak was not effective but night fighters fought several actions with the bombers and shot down a Halifax from the Goose Squadron. F/O Steve Lasko and Sgt. J. Huspeka baled out, as the bomber went down in flames and were captured. Lasko later reported that the blast from bomb explosions shook his parachute as he drifted down; landing a

mile-and-a-half from the target, he sat on his "brolly" and watched the last stages of the attack. It was a spectacular show. WO B. C. Patterson was reported safe four weeks later. The other members of the crew, P/O G. D. Daughters, WO N. G. Baird and FSs A. G. Allen and R. G. McManus were posted missing, as were an Alouette crew composed of F/L W. D. Corbett, P/Os J. W. Hickson and G. N. Ware, F/O V. P. McAllister, FSs L. J. Parent and J. R. Morin and Sgt. J. C. Forsyth (R.A.F.), who were approaching the end of their tour. Corbett had just received his second ring and the D.F.C.

The Blohm and Voss shipyards at Hamburg were the objective the next night (8th/9th) for over 300 heavies, including 85 Hallies from 6 Group and 16 Lancs from the Vancouvers. Ground markers were fairly well grouped at the opening of the attack, but thin cloud drifting over the target necessitated a change to skymarkers. Explosions (there was one particularly large burst), numerous fires, black smoke and a glow over a considerable section of the target were the visible results. Photographs indicated, however, that much of the bombing was south-west of the aiming point. Two shipyards received slight damage and the "Robert Ley", the famous Nazi "Strength Through Joy" pleasure liner, was set on fire.

Losses were light, only one aircaft, a Swordfish kite, failing to return. Flak hit the Hally just as the bombs were released, starting fires in the starboard engines and rear of the fuselage. The whole crew, veterans of twenty or more trips each, baled out and were taken prisoner, although three managed to elude the Nazis for several days. WO A. F. McDiarmid was skipper, with F/O A. R. Hibben, FSs W. L. Mracek, F. E. Adams, Norman Tonello and G. M. Roberts and Sgt. W. J. R. Gale (R.A.F.) in his crew.

Daylight attacks were resumed on the 11th with three raids on successive days against Essen, Dortmund and Barmen. The first two were record attacks, involving al-

most 1100 bombers. No. 6 Group made a maximum contribution on each occasion, with every squadron participating. For Essen the Group provided 196 heavies and 194. attacked the target; on the Dortmund show 192 Canadian bombers took off and all but one were successful. The Vancouvers also had a share in both attacks, supplying fourteen Pathfinders for the first and seven for the second.

Essen was obscured by cloud when the first waves arrived shortly before three o'clock on the afternoon of the 11th. Skymarkers were well grouped and maintained while the Master Bomber directed his forces as they came in on their bombing runs in a good concentration averaging 25 bombers a minute. The only result immediately obvious was black and brown smoke belching up through the clouds. This indicated that the bombing was well centred around both aiming points, where photographs subsequently confirmed there was a heavy concentration of craters blocking roads and railroad tracks. This raid, in conjunction with two by the U.S.A.A.F., put the finishing touches to Essen. Destruction was now so widespread that it was difficult to determine details of new damage; streets were so choked and torn, and rail lines so littered and battered that any movement through the city seemed virtually impossible. The Battle of the Ruhr was all but ended.

Over Essen the Canadian Group dropped almost 835 tons of explosives, the heaviest bomb load of the month. For the Lions the operation was memorable as their first sortie on Lancasters after 22 months on Halifaxes. There was slight opposition, anti-aircraft fire decreasing to practically nil and only one fighter appearing. The renowned defences of Happy Valley were now but a memory.

Two of the three aircraft missing from this 1,000-bomber raid came from the R.C.A.F. contingent. The Iroquois Squadron had the misfortune to lose its C.O., W/C R. F. Davenport, with his crew F/Os D. K. J. Hector and W. Rink, P/O H. G. Bishop, WO C. W. Fraser, FS C. R. Lecky

and Sgt. A. C. Pettifor. Temporary command of the squadron was assumed by S/L H. M. Smith until W/C W. F. McKinnon arrived a week later. From the Bluenose Squadron a second-tour crew was missing, composed of F/Ls R. J. Fern and A. G. Rowe and F/Os T. D. Copeland, J. R. Latremouille, G. Scott and J. A. H. B. Marceau; the seventh member, P/O W. Jones (R.A.F.), was near the end of his first tour. Marceau, the rear gunner, was the only survivor.

W/C F. R. Sharp and F/L W. R. Austin, both of the Goose Squadron, and F/O J. O. Stewart of the Bluenose were mentioned for their work on the Essen raid when awarded their D.F.Cs. All three pilots completed their sorties despite unserviceable engines; it was Stewart's first operational sortie.

The Dortmund raid, the next afternoon, was almost a repetition of the Essen show. Cloud conditions, accurate skymarking, clear and concise direction by the Master Bomber, excellent concentration of aircraft, clouds of black-brown smoke, and almost negligible opposition—in all these features the two attacks were alike. Identical too were the results—a most successful raid which, following upon one by the Americans, caused further extensive damage to two important steel works and several freight yards around the city. Virtually all communications were cut. There were no Canadian losses. When F/Os H. H. Cowan of the Tigers and T. F. Ford of the Snowy Owls were decorated, their skill and determination on the Dortmund attack were cited.

The Barmen operation on the 13th was on a much smaller scale. Only 350 bombers were involved, with 100 R.C.A.F. Halifaxes included. Once again cloud covered the target and the Pathfinders maintained a continuous pattern of blue smoke puffs to guide the bomb-aimers. Some crews descended below the cloud layer to release their cargoes and were able to identify the built-up area and confirm the accuracy of the bombing. The eastern section of the indus-

trial area suffered most severely; transportation facilities and at least eight large factories showed the effects. There were no losses.

The Vancouvers were not engaged in the Barmen raid, but had a share that night (13th/14th) in a small-scale attack on a benzol plant near Herne in the Ruhr. Handicapped by cloud the raid lacked concentration.

On the next night (14th/15th) No. 6 Group was alloted a tactical objective, Zweibrücken, near the Franco-German frontier, and 196 aircraft from all fourteen squadrons took off. Leading the way to the target there were 34 Pathfinders, including twelve from the Vancouvers, who showered red and green target indicators around the aiming point and released illuminating flares by the light of which many crews were able to identify the target visually. Smoke and fires soon covered the target, and numerous explosions were discernible, with two very prominent blasts at the end of the attack. Photographs revealed a scene of burning rubble and confusion in the centre of the town. Factories and buildings had been gutted or destroyed, and the freight yards had been heavily hit. Any troop concentrations in Zweibrücken must have suffered severely. Opposition was slight and all our aircraft returned.

The attack on Castrop Rauxel the next afternoon was likewise a 6 Group show which was completed without loss. Only the Halifax squadrons were called upon to provide seventy heavies which, aided by a few PFF kites, sought to complete the destruction of the tar and benzol distillation plant in the eastern Ruhr. In good visibility with only slight ground haze, the aiming point was readily identified and well marked with T.Is. Fires quickly took hold and poured forth such volumes of smoke that at times the indicators were invisible. At the close of the concentrated nine-minute attack there was a particularly large reddishorange explosion, which shot a dense black cloud of smoke 14,000 feet into the air. One hundred and twenty-five miles

away the gaggle of bombers could still see the smoke. There was some anti-aircraft fire, but no enemy aircraft appeared. The benzol plant was extensively damaged and rendered inactive for some time to come. At least one building had been completely destroyed and others, together with oil storage tanks, badly knocked about.

Four and a half hours later five of the Halifax squadrons and the seven Lanc units were again over the Ruhr, comprising half of a force that attacked Hagen under a cloudless night sky. The target markers were plentiful and for the most part well concentrated, as was the bombing. When the bursts and smoke presently obscured the T.Ls, the Master Bomber switched over to skymarking for the closing stages. As the bombers withdrew fires were burning so well that sixteen hours later they were still belching smoke and rendering photographic assessment difficult. It was, however, obvious that many new areas had been severely affected by fire. This was subsequently confirmed when prints were obtained showing large sections gutted and much other damage.

In contrast to the afternoon's operation, the Hagen raid encountered strong enemy fighter opposition. No. 6 Group lost four aircraft missing and four more crashed, a relatively high figure considering the number engaged (142). The missing crews were P/O J. V. L. A. Patry, WOs J. J. P. Paiement and J. J. R. Lanctot, FSs A. M. Fournier, J. D. Goupil and J. C. F. J. Panneton and Sgt. G. R. Odell of the Alouettes; F/Ls R. R. Haw and A. G. Edwards, F/Os G. H. Davis and J. L. V. Morin, P/Os P. P. Repsys and A. C. Harris (R.A.F.) and FS R. E. Home, all Iroquois veterans; F/Os S. M. Bonter, M. E. Vachon and A. T. Hinchliffe, WO E. V. Andersen and Sgts. D. C. Lawton, T. D. Scott and D. Colquhoun (R.A.F.) of the Leasides; F/Os J. O. Stewart, L. W. Armstrong, J. D. Ball and J. H. Ayotte, WO J. A. Whitehead, FS W. G. S. White and Sgt. T. C. Kossatz of the Bluenose Squadron. Of the personnel named, Paiement,

Lanctot, Goupil, Panneton, Odell, Vachon, Hinchliffe, Andersen and Ayotte were subsequently reported safe or P.O.W.s.

The four which crashed on our side of the lines were all shot down by enemy aircraft. In one Moose Squadron crew FS C. W. Parrish (captain), F/O H. R. J. Hennessey and FSs C. H. Vickery and M. W. Bredin were killed, and FS C. Ginter and Sgts. P. V. Bowman and Eric Bristow were safe. In a second Moose crew the skipper, F/L M. W. McLaughlin, and F/Os B. V. Saunders and J. D. M. R. Charbonneau and FS W. W. Lightfoot got down safely, but two other second tour men, WO A. Sutherland and P/O E. B. Carleton, D.F.M., and F/O H. L. Garriock were lost. After bombing Hagen the Lanc was homeward bound when a Jerry attacked and set the whole starboard wing ablaze. Displaying fine airmanship, McLaughlin kept the burning bomber under control until the other members of the crew could escape. Before he was able to leave, the aircraft exploded and the nose broke away from the fuselage. McLaughlin had already completed one tour and was well along on his second. He was awarded the D.F.C. for his skill and courage on this and many other occasions. Charbonneau also was decorated. On the Pforzheim raid late in February he had destroyed a night fighter. On this present occasion when his bomber exploded Charbonneau received head and leg injuries. Undeterred by this experience, he returned to operational flying as soon as he had recovered.

An Alouette crew, captained by F/L J. R. S. Y. Laporte, who had won the D.F.C. earlier in the month on the Chemnitz show, had completed their attack and were making a photo run when the Hally was hit several times by flak. A little later the bomber was engaged by two enemy fighters and riddled by a stream of bullets.

Considerable damage was sustained. The starboard engine burst into flames. A fire commenced in the fuselage but it was extinguished by a member of the crew. Unfortunately, the flames in the burning engine could not be controlled. It became imperative to abandon the aircraft. F/L Laporte, who had been struck by a bullet which passed through both his elbows, displayed great coolness, remaining at the controls until his crew members were clear. As he was preparing to leave an explosion occurred. F/L Laporte was thrown to the floor. He got clear of the debris, however, and jumped to safety.

All members of the crew escaped except Sgt. J. J. R. Arcand. A bar to the D.F.C. was subsequently awarded to Laporte.

The crew of a Ghost Lancaster had a similar harrowing experience. Seven times the bomber was attacked by enemy fighters and six times, thanks to the great coolness and courage of F/L J. D. C. Craton, the skipper, it survived their fire. But on the seventh attack the Lanc was badly damaged and set on fire. Unable to control the aircraft Craton ordered his crew to leave by parachute while he fought on to regain control. Finally the bomber turned completely over and hurled the pilot through the perspex of his compartment. His parachute opened and he landed in the battle area with both arms broken and many lacerations and abrasions about the face, neck and other parts of the body. Although in great physical distress Craton walked back to our own lines. F/O B. B. Gray also returned to his squadron within a few days. The other members of the crew, all second tour men, were F/Ls R. W. Newton and R. C. Hamill, F/Os E. R. Evans and D. C. Graham and Sgt. G. T. Llewellin. The D.F.C. was awarded to Craton.

P/O H. D. Milison of the Porcupine Squadron also won a gong that night in action with the enemy. He was the midupper gunner in a Lancaster that was attacked by an Me-410 near Krefeld on the homeward flight. Milison directed his pilot in the necessary combat manoeuvres and then opened fire at 500 yards' range. The Me. burst into flames, dived vertically into the ground and exploded. A minute later another 410 attacked but broke away when both gunners returned its fire.

Yet another D.F.C. went to F/O J. L. Mould of the Tigers who carried on with his mission despite an unserviceable engine.

No. 6 Group was not on operations again until the night of the 18th, but in the interval the Vancouvers had a part in two attacks carried out by forces of 250 bombers. The first was against an oil refinery at Misburg, near Hanover, on the 15th/16th. The sky was cloudless, visibility good, marking excellent, and results most successful. Considering the explosions, masses of flames and great volumes of smoke produced by the attack there was good reason to believe the oil plant would be inoperative for some weeks at least. The Canadian squadron lost two experienced crews: F/L L. N. Laing with F/Os I. W. Bonter, D. G. Smith and R. M. Hyde, FSs F. J. Marsh and J. R. Crisp and Sgt. R. Morris (R.A.F.); F/L K. E. Parkhurst with F/Os H. E. Wort and C. A. Boulton, P/Os R. B. Jones, D. I. Galbraith and F. J. Miller, FS D. A. Holliday and Sgt. L. Dovaston (R.A.F.). It was later learned that Bonter, Hyde and Crisp were prisoners of war.

On the next night the Vancouvers made a deep penetration into southern Germany to assist in marking the target at Nuremberg. Major destruction was wrought in the main railroad station and yards, and six priority targets, including the Siemens electrical works, were heavily damaged. But our own losses were extremely heavy, amounting to almost one-tenth of the attacking force. The enemy's success was apparently due to the fact that his ground controllers correctly identified the target earlier than usual and accurately directed the night fighters to intercept the bomber stream. Fortunately, all the Canadian aircraft came back safely.

Witten in the Ruhr was the target when No. 6 Group operated again in the early morning hours of March 19th, supplying onefourth of the attacking force of 320 kites. The Vancouvers were also represented on the "do" with a maximum contribution of sixteen. The target was identified

visually and accurately marked. The bombs, well concentrated around the aiming point, raised a pall of smoke, punctuated by numerous explosions, over a large area. Although smoke still partly obscured Witten when PRU pictures were taken, it could be seen that almost the whole built-up area was now completely desolate; industries, business premises and rail communications had suffered extensive and heavy damage. Happy Valley lived up to its former reputation this night; heavy flak was moderately severe, searchlights numerous and fighters active over the target area and along the homeward route. The R.C.A.F. lost four of the eight bombers which did not return. From the Vancouver Pathfinders F/Os G. E. Peaker, E. Hayes and R. S. Butterworth, WO R. M. Baker, FSs E. F. Perrault and J. P. H. Adam and Sgts. A. Kirkcaldy and R. P. Smith (both of the R.A.F.) were missing.

The Alouettes lost two crews. One, captained by WO A. J. G. Temple, included F/Os F. H. Irwin and J. G. N. Lejambe, FSs J. S. Wilson, A. Banks and B. A. Balyx and Sgt. L. G. Hinch, all of whom were lost with the exception of Balyx. The second crew was skippered by P/O C. B. J. Racicot who had with him F/O J. P. A. H. R. Marc-Aurèle, FSs M. H. Depot, J. A. P. Dumouchel, J. R. S. Leboeuf and E. G. Gregory and Sgt. Paul Panasuk. The text of the D.F.C. award to Racicot reveals the bomber's fate.

On the bombing run his aircraft was illuminated in a cone of searchlights. F/O Racicot flew clear, however, and resumed the bombing run. Immediately after the bombs had been released the aircraft was hit by enemy fire and sustained heavy damage. The engines on the starboard side were hit, the outer one being put out of action completely, while the inner engine caught fire; the propeller of the latter had to be feathered. Other damage sustained very badly affected the controls. The aircraft began to lose height rapidly. Although F/O Racicot gave the order to prepare to abandon the aircraft he remained at the controls and finally succeeded in levelling out. Shortly afterwards, it became necessary to leave the aircraft by parachute. F/O Racicot came down safely, but in enemy territory. He was captured. Within a few days he escaped

and later came in contact with the liberating forces.

All Racicot's companions, except Panasuk who was presumed killed, succeeded in reaching our lines within a few weeks.

From F/O G. J. Keeper, captain of a missing Snowy Owl bomber, there came later a similar story of an experience which won him the D.F.C. En route to Witten one engine failed and the Halifax lost height. Nevertheless Keeper continued on his course and made a determined and successful attack on the target. While doing so, his aircraft was nit and severely damaged by flak, all fuel tanks being badly holed. A forced landing was imminent. With great skill the pilot kept the crippled bomber airborne long enough to enable the crew to bale out. Then he followed them. Keeper's companions in this trying experience were F/Os D. M. Armstrong (who lost his life), R. G. Reid and W. G. Bridgeman, P/O A. V. Padgham, FS A. F. Domke and Sgt. A. H. Butler.

Early in the month the Heide oil refinery at Hemmingstedt had been the objective of an unsuccessful raid. On the 20th/21st a second attack was made by an all-Lancaster force of 166 aircraft, two-thirds of which were provided by No. 6 Group and fifteen more by the Vancouvers. This time conditions were better. The night was clear and slight ground haze did not prevent visual identification of the aiming point. In the light of illuminating flares ground detail was clearly visible. With the target clearly marked and the Master Bomber skillfully directing his crews, the main force completed a well concentrated attack. Flames rose to 1,000 feet, and oily black smoke much higher. Photographs covering this raid and an earlier one by the U.S.A.A.F. showed dense smoke still streaming over part of the refinery. In the unobscured part hits could be distinguished on buildings previously unharmed and fresh damage to others. It was estimated that at least two months would elapse before work could be resumed.

Losses were limited to one bomber from the Moose Squadron piloted by F/O R. W. Millar who was on the 36th and last trip of -his tour. He had with him F/L H. B. Rubin, beginning his second tour, F/Os A. J. Palanek and L. C. Croucher, FSs C. A. Elliott and J. W. Aitken (who was taken prisoner) and Sgt. S. D. Booth (R.A.F.).

FS F. G. K. Saunders of the Iroquois Squadron won the D.F.M. at Heide for coolness and skill when his aircraft was severely damaged by a falling bomb while on the bombing run. A large hole was torn in the port wing and the mounting of one engine was so badly damaged that the propeller had to be feathered. The Lancaster was almost uncontrollable and went into a dive from which Saunders finally succeeded in levelling out. He turned away from the target, but the bomber was losing height, vibrating badly, and could scarcely be manoeuvred. Nevertheless Saunders nursed his aircraft back to base.

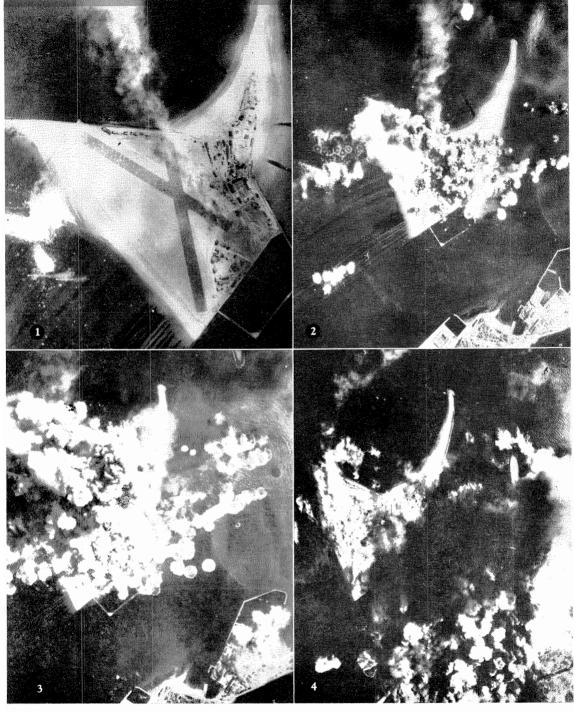
For the Tiger Squadron the Heide raid rounded out 2,000 operational sorties, F/L J. F. Thomas, D.F.C., having the honour of piloting the kite which set this figure. A few days later W/C R. W. Norris succeeded C. C. W. Marshall as C.O. of the Tigers.

Heide was the last night attack of the month for the Canadians; it was followed by eight daylight operations in eleven days. On the 21st the Group put up 90 Halifaxes as half of a force that bombed Rheine marshalling yards in support of military operations in that area. Bomb craters cut all tracks at the south-eastern end of the yards where the Osnabrück line branched off. Various industrial premises were almost wiped out and much other damage caused by the concentrated bombing. It was assessed as "excellent" and must have caused great disorganization to Nazi military traffic. There was no fighter reaction and heavy flak, though moderate in volume, was ineffective. All the Canadian bombers returned, but one flown by P/O R. E. Bagnell

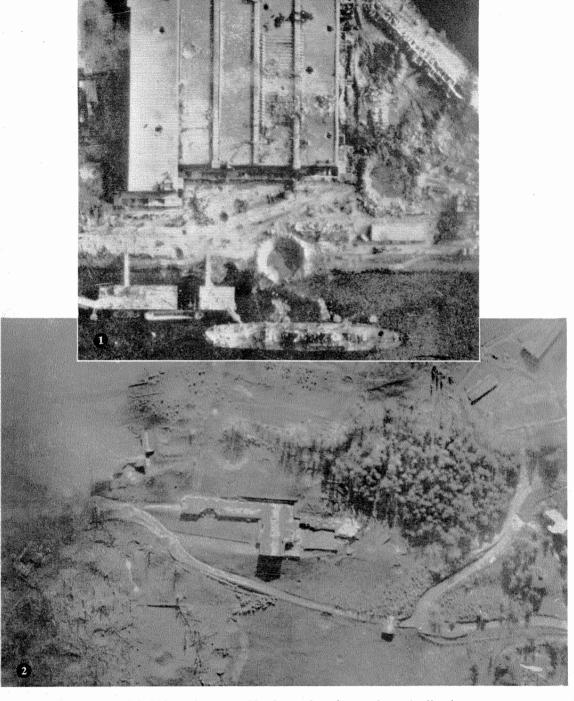
of the Snowy Owls had to make an emergency landing. Over enemy territory the Hally was hit by anti-aircraft fire and an oil leak began in both starboard engines. Bagnell and his crew executed a good bombing attack before turning for home. When approaching the English coast the aircraft began to vibrate badly and fire broke out in one engine. Altering course, Bagnell headed for the nearest airfield and made a successful landing.

F/O J. W. L. Tessier, an Alouette navigator who had already distinguished himself on the Hemmingstedt show, did valuable work as navigator for the gaggle leader on the Rheine raid. Despite intense flak which damaged the bomber, Tessier remained coolly at his post and helped to ensure the success of the operation. When he was decorated he was commended as "a valuable asset to his squadron." In these daylight raids the bombers usually flew in "gaggles"—loose formations of aircraft grouped behind a Vic of three leaders. Upon these few crews rested the navigational responsibility of the whole gaggle. Their course and timing must be perfect if the bombers were to reach the target at the correct time, with the proper concentration, and with the planned fighter cover.

A tactical target was also attacked on the following day when six of the Canadian Halifax squadrons were allotted Dorsten, a railroad junction on the Lippe. For some weeks the R.A.F. and U.S.A.A.F. had been preparing for the crossing of the Rhine River north of the Ruhr. One of the key points in operation "Plunder", which was to begin on the night of the 23rd, was Wesel, fifteen miles west of Dorsten. On the afternoon of the 22nd, concentrations of troops and supplies in the latter town were subjected to an intensive five-minute attack by 96 R.C.A.F. Halifaxes and 14 P.F.F. aircraft. The target was readily identifiable, thanks to the good visibility, and ground markers added their confirmation. These were soon obscured by smoke and the Master Bomber directed the last waves of the gaggle to release



Four Stages in No. 6 Group's Attack on Dune, April 18th: (1) before the bombs fell—the Nazis start a futile smoke screen; (2) the attack commences; (3) the island is smothered in bursts; (4) after the raiders had passed—the attack on Heligoland (lower right) is now under way.



U-boat shelters at Hamburg after the attack on April 9th.
 Hitler's chalet at Berchtesgaden, damaged on April 25th.

their bombs into the centre of the smoke clouds. Smoke continued to rise several thousand feet in the air as the bombers turned away from Dorsten. The town and its suburbs received a good battering. Railroad damage was particularly severe; many tracks were cut or blocked by derailed coaches and cars, and adjacent installations hit. Heavy flak in sporadic barrage form was the only opposition. We suffered no loss. F/O G. C. Brush, an air bomber of the Swordfish Squadron, was decorated for his exceptional ability as bombing leader of the gaggle on this operation and the one against Mannheim at the beginning of the month.

Preceding the Dorsten attack 100 Lancasters of No. 6 Group and the Vancouvers had taken part in a 220-kite raid on Hildesheim, south-east of Hanover. 'The marking was at first short of the aiming point, but under the Master Bomber's direction this was corrected and thereafter a good and accurate concentration was maintained by both the Pathfinders and the main force. The centre of the town was soon blanketed by dust and smoke, which formed a cloud 15,000 feet high that was visible 200 miles away. Only two suburban sections escaped the destruction that blasted Hildesheim. Few buildings remained intact; the central post office, town hall, council house. Deutsche Bank, market hall, and three barracks were either destroyed or severely damaged; the town gas works were completely gutted and the electric power station severely affected; and the railroad lines, depots, station and yards all showed the result of bomb and incendiary. Fourteen minutes had sufficed to lay the greater part of Hildesheim in ruins.

Opposition was negligible but four bombers were lost, including two R.C.A.F. Lancs. From the Ghost Squadron F/L J. F. Hadley, F/Os W. J. Spence, C. A. Goodier and D. Frame, FSs J. MacKenzie and J. W. Bellamy and Sgt. R. R. Duke were missing. Spence, Goodier, Bellamy and Duke were taken prisoner. The Iroquois lost a veteran crew skip-

pered by F/L J. P. Duggan, with F/Os G. A. Zuback and G. D. McLean, P/Os J. W. Dorrell and F. B. Trent, FSs C. E. Root and J. B. Ketchen and Sgt. J. H. Bentley (R.A.F.).

On March 24th the aerial offensive in support of operation. "Plunder" reached a climax. During the previous night the ground forces had opened their assault on Wesel; in the morning the airborne landings began and during the day, as the bridgeheads were expanded, the Allied air forces gave their powerful assistance. The Canadian Group in Bomber Commaid carried out two operations over the Ruhr that afternoon, sending its Halifaxes to Gladbeck and its Larrcasters to Mathias Stinnes near Bottrop. The first attack was keyed with ground operations to destroy troop concentrations and disorganize road movements behind the battle lines. The weather, which had remained fine during the preparatory period, was still favourable and the crews of the 165 bombers-95 of them Canadian-had no difficulty in picking out the objective and emptying their bomb-bays over a compact pattern of markers. Results were similar to those achieved at Dorsten two days previously. The -target was soon enveloped in dust and smoke; when . it cleared later in the day it could be seen that streets had been torn up for hundreds of vards, reads and rail lines were cut by craters or blocked by debris and much damage had been done to the built-up area. F/L A. C. Davies, a second tour officer in the Thunderbird Squadron, won the D.F.C. for skilful leadership on this attack.

Later in the afternoon 75 R.C.A.F. Lancasters preceded by 15 Pathfinders attacked the benzol plant at Mathias Stinnes near Bottrop, as one in a series of diversionary operations against oil targets in the Ruhr. The bombing opened in rather scattered fashion which was quickly rectified, and soon bursts could be seen on the coke ovens until black oily smoke made further observation difficult. Fresh damage to five sections of the benzol plant ensured that it would remain inactive for some time to come. Over both

targets opposition was limited to slight anti-aircraft fire. Some of the bursts caught a Porcupine kite flown by P/O B. H. Jensen and put two engines, the mid-upper and front turrets, the hydraulic gear and some of the instruments out of action. Despite all this damage the pilot brought his bomber back to an airfield in Belgium and made a masterly landing. He received the D.F.C. and his wireless operator, FS F. G. Ridley, the D.F.M. The fuselage and Ridley's instrument panel caught fire when the flak struck, and the flames spread to the floor on which petrol was spraying from a broken fuel line. With the help of another member of the crew Ridley extinguished the fire, displaying great coolness, initiative and resolution under trying circumstances.

Again on March 25th the Group had two targets, Hanover for the Lancasters and Munster for the Hallies. At Hanover a well controlled and well concentrated attack was made by 260 aircraft, including almost 100 Canadian bombers. The north section of the city bore the brunt of the assault. Large areas were devastated and gutted; heavily loaded freight yards received a good share of the bombs, and many industrial plants in the Linden area—producing tyres, acetylene welders, paints, lacquers, vulcanisers, etc.—were hit repeatedly. There was considerable ground fire but no enemy fighters appeared, which was fortunate, for the gaggle flying was rather scattered. A bane from the Iroquois Squadron crashlanded in England as a result of flak damage; the crew were injured.

The Halifaxes, 99 strong in a force of 175 bombers, reported good results also at Munster. The aiming point was soon hidden in smoke and dust while the bombs continued to whistle down into the centre of the eddying mass. When recce aircraft visited the town later in the day only the western and southern outskirts were visible outside the smoke pall; even here fires were raging at several points, including Wehrmacht quartermaster buildings. Anti-aircraft fire was more severe than over Hanover, and three aircraft,

all from the R.C.A.F., did not return. F/O B. A. Burrows skippered a Goose Squadron crew comprised of F/Os W. R. Lay, F. W. Shantz and J. P. Marchant, FSs W. A. Dyer and C. L. Cofield and Sgt. R. Hamilton (R.A.F.). Early in April Dyer, the only survivor, made his way back to our lines. A Swordfish Halifax was hissing with its freshman crew, F/Os J. R. McCollum and R. M. Aylsworth, WOs J. M. Jones and A. N. Knight, FS L. W. Brennan and Sgts. R. A. Paul and S. W. Lowe (R.A.F.). The Thunderbirds lost F/Os S. E. Levis and W. J. B. Jarvis, FSs L. F. Branston and R. M. Eyre, and Sgts. J. W. Rattigan, S. Ross and K. M. Montagano. All of Levis's crew except Branston, and Aylsworth and Knight of the Swordfish crew were subsequently reported safe.

Another Thunderbird Halifax had a shaky do when it was hit by the intense flak and F/O P. C. O'Conor, the wireless operator, was severely wounded in the chest and forehead. Although in great pain he remained at his post until the bombs had been released and the aircraft was well clear of the enemy defences.

Heavy bomber support of the 21st Army Group's offensive had now been completed and the Command returned to its strategical campaign against Nazi oil targets. At the same time the weather, which had been favourable for so many days, finally broke and No. 6 was not on operations again until the last day of the month. The Vancouvers, however, were out on the 27th to assist in marking Paderborn for a most satisfactory attack by Nos. 1 and 8 Groups.

Thirteen times since the beginning of March No. 6 Group had operated over Germany in broad daylight; not once had the bombers encountered enemy fighters. The gaggles or streams of heavies had flown unopposed except for the ground defences. On March 3ist, however, it was quite a different story. The target that morning was once again the Blohm and Voss ship-building yards at Hamburg, for which about 450 aircraft were briefed. The Canadian

Group detailed 100 Hallies and the same number of Lancs, representing all fourteen squadrons, and the Vancouvers added fifteen more heavies. Target indicators could not be seen because of solid cloud over Hamburg and the Master Bomber called for skymarking. This was fairly well grouped but the bombing, it was believed, represented only moderate concentration. The only visible results were puffs of grey smoke rising above the cloud-tops during the later stages.

Flak decreased in volume as the attack progressed, but enemy fighters were very active and the Canadian squadrons in particular were heavily engaged. For strategic defence of the homeland the Luftwaffe was now depending almost exclusively on its new twinjet Me. 262 fighter, capable of flying 500 miles per hour and armed with at least two 30 mm. cannons. About thirty of these fighters intercepted the bomber stream over Hamburg and gave our gaggle formation its first real test in action. The enemy controllers skilfully directed the jet pilots against stragglers and formations not protected by fighter cover.. The PFF spearhead, flying in advance of the escorting fighters, was engaged, but the first waves of the main force, well guarded by our single-seaters, were unmolested. The R.C.A.F. Halifax gaggle reported good fighter protection and few saw anything of the enemy. The last gaggle, however, composed of Canadian Lancasters, was ten minutes late reaching the target area, when the main force had already withdrawn, and as a result did not get under the planned fighter umbrella. For four or five minutes while the hombers were crossing Hamburg they were hotly engaged by Me.s which rocketed up from the cloud banks. In all there were 78 encounters and 28 crews reported one or more combats with the pack of jets. Five Lanes were ,lost, but we knocked down four Me.262s for certain, with three more probables

<sup>&</sup>lt;sup>1</sup> No. 6 Group's total for the whole month was 113 encounters with enemy aircraft, of which 43 developed into attacks.

and four damaged. This first large-scale enemy interception of our bombers in daylight showed that the contest was by no means onesided, even when Jerry had the advantage of jet-propelled fighters. Our losses, however, would in all probability have been higher had it not been for the timely arrival of some R.A.F. Mustangs that turned back to investigate the aircraft flying far in the rear of the main force.

Of the eight Lancaster squadrons the Porcupines appeared to be most sharply involved with the jets. Seven of the ten crews from that squadron were attacked and fought sixteen engagements. Two Me.s closed on S/L P. D. Holmes' aircraft simultaneously from the' rear and port quarter. WO E. J. Ash, the rear gunner, opened fire on the first enemy and was joined by WO V. M. Ruthig, the midupper gunner, after he had let off a burst at the second Jerry. Their streams of tracer converged on the jet, striking it on the wing, engines and nose. The Hun then broke away, shedding debris from the wing and trailing smoke as it fell to earth. Ruthig directed his pilot in the necessary evasive action to escape five consecutive attacks during this sortie; he later received the D.F.C. A probable was credited to another Porcupine crew skippered by F/O D. Pleiter, whose gunners were FSs C. H. Stokes and M. A. Graham.

An Iroquois bomber (captain, F/O C. E. G. Heaven) was beset by three Me.s and destroyed one and damaged another. The rear gunner, FS William Kuchma, kept his sights on the first e/a as it closed from 700 yards until, at 50 yards range, the Hun pilot pulled up to starboard. Smoke and fragments streamed from the fighter, it began to fall and the whole tail assembly tore away. End over end it tumbled into the clouds below. When two more Me.s then attacked, one was driven off trailing, smoke. For their skill and co-operation on this occasion Heaven and Kuchma were both decorated. Three other Iroquois crews also filed combat reports.

Jet fighters were also destroyed by FS E. R. C. Casey

and A. E. Vardy, gunners for F/O D. M. Payne of the Ghost Squadron, who sent their opponent down in flames, and FSs C. K. Howes and S. J. Robinson, gunners in a Tiger kite flown by F/O J. W. Watson, who countered two simultaneous attacks. Howes fired on one Me. as it closed from starboard, but had the bad luck to have all four guns jam. The Hun pilot opened fire too, but missed. Meanwhile Robinson had been engaging another fighter dead astern. One of the jet units began to smoke; the e/a lost control and went down in a spiral dive while flames streamed along. the underside of the fuselage.

Seven Bluenose crews reported ten combats as a result of which one Me. 262 was probably destroyed by FSs R. Spratt and R. Taylor in F/O J. Dawson's crew and two damaged by FS O. Lambert, gunner for F/O F. Hawes, and P/Os J. Baxter and E. Cowlin who flew with F/O M. Isenberg. The Moose Squadron had nine inconclusive engagements with jet fighters.

For the Bison Squadron the Hamburg raid was noteworthy as its first operation since converting from Halifaxes to Lancasters. Ten crews took off and five were attacked, fighting nine separate combats. When F/O H. A. M. Humphries' bomber was attacked, both gunners, FS D. H. Lockhart in the rear turret and FS R. Jones in the midupper, opened fire. Lockhart's four guns stopped after twenty rounds, but Jones got in a good burst as the fighter broke away. The enemy fell into the clouds, apparently out of control and with pieces flying off the starboard wing. It was counted as a probable. FS J. O. Leprich, mid-upper gunner for F/O R. P. Pike, won the D.F.M. when another Bison Lancaster encountered an Me.262 over Hamburg. Although the electrical firing circuit of his guns was u/s Leprich worked them with one hand while rotating the turret with his other hand. He continued firing one gun after the other until the jet broke away and dived into the clouds, hotly pursued by three Mustangs. Black smoke streamed

from it. A third Bison aircraft (captain, F/O S. F. Avis) was severely damaged in combat with four Me.s. The starboard aileron was destroyed, the upper turret damaged and a large hole blown in the starboard mainplane.

A Lion kite was also shot up in the course of three attacks by enemy fighters, but WO J. G.. Jarvis, rear gunner for F/O D. L. McNeill, saw strikes on one Jerry as it rolled over and dived vertically into the clouds, trailing black smoke. The Lancaster was holed in the fuselage, elevators, fins and rudders. F/L J. L. Storms of the same squadron returned with five feet missing from the wing of his bomber. Although one aileron was useless and the aircraft was difficult to control, Storms nursed the Lanc home from Hamburg and thereby won the D.F.C.

But five Lancasters did not come back from the foray. Their crews were:

- Moose Squadron: F/L H. A. Metivier, F/Os J. Todd and R. O. Johnson, FSs G. Matuszewski, E. E. Morphy and H. S. Tulk, and Sgt. W. M. Sommerville (all presumed killed in action). F/Os D. S. Bowes and J. J., Gladish, FSs G. R. Berry, B. Maclennan, R. W. Rowlands and W. H. Milne and Sgt. J. Rea. (Berry, Rowlands and Milne were captured.)
- Bison Squadron: F/Os R. R. Jones and R. H. Fisher, WOs E. M. Hooker and J. H. R. R. Ledoux, FSs J. A. J. C. Rancourt and L. J. A. Campeau and Sgt. R. L. Bailey (R.A.F.). (Jones and Rancourt were P.O.W.s).
- Iroquois Squadron: F/L P. J. Hurley, F/Os M. Hartog, F. R. Alty, P. B. Dennison and J. J. Casey, FS A. Dorey and Sgt. L. J. Mercer (R.A.F.). (Hurley was the only survivor.)
- Bluenose Squadron: F/Os G. P. Haliburton, D. G. Rathwell, C. K. Legaarden, and R. D. English, FS R. J. Green, and Sgts. J. A. English and J. M. Hanlin. (Haliburton,

Rathwell and Green were lost; the others were liberated in May.)

In addition to the five Lancs the Canadian Group lost three Halifaxes<sup>1</sup>.

- Goose Squadron: F/Os K. K. Blyth, J. M. Taylor and R. D. Atkinson, FSs A. A. Watson, J. B. Folkersen and R. J. Hughes, and Sgt. D. G. Grey (all prisoners of war).
- Swordfish Squadron: F/Os G. A. Hyland, T. S. Lewis and J. E. Suttak, WO G. Anderson, FSs G. J. Peden and G. J. Rude, and Sgt. J. A. Neilson (all presumed killed in action.)
- Alouette Squadron: F/L C. Lesesne, F/O W. B. Cable, P/O J. H. L. Pigeon, WO J. G. R. Trudeau, FSs F. H. King and J. A. R. Villiard, and Sgt. J. P. A. Tame (R.A.F.). (All liberated in May, except Lesesne who had been killed).

Sea-mining during March was concentrated primarily at key points on the Nazi shipping routes in the Western Baltic and the Kattegat. There was a tactical innovation on the night of the 8th when the minelayers were timed to coincide with a bombing attack on Hamburg. They went in with the main force and used the PFF markers as a guide to release their mines in the correct spot. No. 6 Group sent out 27 minelayers that night, the largest number in nearly a year. Eight of the aircraft carried special mines to deposit in the Hamburg dock area; the others planted their vegetables in the Weser and Elbe estuaries.

On four other nights, March 2nd, 9th, 12th and 16th, the Group was active in its old garden plots along the Norwegian coast. In all, 67 mine-laying sorties were made with 91

<sup>&</sup>lt;sup>1</sup> Total Bomber Command losses on the Hamburg raid were eleven aircraft

per cent successful; 307 mines (220.8 tons) were laid. One aircraft was lost on the 12th, a Lanc of the Porcupine Squadron, which was believed shot down by enemy aircraft in the Kattegat area where the Nazis had a very efficient night fighter organization. The crew, of the missing aircraft were F/Os J. P. Farrell and A. V. Plante, P/O G. A. Kennedy, FSs J. H. Wilson, D. W. Hodge and T. C. Peirson and Sgt. T. Orr (R.A.F.). While on a mine-laying sortie in Kiel Bay, F/O G. R. H. Peck of the Moose Squadron had an engine catch fire before he reached the area. Undeterred the pilot pushed on, but after mining a second engine caught fire and the kite had to be ditched. As a result of signals sent out by F/O A. W. Winch before the aircraft was forced down, the crew was soon located and rescued. This was Winch's first operational flight and was cited when he was later awarded the D.F.C.

The Halifaxes, which had carried the weight of the mine-laying programme for so many months, made their last sorties on the 12th; thereafter the work was done by Lancasters which had a greater mine-carrying capacity. For March the Hallies had 29 successful sorties on which 116 mines were laid, while the Lancs completed 32 missions for a total of 191 vegetables.

During the month reports came in from various channels telling of ships being sunk or damaged by mines in the Kattegat off Frederikshavn, Anholt and Sjaellands Odde. Several vessels were lost and with them many troops which were being withdrawn from Norway for urgent use on other fronts. These were areas which No. 6 Group had mined regularly in conjunction with Nos. 1 and 4 Groups. The Canadian squadrons were gratified that they had a share in this successful work and that their mines were hitting the Hun where it hurt most.

April 1945

No. 6 Group's operations showed a marked decrease in

April 1945. This was due in some measure to unsettled weather which restricted operations during the first and last weeks of the month. But to a much greater degree the slackening in the bomber offensive was due to lack of targets. The disintegration of the Wehrmacht and the rapid progress of the Allied armies plunging deep into Central Germany left relatively few of Bomber Command's long-familiar targets free for attack. The distinction between strategical and tactical targets was now largely erased; many of the operations carried out this month could be classified under both headings.

For No. 6 Group April was noteworthy as a month in which the squadrons tried their hardest and succeeded in bombing the least. The explanation has already been given; repeatedly operations were cancelled due to the constant shifting of the battle-line as our armies drove ahead. Only a quarter of the month was "usefully employed" in dealing the final blows to the ruins of the Third Reich. Although the bomber crews were disappointed at this letdown in their long-sustained effort they had the satisfaction of knowing that, with one or two exceptions, when they were able to hit, they hit hard.

The Canadian Group went out on twelve bombing and four sea-mining operations. Of these two were abortive and a third was on a very limited scale. Three of the nine successful major bombing raids were directed against naval installations and shipping at Hamburg, Kiel and Heligoland; three were against junctions and freight yards at Mockau, Engelsdorf and Schwandorf; two had oil targets at Merseburg and Harburg as their objective; and the last attack was on coastal defences at Wangerooge. Nine were night operations (including the sea-mining); the other four were daylight raids. In all, 1517 heavy bombers were sent out on the sixteen operations ordered and 1283 were successful in attacking the primary target; 204 had to return when attacks were cancelled. A total of almost 6106 tons of

bombs (all. high explosives) was lifted and 4973.2 tons were dropped (2874.2 by night and 2099 by day). In addition 315.6 tons of mines were laid. Losses for the month totalled fifteen aircraft, including two which crashed in Britain.

The first Canadian heavy bomber operation of the month came on April 3rd when the Vancouvers participated in a daylight assault on Nordhausen. The attack was carried out on radar instruments as the target was completely covered by cloud and no markers could be seen. There was no enemy opposition. This attack and a second one by Bomber Command on the following day laid waste the heart of the town and did much damage to the Luftwaffe Signals School, the barracks of which constituted one of the aiming points.

On twelve other occasions during the month the Vancouvers constituted part of the Pathfinder force marking targets for the main stream of heavies; seven of these were attacks in which No. 6 Group also participated. The squadron sent out on all these attacks over 125 bombers and all returned.

The first operation in which both the Group and the Vancouvers were represented was on the night of the 4th when the oftenbombed Leuna synthetic oil plant at Merseburg was visited once again. There was some indication that the plant was partially active, so 340 heavies were despatched to stop this activity and complete Leuna's destruction. The R.C.A.F. supplied over onethird of the force, with 105 Lancs from the Group and sixteen more from the Vancouvers. The weather was bad, with thick cloud cover and heavy icing. Breaks in the cloud blanket permitted some crews to identify the target and pick out the ground indicators, but the majority had to use skymarkers as their bombing guide. There was some scatter in the bombing, due possibly to the enemy's use of dummy markers. Photographs by recce aircraft revealed scattered incidents of fresh dam-

age to the oil plant; the raid could-only be assessed as fair.

The Tigers lost a crew that night when a Lanc crashed in England on return from Merseburg and F/Os J. W. Watson and J. Rochford, WO S. M. Thomson, FSs C. N. Armstrong, S. J. O. Robinson and C. K. Howes and Sgt. E. T. Ashdown were all killed.

While the Lancaster squadrons were approaching Merseburg a Halifax force was bombing another oil target at Harburg, one of the suburbs of Hamburg. Here the weather was better and excellent visibility permitted easy visual identification of the target. Ground markers were dropped in a compact group around the aiming point and the bomb-aimers did their work so well that the concentration of bursts soon obscured the markers. Two large explosions shot vivid flashes into the sky, followed by great volumes of black smoke. Photographs confirmed the success of the attack. The partially active Rhenania oil refinery, which had been the primary objective, suffered such severe additional damage that any further refining operations were unlikely for at least two months. Both boiler houses, the distillation unit, and ten of the remaining nineteen small tar and oil storage tanks had been hit and gutted or damaged.

Flak opposition was moderate, but enemy fighters engaged the bomber stream over the target and along the homeward course. Four of the 300 heavies did not return, including one of the Canadian contingent of 90 Hallies. This aircraft, flown by P/O A. K. Brown of the Goose Squadron, was dogged by engine trouble throughout its sortie. En route to the target one motor packed up, but Brown carried on and bombed the refinery. Then a second engine cut out, followed shortly by the third. The skipper ordered his crew to abandon the bomber, but height was being lost so rapidly only three were able to do so before the last engine failed. With great skill and coolness Brown landed the heavy bomber north of Meppen, guided only by his altimeter and air speed indicator. Although not a single light was

shining in the enemy territory he brought the Hally down successfully on a swampy field without injury to his three companions—a feat which brought him a wellearned D.F.C. The four members of the crew who crash-landed, Brown, F/Os W. G. Burnett and F. W. Trow and Sgt. R. A. Hind (R.A.F.), made their way southward and in five days met our advancing troops. The three who baled out, F/O T. C. King and FSs J. B. Bennett and K. G. Finn, were captured, but were soon liberated. All seven members of the crew were approaching the end of their tour.

A Leaside Halifax, skippered by F/O R. F. Ritchie, encountered an enemy aircraft on the return trip from Harburg and both gunners, FSs J. B. Brooks and W. N. Billard, opened fire. Pieces flew in all directions as the enemy craft exploded.

Hamburg was visited again four nights later (April 8th/9th) when 420 bombers attacked the Blohm and Voss U-boat and shipbuilding yards through a thin layer of cloud. In the early stages of the attack the red glow of the target indicators could be seen, but later the cloud thickened and the Master Bomber switched to skymarking. As a result the raid, which had been planned as precision bombing, became an area blitz. Results were, nevertheless, satisfactory. Photographs covering this attack and two subsequent ones by Bomber Command revealed further severe damage to many buildings in the Blohm and Voss yards, including the construction shop, power house, gas works, and Diesel testing shop. The nearby Stulcken yards had also suffered; the entrance to the Elbe tunnel had been half destroyed; one floating drydock was now submerged and another was two-thirds under water.

No. 6 Group supplied 90 Halifaxes and 100 Lancasters for the Hamburg raid, while the Vancouvers sent out ten Pathfinders. Several combats were fought, one enemy aircraft was destroyed, and two bombers were lost. In the successful combat a Bluenose Lanc (captain, F/O E. Yuill) was

attacked by a Ju. 88 south-west of Hamburg. FSs L. Lawlor and F. Saunders, the rear and midupper gunners, replied to the enemy's fire so accurately that the Jerry pilot broke off his attack and started to descend with his machine on fire. The gunners continued firing until the hostile kite exploded in mid-air and the fragments fell in flames.

The missing Canadian aircraft were from the Goose and Moose squadrons. F/O A. P. Jensen and his freshman crew, F/Os J. C. Cunningham and A. M. Taylor, FSs J. D. Walker, R. A. Duncan and R. I. Smylie and Sgt. A. Thorpe (R.A.F.), were shot down by flak after bombing the target. Smylie was the only survivor. The Moose crew was captained by F/O H. R. Cram, who was beginning his second tour. Engine trouble developed on the outward journey, but Cram carried on and bombed Hamburg. On the homeward course a second engine burst into flames. With two motors u/s the Lanc lost height rapidly, and the crew had to jump for it. Fortunately they were then over a part of western Germany occupied by our troops, and within a few days all seven were back in Britain.

S/L R. D. Hemphill of the Alouettes had an experience that night which brought him a bar to his D.F.C.

When nearing the target the port inner engine and the electrical system became unserviceable. Despite loss of height S/L Hemphill continued his mission and eventually bombed his objective. On the return journey the hydraulic system and the brakes became use less. The port outer engine commenced to give trouble and the aircraft was continually losing height. Nevertheless, displaying great skill and determination, S/L Hemphill flew to an emergency airfield in England where he executed a successful landing.

The Vancouvers were out again the next night, participating in a double attack on two shipyards at Kiel. Their Lancs, fourteen strong, helped to mark the aiming point in the Deutsche Werke yards for 360 Lancasters in a most successful raid. Many large explosions and fires produced a glow which was long visible in the sky. Four nights later

Bomber Command returned to the assault on Kiel.

In the interval the programme of night attacks on oil and naval targets was varied on April 10thby a brace of daylight raids on Nazi rail communications, designed to support our ground operations. In the centre the Third U.S. Army was driving deep into Thuringia and had reached Gotha, narrowing the corridor between the Allied armies in the west and the Russian in the east to less than 200 miles. Leipzig was one of the major rail centres in this gap linking northern Germany with the proposed last-ditch stronghold in the south. No. 6 Group was detailed to block the rail lines running through the Saxon metropolis. Two aiming points were assigned: for the Halifax squadrons (go aircraft) the objective was the Mockau marshalling yards, north-east of the city, while the 110 heavies from the eight Lancaster squadrons had the suburban Engelsdorf yards. Each force was accompanied by a small number of Pathfinders, including four from the Vancouvers. Thirteen squadrons of Mustangs provided fighter cover. The weather was clear, with excellent visibility, permitting the crews to map-read their way to the target.

The Lanc force struck first in a concentrated sevenminute attack from 1755 to 1802 hours. The yards were readily identified, well marked with target indicators, and thoroughly plastered with ago tons of H.E. Soon dust and smoke were rising to 10,000 feet. Photographs confirmed the success of the attack and showed very severe damage throughout the western half of the yards. All through lines were blocked; all tracks in two groups of sidings were cut; the locomotive depot was practically destroyed, and there was ample evidence of damage in the railroad workshop area.

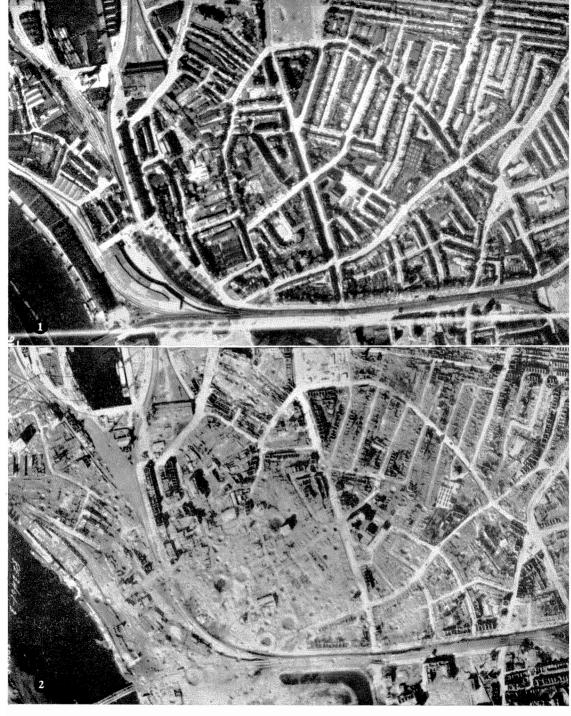
Three minutes later the Hallies began their sevenminute blitz on Mockau, marred only by the error of one group of kites which bombed the Lanc target. Otherwise the attack paralleled the first. Here too most of the through lines and siding tracks were cut; much rolling stock was knocked about, and roundhouses, repair shops and sheds, as well as factory buildings in the vicinity, were destroyed or severely damaged.

Heavy flak was slight over both targets; a few enemy fighters were seen, but only one combat was reported. One bomber was missing from each force. The Lanc contingent lost a freshman crew from the Porcupines–P/O R. J. Grisdale, F/Os I. Zierler and W. G. McLeod, FSs J. M. Hirak, F. G. Seeley and D. W. Roberts, and Sgt. W. A. Thurston (R.A.F.). A veteran Halifax crew of the Swordfish Squadron was composed of F/Os R. S. Evans, L. M. Spry, L. E. Veitch, FSs M. J. Burns, D. L. Lorenz and R. D. Teevin and Sgt. J. M. Andrews (R.A.F.).

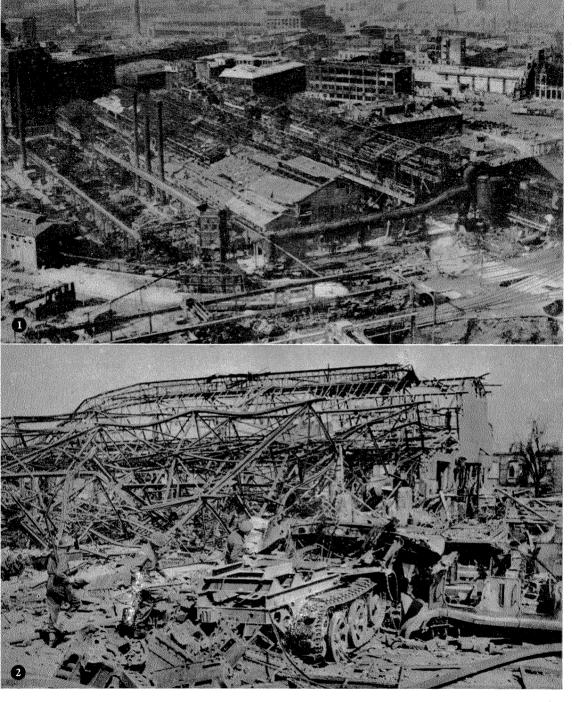
The sole encounter with enemy fighters brought a D.S.O. to S/L C. H. Mussels, D.F.C. of the Vancouvers. He had just completed his first run over the target when an Me. 163 attacked and with one burst shot away the rear turret and starboard rudder. The port rudder was smashed and both elevators were badly damaged. The rear gunner, F/L M. L. Mellstrom, is believed to have been killed by the fighter's first deadly burst. The Lanc began to dive out of control and, as the trimming controls were useless, Mussels had a desperate struggle before he was able to level out. To keep the nose up it was necessary to lash the control column back. Escorted by Mustangs, which had provided fighter cover for both operations, Mussels flew his crippled bomber back to Britain. After crossing the coast he ordered his crew to abandon the aircraft. Four did so, but the midupper gunner, P/O R. T. Dale, had been seriously wounded and was unable to leave. Mussels remained with his comrade, flew to the nearest airfield and then, although his flaps were useless and the control column was still lashed back, he made a superbly skillful landing.

The successful Leipzig attacks, which set a new record for daylight penetration by night bombers, were followed by a return visit to Kiel on the 13th/14th. Bomber Command sent out over 480 aircraft, with the Canadian Group providing 210, evenly divided between the Halifax and Lancaster squadrons. Target indicators, well grouped in a compact mass, fell into an almost unbroken layer of cloud that lay over the Deutsche Werke yards. Their glow, however, was visible and the Pathfinders quickly reinforced the marking and maintained it throughout the attack. The main force, guided by the Master Bomber's clear directions, concentrated their sticks well around the markers. Dummy indicators a few miles to the north-east of the shipyards may have drawn a few bomb loads, but the great majority of the bomb-aimers ignored this lure. Except for bursts visible through the cloud layer, the glow of fires and the flashes of two violent explosions, it was difficult for the crews to determine the results of their attack. Photographs covering this raid and the previous one on the 9th, however, showed that both had been extremely successful. Heavy damage was inflicted to shipping and shippard facilities in and around the Deutsche Werke establishment where almost all the buildings were hit. In the inner dockvard basin the "Admiral Scheer" was capsized and the "Admiral Hipper" was probably damaged by very near misses. The Deutsche Werke and two other shipyards had been virtually destroyed by the heavy concentration of bombs. In this attack No. 6 Group alone dropped goo tons of high explosives.

Heavy flak was moderate with light flak rather more intense; searchlights were few and of no effect. A number of Hun fighters appeared on the scene and two were destroyed in combat. The same number of bombers were lost, both from the Canadian group. One of the two Jerries destroyed was credited to the gunners of Lion Lancaster O-Oboe, F/Os E. R. J. Dupuis and K. Reed, whose skipper was F/O S. G. Matheson. The crew of a Goose Halifax damaged a Ju.88 in another combat. FS L. Morgan, one of the gunners, sighted the night fighter as it approached and opened fire.



BEFORE AND AFTER: (1) the city centre and dock area of Bremen in 1941 before Bomber Command's heavy attacks began; (2) the same section of the city on March 23rd, 1945.



(1) An air view of the devastated Krupp works at Essen after the capture of the city in April 1945. (2) The ruins of a military transport factory in Bremen.

Morgan gave instructions to his captain, F/O F. F. E. Reain, for the appropriate evasive action and replied to the enemy's bursts. Strikes were seen on the Ju's starboard wing and motor. The fighter thereupon abandoned the attack and dropped away with one motor on fire.

The Moose and Ghost Squadrons each lost a crew that night. FS C. C. MacLaren was captain of the Moose Lancaster, with F/Os D. W. Wincott and C. R. Loft, WO W. Henderson, FS E. R. Wightman and Sgts. G. A. Livingston and G. J. Jones in his crew. With F/O D. M. Payne in the Ghost bomber there were F/Os G. C. Riley and V. Banks, WO E. V. Miller, FSs E. R. C. Casey and A. E. Vardy and Sgt. T. F. Sinclair. The fate of the latter crew is told in the text of the D.F.C. award to F/O (later F/L) Payne.

Anti-aircraft fire was encountered while en route to the target and intense opposition was met when making the bombing run. Just before releasing the bombs, the aircraft was hit and damaged and F/L Payne was wounded in both legs and his left arm and hand; nevertheless he pressed on and the target was successfully bombed. As he turned the aircraft for the return flight it was hit again by anti-aircraft fire and badly damaged. By skilful flying with only one' engine of his aircraft functioning this officer retained control of the bomber and continued his homeward flight but, when over the North Sea, the remaining engine failed and he was forced down on the sea. F/L Payne, although strapped in, was thrown head first through the cockpit cover. Despite his wounds and the severe shaking he had received, this officer materially assisted his crew in getting safely into the dinghy before he became unconscious from exhaustion and his injuries. For the first part of the subsequent eleven to twelve days, F/L Payne was only partly conscious, but as soon as he was able he assisted in all the necessary operation of sailing the dinghy and taking his turn "on watch", despite the fact that on the seventh day he had to lance his leg as the swelling from his wounds was spreading rapidly. Throughout this trying experience F/L Payne displayed outstanding skill, resolution and devotion to duty.

When the Lancaster came down on the sea all members of the crew were injured except the wireless operator and the navigator. The latter, F/O Riley, assisted his injured comrades into the dinghy and helped in efforts, which unfortunately were unsuccessful, to rescue FS Vardy, the rear gunner. Soon after the crew left the aircraft it sank.

The pilot having been rendered unconscious . . . F/O Riley assumed command and organized the sailing of the dinghy as well as attending to the injuries of the crew. He also started the keeping of a log and arranged for some form of navigation. Throughout the eleven to twelve days spent in the dinghy this officer exhibited outstanding qualities of leadership. With coolness, calm courage and splendid example he kept up the spirits of the crew by reading passages from a pocket Bible and by organizing diversions such as card games. He was instrumental in preventing the crew from drinking sea water when the fresh water supplies were running low and he organized the distribution of the emergency rations on an economical basis. Eventually the dinghy grounded on some sand flats near Bremerhafen and the crew were taken prisoner. Without this officer's, direction, guidance, and example, it is doubtful if the members of his crew would have survived this very trying ordeal.

## F/O Riley was awarded the M.B.E.

The Vancouvers were not engaged in this second attack on Kiel. Three nights previously they had shared in a destructive attack on Plauen, south of Leipzig, in which the Lancs of Nos. 1 and 8 Groups laid waste a considerable section of the central and northern areas of the city. The marking by illuminating flares and target indicators was prompt and exceptionally accurate, and the main stream of heavies duplicated this accuracy. The next afternoon (April 11th) the squadron sent a few kites to Bayreuth, the objective of American army drives in the south. The attack began in rather scattered fashion, but soon settled down to a concentrated blitz. Potsdam, a military stronghold west of the Nazi capital, was the next Vancouver target three nights later when 500 Lancasters blasted rail facilities, aircraft factories and munitions plants in an intense and accurate attack that touched off many huge fires.

On the 16th the Canadian Group and Pathfinder squadron were teamed in a raid on the marshalling yards at Schwandorf in eastern Bavaria which provided an excellent example of precision bombing by night. Three-quarters of the moderate-sized attacking force of 175 kites was provided by the R.C.A.F., 120 heavies from the eight Lancaster squadrons of the Group and sixteen from the Vancouvers. Bombing conditions were ideal; the PFF marking could not have been better, and the Master Bomber did a brilliant job. Most crews were able to identify the target visually and make perfect runs to the bomb-release point. After several large explosions on the ground black smoke gushed two miles into the sky and obscured further observation of the results, but the PRU pictures proved that the yards had been completely obliterated. In addition to the very heavy damage inflicted on through lines, sidings and rolling stock, one roundhouse in the locomotive depot had been completely gutted. All Nazi military traffic through this major junction point, north of Regensburg, had clearly been disrupted. Proof of the accuracy of the bomb-aimers is to be found in the fact that the average error of stick centres for the whole Canadian force was only 610 yards from the aiming point.

The same night two of the Group's Halifax squadrons made a feint attack on the airfield at Gablingen, near Augsburg in southern Bavaria. Although marking and bombing were accurate and concentrated, ground haze prevented any observation of specific results. The attacks on Schwandorf and Gablingen, were the last night bombing operations carried out by No. 6 Group. The next three raids, the final ones of the war, were all made in daylight.

On the 18th five groups of Bomber Command sent out 976 aircraft, with a strong fighter escort, to obliterate the defences and naval base at Heligoland and the airfield on the adjacent island Dune. The latter of these objectives was assigned to the R.C.A.F. contingent of 112 Halifaxes. As at Schwandorf, bombing conditions were perfect; the sky

<sup>&</sup>lt;sup>1</sup> The Vancouvers contributed a number of Pathfinders for the Heligoland attack.

was clear, visibility excellent and marking accurate. The Hallies emptied their bomb-bays in such a heavy concentration on the aiming point that the whole island soon disappeared beneath clouds of smoke and dust. Over 525 tons of bombs rained down on Dune, yet only about a dozen sticks of bombs missed the target and fell into the sea. This was indeed a remarkable achievement if one considers the difficulty of "gaggle bombing" so small a target when the pilot not only has to stay on the correct bombing run, but also has to keep an eve on neighbouring aircraft, watch for sticks released by bombers overhead, and at the same time retain control of his kite in the violent "propwash" from machines in front. Photographic evidence was scarcely necessary to confirm that this was another example of precision bombing. Hundreds of craters covered the landing ground and runways, and many barracks, stores buildings and workshop sheds on the airfield were flattened or severely mauled. The attack on Heligoland by the main force had been equally successful; there too nearly all buildings had been destroyed, only the northern tip of the island fortress escaping the general destruction.

Opposition was slight; no fighters challenged the great force of bombers and all but three of our aircraft returned. Two of the missing crews were Canadian. The Goose Squadron lost P/O A. J. Cull, F/Os F. C. Hill and D. M. Miller, FSs C. H. White, R. W. Williams and H. R. Wood, and Sgt. E. E. Sykes (R.A.F.). Another Halifax from the Snowy Owls crashed into the sea en route to the target. The Air-Sea Rescue Service immediately went into action; patrolling Warwicks dropped lifeboats at the scene of the crash and a Catalina landed to investigate. Unfortunately there were no survivors. With FS W. J. Dunnigan, the pilot, were F/Os D. F. Ross and D. M. Neilson, FS G. F. Montgomery, and Sgts. R. A. McDonald, D. W. Newman and L. F. J. Murphy.

P/O J. A. H. Whipple of the Thunderbirds won the

D.F.C. for bringing back a crippled bomber. His kite was severely damaged when another aircraft blew up alongside while on the bombing run and showered the Hally with debris. Whipple completed his run before setting course *for* base where he landed safely.

This excellent attack was followed, on the 22nd, by a raid on Bremen which, for the Canadian crews engaged, was completely abortive. The north German port was being pressed hard by British forces (it fell four days later), and Bomber Command despatched a powerful force of over 750 aircraft to blast four particular aiming points, the defended area, a factory strong-point, some barracks and a hutted camp. The last two objectives were assigned to No. 6 Group's Lancasters and Halifaxes, respectively, which took off 200 strong. The first waves of the great armada were able to identify their aiming point and bomb, but by the time the R.C.A.F. formations arrived cloud obscured the targets. Because of the proximity of our own troops the Master Bomber ordered the crews to abandon their mission and return.

While over the target area a Tiger Lane received a burst of heavy flak which caused some damage to the wings and fuselage. F/O D. R. Saunders, the pilot, was struck in the left eye by a fragment of perspex. Despite his injury and the damaged condition of the kite he made a safe return to base and was later decorated with the D.F.C.

Three days later the R.C.A.F. made its last heavy bomber attacks. In the morning the Vancouvers had the pleasure of participating in a raid on Hitler's mountain retreat at Berchtesgaden in the southeastern corner of Bavaria. Ground haze made visual identification rather difficult, but in spite of this a good concentration was achieved by the 315 bombers and hits were claimed on all the important buildings. Photographs subsequently confirmed the accuracy of the claims. Hitler's chalet, the Wachenfels or Berghof, received two direct hits and several near misses that

severely damaged both wings and destroyed part of the main building. Three blocks of SS barracks, the headquarters of the SS administrator and various other administrative buildings were damaged, demolished or gutted. One other target, however, escaped; the small "Eagle's Nest", Hitler's hide-out high above the chalet, was untouched.

In the afternoon the Vancouvers were out again, together with 192 Lanes and Hallies from No. 6 Group and 284 aircraft from Nos. 4 and 8 Groups, in an attack on two coastal gun batteries on Wangerooge Island at the eastern end of the Frisian chain. The Pathfinders, aided by clear weather and good visibility, marked the target well and accurately. The bomb-aimers followed suit, laying a concentrated pattern of bursts until smoke and dust, blown 12,000 feet into the air, finally blotted out the target. The attack then tended to scatter, but the damage had been done. Hundreds of craters pitted both battery positions. No. 6 Group's bomb load, over 902 tons, set a record for the month.

The Nazi anti-aircraft gunners on the adjacent islands, Spiekeroog and Langeoog, did some very accurate shooting and losses were rather heavier than on other operations during the month. This was particularly true of the Canadian Group which lost four of the seven aircraft missing from the raid. Two crews of the Iroquois Squadron, who were just beginning their operational tour, did not return. The captains were F/L B. D. Emmet and F/O D. G. Baker who had with them F/L R. J. Stingle, F/Os W. E. Hanna, J. D. Cruickshank and L. H. Amos, WOs C. R. I. Mark and P. E. A. Henrichon, FSs R. J. Mellon, J. J. P. R. Roy and L. U. M. Hiatt, and Sgts. D. A. Faulkner, J. Sims and F. Smith (all three of the R.A.F.). The Goose Squadron also lost a freshman crew in F/L A. B. Ely, F/Os J. K. Stanley and A. B. Boyd, WO J. E. Brambleby, FS V. E. Hovey, and Sgts. A. L. Rutter and J. Hughes (R.A.F.). The fourth crew came from the Thunderbirds and was composed of WOs J. C. Tuplin and R. G. Evans (R.A.F.), F/O J. D. C. Ross, FSs D.

R. H. Curzon, E. W. Hicks and S. J. Teskey and Sgt. R. Roberts (R.A.F.).

When a Tiger bomber flown by the C.O., W/C R. W. Norris, was hit by flak over the target area, the flight engineer, P/O Jack Duggan, received an injury in the left thigh. In spite of this, he remained at his post and performed his duties with his usual efficiency. F/L J. P. Matheson, captain of another Tiger kite, also was injured when an ack-ack burst sent fragments of perspex into his left eye. For a moment the bomber went out of control; then Matheson righted it, followed his formation through to the target and flew back to base. When F/O D. R. Walsh of the Ghost Squadron landed his Lancaster D-Dog at 2036 hours that evening No. 6 Group's final bombing operation of the war was over.

In contrast to bombing, sea-mining during April showed an appreciable increase. The number of sorties was not large—only 75—but more mines were laid than in any other month since D-Day. This was due to the great carrying capacity of the Lancasters, now used exclusively on this important work, which were able to plant 429 vegetables, weighing over 315 tons, in the course of four gardening operations. This performance may be compared with that of a year previous when, in one month, the Group had to make 273 sorties in order to lay 557 mines.

The Group's. last two operations, on April 13th and 21st, were 100 per cent successful, all the aircraft laying their mines as instructed. Indeed there were only three abortive sorties during the whole month.

On the 9th when the Porcupine Squadron was planting mines in Kiel Bay, L-London (captain, F/L D. S. Rogers) was intercepted by an FW.190. The wireless operator detected its approach on his special radar equipment and warned the gunners, F/L J.. Y. T. Ogle and FS G. T. Watson, who greeted the enemy pilot with such accurate bursts that he was forced to break away. On his second attempt to

close, the Jerry again flew into a stream of bullets that struck the starboard side of his fighter, producing a large white flash. The FW dropped away and did not reappear.

On the same night F/O G. E. Reynolds (pilot) and FS A. J. Horne (rear gunner) of the Tigers won the D.F.C. and D.F.M. respectively for coolness and determination when the rear turret of their aircraft caught fire on the homeward flight from Kiel Bay. Home did his best to extinguish the blaze, but his turret was soon enveloped in flames and the ammunition in the guns began to explode. Undeterred, the gunner continued his efforts and finally, with the assistance of another crew member, brought the fire under control just as the aircraft approached land. Reynolds set the badly damaged bomber down safely on the nearest airfield.

Operations on land continued until May 7th when the Nazis signed an unconditional surrender, but No. 6 Group was not out over Germany during the last twelve days. Bad weather prevented operations on several days; on other occasions missions which had been laid on were cancelled because of the rapid disintegration of the enemy's forces. In any case relatively few worthwhile targets now remained in unoccupied Hunland.

After months and years of destructive operations the bombers were able to turn now to pleasanter, more constructive tasks. The Vancouvers on five occasions, April 30th, May 1st, 2nd, 4th and 5th sent aircraft to mark the race-course at The Hague where food and other supplies were being dropped for the Dutch population. On the 7th they performed a similar service at Rotterdam. Then the squadron turned to evacuating liberated prisoners-of-war from the continent. In a series of four lifts on the 8th, 9th, 10th and 15th the Vancouvers flew back almost 1,000 ex-P.O.Ws from Brussels, Lubeck and Juvincourt. This concluded the Vancouvers' work with No. 8 (PFF) Group. Late in May the squadron moved to a base in the Canadian Group.

The crews of other Canadian heavy bomber squadrons also had a share in the evacuation of liberated prisoners-of-war, many of whom were their own comrades. In three days, May 8th to 10th, No. 6 Group completed almost 180 sorties to and from the continent and carried 4329 exprisoners back to the United Kingdom. The squadrons engaged in this congenial duty were the Lion, Bison, Porcupine, Tiger, Iroquois and Bluenose. The first four squadrons began their flights to Juvincourt and Brussels on May 8th, thereby missing the V-E Day celebrations, but the crews were unanimously of the opinion that "it was worth it just to witness the pleasure of the released officers and men on their return home."

For many of the Canadian heavy bomber squadrons the flights on Operation "Exodus" (as the repatriation by air of ex-P.O.Ws was officially designated) were the last sorties carried out from the United Kingdom. Even before hostilities ended in Europe plans were being made for further R.C.A.F. participation in the "Second Phase" against Japan. These plans contemplated the formation of a VLR (Very Long Range) force of eight heavy bomber squadrons and three transport units. The Goose, Moose, Snowy Owl, Alouette, Ghost, Iroquois and Bluenose squadrons, together with the Vancouvers who had been transferred to No. 6 Group late in May, were detailed for "Tiger Force" and prepared to fly home to Canada. Three of the squadrons, the Alouettes, Snowy Owls and Goose, had carried out their last bombing operations on Halifaxes, but converted to Lancasters before making the trans-Atlantic flight.

On May 31st, the first aircraft, fourteen kites of the Ghost Squadron, left Middleton-St. George on the first leg

<sup>&</sup>lt;sup>1</sup> In April 1942 No. 413 (R.C.A.F.) Squadron began operations from a base in Ceylon. Late in 1944 at the time when No. 413 was finishing its work and returning to the U.K., two R.C.A.F. transport units were formed for operations in Burma. In addition there were many R.C.A.F. personnel serving with the R.A.F. and the Royal Indian Air Force in South-East Asia Command

of the homeward flight to Nova Scotia via St. Mawgan, the Azores, and Gander. F-Fox, piloted by F/L S. V. Eliosoff, was the first bomber to take off. In the course of the next few weeks the other. squadrons followed until, in all, 165 Canadian-built Lancaster Xs had been ferried home. The great airlift was completed with the loss of only one machine which was forced down at sea off the Azores; all the crew were rescued.

Air Chief Marshal Sir Arthur Harris, K.C.B., O.B.E., A.F.C., Air Officer Commanding-in-Chief, Bomber Command, came to Middleton-St. George to see the first squadron depart and to wish the aircrew "bon voyage" and good luck in future operations. In paying tribute to No. 6 Group he said:

You leave this country, after all you have done, with a reputation that is equal to any and surpassed by none. We in Bomber Command have always regarded our Canadian Group and Canadian crews outside the Group as among the very best.

It is not possible here to recapitulate the records of all the Canadian heavy bomber squadrons, but the achievements of one may be cited as typical of what the units of No. 6 Group accomplished. No. 419 (Moose) Squadron was first formed on December 15th, 1941, and began operations on January 11th, 1942. Between that date and April 25th, 1945, when the squadron carried out its last bombing raid, it made 4002 sorties, dropped over 13,416 tons of bombs on enemy targets and lost 129 aircraft.

In Canada the personnel of the eight squadrons went on leave, preparatory to re-organization, re-equipment and training for the Pacific theatre. Before their re-formation became effective, however, the atom bomb blasted Japan out of the war and early in September the squadrons were disbanded.

Of the remaining units in No. 6 Group two, the Sword-fish and Leaside squadrons at Eastmoor, had been dis-

banded within a week of V-E Day. Four, the Tiger, Lion, Bison and Porcupine squadrons, remained in Bomber Command as the R.C.A.F. 's contribution to the Striking Force of the R.A.F. Through June, July and August 1945 they were employed in disposing of surplus stores of bombs, and in extensive training both in the air and on the ground. Many flights were made over Germany so that the ground crew, who were carried as passengers, might see with their own eyes the damage wrought by the long bombing campaign, in the success of which they had played such a vital part.

At the end of August, when No. 6 Group Rear Head-quarters ceased existence, the four squadrons were transferred to No. 1 (Bomber) Group. Here they were engaged on Operation "Dodge", flying to Pomigliano in Italy to bring back soldiers on leave to the United Kingdom. From Britain the aircraft set course first for Le Havre, thence across France to Toulouse; then they headed across the Mediterranean to the northern tip of Corsica, crossed by Elba to the Italian peninsula, and followed the coast to Naples. The Tigers and Porcupines made only a few flights on this work as they were disbanded in mid-October. The Porcupines had been in existence for two years and one month; during their career as a bomber squadron they had flown 12,506 operational hours on 2,227 sorties and had suffered 249 casualties.

The Lion and Bison squadrons continued their Italian flights until the spring of 1946 when they too were disbanded on May 31st. The Lions had formed in December 1942 and by V-E Day had logged 3277 bombing sorties; 88 crews had been lost, killed, missing or prisoners of war.

In May 1945, when half of No. 6 Group was preparing to return to Canada, the Thunderbird Squadron was transferred to No. 4 Group in Transport Command. It moved from Linton-on-Ouse to Driffield and thence to Tempsford in Bedfordshire. There it was re-equipped with Liberators and be-

gan an intensive programme of training in preparation for its new duties as a long-range troop transport squadron. On October 1st the Thunderbirds were transferred to No. 47 Group and simultaneously began "trooping to India". From Tempsford the Libs crossed to Brussels/Melsbroek, there to pick up a load of British troops to be carried to Cairo. At the Egyptian port of call Indian soldiers were emplaned and flown to Karachi.- On the homeward journey repatriated British troops were brought home to Britain. Towards the end of October the Melsbroek stop was eliminated and passengers were taken on board 'at Tempsford. The outward flight took about 26 hours' flying time; 8½ hours to Castel Benito, the first stop, 3 more to Cairo West, another 4½ to Habbaniya, and a final long 10-hour hop to Mauripur (Karachi). Allowing for stop-overs, a round trip was normally completed in four days.

The schedule called for two sorties one day, alternating with one the next, and the Thunderbirds maintained this schedule without serious mishap or interruption except when the weather stopped all flying. In the first month (October) 34 round trips were completed, 1043 passengers were flown out and 753 brought back. For November the figures were 45 round trips, 1196 passengers carried to India and 974 flown home; the total pay-load lifted on the outward flight was 208,825 pounds (passengers, baggage and mail), and the return load was 228,320 pounds. Before operations ended in December 727 more passengers were taken up from Tempsford and 814 landed. All told 120 round trips were completed, over 5,500 troops were carried, and approximately 987,240 transport miles flown without one fatal accident. When the squadron disbanded on the last day of 1945 Air Marshal Sir Ralph A. Cochrane, K.B.E., C.B., A.F.C., Air Officer Commanding-in-Chief, Transport Command, congratulated the Thunderbirds on the "great reputation" they had built up during the three months they were engaged in the Trooping Task.

## The Bombing Campaign in Review

No. 6 Group began operations in January 1943 with a strength of eight squadrons, the Goose and Moose flying Halifaxes, and the Snowy Owl, Tiger, Alouette, Thunderbird, Lion and Ghost equipped with Wellingtons. The Bison (Wellington) Squadron was transferred to the Group in April of that year. In May the Leaside Squadron was formed, also with Wellingtons, followed in June by the Bluenose (Halifaxes), in July by the Iroquois (Halifaxes), and in September by the Porcupine (Halifaxes). In November the Snowy Owls, Tigers and Alouettes, who had left the Group in May, returned from North Africa and rejoined No. 6, at the same time converting to Halifaxes. Finally, in July 1944, the Group reached its maximum strength of fourteen squadrons with the addition of the Swordfish unit, formerly in Coastal Command. A fortnight after the squadron changed Commands it had reequipped with Halifaxes and was ready for operations.

During the first fourteen months of its existence No. 6 Group was engaged in the strategic bombing of German industrial centres from which came U-boats, tanks, aircraft, munitions, fuel, equipment and all the paraphernalia of war. Between January 1943 and February 1944, over 100 major night operations were carried out against targets ranging from Peenemunde on the Baltic to Lorient on the Bay of Biscay and Milan and Turin in northern Italy. Berlin was attacked no less than nineteen times and objectives in the congested Ruhr industrial area on 27 occasions (six raids on Essen, four each on Duisburg, Bochum and Düsseldorf, and nine divided between Dortmund, Gelsenkirchen, Wuppertal, Krefeld, Mülheim and Remscheid). Other major targets were Hamburg (six attacks), Stuttgart (five), Cologne, Frankfurt, Mannheim and Hanover (four each). On sixteen of these opérations 100 or more aircraft were engaged, with the heaviest blows being aimed at Berlin. St. Nazaire, Kiel, Kassel, Leipzig and Magdeburg were other cities that received visits from strong Canadian forces.

In March 1944 a new phase of Bomber Command's campaign began in direct preparation for the landings in Normandy. While attacks on German targets continued, the heavy bombers were used also in a long series of night raids against railway communications and Nazi defences in France and Belgium. Unlike the operations against industrial targets where a considerable area was subjected to a devastating blitz, the new raids were, as a rule, carried out by smaller forces with a premium on pinpoint accuracy. Between March 1st and D-Day the Canadian Group made 53 attacks of which only fourteen were against German targets; the other objectives were all in Belgium and northern France. Marshalling .yards at Trappes, Le Mans, Laon, Aulnoye, Somain and St. Ghislain, batteries at Neufchatel, Calais, Trouville and Le Clipon, radar stations and military camps were among the aiming points in the bomber buildup for D-Day.

Once the battle had been joined on the beaches of Normandy the heavy bombers continued to assist the forces on the ground by further attacks on rail communications to the battle area, airfields and supply depots. On several occasions, as at Caen and Falaise, they bombed enemy positions to open the way for attacks by our Armies. Repeatedly too they blasted sites from which the Nazis were launching their new V-1 terror weapon against London. It was in this period of close co-operation with the Armies that No. 6 Group set a record which was never surpassed. In August 1944 the Canadian heavy bomber squadrons flew 21,869 hours on 3704 sorties and dropped 13,274 tons of bombs. Despite the pressure under which aircrew, ground-crew, operations, control and maintenance staffs worked, a high standard of aircraft serviceability was maintained. The personnel of the bomb dumps in particular were called upon to perform herculean tasks.

In all, from D-Day to the end of August, No. 6 Group

sent out aircraft on 118 missions, of which only twelve were over Germany (including two attacks each on Stuttgart and Stettin). Many of these operations (57) were carried out in daylight with fighter escort. It is of interest also to note, as an indication of the Group's growing strength, that on several occasions the Canadian squadrons put up more than 200 heavies against a single target. The first such occasion was on July 28th/29th when 234 bombers struck at Hamburg<sup>1</sup>; Bois D'Amont, Bois de Casson, St. Leu d'Esserent, Caen and Falaise were other targets pounded by 200 or more Canadian heavies.

After the Battles of Normandy and France had been won Bomber Command returned to its strategic bombing of oil plants, munitions factories, ports and rail centres in the Reich; but tactical attacks were still made on occasion. In the spring of 1945 daylight operations again became a feature of the Command's work, but most of its old targets had now been overrun by the Allied advance. By the end of April the heavy bombers' job was done.

In this fourth and final phase (September 1944 to April 1945) No. 6 Group undertook 146 operations, thirteen of which were abortive or on an extremely small scale. Of the remainder, 65 were daylight attacks. Fourteen times the Group attacked a single target with 200 or more heavy bombers; on many other occasions equally large forces were despatched on a single night against two or more objectives. The heaviest attack during this period, and indeed the heaviest carried out by the Canadian Group during the war, was against Dortmund on the night October 6th/7th, 1944, when 293 Halifaxes and Lancasters took off from their Yorkshire bases; 273 bombed the primary target, three attacked an alternative, two did not return, and the remaining aircraft were for various reasons unable to drop their explosives.

<sup>&</sup>lt;sup>1</sup> This raid was also the Group's most tragic: 22 bombers did not return.

The major targets of the Canadians during the last eight months of operations were Duisburg (994 aircraft in five attacks), Cologne (812 in six raids), Essen (607 in four), Dortmund (546 in three), Hamburg (544 in four), and Calais (537 in nine); Bochum, Castrop Rauxel, Wanne-Eickel, Düsseldorf, Hagen and Kiel all received the bomb loads of 300 or more R.C.A.F. heavies.

## Sea Mining

The Royal Air Force carried out its first aerial minelaying operation on April 13th, 1940. In the course of the next five years Bomber Command made 18,270 gardening sorties and laid 47,256 mines. The full effect of this "unspectacular but deadly campaign" cannot be readily tabulated, but one result alone, and that not the most important, is significant. By the end of March 1945 it had been confirmed that woo enemy vessels had been sunk or damaged by mines laid from the air, an average of one ship for every 47 mines laid—a truly formidable crop from the vegetables. In addition to this tangible result there was the primary aim of the whole campaign to delay and disrupt to the maximum degree possible traffic along the enemy's sea routes; for example, it was estimated that in one year (194.4) nearly 9,000,000 tons of shipping were held up as a result of mine-laying operations. Of great importance too was the diversion of hundreds of ships and thousands of skilled men to counter Bomber Command's activity around ports and waterways.

No. 6 Group had an important share in this work of the Command. From January 1st, 1943, to April 21st, 1945, the Canadian. Group made 2594 sorties, planted 6375 vegetables, and lost 39 aircraft and crews. In other words, on the

<sup>&</sup>lt;sup>1</sup> These figures do not include R.C.A.F. mine-laying operations in the last months of 1941 and through 1942 before No. 6 Group began operations; nor do they reflect the contribution made by R.C.A.F. aircrew serving in R.A.F. squadrons.

average approximately one mine-laying sortie out of every seven carried out during the whole period of the war was made by a crew from an R.C.A.F. squadron, and two out of every fifteen vegetables were planted by the R.C.A.F.

At the time No. 6 Group commenced operations the Stirlings of No. 3 Group were doing the bulk of the minelaying work, with the Wellingtons of Nos. 1 and 4 Groups contributing their share; long-range sorties were entrusted to the new Lancasters of No. 5 Group. The Canadians and No. 3 Group soon became friendly rivals for top honours in the Command; during the last sixteen months of the campaign No. 6 topped its rival in the total number of sorties, but had to yield the palm for the number of mines laid.

At first all the squadrons in the Group, flying both the twinengined Wellington and the four-engined Halifax, shared in planting the various garden plots along the coast from Norway to France; but in the summer of 1943 the Bisons and Leasides, the last of the Wellington units, became mine-laying specialists and thereafter the Canadian Group pioneered in the development of new techniques. Hitherto vegetables had been planted from heights below 6000 feet, where the aircraft was fully exposed to both light and heavy flak. It was decided to test mine-laying from high level (15,000 feet) and No. 6 Group had the honour of making the first operations using the new technique. On the night of January 4th, 1944, the Ghost Squadron sent six mineladen Halifaxes to the inner harbour of Brest and all six successfully dropped their vegetables by parachute from 14,000 or 15,000 feet. Two nights later six aircraft of the Moose Squadron repeated the operation at Brest, while the Ghosts mined the mouth of the Loire River, north of St. Gildas Point.

The introduction of this new technique opened many new areas to the gardeners, in particular important inner approaches which previously had been too "hot" to be mined from low altitude. While the scope of the minelayers was greatly increased, their losses were decreased. Further refinements of technique were developed, including extensive use of all the latest radar devices and pathfinder target marking.

Mine-laying reached a peak in the weeks immediately preceding D-Day; mines were laid on Z3 nights in May. During the last year of the campaign the four squadrons in No. 63 Base, the Lions, Bisons, Tigers and Porcupines, were the Group's specialists in this work. From September 1944 onward they devoted themselves in particular to the ports and channels of southern Norway in an effort to block the movement of Nazi troops from the northern fronts to the homeland. Oslo was practically eliminated as an important port, forcing the enemy to turn to the smaller Norwegian harbours; these too were methodically blocked from the air. The approaches to many were very narrow channels, only 500 or boo yards in width, necessitating a return to low level gardening tactics and special training for the task. Indeed in the latter stages of the war the minelayers had to face even greater hazards than the crews engaged on bombing operations. The success attained by the Canadian and R.A.F. squadrons engaged in this work may be judged from the fact that in March 1945 the Germans, despite their desperate need at home, still had twice as many troops in Norway as were necessary for its defence.

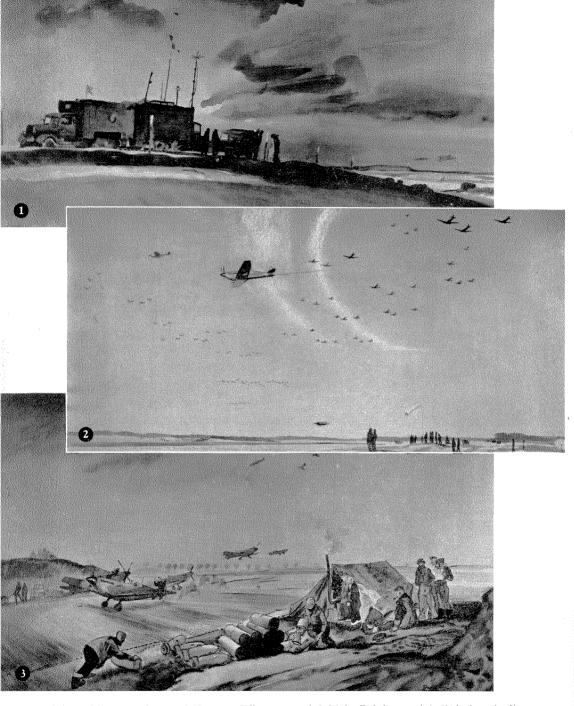
A brief summary shows No. 6 Group's sea-mining effort:

		Aircraft	Mines
Period	Sorties	Missing	Laid
JanDec. 1943	911	19	1491
Jan. 1944-Apr. 1945	1683	20	4884
Total	2594	39	6375

By way of comparison, the figures for the whole of Bomber Command (Nos. 1, 3, 4, 5 and 6 Groups) during the last sixteen months were 6,117 sorties, 93 aircraft lost and 22,040 mines planted. The Canadian Group was par-



(1) A Lancaster bomber en route to the target. (2) An R.C.A.F. Halifax at its dispersal beneath an English oak. (3) Marshalling Lancasters for a raid. (4) R.C.A.F. Liberators on the runway ready to take off for India. (5) and (6) A Ghost Squadron Lancaster starts the homeward flight to Canada, as A/M G. O. Johnson, A/C/M Sir Arthur Harris and A/V/M C. M. McEwen wave farewell.



(1) Mobile control van of No. 127 Wing at an airfield in Belgium. (2) "Air invasion"—part of the air lift and fighter escort en route to Wesel. (3) The airfield and dispersal at Petit Brogel. (Water colours by F/O D. K. Anderson.)

ticularly proud of its record in number of mines wasted. In the period January 1944 to April 1945 only 56 vegetables were lost by jettisoning or wild planting.

In addition to bombing and sea-mining the squadrons were at times called upon for Air/Sea Rescue work. Between May 1943 and April 1945 they made 345 sorties in search of aircraft that had been forced to ditch in the North Sea.

In all these aerial operations the personnel on the ground had a vital, though seldom-recognized, role. Without their preliminary work in all the varied tasks involved in planning and preparing for a heavy bomber operation, the Group's achievements would never have been possible. The calibre of their conscientious and arduous service is reflected in the percentages of aircraft serviceability and operational failures. In the early days of the Group serviceability was often only 60 per cent; in the last twelve months of the war it fell only twice below 80 per cent and in April 1945 rose to an all-time high of over 92 'per cent. At the same time operational failures dropped from 17 per cent in January 1943 to less than 2 per cent in the last month of the war. Maintenance personnel knew well the "ardua" even though it was not their lot to soar "ad astra".

The table below summarises in statistical form the record of No. 6 (R.C.A.F.) Group from January 1st, 1943 to May 8th, 1945.

	1943	1944	1945	Total
Operational sorties	7,355	25,353	8,114	40,822
Flying hours (operational)	59,534	160,111	52,336	271,981
Aircraft successful <sup>1</sup>	6,238	23,429	7,369	37,036
Aircraft unsuccessful <sup>2</sup>	1,117	1,924	745	3,786
Percentage attacking primary	83.7	92.5	97.0	91.7
Aircraft missing	340	377	97	814
Percentage aircraft missing	4.6	1.48	1.2	2.0
Tons lifted (bombs and mines)	(not	95,833	29,112	
	available)			
Tons dropped (bombs and				
mines)	13,630	86,503	25,989	126,122
Encounters with enemy aircraft	344	701	267	1,312

E/A destroyed	29	60	27	116
E/A probably destroyed	6	10	8	24
E/A damaged	19	61	12	92
Serviceability of aircraft	64.7	80.2	88.3	77.7
Personnel employed	14,366	23,909	23,254	
Awards for gallantry and				
chivalry	255	1,115	860	$2,230^2$

<sup>&</sup>lt;sup>1</sup> Including aircraft which attacked an alternative target, and aircraft which were missing (assumed to have attacked target).

<sup>&</sup>lt;sup>2</sup> Including aircraft which returned early, were recalled or ordered to abandon mission, or for other reasons were abortive.

<sup>&</sup>lt;sup>3</sup> Figure includes only awards to May 1945

## CHAPTER V

CANADIAN WINGS WITH 2ND T.A.F. (SEPT.-DEC. 1944)

## Day Fighters

THE two R.C.A.F. Spitfire wings operating with the Second Tactical Air Force on the Continent, as the sixth year of the war began, were under the command of G/C G. R. McGregor, O.B.E., D.F.C., a veteran of the original Canadian fighter squadron, and G/C W. R. (Iron Bill) MacBrien, O.B.E. W/C B. D. Russel, D.S.O., D.F.C. & Bar, was the wing commander flying for his old squadron mate, while W/C J. E. Johnsop, D.S.O. & two Bars, D.F.C. & Bar, the outstanding R.A.F. fighter pilot of the war, served in a similar capacity for MacBrien. McGregor's wing included the Ram Squadron, commanded by S/L H. C. Trainor, D.F.C., the Grizzly Bears under S/L R. K. Hayward, D.F.C., the Falcons led by S/L D. H. Dover, D.F.C., and the Caribous commanded by S/L H. J. Dowding, D.F.C. Of the MacBrien units, S/L E. P. Wood commanded the Wolf Squadron, S/L J. F. McElroy, D.F.C. & Bar the City of Oshawa, S/L W. A. Prest the Red Indian, and S/L H. W. McLeod, D.S.O., D.F.C. & Bar, the Hornet Squadron.

The end of August had witnessed the beginning of the powerful offensive from the Seine bridgeheads by the Second British Army. By September 4th this force had swept

into Antwerp. On its left the Canadian Army was driving up the coast into northern Belgium while to the south the Americans were pushing on to invade the Fatherland itself. By the middle of the month, however, it was obvious that the far-stretched Allied lines of supply were presenting a problem and German resistance was reported as increasingly stubborn. This was reflected in air operations.

The McGregor-Russel wing moved on September 1st from Cristot to the vicinity of Evreux, thence to Poix, and on the 5th to Brussels. Road parties had an enthusiastic reception everywhere. Every vehicle was cheered as it passed through towns and villages, and showers of fruit and flowers were rained on the airmen. The new airfield they found intact and cleared of booby traps but very congested, taking off and landing being complicated by the presence of Dakotas bringing supplies to the front and ferrying wounded back to England.

The first successes were gained on the 8th. The Grizzly.. Bears, formerly the Roaring Squadron, destroyed four locomotives and damaged six barges and two motor transports while the Falcons claimed four locomotives destroyed and one damaged. This kind of operation was repeated on succeeding days down to the middle .of the month, F/O G. F. Mercer on one occasion blowing up a locomotive so effectively that pieces of debris damaged his spinner and splintered the rear-vision mirror of his aircraft.

On the 16th S/L Dover, commanding officer of the Falcons, flew to England on a special mission, carrying a communication from General Dempsey's H.Q. to the Headquarters of the Airborne Troops. The next day patrols reported the sky full of parachutes; the landings at Eindhoven, Tilburg, Grave, Nijmegen and Arnfiem were taking place.

On the 18th the Rams got into a good old-fashioned dog-fight. Six aircraft were scrambled at 1110 hours and, led by S/L Trainor, they stormed into thirty or more

FW.190s at 12,000 feet about five miles west of Venlo. In the ensuing mix-up, F/O R. M. Davenport, D.F.C., destroyed one FW and Lt./Cdr. A. C. Wallace, a Fleet Air Arm pilot attached to the squadron, damaged another. S/L Trainor was lost the next day, however, when his engine failed and he was forced to bale out and was taken prisoner, while two days later Lt./Cdr. Wallace was killed when his aircraft collided with another. Subsequently Trainor, who had at least eight enemy aircraft destroyed to his credit, was awarded a Bar to his D.F.C. and the D.S.O.

The 21st was another moving day. This time the Wing settled in at Le Culot near Louvain, Belgium, but it was not until the 25th that anything important occurred. From then until the 30th events were spectacular indeed. The Rams and the Falcons opened on the 25th with five enemy aircraft destroyed and two damaged. A low level patrol of the Arnhem-Nijmegen bridges by the Rams resulted in an encounter with approximately thirty Me.109s and FW.190s. When the fight was over F/L R. R. Bouskill had shot down one FW.190 and damaged an Me.tog while F/L G. W. Johnson had shot down two Me. 109s and damaged another. The London Gazette in announcing Johnson's D.F.C. in October credited him with five enemy aircraft destroyed. A month later he added a Bar to his decoration, his final total of aircraft destroyed being eight. A similar patrol by the Falcons resulted in the sighting of one Me.to9 and two FW.190s. F/L D. C. Laubman, D.F.C., chased the Me. tog, firing at it until it burst into flames, dived into the ground and exploded. The second of the two FWs was attacked by F/O H. W. McLeod and it, too, dived into the ground. The engine of McLeod's aircraft then failed and he crash-landed near Arnhem. He was picked up by patrols of the 43rd Armoured (Guards) Division and returned to his unit two days later.

The Falcons had a field day on the 26th, destroying ten and damaging two. In the afternoon the squadron encountered two gaggles of a dozen Me. togs and one of 25 or more FW.t90s flying along the deck east of the Rhine. Diving on the FWs F/L Laubman destroyed two, both going into the ground. F/L W. J. Banks, D.F.C., also destroyed two, both of which likewise crashed in flames, and F/O P. M. Charron similarly destroyed another which hit the deck and burned after the pilot had baled out. F/L R. I. A. Smith, D.F.C., attacked the two gaggles of Me.109s destroying one from each. Another was shot down by P/O P. E. Hurtubise, the pilot being seen to run away after the aircraft crash-landed. In the early evening, the squadron was again on patrol when, south-east of Nijmegen, they sighted ten or more Me.109s and FW.190s flying at 17,000 feet. Don Laubman gave chase as they made a dive for cloud cover. Singling out an Me. 109 he gave it a burst but both his cannons stopped. Continuing to fire with machine-guns only, he saw it dive into the ground at 300 m.p.h. The cannons of F/O W. H. L. Bellingham likewise stopped when he attacked an Me.109 that was coming in head-on. The enemy aircraft was damaged but it gained the shelter of cloud. The first Me.109 that F/O Charron attacked gained cloud cover too after being damaged but he then sighted two Spitfires and another Me. 109 milling about a small cloud. While the Spits were above, the Me. made a dive for the deck but Charron chased it and the enemy tried to regain the shelter of the cloud. Charron attacked and the Messerschmitt dived into the ground and burned. This closed the best day the Falcons had had for a month.

Great as were the achievements on the 26th they were surpassed on the 27th, the Grizzly Bears and the Falcons destroying 22 and damaging ten enemy aircraft, the largest score made by the Wing to date. The Rams started the day with a tantalizing distant glimpse of two jet-propelled aircraft but the Falcons, taking off at 0725 hours, ran into ten Me.109s north-east of Nijmegen. They knocked down six for no losses. Apparently the enemy had an objective in the

Nijmegen area since, as the attack began, they dropped bombs or extra fuel tanks which exploded on the ground. The Falcons were led by F/L R. I. A. Smith who shot down two, one enemy pilot falling into the Rhine as his parachute failed to open, the other hurtling to the ground without a parachute. These victories, amounting to four in two days, contributed to the award of a Bar to Smith's D.F.C. The citation commended the squadron's work in frustrating the enemy's efforts to destroy the bridges in the Arnhem and Nijmegen areas. Laubman sighted an Me.109 at the base of a cloud, attacked it and saw it explode as it hit the deck. Looking around he saw another Me. 109 coming in behind him but he got on its tail and, shortly afterwards, shot it down. Two more were claimed by F/L L. F. Berryman, the first being seen to crash, the other burning on the ground as its pilot parachuted.

Then it was the turn of the Grizzly Bears. Led by S/L Hayward, they took off on a low level patrol at 0830 hours and encountered fifteen FW.190s near Nijmegen. These too jettisoned bombs or tanks as the attack opened. F/L E. G. Lapp destroyed two and F/Ls J. M. Portz and J. M. McConnell and F/Os G. F. Mercer, E. G. Ireland and L. G. D. Pow destroyed one each. Portz and Mercer and F/O W. A. Reid also damaged one each. The squadron's score was therefore seven destroyed and three damaged.

At 1130 hours twelve pilots of the Falcons took to the air again on another low level front line patrol during which they met forty or more FW.190s and a score of Me.109s. They destroyed four and damaged six but P/O Hurtubise failed to return from this operation. Both Laubman and Berryman scored again. Meeting a gaggle of twenty Me.109s head-on Laubman got on the tail of one which he shot down on the edge of a small lake, its pilot baling out. He then chased another one through cloud; he damaged it and the enemy jettisoned his hood but Laubman ran out of ammunition and claimed this one as damaged only.

Berryman attacked an FW.190 and damaged it but, because of being the target for too many enemy aircraft, he was compelled to break off the engagement. Shortly afterwards he encountered two Me.109s in the clouds and shot down one in flames. The other escaped. His total of three destroyed and one damaged in September was cited in the *London Gazette* when his D.F.C. was awarded. Two damaged were claimed by F/L Banks, an FW.190 streaming smoke after his attack and an Me.109 dropping its port oleo and also emitting smoke when he fired. The Me.109 was credited as probably destroyed and the FW.r90 as damaged. The pilots of two FW.190s baled out when F/L C. W. Fox destroyed their aircraft. In addition he damaged another FW.190 and an Me.109, both of which escaped.

During the lunch hour the Bears went out again and sighted an Me.410. F/L Lapp and F/O R. M. Cook shot it down but four Ju.88s flying just east of Nijmegen took to the clouds and disappeared to avoid the same fate.

Still the day was not over. At 1527 the Falcons were again on patrol, shooting down four and damaging one but losing F/O R. Clasper. This time ten plus enemy aircraft were encountered. The enemy turned, were lost, but found again and pursued all the way home. As they prepared to land the Falcons attacked. F/O D. R. C. Jamieson, D.F.C., shot down two FW.190s, flying through the debris of one and seeing the pilot bale out of the other. This incident was cited when he was awarded the Bar to his D.F.C., a similar incident in July having been mentioned when he got his first decoration. Another FW.190 was destroyed by F/L J. B. Doak while Don Laubman destroyed an FW.190 and damaged another. Jerry had come out all right but he had taken a terrific trouncing.

The Bears were still hunting on the 28th, this time destroying two and damaging three. Eight FW.190s were seen on the early morning patrol in the Nijmegen area. F/L Portz and F/O M. G. Graham each destroyed one while F/L Lapp,

F/O Cook and F/O B. Eskow each claimed one damaged. At 0800 hours the Caribous took off and met two FW.190s, one of which was damaged by F/L S. M. McClarty. Unfortunately F/L G. G. Millar ran out of fuel and was believed to have baled out behind the enemy lines.

September's activities closed with another good day on the 29th, the Rams destroying rime and damaging five while the Falcons destroyed three and damaged another. At 0845 hours the new commanding officer of the Rams, S/L R. I. A. Smith, formerly of the Falcons, led his squadron into a dogfight with thirty Me.109s and FW.190s. S/L Smith destroyed two Me.109s as also did F/L H. J. Everard, D.F.C., a veteran of the Italian campaign, who added one damaged to his score besides. Smith had now destroyed seven enemy aircraft. An example of the ferocity of the encounter is contained in F/L Everard's combat report:

The second dogfight began immediately the first finished, the victim being the aircraft nearest me in the remainder of the formation that still milled about on the deck. I gave this aircraft two 2-second bursts from 75 yards quarter astern. On the second burst it exploded and I was unable to steer clear of the debris. Part of the pilot's body hit my mainplane inboard of the starboard cannon and dented it. Superficial damage to the aircraft

Claims of two Me.109s destroyed were made by F/O J. C. Hughes as well as by F/O D. F. Husband, who gained the D.F.C. in the following January, while F/L Bouskill claimed one destroyed and one damaged. F/O G. Bell and F/L E. B. Sheehy each damaged an Me.109, the latter also damaging an FW.190. F/O C. G. Hutchings failed to return from this operation.

At 1000 hours the Falcons undertook their second patrol of the day. Though they carried long range tanks they covered such vast distances that they were obliged to refuel at Eindhoven before returning. When six miles east of Nijmegen they ran into a daisy chain of a score or more FW.190s at 6,000 feet. P/O W. C. Busby shot one down in

flames. Another, brought down by F/O W. A. Az12, exploded as it hit the water of the lower Rhine. The report of F/O Jamieson reads as follows:

I was chasing one FW.190 when it rolled to the deck and I gave chase. It was very bumpy on the deck and many times I fired without results, but on one attack from a little above from about 200 yards I saw strikes on his fuselage and tail. As I closed in for my next attack the e/a's port wing hit a tree and he crashed to the ground. We were flying at close to 350 m.p.h. and the e/a exploded as it crashed to the ground.

This was Jamieson's eighth destroyed enemy aircraft. Finally F/O E. L. Prizer damaged an FW.190 but had to break off the engagement when other FWs began to attack him.

Meantime the MacBrien-Johnson Wing was moving through France and Belgium. From their starting point at Illiers L'Eveque, near Dreux in France, they went to Le Culot, near Louvain, Belgium, on September 22nd, thence to Grave, Holland, on the 30th. For the first three weeks all the squadrons of this Wing were non-operational owing to the necessity for supplying the army with all available motor transport and ammunition. Paris proved an attraction when the weather and the Provost Marshal permitted, which was not often, and there was a sigh of relief when the news finally came through that the move to Belgium was to take place.

The Wolves took their aircraft to England for refitting just as operations began and for the first few days the Hornets participated in no engagements. The Oshawa men and the Red Indians, however, got off to a flying start on the 25th. Taking off at 1440 hours the Indians ran into twelve Me.109s in the Nijmegen area, two of which F/L J. D. Mitchner, D.F.C., destroyed. Six more were then sighted in the same area, S/L Prest, the Red Indian commanding officer, destroying one. As the Indians were about to land, the Oshawa Squadron led by F/L A. H. Sager took off. Sighting a round dozen FW.190s north of Arnhem they launched their attack and in the ensuing combat F/Ls N. G. Russell

and A. J. Fraser and F/O W. H. Palmer each destroyed one but F/L E. H. W. Treleaven failed to return and two other pilots had to crash-land.

The 26th was also a good day for the Oshawa men. Carrying out a low cover patrol in the lunch hour they encountered about twenty enemy aircraft near Arnhem, some of them apparently jet-propelled. F/L J. B. McColl and W/O Bill Saunders, who also damaged one, each shot down an enemy aircraft. F/L Art Sager damaged a fourth. Again one pilot was posted as missing-F/L G. R. Patterson who laterwas reported a prisoner of war. The Hornets lost F/O L. D. Sherwood on a patrol over Nijmegen but he evaded the enemy and returned a month later.

All three of the operational squadrons tore into the Hun on the 27th, thirteen of the enemy being definitely accounted for, two probables and six damaged being marked up in addition. The early morning patrol by the Red Indians resulted in an engagement with six Me.109s in the Niimegen area, F/L Mitchner and F/Os Len McDonald and J. M. Calvert each claiming a destroyed while F/O T. J. De-Courcy got a damaged. F/L R. E. Holness was listed as missing after the operation. The lunch hour patrol by the Oshawa Squadron encountered upwards of fifty FW.190s and Me.109s over Uden. From the combats that ensued claims were made for two destroyed and one damaged by F/L D. W. A. Harling, two destroyed by Art Sager, one destroyed by F/L D. R. Cuthbertson, another by F/L J. B. Rainville, one damaged by F/O R. R. St. Georges, two damaged by F/O G. A. Cameron, and another damaged by F/L W. F. Mason. The third squadron, the Hornets, led by W/C Johnson, took off at 1220 hours for the Nijmegen-Venlo area. Twenty miles east of Nijmegen they attacked nine Me.109s, the Wing Commander, F/Ls E. B. Stovel and D. M. Walz -together with F/O W. A. C. Gilbert each destroying one. Johnson's score was now 38 destroyed. Probables were obtained by F/L Stovel and F/O R. Hodgins. Once more a pilot failed to return; this time it was the Hornets' commanding officer, S/L McLeod. At the time he was lost McLeod was the top-scoring ace in the R.C.A.F., with 21 aircraft destroyed. After a victorious career in Malta he had become the first commanding officer of the Hornets overseas.

The only encounter on the 28th took place on a morning patrol by the City of Oshawa Squadron. An enemy aircraft with a silhouette resembling that of a Beaufighter, and thought to be a jet-propelled Me.262, was attacked. It was flying at 13,000 feet about ten miles south-east of Nijmegen and was diving at an estimated speed of 450-500 m.p.h. F/L McColl made an all-out dive and attacked from 450 to dead astern from 600 to 200 yards. The enemy took no evasive action but opened up and climbed away, both jets pouring black smoke. McColl claimed to have damaged the first jet-propelled aircraft encountered by the Wing.

The 29th was also a very good day, the Wing accounting for eighteen enemy destroyed and five damaged. At 0845 hours the Hornet Squadron was airborne on a low level patrol. As they were turning for home they sighted fifty Me.109s at 5,000 feet, five miles north-east of Nijmegen. A dog-fight followed in which, though the squadron was heavily outnumbered, seven enemy aircraft were destroyed and three damaged. F/Os G. F. Ockenden and R. Hodgins and F/L G. W. A. Troke, D.F.C., destroyed two each, the seventh being shot down by F/O A. J. Horrell. Ockenden and Hodgins were both later awarded the D.F.C. F/L Troke and F/Os F. R. Kearns and D. J. Wegg were responsible for the three that were damaged but shortage of petrol caused the engagement to be broken off.

At 1000 hours the Red Indians took off. Two miles east of Nijmegen they engaged fifteen Me.109s. F/L G. M. Smith shot down two and one each was accounted for by F/L L. Foster and F/O K. Langmuir. F/L B. T. Gilmour

damaged yet another. One hour later the Oshawa Squadron met a large gaggle of FW.190s. Mitchner destroyed two while one each was claimed by F/L Harling, P/O W. G. D. Roddie, F/O Palmer and F/Ls Russell and McColl. In addition F/L L. L. Nault damaged another. Mitchner was awarded the Dutch Bronze Star for his work in the Nijmegen area while Russell got the D.F.C.

To round out the month's activity the Oshawa Squadron encountered one Me.109 on an afternoon patrol on the 30th. This was engaged by McElroy and Harling who jointly destroyed it. This brought the Wing's total for September to 52 destroyed and 25 damaged.

The Silver Fox Squadron commanded by S/L R. H. Walker, a component of W/C A. G. Page's R.A.F. Wing, moved to Beauvais on September 2nd and thence on the 5th to Douai, where they occupied an aerodrome which had been constructed by the British in 1939. From this place they carried out armed reconnaissances on one of which, on the 14th, they sighted and attacked a column of six transports on a road. Three flamers were scored by F/L R. G. Sim, one other being left smoking and a fifth claimed as damaged. Sim's aircraft was hit by flak shortly afterwards and he had to bale out. He was seen to land successfully and go to a nearby farm house where he was taken in by two civilians. He was reported safe in England in October.

On the 17th the pilots left for a new aerodrome near Antwerp from which advantageous position they were able to patrol the Arnhem-Nijmegen area. The next day brought results. With Walker in the lead the squadron sighted eighteen or twenty Me.109s at 14,000 feet which they chased from Nijmegen to Wesel. In the ensuing engagement F/O G. E. Heasman destroyed one and another was shared by S/L Walker and F/L A. Johnstone, a third being shot down by F/L R. G. Lake. On the 23rd and the two succeeding days, shells were dropped on the aerodrome, six of the squadron's aircraft being slightly damaged. Steel helmets

were much in evidence and dug-outs became quite popular. The 25th turned out to be an eventful day for, besides the shelling on the ground, there was action in the air. In the afternoon nine aircraft were patrolling Nijmegen when they saw twenty Me.109s on their way to attack the bridge. The enemy was forced to jettison but during the fight ten or more F.W.190s, which had obviously been acting as high cover, joined up with the Me.109s. The Spitfires got separated and F/L B. Boe and , FS O. McMillan failed to return. F/O D. H. Kimball's aircraft was hit in the petrol tank by a cannon shell and he was forced to land at Eindhoven but, before being hit, he destroyed two Me.109s. A destroyed and a damaged were claimed by F/O H. E. Derraugh. S/L Walker damaged two Me.109s and F/Os J. A. McIntosh and L. C. Saunders each got a damaged. More important than these victories, however, was the fact that the bridge at Nijmegen had been saved from destruction. Later in the afternoon eight Spits. acted as escort to seven Dakotas dropping supplies at Arnhem. F/L Lake silenced three flak posts which were firing at the Dakotas.

After an unsuccessful attempt to intercept a jetpropelled aircraft on the morning of September 26th a patrol of the Nijmegen area was carried out in the afternoon, eight Me.109s being engagedThe wing commander flying, W/C Page, R.A.F., destroyed one but McIntosh's aircraft was hit by cannon fire and he was forced to land at Eindhoven.

The early morning patrol on the 27th also resulted in an encounter. In a dogfight with fifteen plus Me.109s and FW.rgos ten miles east of Arnhem F/L Lake, F/L J. C. Copeland and P/O S. Bregman each destroyed an Me.109.

The last day of the month was the last day of the Silver Fox Squadron's participation in the defeat of Germany on the Continent. Taking off at 0930 hours six Spitfires sighted two Me.262s at 9,000 feet about fifteen miles east of Nijmégen. The enemy were gliding down in a shallow

dive and one, at least, was carrying a yellow bomb of about 1,000 pounds slung under the fuselage off centre. Lake turned to get on the tail of one of the Messerschmitts, the other being lost in cloud. Lake fired from between 200 and 100 yards and a piece resembling a panel was seen to fall away from the Me. The enemy turned on his jet units, however, and made off at a speed estimated at 450 m.p.h. No evasive action was taken and the bomb was not jettisoned. In the afternoon the squadron left Antwerp for England, to change places with the Winnipeg Bears.

While the Americans were breaking through the Sieg-fried Line at Ubach at the beginning of October the Germans were busy in the north destroying dykes and pumping stations to flood the country and arrest Allied progress. On the 27th the British Second Army, driving to the mouth of the Meuse, took Hertogenbosch and Tilburg and as a result the McGregor-Russel Wing, which was at Le Culot, moved to Rips, about twenty miles south of Nijmegen, on the 4th and to Volkel, east of Hertogenbosch, ten days later. Despite bad weather they had a busy time.

The month opened unfortunately for the Wing. On October 1st the Falcons came back from an operation without P/O D. E. Reiber who got separated from the rest of the squadron and whose fate at the time was unknown. The next day the Rams lost F/L Bouskill who failed to return when the squadron was bounced by four FW.190s while attacking four others. Bouskill was awarded the D.F.C. at the end of the month, his victories being given as five. To offset this loss F/O A. L. Sinclair damaged one of the enemy but WO M. Thomas's aircraft was in turn so damaged that he had to bale out; fortunately, he was able to make his way back to the squadron. At 1630 hours the Caribous encountered two Me.262s on one of which F/O F. B. Young made a head-on diving attack from 500 feet above. Strikes were seen on the wing of the Me.262 and a damaged was claimed.

After the move to Rips there was considerable success

against ground targets but on the 5th the Rams provided a real sensation. After an uneventful high patrol in the morning they took off again after lunch and saw an Me.262 heading towards Nijmegen. Diving after it they gave chase, five members of the squadron taking a squirt at it. The Me. started to burn and very shortly crashed in a field on our side of the lines; the pilot baled out but his parachute failed to open. This was said to be the first enemy jet-propelled aircraft brought down by any Allied aircraft. The names of the five pilots were S/L R. I. A. Smith, F/Ls Everard and Davenport, and F/Os Sinclair and J. MacKay.

October 6th, the occasion of the crossing of the Leopold Canal by the Canadian forces, dawned as one of the clearest days seen for some time and the Caribous started it well with another attack on transport, one of which they left smoking. They also damaged a locomotive. On a second patrol they claimed two smokers and a damaged motor transport but their greatest success came in the evening. Led by F/L McClarty they encountered 35 plus Me.109s at 25,000-28,000 feet about five miles north-east of Nijmegen. Turning to port McClarty attacked one Me.109 but was almost rammed by another. He turned his attention to a third which he shot down on the south side of the river, east of Nijmegen. He then chased an FW.190 but, seeing tracers flashing by and strikes on his own starboard wing, he broke off the fight. As the top cover of the enemy formation dived to join in the combat, F/O D. W. Goodwin, D.F.C., broke round into them, singled out an FW.190 and followed it all the way down to the deck. In a third attack on this aircraft he scored hits on, the enemy's fuselage. The German pilot pulled up rapidly, jettisoned his hood and pulled around in a steep turn. Further firing produced more hits and the Hun rolled over and went straight down. The pilot got out at 500 feet but his parachute was not seen to open. F/O E. T. Hoar likewise chased an Me.109 from 25,000 feet to 200 feet and attacked it. He saw it burst into flames but was then himself attacked from behind. He therefore broke off the engagement and headed for home on the deck. Damaged FW.190s were claimed by F/Ls W. M. MacLean, N. A. Keene, D.F.C., and M. E. Jowsey, D.F.C., the victim of the last named being possibly destroyed. F/O W. R. Weeks, whose D.F.C. came through in December, also claimed a damaged. During the operation the squadron was bounced three times by Spitfires. first at Nijmegen, then south of that point and a third time when, as he was about to land, F/L McClarty's aircraft was hit. All pilots landed safely, however. McClarty was shortly afterwards awarded the D.F.C.

The Caribous again had all the luck on the 7th. Uneventful patrols had been flown by all the squadrons of the Wing throughout the day but at 1600 hours F/L W. B. Randall led the squadron to the Arnhem-Nijmegen area where about 35 FW.190s were seen flying west at 18,000-20,000 feet. Both sides turned in to attack at the same time and F/O Young chased one FW down to 2,000 feet. It burst into flames and dived into the ground. Meantime another FW.190 was firing at Young. He turned and got on its tail. The enemy pulled up, jettisoned his hood, and got half way out of the cockpit but was unable to escape before his aircraft hit the deck and burst into flames. Young had now destroyed at least four enemy aircraft and wrecked some 75 transports. A week later he was listed in the London Gazette as a recipient of the D.F.C. F/O J. P. Lumsden attacked an FW that was engaging a Spitfire. The enemy broke downwards and Lumsden pursued him firing intermittently until the pilot baled out. Damaged claims were made by F/Os L. H. Wilson and G., A. Costello, In two days the Caribous had destroyed six and damaged as many more for no loss.

On the morning of October 8th a period of fog and rain set in that lasted for a week. The aerodrome became a veritable sea of mud and, though the work of laying wire tracking on the runway was carried on in the downpour, the strip remained unserviceable. Pilots filled in the time by visiting neighbouring gun sites, going to nearby towns, or seeking relaxation in the mess. On the 13th the pilots of the Grizzly Bear Squadron flew to England, the other units in the Wing leaving the next day for Volkel where they were welcomed by two thunderous roars caused by the explosion of an ammunition truck that blew up some few hundred yards away from the billets of the Rams, the only unit not living under canvas.

The three squadrons at Volkel got off to a good start against ground targets on the isth. The Rams dive-bombed an embankment near Veenendaal on their first show, damaging five vehicles as they returned, and hitting a rail junction at Deventer in the lunch hour. The Falcons attacked another junction west of Ede and damaged three locomotives, later bombing the junction at Deventer, destroying a headquarters at Windesheim and strafing motor transport. But the most sensational show was that of the Caribous who on their first effort, led by F/U Goodwin, the Wing's ace low-level fighter pilot, attacked a locomotive and fifteen cars with cannon fire. Three cars exploded and three hours later they found all fifteen cars destroyed and explosions still taking place. They also strafed other rail and road transport. This was the show that got Goodwin a Bar to his D.F.C.

Junctions, bridges and embankments in western Germany were successfully attacked on the 18th by all three squadrons and again locomotives and road transport were destroyed and damaged. The next day they made history when all aircraft were despatched with 1,000 lbs. of bombs each. This was the first time a load of this magnitude had been carried by the aircraft of this Wing. Intense flak was reported by all pilots. It was noteworthy that at the time Bomber Command crews were reporting a decrease in the amount of flak over the targets they attacked in the interior of Germany and it was concluded that the Germans, unable

through lack of fuel to offer effective fighter opposition to strafing attacks, were being forced to rely more and more upon flak defences on the western front. On the 22nd pilots of the Caribou Squadron fell for an old trick. While looking for a rail target of opportunity they sighted an airfield in some woods north-west of Dorsten with about thirty aircraft dispersed at the northwest and southeast ends of the field. Diving from 8,000 to 3,000 feet they released their bombs and then realized that the aircraft on the ground were dummies.

The Rams left for England on October 24th, leaving only two squadrons in the Wing. Owing to the hazy weather during the rest of the month the Falcons and Caribous had to despatch their aircraft by sections of four instead of in squadron formation. The intelligence section was nearly as busy as it had been in the old days in Normandy though on five of the last eight days there was no flying. It would be impossible to list all the objectives attacked but never did our aircraft return from an operation without reporting an attack on bridges, junctions, railways, locomotives, trains, both freight and passenger, motor transport, armoured cars, barges and tugs. Once they dropped bombs all around a passenger train; again, they unloaded just as two trains were passing each other. On the 28th they attacked two R.D.F. stations and wiped out the crews manning the flak guns on a freight train. Nor did they fail to gain successes in the air.

On the seventh operation undertaken by the Falcons on the 28th Don Laubman, after attacking a train at Dorsten, sighted an aircraft below. Diving, he lost the enemy behind cloud but, continuing to ground level, he saw two FW.190s which he chased across the Ruhr. As one of them was about to land near Krefeld he closed in and forced him to crashland, the nose of the FW gouging into the ground and much smoke coming away from the wreckage. He then attacked the other which went into the ground and exploded. Laub-

man, who had just been awarded a Bar to his D.F.C., was now the leading scorer among Canadian pilots on operations at that time, his score amounting to fifteen destroyed and three damaged. Ten of these victories were obtained in a period of five weeks.

Fifteen minutes after Laubman had landed Charron, now a F/L, took off and very shortly sighted 'a train near Borken. As the section dived to the attack four Me.109s passed below, so the Spitfires released their bombs on the train and continued their dive to attack the Messerschmitts. Two of the enemy were chased by Charron for some distance; he fired at the first and the pilot jumped out. He then closed on the other and the pilot of that one also jumped. Charron's Number 2, P/O Busby, had just pulled up from his bombing run when he saw an Me.109 that had followed him down. As P/O W. Cowan, No. 3, broke off his attack on this Me. Busby gave it a burst and saw strikes around the cockpit and fuselage. A second burst caused the enemy to shed pieces of metal and to emit white smoke. To avoid a collision the attack was broken off and the Me. spiralled down, probably destroyed.

October 28th was also an eventful day for the Caribous. In 44 sorties they dropped 86 bombs, cutting eight railways, destroyed one locomotive and damaged seventeen others, destroyed or damaged 33 freight cars, and scored four flamers, two smokers and four damaged amongst motor transport. This was good work but as F/L Randall was attacking a locomotive near Dorsten his aircraft was damaged. He reported that his rad temperature was off the clock but, under the guidance of S/L W. A. Olmsted, D.F.C., newly appointed commanding officer of the Caribous, he gained height and tried to make base. His engine soon packed up and he was forced to bale out near Wesel. Other pilots commented that his procedure throughout was cool and flawless, and the Squadron lost an excellent flight commander. At 1400 hours four aircraft, led by F/L

Jowsey, went to attack a level crossing at Dulmen. They got a direct hit and damaged a train nearby, but flak hit the aircraft of F/O Costello who failed to return and was subsequently reported killed. On the same day the Squadron lost the services of its ace pilot, F/O Goodwin, who was tourexpired. He had accounted for 163 transports destroyed or damaged and more than zo locomotives. He had wiped out a large ammunition train and destroyed two enemy aircraft. At the same time another outstanding dive-bomber, F/L B. E. Middleton, D.F.C., completed his tour. The next day S/L Olmsted had a narrow escape when a 500 lb. bomb that hung-up dropped when he was attacking a truck. The truck was destroyed by a direct hit but Olmsted's aircraft was damaged by the blast. He was forced to bale out and landed on a house-top where he was rescued by an army captain and returned to camp. It was on this day too that the Grizzly Bears, who had just returned from England, lost F/O T. F. Kinsler, after bombing a train at Metelen.

During the first three weeks of October the MacBrien-Johnson Wing and the Winnipeg Bears, who had just arrived from Hawkinge and been posted to an R.A.F. Wing, operated from Grave near the Dutch-German border. There they endured appalling conditions. There was almost continuous rain for a fortnight. The sun appeared only for brief periods and was insufficient to dry up the ground. By the list it was found difficult to move transport along the perimeter track and the tractors of an Airfield Construction Company had to be called in to move two-wheel-drive vehicles on the roadway. The river, normally about ten feet wide and two feet deep, flooded to a width of 200 yards and covered the road with eight inches of water. Where there was no water there was deep slimy mud. The surrounding countryside could not provide more than a quarter of the billets required with the result that the majority of the personnel had to live in tents. There was little heating and fingers soon got numb in the rain and chilly dampness. The

Airfield Construction Company found it impossible to continue work on the runways. Add to all this the fact that the airfield was frequently bombed by the enemy. Under these circumstances it is surprising to find that any operations at all were carried out. Yet patrols were flown and a number of victories over the enemy obtained.

October 2nd was a big day for the Wing, its total of destroyed enemy aircraft being boosted to loo. In addition the airfield was bombed five times, causing casualties and slight damage. North of Nijmegen, on their second patrol of the day, the Red Indian Squadron encountered about 175 FW.190s and Me.109s, two of which were destroyed by F/L Gilmour, a third one being damaged also. Early in 1946 Gilmour was awarded a gong for this. F/O Calvert probably destroyed one FW.190 and damaged another while F/L G. M. Smith, F/O W. F. Cook and WO S. C. Price each claimed a damaged. Cook who had been shot down in October, 1943, and was now on his second tour of operations was awarded the D.F.C. in December, as also was F/L Smith.

The attack on the airfield began at 1100 hours with the dropping of anti-personnel bombs by a jet-propelled aircraft flying at 3,000 feet. In this raid three pilots were injured and one officer and six airmen suffered wounds of minor degree. Several tents were holed and the kit of several officers and airmen was badly riddled. Slit trenches were dug and tin hats became fashionable. At noon the second attack came but it was wide of the mark. The third attack resulted in a number of deaths among personnel of the R.A.F. Wing on the other side of the airfield and some Dutch civilians living in the vicinity suffered serious injuries. The other attacks were like the second and caused no damage or casualties.

On the evening of October 3rd G/C MacBrien had just completed a talk to the officers when anti-aircraft fire was heard. It was black-out time and an effort was being made

to close the flaps of the tent when a blinding flash occurred. The roar of the accompanying explosion caused the officers to flatten themselves on the floor. It was thought that a bombed-up aircraft had been brought down by anti-aircraft fire but a search of the site of the explosion, a mile away, revealed only a part of an oleo leg, presumably of a Ju.88. Apparently a composite aircraft had been launched against the airfield but the enemy's aim had been poor.

Uneventful patrols on the 4th were followed by more successes in the air the next day. The Wolves, on their third patrol, sighted fifteen Me.109s at 14,000 feet in the Arnhem area. S/L Wood destroyed two and shared a third with P/O R. C. Shannon, Wood's victories contributing to the award of the D.F.C. which he received in December. Another was destroyed by F/O F. W. Thomson and a fifth by P/O M. Reeves. Finally F/L S. Tosh damaged one. The same squadron, likewise on its third patrol of the day, scored again on the 6th when two bomb-carrying Me.109s were encountered at 16,000 feet over Nijmegen. Wood shot down one of the enemy, the other making its escape. Many Me.262s were seen in the course of operations but they were not engaged.

The Winnipeg Bears, who had arrived from England on the 2nd and formed part of an R.A.F. Wing on the same airfield, also shot down four enemy aircraft. An Me.109 was credited to the squadron as a whole when, in attempting to escape, it dived and crashed in flames. F/L J. B. Lawrence and F/O D. W. Whittaker each destroyed an Me.109 and F/L A. R. Speare shot down an FW.190.

On October 8th G/C MacBrien and W/C Johnson almost became casualties as they were proceeding along the road to Eindhoven, vehicles immediately in front and behind them receiving direct hits from shells. During the night there was an alarm when rifle and machine-gun fire was heard. Guards were doubled but nothing untoward occurred. It was subsequently learned that the Grenadier

Guards and a Polish paratroop unit had mistaken each other for the enemy.

Days of no flying or of uneventful patrols succeeded. At 1538 hours on the 12th an Me.262 appeared out of cloud over the airfield at 8,000 feet. It released two bombs one of which landed off the airfield causing no damage. The other exploded in the middle of the City of Oshawa dispersal. Five airmen were instantly killed and ten others injured. One Spitfire was destroyed and nine others were damaged. A quantity of ammunition and petrol and a number of tents were destroyed. The Fire Section did an excellent job, despite exploding ammunition, and quickly got the fire under control. Two pilots, F/Ls McColl and Harling also risked exploding ammunition to taxi aircraft away from the danger zone. Other bombs, dropped the next day, missed the airfield by a considerable margin but one of these made the main road impassable for about half an hour. A last echo of this sort of thing occurred on the 20th when one airman was killed, eight others injured and eighteen aircraft damaged. A major mystery was the disappearance of F/Os L. P. E. Piche and A. J. Horrell of the Hornets who left by Auster for Antwerp on the 11th. They were posted as missing.

While the Wing was at Grave there were no further engagements with the enemy, though ground targets were attacked with success. The outstanding event of these last days in Holland was an escort on the 13th when His Majesty the King flew from Eindhoven to Brussels.

The first thing everybody learned when the Wing moved to Melsbroek, near Brussels, on October 23rd was that they were not out of range of the enemy since flying bombs (V.I) were being launched against the Belgian capital. Some of these missiles landed near the aerodrome. On the 24th operations, practically impossible up to that date because of the weather and other difficulties, began with escort duties to a Mitchell bomber wing. Patrols also were flown, on one of which on the 29th six members of the

Wolf Squadron sighted upwards of fifty FW. 190s at 24,000 feet over Venlo. Four pilots were unable to jettison their tanks so that only two, F/L W. J. Hill and P/O Mac Reeves, were able to attack. The former shot down two of the enemy and damaged another while Reeves destroyed one and damaged one. Since two were fighting fifty this was regarded as an extraordinary accomplishment.

The Winnipeg Bears, after their moment of triumph on the 5th, flew a round of patrols on days when flying was possible. They soon learned to avoid the positions heavily defended by flak and found solace in strafing the elusive motor transport and canal barges that occasionally hove into view. After the other squadrons had left Grave they remained to endure the mud for another week and then they too packed up and moved to Diest. Operations from that airfield began on November 1st.

The McGregor-Russel Wing at Volkel lost the Falcon Squadron temporarily on November and when it was taken off operations to make ready for a three week course at Warmwell, the Rams returning on the 4th. Down to, and including, the 11th the Wing had four or five full days before a period of bad weather set in that made operations impossible.

Dive-bombing and armed reconnaissance operations on the first two days ended with an attack by four aircraft of the Caribou Squadron on a junction near Winterswijk. They released their bombs in the target area and then sighted four FW.190s flying on the deck near Koesfeld. They attacked the enemy and F/O J. P. Francis, flying his first operational sortie, destroyed one while F/L Jowsey destroyed another, bringing his total to five destroyed.

The Germans celebrated the return of the Rams and the visit of Cardinal Villeneuve on the 4th by sending over two Me.262s with anti-personnel bombs, which caused a few injuries but killed nobody. Forty-eight hours later they tried again but had even less success. The 4th was highlighted

too by the arrival of a Mitchell bomber which, apparently shot up, came in for a one wheel landing. Much to everyone's surprise two of the crew baled out when only a few feet from the ground, one being killed instantly and the other subsequently dying in hospital. Some 23 operations were flown that day. At 0830 hours the Caribous, led by S/L Olmsted, took off on a bombing mission to destroy the fly-over at Dulmen. Direct hits were registered on the double rails, a locomotive and a truck being destroyed by the violence of the explosion. Unhappily F/O Young was caught by the debris as he followed his commanding officer down. He climbed to 800 feet where it was seen that his aircraft was on fire. He rolled over, started to dive, and at 500 feet, baled out. His parachute opened at 100 feet and he was seen to land safely. Later that same day the Caribous had a spectacular success when they blew up an ammunition dump. Two days later the Rams got a similar satisfaction out of blowing up another dump north-east of Utrecht. The Bears strafed an airfield with a hangar and twin and singleengined aircraft but this proved to be a dummy. The trains, junctions, bridges, and oil dumps they bombed were real, however.

On the second operation on November 7th the Caribous ran into difficulties. F/O Hoar was detained on take-off, could not catch up but bombed a train near Wesel and damaged a locomotive. The other pilots in a 70 m.p.h. wind made three cuts in the line at a junction and damaged two more locomotives. While this was taking place F/O W. S. Curtis was seen to crash whether as a result of flak or not being uncertain.

There were 57 sorties on the 10thand iog on the 11th, mostly with excellent results against ground targets, but bad weather set in on the 12th. An outstanding achievement on the 20th was a display of skill and coolness by F/O G. I. Doyle whose aircraft, carrying 1,000 lbs. of bombs, took fire on take-off. He brought his aircraft in for a good land-

ing without hurting himself or doing damage to his kite.

The second operation on the 16th took the Grizzly Bears to a fly-over at Winterswijk. They encountered accurate light flak from a wood east of the railway and F/L Mercer's aircraft was hit. As a result he baled out four miles south of Bocholt, the top of his parachute being subsequently seen in a tree.

The 19th was quite a busy day, 107 sorties being flown. The Falcons returned, to operations but suffered the loss of four pilots. The squadron's record from D-Day up to this time stood at 58 destroyed and 22 damaged for a loss of 12. On the fourth show, bombs were dropped in a strong wind on the rail lines around Geldern and three motor transports were damaged in addition. F/O Bellingham failed to return. At 1330 hours the squadron despatched four pilots to bomb a railway bridge near Veen. They scored a direct hit on the line just off the bridge and, then formed up for a reconnaissance on the way home. Sighting forty FW. 190s they attacked but only one pilot returned to base. F/L Charron, F/O J. W. Johnston and WO J. A. Comeau were posted as missing. The next day an unfortunate accident occurred when a Typhoon, its engine having cut on take-off, tried to make a wheels-up landing but was thrown off course by a gust of wind. It ploughed into a Spitfire of the Ram Squadron and killed an airman.

There were sunny skies and fast-moving clouds over base on November asst and the Wing got its tooth Hun. The Rams started the day with a projected attack on a railway near Rheydt. Clouds obscured the target and they headed towards Wesel. There they encountered 24 FW.190s. F/L W. C. Connell attacked the hindmost of them as they made a dive for the deck. The FW burst into flames and crashed. F/L Sheehy also attacked the last one of the gaggle and saw the enemy burst into flames and crash. Neither pilot knew that the other had attacked and each was somewhat chagrined to learn that his victory was shared. F/O K. Gallin-

ger and F/O Husband each damaged one. Twenty minutes after the Rams had taken off the Grizzly Bears set off for a rail junction at Xanten but they ran into a score of FW.190s which they attacked head-on. F/L H. A, Crawford destroyed one. Both Rams and Bears claimed the trophy which the Intelligence Officers had agreed to present to whichever unit shot down the Wing's tooth victim. Consultation of the log book of the Ground Controller merely showed that the times of combat were approximately the same. G/C McGregor solved the difficulty by. offering a duplicate trophy and both squadrons were credited with the tooth Hun. Crawford was shortly afterwards awarded the D.F.C.

Duff weather prevented flying for three days and it did not improve very much on the 25th, when the Caribous rejoined the Wing. On that day the Grizzly Bears divebombed a railroad south-west of Winterswijk and destroyed a locomotive between Borken and Dorsten. A flak car, however, was attached to the locomotive and its fire caught F/O Pow who crashed in enemy territory.

The four squadrons flew a hundred sorties on the 26th cutting eight railways, destroying one locomotive and damaging five more, attacking motor transport and barges and destroying one enemy aircraft. On their fifth operation the Falcons despatched five pilots to bomb a bridge south of Venlo. They scored many near misses and on their return sighted three FW.190s which had the markings of American type Mustangs, a black cross being substituted for the star. Picking out the starboard one as they turned to port F/O F. T. Murray saw flames and smoke come from its cockpit as it rolled over and went straight down. As he turned to meet another the remaining aircraft opened up and escaped. The rest of the month, though ground targets were attacked successfully every day, was relatively uneventful.

Early in November it was decided that two R.A.F.

squadrons would be temporarily added to the MacBrien-Johnson Wing which would in turn be moved from Melsbroek to Evere. Apart from providing escort to Mitchell bombers, little flying was done before the move and none of it was eventful. After the move, which took. place on the 4th, there was constant bad weather and, though patrols were flown and escorts were provided, enemy aircraft failed to put in an appearance. An unusual mission was undertaken on the 18th when the Wolves were employed on a riickeling or leafletdropping raid. Towards the end of the month the City of Oshawa Squadron, now commanded by S/L Mitchner, formerly of the Red Indians, left Evere for a short course in England. About the same time S/L J. D. Browne, D.F.C., took over the command of the Red Indians from S/L Prest.

Since the squadrons were nearer to Brussels, personnel had plenty of opportunity to see the Belgian capital though on the 18th it was put out of bounds for a time while the resistance groups were being disarmed. The city was under continuous attack by V.1 bombs which frequently passed over the Evere airfield, causing considerable activity on the part of the anti-aircraft defences in the vicinity.

In the last week the Wing lost two pilots. On the 21st, as the result of a collision in the air, F/O A. W. Collins of the Oshawa Squadron was killed while five days later F/O W. H. Egan of the Red Indians crashed and subsequently died in hospital. F/O A. M. Thomas, who baled out on the 30th, and A/V/M H. Broadhurst, C.B., D.S.O., D.F.C., A.F.C., Air Officer Commanding the Group, who crashlanded on the 24th, were more fortunate in escaping without injury.

The Winnipeg Bears, hampered considerably by bad weather, moved to Diest in the first three days of November. They liked their new quarters and the billeting arrangements but the pilots were somewhat shaken by the shortness of the landing strip and the fact that it ran uphill.

Furthermore the strip was in bad condition and it became necessary to lay down tracking. This and the continued duff weather limited operations. The few sorties that were made resulted only in the strafing of occasional ground targets.

For the first six days of December the McGregor-Russel Wing remained under canvas at Volkel, moving thence to Heesch on the 7th. The weather was poor in that week but on the 3rd E. G. Lapp, now a S/L, who succeeded S/L Hayward of the Grizzly Bears and who was shortly awarded the D.F.C., and F/L E. T. Gardner destroyed one of a pair of Me.109s seen at 10,000 feet over Venlo. A line near Viersen was bombed and cut by the same squadron and another north-east of Koesfeld was cut by the Caribous. Despite gales on the following day eight more lines were cut, three by the Rams and five by the Falcons, all in the Bocholt-Borken area.

The Rams stated that December 5th was their busiest day in two months, rail embankments, junctions, marshalling yards and, factories in western Germany all getting attention. Comparable successes were obtained by the other squadrons but the Falcons in addition destroyed two enemy aircraft and probably destroyed three for the loss of one pilot, F/O C. W. Glithero, who was thought to have shot down an Me.109 and to have crash-landed because of shortage of petrol. Glithero was later reported as a prisoner of war. The third show of the day was a bombing attack oo a target south of Koesfeld. As our pilots were returning to base they met fifty plus Me.109s south of Wesel. The enemy were flying at 17,000 feet above 10/10ths cloud. F/L Banks picked a straggler whose cockpit exploded under fire. Banks then got into position and attacked another and this too exploded. In both cases it was believed the enemy pilot was killed and both aircraft went down shedding pieces and pouring smoke, but the claims were for "probably destroyed" only. Another Hun was attacked by F/O Murray. Strikes were observed on the engine and it went

down smoking badly. A second enemy was then attacked by the same pilot, and this one exploded and went down in flames. Murray then attacked a third one which also went down in flames to make his score two destroyed and one probably destroyed.

Activities at the new station, Heesch, began on December 8th with the cutting of sixteen rails. In addition the Rams damaged a locomotive while the Caribous got fourteen trucks and damaged nine others and a barge. Similar successes were obtained on the 10th but in addition the Rams destroyed an Me.109 and damaged two FW.190s. On this occasion the squadron had as its objective a railway north-east of Enschede. After the bombing, which was successful, they sighted two gaggles of Huns, four Me.109s on the deck and eight FW.190s at about 5,000 feet. F/O D. F. Church dived on them and as they broke he scored strikes on the fuselage of an Me.109 which, after another squirt, burst into flames and went down. F/O G. D. Cameron damaged two FWs which may have been destroyed. A fine piece of work was done by this squadron when a section led by F/O Husband wrecked a bridge on the Twente Canal which the Wing had been trying to destroy for some time.

The 14th was an eventful day. Not only were enemy aircraft destroyed but the score put the Wing ahead of all others in the Second Tactical Air Force and made the Falcons the leading squadron. There was fog in the morning but this cleared up towards noon enabling S/L Everard of the Rams to take a section on a bombing mission against a rail junction northwest of Rheine. The four bombed a train and obtained a direct hit, burning up two cars and making a large crater on the line. While the attack was going on F/L L. W. Woods and F/O Church sighted four Me.109s at 15,000 feet flying north-east. As the enemy tried to break into the Spitfires one spun down out of the turn and was immediately attacked by Church. When he had finished with it the Me. went straight down pouring smoke and gly-

col. It was not seen to go in and so was claimed as a damaged only. A second enemy aircraft broke and spun, recovered and dived vertically with Woods on its tail. This too was damaged but its camouflage against the background of trees enabled it to escape. The Falcons also bombed a train heading southwest from Bocholt, damaged a factory with a direct hit, and silenced a flak position. They then encountered twenty Me.109s and FW.190s south of Koesfeld which broke up into sections. Singling out a lone Me.xo9 S/L J. N. Newell, who was attached to this squadron, attacked and the enemy aircraft burst into flames and broke in two when it hit the ground, the pilot baling out at z,000 feet. F/L R. N. Earle damaged an FW.190 and F/L F. H. Richards caused an explosion on another FW.190 which dived into the ground. The Caribous successfully attacked trains, railways and marshalling yards but while strafing a train in the Groenlo area S/L Olmsted's aircraft was believed to have been hit by flak. His engine started cutting and, although he tried to go on, he finally had to bale out near Grave. He landed safely, waved to the rest of his section, and was subsequently picked up by the Army and returned to his unit. His second tour of operations was now completed, his successor being F/L Jowsey; a D.S.O. was added to the D.F.C. & Bar that Olmsted already had.

Sweeps and rail-cutting missions with days of little or no flying resulted in nothing eventful until the 23rd when the Grizzly Bears, while on a sweep just east of Eindhoven met two Me.262s, one of which was damaged by F/L J. J. Boyle. Then on Christmas Eve the Falcons scored again with two destroyed, two damaged and a probable. On their second sweep of the day they saw 45 FW.190s south of Julich. F/L Fox, whose D.F.C. came through on Christmas Day, and F/L M. D. Boyd each destroyed one, S/L Dean Dover probably destroyed a third and damaged one, while F/L Earle also damaged one.

Except for moderate feasting, Christmas Day was like

any other day on the Western Front and both Rams and Bears added to the Wing total. Once or twice in the course of the month enemy aircraft had visited the station to reconnoitre and' now, just as the airmen were queueing up for their Christmas dinner, an Me.262 crossed the field. Everybody dropped to the ground. F/L Boyle of the Grizzly Bears was in the circuit at the time waiting to land and promptly shot the enemy down. The Me. crashed about five miles away. The Rams, who made 36 sorties that day, were on their second show in the Duisburg area when two Me.109s hove into view and were immediately attacked and destroyed. F/L. MacKay fired on both but saw strikes only on the second one which shed pieces of its wings and its coupé top, caught fire and crashed, its pilot baling out. The other was destroyed by the joint efforts of F/L Connell and FS A. K. Woodill. From this show H. J. Everard, now a S/L, failed to return, other pilots being of the opinion that his aircraft was damaged by the debris from one of the Me.109s. He baled out south of Venlo. He was succeeded in command of the squadron by S/L W. T. Klersy, D.F.C. & Bar.

While the 26th was a busy day it was comparatively uneventful, though many sorties to the scene of the German thrust in the Ardennes on the American front were made. F/L Ireland celebrated taking over the command of "A" Flight in the Grizzly Bear Squadron by damaging one Me.262. The next day the Bears scored again. Taking off at 1025 on a sweep of the Burbuy-Jülich area they ran into an encounter between Me.109s and an assortment of Thunderbolts, Lightnings, and Mustangs. R. M. Cook, now a F/L, Ireland and F/O Graham each shot down one of the enemy aircraft. A squadron sweep of the Rheine airfield area by the Falcons resulted in the appearance of three Me.109s which attempted a bounce. One, the pilot of which baled out, was destroyed by F/L Fox. A similar sweep of the same area by the Caribous netted an Me.262 which was

damaged by F/O M. A. Perkins.

December 29th was a remarkably successful day. On their second show the Rams were bounced by about twenty FW.190s at 20,000 feet in the Enschede area. F/O Murray sent one of them down smoking badly and was credited with a destroyed, F/O Cameron destroyed another while P/O D. M. Horsburgh and F/O A. R. W. McKay each damaged one. Unfortunately F/L Paddy Sheehy was lost. The Falcons on a fighter sweep of the MünsterRheine area encountered a Ju.88 which F/L Fox shot down, forcing it to make a wheels-up landing. The Caribous had no luck but the Winnipeg Bears, who had joined the Wing on the 27th, damaged two FW.190s when S/L Lawrence and F/O J. A. W. Lalonde were conducting a two-man patrol of the Niimegen area. The most remarkable achievement of the day, however, and it was believed to be a record for both R.C.A.F. and R.A.F., was the destruction of five enemy aircraft on one sortie by F/L R. J. Audet of the Grizzly Bear Squadron. The day had begun for this squadron with the damaging of an FW.190 by F/O R. A. Gilberstad who was forced to flee from two others when he ran out of ammunition. His sharp evasive tactics were so good that one of the pursuing FWs, while attempting to catch him, spun into the deck and was destroyed. On the second operation F/L Ireland, later awarded the D.F.C., and F/L Cook each destroyed an Me.109, a third one escaping. Meantime another section encountered a mixed gaggle of twelve FW.190s and Me.109s. Of these Audet destroyed three FW.190s and two Me.109s in less than two minutes while F/O R. C. McCracken, later awarded the D.F.C., destroyed another Me.109 to bring the day's bag for this squadron to nine destroyed and one damaged. During the day the Grizzly Bear Squadron also found time to destroy four locomotives and damage 39 goods cars and five more locomotives Audet's victories, all of which were confirmed in the Log of Second Tactical Air Force, were set forth in his personal combat

# report in the following terms:

I was leading Yellow section of 411 Squadron in the Rheine/ Osnabrück area when Control reported Huns at Rheine and the Squadron turned in that direction. An Me.262 was sighted and just at that time I spotted 12 e/a on our starboard side at 2 o'clock. These turned out to be a mixture of approximately 4 Me.109s and 8 FW.190s.

#### 1st Combat

I attacked an Me.109 which was the last a/c in the formation of about 1z all flying line astern. At approximately 200 yards and 30° to starboard at 10,000 feet I opened fire and saw strikes all over the fuse-lage and wing roots. The 109 burst into flames on the starboard side of the fuselage only, and trailed intense black smoke. I then broke off my attack.

# 2nd Combat

After the first attack I went around in a defensive circle at about 8500 feet until I spotted an FW.190 which I immediately attacked from 250 yards down to 100 yards and from 30° to line astern. 1 saw strikes over cockpit and to the rear of the fuselage. It burst into flames from the engine back and as I passed very close over top of it I saw the pilot slumped over in the cockpit, which was also in flames.

# 3rd Combat

My third attack followed immediately on the 2nd. I followed what I believed was an Me.109 in a slight dive. He then climbed sharply and his coupé flew off about 3 to 4,000 feet. I then gave a very short burst from about 300 yards and line astern and his aircraft whipped downwards in a dive. The pilot attempted or did bale out. I saw a black object on the edge of the cockpit but his 'chute ripped to shreds. I then took ciné shots of his a/c going to the ground and the bits of parachute floating around. I saw this aircraft hit and smash into many flaming pieces on the ground. I do not remember any strikes on his aircraft. The Browning button only may have been pressed.

#### 4th Combat

I spotted an FW.190 being pursued at about 5,000' by a Spitfire which was in turn pursued by an FW.190. I called this Yellow section pilot to break and attacked the 190 up his rear. The fight went downward in a steep dive. When I was about 250 yards and line astern of this 190 I opened fire. There were many strikes on the length of the fuse-lage and it immediately burst into flames. I saw this FW.190 go straight into the ground and burn.

#### 5th Combat

Several minutes later while attempting to form my section up again I spotted an FW.190 from 4,000 feet. He was about 2,000 feet. I dived

down on him and he turned in to me from the right. Then he flipped around in a left hand turn and attempted a headon attack. I slowed down to wait for the- 190 to fly in range. At about 200 yards and 20° - I gave a very short burst, but couldn't see any strikes. This a/c flicked violently, and continued to do so until he crashed into the ground. The remainder of my section saw this encounter, and Yellow 4 (F/O McCracken) saw it crash in flames.

Thick ground fog and low cloud kept the Wing from flying on the 30th but on New Year's Eve they were out again to add to their scores. The Grizzly Bears and the Caribous were successful. The Bears made a sweep of the Rheine-Munster area and F/L Boyle sighted a Ju.88 which he destroyed, pilot and navigator both baling out. Shortly afterwards a long-nosed FW.190 attempted a bounce but was shot down by F/O Graham. The Caribous, returning from a sweep of the same area, sighted upwards of fifteen Me. togs. The commanding officer, S/L Jowsey, called a turnabout on the completion of which F/O J. G. Doyle found himself on the tail of two enemy aircraft. He fired, apparently killing the pilot of one which he followed down until it blew up and disintegrated. F/L D. M. Pieri chased another one at which F/O Perkins had been firing. Its nose dropped and it crashed into a hill and was awarded as "destroyed, shared". After a hectic chase F/L R. C. Smith watched another one crash in a field and blow up while F/O G. H. Watkin chased a fourth one into cloud before it was seen to break into flames and leave the cloud in a slow spin. WO Thomas of the Rams gave the wing personnel a thrill when he tackled a V.1 bomb, scoring a nice hit and causing it to nose over and plunge harmlessly into a field. The day was marred for the Falcons when F/L Earle crashed while attacking a ground target and was believed killed.

Until December 27th the Winnipeg Bears had been at Diest where they had encountered all kinds of trouble with mud, a short and unserviceable runway, and bad weather.

They had some success against ground targets but encountered no enemy aircraft until a sweep in the afternoon of Christmas Day when F/L D. Sherk sighted an FW.190. It was flying some ten miles south of Düren and took no evasive action. When it was attacked its pilot baled out but his parachute failed to open. This was the tooth victory for the R.A.F. Wing since D-Day. After the 27th the Squadron's record is included in that of the McGregor-Russel Wing.

For nearly half the month of December the MacBrien-Johnson Wing was grounded by bad weather, one pea-soup fog lasting from the 19th to the 22nd inclusive. Operations were also cut down by the absence of squadrons in England for air-firing courses or refitting. Sorties on the first two days proved uneventful. Then, in duff weather on the 3rd, two squadrons, the Red Indians and the Hornets, made a sweep of the Dulmen area, the majority of the aircraft having to put down in Holland. Five of the twelve Indians attempted to reach base but one, F/O Dick Veenis, crashlanded some miles to the south and F/O W. Warfield apparently, crashed and was killed in a field near Charleroi. F/L E. S. Smith crashlanded at Eindhoven. As a result, and because two squadrons were in England, the whole Wing had only nine serviceable aircraft on hand the next morning.

Operations on December 5th began with a sweep in the RheineMünster area. W/C Johnson led the Indians while S/L Sager, formerly of the Oshawa Squadron, led the Hornets. They crossed the bomb-line at 10,000 feet and then, leaving one section as top cover, went down to the deck near Koesfeld. Targets of every description were seen and attacked with cannon and machine-guns. Five trains and numerous railway tank cars, trucks, bowsers, factories, billets, hangars, troops and gun positions were all strafed. Flak and small arms fire met them at many places and severe icing and low cloud added to their handicaps. Despite this they suffered no casualties.

On the 8th the Wolves went into action with their new aircraft and with the Oshawa Squadron, which had just returned from an air-firing course in England, engaged in two sweeps of the Rheine- Munster area. On the second mission they sighted three Me.109s near Wesel, F/L Foster of the Wolves destroying one. The Oshawa pilots then sighted two more Me.109s, one of which S/L Mitchner destroyed while F/O A. G. Borland damaged the other. F/O W. J. Simpson failed to return from this operation and later was reported a prisoner of war.

The next important operational activity was on Christmas Eve when the Oshawa Squadron, led by F/L Russell, did a patrol and ran into intense light flak. Five aircraft were hit and two pilots, F/O J. R. Beasley and Sgt. J. G. M. Patus, failed to return. The latter was subsequently reported safe in England. Two other pilots had to crash-land.

There were patrols on Christmas Day by all squadrons, except the Hornets who were in England. On the second "do" S/L J.- E. Collier of the Wolves shot down in single combat one of three Me.262s west of Eupen. In April 1945 his score of two destroyed and a number damaged brought him the D.F.C. During the morning F/O Sandy Borland of the Oshawa Squadron went out on a sortie but failed to return and was reported missing.

On Boxing Day the Red Indians got back into the picture when six of their aircraft were bounced near Trier by two Me.109s. Both Huns were shot down, S/L Browne getting one and F/O DeCourcy the other. The City of Oshawa Squadron rounded out the year when F/O R. W. Tapley knocked down an FW 190 on New Year's Eye

# FIGHTER/RECONNAISSANCE OPERATIONS

September-December, 1944

At the beginning of the sixth year of the war, owing to



(1) S/L M. D. Boyd, D.F.C., S/L D. H. Dover, D.F.C., and F/L C. W. Fox, D.F.C. (2) A group of fighter pilots: (clockwise from the left) F/O R. W. Lawson, P/O F. B. Evans, F/O A. F. Halcrow, FS D. M. Wilson, S/L W. T. Klersy, D.S.O., D.F.C., and (back to camera) F/O W. R. Tew, D.F.C. (3) S/L D. C. Laubman, D.F.C. (4) S/L D. C. Gordon, D.F.C. (5) F/L R. R. Bouskill, D.F.C. (6) F/L R. J. Audet, D.F.C. (7) W/C B. D. Russel, D.S.O., D.F.C. (Portrait by F/L R. S. Hyndman). (8) Four pilots of No. 411 Squadron: F/L J. Boyle, F/O C. D. Wilson, F/O A. C. McNiece and F/L R. A. Gilberstad. (9) "Buzz-bomb overhead"; Heesch, Holland. (Water colour by



Pilots of No. 403 Squadron in Belgium.
 Members of No. 416 Squadron.
 S/L
 H. P. M. Zary, D.F.C. (Chalk drawing by F/O D. K. Anderson.)
 F/O A. V. R. Sainsbury (rear) and S/L J. E. Collier, D.F.C. (Chalk drawing by F/O Anderson.)
 S/L J. D. Mitchner, D.F.C., of Saskatoon.
 W/C J. E. Johnson, D.S.O., D.F.C., chatting with G/C P. S. Turner, D.S.O., D.F.C.
 W/C J. F. Edwards, D.F.C., D.F.M., of North Battleford.
 Four pilots of No. 402 Squadron: S/L J. B. Lawrence, P/O W. A. Peters, S/L L. A. Moore, D.F.C., A.F.C., and WO C. H. Davis.
 Browne, D.F.C., S/L R. A. Buckham, D.F.C., and F/L R. G. Middlemiss, D.F.C.

the advance of the allied armies, the R.C.A.F. Reconnaissance Wing, under the command of G/C E. H. G. Moncrieff, A.F.C., with W/C R. C. A. (Bunt) Waddell, D.F.C., as Wing Commander Flying, found itself far behind the zone of operations. The Imperials, or City of Sarnia Squadron, commanded by S/L R. T. Hutchinson, D.F.C., were, for a time, detached to the McGregor Wing and accompanied that wing as it moved up to Brussels. The City of Toronto Squadron, commanded by S/L R. A. (Dick) Ellis, D.F.C., and- the City of Sudbury Squadron, commanded by S/L F. H. (Chesty) Chesters were at St. Honorine de Ducy near Caumont whence they moved to the vicinity of Evreux some sixty miles west of Paris. This coincided with the beginning of the drive by the British Second Army which severed the German Fifteenth Army from its communications and forced it to- retire northwards. The route followed took the squadron personnel through scenes where bitter fighting had taken place, Flers, Argentan, Laigle, Verneuil and Nonancourt. Burnt-out and wrecked German tanks, trucks, mobile guns and artillery littered the roads of the retreat from the Falaise-Argentan pocket, speaking volumes for the work of the Typhoons and artillery and bearing mute testimony to the accuracy of the information forwarded to the Army by aerial reconnaissance.

Everywhere en route the men encountered demonstrations of enthusiasm by the civilian population. One jeep, stopping for a few minutes at one of the towns, was attacked by small children who wished to shake hands and kiss the Canadian airmen, at the same time putting in the usual request for chocolate and "cigarette pour papa". It was noted that there was much more friendliness than in the Normandy area, fruit, fresh tomatoes and even the elusive egg being freely bestowed wherever the convoy stopped.

The new aerodrome at Evreux was situated in a wheat field, the surrounding landscape being very flat and almost bare of trees. Though everybody seemed to be delighted with the new location, and the proximity of Paris resulted in frequent trips to see the sights, difficulties were encountered in obtaining supplies. Ration stores were 25 miles away and the post office was at Amiens 120 miles distant. These were inconveniences about which there could be no grievance, however, since they were occasioned by the rapid advance of the army—so rapid that in a matter of days the tactical reconnaissance squadrons were again out of range of the fighting front.

The high level photography undertaken by the unarmed Spitfires of the Toronto Squadron during the month was in part for the construction of the maps that were used in the Rhine crossings in March 1945, in part the daily cover of battle positions for the detection of enemy mine fields, gun positions, road blocks and other defensive measures. Tactical reconnaissance aircraft of the other two squadrons engaged in low-level oblique photography, visual reconnaissance and artillery reconnaissance. Sometimes they worked with a contact car or army scout car to report what was visible in front of advancing troops.

For the first week in September bad weather interfered with operations, though on the 4th F/L L. W. Seath made the longest trip ever made by a member of the Toronto Squadron in a Spitfire, returning to base in darkness after a flight lasting 4 hours and 9 minutes. He had only fifteen gallons of fuel left when he landed.

During the next twelve days there were signs of preparation for the great airborne expedition to eastern Holland—the Arnhem-Nijmegen landings. Photographs were taken of Rotterdam, Tilburg, Nijmegen, Brussels, Antwerp, Arnhem and the rivers Maas, Nethe, Waal and Scheldt, the results being ferried immediately to Second Army Headquarters. Close watch was maintained on points farther east, particularly the Rhine bridges.

An interesting feature of the reports by the Spitfire pilots of the lôronto Squadron in these days was the frequent

reference made to certain peculiar sky trails. On the 16th F/L H. P. Furniss noted a trail forming at 30,000 feet over Venlo. It was corkscrew in shape, ascending at an angle of 55 to 66 degrees, and was thought to be a V.2 bomb. Other similar trails were seen at various times throughout the month all over southern Holland.

On September 17th the skies above Eindhoven, Grave, Nijmegen and Arnhem were filled with parachutes as the greatest airborne landing up to this time took place. Tactical reconnaissance flights were made by the Mustangs of the Sudbury Squadron but observations of enemy movements were of minor importance only. Valuable information was obtained, nevertheless, about the condition of bridges in the areas where airborne troops had been dropped and this was passed on to the Second Army.

Meantime the Imperials or , Sarnia Squadron, equipped with Spitfires, had been moving forward from St. Andre de l'Eveque to Evere, near Brussels, and thence to Diest, near Louvain, where they were rejoined by the Toronto and Sudbury Squadrons on September list. Morale went up several points as a result despite the rain and mud which made life in tents fairly miserable.

The new airfield suffered much from the constant rain and maintenance crews worked without shelter in an almost continuous downpour. A fitting tribute was paid to the work of these men by a pilot who was asked if he had any misgivings about the performance of the aircraft. He replied, "Not with those kids looking after it; why, I feel guilty if I don't bring old "J" back intact." The conditions in which the men lived were no better than those in which they worked until billets were found for some of them in the surrounding villages.

After the airborne landings conditions were consistently bad except for one or two days. Mud made taxying impossible and returning aircraft had to land at Eindhoven or go on to Brussels because of the sogginess of the landing strip. On one day alone five aircraft were damaged on coming in to land. When flying was possible pilots brought back useful information about enemy movements, the condition of bridges, fires in marshalling yards, the erection of defensive earthworks and the shuttling of barges across rivers and canals. Though enemy aircraft were occasionally seen there was no action, other than that on September 21st when F/L D. I. Hall of the Imperials shot down an FW.190. Once an attack was made on a train and F/L J. J. B. Prendergast claimed one locomotive damaged. Altogether the reconnaissance squadrons had a thin time in September.

On October 3rd and 4th the squadrons moved from Diest to Eindhoven, the largest base the Germans had in occupied Europe, and the next day they flew a total of 48 sorties. The Toronto Squadron photographed places from Nijmegen and Arnhem in the west as far as Munster and Osnabrück to the east; the Sudbury Squadron, now commanded by S/L J. Watts, reported considerable rail and barge activity. There was some flak and, in addition, there was some interference from American Mustangs escorting bombers which mistakenly assumed that our Spitfires were unfriendly. On the 6th, a peak day in the photographic section, the Toronto Squadron reported that all the bridges between Düsseldorf and Duisburg were still intact and that about eighty barges were moored alongside the banks of the Rhine. Again widely scattered areas in the Rhine and Ruhr valleys were photographed and some large fires behind the enemy lines were seen. Much rail activity was noted by the Sudbury Squadron. An interesting feature of the day was a request to the Wing to locate a railway gun that was shelling the bridges at Nijmegen, but the search was unsuccessful.

At 2330 hours on October 8th the Tannoy announced: "All personnel are to dress immediately and, wearing steel helmets and carrying rifles, are to proceed to the nearest shelter and await further instructions." At 0330 hours they

returned to their beds but kept their rifles handy. It transpired that enemy patrols were operating about a mile west of the officers' quarters and for the next few nights similar precautions had to be taken. The Imperials had their own bit of excitement on the 11th when F/O L. T. Banner's aircraft was hit by a 20mm. shell and F/O J. H. Donovan's was damaged by an armour-piercing bullet but neither pilot suffered injury. On the same day F/L I. M. Duff of the Sudbury Squadron was killed as he was attempting to make a landing.

The enemy flung his jet-propelled aircraft into the battle on the 15th, F/L D. K. Wilson of the Toronto Squadron. after taking photographs at Nijmegen, was bounced by 24 of them at 28,000 feet but escaped. F/O J. L. C. Brown saw the trails of seven more in the same area and F/L E. E. Tummon also sighted ten or a dozen but there were no further encounters. F/O P. S. Barton returned with information that all the bridges on the Ruhr from Mülheim to Hagen appeared to be intact and that there was a fair amount of rail and river traffic in western Germany. F/Os E. J. Geddes and W. P. Golden of the Sudbury Squadron directed a successful artillery shoot against four gun positions. Not only were the guns silenced but an ammunition truck was blown up with spectacular results, smoke and debris rising to i,500 feet. Many pilots also reported the trails of V.2 rocket bombs that day.

For the rest of the month the weather was very poor, showers and clouds interfering with photography and overcast skies and fogs preventing the observation of ground movements. One pilot, F/L W. W. Kennedy, was posted as missing when he failed to return from a, photographic sortie to the Dutch border.

An outstanding event in October was the visit to Eindhoven on the 11th by His Majesty the King, Air Marshal Sir Arthur Coningham and Field Marshal Sir Bernard Montgomery.

November opened with the invasion of Walcheren Island—a venture that cost more in casualties than the Dieppe operation. On the main battle front the first fortnight was relatively quiet as the Allies prepared for the onslaught on the Rhine defences. This they unleashed on the 16th. By the 10thMajor General Jean de Lattre de Tassigny's First French Army had taken Belfort and Lieutenant General "Blood and Guts" Patton's Third American Army had taken Metz. At the end of the month Patton was on the east side of the Saar and in sight of Saarbrücken, well within the Siegfried Line defences.

About one-third of the time the weather was totally unfit for flying. Intense flak was more than a source of annoyance, a number of pilots being lost to this cause and many aircraft sustaining damage. On November 6th FIL J. D. McIlveen of the Sudbury Squadron was forced to bale out. He got down safely and people were seen running to the place where he landed but he was on the wrong side of the lines and the squadron learned later that he was a prisoner of war. The next day F/L J. P. M. A. Brunelle of the Imperials had better luck, being able to return to his squadron when he was shot down. On the 19th F/L E. F. Ashdown's aircraft (Sudbury Squadron) was hit over Venlo and burst into flames. He baled out but he too landed behind the enemy lines and was subsequently reported a prisoner of war. The Imperials had more bad luck on the 28th. F/Os J. L. A. Roussell and H. J. S. O'Brien were despatched to the Roer Valley to photograph a reservoir and dam. Roussell said that they encountered intense flak and that pictures could not be taken. Jack O'Brien failed to return.

Sometimes there was opposition in the air but only once was there any action. On the 4th F/L M. G. Brown, who was to succeed to the command of the Toronto Squadron on the 15th, was flying at 20,000 feet over Bramasche when he noticed twelve enemy aircraft coming up behind him. They fired but he eluded them. Returning five minutes

later to the same place to make another attempt to get photographs he noticed that they. were still there and he had to return without his pictures.

V 2 trails were often seen and on November 6th F/L P G. Wigle turned in a detailed report on one. When at 25,000 feet over Enschede, above cloud, he was looking to the rear when his aircraft received a heavy jolt. He turned quickly and saw a large white trail about six feet in diameter between fifty and a hundred yards ahead. The trail started at 24,000 feet at an angle of 75-80° on an approximate bearing of 270°. There was a large black object at the head of the trail with bright red flames coming from the rear. In one second the rocket climbed from 27,000 to 37,000 feet, at which height its trajectory began to disappear. It went out of sight between 40,000 and 45,000 feet, its trail becoming very faint. Since F/L Wigle was above cloud at the time the controller was asked to take a fix and, after maintaining a steady course for base, the pilot asked for a second fix whereby the position of the launching site could be determined.

For the rest of the time the squadrons made reports on trains, mechanical transport and river movements. They observed the state of bridges and sometimes noted the prevalence of flooding. Now and then a few troops were seen but, on the whole, there was little that was colourful about this kind of work. Its virtue lay in bringing back accurate information, not in combating the Hun in the air. Sometimes a tactical reconnaissance bore excellent fruit and more than once the General Officer Commanding the Eighth Army Corps signalled his congratulations to the Wing for excellent work under difficult conditions.

The Allied world received a severe shock in December. The month had begun well with General Patton's advance across the Saar when suddenly, on the 16th, Von Rundstedt launched a powerful offensive with 24 divisions against the United States First Army between Monschau and Echter-

nach in southern Belgium. Bad weather was on his side at first and four days later Berlin commentators were claiming that a 60-mile hole had been punched in the American front. Good flying weather in the last week of the month enabled the Allies to bring up some 5,000 aircraft to the assistance of the First Army and on the 28th it was admitted in Berlin that the drive had been halted. Secretary Stimson's statement that the failure of the German offensive would shorten the war seems to have been borne out by the facts.

The effect on the Canadian Fighter Reconnaissance Squadrons was noted by the diarist of the Sudbury Squadron on Christmas Eve, a day on, which 83 sorties were flown by the Wing. He states that most of the missions that day were to the area south of the line from Namur to Liège where the American First Army was operating.

There were eight days in the month on which flying was impossible and many others on which results, because of the weather, were scarcely commensurate with the effort. The 3rd was a fairly active day, 51 sorties being made, with much photographing and observation of enemy ground positions. The only untoward event occurred when a Mustang of the Sudbury Squadron piloted by F/L C. F. B. Steven was destroyed by enemy flak. The pilot baled out successfully, however. The next day the Imperials, or Sarnia Squadron, despatched S/L G. Wonnacott, D.F.C., who had become Commanding Officer on October ist, and had been decorated in November, and F/O G. G. McLean on a tactical reconnaissance and photographic mission to the dam at Gemund. Over Hurtgen Forest heavy accurate flak damaged McLean's aircraft and he failed to return.

On December 17th, the day of Von Rundstedt's offensive, the Sudbury Squadron made twelve sorties and the Imperials sixteen. Apart from a case of mistaken identity by Thunderbolts nothing eventful marked the effort of the Sudbury pilots though the Imperials saw three Me.262s

which they attacked but without success. The next day it was the Sudbury's turn to have one of these tantalizing encounters but they had no better luck.

On the 24th the Luftwaffe came out in strength and the Imperials had a field day at their expense. On a mission to Cologne at 1120 hours F/Ls W. Sawers and W. Pearson met an Me.109 south of Venlo. Strikes were obtained on the enemy fuselage but the aircraft was not shot down. Ten minutes later F/Ls Paul Brunelle and Sammy Hall took off for the same objective. They were intercepted by fifteen Me.109s but Hall shot down two while Brunelle damaged a third one. Hall's coolness on this occasion was cited when he subsequently received the D.F.C. Brunelle received the same award in March, 1945. F/Ls Les Banner and Bill Sawers took off for Cologne on the third mission to that area at 1515 hours and near Neuss encountered ten or a dozen Me.109s. Sawers, who was awarded the D.F.C. in February, destroyed three and probably destroyed a fourth but his own aircraft was damaged. The total for the day was therefore 5 destroyed, 1 probable and 2 damaged.

Christmas Day produced 80 sorties and thereafter there was plenty of flying for the rest of the month though no enemy aircraft were encountered. The year ended with the loss of F/O J. N. McLeod of the Sudburys who was killed when his aircraft crashed after it had sprung a glycol leak.

The work of the reconnaissance aircraft was not always fully understood and it was reassuring to some of the personnel of the Toronto Squadron when the following letter from Major General D. A. H. Graham, commanding the Fiftieth (Northumbrian) Division, was drawn to their attention:

I would like to express my appreciation of the reconnaissance flying which your Squadron has carried out on behalf of my Division. As a result of this flying really excellent photographs have been made available to me, my staff and to the forward troops. I particularly appreciate your very valuable efforts in flying, on occasions, special low level sorties which have enabled a very detailed study to be made of enemy dispositions. The effect of this has been that we have been able to make things very unpleasant for the enemy causing him heavy casualties. You have given us valuable assistance and your efforts have been appreciated to the full.

Subsequently at a party for the ground crew of the same squadron Captain W. L. Palk of the Fourth Canadian Army Liaison Section spoke briefly on the use made of the pictures and added, "without them the army would not move". Afterwards the ground crew took less seriously the nickname of "Esquire Squadron" that those less versed in the importance of aerial photography had glibly bestowed on them. Victories in the air were of secondary importance as the diarist of the Imperials brought out when, after a very successful day against enemy aircraft, he noted, "The above victories were incidental to the observation of the state of bridges, movement of enemy transport, enemy gun positions and marshalling yards".

# FIGHTER BOMBERS

September-December, 1944

The Typhoon Wing at St. Andre, as the sixth year of the war opened, consisted of three squadrons, the Wildcats, the City of Westmount and the Beavers or City of Ottawa. The Wildcats were under the command of \$/L J. R. Beirnes, who was awarded the D.F.C. in October, the Westmount Squadron under S/L H. H. Norsworthy, D.F.C., who was succeeded in the middle of the month by S/L K. J. Fiset, D.F.C., and the Beavers were commanded by S/L W. H. Pentland, D.F.C., who was killed early in October and was succeeded by S/L A. E. Monson. The Wing was under the command of a former bush pilot in northern Canada, G/C P. Y. Davoud, D.S.O., D.F.C., the wing commander flying being W/C M. T. Judd, D.F.C., A.F.C., R.A.F., who, as the

year ended, was succeeded by W/C F. G. Grant, D.F.C.

This Wing moved over a considerable distance in September. Spending only a few days at St. Andre they moved to Glisy, near Amiens, and thence to Brussels where they resumed operations on the 8th, their activities taking them into Germany for the first time. As they moved forward they had a splendid reception, particularly in Belgium, where their proximity to Brussels gave them a taste of city life once more

Ground targets were the objectives on virtually all the operations carried out by the Typhoon wing. A typical entry describing one of these operations, taken from the Westmount diary, runs as follows:

This morning the weather cleared sufficiently to allow an operation to be carried out for the first time in eight days. This operation, led by F/O R. A. Johns and made up of pilots all of the rank of Flying Officer, was the first by a squadron of the Wing into Germany proper. The squadron received a great deal of attention from all the flak gunners in the area, too. The show was an armed recce of the area Venlo, Wesel, Bocholt. A sweep was carried out over the area but very little movement was seen on the ground. Two small tugs, each towing two barges, were seen on the Rhine at Wesel. The tugs were attacked in a long fast dive from the north east but the speed attained (400 m.p.h.) seemed pitifully slow as the boys weaved their way out of the thick curtain of light and heavy flak that came up from all sides. Lady Luck was with us this time and not a single aircraft was damaged. The two tugs were heavily damaged by accurate cannon fire and one or more of the barges hit. We did not tarry to observe the complete results. On the return a train was seen but was not attacked; flak was the discouraging factor. About twenty horse-drawn carts were seen on the road. Some were attacked before it was too late and three cart loads of mixed civilians and soldiers were knocked out. Once again we were forced to run the gauntlet of heavy flak as we crossed out of Germany and passed too near the airport at Venlo. All aircraft and pilots returned safely to base at 1120 hours.

Other entries in the diaries contain references to a barge that blew up and turned over, the sighting of a horse-drawn convoy with its 200 to 300 horses all dead, a direct hit on an 800 ton ship and the sinking of another, the strafing of innumerable trains, staff cars and other motor transport, the blowing up of petrol dumps, attacks on barrack buildings and flak towers, the bombing of gun positions and the like. There was constant dive-bombing of rail communications and bridges, sometimes without success but usually cutting the railway and, on one occasion, blocking it by blowing a building across it. On practically every attack there was a flak barrage. On the 17th the Tiffies bombed anti-aircraft positions in support of the Arnhem landings and thereafter attacked any place that was known or thought to be concealing enemy troops opposed to the Second Army. Usually it was a thankless job but sometimes it happened that a particularly outstanding attack brought its reward as, for instance, when F/L W. D. Burton of the Westmount Squadron led an attack on road transport and two troop trains setting six vehicles and both trains on fire, a feat which won him the D.F.C.

Another move took place on September 26th, this time to Eindhoven. The airfield was heavily cratered and only one of its three concrete runways was serviceable. The dispersal area was situated in the middle of a mass of shellholes into which it was quite easy to fall on dark nights. Late that afternoon F/L Burton led eight aircraft of the Westmount Squadron on a patrol over the Arnhem area. Blue section led by F/L Monson was attacked in error by Thunderbolts and split into two pairs. As night was closing in flares were dropped from unseen aircraft flying at 10,000 feet, guns opened up and searchlights swept the sky. In the light of flares and bursting flak Monson caught a fleeting glimpse of a Ju.88 at which he fired. Then the searchlights caught an FW.190 on which WO W. A. Gray closed. The enemy dropped his tanks and spiralled down but not before Gray had registered strikes on his wing roots sufficient to claim a damaged. Unfortunately Gray was shot down near Goch the next day. F/O J. H. Stitt meanwhile had spotted a Ju. 88 at 7,000 feet and, closing in to a point almost dead astern, gave it a long burst. Strikes were visible on the port engine and wing root and the aircraft burst into flames and spiralled earthwards. This was the first aircraft to be brought down by a member of the Westmount Squadron, and the first "kill" for the Wing.

The next day it was the turn of the Wildcats. Eight Typhoons were scrambled and four of them were jumped by a score of Me.109s and FW.190s. F/O Harry Upham shot down an Me.109 to claim the first kill for the Wildcats. On the 29th, however, four aircraft of the squadron were bounced by thirty Me.109s near Nijmegen and, though one of the enemy was damaged by FS R. G. Fox, one pilot, F/O J. E. Cornelison, failed to return.

Just as the sun was going down on the 29th twelve pilots of the Westmount Squadron took off to patrol over Nijmegen. Half an hour after reaching the target it was so dark that no pilot could see more than one other aircraft. At 1920 hours a very large number of incendiary bombs and flares were dropped and searchlights and flak opened up but no enemy aircraft were seen. As the squadron returned F/O M. J. A. Cote got separated, was given a homing but apparently failed to receive it and, though watch was kept for him, he failed to return. He got back, however, on October 1st.

Apart from these incidents in the air the whole time of the Tiffies was taken up with attacks on ground targets, usually heavily defended by flak, their efforts ranging from the mouth of the Rhine to points inside Germany proper. As the B.B.C. put it, they were out to freeze the German transport system and they were doing it very well.

These attacks were carefully planned to produce the maximum effect. For example, early in October, it was observed that owing to the effectiveness of the work of the Tiffy Wing the enemy was forced to make a loo-mile detour, well to the north, in order to supply his troops by rail.

Attention was therefore concentrated on points inside the German border. Later it was noted that Zwolle had become the railhead for evacuation and supplies and attacks were therefore shifted to the Zuider Zee coast line between Zwolle and Amersfoort. By the end of the month rail traffic, while intense within Germany, had almost ceased at the Dutch border. Information received from outside sources indicated that replacements for straight tracks seemed to be adequate and it was therefore proposed thenceforward to concentrate on curves.

Some incidents may be cited to illustrate this phase of the Wing's operations. On October 2nd the Wildcats took off to attack a railway in Germany and when east of Wesel sighted an ammunition and petrol train which they attacked. At least ten cars blew up and the train took fire. Sometimes it took two operations to get results. After the City of Westmount Squadron had divebombed a bridge at Rhenen on the lower Rhine below Arnhem they discovered the bridge was still intact. Two hours later they attacked it once more. As on the previous occasion great clouds of debris were thrown into the air but this time, as the dust and smoke settled, it was seen that the entire southern span had been knocked out. The squadron then strafed some nearby trenches and, ignoring two passenger trains nearby, returned to base. In the afternoon F/O J. E. Hogg of the same squadron led an attack on a railway at Issum; the oil radiator of P/O A. C. McBride's aircraft was hit by flak and an emergency landing had to be made about fifteen miles from base. Fortunately an American patrol was in the vicinity and it whisked him away just as a number of Huns came out of the woods to destroy the aircraft. Another pilot who had a narrow escape that day was P/O R. A. Watson of the Beavers. As he went down in a dive a bomb from F/L H. 0. Gooding's aircraft exploded prematurely and Watson's aircraft was damaged by the blast. He got back to base safely however.

In the last operation of the day all three squadrons participated and scored heavily. They attacked the marshalling yards at Geldern with 32 one-thousand-pounders. All the tracks, estimated at a minimum of ten, were severed and the main double rails running into the south end of the yards were cut too. Twenty trucks were destroyed and the station house was wrecked. A locomotive and six passenger cars were strafed and damaged. The yards were put out of action at least for a time.

In what was described as far from ideal weather the Wing destroyed or damaged 58 goods and passenger trains on October 4th, one train being blown right off the tracks. The next day it was noted that one aircraft took off every minute of the day from the strip at Eindhoven, nine missions against rail targets being undertaken by the Davoud-Judd Wing. On the afternoon operation F/O Johns, leading the Westmount Squadron, was hit by flak and was posted as missing. The next day—another period of great activity, one hundred sorties being flown—the Beavers lost F/L C. S. Aistrop, A.F.C., who was last seen in a dive over the marshalling yards at Geldern.

There were 66 sorties by the Wing on the 7th in which 17 rails were cut, 6 locomotives and 36 goods trucks damaged and one factory demolished. Unfortunately there were two severe losses. S/L Pentland, the officer commanding the Beaver Squadron, who was only three trips short of completing his second tour, was hit by flak and killed after releasing his bombs. Bill Pentland had completed one tour with No. 417 Squadron in North Africa before taking command of the Beavers early in 1944. The Wildcats lost one of their flight commanders, F/L A. B. Newsome, who also was struck by flak and reported killed.

For four days flying was not possible. About midnight on October 8th there was a call to man stations as a pocket of Germans had been discovered to the north of the airfield but nothing eventful occurred.

Rail targets were once more pounded when flying was again possible though thick layer cloud sometimes made observation and navigation difficult. An interesting discovery was made on one sortie when the Westmount pilots found a camouflaged locomotive, the first of its kind they had ever seen. On the 18th the Wildcats, now commanded by S/L R. F. Reid, lost F/L V. E. McMann whose engine failed over enemy territory and two days later F/O R. W. Doidge of the Beaver Squadron was hit by flak and presumed killed. On the 22nd F/O R. V. Smith of the City of Westmount Squadron was seen to parachute down behind the enemy lines when his aircraft blew up, while his squadron attacked a supposed military headquarters near Hertogenbosch. Subsequently he revealed that, just as he pressed the bomb-release, two explosions occurred and he was blown into space. His helmet and pistol had gone and the ripcord of his parachute was damaged. The 'chute opened, however, and he landed in a lake. Swimming to shore he was met by a German officer armed with a Luger and taken to a prison camp. On the way Smith fell out of the staff car that was transporting him and some senior officers decided to take him to hospital. The Dutch hospital staff treated him courteously and fed him well, especially when the Germans left his bedside. On the 25th, after a preliminary shelling, our forward troops entered the town and a British R.A.M.C. officer visited the hospital. That night the retreating Germans shelled the town mercilessly, hitting the hospital several times. Smith and many others took refuge in the basement whence he was taken to Eindhoven hospital the next day. His injuries consisted of lacerations of the right hand and a flak wound in the leg sustained when his aircraft exploded.

On October 28th the Wing, which now included an R.A.F. squadron, got in 110 sorties. The Westmounts lost F/O M. P. Laycock on the first operation of the day, the bombing of a railroad two miles west of Deventer. He had completed 77 operational trips and had planned to enter the

ministry at the end of the war. In February 1945 it was learned that he had died as the result of an operation. The next day W/C Grant led an attack on the gates of the Dortmund canal, eight miles east of Rheine, so as to flood that part of the canal that was undergoing repair. The three R.C.A.F. squadrons were to do the bombing while the R.A.F. squadron of the Wing, together with a wing of rocket Typhoons and two Spitfire squadrons, acted as antiflak support and top cover. They found the canal full of water but attacked the gates just the same. Smoke and debris prevented any estimate being made of the damage done other than that one oil barge was blown up. On the same day two efforts were made to blow up a bridge, the second one succeeding. F/L A. Lambros of the Wildcats divebombed a railway despite the harassing tactics of Me.262s, thereby gaining a D.F.C. for his tenacity of purpose. For the rest of the month there was no flying.

While mud, rain and cold made life miserable for the ground crews in November, gales and bad weather prevented effective operational flying on more than half the days of the month. A new all-weather overall was issued and considerable ingenuity was shown in combating the bugbears of life in the "hut-towns".

Whenever operations were possible rail cutting continued to be the primary occupation of the Wing. Activities began with the destruction of a bridge by the Beavers on the 2nd, F/O F. J. Crowley knocking it out with two direct hits. Later a rail cutting job had to be abandoned when the heaviest barrage of flak ever encountered by the pilots met them on arrival at the target. The other squadrons were more fortunate and dropped their bombs in the target area. In 94 sorties on the 4th fourteen lines were cut. Two days later the Westmount Squadron had bad luck when F/O J. A. Brown failed to return. It was presumed that he went into the target too low and that he got the blast from his own bombs. His aircraft was seen streaming glycol and, though

he set course for base, he had to bale out at Deventer. He was subsequently reported a prisoner of war. This was the second loss the squadron had sustained in three days, F/O R. N. MacDonald having crashed while on a test flight.

A/C/M Sir Arthur Tedder, G.C.B., visited the Wing on November 10th, the Beavers celebrating the occasion with an attack on barges, one being set on fire and eleven others damaged.

Armistice Day was fair to cloudy with occasional showers and moderate or strong northwesterly winds. It was a memorable day for several pilots in the Wing. The Beavers despatched F/L D. F. English and F/O J. A. D. Gordon on a weather reconnaissance to finish off their operational tours. They strafed fifteen trucks and damaged six Tiger tanks on flat cars, a truck behind the engine exploding and the locomotive itself spouting steam. Two more locomotives were sighted and damaged. Later in the day eight aircraft went on a successful rail cutting mission but F/O Crowley failed to return, his aircraft having been hit by flak. All the squadrons in the Wing attacked lock gates at Sneek that morning, causing severe damage. While on this operation F/O J. G. Fraser's aircraft was seen streaming glycol and shortly afterwards he called up to say that he was forced to land. Eight miles south of the target he touched down safely and then called up to say that he would "see you sometime". He was reported later as "in friendly hands in N.W. Holland", and returned to England in April 1945. S/L Reid of the Wildcats was decorated with the D F C for his work on this occasion

A week later the three squadrons made nine attacks in one day on a bridge across the Roer River. Though there were many near misses and the approach to the bridge was cratered the attacks failed of their primary purpose. On one of these operations F/Os N. E. Dawber of the Wildcats and R. J. Reilly of the Beavers failed to return. Dawber baled out successfully but drifted down between the opposing

lines whence he was directed to safety by two British Tommies who risked their lives under enemy fire to rescue him. On returning to the squadron Dawber reported that the army was feeding very well and was very optimistic about the future. Subsequently he was notified that he had been awarded the D.F.C.

For the rest of the month attention was centred mainly on railcutting. There were some casualties, F/Os J. G. Martin, J. M. Cordick, R. A. Hiltz and A. Frombolo being posted as missing while P/O J. Duncan was known to have crash-landed in enemy territory.

An interesting incident on November 28th was the result of a call from the army to deal with some forty Nazi cadets entrenched in a castle on the Meuse. The Westmount Squadron did a low level attack, the army phoning in its congratulations but requesting another effort. This time the castle was so effectively demolished that only the bottom floor was left. But the Nazis were still not exterminated. Some, at least, were holding out in neighbouring farm houses and the Beavers were detailed to deal with them. Three direct hits were obtained and another bomb cut a rail junction vh hich the army had requested be cut.

The Westmount pilots wound up the month with an interesting weather reconnaissance on the 30th. Taking. off from Eindhoven F/O R. H. Laurence led his section of four aircraft across the Meuse. Diving from 10,000 to 7,000 feet they saw the barrage balloons of Wesel floating above a solid layer of stratus at 6,000 feet. Laurence, not sure of what would happen if balloons were attacked, fired at one which went down and then every pilot in the section had a go at them. WO S. A. Church said that his balloon went up in flames

Usually, however, the reports turned in read something like the following:

F/L J. Carr with seven other aircraft went out to cut the railway running north from Wesel, Germany. They carried 500 lb. bombs and

were escorted by two Typhoons as fighter cover. After climbing to 9,000 feet the Squadron levelled out and then began a gradual descent across the bomb line. The usual heavy flak was met crossing the Meuse but it didn't impede the approach to the target. The flights approached the rail in line abreast and both commenced their dive at the same time. The bombing was not particularly accurate though one pair of bombs appeared to be on the rails and probably cut them. The Squadron reformed and did a short recce which proved uneventful, no movement being seen. They all returned safely to base.

One non-operational incident of some interest was narrated by F/L A. C. Brooker and F/O W. L. Beatty of the Wildcats, when they returned from leave in England on the 30th. Their Dakota was shot down by flak near Dunkirk and the pilot was forced to land in No Man's Land. After some hectic moments they were able to reach our lines safely.

In December there was a new departure in techniqueblind bombing was introduced, i.e. aircraft were directed from the ground when cloud prevented observation of the target and were told when to drop their bombs. The experiment was made on a number of occasions.

At first there was much bad weather but on some days three or four missions could be flown. On December 3rd the Westmount Squadron took off to dive-bomb the railway between Dorsten and Haltern in Germany. Despite cloudy conditions the target was found, identified and successfully attacked. Then followed a reconnaissance on which four trains were discovered on the Munster railway. All were effectively "clobbered" but in one attack several bursts of flak were seen around F/L W. L. Saunders and he failed to return. In the afternoon of the same day the Beavers lost P/O A. W. E. Sugden, a recent arrival on the squadron, who was killed on landing at base.

On the 5th the Westmount Squadron, now commanded by S/L R. G. (Bing) Crosby, bombed the railway between Koesfeld and Ahaus. As they climbed above cloud after the attack F/O V. H. J. LeGear's aircraft was seen to be streaming gas. He was escorted back to base where it was discovered that a 5 in. shell had gone through one of his tanks. A similar thing happened again on the i th when the same squadron bombed and strafed a train between Wesel and Dorsten. After climbing away they ran into a heavy barrage and F/L C. A. Lambert sustained a hit. He was killed in a crash-landing behind the enemy lines.

Christmas Eve was an unfortunate day for all three squadrons. The Wildcats went on an armed reconnaissance of the MalmedyEuskirchen-Mayen-Houffalize area, obtaining two smokers but F/O D. J. Washburn and WO R. F. Breen, two experienced pilots, failed to return. On their second operation the Westmount Squadron had some slight success against road targets but FS W. A. Wright was posted as missing. In the afternoon ten aircraft of the same squadron took off for the battle area south of Aachen and, breaking up into three sections, sought out enemy transport. Everything seemed to be heavily defended. This time F/L Ken Sage was killed. F/O Laurence was hit too, a 40 mm. shell exploding inside his aircraft, filling the cockpit with smoke and severing the elevator and rudder trim wires as well as the hydraulic lines. He regained control and returned to base, lowering his undercarriage by the use of emergency pedals and making a safe landing. The Beavers were the unluckiest of all. Led by W/C Grant, on a reconnaissance of the Jülich-Neuss-Ahrweiler area, they were attacked by two FW. 190s, one of which was damaged by the Wing. Commander. In strafing ground targets, however, F/O C. F. Harwood flew into some flak and failed to return. Later in the day on another reconnaissance of the Malmedy-Euskirchen-Mayen-HoufFalize area an FW. 190 shot down F/O D. H. Cumming and F/O W. T. Dunkeld, both of whom were posted as missing. The FW was immediately destroyed by a Spitfire.

F/O J. D. Sweeney of the Westmount Squadron had a "Shaky Do" on Boxing Day when, after repeated hits, a 20

mm. shell pierced one of his tanks. Over the aerodrome his engine cut and, with one wheel retracted, he made a hazardous but successful landing in a field. The next morning two pairs of the same squadron attacked ground targets southwest of Aachen. On pulling out from an attack F/O B. E. Bell's aircraft was seen to be pouring black smoke and flames were coming from his radiator. He baled out but apparently was struck by the tailplane since he was seen to be floating down limp in his parachute behind the German lines. He was later reported a prisoner of war. The Beavers, now commanded by S/L Gooding, dropped anti-personnel bombs the same day on some woods and then encountered three Me.109s one of which was destroyed by F/L D. E. Jenvey.

The Westmount pilots had mixed luck on December 29th. In the morning the battle area was closed in so an armed reconnaissance of the Koesfeld area was laid on. Red flight attacked a train and Sweeney again was hit by flak and had to return to base. Blue flight encountered a "nest of trains", and S/L Bing Crosby accounted for five locomotives. F/O Laurence saw a Typhoon shot down by an FW.190, gave chase but, with his No. 2, was himself attacked by ten FWs and Me.109s. At such odds he dived for the deck, the Huns on his tail firing all the time. After a chase of ten miles there was only one long-nosed FW.190 behind him but this Hun was extremely persistent. Laurence then tried some very steep turns hoping that he could shake the enemy of In one of these the FW flicked, crashed into the ground and burst into flames. An Me.109 then bounced Laurence but he out-turned it and was about to shoot when it too rolled over and blew up as it hit the deck. WO Church failed to return and later was reported a prisoner of war. On another operation that-morning the Beavers accounted for three locomotives damaged, four coaches destroyed, fourteen coaches damaged and fifteen flat cars damaged. A lunch-time mission resulted in the

complete destruction of an. ammunition train and damage to eighteen cars, but F/L Jenvey was hit by flak and crashlanded his smoking aircraft. He was seen to walk away after landing. He was subsequently shot by the Germans while evading capture.

Throughout the month V bombs were often seen and, though one or two dropped in the neighbourhood, the airfield came through unscathed. Efforts by Me.262s to bomb the aerodrome were also unsuccessful as was an attempt by an Me.410 on Christmas Day.

## CHAPTER VI

## 2ND T.A.F. (1945) AND FIGHTER COMMAND

The New Year's Day Raid on Canadian Airfields

HILE the U.S. First Army and the British Second were wiping out the gains made in December by the German counter-offensive in southern Belgium, the Germans launched a new counter-offensive on. January 1st along a 30-mile front in the Saar area and obliged the U.S. Seventh Army to withdraw to the old Maginot Line. The Luftwaffe's contribution was a series of raids on Allied airfields. Fighters, including jet-propelled aircraft, strafed three Canadian stations in Belgium and Holland, destroying many of our aircraft on the ground, and inflicting casualties on our personnel.

At Eindhoven, where the R.C.A.F. Fighter Reconnaissance and Typhoon Wings were stationed on New Year's Day, routine work was being carried on. The pilots of the Toronto Squadron were on their way to the aerodrome from their billets, eight aircraft of the Imperials were on sorties, and some of the pilots of the Sudbury Squadron were sitting in their aircraft dispersal. Two pilots of the Wildcats were just taking off, six others getting ready; the Westmount Squadron had four pilots coming in from a weather reconnaissance, the remainder awaiting their report in the crew room, and eight pilots of the Beaver Squadron were

on the runway ready for take-off, the others being in the orderly room. The time was 0920 hours. Suddenly two waves of FW.190s and Me.109s together with some jetpropelled aircraft, filled the sky, one flying out of the sun from east to west and the other strafing the runway from north to south. Some Mustangs and a Spitfire with German markings also were noticed, during the attack. Succeeding waves of about twelve aircraft each beat up the field in a well organized manner, persistent, well-led and thorough. The attacks lasted about 22 minutes. Most of the men on the field rolled for ditches, trees or anything else that would afford protection. Some managed to get into slit trenches, others lay behind a pile of sand, one huddled in a frozen wheel-track. Several pilots of the Westmount Squadron made for a trench behind the crew room only to find that it contained three feet of water covered with two inches of ice. But pride was cast asunder as one of the maintenance NCOs led a disorganized formation to its refuge. There they lay flat until an excessive number of stragglers, unthinking in their haste, made a low level dive into the trench, breaking the ice and submerging those who had preceded them. S/L Crosby of the Westmount Squadron and F/L Johnny Carr had just left the Officers' Mess. They got as far as the Salvation Army building and took to a ditch until Johnny found a safer hiding place in a culvert. F/Os D. E. Johnson and Jack Roberts were on their way to the maintenance section in a 3-tonner driven by LAC Len Weir. All three baled out and scurried behind the truck for cover, a bullet subsequently puncturing one of the tires. The Toronto pilots, abandoning their transport, had a grandstand view of the whole affair from a roadside ditch. One pilot of the Wildcats, F/O Don Campbell, could not get out of his aircraft and remained crouched down in the cockpit throughout the whole attack, his aircraft sustaining several hits

Personnel on the ground tried to shoot down as many of

the enemy as they could. F/O Watson of the Beavers, who was seated in his Typhoon ready for take-off, took a long squirt at three FW.190s aiming head-on and claimed one destroyed before his own aircraft was set on fire. Similarly a pilot. of the Wildcats took a shot at the enemy before abandoning his aircraft. The senior armament NCO of the Wildcats, FS W. Large, and FS C. H. McGee, R.A.F., of the same servicing echelon used Bren guns to bring down an FW.190. FS Ron Beatty, another armourer, mounting a Bren gun on a wall, fired on every enemy aircraft that came in range and was believed instrumental in shooting one down.

The leader of the Wildcats, F/L P. Wilson, who had just been appointed as Commanding Officer, was in the take-off run but throttled back and pulled to the side of the runway. He climbed out of his aircraft and was later discovered to have suffered a gunshot wound in the lower stomach and died shortly after being admitted to sick quarters. Whether he was shot while attempting to take-off or later was not known. His Number 2, F/O R. W. Keller, became airborne but he or his aircraft was hit. There were no eye-witnesses but he was later found dead in his burned aircraft just off the aerodrome where he had attempted a forced landing.

Pilots who had taken off, or were just taking off and had managed to get into the air, immediately engaged the enemy. An R.A.F. officer, stationed on the aerodrome, who was testing an aircraft, chased one of the Huns and destroyed it but was himself killed. The Imperials had six pilots on tactical reconnaissance and two on an artillery reconnaissance at the time of the attack. Encountering a gaggle of ten enemy aircraft as he returned F/O Wally Woloschuk destroyed an FW.190 and damaged an Me.109 inthe Roermond area. These victories were mentioned in his citation when he was awarded the D.F.C. in July. S/L Gordon Wonnacott, returning alone from a sortie to the Ardennes, destroyed two Me. 109s and an FW.190 near Eindhoven at

house-top level, winning an immediate Bar to his D.F.C.

Four aircraft of the City of Westmount Squadron were returning from a weather reconnaissance of the American battle front when they intercepted fifteen FW.190s as they were on their way back from Eindhoven. Four Typhoons and one or two Spitfires were already mixing it with the enemy. The Westmount pilots accounted for four, F/Os R. H. Laurence and A. H. Fraser each destroying two. One of Laurence's victims was the leader of the German raiding party, an officer with a rank equivalent to that of Group Captain, and shortly afterwards Laurence was awarded the D.F.C. F/O S. Angelini failed to return and was last heard reporting a shortage of fuel. On the 3rd his body was found in his aircraft near Rips where he had apparently been shot down.

Meanwhile the strafing continued, some of the enemy pilots taking time out to wave to our men on the ground. As fires started ammunition and bombs began to blow up in the intense heat. The explosions lasted for about an hour. Many aircraft were completely burned out, one was hit by a crashed enemy aircraft and had to be written off, many more were damaged in varying degrees. A bowser, from beneath which an "erk" had just emerged, blew up as the airman scrambled into a small gully.

The orderly room and pilots' hut of the Toronto Squadron were riddled. An airmen's hut of the Westmount Squadron was destroyed, and one wall of the crew room was torn loose by blast, while a 20mm. shell pierced an Irvine jacket and trimmed the peak of F/L Lyall Shaver's cap. The shack occupied by F/L H. P. V. Massey, the Intelligence Officer, was peppered and he was injured in head, chest and back. The orderly room of the Beavers, though protected by a blast wall, got the full effect of a 1,000 pounder which broke every window, cut the faces and hands of the pilots who were in the room at the time and blew desks, tables and chairs all over the place. The Squad-

ron's dispersal was a shambles. The central mess was destroyed, and there was not a window on the airfield that was intact.

Besides the casualties already mentioned, two airmen of the Imperials and five of Wing Headquarters were killed. F/Os D. A. L. Fuller and F. R. Loveless of the Imperials were slightly injured. F/L R. F. Gill of the Sudbury Squadron was wounded as the result of a, shell explosion in the cockpit of his aircraft and F/O Bill Golden suffered a head injury and a broken arm as he climbed out of an aircraft under enemy fire. P/O A. B. Harle of the Wildcats was struck by flying glass and F/O P. G. Macklem was hit in the shoulder by a bullet. Fifteen airmen were wounded and many more cut and bruised or badly shaken up.

The Wing Medical Officer reported:

Luckily there were few patients at Sick Quarters and when it became evident that we would receive many casualties from the drome after the enemy had wished us a Happy New Year they were told to dress and get out, no more, no less. Shortly after the guns had stopped the wounded started coming in. Some walked, others were brought in 3-tonners, 15 hundred-weights, bowsers, anything ... and in a very few minutes the floors of our large ward and of the corridors were literally covered with a mass of gaping wounds and bloody uniforms. One airman in the corner was screaming and waving in the air two mangled hands that hardly seemed attached at all to the arms. The rest of the wounded seemed surprised to find themselves there: they were silent and patient, waiting for somone to take care of them. One chap, who had had trouble with varicose veins, looked at his shattered leg and said, "They sure fixed my veins for me". He died the next day. Another, whose arm was almost severed at the shoulder, was saying, "If they put me to sleep and I wake up without my arm, I shall go crazy". Such sights may be common in any army Sick Quarters but this Wing is not accustomed to desolation. To us it seemed particularly ugly. Pain was alleviated, wounds were dressed summarily and the wounded evacuated as quickly as possible in the midst of explosions that shattered our windows and managed to produce a few more cuts. The staff worked hard. The drivers were right on the bit, (so were the vehicles), we got help from the outside and every patient had left within an hour and a half. In that time we handled 63 patients and evacuated 49. In the

afternoon the mess was cleaned up and the dead prepared for burial—these included four enemy pilots. The next few days we were still busy but in a different manner, trying to clarify the confusion that reigned in our reports, finding out where patients had got to, what in detail was the matter with them, how they were getting along. There were also many broken windows to repair and repainting, to be done. We definitely didn't think much of Hitler's talent as an indoor decorator ....The next few days we coped with the aftermath. Many small injuries were treated, mostly sprains incurred during the hasty retreats from the field of action of machine-guns.

At Heesch, where the McGregor-Russel Wing was located, New Year's Day dawned sunny and clear. Here, too, the Hun expected to take our men by surprisee but a large part of the Wing was already airborne when Jerry arrived. The Grizzly Bears and the Caribous were on sweeps. Two sections of the Winnipeg Bears were out on patrol. The Falcons were just getting ready to go on their first operation and the Rams were at the end of the runway waiting to take off when forty or more FW.190s and Me.109s swept over the airfield and made passes at the aircraft on the ground. They inflicted neither casualties nor damage.

The Rams hurriedly scrambled into the air, most of the pilots getting separated. On his return F/O Cameron, who was awarded the D.F.C. in February, reported that he had destroyed three Me.109s. F/L W. E. Foster damaged an FW.190 while Johnny MacKay (now a F/L) destroyed two FW.190s and an Me.109. MacKay stated that shortly after take-off he was vectored into the Reichswald area where he saw an FW.190 on the deck. He fired and it exploded. crashing in flames. Returning alone he saw an FW.190 trying to get on the tail of a Tempest. He fired a few short bursts at the FW but his ammunition was exhausted. He closed in and, as the enemy pilot attempted to do a shallow turn, the FW's port wing struck the ice on the lake below and the aircraft blew up. On pulling up MacKay then sighted an Me.109 which again by bluff he forced down into a field where it bounced into some trees and broke up.

For this achievement MacKay was awarded the D.F.C.

On their sweep the Grizzly Bears saw two FW.190s in the Twente area both of which F/L Dick Audet shot down. bringing his score to seven in two days. The only damage the Hun inflicted on the Bears was to put a hole in the thatched roof of the Squadron's dispersal. Similarly no damage was done to the Falcons who, on the other hand, shot down four aircraft during the morning blitz, 'and three more later in the day. The Squadron had left Heesch at 0930 hours just before the enemy arrived. West of Venlo they encountered upwards of thirty FW.190s, which were already being engaged by Tempests. F/L Doak fired at one which flicked and exploded on the deck. Later that day Doak was himself shot down by an FW.190. F/L B. E. MacPherson forced the pilot of another to bale out. A third, attacked by F/O V. Smith, piled up in a wood, and a fourth was destroyed by the joint efforts of S/L Dover and F/O E. D. Kelly.

The Caribous had been airborne at 0850 hours on a fighter sweep but F/L.R. C. Smith had to return because of trouble with his jettison tank. As he neared base he heard that the Huns were heading for Eindhoven and shortly found himself at that place, the only allied aircraft among forty enemy planes. He made some ten attacks in all but never stayed anywhere long enough to watch results. On return to base he ran out of petrol at 7,000 feet and was forced to make a dead stick landing. He made no claims but it was not long before Group Headquarters and Eindhoven airfield were telephoning in their congratulations for damaging one Me.109 and forcing the pilot of a second to bale out. Another pilot of the same squadron, F/L D. C. Gordon, also was returning early when, as he neared base, he saw a mighty gaggle of Huns on the deck. He destroyed two FW.190s and then was wounded by flak in the head and back. He was forced to crash land. He climbed out gingerly and was promptly clapped on the back by an enthusiastic

Dutch woman who ran up to wish him a Happy New Year. In all, seventeen pieces of shrapnel were removed from his torso. He was awarded the D.F.C. for his work on this occasion. Meantime F/L Keene's section met a number of enemy aircraft west of Venlo. F/L Pieri destroyed two FW.190s and probably destroyed two more while the section leader destroyed one. Pieri's achievement was cited when his D.F.C. was awarded in 1946. Further north F/L Lumsden, recently awarded the D.F.C., damaged an FW.190 and shared in the damaging of another with F/O J.. A. Cousineau. An Me.262 was damaged by the joint efforts of F/L R. K. Trumley, F/O W. H. Dunne, R.A.F., F/L J. N. G. Dick and P/O E. C. Baker. Unfortunately F/O D. A. Brigden was killed.

Far from hampering the efforts of the Wing the enemy attack on their airfield seemed to spur our pilots on to, greater achievements. In the course of the day they destroyed on all operations 24 enemy aircraft, probably destroyed three and damaged seven for the loss of two.

The third Canadian aerodrome Evere, near Brussels, was also attacked. Early take-offs there had been prevented by ice but two of the Wolf Squadron got away at 0848, two more at 0928 and the Oshawa Squadron was just taxying out at 0939 when about forty Me.109s and FW.190s appeared. There was no warning and only one aircraft of the Oshawas was able to get airborne. F/L Harling was the pilot of the leading aircraft as the squadron was moving along the perimeter track preparatory to take off. He had almost reached the runway when the Germans fired bursts into the aircraft immediately behind him. The aircraft of F/L Nault, P/O Ken Williams and WO Lou Jean were all shot up. Since the ground on either side of the track was soggy it was impossible for the rest of the pilots to taxi round the damaged aircraft and follow Harling onto the runway. This did not deter Harling who took off and, single handed, immediately, engaged the enemy. He was shot down and

killed, however, over Brussels.

The four aircraft of the Wolf Squadron returning from patrols engaged the enemy, P/O Reeves destroying two FWs, P/O Steve Butte destroying another and two Me.109s in addition. Butte was later awarded the D.F.C. for these victories. One FW. 1go was destroyed and an Me.109 probably destroyed by FS G. K. Lindsay.

The enemy succeeded in wiping out eleven aircraft of the MacBrien-Johnson Wing on the ground and damaging a dozen more. Nine men were wounded and one. was killed among the ground crew, one of the wounded dying in hospital the next day.

It had been an expensive day for the R.C.A.F. but the German objective, the immobilization of our aircraft, had not been achieved.

## DAY FIGHTERS

January-May, 1945

The McGregor-Russel Wing became the McGregor-Northcott Wing in the month of January 1945 when W/C Russel completed his third tour of operations—one of the few members of the R.C.A.F. to do so—and was replaced by W/C G. W. Northcott, D.S.O., D.F.C., as wing commander flying.

The events of New Year's morning at Heesch have already been described but there was more action in the afternoon when the tables were turned on the Hun. Ground targets near Munster were attacked by the Grizzly Bears. F/L J. C. Lee of the Rams took his section into the circuit at Rheine aerodrome and came out with a score of one Me.109 destroyed and another probably destroyed while F/O Church got a destroyed and a damaged and P/O Horsburgh claimed one Me.109 destroyed. Another section met a Me.262 south of Rheine and damaged it, the honours go-

ing to Johnny MacKay and FS Woodill. The Falcons also added to their day's score when F/L W. J. Banks saw a Ju.88 flying on the deck in the Dortmund area and shot it down into a field where it exploded and burned. This was the ninth victory in the air for Banks. In the evening, near Osnabrück, two Me.109s were seen and attacked, one being destroyed by F/L J. A. Swan and the other by Dean Dover.

The Grizzly Bears and the Caribous had successful combats on the 4th. The former, sweeping the Hengelo area, sighted seven or more FW.190s and destroyed six of them. Audet and Boyle each got one and shared in the destruction of a third. F/O M. G. Graham knocked out two and F/L H. D. Carr drew his first blood by shooting down the sixth. Graham now had shot down five and was awarded the D.F.C. in March. F/O K. J. Thomson reported that he was going to crash-land and failed to return. In the same area the Caribous ran into fifteen plus Me.109s and FW.190s and promptly engaged them. F/L M. Johnston claimed one Me.109 as probably destroyed and F/L R. C. Smith damaged an FW.190. The Winnipeg Bears, encountering no enemy aircraft, attacked five trains in the Munster-Osnabrück area.

A little factory with six boilers siting on top of it attracted the attention of the Caribous on January 6th. They shot it up and had the satisfaction of seeing dense clouds of steam pour from three of the boilers, but nothing sensational occurred in the air until the 14th when three squadrons reported a total of eleven victories. The Rams, on an armed reconnaissance in the morning, caught a number of FW.190s taking off and landing at Twente aerodrome, just east of Hengelo. They shot down five of them. Johnny MacKay fired at one and its jet tank blew up; a second FW, coming in over the tree tops, also caught fire and crashed when he attacked it, and a third spun into the deck and blew up when it tried to get on MacKay's tail as he made a steep turn. F. T. Murray (now an F/L) and F/O D. B. Dack each

destroyed one but F/L R. J. Land failed to return. On the same operation Dick Audet of the Grizzly Bears added another FW.190 to his total, a fitting event to commemorate the award of the D.F.C. for his showing on the 1st which was announced that day. Boyle and F/O J. A. Doran also destroyed one each. The Caribous were then vectored onto the scene. They encountered three FW.190s and destroyed all three, F/Ls J. E. G. Reade . and J. N. G. Dick, together with F/O A. J. Urquhart being the victors. Urquhart was forced to bale out after the combat but he was seen to land six miles south of Enschede. A later effort to engage fifteen to twenty Huns near Rheine only resulted in the enemy scuttling off.

The Winnipeg Bears left for England on the 14th and the weather turned duff. Two-man patrols were carried out on the afternoon of the 17th, on.one of which F/L Woods of the Rams shot down an Me.109 in the Arnhem area. The next day, on the final sortie of his tour, F/L Fox, D.F.C. of the Falcons was shot down by flak and was forced to crashland. During his tour he had destroyed four enemy aircraft, damaged five, destroyed or damaged 160 vehicles, both road and rail, and destroyed or damaged 21 locomotives.

January 10th was one of those black days that occur from time to time in the history of any fighting unit. The Grizzly Bears lost F/O C. A. Ellement on his first operational sortie, and the Falcons lost four pilots, F/Ls MacPherson and Richards, F/O W. J. Walkom and P/O B. S. McPhee. MacPherson and McPhee were later listed as prisoners of war but the fate of Walkom and Richards was unknown at the time though Richards reported just before he disappeared that his aircraft had been hit by flak. Ellement managed to make his way back to his squadron only to be shot down and repeat the procedure a second time.

By way of contrast the Wing obtained thirteen victories on the 23rd. The Rams on a morning armed reconnaissance found a number of aircraft taking off and landing at Bramsche, north of Osnabrück. These they took to be Me.262s but on further consideration, after study of aircraft recognition books, they came to the conclusion that they were Arado 234s. F/O G. A. Hardy dived on one which crashed in the woods and took fire. F/L Connell and P/O M. Thomas shot down another which exploded as it hit the ground. The pilot of a third, which also crashed and burst into flames, baled out when attacked by F/O D. F. Church. Another, attempting to take off, nosed into the ground and was claimed as damaged by the squadron as a whole. Claims of one damaged Arado were also made by S/L Klersy, the new commanding officer of the Rams, F/O F. E. Thayer and F/L W. R. Tew respectively while F/L Murray, who got his D.F.C. on the 3ist, damaged two more. The Grizzly -Bears reconnoitred the Lingen-Munster area and, while so doing, F/L Cook destroyed an FW.190. At lunch time in a sweep of the same area F/L Dick Audet, D.F.C. destroyed an Me.262 in the air and another one on the ground. Two Me.109s were chased by F/O Gordon Harrison but nothing more was heard of him and he was posted as missing. The Caribous, in the same locality, damaged a truck and a trailer and "clobbered" some fifteen soldiers who were running for shelter. Another transport was destroyed and three damaged while a horse-drawn transport, complete with motive power, was blown to pieces. In the afternoon Red Francis damaged an FW.190 on the deck near Rheine while the squadron damaged a locomotive and a goods wagon, destroyed another horse-drawn transport and strafed a small dump. The aircraft of F/O Francis sustained a flak hole in its wing.

The next day F/L Dick Audet damaged an Me.262 near Munster but again it was a day for success against ground targets, the Caribous claiming one locomotive and nine goods wagons. F/O N., A. Burns was apparently hit by flak, being seen to bale out successfully near Munster. For the rest of the month nothing very eventful occurred.

The MacBrien-Johnson Wing also changed its name when G/C MacBrien was replaced in the middle of January by G/C P. S. Turner, D.S.O., D.F.C. and Bar. Stan Turner was a Canadian who had joined the R.A.F. before the outbreak of the war. He had been a member of the all-Canadian squadron and had fought in the Battles of France and Britain. He had served, too, in Malta and the Middle East and had commanded the City of Windsor Squadron in Sicily and Italy. His score was fourteen enemy aircraft destroyed.

The Wing in January was rendered almost inactive operationally because of the weather. In the earlier part of the month the Hornets returned to operations but the Wolves left almost immediately for England. When the Wolves returned to Evere their operational life was singularly uneventful. One officer suffered minor wounds while flying and another was shot in the foot when attempting to defend S/L Collier's jeep from being stolen by two Allied soldiers. On the 13th there was a minor repetition of the Falaise Gap days when 48 sorties were flown by the wing against enemy transport getting out of the St. Vith-Houffalize area. The aerodrome hummed with activity and a total of eleven destroyed and seventy damaged was piled up. The Oshawa Squadron lost F/O W. F. Bridgman while F/L E. H. Fairfield of the Hornets was forced to bale out but got back to his unit. The Hornets had already had one casualty on the 5th when F/O T. C. Gamey was reported missing after an armed reconnaissance of the Munster area. There was action again on the 22nd and 23rd in an otherwise dull period. The Hornets, over Rheine aerodrome on the 22nd, saw a single-engined aircraft in process of taking off The enemy pilot changed his mind, however, and started to taxi for cover as S/L Sager and F/O R. D. Marsh dived out of the sun. Flak was plentiful but inaccurate and Sager and Marsh managed to destroy a twin-engined aircraft, a snow plough, a truck and about eight Germans. Resuming patrol they also



(1) "Hard living." (2) "Easter Church Service", Eindhoven, Holland. (Sketches by F/O D. K. Anderson.) (3) Shanty town. (4) Liberated prisoners of war with their trophies: F/O T. C. King, F/L W. A. Wilson, F/O R. R. Loveless and F/L D. Laver (R.A.F.). (5) Pilots of the Silver Fox Squadron: (left to right) F/O D. C. Gildner of Toronto, F/L D. H. Kimball, D.F.C., of Oromocto, N.B., F/L A. A. Smith of Vancouver, F/O G. D. Morrison of Montreal, F/L H. E. Derraugh of Sudbury, S/L R. H. Walker of Niagara Falls, F/O G. E. Heasman of Toronto, and F/O J. A. McIntosh of Bobcaygeon, Ont.



S/L R. E. Coffey, D.F.C., of Greenview, Ill. (2) A/M G. O. Johnson, C.B., M.C., with S/L D. A. Brownlee and G/C A. D. Nesbitt, D.F.C. (3) S/L H. O. Gooding, D.F.C. (4) S/L J. R. Beirnes, D.F.C. (5) S/L J. E. Hogg, D.F.C. (6) Westmount Squadron pilots: (left to right) F/L L. Shaver of Avermore, Ont., S/L J. H. Beatty, D.F.C. of St. Catharines, Ont., and F/O A. H. Fraser of Westmount, P.Q. (7) Wildcat Squadron pilots: F/L V. E. McMann of Vancouver, F/O W. S. Hutchinson of Toronto, and F/L P. Wilson of North Vancouver. (8) W/C M. T. Judd, D.F.C., A.F.C. (R.A.F.), S/L H. H. Norsworthy, D.F.C., A/M L. S. Breadner, C.B., D.S.C., and G/C P. Y. Davoud, O.B.E., D.S.O., D.F.C.

damaged a mobile flak wagon and a small staff car. Later in the day the squadron was engaged in dropping leaflets over Heinsberg, Straelen, Geldern and Erkelenz. The Red Indians on an armed reconnaissance over. Munster, Rheine and Enschede on the 22nd sighted 25 or more FW.190s and Me.109s and shot down five, one FW.190 each being accredited to F/Ls E. Smith, G. E. Stephenson, T. H. Hoare, M. J. Gordon and F/O F. W. Evans. WO C. D. Beck, who had just started his tour, failed to return. On the 23rd the Indians encountered five long-nosed FW.190s and destroyed two. S/L Browne got one and the other was shared by F/L Mac Gordon and F/O Fred Evans, who each scored for the second time in two days. F/L Ed Smith's engine cut while he was changing to main tanks and he crash-landed in a field near Hamm. In the afternoon the Hornets attacked German transport retreating from Malmedy and got one flamer and 23 damaged.

The airfield was badly shaken on January 10th when a Flying Fortress with an American crew crashed and burst into flames. Its bombs exploded and did a great deal of damage to aircraft on the ground, buildings, and vehicles and injured a number of personnel. Two Americans in the crew were killed.

All through the month of February the Allies were steadily advancing. At the end of the first week the Third U.S. Army had entered Germany and the First Canadian Army was launching an attack south-east of Nijmegen. By the 19th the Canadians had cleared Gennep and Cleves and, with the British, had entered Goch. Jülich, well inside Germany and only some thirty miles west of Cologne, fell to the Americans on the 24th. The propaganda machine in Berlin was showing signs of strain.

There was a fairly successful programme of ground strafing carried out on the 3rd by the McGregor-Northcott Wing. Mechanical transport, a gun, freight cars, locomotives and two signal boxes were shot up by the Rams while

the Grizzly Bears destroyed a factory, cut a rail and damaged a locomotive and the Falcons claimed a rail cut. Three days later more ground targets were attacked with success; this time the Grizzly Bears strafed an aerodrome and shot up three enemy aircraft on the ground before they discovered that these were dummy aircraft. There was no doubt about the victories won on the 8th. On an early morning reconnaissance F/L K. S. Sleep of the Winnipeg Bears-the squadron had just returned from a course in England-got his first enemy aircraft, a Ju.88, north of Koesfeld. S/L Jowsey led his squadron, the Caribous, on a reconnaissance of the Wesel area where they encountered five Ju-87s and made a clean sweep. F/L Gordon shot two down in flames and, with F/L Doyle, shared a third which exploded on the ground. In addition, F/L Doyle shot down another. F/L R. B. Barker got the fifth Stuka to complete the total. On the same trip the squadron damaged three locomotives, six trucks and one transport. F/L Audet and F/O McCracken of the Grizzly Bears raided Twente aerodrome but found only workmen. A well camouflaged gun opened up on them, however, and Audet's aircraft was hit. He managed to get back to base where he baled out and arrived at the interrogation room before McCracken had finished giving his report. The other squadrons in the Wing bombed ground targets successfully.

An armed reconnaissance on February 11th by the Winnipeg Bears ended in the death of F/L W. G. Hodges who crashed on attempting to land. F/O A. T. Gibb of the Falcons baled out over the Reichswald and landed in a place that had been captured by our troops only two hours previously. He was soon back with his unit.

All the squadrons attacked ground targets on the 14th with considerable success, F/L Boyle of the Grizzly Bears destroying two He.177s and damaging one while FS J. O. A. Watt damaged two more of a concentration of thirty on the ground at Handorf aerodrome. Boyle was later awarded

the D.F.C. for these and other victories. The other squadrons accounted for fourteen rail cuts and damage to various ground targets. Enemy jet-propelled aircraft, though seen, were very elusive in the air. In all the Wing made 237 sorties that day.

Ground targets were attacked again on the 16th and, after an interval of four days due to weather, on the 21st when nine rails were cut and eleven locomotives were destroyed or damaged besides other forms of transport. In addition F/L. L. A. Stewart of the Falcons damaged an Me.262, one of its engine nacelles being seen to emit black smoke, F/L L, G, Barnes and F/O J, C, McAllister of the Winnipeg Bears took part in a reconnaissance over western Germany in which two locomotives were destroyed and three more, together with 23 closed railway trucks, were damaged. The next day, too, the Wing made a high score with 1g rail cuts, 2 locomotives destroyed and 2 more with 23 trucks and 27 transport vehicles damaged, one vehicle, a factory and a switchbox destroyed and other targets damaged. But this was not done without loss. F/L L. G. Barnes baled out over enemy territory near Haltern and F/O McAllister crashed on landing and died shortly afterwards. F/L Freddie Murray of the Rams was forced to crash-land in enemy territory when his aircraft was badly damaged by flak; P/O Cowan of the Falcons experienced engine failure on returning from a divebombing sortie and was killed near the airfield; and the Caribous lost their commanding officer, S/L Jowsey. While attacking some mechanical transport, Jowsey's aircraft was hit by ricochets and he had to parachute over enemy territory. He got back to his unit on April 3rd, the squadron being commanded in the meantime by S/L M. Johnston.

The Caribous had bad luck again on February 24th. While on a reconnaissance F/L Doyle and F/O Cousineau with their Number 2s went after some Huns on the deck in the Rheine area. Becoming separated from their Number 2s

they were not seen again and it was presumed that the mixture of flak and enemy aircraft was too much for them.

A remarkable performance was made on the 24th by F/L Reid of the Grizzly Bears when he made a superb emergency landing, bringing back what F/L J. D. Runkle, the engineer officer, described as "the worst-shaped aircraft I've ever seen flown in". Three feet of one of the propeller blades had been shorn off, the engine had sprung several oil leaks, the oil tank had vibrated off its moorings and was hanging by one clamp, the air intake scoop was just hanging, the engine bearers were twisted, the front engine bearer bolts sheared and the fuselage was distorted, In addition the vibration had thrown the pilot's helmet off and he was unable to get it on again.

On the same day the Rams had the good fortune to sight a train loaded with about forty lorries and small tanks or armoured cars that were being taken to the battle zone. Though this train was protected by five flak cars it was attacked and thoroughly shot up.

The 25th turned out to be a fairly good day for the Wing. The Rams had good success against rail targets, buildings and mechanical transport; the Winnipeg Bears, who had just begun divebombing three days before, cut three rails, destroyed a locomotive and damaged several other targets, and then encountered an Me. 262 which F/Ls K. S. Sleep and B. E. Innes damaged. F/L W. S. Harvey, another pilot of the same squadron, baled out later in the day when his aircraft was hit by flak and caught fire. He returned to his squadron six weeks later after escaping from the enemy and being liberated by the army. On their early morning patrol the Falcons ran into two gaggles of eight or more Me.109s. F/O McLeod got on the tail of one, which he probably destroyed, and shot down a second which crashed in flames on the ground. The Caribous encountered about forty Me.109s and FW.190s west of Rheine and shot down seven. F/L Trumley, leading Blue section, attacked

one of a pair of Me.109s, the pilot of which was seen to bale out, and then attacked the other which went straight down pouring black smoke and with flames coming from the engine. F/L Barker shot down an Me.109 that was trying to get on the tail of his Number 2. Damaging another he then climbed up to engage a third Me.109 which was subsequently seen to crash west of Rheine. Two Me.109s were also destroyed by P/O Baker and still another by F/L D. C. Gordon, D.F.C. The month ended with attacks on ground targets on the 28th.

February had little to offer to the Turner-Johnson Wing. There were few occasions on which enemy aircraft were seen and fewer still on which they could be engaged. One damaged was claimed when P/O Larry Spurr of the Oshawa Squadron ran into an Me.262 on the 25th and scored strikes but this Hun lived to fight another day. No other claims in the air were made.

Even ground targets seemed difficult to come by. On the 3rd the Oshawa Squadron plastered a train but the results of railcutting efforts could not be observed.

On the 8th the Hornets destroyed two locomotives and damaged two and some trucks, inflicting more damage on locomotives and transport on the loth. The Oshawa Squadron got another locomotive on the 11th, damaged three more and strafed some goods wagons. On the 14th the Hornets came back with rail cuts and the destruction of a station house and goods wagons. So it went throughout the month when flying was possible, the best days being the list, 22nd, 24th and 25th. There was a certain amount of uneventful escorting of bombers, the clouds usually being too thick for observation of results.

On the 3rd F/O R. M. Tegerdine of the Wolf Squadron caused some excitement when his engine cut over Brussels and he landed on the roof of an apartment house. The aircraft broke in two but Tegerdine escaped with cuts and bruises. The same pilot had to bale out over enemy territory

on the 22nd. He was seen to get down safely and roll up his parachute. Two days later F/L W. F. Wiltshire of the Red Indians baled out and was posted as missing.

The Oshawa Squadron lost F/O Jack Menard on the 25th when he crash-landed in Germany but he called up to say that he was uninjured and he returned to England iii May. On the 24th F/L Walz of the Hornets was forced to bale out after an attack on road transport but he too was subsequently reported safe. This was Walz's second escape, a similar disappearance in June 1944 with a subsequent period of two months in hiding having ended with his return to his unit.

The McGregor-Northcott Wing at Heesch got off to a good start in March. On the 1st the Rams, on their only show of the day, an armed reconnaissance, were bounced in the Dorsten area by about forty Me.109s and FW.190s. S/L Klersy called a break and got behind an Me.109 which he brought down in flames. A second one similarly went down in flames and then, as his section reformed, Klersy met some FW.190s one of which he destroyed. It went into the deck and exploded. Klersy now had ten destroyed, an achievement for which he was awarded the D.S.O. F/L MacKay obtained strikes on an Me.109, damaged an FW.190 which spun towards some cloud, and then similarly damaged another FW which likewise spun towards the cloud. This last shed its starboard wing, however, and Johnny chased it down until he saw it crash in flames. F/O A. E. Sawyer probably destroyed an Me.109. These victories gave the Wing the honour of being the first formation in Second Tactical Air Force to chalk up a total of 300 enemy aircraft destroyed. The squadron's success was somewhat offset by two casualties. F/L O. E. Thorpe, on his last operational trip, was forced to crash-land at Volkel, where he escaped with nothing more than a bad shaking-up, but F/L Harry Furniss, whose aircraft was damaged in the combat, failed to return, and was later reported a prisoner of war.

Rail and road transport was attacked with success by the Winnipeg Bears and the Caribous but an attack on ground targets on the 3rd, the last for a period of two weeks, resulted in the loss of F/L Dick Audet, D.F.C. and Bar of the Grizzly Bears who was shot down while attacking a train. During his tour of operational flying he had destroyed 10½ enemy aircraft in the air, one on the ground and damaged another. Uneventful patrols, escorts and sweeps alternated with duff weather until March 12th when a patrol by two pilots of the Rams resulted in the destruction of an Me.262 by F/L L. H. Watt. Another Me. 262 was shot down the next day near Munster by F/O H. C. Nicholson of the Winnipeg Bears after a very fine piece of work in vectoring by a ground control officer. The 13th was a day of escorts, artillery reconnaissance, and fighter sweeps. On one of the sweeps F/O McKay of the Rams had some difficulty with his engine, baled out, and was reported as missing.

Ground targets came into their own again on March 15th, the Wing piling up fifteen rail cuts and one road cut and blowing up. a petrol dump. On the afternoon of the 17th a special target was selected for dive-bombing-a German stragglers' post in a village east of Wesel. The Rams circled the target until the clouds cleared and then, diving through accurate and intense light and heavy flak, they obtained three direct hits. The Grizzly Bears got a number of trucks and made four rail cuts while the Falcons also cut a rail near Haltern. As they were returning the Falcons met four FW.190s near Koesfeld. Two of the enemy took refuge in the clouds but F/O V. Smith and S/L M. D. Boyd, who had only recently assumed command of the squadron, shared in the destruction of one of the others, its pilot baling out, and P/O H. W. Grant got the last one which spiralled down in flames.

Apart from one squadron having half its aircraft damaged by flak on one mission, nothing unusual occurred until

the 10thwhen the Grizzly Bears undertook three Air Sea Rescue patrols for a disabled Walrus off the Hague. The Caribous ceased operations on the 23rd to prepare for their return to England but the remaining squadrons of the Wing destroyed twelve road vehicles and damaged others.

It had been anticipated that the Luftwaffe would make a supreme effort to defend its homeland on the 24th when the crossing of the Rhine was scheduled to take place. To offset this the Allies planned counter-measures in the air, the R.C.A.F. Wing alone putting in upwards of 200 sorties. Though a full squadron standing patrol was maintained throughout the day between Zutphen and Winterswijk there were no sightings of the enemy. The Winnipeg Bears, lent to another wing for the occasion, did some free-lance flying further into Germany but they encountered nothing though they did attack with success a number of ground targets.

The Winnipeg Bears attacked a train in the Hamm-Munster area on the 25th and their new commanding officer, S/L L. A. Moore, D.F.C., was brought down either by flak or ricochet bullets. The Falcons somewhat offset this loss by destroying three of a formation of twelve Me.109s that they encountered while patrolling between Zutphen and Winterswijk. S/L Boyd destroyed one Me.109 which, after shedding pieces, went down in flames while F/L Pieri fired at another which hit the deck and burst into flames. F/O V. Smith, who had trouble with a jet tank and did not get into the fight until the end, shot down the third enemy aircraft.

The Wing flew 181 sorties on the 26th and though no Huns were sighted the Rams turned in a sizeable account of sixteen enemy transports destroyed. On a morning reconnaissance F/O McCracken of the Grizzly Bears was forced to bale out over enemy territory when his aircraft was hit by flak. He was seen to land and gather in his parachute. F/L J. G. Burchill of the Caribous was hit by flak on an afternoon show and baled out near Dorsten in enemy terri-

tory. By evading the enemy he got back to his squadron in April.

The speed and frequency with which the bomb line moved forward again called for caution. This factor, combined with overcast skies, restricted the scale of ground attacks for two or three days but on the 28th the Rams were vectored on to six enemy aircraft in the Dulmen-Koesfeld area. Only two pilots, F/L Johnny MacKay and his Number 2, who had lost their squadron in the clouds, saw the Huns. Johnny gave chase to the rear one and destroyed it. Then, while trying to regain his squadron, he saw another Me.109, "slipping along the deck". After one burst from the Spitfire's guns the enemy pilot baled out. MacKay's score was now ten destroyed and three damaged.

Ground targets were attacked again on the 30th and there was one encounter in the air in which F/L H. A. Cowan of the Winnipeg Bears destroyed an FW.190. The Falcons, however, had bad luck. F/L W. J. Anderson was hit by flak and was posted as missing while F/L W. R. James was also hit by flak and baled out. In a letter to F/L C. J. Johnson, James subsequently gave an account of what happened to him:

The Jerrys got hold of me as soon as I baled out, there being a whole house full of them awaiting me to land, and consequently I spent the duration in a P.O.W. camp in Holland. They tried to take us (about 15 of us) to Germany around the end of the war but we only got as far as one of the Dutch Frisian Islands. We made our way back to the mainland after V-E Day and on to Nijmegen where they had a sort of reception. camp for ex-P.O.Ws. From there we went to Brussels and they flew us across to here (Bournemouth).

The Winnipeg Bears finished up the month by destroying three enemy aircraft. On their first show on March 31st F/O R. W. Lawson dived on two FW.190s south of Oldenburg and shot them down in turn. Shortly afterwards F/L Bruce Innes saw another trying to take refuge in cloud but he destroyed it before it could escape. The other squadrons

flew uneventful patrols.

For the first few days of March the Turner-Johnson Wing was busy moving forward again, this time from Evere to Petit Brogel, near Bourg-Leopold. There they were housed in Nissen huts which they found better than tents but not as good as the quarters they had occupied in Brussels. The weather was cold and they had difficulty getting wood for their small stoves—coal was unobtainable. Many of the, pilots made trips to nearby German towns, München-Gladbach, Roermond and Cologne, from all of which they returned with tales of desolation and irrepressible German arrogance.

Uneventful operations and bad flying weather characterized the first week of the month and in the second week things hardly improved. Three casualties marred the record. On the 9th P/O Eric Downer of the Oshawa Squadron was forced to land east of Wesel while escorting bombers. He called up on the R/T to report that he had landed safely but he was inside the enemy lines. He returned to England in May. Two days later a Red Indian pilot, F/O D. A. Fawthrop was killed when his aircraft crashed three miles from base. Then on the 15th WO G. V. Boudreau of the Wolf Squadron made a forced landing behind the enemy lines, but was later reported safe.

In the third week escorts to bombers, two-man patrols, and sweeps all proved unspectacular. Another pilot was lost on the 19th when P/O H. C. Byrd of the Wolf Squadron failed to return from a sweep of the Osnabrück area.

Operating to the north of the British Second Army's crossing of the Rhine on the 24th the Wolves destroyed three mechanical transports and damaged two, started a large oil fire in some woods and strafed some cyclists south of Groenlo. They also had some success against rail targets. The next day F/L F. B. Gillis of the same squadron forcelanded amongst the paratroopers and gliders in the Rhine bridgehead near Wesel but he got down safely. On return-

ing to his unit he stated that his forced landing was due to flak from a vehicle marked with a red cross standing beside an ambulance. The Oshawa pilots did well against ground targets on the 25th, cutting a line in two places, demolishing a house near the railway, destroying a cross roads, strafing a staff car and then shooting the occupants as they attempted to flee, and destroying a German headquarters.

March 26th was also a day for ground targets. The Wolves damaged two tanks and a motor transport, also attacking a motorcycle and some soldiers and cyclists. The Oshawa Squadron destroyed or damaged five transports and the Red Indians cut rails, blew up petrol tanks and strafed road traffic, stores, and sheds and bombed a lock gate on the Dortmund-Ems canal. The Hornets strafed road traffic also.

The 28th was a similar day, the Hornets carrying out attacks on Munster and Osnabrück, besides destroying two guns and some road transport. Enemy aircraft were seen and finally F/O W. B. Dalton caught an Me.109 and damaged it, being very disappointed when others got away in the clouds. A section of the Wolves strafed two tanks, a staff car and some gun positions and then attacked a convoy but the day was marred for them by-the loss of F/O Reeves who was hit by flak from the convoy. The Red Indians destroyed road transport and a headquarters but the crowning achievement of the day was that of the Oshawa Squadron. Near Emmerich they encountered two FW.190s which F/L J. W. E. Harten destroyed.

Combined armed reconnaissance and bombing shows were carried out on the 30th. Many rail cuts were made, factories, warehouses and other buildings were hit, a barge was damaged, and road transport was strafed. Once the Wolves attacked marshalling yards, their 22 bombs falling among some 80 trucks. Two of the Hornets' bombs fell by accident in an orchard and set off a series of explosions that revealed an unsuspected ammunition dump.

On the last day of March the Wing moved to Eindhoven. Operationally there were some successes, an FW.190 being destroyed, six rails cut and ten trucks and passenger coaches damaged. But this was offset by the loss of five pilots. The Red Indians got the FW.190, F/O O. H. Levere being the lucky pilot. The Wolves did the rail cutting and it was they who damaged the rolling stock but they returned without F/L E. G. Aitcheson who was last heard from as he was about to bale out. They also successfully bombed an enemy airfield. On their third mission F/L T. S. Todd baled out safely over enemy territory. The Oshawa Squadron was bounced by a Mustang with American markings and two of its pilots, F/Os V. W. Mullen and S. A. R. Round, were shot down. F/L F. G. Picard damaged the Mustang before it got away in cloud. Round was seen to bale out and was later reported in hospital in England, while Mullen was subsequently reported safe in England, too. On their second mission the Hornets lost F/O G. A. McDonald who baled out successfully and was last seen in company with Dutch civilians on the German side of the battlefront. He subsequently returned to the United Kingdom.

In the first week of April 20,000 Germans were surrendering every day. More than 1,000,000 Allied troops had crossed the Rhine and had established a front some 300 miles long east of the river. The Canadians were nearing the Zuider Zee and the German North Sea ports were being threatened by the British Second Army, while the Americans were encircling the Ruhr. Already the enemy was talking of retiring to a mountain redoubt. By the middle of the month the Allies held more than half of pre-war Germany and a bridge-head, 55 miles from Berlin, had been established across the Elbe. Union of the eastern and western Allies was confidently anticipated in the near future. It only remained to find some responsible authority capable of negotiating a surrender on behalf of the Germans.

In the air the Allies made 32,000 sorties in the last week

of the month, losses being put at less than half of one per cent. The decline in the strength and fighting power of the Luftwaffe is best shown, from a Canadian viewpoint, by the fact that one fighter squadron destroyed eighteen and damaged six enemy aircraft in a single day for the loss of one pilot and slight injury to another.

The McGregor-Northcott Wing moved from Heesch in Holland to Rheine airfield in Germany on April 12th, the rear party encountering some difficulty when the Germans broke through to the village of Oss. Two days later they went on to Wunstorf where they occupied a former German airfield. There everyone was much impressed by the scale of the Luftwaffe's equipment and bewailed the destruction of much useful war material prior to their arrival.

There was little of moment for the wing until the 5th when the Winnipeg Bears on their first afternoon mission met twenty FW. 190s and Me.to9s in the Lingen-Rheine area. F/O A. G. Ratcliffe and F/L W. F. Peck destroyed an Me.109 and an FW.190 respectively, the latter also damaging two Me.109s; F/L Henry Cowan probably destroyed an FW.190 while F/L E. R. Burrows and Henry Cowan each damaged an FW.190. Subsequently the squadron concentrated mainly on ground targets, destroying and damaging mechanical and horse-drawn transport in varying amounts. On the 11th the Winnipeg Bears lost P/O G. F. Peterson whose plane was hit by flak and on the 14th the squadron commander, S/L Don Laubman, D.F.C. and Bar, was also hit by flak and baled out. Laubman got back to his squadron on May 5th, however. Rail targets came into the picture on the 15th, the Rams getting one locomotive destroyed and four damaged, the Winnipeg Bears one damaged, and the Grizzly Bears three trains and 24 goods cars damaged.

The primary target on the 16th was again the German transport system, the Wing accounting for 45 locomotives, 139 rail trucks, eleven barges, a number of motor vehicles and two buildings. The Luftwaffe also put in an appear-

ance. F/L Johnny MacKay of the Rams damaged three Arados 234 on the ground as they were taking off but was forced to break away when the flak got too hot. The Grizzly Bears destroyed three enemy aircraft, F/O C. D. Wilson and F/L Gordon each getting a Ju.88 and F/O D. J. Bazett an FW.190. F/L J. E. Maurice of the Winnipeg Bears failed to return from an operation this day but got back to his squadron on May 5th.

The Rams and the Grizzly Bears on the 17th damaged 29 locomotives, the Rams destroying one completely, and together they accounted for 103 railway trucks. The Grizzly Bears and the Falcons each damaged a tank and with the Rams destroyed and damaged a total of 66 motor transports. In addition F/O Francis of the Rams destroyed an Me.109 but F/O Len Dunn was caught in the blast from a petrol train and failed to return. The next day F/L Barker of the Falcons had to make a forced landing between the opposing lines but he returned to his unit.

The Luftwaffe put in an appearance again on the four succeeding days but regretted it. Hagenow aerodrome was the hunting area on April 19th, mechanical transport being the objective. Ten vehicles were destroyed and 43 damaged and in addition five locomotives and 33 trucks were damaged. This score was further augmented by seven enemy aircraft destroyed and three damaged. The Falcons began it all when they engaged six FW.190s and destroyed four of them. F/L Pieri got one and shared a second with F/L Stewart. F/L D. J. Dewan and F/O G. M. Horter each knocked down another. The Winnipeg Bears then came along to add to the toll by destroying one-and damaging three. F/O H. C. Dutton destroyed an FW.190 and damaged another while damaged FWs were claimed by F/Os D. B. Riddell and H. R. Robertson. Later F/O C. B. MacConnell destroyed a Ju.88. Unfortunately the squadron lost F/L Henry Cowan who was thought to have crashed at Parchim aerodrome while pursuing an enemy aircraft. Finally the Rams on a

patrol in the Hagenow area sighted a lone FW.190 which S/L Klersy destroyed.

Though the diarist of the Rams recorded that pilots were gnashing their teeth because of the success of the other squadrons on the 19th, the situation was reversed the next day. They destroyed 18 enemy aircraft and 27 vehicles for the loss of one pilot and two aircraft. On their second armed reconnaissance the Rams saw a large number of enemy aircraft taking off from the grass strip southwest of Schwerin. There were more Huns at 10,000 feet and a top cover at 20,000 feet. The squadron immediately attacked and when it was all over the Rams had totalled eleven Me.109s destroyed and three damaged. S/L Klersy and F/L Woods each destroyed one and shared another, F/O Francis destroyed one and damaged another. F/L W. R. Tew and F/O J. A. Ballantine each destroyed two, F/Ls R. H. Cull and MacKay and F/O J. H. Ashton, D.F.C. each destroyed one and a damaged each was claimed by F/O R. C. Gudgeon and P/O D. W. Davis. F/O R. W. Anderson, however, failed to return. Tew, who now had shot down four enemy aircraft, and Cull, who likewise had destroyed four, were awarded the D.F.C. in July, while F/L MacKay, who had a total of eleven destroyed and a share in a twelfth, was awarded a Bar to his D.F.C. in May.

At 1910 hours the squadron was off once more and again a large gaggle of enemy aircraft was seen taking off, this time from Hagenow aerodrome. The enemy were heading east at tree-top level as the squadron attacked. Seven Huns were destroyed and three damaged. F/L Watt and F/Os Francis and Cameron each destroyed one FW.190 and damaged one, F/L Cull and F/O D. B. Dack each destroyed one while S/L Klersy destroyed two which exploded and crashed. Klersy's score was now 14½. There was no loss from enemy action though one of our aircraft crashed on take-off. The pilot, F/L B. B. Mossing, had a narrow escape since the aircraft had both wings ripped off, the fuselage

broke in two, and one half the aircraft went up in flames but Mossing sustained only a broken leg bone.

The Winnipeg Bears participated in the evening freefor-all and F/L R. J. Taggart and F/O T. B. Lee each shot down an FW.190. The Wing now claimed a total of 317 enemy aircraft shot down since D-Day, 17 probably destroyed and 151 damaged. Earlier in the day the Bears lost WO V. E. Barber when his aircraft was hit by ricochets in an attack on a locomotive and he was forced to bale out over enemy territory. He returned to his squadron on May 3rd, this being the second occasion on which he had escaped from enemy territory.

Three squadrons carried out armed reconnaissance on April 21st while the Winnipeg Bears patrolled over some vital bridges. The Bears had good luck, one Me.109 being destroyed by F/L Burrows and two more being damaged by F/O H. C. Dutton and F/L W. O. Young. The Grizzly Bears, on an armed reconnaissance of the Lübeck-Kielencountered an Me.109 which F/L Hamburg area. McClarty destroyed, the enemy crashing on a railroad track. The squadron also accounted for three locomotives and ten railway trucks. F/O Ellement lost formation after reporting that his aircraft had been hit by flak. He reformed at 4,000 feet but three minutes later disappeared about ten miles southeast of Hagenow. This was Ellement's second disappearance on operations, the first being on January 10th, 1945. He turned up again, however, on May 3rd.

On the 22nd an FW. 190 poked its nose west of the Elbe and was promptly jumped by F/L Gardner and F/O M. F. Doyle of the Grizzly Bears whose combined efforts resulted in its destruction.

There was little of importance then until April 25th when the Rams patrolled over Hamburg and F/L Woods was shot down by flak. He baled out over friendly territory, however, and was reported safe. Then on the 26th the Win-

nipeg Bears discovered some He.i 15s moored at Putnitz aerodrome. F/L Bruce Innes destroyed one and F/U R. H. Roberts damaged another. The next day they went to Ribnitz and found six more He.i15s moored. S/L Gordon, formerly of the Caribous and Grizzly Bears, who had succeeded Don Laubman as commanding officer, destroyed one in the air and F/O Ratcliffe destroyed another on the water. A third was damaged by F/O Robertson as it lay at its moorings.

The Falcons suffered mixed fortune on the 28th. F/L L. A. Stewart had to bale out but landed safely and was returned to his unit by Anson. Later F/O Horter tried to make a forced landing when his jet tank caught fire and it was feared that he had been killed in the attempt. Thanks, however, to some excellent pin pointing by S/L M. D. Boyd it was possible for F/L J. E. McAllister, the squadron medical officer, and two of the squadron pilots to locate the crash. They found F/O Horter still strapped in the cockpit and alive, having spent forty hours in that position. An Army unit in the vicinity had seen the crash, followed by an explosion and flames, but did not believe that anyone could have survived. Having lost a lieutenant and a sergeant in that vicinity recently they did not risk men in further investigation, particularly as the spot was still open to mortar fire. The aircraft was a complete wreck and Horter was supported in the cockpit by shoulder straps only. Had these come undone he would have fallen into a deep ditch which was full of water where he would certainly have been drowned. He was taken to hospital where he was found to be suffering from a broken arm and other injuries and from effects of exposure. It was a miracle that he was still alive.

On a patrol of the bridgehead area on the 29th the Falcons encountered a gaggle of ten or more FW.190s going south on the deck over Winsen. They attacked the, enemy and shot down three, F/L R. L. Hazel, F/O J. H. MacLean and F/O A. T. Gibb each destroying one. About ten minutes

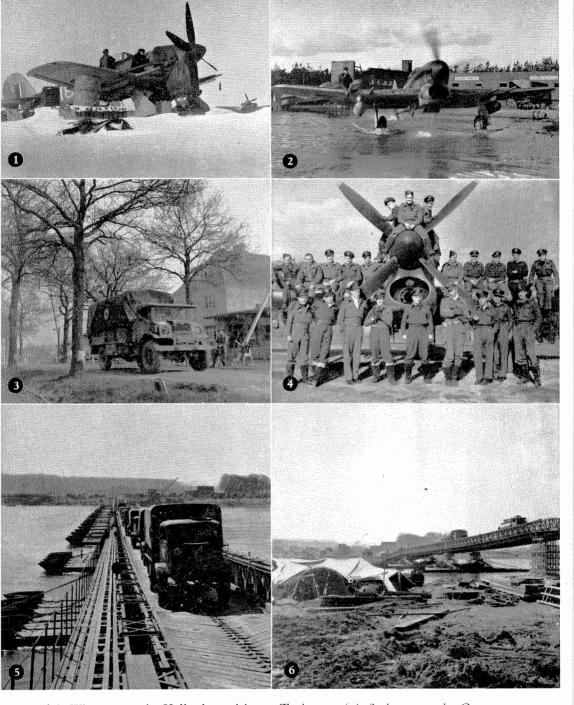
later F/O Gibb destroyed another FW.190 when two more were sighted about cloud level northwest of Luneburg. The Grizzly Bears also met a small formation of FW.190s which had just dropped their bombs in the Elbe. In the ensuing combat F/O C. D. Wilson damaged one. A topic of interest that day was the capture by this squadron's servicing echelon of five Germans who arrived on the airfield with a Ju-52 at 0440 hours and gave themselves up. One of the prisoners remarked that Germany was now "Kaput", a sign of the defeatist attitude that had set in amongst the enemy.

The month ended with a fine show by the Winnipeg Bears and the Falcons. Standing patrols were maintained by the Wing all day but, though Huns were seen, no engagements followed. Armed reconnaissance, however, produced results. The first of these by the Winnipeg Bears ended with eight enemy aircraft destroyed and four damaged for no trouble at all. Four FW.190s were destroyed by F/L S. M. Knight, F/L W. O. Young, who also damaged another, F/L F. E. W. Hanton, D.F.C., who likewise damaged a second one, and F/L D. R. Drummond. F/L R. J. Taggart destroyed two FW. 190s on the ground in the wooded dispersal area of Schwerin aerodrome, F/L Bruce Innes likewise destroyed one on the ground and two more were damaged on the ground by the squadron as a whole. F/L S. M. Knight shot down a Ju.88 in addition to his FW.190. On the second show F/L S. M. Knight and F/L E. R. Burrows discovered a Ju.88 flying west at 1500 feet two miles east of Lübeck. When they had finished with it, it crashed in flames in the middle of a village. Eight more Ju.88s were seen on an aerodrome about ten miles south-east of Lübeck and two of these were claimed as damaged by F/Ls Hanton and Burrows.

The Falcons flew an armed reconnaissance to the Hagenow-Schwerin-Wismar area and met a number of Me.109s. S/L Boyd destroyed two and F/Ls Barker and



S/L A. E. Monson, D.F.C., of Cody, Wyo.
 S/L R. F. Reid, D.F.C., of Toronto.
 S/L H. H. Norsworthy, D.F.C., of Montreal.
 G/C P. Y. Davoud, O.B.E.,
 D.S.O., D.F.C., of Kingston, Ont.
 S/L R. G. Crosby, D.F.C., of Vancouver.
 F/O
 H. Lawrence, D.F.C., of Edson, Alta.
 S/L W. H. Pentland, D.F.C., of Calgary.
 W/C F. G. Grant, D.S.O., D.F.C.
 Water colours by F/L P. A. Goranson.)



Winter scene in Holland: servicing a Typhoon.
 Spring scene in Germany: a Typhoon carrying 1,000-lb bombs under the wings taxis to the runway, guided by a fitter.
 The convoy of No. 143 (Typhoon) Wing crossing the Dutch-German frontier.
 Pilots of the Westmount Squadron.
 and (6) The Typhoon Wing convoy crossing "Sparrow Bridge" over the Rhine at Xanten.

Stewart each destroyed one. Boyd and Barker respectively damaged one more; Boyd's total now stood at 4V2 destroyed and Barker's at 4, an achievement that netted both the D.F.C.. Acting as spare on this operation F/L Pieri returned early and met a lone FW.190 which he shot down, bringing the squadron's total for the day to five destroyed and two damaged.

On their last mission the Grizzly Bears encountered an FW.190 that had just bombed Lauenburg. F/O M. F. Doyle engaged it and shot it down in flames. F/L S. M. McClarty experienced engine failure and had to crash-land but he found himself in Allied territory and returned to his unit.

Signs of the times were an unheralded visit on April 18th and a collection taken up in the course of the month. The first was the arrival of an assortment of Serbs, Czechs, Croats, Roumanians, Ukrainians, Poles, Russians and Frenchmen and one of "anonymous nationality" who wanted to know why his Red Cross parcels were not coming in yet. The collection, made at the suggestion of S/L L. M. Sanker, R.A.F., was for the relief of the unfortunate inmates of Belsen. It was estimated by an army padre that 500 lives were saved by the Wing's contribution of food and medical supplies.

One of the most outstanding events in the history of the Turner-Johnson Wing in April occurred on the 6th when W/C J. F. Edwards, D.F.C. and Bar, D.F.M., replaced W/C J. E. Johnson, D.S.O. and 2 Bars, D.F.C. and Bar, as wing commander flying. Johnson had 38 victories in the air to his credit when he was posted as station commander to another Wing. His successor was a Canadian with a distinguished career in the Middle East, who at the time of the award of the Bar to his D.F.C. in October 1944 had thirteen enemy aircraft destroyed to his credit.

The Wing moved three times during the month, the first time on the 8th from Eindhoven to Goch, in Germany, where they went under canvas, then on the 13th to Diepholz, about 35 miles north of Osnabrück, where German barracks were occupied, and finally on the 28th to Reinsehlen, approximately 30 miles south of Hamburg. At this last place they found undamaged wooden buildings for use as barracks. Excellent camouflage had hidden the place so successfully that Allied bombers had apparently never found it. The Germans had set large numbers of. booby traps before they left and they had attempted to plough up the landing strip but lacked sufficient time to complete the job. Camp water and lighting systems were soon in working order and the furrows on the strips were quickly turned down so that operations could begin almost immediately.

Though there was a considerable number of sorties flown in April by all squadrons in the Wing there was very little action in the air. After three quite uneventful days the aircraft were loaded up with 250 lb. bombs on the 4th and 5th to attack communications. Meppen, Cloppenburg and Osnabrück were the areas on the 4th but the weather prevented accurate observation of results, though a number of houses were known to have been hit. A village, too, was bombed but similarly without observed results. The next day an attack on the marshalling yard at Haselunne resulted in the blowing up of an ammunition shed. Other railroad targets were also successfully bombed, together with a number of crossroads. On both days rolling stock was attacked and damaged.

The 6th witnessed the loss of F/O S. E. Messum of the Hornets whose aircraft was hit by flak while he was engaged in a weather reconnaissance in the Rheine area.

On the 8th in an attack on rail targets the Oshawa pilots found a staff car which they destroyed, an achievement they repeated later in the day. They also destroyed a house that was suspected of being a headquarters and damaged four house trailers in a wood and some motor transport. The Hornets, now commanded by S/L T. J. DeCourcy, bombed a train in the yards at Cloppenburg, a town which

the Wolves also attacked with success, and they claimed one horse-drawn transport and some motor vehicles as well as a share in the bombing of Cloppenburg itself.

The Red Indians discovered some barges on the 10th, 21 of them being damaged, and then proceeded to shoot up an airfield where three hangars and a number of administration buildings were damaged. The Wolves and the Oshawa Squadron provided cover for Mitchells bombing Cloppenburg which they reported as practically destroyed. At various times during the day small quantities of transport including a staff car were successfully attacked.

An impressive total of MET, AFVs, HDTs, LOCOs, TRGs<sup>1</sup> and barges destroyed or damaged was shown in the records of the Wing for April xath. A tramp steamer or tanker of 1,000 tons and some buildings were damaged too by the Hornets. The Oshawa Squadron lost F/O T. P. Dollery, a recent addition, who was reported killed during air operations.

An equally varied score was obtained several. days later. The Wing successfully attacked two locomotives, road transport, including two staff cars, and strafed a small contingent of soldiers and a 4-gun flak position which they silenced. The Indians reported that a hospital train appeared to be serving as cover for enemy flak batteries.

A dull round of patrols on the 15th brought action in the air for the first time in the month when the Red Indians, almost out of fuel, encountered four FW.190s near Rethem. Before the enemy could reach cloud cover the squadron attacked and F/Os J. V. Marsden and A. G. Scott managed to damage one of them. The Wolves on an otherwise dull day destroyed eight transport vehicles and damaged ten

<sup>&</sup>lt;sup>1</sup> MET–Mechanical transport AFV–Armoured fighting vehicles HDT–Horse drawn transport LOCOs–Locomotives TRG–Goods trucks or freight cars.

more, a locomotive and a goods wagon, while the Oshawa pilots strafed a marsh just west of the aerodrome where a pocket of Germans was reported holding out.

The events of the 16th are best described in the words, of the Wing diarist:

The Wolves led off with an armed reconnaissance in the Cuxhaven/Stade environs. Scattered motor enemy transport and horsedrawn transport appeared and were given full treatment in various parts of the area and a substantial train was thoroughly beaten up. A field gun position was strafed and silenced. On the second and third trips more motor transport took the count at various points and a second train was knocked out. The fourth mission followed the same pattern as did the fifth, with the exception that two tanks were attacked and damaged. A patrol over Celle proved uneventful.

The Oshawa Squadron's first take-off was with twelve aircraft on an armed reconnaissance in the Stade/Luneburg/Saltwesel area. No little corn was found in this bin, mainly in the way of rolling stock. Two locos were destroyed, two damaged, and bags of goods trucks removed permanently or semi-permanently from service. A staff car was liquidated—always good for a sinister laugh. On the second run scattered mechanical and horse-drawn transport was the form, no less than five destroyed and eight damaged being scored. This prevailed, more or less, on the next two sorties also, although one civilian car, when clobbered, evidently set off an explosion which levelled a house beside which it was parked. Two uneventful patrols around Bremen tapered off the day.

The Red Indian Squadron opened their day with a twelve aircraft armed reconnaissance in the Cuxhaven/Stade neighbourhood, and found action immediately. The first flight to reach the area was welcomed by sight of an eastbound train, which they promptly fell upon, rendering it thoroughly unfit for further service. A glance at the timetable showed a westbound express due presently but, distrusting the Jerry's ability to keep to schedule, they ranged up track and met old 49 halfway. Having clobbered a few box cars, they, too, topped it with a "loco destroyed", the engine finally exploding and bursting into flames. Some ammunition still being unexpended they gave attention to scattered mechanical transport, horse-drawn transport, spotting them throughout the reconnaissance area, and it then became obvious that this was one of the better days. On the third sortie they strafed the airfield at Stade, shooting up parked aircraft. However, no claims were

entered as the crates may possibly have been already damaged. Two lively-looking staff cars at various points also were destroyed on this do—of which we may hear more later, who knows? Once again, on the third patrol, more moving stock reared its head and was well pranged-including a vigorous attack on a tank, although no claim was entered on this latter, the vehicle perversely refusing to smoke or flame. The day's programme ended with two uneventful patrols over Celle.

The Hornet Squadron made four armed reconnaissances of the Luneburg area and one eventful patrol. The armed reconnaissances were almost identical with very solid scores on mechanical and horse-drawn transport being rung up on every one. The mechanical transport ranged from buses to staff cars, and one set of goods trucks was attacked in the Luneburg area. In all, 176 sorties were flown during the day.

There was action in the air again on April 17th. The Wolves, hunting for enemy aircraft in the Hamburg area, sighted five FW. 190s, one of which half-rolled and dived away, the rest climbing to 19,000 feet. F/L J. D. Lindsay, D.F.C., who by this time had a score of eight enemy aircraft destroyed, closed in to attack as they too half-rolled and dived. At 600 yards Lindsay registered hits on the port wing root of one of the Huns who went down but disappeared in the smoke and flak over Hamburg. F/O W. V. J. Burdis, however, was lost to the squadron when he died of injuries after attempting to make a forced landing. The Hornets attacked a bus and a convoy of fifteen trucks, leaving twelve of them in flames. The Red Indians got a staff car and other road and rail transport.

Ground targets were attacked again on the 18th when 500 lb. bombs were carried, the strafing rising to a crescendo on the 19th. In, addition to the usual targets the Wolves found a tug-boat and a yacht, both of which they damaged to prove that Jerry was not safe on either land or sea. The Oshawa Squadron pierced the brown and white camouflage of what looked like horse-drawn transport to find that they were really attacking tanks. The Red Indians caused such an explosion when they attacked some oil tank cars that aircraft at 7,000 feet were rocked. In the course of

the day two pilots were lost; F/L Webb Harten of the Oshawa Squadron was apparently hit by flak and F/O A. G. Scott had to land his damaged aircraft in enemy territory for the same reason.

The Luftwaffe put in one of its now rare appearances again on April list. The Wolves on an armed reconnaissance sighted five Me.262s on Hagenow aerodome but did not attack them. As they were crossing the Elbe on their return, however, S/L H. P. M. Zary, D.F.C., in command since the middle of February, saw two Me.109s apparently climbing from a ground attack. He attacked immediately ordering his Number 3, F/O D. Leslie, to take the port aircraft while he himself took the starboard one. Both logs were shot down, Zary's victim practically disintegrating and Leslie's bursting into flames, its pilot baling out. This was S/L Zary's seventh victory and F/O Leslie's first kill. An Me.262 tried to attack while the combat was taking place but it did no damage and disappeared immediately. The Oshawa Squadron met six FW.190s south of Hamburg but on attacking were bounced in turn by another formation of six FWs from above and astern., A dog fight ensued but there were no observed results, our pilots remarking that Jerry had shown more than his usual spirit. The Hornets had bad luck. F/O Bob Marsh was forced to bale out when his aircraft was hit by flak while he was attacking a train. He was seen to land safely, pick up his parachute and make for the woods. He subsequently returned, reporting that he had lived on potatoes and wild ducks' eggs. Later, on an armed reconnaissance of the Parchim-Schwerin area, the squadron was bounced by four FW. 190s. The enemy climbed, half-rolled and dived for the deck immediately, and though F/L T. R. Watt followed them down and got in a few bursts he was unable to observe results. F/O H. R. Hanscom failed to return, having been last seen at 12,000 feet over the combat area. The next day the Hornets almost sustained another casualty when a 40mm. shell exploded

behind P/O P. C. Gomm's radio, making a sieve of the fuselage, but he managed to get back to base safely.

The Luftwaffe appeared again for a brief while on April 23rd. Returning from an early morning patrol of the Bremen-Hamburg area the Wolves met twelve long-nosed FW.190s. Eight of the aircraft were milling about low over an autobahn, the other four acting as cover at 3,000 feet. The squadron engaged the four flying as cover and F/Ls H. R. Finley and W. N. Dove each destroyed one. F/O A. McLaren experienced engine failure southeast of Bremen and crash-landed but called up to say that he had got down safely. He eventually was released from a prisoner-ofwar camp. Later in the morning two more FWs were seen but they took refuge in cloud. The Oshawa Squadron damaged some transport and strafed a tank.

A total of 22 transports, two locomotives and several goods cars was accounted for by the Hornets on the 24th while the Red Indians claimed a complete train. But therewas a bigger and more varied toll on the 25th. F/O Bob Shannon of the Wolves destroyed an FW.190 at Hagenow just after it had landed and, as aircraft in large numbers were reported parked there and at Schwerin, the squadron visited those two aerodromes later in the day and damaged four enemy aircraft on the ground. S/L Zary claimed an Me.262 and a Ju.88 while F/Ls Reg Morris and E. 0. Doyle each damaged an Me.262. On the southwest corner of Schwerin aerodrome twelve Me.109s were strafed and as our pilots pulled up and away they noted a large explosion which enveloped all the aircraft in a cloud of dust. About twenty aircraft were seen at Travemunde aerodrome and sea station and again there was ground strafing with good results. F/L A. E. Fleming destroyed an He.III and F/O Leslie claimed what he thought was an FW.189. A Do.26 was damaged by F/O Fred Town with the help of F/O J. R. Baker and FS J. C. Pickering, and in addition six small speed boats and two tugs were damaged. The squadron also

reported two submarines lying in the channel.

The Hornets participated in the strafing of Schwerin where they saw some sixty assorted Ju.87s, FW.190s, Ju.88s and other types of aircraft. One Ju.88 was destroyed by F/O A. J. Dilworth and damage was claimed to two Ju.87s and an unidentified aircraft by F/L Finley, to another unidentified aircraft and a Ju.87 by S/L DeCourcy, who got the D.F.C. for his part in this attack, to a Ju.87 and an unidentified aircraft by F/O H. A. Greene, a twin-engined and a single-engined aircraft by F/O M. C. Tucker, a Ju.87 by F/O O. A. Dodson, an FW.190 by F/O G. S. Taylor and a Ju.87 by F/O W. G. Conway. In the evening the same squadron visited Neustadt aerodrome where they sighted twenty-five Me.109s and FW.190s on the ground. Two FWs were destroyed by F/O Tucker and one by F/L Finley while F/O Taylor damaged two more. The squadron also had much success against road transport. This time, however, F/O Dilworth failed to return, his aircraft being assumed to have been hit by flak.

The Hornets lost two pilots the next day, too. F/L Watt reported a glycol leak after an attack on road transport near Neumünster and subsequently crash-landed while F/O Conway said that he had hit a pole when pulling up from a ground attack. He was not heard from after he asked for directions to make base. Watt was later reported in hospital and Conway safe in the United Kingdom. The Wolves recorded an attack on road transport and also strafed a locomotive with a train-load of lumber.

The 27th and 28th were poor days though the Wolves saw a Do.217 flying southeast at 6,000 feet on the 28th. F/L Cap Foster attacked it from astern and it burst into flames and crashed. Foster now had three destroyed and a damaged to his credit, as well as several transport vehicles, a score which netted him the D.F.C. On the 29th the same squadron encountered an FW.190 at which W/C J. F. Edwards took a squirt-but it escaped in the clouds. Similarly

the Hornets saw an Me.109 at Lübeck which also escaped.

The month closed with a good score on enemy road and rail transport by the Wolves and the Oshawa Squadron. In addition F/L Fleming of the Wolves shot down an Me.108. The Oshawa Squadron set something of a record when for twenty-four sorties it claimed 45 motor vehicles destroyed and io6 damaged, together with two locomotives and five goods trucks damaged too. S/L Mitchner, D.F.C., was awarded a Bar for his share in this devastation of enemy transport.

An interesting note was added to the diary of the Red Indians by F/O Marsden on April 29th:

Soon after we landed (at Reinsehlen) Evans and myself heard of the army finding one of those graves containing German political prisoners of all nationalities so out of curiosity we went to ee it. There had been 156 of them in all—the last 19 of them were still there and those are what we saw. It wasn't a pleasant sight as they had been dead since April 5th and were being exhumed by local farmers overrun by the Army. We'd both seen photos of them in newspapers but hardly believed it. However, there's no doubt about those pictures now.

The close of hostilities found the McGregor-Northcott Wing at Wunstorf. On May 1st the Rams on a patrol of the Schwerin Lake area sighted an FW.190 which W/C G. W. Northcott, D.S.O., D.F.C., damaged. A second one was seen taking off from Lübeck aerodrome and was likewise damaged by S/L Klersy. On the last patrol of the day the aircraft of F/L G. D. Cameron, D.F.C., was hit by flak and he had to bale out but he was escorted back to his unit by a German doctor. The Grizzly Bears were more unfortunate, Losing P/O D. B. Young, who was posted as "missing, particulars unknown".

The same Bears gained two victories on the and when F/O Wilson destroyed an Me.109 and F/O G. N. Smith damaged an Me.262, the only other event of the day being the damaging of a locomotive and a passenger car by the Falcons

The 3rd was a great day, a kind of grand finale to the whole continental campaign. The Rams had been patrolling over Hamburg as the ground forces entered the city and, while in search of enemy transport, saw a grass strip at Schonberg, northeast of Kiel, with a number of enemy aircraft in various stages of camouflage. The Rams attacked and, meeting no opposition, continued firing until they ran out of ammunition. S/L Klersy1 destroyed a Ju.52 and an He.III. F/L Watt destroyed a Ju.52 and a Ju.87, F/O Francis<sup>2</sup> destroyed two Ju.52s and F/Os Gudgeon and Dack each three more; P/O V. E. Cottrell destroyed two Ju. 52s and P/O Woodill one He.III. In addition the squadron accounted for five locomotives damaged, thirteen rail trucks damaged, seven motor vehicles destroyed and 47 damaged and three horse-drawn transports damaged. The Winnipeg Bears also added to their score. Sighting three Fi.156s on the ground north of Neumünster, F/Ls Innes and Peck attacked and left all three damaged. Innes now had three enemy aircraft destroyed and was awarded the D.F.C. in September 1945

A little later S/L Gordon, D.F.C. saw another Fi.156 flying near the deck and shot it down in flames. F/L J. A. O'Brian was hit by his own ricochets during this operation and baled out southeast of Hamburg. The same day he was reported as on his way back to the squadron. For the Grizzly Bears and the Falcons it was an unfortunate day, both losing one pilot. F/L McClarty, D.F.C., of the Bears was hit by flak and disappeared twenty miles south of Kiel while F/L Pieri of the Falcons was forced to bale out when his aircraft likewise was hit by flak or ricochets.

<sup>&</sup>lt;sup>1</sup> Klersy was killed on a training flight on May 22nd. His D.S.O. was announced in June, 1945, at which time he was credited with the destruction or damaging of go enemy vehicles, eight locomotives and eight goods trucks since the award of the Bar to his D.F.C. His total of aircraft destroyed in the air and on the ground was 16½.

<sup>&</sup>lt;sup>2</sup> F/O J. P. Francis who had destroyed four e/a was awarded the D.F.C.

The last score of the war for this wing was obtained on May 4th. A locomotive and five trucks were damaged by the Falcons and an He.*III* was destroyed by F/L D. F. Campbell and F/O T. L. O'Brien of the Grizzly Bears. The Winnipeg Squadron got two motor vehicles and damaged ten others. Flying on the 5th was uneventful. On May 12th the Wing moved to Fassberg. There they found many wrecked German aircraft. They soon settled in and availed themselves of the many amenities that they found, including the two swimming pools. On July 5th they reluctantly left for Utersen, a few miles north of Hamburg, where they were within reach of the many entertainments provided for service personnel. They remained there throughout the summer, the Wing forming part of the Occupation Forces.

Since D-Day, June 6th, 1944, the McGregor-Northcott Wing had flown 22,372 sorties and destroyed 361 enemy aircraft in addition to taking an enormous toll of ground targets.

Reinsehlen continued to be the *locus operandi of* the Turner-Edwards Wing until its official disbandment on July 7th, when two of the squadrons, the Oshawa and the Hornets, were transferred to the McGregor-Northcott Wing, the Wolves and the Red Indians being disbanded with Wing headquarters.

May started with a bang. On the ist, four squadrons maintained standing patrols over the bridgehead across the Elbe, carried out armed reconnaissances in the Schwerin area, southeast of Lübeck, and provided escort fighter cover to medium bombers attacking Lübeck. The reconnaissances provided many targets on the roads and the second patrol netted an encounter between the Wolves and twenty FW.190s. In the dog-fight two of the enemy were destroyed by WO R. C. Neitz and F/O R. Young, one was probably destroyed by F/O Bob Shannon, and eight were damaged, one by F/O Leslie, two by WO Neitz, two by F/L C. L. Rispler and three by Shannon. After escorting Mitchells to

Lübeck, the Red Indians on an armed reconnaissance in the Schwerin area saw an FW.190 which was shot down by the joint efforts of F/L W. P. Harper, F/O E. H. Mann and WO P. S. Murphy. The squadron also successfully attacked a convoy of motor vehicles while the Hornets similarly had considerable success against road transport.

On the 2nd the Wing participated in almost every conceivable kind of activity, patrols, armed reconnaissances, escorts to bombers and to a V.I.P. (very important personage), scrambles, fighter sweeps, and reconnaissances to check up on bombing results. The Wing got credit for an enemy aircraft when a German wireless mechanic landed a Henschel 126 on the aerodrome and, with another member of the master race, surrendered to the Canadians. The Wolves scored again when, on a patrol of the bridgehead, an He.III was shot down by F/O Town. But it was really the Hornets' day. On a morning patrol, four of their pilots destroyed twelve transports and damaged twenty more, four more pilots got an additional twelve and still later the squadron found a number of aircraft on .the east shore of a lake in the Lübeck area and destroyed one He.III and a Fieseler-Storch as well as damaging two more He.IIIs. Then a Ju.88 was seen flying north at 2,500 feet over Bad Segeberg. F/O M. J. Clow and F/L Finley shot it down but Finley's aircraft was hit by the rear gunner's fire and Finley had to bale out. He returned to the squadron three days later. The Red Indians on their afternoon patrols damaged five trains and destroyed ten motor vehicles.

A new note was introduced on May 3rd when, in addition to their other duties, the squadrons indulged in antishipping strikes. The Wolves turned in a varied score of one locomotive and rolling stock damaged, road transport destroyed and damaged, flak towers destroyed, hits on a runway and dispersed aircraft, trawlers and cargo ships damaged -and rail cuts obtained. The Oshawa Squadron, on an otherwise uneventful day, got its last victory of the war

when F/O Rex Tapley and P/O Larry Spurr jointly destroyed a Do.217. The Red Indians' only relief from a series of dull patrols was an attack by an FW.190 which failed to do any damage and then made off in clouds. The Hornets damaged locomotives and rolling stock, road transport, cut roads and rails, destroyed a trawler and damaged others, and destroyed a Ju.88 which fell to the guns of S/L T. J. DeCourcy, F/L R. G. Sim and F/O W. A. Marshall. Subsequent operations by the Wing provided nothing eventful.

Since D-Day the Wing had flown 20,084 sorties, destroyed 184 enemy aircraft, probably destroyed 8 others and damaged 103.

## DAY FIGHTERS IN GREAT BRITAIN

## September 1944–May 1945

While the other Canadian day fighter units were busily engaged with the Second Tactical Air Force on the Continent one Spitfire squadron remained in England. Throughout September the Winnipeg Bears, commanded by S/L W. G. Dodd, D.F.C., were stationed at Hawkinge. There they could hear shelling and occasional loud explosions across the Channel, they could see the smoke screens laid down for convoys and, on occasions, they experienced near-by bursts from German long-range guns. Once a shell damaged the water towers, the sergeants' mess and a few other buildings but there were no casualties. On other occasions, too, shells landed near but did no appreciable damage.

The major duty of the squadron was escort to heavy and medium bombers and transport aircraft on operations over the Continent. Sometimes they got into action themselves as when, returning on the morning of September 1st from an escort to Halifaxes, they strafed a number of goods trains in north-eastern France and later attacked large quantities of road transport. They observed enemy shipping and, as opportunity offered, they strafed German personnel and ground targets.

When the Bears moved to Antwerp at the end of September their place was taken by the Silver Fox Squadron under the command of S/L Walker. They continued the same work, escorting Bostons to Nijmegen on October 5th, Halifaxes to the Ruhr on the 6th and 12th and Lancasters to Duisburg on the 14th, all uneventfully. After some shipping reconnaissances over the Dunkirk area they reverted to bomber escorts over the Ruhr on the 25th. Three days later, as they were returning from a raid on Cologne by Lancaster aircraft, F/O A. J. McDonald and P/O V. A. G. Brochu disappeared and it was feared they had come to grief. The month ended with an escort to Lancasters bombing Walcheren.

In the last two months of the year the squadron accompanied bombers to Cologne, Gelsenkirchen, Homberg, Düren, and Bottrop and to targets in Holland. On one occasion they went with Dakotas carrying supplies to Paris but none of their operations in this period were particularly eventful. On December 28th, the squadron left Hawkinge and arrived at Skaebrae in the Orkney Islands on the 30th. There they were to remain until April.

In the first three months of 1945 only two or three important events were recorded. A snow storm isolated the WAAF barracks in January so effectively that the women were unable to get to the camp to perform their usual duties. On another occasion an airsea rescue patrol was carried out 30 miles off the Norwegian coast. WO J. E. Bohemier failed to return from an exercise on January 23rd and on March 10th F/L E. W. Martin similarly was posted as missing.

With their return to Hawkinge on April 4th the squadron became more active. Bombers were, escorted to the naval base at Ijmuiden, to Heligoland, Hamburg, Bayreuth, Swinemunde and Wangerooge Island but again nothing noteworthy occurred. Their last operation took place after VE-Day when they gave air cover to the forces removing German prisoners from the Channel Islands. For the first half of May they were at Hunsden in Hertfordshire but on the 17th they moved to Digby, Lincolnshire, the place where the squadron had been formed. There they remained until the middle of July when they went to Molesworth in Huntingdonshire for disbandment.

On March 21st, 1945 the Caribous commanded by S/L Johnston left Heesch for Hunsden to spend the few remaining weeks of the war in England. At the beginning of April they converted from. Spitfires to Mustangs for long range bomber escort and returned to operational flying on the 9th, accompanying Lancasters to Hamburg where an oil refinery was bombed. On the 10th they undertook a similar mission to the Leipzig marshalling yards, a single Me.163 being the only enemy aircraft encountered. The next day they accompanied bombers to Nuremburg, the only opposition of any kind being a moderate amount of flak. On their fourth, fifth, and sixth operations with their new aircraft thev escorted Bomber Command Lancasters Swinemunde. As they were returning from one of these operations some strange aircraft were sighted which, on investigation, turned out to be Russian. There was much circling around and signalling to mark the occasion, the first linking up of Fighter Command with the Russian Air Force. On April 15th F/L Dick failed to return, being last heard of over the Enschede-Munster area, but the next day the squadron scored twice. Northeast of Berlin some FW.190s were bounced. F/L W. V. Shenk, trying to scare off an FW that was on the tail of another Mustang, chased the enemy down to 2,000 feet scoring strikes on the starboard wing. The FW straightened -out, rolled over on its back and took a gentle dive upside down towards the deck. Thiss was claimed as a probable since Shenk did not actually see the

enemy crash. Meantime F/O L. H. Wilson and F/O R. J. Robil lard chased another FW.190, both firing at it until it took fire, dived into a wood and blew up. These were the last squadron victories.

On April 18th the Caribous patrolled enemy airfields in northern Germany and southern Denmark while Lancasters bombed Heligoland. Acting as wing leader was Lieutenant-Colonel W. H. Christie, who had flown with the squadron on occasions. Fifteen miles southwest of Handorf he experienced engine trouble and had to bale out, his parachute being seen to open. He was thought to have landed safely but behind the enemy lines.

The next day as the squadron was taking off on an escort to Lancasters bombing Munich, F/O Robillard had a very narrow escape. When his aircraft was only ten or fifteen feet in the air it dropped a wing and crashed but the pilot walked away from the wreck without a scratch. As the squadron was returning F/O D. J. Jeffrey was forced to make a belly landing near Canterbury but he too got away without injury. A hundred Lancasters bombed the oil refinery at Regensburg on the 10th and the Caribous were again called upon for escort duty. Two days later, as the marshalling yards at Cuxhaven were raided, the squadron patrolled between Zeven and the target. Nothing eventful marked either occasion. Similarly, there was an attack on Flensburg on the 23rd.

The 25th provided one of those operations to which every pilot must have looked forward. At 0650 hours the Caribous took off to escort Lancasters in an attack on Hitler's chalet at Berchtesgaden. Fighter pilots merely noted that the bombing was heavy and concentrated, no opposition being encountered.

Finally, after VE-Day, the squadron participated in the liberation of the Channel Islands and a week later it moved to Digby in Lincolnshire where, except for the last half of July when it was stationed at Molesworth, it remained for

the summer. Two sad accidents marred these last days. On May 10th, WO S. H. Lorenz was killed on a practice flight and in the middle of June the squadron lost F/O V. F. McClung who crashed into the sea and was believed killed. Otherwise this was a carefree time as the squadron prepared to disband, an event that took place early in August.

## FIGHTER RECONNAISSANCE

January-May, 1945

There was a considerable amount of snow in January and this, combined with high winds, kept the three Fighter Reconnaissance squadrons, now entirely equipped with Spitfires, grounded for more than half the time. Except for the attack by the Luftwaffe on the ist, nothing eventful occurred. Plays, concerts and Ensa shows at local theatres, clubs, cafés and Canada House, and station movies and dances held in the *Flieger Kaserne*, the former German airmen's barracks, helped to tide over these wearisome non-flying days.

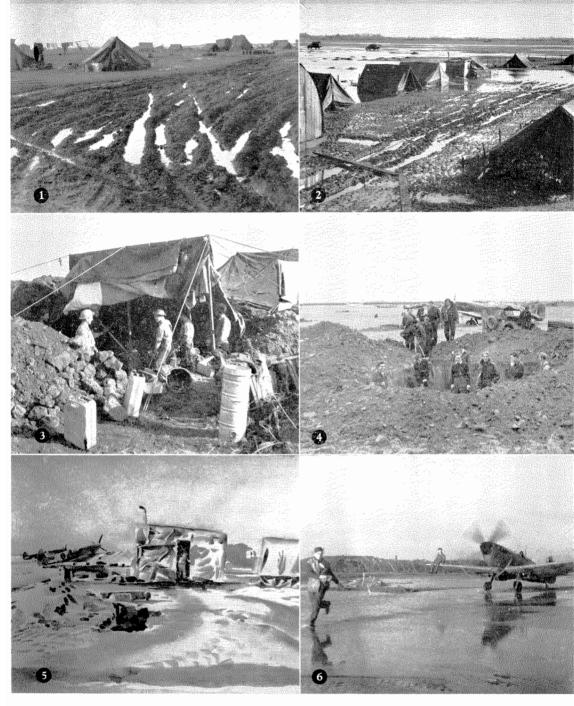
The high-flying Toronto Squadron got in a total of 82 sorties but found very little to report except a few V.2 trails and some flak. The Imperials and Sudburys, employed on lower level reconnaissances over the battle and rear areas, returned with occasional reports of enemy movements or the results of one of our bomber raids. On New Year's Day, for instance, the Imperials noted that the marshalling yards at Rheydt were in a shambles. Later in the month, when the Germans made a thrust towards Dinant, the Sudburys observed that there was much movement in Houffalize but that its general trend was eastwards, confirming that the enemy attack had been repelled. These units too had to weave their way through barrages of flak. On one occasion F/O F. R. Bartlett of the Imperials intercepted a burst and had to bale out but he got back safely, the incident being

cited when his D.F.C. was gazetted in May.

February was little different. The Wing was unable to fly about one-third of the time owing to continued poor weather. Furthermore the continuous rains had caused serious dislocation on roads that had not been constructed to withstand the strain of modern war and ground crews had to assist airfield construction units in keeping open the lines of supply. When the pilots could fly, low cumulus interfered considerably with their work. Sometimes they were able through gaps in the cloud to obtain information about the state of a bridge or the movement of rail traffic, thereby enabling other squadrons to get in a certain amount of ground strafing.

At the end of the first week the Imperials or Sarnia Squadron sent nine pilots to an R.A.F. Wing near Hertogenbosch for cooperation with the ground forces in the Reichswald area where an attack by the First Canadian Army and the 30th Corps of the Second British Army was contemplated. The Nazis on this front were fanatical and fought for every inch of the ground. The detachment remained at Hertogenbosch until the 11th, reporting action on one occasion only when F/Ls Bob Cutting and Bill Sawers attacked a ferry on the Rhine setting it on fire and causing troops to jump overboard. On the 8th the Sudbury Squadron lost F/O G. S. Taylor who baled out over enemy territory when his engine failed.

On February 14th it was recorded that it was one of the Wing's busiest days in the New Year. They sighted one tank, twelve barges, three tugs, 41 locomotives, over 8,000 trucks, sixteen trains, and nearly 300 mechanical transport vehicles. But quantity is sometimes of little significance, it being observed on the 16th, for instance, that there was very little rail movement between the Rhine and the Maas Rivers, only two trains, one of which was on fire, and five engines being seen. Pilots of the Toronto Squadron, designated to work in the Wesel and Rees areas along the main



(1) and (2) Living conditions on a former German airfield in Holland taken over by the R.C.A.F.
(3) and (4) Airmen and pilots dig shelters at their quarters and dispersal.
(5) "Spitfire dispersal in Belgium." (Water colour by F/O D. K. Anderson.)
(6) A Spitfire is guided down a flooded airstrip in Holland.



(1) F/O C. E. Butchart of Sudbury, and S/L F. H. Chesters of Regina. (2) The convoy of No. 39 (Recce) Wing rolling into Germany. (3) F/O L. W. Seath of St. Lambert, P.Q. (4) G/C E. H. Moncrieff, O.B.E., A.F.C. (5) S/L G. Wonnacott, D.F.C., of South Edmonton. (6) S/L J. B. Prendergast, D.F.C., of Victoria. (7) Installing 36-inch cameras in a Spitfire high altitude reconnaissance aircraft. (8) and (9) City of Toronto Squadron pilots relax between sorties.

enemy supply route, found the skies filled with aircraft and reported considerable amounts of flak but they were unable to see much on the ground because of heavy smoke caused by recent bombings.

From the 17th to 21st there was no flying but then the weather improved and a heavy operational programme was put into effect. Eight out of nine missions flown by the Toronto Squadron were more or less successful, low level photography proving particularly worth-while. Artillery reconnaissance resulted in disaster for enemy gunners and there was much reporting of enemy movements by road and rail. Me.262s were seen but could not be brought to combat.

Information gleaned on February 23rd was to the effect that the condition of the bridges at Wesel had not changed, though work was being done on the road bridge, that Xanten appeared to possess a submerged pontoon bridge, that at least ten locomotives had steam up in the yards at Krefeld, and that tugs, barges and launches were heading south towards Düsseldorf. Again tactical reconnaissance by the Imperials on the 27th showed evacuation eastwards along the roads leading out of Viersen -and on the 28th a considerable increase in the number of German ambulances was noted. Photographic enterprise in the last week of the month seemed to consist of a series of frustrations for the Toronto pilots as they repeatedly were prevented by clouds from being able to focus on a bombed refinery at Hanover.

The most memorable event in March was the crossing of the Rhine at Remagen on the 7th by troops of the First U.S. Army. This allowed the Allies to establish a bridgehead east of the river, the last line of German defence. On the night of the 23rd/24th the Ninth U.S. and Second British Armies crossed the Lower Rhine and established two more bridgeheads south of Wesel and between that town and Rees. Despite the fact that the enemy was still able to make in a day 300 sorties over the battle area, mostly by

jetpropelled aircraft, the end was now in sight.

Bad weather on March 1st interfered with photographic and artillery reconnaissance though late sorties reported increased road activity, an increase in the number of German ambulances and a movement eastwards across the Rhine bridge at Krefeld of some 200 mechanical transport vehicles. Improved conditions the next day resulted in sorties over the territory of the Second British and First Canadian Armies and a special photographic reconnaissance by the Sudbury Squadron between Wesel and Xanten, the results of which greatly impressed the army. Rain and snow hampered photography again on the 3rd but reports were made of the movements of trains, mechanical transport, tanks, tugs, and barges and the position of U.S. troops in the Krefeld, Kempen, and Geldern areas was noted. From that point until the 9th there was no flying except on one day when 10/10ths cloud made observation practically impossible and photography useless.

Even on the 9th reconnaissance was hardly worth-while because of the weather but the road bridge over the Rhine at Wesel was found to be in use by the enemy. The day was notable for being the only occasion during the month when enemy aircraft were encountered. On a late sortie to the Munster area one section of the Imperials, now commanded by S/L F. S. Gilbertson, was attacked by a score of FW.190s at 4,500 feet. F/L Bob Cutting, who was later awarded the D.F.C., caused one of the enemy to take fire in the air but he did not see it crash. He also damaged another in a head-on attack.

There were one or two sorties on succeeding days but little in the way, of results, though on the 13th and 4th enemy movements westwards were noted and diggings east of the Rhine were seen and photographed by the Imperials on the 15th. Then followed a week of fine weather. Gun positions were reconnoitred on March 17th and photographs taken of an objective that was bombed by the McGregor-

Northcott Wing. More gun positions, rail cuts and aerodromes, with suspected dummy aircraft, were seen on the 18th. There was a general impression of activity near the Rhine and of quiet towards the east and northeast. Dorsten, Wesel, Bocholt, Haltern and Koesfeld were the areas investigated. Gun positions seemed to be the primary objectives again on the 19th with some observation of rail, road and river movements, the Sudbury pilots making a special photographic reconnaissance of the Rheine airfield. The Imperials lost F/O W. A. Glaister who failed to return from a sortie to the Haltern-Dorsten area. A month later he returned to the squadron after escaping from a prisoner of war camp near Hanover. The Toronto Squadron got in 27 photographic reconnaissances on the 21st and the Ving took over 10,000 pictures; but the tactical reconnaissance sorties of the other squadrons found little movement to report though they brought back observations on gun and barrage balloon positions, some rail and road movements and new diggings. One pilot noted a dozen white or glass projectiles being fired in a westerly direction.

Haze and smoke from Allied smoke-screens and fires on the German side of the lines interfered with observation on the last two days before R-Day, *i.e.* the crossing of the Rhine in the Wesel area. Again artillery positions were noted and photographed, the Sudbury Squadron also paying attention to the marshalling yards further east at Munster. The principal subjects of pilots' reports concerned damage to towns and the condition of freight yards.

All this seemingly uneventful routine of noting positions on the ground and taking photographs was put into perspective for the pilots of the Wing on the night of the 23rd when they were briefed for operations on March 24th. The briefing officer, from the Second British Army, told the pilots of the magnificent pictures they had taken of the projected crossing points on the Rhine. In the period 17th-24th March their photographs had been developed as soon

as they could get them out of the cameras. What was of immediate importance was phoned in at once to the army and then, in addition, a trace was made showing full details of all flak positions in the zones of artillery and air responsibility. Every 24 hours amendments to this trace were signalled to the army and thence to First Allied Airborne Army Headquarters. Apparently the Germans built up their flak defences but these could not be concealed from the allpervading eye of the camera. One sortie, flown by Paul Barton of the Toronto Squadron, a pilot who was later awarded the D.F.C. for his work, resulted in the discovery of many well-hidden camouflaged positions of light flak batteries as well as the presence of a mine belt. Sorties flown by this squadron for the preceding three months, over 100 in number, covered the area from the Rhine to Hanover. As a result of these sorties defence overprints were prepared and distributed to each division of the army concerned. These overprints in turn were annotated and distributed amongst all officers down to platoon commanders, who. were thus able the more easily to locate their objectives. Special mosaics of the Rhine were also made, and a photostat of the Rhine floodings was prepared daily for the army. Delivery of reports and prints was made each day to Sixth Airborne Division in England, the Eighteenth Airborne Division in Dreux, the 8th, 12th and 30th Corps and the First Allied Airborne Army Headquarters in Paris. By using Auster aircraft delivery to mobile. corps headquarters was made possible since these aircraft were able to land in any available grass field. In addition motor transport did two runs of 200 miles each twice every 36 hours, two vehicles covering 5,000 miles in three weeks. Enlargements and reprints were frequently received in England within 24 hours of the placing of an order. On March 23rd special sorties were flown over the battle area in the morning and the photographs were developed, printed, interpreted, and flown to England by Dakotas so that they were in the hands

of the General Officer Commanding Sixth Airborne Division by 2100 hours. This meant that each army platoon commander had a 24-hour-old photograph of his objective to carry with him on the morning of the 24th. As a result of these photographic reconnaissances it was decided that there had been no increase in the flak defences in certain areas and the army was able to proceed with the operation as planned. The pilots were interested to hear the briefing officer explain that certain units would cross the Rhine at points which they had photographed and it was equally interesting to have the operations officer explain the next day how this had been carried out.

There was excellent visibility on the morning of the 74th and the Wing kept the area of the airborne invasion under almost continuous observation from 0630 until 0945 hours. Over a hundred sorties were flown. Two special flak patrols were flown by the Sudburys over the airborne drop area and an anti-aircraft position was attacked by them just before seven gliders landed in the vicinity of a nearby bridge which; it was presumed, they captured intact. On one mission the Imperials directed some of our batteries onto two German guns firing from a wood.

In the afternoon, between 1330 and 1530 hours, the Wing covered an area to the northwest of the airborne drop but was unable to locate any targets as smoke, haze and dust obscured the battlefield. Other reconnaissance aircraft looked after the rear area of the Emmerich-Rees-Bocholt triangle. Pilots in the forward area of the same triangle directed successful shoots by the artillery on the two groups of German guns but heavy smoke was known to conceal other enemy batteries which could not be engaged. Reconnaissance aircraft of the Imperials or Sarnia Squadron discovered scattered mechanical transport in the Dinslaken-Bisch-Emmerich sector and put in a call for Typhoons which effectively dealt with the situation, blowing up one of the enemy transports. The same squadron reported the

destruction of a bridge which had been intact the previous day and the Sudbury pilots found some tanks in a wood between Isselburg and Bocholt. Cyclists, mostly moving west, were sighted in the Emmerich-Groenlo-Borken area.

But battles are not won in a day. From 0800 to 1800 hours on March 25th there was practically continuous cover of the battle area southeast of the Rees-Isselburg line which comprised the low, partly wooded ridge between the Rhine and the Issel. There the Imperials directed successful artillery shoots on guns, earth-works and mechanical transport. The Sudbury Squadron ranged further east and south of Bocholt where enemy guns were engaged by Allied artillery and transport was damaged. Both squadrons swept the area east from Emmerich to the Bocholt-Wesel road, reporting on mechanical transport, defence works and the state of the bridges. Tanks were seen in the afternoon northwest of Dorsten by the Sudbury Squadron and a possible supply depot was spotted in the Wesel woods.

Despite cloud at 6,000 feet in the morning and rain storms in the afternoon almost continuous patrols were maintained in the Emmerich area on the 26th. Once more there was successful direction of artillery and reports sent in on the presence of tanks and transport. Again Typhoons came in to make a killing on receipt of these calls. As on preceding days the Toronto Squadron did photographic work while the other two co-operated directly with the army by making tactical and artillery reconnaissances. But on the 27th the weather closed in and made flying impossible. The Wing was pleased to learn that their services during the past few days had been of considerable assistance to the army and that, in particular, their pilots had been responsible for finding the whereabouts of two enemy Panzer divisions.

The weather was not good enough for artillery shoots on the morning of the 28th but it cleared later in the day. The progress of the battle could be judged by the fact that the Wing was now operating north of the Isselburg-Bocholt line, north and northeast of the Bocholt-Borken-Dorsten road and that substantial movements of mechanical transport proceeding north and northeast were observed. Some enemy guns were sighted and our own artillery directed on to them, reports on the state of bridges were brought back, tanks were sighted and movements on the roads were broadcast. What these days meant to the pilot in the air can be judged from the following report of an artillery reconnaissance:

Reception loud and clear. No targets or guns not firing found in area A. In area B four gun pits (seen) occupied and intense accurate light flak from same place. Passed to ground who said target would be engaged by other guns. Opening salvo 200 yards short of target but O.K. for line. Correction given but round fell 700-800 yards over. (Two more) corrections and round O.K. for range but 100 yards left (of target). Another correction but round fell in almost same place. Further corrections. O.K. for line but over correction and two rounds fell 150 yards short and third 75 yards to left. Pilot then gave another correction but unable to observe as short of petrol. Shoot very difficult due to deteriorating weather.

There was no flying on March 29th and things did not improve on the 30th until the afternoon. Thereafter contact reconnaissances were made for the Twelfth and Eighth Corps of the Second British Army, the Battle Group and later for the Thirtieth Corps. A selfpropelled gun, horse-drawn transport, tanks and scattered mechanical transport were located, Typhoons being brought up to deal with some of the tanks and mechanical transport. Enemy movements were mainly to the north and northeast again. Reconnaissance of the Dortmund-Ems canal revealed it as completely dry and investigation of bridges over the rivers Berkel and Slinger in the path of the advance by the Thirtieth Corps showed them intact.

On the 31st the weather interfered seriously with operations, the only successful sorties being carried out by the Sudbury Squadron which photographed the Dortmund-Ems canal

The Wing made two moves during the month. On March 7th they went to Petit Brogel, in northern Limbourg, where after five months in winter billets they found themselves under canvas again for three weeks. The airmen were very pleased with the new site that nestled in a forest of young pine, which served the purpose of camouflage and windbreaker, while the pilots spoke well of the new metalcovered airstrip. The re-appearance of eggs in the daily diet worked wonders too. Morale ran high and there was a sense of urgency and expectancy pervading everywhere. Despite the more or less constant presence of buzz-bombs it was felt that the war would soon be over. This feeling was intensified on the 30th when the groundcrew moved into Germany to an airfield at Damm near Wesel, though the aircraft and pilots did not advance until April 10th when the whole Wing settled down at Rheine. En route from Petit Brogel to Damm the convoy passed through the "impregnable" Siegfried line with its pill-boxes, tank traps and concrete blocks. The steel gates that formerly blocked the roadway were wide open as the vehicles rolled through. To the Canadian airmen the Rhine at Xanten looked small, even insignificant, and it seemed to them that it scarcely justified the big battle that had just been fought for its possession. Anti-aircraft batteries were much in evidence around the bridge approaches and barrage balloons floated overhead.

Wesel appeared to be a mass of smouldering rubble through which roadways had been cleared by bull-dozers to make way for the advancing troops. When the Canadian airmen crossed the Bailey bridge over the Rhine at noon on March 30th they claimed, that they were the first major R.C.A.F. unit to have proceeded east of that river. Then came the fields where the airborne troops had fought. Gliders, both Horsas and Hamilcars, lay about everywhere, the

majority intact but some nothing more than burnt-out frames The airfield at Damm was covered with water and vehicles sank to the hubs. After eight days in the mud the Wing moved on. Rheine airfield, built in 1939 and serving at different times as a German night fighter and bomber station, was a tremendous sprawling field with miles of perimeter track and a forest on one side. Situated 25 miles north of Munster it had been well plastered by our bombers. Its buildings had been demolished by the retreating enemy and there was little in the way of accommodation. Runways gaped with huge holes and hangars were piles of twisted steel. As a precaution against any action by German troops or civilians personnel were only allowed to leave the station in groups of three or more, and weapons were kept loaded at all times. German civilians were evacuated from the area and the Wing took over a Third Reich farm complete with live-stock. Pork chops, roast pork and venison appeared on the dining tables and morale went higher still.

The three contact sectors for the Wing in April were those of the Thirtieth, Twelfth and Eighth Corps. For the first week the weather was unsuitable for effective photographic work by the City of Toronto Squadron though on the 4th F/L H. R. Pinsent did a tactical reconnaissance 'between Minden and Bremen. At the request of the Second Army he descended from 25,000 to 1,500 feet and made contact with an armoured column at whose suggestion a visual reconnaissance of the bridges in the same area was undertaken. From the 7th to the 11th the squadron had fairly successful days but again bad weather intervened until the 16th. Sometimes our high-flying Spitfires made tactical reconnaissances bringing back useful information about the state of bridges, road blocks and demolitions, gun positions, rail and road traffic, the presence of infantry and the eastward movement of the German Army. But the emphasis was shifting to coastal reconnaissance so that attempts by the enemy to escape by sea might be frustrated.

Reconnaissance by the Imperials and the Sudbury Squadron showed no resistance in the Thirteenth and Eighth Corps areas on the 2nd but found some defensive activities southwest of Osnabrück. A special reconnaissance of the Dortmund-Ems canal revealed that eleven of twenty bridges in a 20-mile stretch were still intact. A similar sortie the next day made a like report on the Ems-Weser canal bridges east of Ramsche.

The same two squadrons flew 68 sorties on the 4th. They found some zigzag diggings on both sides of the two roads running east and northeast of Ibbenburg, reported thirteen bridges on the Dortmund-Ems canal down and two railway bridges on the Ems-Weser canal also destroyed, and observed tanks and mechanical transport southeast of Diepliolz. The next day they found road blocks, broken bridges and other signs of resistance in the NordhornLingen-Schuttorf area but white flags were flying over Schuttorf itself.

After a day of no flying there was little to report on the 7th around Lingen but at Verden the Sudbury Squadron found three bridges still intact with our own troops only twelve miles away at Vilsen. An intact bridge was seen too at Usen but two bridges at Hoya were confirmed as destroyed. In the evening they were able to inform the army that its troops had crossed the Leine at Bordenay and they passed on a request for air cover of the bridges at that point.

Day after day, when flying was at all possible, they brought back similar reports. Nothing out of the ordinary occurred until the 15th when F/L W. M. Middleton of the Sudbury Squadron, on a tactical reconnaissance of the Lüneburg area, sighted an FW.190 and destroyed it, while his partner gathered the information required by the Second Army. This was the Wing's only victory in the air during the month. Middleton was awarded the D.F.C. in July.

From the Rheine airfield the Fighter Reconnaissance Wing advanced on April 16th to Wunstorf near Hanover.

The journey of 137 miles was made over very rough roads which caused many of the vehicles to break down. But the route wound over some of the most prosperous and beautiful farmland that the Canadians had, ever seen, Tremendous brick and timber houses with vast barns were indicative of agricultural prosperity in that neighbourhood. "Why didn't they have sense enough to be satisfied with this" was the general comment. The new site turned out to be in very good condition, paratroopers and tanks having surprised the Germans so effectively that they had left everything intact, including a number of aircraft. The headquarters building was placed under guard because it contained many highly The McGregor-Northcott important Nazi documents. Fighter Wing had arrived ahead of the Fighter Reconnaissance squadrons and had had first choice of the remaining buildings. As a result many of the Reconnaissance Wing personnel found themselves once more under canvas. To compensate for this the Germans had thoughtfully left a good supply of champagne in a nearby warehouse. It was the best aerodrome occupied by the Wing to date with a nearby lake that was a potential recreation centre of a very high order. One unpleasant feature was the reported presence of German troops in the vicinity and, indeed, men of the R.A.F. Regiment were sent to investigate a rumour that German Intelligence Officers were hiding in a Schloss only a mile away. Another annoyance was the discovery that the Germans had left booby traps, one airman suffering shrapnel wounds in the legs after coming into contact with one.

The 16th, the day of the move to Wunstorf, was a good day. After the early morning mist had disappeared the sky remained clear with only small amounts of cumulus cloud after midday. All but two of 26 operational sorties in search of photographs were successful. On the 17th, besides the usual reports on enemy movements, pilots returned with accounts of scattered soldiers who appeared to be starting fires and once they saw a column of 600-1,000 British pris-

oners of war on the further side of the Elbe.

April 19th was also a fairly good day, photographic reconnaissances being flown to Hamburg, Lübeck, Lauenburg, Bremen, Kiel, Lüneburg and the mouth of the Elbe, F/O R. J. Dew returning to report the presence of a German cruiser at Wilhelmshaven which the Nesbitt-Grant Wing attacked successfully. At the same time the Second Army called for a search for evidence of a possible counter-attack west of Salzwedel but none was found. Once, while searching for a heavy gun position southwest of Hamburg, pilots of the Sudbury Squadron were attacked by anti-aircraft fire from a supply ship and a submarine. Some satisfaction was afforded on the 10th when Typhoons were led by the Sudbury pilots to a point where mechanical transport was concentrated and two flamers resulted.

On the 23rd the Second Army was asking for evidence of a German withdrawal by sea and reconnaissances of Bremerhaven and the Elbe estuary were undertaken. Nothing could be seen that confirmed the suspicions of the Army but the next day, as they scanned the mouths of the Elbe and the Weser, they saw many ships, some of which had steam up, and they were greeted with a concentration of anti-aircraft fire.

On April 25th the Army again requested a search for a westward counter-thrust in front of the Thirtieth Corps in the direction of Bremen. Many gun pits were seen, complete or under construction, covering Bremen, Harburg and Sch6nefeld. Concentrations of small and medium vessels and barges at various points in the estuaries were reported but there was no evidence of counterattacks. On the 26th the Imperials noted that our troops had entered Bremen.

On the Wing's last day at Wunstorf a Ju.52 landed with four officers who wished to surrender. They had been ordered to Norway but were convinced that the war was over and gave themselves up instead. They handed over their weapons to an LAC fitter.

On the 26th the Wing moved from Wunstorf to Reinsehlen, near Soltau, about halfway between Hanover and Hamburg. This time the Turner-Edwards Wing had preceded them and again they had to go under canvas. The field was still under construction, numerous roads leading to half-completed buildings, and there were reports of the existence of huge underground hangars. Again there were pockets of German troops in the vicinity and it was deemed a lights. On July 6th the Imperials lost F/L W. J. Hanna and F/L R. W. C. Davis, both of whom were killed when their aircraft crashed as they were returning to LUneburg from Warmwell. All squadrons in the Wing were disbanded on proceeding to the United Kingdom for repatriation at the end of the first week in August.

### FIGHTER BOMBERS

January–May, 1945

The Typhoon Wing, previously under the command of G/C Davoud, came under the direction of W/C A. D. Nesbitt, D.F.C., with the beginning of the New Year. After the initial excitement of New Year's Day had subsided a period of comparative calm set in. The weather interfered with flying and nothing very eventful occurred during the first half of January.

On the 14th all three squadrons, Wildcat, Westmount and Beaver, attacked a number of ground targets. The afternoon mission of the Wildcats was against a V.2 site but the target was covered with haze so they dropped their bombs on a railway line instead and strafed some military huts, causing casualties. Later they peppered a stationary train too. The Westmount pilots blew up a bridge in enemy territory but F/L Cote, who had been forced to bale out in the previous September, was brought down by flak. He landed and then called up to say he was all right. In April

he was reported as a liberated prisoner of war. Some woods and a barracks in the neighbourhood were also strafed and later in the day this squadron too attacked a stationary train. The Beavers obtained strikes on a tank and damaged a locomotive and fifteen box cars.

A village in front of the 12th Corps was the target for a bombing and strafing attack by the Wildcats on the loth. A road intersection was similarly bombed the next day. The Westmount Squadron also attacked a village on the 10th and another on the list but lost F/O Sweeney on the first "do". Sweeney landed successfully behind the enemy lines and then called up to say that he was "O.K. and starting to run", but the enemy must have caught him as he was later reported a prisoner of war. The Beavers participated in these two operations with success but F/O P. H. Kearse failed to return and was posted as missing. The Army signalled the Wing, "Commander 12th Corps requests you convey his appreciation of support given on 21st January, 1945, under conditions of bad visibility. These operations materially assisted ground troops to reach their objectives."

Villages were again attacked on January 22nd, the Wildcats losing F/O Frank Skelly, and the Westmount Squadron reporting that S/L Crosby's aircraft had blown up and that it was very doubtful that he could have survived. "Bing", however, was not killed. When his aircraft was hit by flak it blew up and he was thrown out. He twice attempted to pull the rip cord with his right hand but his shoulder had been dislocated. At 1,000 feet he managed to pull the cord with his left hand and landed safely. He made for the woods and there, in intense pain, he lay wrapped up in his parachute for 36 hours. Germans were working within ten feet of him at one time. On the 23rd, when our aircraft again bombed the area, he was badly shaken and covered with dirt and debris. He then decided to make for the Allied lines four miles away. Eluding enemy sentries he encountered a patrol of the 43rd Division which passed him on to the 39th British General Hospital where, besides the injury to his shoulder, he was found to be suffering from frostbite. In March he was awarded the D.F.C. He was succeeded in command of the squadron by S/L J. H. Beatty.

The Beavers also pranged villages on January 22nd, and the next day the army reported that it had captured boo prisoners in the places the Wing had attacked. Villages and other ground targets were again the objectives on the 23rd, the Wildcats reporting the loss of F/O I. V. J. Wallace on a rail-cutting job and the Beavers the loss of F/L H. N. Byers. For the rest of the month what flying there was proved uneventful except for the destruction of a locomotive and the strafing of some cars by the Wildcats and Beavers on the 29th

In February, the Wing experienced mild weather and gentle rain as the ice disappeared from the roads. Skies were frequently overcast and half the time the weather was not fit for flying. Pilots complained that it was a dull month.

What Gremlins could do was well illustrated by an account of an operation undertaken by the Westmount Squadron on the and. F/L Shaver was briefed to take off with six other pilots at 0935 hours to attack the Dorsten-Koesfeld railway with 1,000 lb. bombs. F/O Fraser's aircraft took fire on taxying out. The spare pilot, F/O W. Anderson, then started for the take-off position but his starboard bomb fell off. While he waited for the removal of the dud bomb from the runway his engine temperature rose alarmingly and he had to switch off. F/L Carr then lost a bomb as he was getting airborne but there were no ill effects. F/O McBride got as far as Wesel when his aircraft developed an oil leak. He jettisoned his bombs and his Number 2, F/O D. E. Johnson, and his Number 3, F/O D. G.Cleghorn, did likewise, all three returning to base. WO L. J. Horrocks then had an oil leak over the bomb line and had to jettison his load between the Meuse and Rhine. F/L Carr was forced to jettison his one remaining bomb in the same area and consequently only two pilots reached the objective. There was a considerable amount of light flak over the target but one possible rail cut was obtained. The Wildcats were more fortunate, obtaining two cuts, but the Beavers, though they cut the rails in four places and damaged two locomotives, lost F/O G. L. Passmore and the next day F/O J. F. Warrell failed to return from a similar operation.

The 6th was better than average. The Wildcats got at least four rail cuts and raked with cannon some 200 railway goods trucks. On their first operation they stirred up a considerable amount of flak between the Maas and the Rhine into which the Westmount pilots also ran. In the later afternoon there was a guessing game between the Germans and the Beavers. After cutting the Koesfeld-Burgsteinfurt line they strafed a locomotive on the Munster line and sighted another letting off steam in the middle of a wood. This latter looked too much like a wellbaited trap so they left it in search of other prey. Very shortly they encountered a long train carrying motor vehicles but this time they were short of fuel and were compelled to head for home. On the 11th the Westmount Squadron, dropping through a hole in the clouds, saw a road bridge crossing a canal in Holland. Their bombs straddled the canal causing both banks to cave in and covering the bridge with debris.

February 14th turned out to be an exceptional day, reminiscent of the Falaise gap. The Wing, including one R.A.F. squadron, dropped 250 bombs of 1,000 lb. calibre, *i.e.* 125 tons. The Germans in their heaviest raid on London dropped only 943 tons. The Wildcats cut six rails, damaged three locomotives and fifteen goods cars and blew a German house to pieces. F/O Allan Nixon, however, failed to return. The Westmount Squadron had one of those pieces of rare good fortune, an encounter with Me.262s. F/L L. Shaver destroyed one and F/O Fraser got another. These



(1) P/O J. Simpson of Winnipeg. (2) W/C J. D. Somerville, D.S.O., D.F.C., of Parry Sound, Ont. (3) W/C R. F. Hatton, D.F.C., of London, Ont. (4) F/L C. L. Vaessen, D.F.C., of Landis, Sask., with one of his ground crew, Cpl. Jim Wilson of Vancouver. (5) F/L B. E. Plumer, D.F.C., of Bassano, Alta. (6) F/L C. E. Edinger, D.F.C., of Ferndale, Mich. (7) W/C W. M. Beveridge, D.F.C., of Westmount, P.Q. (8) F/L R. H. Finlayson of Hamilton, Ont. (9) F/L R. N. Rivers, D.F.C., of Kitchener, Ont.



(1) Pilots and navigators of No. 418 Squadron working out their courses. (2) to (7) Lynx Squadron crews: (2) F/L W. A. Boak, D.F.C., of Regina, and W/C R. Bannock, D.S.O., D.F.C., of Edmonton and Toronto. (3) F/O J. H. Wyman of Grande Prairie, Alta., and F/L J. J. Greene of Toronto. (4) P/O W. Anaka of Kenora and WO B. J. Weber of Quebec City. (5) F/O D. J. McConnell, D.F.C., of Sault Ste. Marie, and F/L M. Kazakoff, D.F.C., of Wadena, Sask. (6) F/O C. E. S. Hamlyn-Lovis of Moose Jaw, and F/L R. J. Radcliffe of Toronto. (7) F/O J. B. Kennedy and F/L T. W. Trewin. (8) No. 418 Squadron's score-board. (9) S/L D. B. Freeman of Calgary. (10) F/O J. Caine, D.F.C., of Edmonton.

were the only victories in the air in the month of February. On the same day the Beavers scored 22 rail cuts besides damaging seven barges, a staff car, two locomotives and seventeen trucks.

Throughout the month V.1 flying bombs were frequently seen passing over the airfield and there were occasions when these and V.2 bombs exploded in the vicinity. On the 16th a wing effort was organized against a V.1 site at Puttershoek, fifteen miles south of Rotterdam. Some 24 tons of bombs were dropped on the target which was cleverly concealed amongst some factory buildings. The Wildcats took off first at 1335 hours followed by the Westmount Squadron and the Beavers. All were equipped with 1,000 lb. bombs. A large explosion and a great deal of smoke indicated that the target had at least been hit though it was not wiped out. "There was a great column of smoke from the target as I left," said S/L James Hogg, D.F.C. of the Wildcats. "Just before that a big explosion shook us. I figure one of the bombs hit a rocket bomb or some other explosives." For the rest of the day a routine order of rail cutting was carried out. On the next flying day, the 21st, two more V:1 sites, southwest of Rotterdam, were attacked, the three Canadian squadrons co-operating with other Typhoon aircraft. The rockets of the R.A.F. Tiffies and the cluster bombs of the Beavers took care of the heavy flak while the Wildcats and the Westmount Squadron dropped 1,000 pounders on the ramps at the two sites. WO G. R. Errington of the Wildcats was hit by flak but was seen to bale out safely on the German side of the lines

On February 22nd and 24th attention was redirected to railbusting, a total of 59 cuts being obtained on the one day and 47 on the other. On the first occasion pilots of the Wildcat Squadron got eight cuts with ten bombs. After several successful sorties the Westmount pilots chased a lone transport aircraft which led them into a flak trap. F/L B. P.

Swingler, who had just started his second tour of operations, failed to return. On the 24th the Wildcats made an anti-personnel attack on German gun installations west of Geldern but spent the rest of the day looking for railways through almost non-existent holes in the clouds. Once they attacked the marshalling yards at Borken, blowing up five goods trucks and causing general confusion. On the same day the squadron was bounced by Me.109s but no harm was done and the Huns escaped. The Westmount Squadron got eighteen rail cuts, damaged a bridge, cut two roads and destroyed a railway switch house. The Beavers got sixteen rail cuts but F/O John Flintoft had to make a forced landing on the German side of the lines. He returned to his squadron in April.

V.1 came into the picture again on the 25th. Once more the target was the launching ramp at Puttershoek. The Wing had the assistance of an R.A.F. rocket-firing squadron which was to silence the gun positions north of the target while the Wildcats with antipersonnel bombs were to take care of the batteries to the southeast. The Westmount Squadron was then to bomb the ramp and the Beavers to blow up the warehouse. Rendezvous was made with the R.A.F. rocket squadron at Hertogenbosch. At Willemstad the R.A.F. squadron turned north to their target and the Wildcats headed for their gun positions. The other squadrons went on to . Puttershoek, rolled over, and dived on their target. There was no flak and many strikes were seen which caused explosions and fires. One storage building received two direct hits

Though violent battles were going on as the month closed, the Canadian Army pushing down between the Maas and the Rhine, no close support operations were carried out, the efforts of the Wing being directed rather against rails and other means of communication. What this meant can be gauged from a list of claims for the month by one squadron:

Rails	91	cuts
Roads	3	cuts
V-sites	3	damaged
Met (mechanical transport)	3	destroyed
TRG (goods trucks)	19	damaged
TRG	4	destroyed
AFV (armoured fighting vehicles)	1	destroyed
Locos	8	damaged
Flatcars	3	destroyed
Tanks	2	destroyed
Enemy aircraft	2	destroyed
HDV (horse drawn vehicles)	1	damaged
Railway switch houses	1	destroyed
Railway stations	1	destroyed
Canals	1	damaged
Canal bridges	2	damaged
Villages	1	damaged
Towns	1	damaged
Houses	1	destroyed
Warehouses	1	destroyed

One squadron reported the roads out of Bocholt, Borken and Koesfeld as full of civilian refugees but these were not attacked. The Beavers ended up on a.sad, note, losing F/O W. R. Gibbs who was shot down by flak in the Wesel area while on a rail cutting sortie on the 28th.

There were many days in March when operational flying for Typhoons was impossible because of low overcast. Their busiest days were spent while the Allies were crossing the Rhine on the 24th, 25th and 26th. For the most part they went out in Wing formation, some of the aircraft acting as cover while the rest bombed objectives on the ground. Though they encountered "bags of flak" never once did they meet enemy aircraft. Four pilots were lost on operations and, in addition, the Commanding Officer of the Wildcats, S/L Hogg, was killed over the English Channel while carrying out practice dive-bombing. He had only been appointed to command at the end of January.

After a day on which the clouds prevented observation of results the 2nd dawned bright and clear and the three squad-

rons renewed their attacks on the railway and marshalling yards at Haltern and Dulmen. On their second mission the Wildcats, besides cutting the rails, strafed and set fire to a number of oil cars. Flak was moderately heavy and F/L Don Heard failed to return. The Westmount Squadron, accompanying the Wildcats, attacked two trains and later strafed a third but as they were returning to base F/L Shaver was hit by flak and was posted as missing. The Beavers started a large fire near some yards south of Munster, strafed trains and cut rails. March 5th was a good day for the Wildcats who got eleven of the twelve cuts made by the Wing. They bombed and strafed trains and a factory on the 7th when the Beavers also did well against trains and rails in the Borken area while the Westmount Squadron got six cuts. After that there was no more operational flying until the 13th.

For three days the three squadrons kept up their rail cutting programme, were grounded on the 16th, and then bombed an enemy dump east of Wesel on the 17th. The Wildcats then went to England for a course and thereafter operations were by the Westmount and Beaver Squadrons only.

There was steady hammering of German communications up to the 24th, the day of the Rhine crossings. This occasion was described in one squadron diary in the following terms:

The squadron was awakened at 0400 hours for breakfast, briefing and then battle. It was a hectic day for us: the kites were going up all the time. Those who did not fly were playing horse shoes, eating or sleeping. The boys were fagged out in the evening after having carried out nine operations, which totalled 48 sorties. ... It was really an amazing sight, Tiffies all over the sky, also heavies, mediums, Spits and all the Daks coming out of Germany around 1030 hours after, dumping their loads of paratroopers who were subjected to terrific flak.... The pilots take off their hats to these fellows who must have a lot of intestinal fortitude.

The Westmount Squadron attacked flak positions and bombed a town in preparation for the arrival of the airborne troops. Late in July the squadron learned of the importance of this operation when the following communication was received from their Group Headquarters:

At approximately 0650 hours on the 24th March, 1945, (Rhine, D-Day), the Westmount Squadron put 22 thousand-pound bombs on a group of buildings in the Dorsten area. The target was laid on by the Army as a possible headquarters. In May, 1945, General der Fallschirmtruppen Schlem (G.O.C. First Paratroop Army) was found in hospital on Sylt. He had been under a collapsed wall in the Typhoon attack, suffered severe concussion and internal injuries and had to give up his command on the 27th March, 1945, as soon as a deputy was made available.

F/L LeGear and F/O Anderson led the two sections that made this attack. Later in the day, the squadron dropped anti-personnel bombs on some enemy artillery and found more flak guns and one multi-barrelled affair which they blew to pieces. On their last mission they bombed the headquarters of a German communication centre in the town of Dingden. The Beavers, now commanded by S/L R. E. Coffey, started the day with an attack on a German headquarters and ended it with the bombing of a bridge. Otherwise their activities closely paralleled those of the Westmount pilots. There was one casualty when F/O Anderson of the Westmount Squadron was shot down in the bombing of Dingden.

In the course of the next day the Army, frequently called on the squadrons to silence field guns in the Rees sector. Each time the Westmount Squadron went out it returned to report "gun positions silenced". The Beavers usually found so much smoke and haze that they were unable to state results though they knew they had hit the targets every time. Once they attacked a headquarters at Heeren and scored direct hits on two of the four buildings there and rendered another untenable.

At 1145 on March 26th the Wing bombed a wood full of enemy troops that were giving some trouble to the Army. They were met by flak but their bombs were well placed, though, as on the previous day, they could not state

precisely what the results were. The Westmount Squadron, patrolling further afield, found more than twelve locomotives pinned down between bombed-out tracks. These they strafed. Later they bombed a headquarters at Erle, some of the pilots acting as decoys to lure the flak in their direction while the rest went in and bombed. W/C Grant, flying with the Beavers, who participated in all these shows, strafed a staff car while the rest of the squadron scored strikes on road transport and rolling stock.

Another headquarters came in for the attention of the Wing on the 28th. This time a chateau near Anholt, east of Rees, received three hits while a near miss caused a large explosion nearby. Later the squadron was sent on its first leaflet-dropping raid to various towns that had been cut off by the advancing Allied armies.

The Wing moved on the 28th and 30th to Weeze, some miles west of Wesel but across the Dutch frontier. Thereby the NesbittGrant Wing established its claim to be the first R.C.A.F. formation to enter Germany. The Westmount Squadron celebrated its arrival by smashing two formations of German tanks near Osnabrück, strafing a locomotive and road transport and attacking defence positions in a wood. Unfortunately they lost F/L W. G. Davis who was shot down on the last operation of his tour. The Beavers strafed railway transport, trenches, barges, mechanical transport and a dump and also dive-bombed a headquarters.

The month ended with a day of attacks on mechanical transport. Though the weather was not too good for flying, both squadrons had considerable success. It is of interest to note that between January 1st and April 18th some four hundred motor vehicles were destroyed by the R.A.F. and R.C.A.F. in Eastern Holland, the Canadian Typhoon Wing having contributed considerably to the total.

The Wing operated at two-squadron strength throughout the month of April. For the first few days the Wildcats were still in England. From 3rd to the 23rd the Westmount Squadron was at Warmwell and on their return the Beavers took their place for the rest of the month.

The birthday of the R.A.F. was a day of bad weather, nor was the next day much better. Nevertheless the Westmount pilots got a staff car, the driver of which was seen to run into a house, which was therefore shot up. In the evening, after attacks on transport on a road near Lingen, F/L Cleghorn was compelled to make a forced landing about nine miles north of Nordhorn. He called up to say that he had landed safely but he was on the wrong side of the lines and was taken prisoner. The same evening a section of the Beavers attacked fifteen horse-drawn vans, two of which caught fire and provided a very colourful pyrotechnical display and set a nearby barn on fire. Five of the vans were destroyed and seven damaged.

A section of the Wildcats just back from England ran into trouble on the 4th when, returning from an operation in the evening, they were bounced by a dozen Me.109s and two pilots, F/L E. J. McAlpine and WO W. J. Kinsella, failed to return. Some mechanical transport and a number of barges were successfully strafed, however. The Beavers also attacked gun positions, a staff car and other transport.

A leaflet campaign was begun on the 5th when the Wildcats dropped twelve leaflet bombs in the Lingen and Furstenau areas. The Beavers participated in this kind of activity on the 7th, 8th and 9th when the two squadrons visited Freren, Meppen and Neuenkirchen, both continuing to attack ground targets when the opportunity presented itself.

Meanwhile on April 8th the Wing had left Weeze for an airfield near Osnabrück. About six miles from their objective the convoy halted while the commanding officer took a small party forward to reconnoitre. The new airfield was found to be in possession of the enemy who used mortars and 88mm. guns to frustrate efforts to dislodge him. After sustaining some casualties our men moved in on the 11th though the occasional Hun still crept out of his foxhole

with the cry of "Kamerad". A week later the Wing moved again, this time to Hustedt. The journey was long but the convoy passed through some very beautiful countryside, dotted here and there with devastated towns. Winding roads, traffic jams and ruined bridges made progress extremely slow. There were forest fires of questionable origin with which the advance party had to contend, and German soldiers were surrendering in great numbers. Not far from Hustedt was the notorious Belsen camp, the horrors of which were confirmed by some of the Wing personnel who visited that scene of unparalleled crime.

Not all of the Germans surrendered without a struggle. It was remarked on occasions that the anti-aircraft gunners never seemed to let up for an instant. On April 20th the advance party at Hustedt was rudely awakened early in the morning by bofors and cannon fire when six Me.109s and FW.190s attacked the aerodrome. Two airmen were slightly injured and two motor vehicles were slightly damaged. To balance the account one FW.190 was shot down by the ground defences.

After the move from Weeze the Wing concentrated, on ground targets, bombing villages, woods, a tank, a road junction, transport, railways, marshalling yards, a bridge and a factory. On the 16th the two squadrons obtained 68 rail cuts and destroyed upwards of 70 trucks, incidentally taking time out to satisfy an army request for the bombing of Velzen. Two casualties occurred at this time, F/O J. G. S. Livingstone of the Wildcats being killed on the 14th and F/O J. K. Brown of the same squadron, who was last heard of as he reported that he was baling out, being posted as missing.

An unusual target was provided on the 17th. After attacking rails between Bremen and Hamburg the attention of the Tiffies was directed to some shipping on the Elbe. The Wildcats dive-bombed an anchored cargo ship and some oil storage tanks while the Beavers scored a direct hit on the stern of a minesweeper but were less successful in attack-

ing other ships and a submarine which had reduced evasive tactics and the use of anti-aircraft fire to a fine art.

It was a pleasure on the 18th to attack SS troops at the request of the army though other ground targets were also successfully strafed. Again shipping came in for some close attention the next day. This time it was a mysterious light cruiser anchored off Wilhelmshaven. Though the flak was intense one direct hit was obtained on the superstructure, two more amidships, and three on the stern. The ship listed to port and was emitting smoke as the aircraft left the scene. An attack on three or four merchant vessels produced no tangible results. For his part in this operation the newly appointed commanding officer of the Wildcats, S/L Beirnes, D.F.C., who was responsible for two hits on the stern of the cruiser, received a Bar to his decoration.

The army called for action again on April 21st and the two squadrons answered with an attack on Achim, east and south of Bremen, bombing the roads and causing confusion to enable the British to capture the town.

The Westmount Squadron, now replacing the Beavers, celebrated their return to operational flying on the 23rd by strafing rail and road targets and a number of barges. They poured ammunition into some Ju.88s they saw on the ground, too, but were chagrined to learn that the enemy aircraft were dummies. F/L J. McCullough was forced to crash-land but called up to say that he had got down safely. On the same day the Wildcats lost P/O T. Hartnett who was last seen entering a cloud over a wood, and was subsequently posted as killed. For the rest of the month rail targets received major attention though on the 24th the Westmount Squadron, after cutting some rails, sighted a sixengined BV.222 resting on the water and left it in flames. Credit for this was awarded to F/Os W. Kubicki, J. Brock and M. Hallford. In the evening the same squadron saw thirty enemy aircraft parked on an aerodrome. These too they attacked, seeing strikes on eight of them though none of them burned. The Wildcats had the misfortune to lose another pilot on the 25th when F/O T. M. Jones crashed after his aircraft had been hit by flak. On April 26th F/O E. D. Brydon flew too low in an attack on some transport and collided with some trees. This was the seventh casualty sustained by the Wildcats in the course of the month.

An order of the day from General Dwight D. Eisenhower, received on May 1st, read as follows:

To every member of the AEF. The Battle of the Ruhr has ended with complete success. Following hard upon the final destruction of the German forces west of the Rhine, the Twenty-first Army Group thrust powerfully across that river with the U.S. Ninth Army under command. Simultaneously rapid drives across the Rhine and from the Remagen bridgehead by the Twelfth and Sixth Army Groups provided the southern arm of a great double envelopment which completely encircled the entire German army group "B" and two corps of army group "H" whose mobility was rendered almost zero by our magnificent and tireless air forces. Hereafter, in the pocket thus created, the Twelfth Army Group eliminated twenty-one enemy divisions, including three Panzer, one Panzer-Grenadier and three parachute divisions. Over 317,000 prisoners of war were captured including 24 generals and one admiral. Many tanks and more than 750 guns were destroyed or taken. Booty is immense and still being counted. The enemy's total losses in killed and wounded will never be accurately known. The rapidity and determination with which this brilliant action was executed blew asunder the divisions of Field Marshal Model and enabled all army groups without pause to continue their drive eastward into the heart of Germany. This victory of Allied arms is a fitting prelude to the final battles to crush the ragged remnants of Hitler's armies of the West, now tottering on the threshold of defeat.

The R.C.A.F. Typhoon Wing was to contribute no little to the, final push that sent those remnants across that threshold. The Wildcats opened the month of May with a blind bombing operation against an enemy airfield. Vectored by control over their objective they released their bombs only to discover that they had hit a point half a mile northwest of the target. They had better success against rails later in the day, claiming three cuts in all. The West-

mount Squadron carried out two operations against the enemy railway system, bombing and strafing three trains but failing to cut the rails.

For the next three days enemy shipping was the primary objective. After successful attacks on rail and road transport on the 2nd the two squadrons were directed to divebomb a troop ship with 1,000 pounders. They obtained a direct hit on the bow, two hits amidships, and one hit on the stern, causing a large explosion amidships. The Westmount Squadron on their noon operation in search of road convoys east of Lübeck got three motor vehicles and three goods trucks, damaging five others. They then sighted a Fieseler-Storch flying at fifty feet. It attempted to land but was shot down by F/L Tex Gray. In approximately the same position an FW.9.4 was seen and shot down by F/L Jack Cook. In the afternoon they immobilized a train by cutting the line in front of and behind it, while on later sorties they had more successes on both rail and road transport. W/C Grant accidentally blew up an ammunition dump when bombs that had hung up came away while he was returning from an anti-shipping strike.

Transport by road, rail and sea, was again attacked on the 3rd. The Wildcats ran up a score of twelve rail cuts, five goods wagons destroyed and five damaged and four motor vehicles destroyed while the Westmount Squadron got twelve railcuts, one locomotive and six wagons damaged, and a signal box destroyed. Both squadrons made attacks on shipping, damaging a barge and four ships. F/O George Burden of the Westmount Squadron failed to return from the first operation.

There were fewer ships to attack on the 4th but the Westmount Squadron claimed the destruction of a barge and an oil tender and damage to another barge, a cargo ship, a small fishing vessel and a large yacht while the Wildcats registered several near misses. These were the last operations by the Grant-Nesbitt Wing.

For the last week of the war in Europe the Wing was at Hustedt. After VE-Day it remained in the same place until May 29th when it moved to Flensburg, a short distance from the Danish border. En route the road convoy passed through Hamburg where block after block of ruined buildings and heaps of rubble impressed everybody with the thoroughness of the bombing of what had once been the second largest city in Germany. It was noted that the bridges across the Elbe were only slightly damaged. Flensburg lay in the middle of some rich dairy farming country. The aerodrome had three good long hard-surfaced runways and excellent billets were provided with running water and shower baths. Nearby was a field where 'large numbers of German fighter, bomber, transport and jet aircraft had been abandoned. At the end of the month it was noted that German soldiers were still being taken to prisonerof-war cages, their officers carrying their side arms as possible protection against assault.

On May 20th, 1945, an R.C.A.F. Disarmament Wing arrived at Oldenburg, Germany. Its three flights were directed to Jever, Aurich and Quakenbruck. A reconnaissance party was also despatched to the Frisian Islands. These units searched for German radar, jet and other secret equipment, arranged for the disposal of German ammunition dumps, shipped material such as German aircraft and radar equipment to Britain for examination and study, investigated the cases of a number of missing aircraft and their crews, and prevented looting and useless sabotage. After a year of very useful work the unit was disbanded on April 15th, 1946.

Of the eight wings which formed No. 83 Group in 2nd T.A.F. at the end of the war three fighter and one fighter-recce were R.C.A.F. No. 126 Canadian Wing held the record for total number of sorties flown and number of Huns destroyed. No. 4.01 Squadron of this Wing led the whole Group in number of sorties flown, number of enemy aircraft destroyed and total number of enemy aircraft casual-

ties. No. 143, the R.C.A.F. Typhoon Wing, dropped the greatest number of 500-lb. bombs and made more rail cuts than any other unit in the Group. From D-Day to VE-Day

the records of the Canadian wings were:

the records of						
	126 WING	127 WING	143 WING	39 WING	144 WING¹	TOTAL
SORTIES	22,372	20,084	12,043	11,915	2,487	68,896
500 lb. Bombs	5,076	1,171	21,994		107	28,348
TANKS						
Dest.	7	5	12		1	24
Dam.	82	51	25			159
MET.						
Dest.	1,407	1,267	509	6	57	3,246
Dam.	3,061	2,559	1,026	8	123	6,777
LOCOS.						
Dest.	61	17	22			100
Dam.	435	126	283	4	2	850
TRUCKS						
Dest.	172	60	379			611
Dam.	1,397	421	1,409			3,227
SHIPS						
Dest.		1	4			5
Dam.	5	12	23			40
BARGES						
Dest.	2		10			12
Dam.	52	59	92		11	214
RAIL CUTS	426	108	1,264		3	1,801
SIGNAL						
BOXES						
Dest.	2	1				3
Dam.	1		2			3
ENEMY						
AIRCRAFT						
Dest.	361	184	17	201/2	56	6381/2
P. D.	12	8	1		1	22
Dam.	156	103	6	11	13	289
LOSSES						
Pilots	98	80	104	27	8	317
Aircraft	131	105	132	42	11	. 421

To this may be added that 25 pilots destroyed six or

<sup>&</sup>lt;sup>1</sup> No. 144 Wing disbanded in July, 1944.

more enemy aircraft *in the air* while serving with 2nd T.A.F. Of these, thirteen were members of the R.C.A.F. and another, an R.A.F. pilot, was leader of an R.C.A.F. Wing.

These top-scoring pilots were:

			Score	
Name	Unit	Dest.	P.D.	Dam.
G/C J. E. Johnson	127 (R.C.A.F.) Wing	20		$3\frac{1}{2}$
(R.A.F.)				
S/L D. C. Laubman	412 (R.C.A.F.) Squadre	on 15		3
S/L W. T. Klersy	401	$14^{1}/_{2}$		3
F/L J. MacKay	401	$11^{1}/_{5}$		3
F/L R. J. Audet	411	$9^{1}/_{2}$		1
F/O W. J. Banks	412	9	3	1
S/L H. C. Trainor	401	$8\frac{1}{2}$	1	
F/L A. R. MacKenzie	403	81/4		1
F/O D. R. C. Jamieson	412	8		1
W/C G. C. Keefer	125 (R.A.F.) Wing	8	1	1
F/L G. W. Johnson	401 (R.C.A.F.) Squadro	on 8		5
S/L H. W. McLeod	443	8		
S/L R. I. A. Smith	401	$7^{1}/_{5}$		
F/L J. D. Lindsay	403	$6^{1}/_{3}$		7

### CHAPTER VII

# MOSQUITO SQUADRONS OF THE R.C.A.F.

### NIGHT FIGHTERS

September 1944-May 1945

THE Lynx Squadron commanded by W/C D. J. (Blackie) Williams, D.S.O., D.F.C. and stationed at Winkleigh, Devon, replaced the Cougars at Colerne, near Bath, in Wiltshire, on September 17th, a detachment having been sent ahead for preliminary training. The object of the move was to prepare the squadron for a. new type of work as it abandoned defensive or offensive operations and became a Mosquito-equipped intruder squadron. From the 8th to the 13th and again on the 23rd patrols were flown over northwestern France as far south as Paris, the only departure from normal being the difficulties encountered because of the weather on the night of the 23rd. Efforts were made on five nights in October to intercept enemy aircraft taking supplies to Lorient but to no avail. Offensive patrols were carried out on six nights in November, these too centering round Lorient and northwestern France but likewise proving unproductive. The squadron's move to Manston at the end of November was the last step before going on intruder operations.

The Nighthawks, commanded by W/C M. W.

Beveridge, D.F.C., were at Carpiquet as the sixth year of the war began, There, with their Mosquito aircraft, they carried out uneventful patrols. On September 10th, they moved to St. Andre where they continued to lead the same kind of life until the 19th when FSs G. Leslie and C. M. Thurgood, while stalking a Hun, were shot up by another enemy aircraft and forced to bale out, the former suffering an injury to his foot. The next morning the commanding officer, W/C Beveridge, set out alone to look for the two NCOs and was killed near Flavacourt, 60 miles west of Paris. The tables were turned on the Hun on the. 24th when WO L. E. Fitchett and FS A. C. Hardy destroyed a Heinkel III, the first squadron "kill" from an airfield based on the Continent. Their aircraft was so badly damaged by debris, however, that they were forced to make an emergency landing at Lille.

On September 27th the squadron moved to Amiens-Glisy and on October 4th to Le Culot where the next night S/L J. Fulton and F/O A. R. Ayton destroyed an Me.110. Twenty-four hours later P/Os F. E. Haley and S. J. Fairweather destroyed a Ju. 88. The enemy aircraft blew up and the Mosquito flew through the debris. Haley's starboard engine was damaged and soon packed up, the other engine following suit shortly afterwards. The crew therefore baled out near Brussels. The same night F/Os R. H. Finlayson and J. A. Webster destroyed an Me.110 but on the 7th WOs N. Joss and P. C. Lailey were presumed shot down while on a coastal patrol near Ostend.

Three days after the appointment of W/C J. D. Somerville, D.F.C., formerly of the Cougars, as commanding officer of the Nighthawks, there was another move. On October 12th the squadron went to Lille-Vendeville from which place uneventful patrols were carried out to intercept the aircraft engaged in provisioning the German garrison at Dunkirk. On November 25th, F/O R. I. E. Britten and F/L L. E. Fownes, while on a defensive patrol, destroyed a

Ju.88 and damaged a Ju.188 and the next night WO R. A. Boorman and P/O W. J. Bryant damaged a Ju. 87B, F/L W. H. McPhail and F/O J. E. Donoghue damaging another. No such harvest had been reaped for a long time but there was more to come. On the 29th, in bright moonlight, WO E. F. Cole and F/O W. S. Martin destroyed two Ju.88s, though debris from their last kill, which disintegrated in the air, so damaged their own aircraft that they had to make a crashlanding, fortunately without injury to themselves. For this double triumph they were awarded the D.F.C. Then on the 30th, F/Os F. K. Collins and P. S. Lee damaged a Ju. 188. This completed a very successful week of operations.

A sad accident dampened the spirits of the squadron on December 12th when the aircraft of F/L H. S. Ellis and WO W. D. King took fire while on a training trip; F/L Ellis was killed.

December 18th was another big night. P/O Haley, who was on the last sortie of his tour of operations, and WO W. N. McNaughton destroyed an Me.110; F/L Finlayson and F/O Webster got a Ju.88 an /C Somerville and F/O G. D. Robinson, D.F.C., who had been ansferred with his C.O. from the Cougars and had been decorated ith him in October, destroyed a Ju.88. Robinson was killed in an automobile accident in the early hours of December 26th.

A Ju.188 was destroyed on the 23rd by F/L McPhail and F/O Donoghue, a crew that unfortunately lost their lives early in January. Two Ju.88Gs were shot down on the night of the 27th by F/O Britten and F/L Fownes. This last success was considered at the time to be quite an achievement since the Ju.88G was a night fighter, and both members of the crew received the D.F.C. for their exploit. The 30th produced the final victory of the month and year, S/L R. F. Hatton and F/L R. N. Rivers destroying another Ju.88G, the 45th enemy aircraft shot down by the Nighthawks since D-Day.

There were no victories in January until the 23rd when

W/C Somerville and P/O Alec Hardy destroyed a Ju.188 while F/O M. G. Kent and P/O J. Simpson destroyed a Ju.88, the latter pair repeating with another Ju.88 on February 3rd for the only squadron victory in that month. Somerville, who was succeeded in March by W/C Hatton, was awarded the D.S.O. in February, his score at that time being seven destroyed. Britten and Fownes obtained two more victories for the squadron in March. While over the Ruhr on the list they shot down an Me.110 and four nights later they knocked down a Ju.88. Two flying bombs were shot down on the 27th by Kent and Simpson. By a piece of bad luck the squadron lost F/Os R. H. Long and K. S. Brenton who were killed on a training flight on the 16th.

April produced another move, the squadron going to Rheine airfield in Germany on the 19th, the first R.C.A.F. night fighter squadron to cross the Rhine. The move was accomplished in three days without interruption of the flying programme. Officers, NCOs and airmen now messed together, the whole squadron being under canvas. Everyone was armed, the recent presence of Germans being obvious from the condition of the aerodrome. Here the squadron established a record for itself, no less than six enemy aircraft being shot down on the night of April 23rd. On an early patrol F/O E. E. Hermanson and F/L D. J. T. Hamm got two Ju.87s and one FW.190. At 800 feet the FW was recognized as one of the longnosed variety, one of the Luftwaffe's more recent creations. At 400 feet Hermanson gave it a burst and the FW exploded and crashed. The attacks on the Ju.87s were made difficult by the high speed of the Mosquito and the slowness of the enemy but by lowering his undercarriage and using his flaps the pilot was able to manoeuvre into a position where they could be shot down. Both members of the Mosquito's crew were later awarded the D.F.C. On their second operational trip F/O J. H. Skelly and F/O P. J. Lim got two Ju.52s while P/Os Leslie and Thurgood, recently commissioned, added another Ju.52 to the list.

A brilliant moon made the night sky as clear as day on the 24th and three more German aircraft fell as prey to the Nighthawk Squadron. W/C Hatton and F/L Rivers, both of whom were subsequently awarded the D.F.C., destroyed a Ju.290, F/L B. E. Plumer and P/O H. G. Beynon beat up an enemy aerodrome and destroyed an FW.190, and P/Os Fitchett and Hardy destroyed a Ju.52. Fitchett and Hardy

were themselves shot up, however, presumably by another Mosquito, and had to make a crash-landing on their return. These were the last of the squadron victories.

After watching the stream of ex-prisoners of war, including F/Ls A. B. Sisson and D. S. Nicholson, former members of the Nighthawk Squadron, pass through Rheine, the squadron moved on May 15th to Gilze-Rijen in Holland and thence to Twente where it disbanded. During its operational career it had established a claim to 67 destroyed, nine probables and 24 damaged, its Honour Roll containing the names of 47 officers and men who had given their lives in the cause of freedom.

The Cougars, under the command of W/C G. A. Hiltz, were at Colerne in September 1944. Flying Mosquitos they got off to a good start when F/L I. E. MacTavish and F/O A. M. Grant destroyed an FW.190 on the night of September 1st. Patrolling in the Le Havre area MacTavish sighted the enemy doing mild evasive action. He closed and fired a short burst which caused the FW to .blow up with a large orange mushroom of flame. Flaming debris forced the attacking Mosquito to take quick evasive action. This was MacTavish's first kill and the first FW.190 claimed by the squadron. Another "first" was claimed on the 10thwhen F/Ls R. M. Currie and A. H. Rose claimed a visual of a V.2, an object which they at first mistook for a doodle-bug or flying bomb until they observed its spectacular rate of climb. Many crews subsequently reported seeing the reddish-orange light of this new weapon. All remarked that while the light appeared at first to be stationary it accelerated rapidly as it rose beyond the level of the observing aircraft. It remained visible for a period of  $1\frac{1}{2}$  to 2 minutes and was invariably headed in a westerly direction.

A victory was obtained without firing a shot on September 17th by F/L C. E. Edinger and F/O C. L. Vaessen who sighted an unidentified aircraft which, in the process of taking evading action, lost so much height that it crashed into the sea. The victory brought the squadron's total bag to fifty destroyed.

In the middle of September the Cougars moved to Hunsden and on the 22nd to Amiens-Glisy. Four days later Lieutenant A. A. Harrington, U.S.A.A.F. and P/O D. G. Tongue encountered a Ju.87 (Stuka). Closing on the enemy they blew off his undercarriage but, though hit repeatedly, the enemy aircraft refused to take fire. Finally it crashed to the ground and exploded.

October 6th was the date of the next victories, Edinger and Vaessen destroying a Ju.88 which took fire in the air and blew up on hitting the ground, while F/Ls. Ben Plumer and W. W. Hargrove destroyed an Me.110 near Venlo. The latter was not caught without a struggle, its top gunner firing a long burst which set fire to the Mosquito's starboard engine. By feathering the propeller and using the graviner the fire was extinguished. Plumer meanwhile followed the enemy down as he weaved and lost height. Finally the Me. crashed into the ground and disintegrated though the Mosquito's crew had not fired a single shot. This was Plumer's first victory with the Cougars and the second enemy aircraft to be brought down in this way during the month. In November both officers were informed that they had been awarded the D.F.C.

The next night F/Os J. W. Fullerton and B. E. Gallagher encountered and destroyed a Ju.88 which took fire and exploded while still 1000 feet from the ground.

Efforts were made on several nights during October to intercept "the milkman" who at z300 hours every night was

reported dropping supplies to the German garrison at Dunkirk. The enemy was not intercepted however, general opinion being that he delivered his goods in a great hurry and did not wait for the Mosquito crews. The mysterious aircraft was positively identified by F/O R. C. Bayliss as an He.III on November 1st when it was seen flying over the aerodrome.

October closed with the destruction of an FW 190 on the night of the 29th by Lieutenant Harrington and P/O Tongue. This enemy aircraft plunged vertically into the ground and took fire after numerous strikes had been obtained on the cockpit.

The squadron had bad luck on the 10th, F/O K. R. Walley and FS F. R. Charnock being killed accidentally when returning from a patrol.

November opened with a move on the 3rd from Amiens-Glisy to Lille-Vendeville aerodrome where the Nighthawks were already stationed. Operationally there was every indication that the month would be completely uneventful as it was not until the 25th that there was any action to record. Then Harry Harrington and Dennis Tongue did the hat trick. It was the second time a Cougar crew had shot down three enemy aircraft in one night. This time the victims were the most modern of German night fighters, Ju. 88Gs. After patrolling uneventfully for an hour, Harrington and Tongue were vectored onto the first fighter which they identified by the blister under its nose, the black crosses on its wings and its forward projecting radar aerials. Strikes were obtained on the cockpit, engines and wing roots and an explosion followed. The enemy then plunged to the ground and burned. While being vectored onto a second enemy aircraft the crew discovered that another Ju.88G was in the vicinity, apparently stalking the Mosquito. Violent evasive tactics by this enemy aircraft over a period of ten minutes availed little and once more Harrington's bursts ripped into cockpit, engines and wing roots. The enemy did

a half roll, turned to port, straightened out, looped, stalled and finally went into an inverted spin which ended when it hit the deck with a large explosion which illuminated houses in the vicinity. Climbing again Harrington discovered that two more hostile aircraft were in the neighbourhood. Despite moderate evasive action one of these was intercepted and for the third time an enemy cockpit, engines and wing roots were struck by shells. The Junkers took fire and disappeared through a cloud which a subsequent explosion lit up brilliantly. Since a fourth German night fighter was still in the vicinity violent evasive action was taken and the Mosquito returned to base. The three victories which raised Harrington's and Tongue's kills to seven were obtained in a period of eighteen minutes. In December F/O Tongue was awarded the D.F.C. and in January he received a Bar to his decoration. The President of the United States conferred upon Lieutenant A. A. Harrington, U.S.A.A.F., the Distinguished Flying Cross, the Air Medal with two Clusters (subsequently increased to seven), and in November, 1945, the same officer received at the hands of the Earl of Halifax the D.S.O. and D.F.C.

Harrington's triple did not complete the toll of enemy aircraft for November. On the 30th F/O D. MacKenzie and P/O G. P. A. Bodard, both of whom were awarded the D.F.C. early in the New Year, were vectored onto a Ju.88G which they attacked, causing both wings outboard of the engines to break off. The enemy spun down and exploded on the ground.

A training accident on the 29th caused the death of two pilots, F/O H. Connelly and F/O J. Hunt, who had recently joined the squadron.

Throughout December the squadron remained at Lille-Vendeville but it had no success until the 18th. The squadron diarist recorded that F/L Pop Edinger had a hunch that he would get a Jerry that night, the reason being that the last two Huns he had knocked down had been encountered

on the eve of his departure on leave. The hunch turned out to be a good one. After a long chase in which the enemy employed evasive tactics Edinger closed on a Ju.88 and fired a burst which resulted in strikes on the starboard engine and fuselage. The enemy went down and exploded on the ground, the last stages of the conflict having been conducted at so low a height that Junior Vaessen, the navigator, swore that he could see the trees. Both Edinger and Vaessen were very shortly decorated with the D.F.C., Edinger's score being put at five.

On the night of the 23rd F/Os MacKenzie and Bodard destroyed two Ju.88s. The first was jinking mildly when encountered but MacKenzie closed and fired. The enemy's starboard wing root burst into flames and the aircraft dived into the ground and exploded. After an interval of thirty minutes another vector brought the Mosquito into range of a second Ju.88 with external bomb racks. The enemy, aware of the Mossie's approach, fired the correct colours of the day but it availed him nothing. He too burst into flames and exploded on hitting the ground.

Edinger and Vaessen added another "destroyed" to their score on Christmas Eve. Vectored onto a Ju.87 they rapidly overtook it and knocked off several pieces. The enemy flew on but another burst brought more debris. After a third burst flames broke out and the enemy dived into the ground. The score of Edinger and Vaessen now stood at six destroyed and one damaged. On the same night S/L Mac-Tavish and F/O Grant destroyed a Ju-87, while F/O J. A. Watt and F/L E. H. Collis got a Ju.88. The Ju.87 was carrying two bombs on its wings. Its pilot took violent evasive action and was adept at increasing and decreasing speed. A second and third attack resulted in strikes and debris and the enemy plunged to earth, its bombs apparently exploding as it hit. Two attacks were made on the Ju.88 which went in from 3000 feet, exploding and burning as it hit.

The next victory was on December 27th, F/L W. G.

Dinsdale and F/O J. E. Dunn destroying a Ju.88. Despite difficulties with their equipment they were successfully vectored onto their target and made an attack. The enemy's port engine burst into flames and the aircraft spun into the ground and exploded. The remains of the crash were found in a field within a few hundred yards of the ground controller's office, a certain way of having a kill confirmed. Debris in the radiator of the Mosquito prevented successful pursuit of another enemy aircraft and Dinsdale flew back to base. In April, 1945, these two officers were awarded the D.F.C.

Finally S/L Currie and F/L Rose destroyed a Ju.188 on New Year's Eve while F/L W. A. Dexter and F/O D. G. Tongue destroyed a Ju.88G. Currie gave his target two bursts and three explosions resulted, the whole aircraft disintegrating and the debris hitting the Mosquito. Dexter's victim exploded with a bright orange flash and dived into the ground where it burned fiercely for some time. In addition F/L W. J. Whittaker and FS S. Albright damaged a Ju.88 and might have destroyed it, together with a Ju.188, had not their gun sight failed after the firing of one burst.

All in all December had been a good month operationally, nine enemy aircraft being destroyed. This was achieved despite adverse weather and the squadron was by this time the leading R.C.A.F. night fighter unit with 68<sup>3</sup>/<sub>4</sub> destroyed, 2 probables and 7 damaged.

Unfortunately the record was marred by a tragedy on the. 21st when five men lost their lives. S/L S. J. Fulton,. F/L F. G. Thomson, D.F.C., R.A.F., F/O A. R. Ayton, F/O W. Rumbold, R.A.F., LAC R. Seefried and LAC E. Wahlers took off for England in an Oxford aircraft which crashed near Wrotham in Kent. All were going on leave, LAC Wahlers in order to get married. The only survivor was F/O Rumbold.

Some material loss was sustained on Christmas Day when a fire, believed to have been caused by a short circuit,

broke out in the squadron dispersal. All the files, publications and maps in the Intelligence Room were destroyed. Ground crew personnel made a valiant effort to put out the fire but were unable to salvage much valuable equipment. For a time the squadron shared the dispersal of the Nighthawks.

January, 1945, was a very quiet month, the weather seriously interfering with operations. Except for the successful sorties on New Year's Eve and the early hours of New Year's Day already described there were no victories in January. On the 6th the squadron moved back to Amiens-Glisv.

Conditions were not much better in February, only one enemy aircraft being destroyed. This victory, however, was an unusual one. F/Ls Plumer and Collis were patrolling at 25,000 feet in the Roermond area on the night of the 3rd when they were vectored onto an aircraft that they recognized as an He.219, a type specially designed by the Germans to combat the Mosquito. The first burst produced an explosion and a small fire in the fuselage. Thereupon the enemy dived to port, crashed, exploded and burned. This was the first He.219 claimed by the squadron or any R.C.A.F. unit and possibly only the second or third shot down by the Allied Air Forces. It was also the squadron's fiftieth enemy aircraft shot down since D-Day.

Fortune smiled and frowned in March, three enemy aircraft being destroyed for the loss of two crews. The first loss occurred on the 6th when WO A. G. Cole and F/O S. I. Lees crashed on take-off and were killed. Three days later F/L D. T. Steele and F/O C. Home, R.A.F., failed to return from an operation. The first victory came on the night of the 24th/25th when F/L G. R. Leask and F/L J. W. Roff were vectored onto an Me.110 at which they fired. Numerous hits were obtained on the starboard engine and wing root and the enemy went down trailing smoke. An explosion and a large fire on the ground indicated the final outcome of the combat. A second kill that night was obtained by S/L MacTavish and F/O Grant who destroyed a Ju.88G. The first burst produced a fire and pieces of debris and shortly afterwards the enemy went straight in, exploded and burned. Subsequently, as an attack was being made on an Me.110. MacTavish and Grant were fired on both by the Me.'s upper gunner and by an aircraft to the rear. They dived to the deck and escaped. Climbing up they were attacked once more but again they shook off the enemy and returned to base.

The last victory of the month was obtained by F/Ls B. Plumer and N. W. Bradford on the night of the 26th. Vectored onto an Me.110 which was gently weaving, Plumer fired a burst which caused the starboard wing root and engine to burst into flames. As they followed the enemy down they were greeted by a hail of light flak out of which they were vectored by ground control. When they started to look for the enemy again they were informed that the Me. had crashed and exploded and that further action was unnecessary.

The squadron moved to Gilze-Rijen on April 4th. A week later, F/L R. D. Schultz, D.F.C., and F/O J. S. Christie, D.F.C., R.A.F., patrolling the Hanover area, destroyed a Ju. 188. Firing a short burst Schultz saw an explosion in the enemy's cockpit and immediately the Junkers burst into flames and broke up in the air. Ten days later, on the 22nd, the same crew destroyed two Ju.88s in the Berlin area. The first victim was carrying bombs inboard of the engines. After a short burst the enemy aircraft took fire and four members of its crew were seen to bale out. As the flaming aircraft went down Schultz gave it another burst for good measure and was then called off by ground control and vectored south. Unable to find the second aircraft they returned to their previous position where an aircraft was said to be orbitting. The lights of an airfield were seen and an aircraft was found in the vicinity. This was attacked and its starboard engine burst into flames. The enemy then flicked onto its back and crashed on the red perimeter lights with a violent explosion. Another enemy was in the neighbourhood apparently looking for the Mosquito but Schultz was by this time short of fuel and so he returned to base. When he was awarded a Bar to his D.F.C. in the course of the summer, Schultz was credited with eight enemy aircraft destroyed.

These were the last victories obtained by the squadron whose score now stood at 75¾ destroyed, 2 probably destroyed and 8 damaged. Its Honour Roll contained the names of 59 officers and other ranks, the names of F/L T. H. Cameron, D.F.C., and LAC L. M. Thomas being included as they were killed when their aircraft crashed. on May 11th. The squadron was disbanded on June 9th, 1945.

## **INTRUDERS**

September–December, 2944

The work of an intruder squadron consisted primarily of operations against enemy airfields. Whenever there was a raid on an enemy target by the aircraft of Bomber Command, intruder squadrons dispatched crews to patrol German and German-held aerodromes. There the intruder crew, consisting of a pilot and a navigator, lay in wait for German night-fighters taking off to attack our bombers or homing when their operations were concluded. The aircraft used for this kind of work were Mosquitos.

Throughout September, October and the greater part of November the City of Edmonton Squadron, commanded by W/C Anthony Barker, R.A.F., operated as the only R.C.A.F. intruder squadron. At the end of August, 1944, it was stationed at Hunsden in Hertfordshire and there it remained until the end of November. Already long famous for its day and night intrusions, deep into enemy-held terri-

tory the Edmonton Squadron continued to pile up a phenomenal record of victories in the air.

During June, July and August the squadron had been quite successful on anti-diver patrols, i.e. patrols against flying bombs. This work continued for a time but proved uneventful. Intruder sorties were more colourful, not merely by reason of the numbers of enemy aircraft destroyed but also because of the attacks on ground targets which crews undertook as they returned from their primary objectives on the Continent. Thus on September 1st F/O S. P. Seid with F/O D. N. McIntosh, intruding to Munich, obtained strikes on three trains, two of which they forced to stop, and on a truck which exploded and burned. Seid, an American Jewish boy who "wanted to get into the business of hammering Hitler", already had obtained numerous successes. He was to do much more.

On the 3rd, an afternoon operation to the Baltic coast netted for F/L S. H. R. Cotterill, D.F.C., with FS E. H. McKenna, R.A.F., a damaged Me.109 and one goods train, while two more goods trains were strafed by F/L D. E. Forsyth, an American from Brooklyn, and his English navigator F/O R. T. Esam, R.A.F. F/L H., E. Miller, R.A.F. with Sgt. W. Hooper damaged two more locomotives on the 5th while the next night Stan Cotterill and Pop McKenna had great success with a train south of Verden and a road convov of fifteen vehicles east of Linden. It was the turn of Miller and Hooper again on the 8th. They strafed a train between Arnhem and Wesel and a lorry near 01st while F/O S. K. Woolley and F/O W. A. Hastie got a train and two lorries at Papenburg. The same night F/O W. R. Zeller and F/O H. R. Tribbeck, R.A.F. failed to return from a sortie to Vechta and Diepholz. Then on the 12th S/L Russ Bannock, who had been informed about the award of his D.F.C. on the 2nd, and his navigator, F/O R. R. F. Bruce, got a "probably destroyed" near Kitzingen.

"I was coming back from an intruder trip deep into Germany," said Bannock. "Behind the Ruhr I spotted an enemy airfield with some lights showing. I went down to investigate and saw a Jerry kite taking off with his navigation lights on. He was doing a climbing turn as. I went in underneath to give him a couple of short bursts. His starboard engine exploded and he hit the deck."

Attacks on road convoys were made on September 17th by Woolley with Hastie, Seid with McIntosh and by Bannock with Bruce, who also attacked a train successfully south of Meppel.

Three victories and three damaged were claimed on the afternoon of the 21st by S/L R. G. Gray with F/L N. Gibbons, D.F.C. and F/L P. R. Brook with F/O A. D. McLaren.. Taking off from an advanced base, St. Dizier, the two crews proceeded to Bad Aibling, near Munich, where they saw a single-engined enemy aircraft coming from the east at 600 feet with its wheels down. Gray shot down this aircraft. He then attacked the airfield, damaging two single-engined aircraft on the ground and destroying another. Intense light flak was encountered and Gray's aircraft was damaged. Meantime Brook attacked aircraft on the ground, destroying one single-engined aircraft and damaging another but his own aircraft suffered some damage from debris. On the way home he damaged a locomotive in the Munich area and then both crews attacked two stationary petrol tank-cars near Inglostadt seeing strikes but no fires

On the afternoon of September 22nd two more crews accounted for four aircraft destroyed on the ground. Taking off for Tutow and Lelkendorf F/L Forsyth with F/O Esam and F/O J. S. Hill with FS G. W. Roach, R.A.F. saw a number of aircraft parked on an airfield. Forsyth made two attacks, one from east to west when hits were obtained on a Ju.88 on the eastern perimeter, the other from north to south when another Ju.88 in the centre of the aerodrome was hit too. Both the enemy aircraft took fire, the second

one causing a number of minor explosions. Hill, diving from east to west, attacked a Do.217 on the eastern perimeter, the port engine of which took fire. Re-forming, the two crews then went on to Tutow where Forsyth saw a twinengined aircraft on the south perimeter. He attacked and the enemy blew up. "It was raining like hell all through our little encounter," said Forsyth, "and by the time we had cleaned out the fourth aircraft, I felt it was time to go home. My starboard engine was heating up from a flak hit in the oil line. It kept going all the way back in spite of the leak."

A factory was left smoking on the night of the 26th after an attack by F/L F. A. Johnson with F/L Gibbons and strikes were scored on two motor vehicles, a searchlight and a truck being destroyed by F/L T. Matthew, R.A.F. with F/O G. H. Drew.

The 27th provided good hunting for Bannock and Bruce. Near Parow airfield they saw six enemy aircraft of a training type that had just taken off. From dead astern they attacked an Me.108 which disintegrated in mid-air. In the same locality, Kubitzer Bay, they shot down another Me.108 which dived into the sea. At one point it seemed that the enemy was trying to ram the Mosquito and it succeeded in scoring a hit on the port engine and setting it on fire. "It seemed for a minute," said Bannock, "that we had had it but I feathered my prop and with the fire-fighting equipment put out the blaze." Staying at tree-top height the crew completed the boo miles to base on one engine, getting back an hour and a half late. "If some one had been careless in handling that starboard engine we never would have made it," he said, and he also paid warm tribute to his R.A.F. navigator who got him back to base "dead on". Bannock was later awarded a Bar to his D.F.C. for, his exploit on this occasion while Bruce got the D.F.C.

Syd Seid with Dave McIntosh and F/O M. L. Sears with Sgt. W. F. Hill, taking off from Wick, attacked an open hangar and left it smoking while on the same night F. A.

Johnson with F/L Gibbons shot down a ju. 88 about two miles from the airfield at Hailfingen. This was the tooth aircraft destroyed in the air by the squadron. Johnson's account of the action was as follows:

"The navigation was bang on. We arrived over the target area at the same time we figured and stooged around, looking for Jerry, but business did not seem good. The cloud was almost on the deck and we flew about for 35 minutes before we spotted a kite. They obviously didn't suspect we were in the district because this fellow came in with his navigation lights on. He flew around with us tailing him for five minutes as he broke into the circuit. Finally, when we were about 100 yards behind him, I let blast with every thing I had. Both his motors caught fire and he exploded before he hit the deck. It was a three-second burst but that was enough." Gibbons carried on the account: "When he exploded the whole sky was lighted like day. Johnny pulled up in a hurry and we passed through the top of the debris as he disintegrated. There wasn't a piece of his aircraft big enough to hurt us though."

September 28th was another night for ground targets. F/L R. H. Thomas, R.A.F. with F/O G. J. Allin, R.A.F. strafed the entire length of a train near Darmstadt and S/L D. B. Annan with F/O A. M. MacIntosh, who scored strikes on a large unidentified aircraft on the ground at Stendal, attacked two more trains with success. F/L Miller with Sgt. Hooper destroyed three trucks and damaged six more while F/O C. R. Redeker with F/O M. E. Zimmer damaged one truck. The next night two trucks were destroyed and one damaged and a train was successfully attacked by Seid and McIntosh.

Five enemy aircraft were destroyed and seven damaged on the 30th. Taking off at noon Brook with McLaren and Gray with Gibbons went first to Erding where Gray attacked two Memos parked on the west side of the landing area. Numerous strikes were obtained on the nearest one which was destroyed, large fragments of debris being flung all around. The second was claimed as damaged only. Flying to the far side of the airfield at a height of ten feet Gray then attacked and damaged an unidentified singleengined

aircraft parked on the northwest side of the landing area. Proceeding to Eferding he sighted an FW.190 with undercarriage lowered about 1,000 feet above the airfield. He attacked and it blew up in the air. Another FW which was also preparing to land then retracted its wheels and climbed vertically, the Mosquito firing as the FW stalled. The enemy dived for the deck with Gray in hot pursuit. Strikes were obtained but cannon ammunition ran out and the attack had to be broken off. A Do.217 was then sighted on the ground at Horsching and an attack was made on this with machine-gun fire only. It was claimed as damaged. These incidents and the achievement of the 21st were cited when S/L Gray was awarded the D.F.C. Meantime Brook attacked an FW.190 in the southeast corner of Erding aerodrome, causing the enemy aircraft to disintegrate. Swinging to port he fired at another FW.190 towards the centre of the field and damaged it. In the dispersal area to the north was an Me.110 which he also damaged before he left for Eferding. There he noticed an Me.109 on the east side of the airfield and this too he damaged.

On the same afternoon Forsyth with Esam and Cotterill with McKenna took off for Neubrandenburg. South of Sorup Forsyth destroyed a locomotive. Both crews then gave chase to three singleengined fighters they sighted south of Wanderup and attacked them as they were landing near Eggebek. Forsyth made a head-on attack on an FW.190 which banked steeply to starboard and crashed in flames while Cotterill fired at an Me.109 that was taxying after landing. He was unable to get enough deflection however and so made no claim. In the effort to get the Me.109 the Mosquito was hit by flak and the port engine, the main plane, fuselage and electrical system were so severely damaged that on three occasions on the return journey the crew prepared to ditch their aircraft. They managed to get back to Coltishall, however.

Another pair of Mossies took off that afternoon, F/L

Miller, R.A.F. and Sgt. Hooper returning to report but F/L Thomas and F/O Allin failing to return. Miller sighted an Me.109 near Aalborg. He attacked and its starboard wing fell off as the rest of the aircraft became enveloped in smoke. The enemy spiralled down and crashed. He then attacked a train damaging the locomotive and at Frederiksvaerk Lake a staff car was strafed and forced off the road.

October opened with the loss of F/Os Woolley and Hastie who failed to return from an operation- on the 2nd. The same night, however, F/L Johnson with F/L Gibbons, taking off from Ford, damaged an unidentified aircraft parked on the aerodrome at Erding while F/O Sears with Sgt. Hill damaged a locomotive near Hardenberg, a barge near Zwolle, a train near Nunspeet, the locomotive of which exploded, and three more barges at Hasselt. Other crews also damaged trains and barges that night. On the 3rd F/Os Seid and McIntosh caused a lorry to explode and over the Zuider Zee damaged two ships that looked like trawlers. Other ground targets were occasionally attacked on succeeding nights.

October 12th was one of the squadron's most successful days when nine enemy aircraft were destroyed and nine damaged by two crews. Operating by day from Jesi in Italy S/L Grav with F/L Gibbons and F/L Thomas with F/L R. W. MacDonald took off for Ceske Budejovice and Nemecky Brod in Czechoslovakia. This was the first time the Edmontons had spread their net into this part of enemy-held territory. At Ceske Budejovice Gray damaged a Ju.34 and fired at another which exploded. A third one burst into flames. At Nemecky Brod he attacked a large number of Ju. 87s, destroying four and damaging five. Thomas destroyed one Ju.34 at Ceske Budejovice and, joining in the attack on the Ju.87s at Nemecky Brod, set one on fire and caused another to give off a large column of smoke while three more were damaged. Thomas and MacDonald were awarded the D.F.C. for their share in this exploit while Gray received a Bar.

Subsequently Gibbons was awarded a Bar to his decoration.

On another daylight operation Seid and McIntosh took off from Le Culot on the 15th for Stargard, near Stettin, and Kolberg. The aerodrome at the former place was attacked and an Me.109, a Ju.87B and an Me.110 were destroyed while two Me.109s and an unidentified aircraft were damaged. At Kolberg they destroyed five Ju.88s and damaged two more. Seid had now accounted for eight destroyed and seven damaged as well as four flying bombs. In addition many trains and ships had been destroyed or damaged and his score with Hitler was now settled. Both he and his navigator, Dave McIntosh, were awarded the D.F.C.

On the 17th F/L Stuart May and F/O John Ritch on a sortie to German held airfields in Czechoslovakia crashlanded in enemy territory but were picked up by Russian partisans operating behind German lines. After tramping about 1,200 miles they finally reached a Russian repatriation centre near Budapest in April, 1945. On the same night F/L Cotterill and F/O Colin Finlayson, D.F.C. & Bar, who took off from an Italian base for an operation to Vienna, also failed to return. Finlayson was an old timer with the squadron who had formerly served as navigator with Lieutenant J. F. (Lou) Luma, U.S.A.A.F. At the time he was lost Finlayson had completed, his tour and was on non-flying duties; he volunteered to fly in place of Cotterill's navigator who was ill. In the course of his operational career he had shared with his pilots in the destruction of 18½ enemy aircraft, seven of them on the ground. Five days after the loss of Cotterill and Finlayson, S/L Boomer, D.F.C., and F/L Gibbons, D.F.C., failed to return from a sortie to Munich though F/L Johnson, who participated in that operation, saw Boomer account for an unidentified enemy aircraft and damage another at Holzkirchen. Word was subsequently received that Ken Boomer was killed. A veteran of the Battle of Northern France and the Aleutian operations (where he destroyed a Jap Zero floatplane), Boomer had

returned to Europe to begin another tour. Johnson himself destroyed a train on the same occasion and attacked a factory at Schomberg. Subsequently Johnson was awarded the D.F.C. On the 29th F/L Miller and S/L Annan with their navigators attacked road and rail transport with success.

The squadron had mixed fortune on November 1st. F/O Hill and his navigator, FS Roach, failed to return from Giessen but Miller and Hooper, on a sortie to Langendiebach, destroyed a Ju.88G in the air, the enemy crashing and exploding on the ground about a mile north of Undenheim. This was the Edmonton's last victory in air combat. On the same night trains were successfully attacked by Russ Bannock (now a W/C), who had recently succeeded W/C Tony Barker as commanding officer, and by WO G. S. Johnston. On half a dozen nights later in the month ground targets were strafed but on November 10ththe squadron was declared non-operational. The next day it moved to Hartford Bridge. Its intruder days were over and for the rest of the year it trained for close support of the land forces as part of the Tactical Air Force on the Continent. The change was also marked by the posting of W/C Bannock, who took command of the Lynx Squadron and was replaced by W/C J. C. Wickett.

As an intruder squadron 418's success had been phenomenal. From the date of its formation in November, 1941, to the time of its conversion to close support it had accounted for 105 enemy aircraft destroyed in the air, 73 on the ground and 103 damaged. From June to September 1944 it destroyed 79½ flying bombs too. This record was an outstanding one in the history of the R.C.A.F.

# **INTRUDERS**

December 1944-May 1945

In December 1944, the Lynx Squadron, under the

command of W/C Bannock, formerly of the City of Edmonton Squadron, took over the work of intruding to continental airfields. Equipped with Mosquitos and operating from Manston in Kent they proved worthy successors to the City of Edmonton Squadron though on their initial operation on the 11th they lost F/Os J. F. Lawless and P. T. Reid.

Their first victory came on Christmas Eve when the commanding officer with F/L C. J. Kirkpatrick, D.F.C., was patrolling over Germany. The aerodrome lights at Paderborn were turned on and Bannock decided to circle about there until an opportunity presented itself. Very shortly he found a Ju.88 with wheels lowered going down-wind preparatory to making a landing. The moon was so bright that it was possible to distinguish the colour of the camouflage on the enemy's fuselage. As the Junkers turned Bannock fired and the enemy's port engine exploded, the whole of the port wing bursting into flames. The aircraft then spiralled down and crashed about three miles northwest of the aerodrome spreading itself over a considerable area.

On the 28th F/Ls T. W. Trewin and J. B. Kennedy attacked and damaged a train six miles east of Meppel, strikes being seen on the locomotive, and two days later Lieutenant S. W. Filkosky and F/L F. L. Hall duplicated this effort, a large piece of a locomotive being blown into the air.

New Year's Eve produced another intruder victory. On this occasion P/Os W. G. Kirkwood, D.F.C., and C. N. Matheson, D.F.C., were patrolling Ahlhorn and Vechta, both of which had landing lights turned on, when they saw an aircraft flashing navigation lights as it turned off the runway at Ahlhorn. It was easily identified in the moonlight as a Ju. 88. While it was still taxying an attack was made and on the second burst the aircraft blew up. Subsequently attacks on transport on the Vechta-Ahlhorn road netted one lorry.

The 27th was memorable for an accident at Manston

when an American Fortress, attempting an emergency landing in a fog, struck two Mosquitos which, with the Fortress, burst into flames. Squadron Headquarters and "B" Flight dispersal narrowly avoided catastrophe, some thirty lives being spared by a margin of ten feet. The whole scene presented an eerie spectacle through the dense fog and smoke as sheets of flame, exploding gasoline, Very lights and bursting cannon shells came from all three aircraft. Occupants of nearby buildings left in a hurry via the windows. Nothing could be done to save the crew of the Fortress whose nine occupants were the only casualties. One petrol bowser, partly burned, was towed away; LAC J. J. P. Huneault at great risk dashed in to drive away a second bowser with the assistance of F/O J. H. Wyman.

Another accident occurred on the 17th, again fortunately without fatal results. This time a Lancaster, making a forced landing, knocked off the stove pipe in "A" Flight Dispersal, driving it partly through the floor, and then tore the end off the carpenter's shop before coming to rest normally on its wheels. Only one man was slightly injured but a number of others narrowly escaped death.

The New Year opened well. F/Ls P. E. Etienne and W. A. Boak destroyed an Me.110 on the night of January 1st and F/L R. A. McKay with F/O H. A. Johnston probably destroyed a Ju.188. The former crew found their Me.i 10 near the lighted aerodrome at Bonninghardt and gave it a burst which caused debris to fly off. The enemy began to go down in a spiral but another burst followed and the Messerschmitt hit the ground and exploded. The other crew also found the lights on at Gutersloh but these doused and so they went on to Handorf where they encountered a Ju.188. They fired a burst and pieces of the fin and rudder broke away. The enemy then dived and the Mosquito followed at 350 m.p.h. Pulling up at 1,000 feet the crew could not see the enemy but they were confident that he must have crashed.

The 5th produced more joy. W/C Bannock and F/L Kirkpatrick returned from the Schleswig area to report that they had found the lights turned on at Husurn and had there encountered an aircraft which had not responded when challenged and which they had identified as an He.III before shooting it down. The enemy spun into a wooded dispersal area to the southwest of the aerodrome, the lights of which were immediately doused. Flying on to Schleswig the Mosquito crew were themselves challenged, or so it seemed, and responded immediately but almost at once realized that the challenge had been directed to another aircraft that they saw subsequently going down in flames. At Jagel they found everything in darkness and so they returned to Husum and noticed lights at an aerodrome they took to be Eggebek. Heading in that direction they saw an aircraft briefly flash its landing lights just before touching down. As the enemy taxied to dispersal he considerately flashed his lights on and off making it possible for the Mossie to attack. The first bursts fell short but a few strikes were obtained on the fuselage and a "damaged" was claimed.

On the 14th F/Ls Trewin and Kennedy attacked an aerodrome but made no claims. As they were returning they fired at an electric locomotive causing two explosions.

F/O A. T. Sherrett and F/L K. MacKenzie returned from an operation on the night of January 28th with a claim of one Ju.188 destroyed. Two bursts produced an explosion in the port engine and fuselage of the enemy aircraft which then spun down and burst into flames on hitting the ground. The chase had been a long one however–45 minutes, and fuel was low. A "mayday" was given, as a result of which the Mosquito was safely brought into an Allied airfield in France by an American ground control officer.

Three destroyed and four damaged was the score for February. P/O D. MacDonald and WO S. T. Drury started the ball rolling by destroying a Ju.188 on the night of the

1st. In the neighbourhood of Saarbrücken they encountered the enemy which, after a short burst, shot violently upwards and was lost to view. A few seconds later it hit the ground and exploded, burning fiercely. On the same night S/L S. E. Murray and F/L J. L. Ireland successfully attacked three lorries in a convoy northwest of Darmstadt.

Two nights later S/ L D. B. Freeman and F/L J. J. Greene obtained strikes on a locomotive, and a lorry was damaged by P/O E. A. Oswald and FS K. B. Hicks. The latter crew had a narrow escape at Varel on the 7th. Trying to evade searchlights that were coning them they ripped off three feet of their starboard, wing tip by striking either the ground or a cable. The engineer officer estimated that two more inches would have proved fatal. There was another lucky escape on the 14th when the aircraft of F/L D. A. Gillis and F/O H. J. Watt was hit by flak over Luxembourg. As they made a one-wheel landing their undercarriage col, lapsed but they were not injured.

Despite this mishap the 14th was, however, a night of good hunting, F/L R. S. Croome with F/O H. A. Johnston destroying a Heinkel 219, a type of night fighter not often encountered by the R.C.A.F., and F/Ls D. K. Wedderspoon and A. R. W. Lasser damaging an unidentified aircraft on the runway at Brandis. Croome and Johnston went to Erfurt where they found an aircraft showing two pairs of brilliant white exhausts. As they fired there was an immediate explosion and they had to pull up to starboard to avoid the debris. The enemy went straight down and an explosion lit up the clouds below. Wedderspoon and Lasser patrolled Altenburg but finding no activity went to Brandis. There were no lights there so they returned to Altenburg but it was still in darkness.. Going back to Brandis they found lights on the aerodrome and encountered an aircraft in process of landing. It got down and was turning off the runway before they could attack. As the enemy flashed on his navigation lights they fired and scored strikes on the,

fuselage whereupon all the lights were doused. Thus they could claim no more than a damaged.

February 18th was a day of misfortune, one aircraft crashing, its,crew going to hospital, and one crew, F/O C. E. S. HamlynLovis and F/L R. J. Radcliffe, failing to return from an operation over Denmark.

Squadron morale was boosted on the list, however, when F/Ls D. A. MacFadyen, D.F.C., and F/L V. G. Shail destroyed an Me.110 and WO F. E. Hamburgh with F/O E. H. Pinnell damaged an unidentified enemy aircraft. In support of Bomber Command operations MacFadyen and Shail were sent to patrol Lippstadt and Stormede aerodromes and at the latter sighted an Me.110 with its wheels down in preparation for a landing. Attacked from astern the enemy blew up and dived into the ground, the wreckage giving off minor explosions as flames reached its ammunition. The other crew sighted two aircraft burning white navigation lights near Handorf aerodrome, the nearest of which also had its undercarriage down in readiness for a landing. On the second burst numerous strikes on the enemy's fuselage and wings were seen. There was barely time to note that the enemy had two engines and a single fin when a hail of flak came up from the ground and searchlights coned the Mosquito. The searchlights were shaken off in a dive to port but the crew remained in the vicinity hoping for a sight of parked aircraft. Once more the ground defences opened up and very shortly Hamburgh set course for base. On the same night F/Os J. H. Wyman and A. G. Wood successfully attacked two trains while S/L S. E. Murray and F/L J. L. Ireland damaged the locomotive of another. On the 23rd, F/L R. A. McKay and F/O N. Hamer obtained strikes on a fourth one.

A "damaged" was obtained on February 26th when-F/O Oswald and P/O Hicks caught an enemy aircraft in the Munich area and caused an explosion in the port engine. They recognized the enemy as a Ju.88 with wheels and flaps down but overshot and the enemy evaded final destruction.

An aircraft believed to be a Ju.88 was seen parked in the southeast dispersal at Hailfingen on the 28th by F/Ls MacFadyen and Shail. Five separate attacks were made from 800 feet, closing to minimum range until ammunition ran out. Many strikes were seen and on the second attack a fire broke out in the cockpit but this died down although smoke was observed during the subsequent attacks. The Mosquito was hit on the starboard spinner and port wing by debris. The pilot suggested that he "land and hack the thing (i.e. the enemy aircraft) to bits with the fire axe, but 'Stubby' (Shail) finally persuaded me to go home." A claim of one Ju.88 probably destroyed was made.

There were two victories on the night of March 3rd, F/L H. G. MacKenzie with WO Muir destroying a Ju. 88 while F/L Croome with F/O Johnston damaged an unidentified aircraft. The former crew, patrolling Rheine and Twente, saw a Ju.88 and gave it a burst which caused debris to come back towards them. As the enemy peeled off they followed him down but lost him only to discover later that he had crashed on the edge of a road and was burning violently, numerous ammunition explosions taking place. Croome and Johnston went to Handorf where they chased an aircraft but lost it. They then saw an aircraft landing but were unable to do anything before it got down. As it taxied with navigation lights on they gave it a burst and saw many strikes. S/L Freeman with F/L Greene damaged a train near Paderborn while F/Ls Trewin and Kennedy destroyed a locomotive

But this night the enemy struck back. As the aircraft of Bomber Command were returning to their bases a number of German intruders had some successes. Defensive patrols were flown to cope with these unwelcome visitors and one of the Lynx Squadron crews, F/O R. W. Donovan and F/O V. P. Grant, was lost.

The next night the MacFadyen-Shail team visited Czechoslovakia and returned with a claim of one FW.190 destroyed on the ground and three more damaged. Flying along the Danube Valley they spotted an underground factory and came to Ceske Budejovice where seven or eight FW.190s were dispersed at the north end of the aerodrome. There was snow on the ground and a half-moon made identification easy. Two attacks were made on a single aircraft in the hope that it would burn and light up the rest but it. merely smoked. Three attacks were then made on three more parked aircraft, the third of which burned fiercely.

On March 5th the same pair scored again. Near Gerolzhofen in Bavaria they encountered a Ju.88G which, warned by flares from the ground, was turning away for Kitzingen and weaving slightly. From 150 yards range a five-second burst was given and strikes were obtained all over the enemy's fuselage. The starboard engine took fire and the aircraft dived into the River Main north of Kitzingen.

The 7th was a busy night, involving a hundred telephone calls, that brought both good and bad news. The squadron lost F/O Oswald and P/O Hicks who failed to return from their eleventh sortie, but F/O Sherrett and F/L MacKenzie damaged a Ju.88 near Grove aerodrome in Denmark. The same team damaged an unidentified aircraft at Crailsheim on the 16th while S/L Murray and F/L Ireland damaged an Me.110 as it was landing at Kitzingen and also made attacks on ground targets with unobserved, results.

Still another damaged was obtained on the night of March 20th by F/O D. J. McConnell and F/L M. Kazakoff, this time a Ju.88 at Marx near Wilhelmshaven. At one time, according to F/O McConnell, the Mosquito must have made a perfect silhouette against the dawn but "apparently he was just as sleepy as we were" and, though the enemy's port wing and nacelle were hit, the Mosquito overshot and the enemy could not be found again. McConnell and Kazakoff for this and other achievements were awarded the D.F.C.

Forecasts on the first day of Spring indicated that the weather over Southern England would be bad, "a supposition entirely unfounded and amazingly inaccurate". W/C Bannock with Kirkpatrick made a trip to Vienna and returned to report one unidentified aircraft damaged on the ground at Lechfeld aerodrome and one train damaged. S/L Freeman and F/L Greene after visiting Klecany, Klecany Ruzyne, Kralupy, and Milovice in Czechoslovakia without sighting anything returned to Kralupy where they saw two aircraft about to take off with navigation, lights burning. As soon as they were airborne Freeman attacked the first one. identified as a Ju.87, and shot it down. It blew up as it hit the deck. The second aircraft, also a Ju.87, came to investigate the blazing wreckage and this was in turn shot down. As it went down out of control a parachute was seen to open but since there was no explosion on-the ground, it was assumed that the Stuka had fallen into a river. For this double victory S/L Freeman was awarded the D.F.C.

The squadron was saddened on the 23rd when F/O W. F. Kilpatrick and F/O R. A. H. Allen failed to return from a sortie to Twente but the next night F/L MacFadyen and F/L Shail came back from an operation over Czechoslovakia to report one He.III destroyed and four more damaged on the ground. At Bystrice landing ground south of Prague they had seen thirty to forty aircraft of various types dispersed around the perimeter and in fields to the north of the landing area. Five of these, standing in a row along the south side of the field, were identified as He.IIIs, an Memo with light camouflage being nearby. Two attacks were made on one of the Heinkels which exuded smoke but did not take fire. A second attack on another Heinkel caused a fire which was still blazing after they had left. The third Heinkel was hit and some debris was seen to fly off from the cockpit and damage was inflicted on the two remaining aircraft. Meantime the Mosquito was subjected to small arms fire from adjacent buildings, the drop tank being hit once by a bullet but no further damage was inflicted. When MacFadyen was awarded the D.S.O. in October the incidents of this night were mentioned in the citation.

The last victories of the month were obtained on March 30th by two crews operating from St. Dizier. S/L Freeman and F/L Greene, investigating a number of aerodromes in the Prague area, saw an FW.190 in the moonlight parked in front of a hangar at Pardubice. They attacked and damaged it but it did not burn. Seeing nothing more they went on to Chrudim where several Me.323s were parked. Again damage was inflicted on two aircraft which failed to burn. Heavy flak drove them off but at Nymburk they blew up a locomotive and at Herrnbergtheim they raked a goods train from end to end. They landed with only twenty gallons of fuel to spare. S/L Murray with F/L Ireland, finding no lighted aerodromes, attacked road transport, destroying two vehicles and damaging one. F/Ls Trewin and Kennedy also damaged a train this same night.

April, 1945, was the best month in the squadron's history, thirteen enemy aircraft being destroyed and thirteen damaged. WO Hamburgh and F/O Pinnell, taking off on the 2nd, went to Eggebek, which they found in darkness, and thence to Schleswig where they were coned by searchlights and shot at by flak. There they obtained a contact which they identified by its silhouette as a Ju.188. After one burst the enemy disintegrated in mid-air. Setting course for Eggebek again they attacked a locomotive which also blew up. This was a good beginning for the month.

On the 4th F/L Trewin and F/L Kennedy, who had been with the squadron since October, 1943, and were almost tour-expired, failed to return. They had destroyed or damaged six trains and a transport on intruder operations with the squadron. W/C Bannock with F/L Boak spent an interesting evening at Delmenhorst where they destroyed an unidentified enemy aircraft and damaged an FW.190. Detailed to go to Fassberg they noticed en route that the aero-

drome at Delmenhorst was lit up and decided to investigate. As they approached they saw an aircraft burning navigation lights about to land. They attacked and during the second burst identified the enemy as an FW.190. Strikes were obtained but all lights were extinguished and a "damaged" only was claimed. Ten minutes later they obtained another contact but, after following the enemy two or three times across the aerodrome, they lost him. Shortly afterwards they noticed another aircraft flying across the aerodrome with navigation lights on. They chased it but, on approaching, they noticed that its lights went out and it peeled off and flew across the aerodrome at 300 to 400 feet. Suspecting a trick they discovered that another aircraft was behind them and to one side obviously using the other one as a lure. Attempting to get on the tail of the stalking aircraft the Mosquito crew and the two Germans played "ring-arounda-rosie" at heights ranging from 200 to 700 feet. Brief visuals of a single-engined aircraft were obtained but the Mosquito was never able to get into firing position. Over an hour later another contact was obtained on an aircraft which was followed down to 400 feet-but the Mosquito overshot. Quickly recovering, the Wing Commander obtained a brief visual of exhaust flames from an aircraft about to touch down at the end of the flare path. A long burst was fired to persuade the enemy to make another circuit, a manoeuvre that was successful. Four minutes later faint green and white resin lights were seen passing below and this aircraft was followed as it tried to sneak in for a landing by making a straight approach at tree-top level. A short burst was fired as the enemy was about to touch down. Two or three strikes were seen and the enemy aircraft crashed and blew up on the edge of the flare path. It continued to burn for half an hour, its ammunition exploding in the flames.

An enemy aircraft was destroyed on April 7th when F/L Gillis and F/O Hamer were on an intruder sortie to Plauen.

Finding that aerodrome in darkness they sought elsewhere, and finally encountered an aircraft burning navigation lights over Mensdorf, about 25 miles northeast of Leipzig. This they identified as an He.III but the enemy's bright white tail light made positive identification impossible. After overshooting once they closed with undercarriage down and radiator flaps open, firing a burst between 400 and 500 feet. Strikes were obtained on the port engine, mainplane and fuselage, the port engine exploding and fire spreading along the mainplane to the fuselage. Pieces of debris lodged in the port radiator and along the leading edge of the starboard wing of the Mosquito. The enemy lost height rapidly and exploded on hitting the ground off the southeast corner of the aerodrome. The temperature of the Mosquito's port engine rose rapidly and a fire broke out but this was extinguished by feathering. The crew landed at Brussels-Melsbroek

The 9th was memorable for the squadron's 49th and 5oth victories, both achieved by the MacFadyen-Shail team. Despatched on a bomber support intruder to Lübeck-Blankensee they found a visual lorenz, east to west, with a pair of vertical searchlights, halfway along it. Over Lübeck town there were many searchlights. As they approached the aerodrome they observed that two vertical searchlights dipped and crossed over the end of the runway. As they flew up the downwind leg at 1,000 feet they obtained a contact to starboard at a distance of four miles and shortly had a visual on an aircraft flying at 1500 feet. They closed and identified the aircraft as a Ju.88G. As it lowered its undercarriage they gave it a three-second burst. There were explosions and the enemy caught fire, rolled over, and crashed four or five miles southeast of the airfield causing a major explosion. It continued to burn with its ammunition exploding for at least an hour afterwards. Fifteen minutes after the first encounter another contact was made. The enemy fired a red flare and by pulling up sharply and to one

side MacFadyen was able to identify it as another Ju.88G, just putting his wheels down. As the enemy turned for the approach to the landing field the Mosquito fell in behind and gave him a short burst. A small explosion followed and fire broke out on the underside. The enemy straightened out and MacFadyen gave him another burst. Fire then spread over the whole of the airframe and the aircraft fell off to port and blew up, the wreckage falling just off the visual Lorenz. After landing the Mosquito was found to have brought back 40 to 50 feet of flexible steel antenna and there were several cuts in the fabric of the Mosquito's wings. Attempts to intercept other aircraft, including one believed to have been a decoy, failed and the crew set course for home.

April 10th provided successes for two Mosquito crews. F/O McConnell and F/L Kazakoff, making the last trip of their tour of operations, damaged an unidentified aircraft at Jocksdorf, near Cottbus, to bring their total score to two destroyed, one probably destroyed and two damaged. F/Ls Etienne and Boak scored twice, destroying an He.III and a Ju.88. After a futile chase on their first contact they found the aerodrome at Schonefeld lit up and began a patrol of that area. Almost immediately an aircraft was seen coming in to land with navigation and landing lights turned on. The enemy was too far away for an effective attack but a fivesecond burst on the runway made the enemy overshoot and douse its lights. Despite violent evasive action the enemy failed to shake off the Mosquito and, as it settled down to level flight at 1,000 feet, it was identified as an He.III. A burst from 200 yards resulted in strikes and a long shallow dive which ended in a crash in a wood west of the airfield. Setting course for Juterbog-Damm, they sighted another aircraft with lights on preparing to land at Finsterwalde and two more taking off. After these had put out their lights a contact was obtained on one of them and a visual was obtained. It was a Ju. 88. Etienne fell in behind it and gave it a

burst. The enemy caught fire, disclosing flares or bombs slung under the fuselage, peeled off sharply to starboard and exploded on the ground. It very obviously had a full load of petrol. Another contact was lost and as the Mosquito's fuel was running low course was set for base.

Lieutenant Filkosky, with F/L Lasser as his navigator, made his first score on April 11th when he damaged an unidentified aircraft as it touched down at Ruzyne. Flak and complete black-out frustrated further efforts.

From Toul-Ochey on the 12th S/L Freeman and F/L Greene took off on their last trip together. After visiting a number of aerodromes in Czechoslovakia they set course for KSniggratz where they dropped flares. Then, attacking from the north towards the hangars on the south side, they obtained strikes on an aircraft and, shooting from east to west, they damaged it further. Coming in from the northeast they peppered two aircraft dispersed in a field just off the aerodrome. The three damaged aircraft were believed to be He.177s. This crew's score was now two destroyed in the air, six damaged on the ground, one locomotive destroyed and three damaged, and one lorry destroyed.

Two crews returned to report victories on the night of the 14th, F/Ls Etienne and Boak destroying a Ju.88 while S/L Murray, who later was awarded the D.F.C., and F/L Ireland, damaged an unidentified aircraft. The former crew, taking off from Gilze-Rijen, patrolled Finow and Prenzlau. After making unsuccessful attempts on five aircraft they made a sixth contact at Tutow which they identified as a Ju.88. After two bursts the enemy aircraft took fire, its starboard wing broke off and it spun into the ground burning furiously. The other crew also took off from Gilze-Rijen and likewise patrolled two or three aerodromes before going to Tutow. There they saw Etienne's victim going down in flames and themselves encountered an aircraft which they attacked. Strikes were seen but all lights were doused and the enemy escaped.

The dwindling area of unoccupied territory and the arrival of the full moon period reduced operational commitments considerably and there were no further victories until April 23rd when W/C Bannock and F/L Boak destroyed a Ju.88, while P/O W. Anaka and WO B. J. Weber destroyed a Ju.188 in the air and damaged an unidentified twinengined aircraft on the ground. In a borrowed aircraft the commanding officer and his navigator took off from Swannington for Gilze-Rijen and thence intruded to Rechlin and Wittstock. En route they investigated three aircraft, one of which led them on a long chase, but they all turned out to be Mosquitos. At Wittstock they obtained a contact but lost it so they visited Neubrandenburg and Neuruppin in turn but had no success. Returning to Wittstock they observed the Ju.88 which P/O Anaka had just shot down and then obtained a contact for themselves. A stern chase, in which the enemy took violent evasive action, resulted in a visual of a Ju.88 on which they opened fire. Strikes were obtained and the enemy went into a vertical dive, the top gunner opening up with extremely accurate red tracer. After a further burst and more strikes one of the Germans parachuted out. A third burst clinched the matter, the enemy taking fire and crashing in a wood. Anaka made two attacks on parked aircraft at Rechlin-Larz, south of Muritz Lake, the first being unsuccessful owing to haze, the second resulting in damage to an unidentified aircraft. Driven off from Rechlin by flak they set course for Wittstock where they obtained a visual on a Ju.188. A long burst cut through the elevator and damaged the port engine and fuselage and the enemy turned to port and was lost. It was next seen as it exploded on the ground and took fire.

On the night of the 24th P/O K. A. Norman and his navigator, P/O C. B. L. Warwick, failed to return from an operation to Flensburg. On May 13th they were reported safe in England and two days later P/O Norman returned to the squadron. He reported that at 0010 hours they had been

struck by flak when flying at 50 feet near Flensburg aerodrome. A bad fire started in the fuselage and an emergency landing was made successfully in a field, the crew escaping through the top hatch, P/O Warwick burning his right hand. The aircraft was left in a mass of flames and the crew headed north, being unsure of their position as the escape maps stopped short of the area. For seventeen hours they hid and slept in bushes and then in a barn but were spotted and captured by two German soldiers, who took them to their post two miles away. They were then marched to Military Headquarters at Flensburg where they were then questioned and fed and, experiencing fairly rough treatment, were put in prison at 1500 hours. From there they were marched to Flensburg aerodrome and thence in the early morning went by bus to Pinneberg, near Hamburg, being put in solitary confinement until noon. Interrogation by the Luftwaffe and a naval lieutenant followed, in a vain attempt to learn their squadron. The interrogator produced a sheet on which was listed the number of their squadron, its function, its type of aircraft and its location in England. The crew refused to give any information other than their names, ranks and numbers and were not unduly pressed. They were moved into the main barracks with 52 other prisoners, quarters being good and treatment fair. Their basic daily ration consisted of four slices of black bread with margarine and sausage but Red Cross parcels added variety to their diet and in return for cigarettes they were able to procure brown bread from their guards. Treatment became better and better as the British advanced, their arrival taking place after eight days, whereupon the prisoners armed themselves with the officers' pistols from the mess and, under a Canadian prisoner-of-war squadron leader, took charge of the situation. The following morning various cars were seized, P/O Norman himself acquiring at gun point the Burgomaster's Mercedes-Benz to the owner's intense chagrin. The ex-prisoners then proceeded to Osnabrück and

Diepholz, where the car broke down, and thence by jeep to Rheine. From there they were flown to England by Dakota.

On the same night that Norman and Warwick were shot down other crews destroyed one aircraft in the air and another on the ground and damaged four more on the ground. F/O Wyman and F/L Greene took off from Gilze-Rijen for the Copenhagen-Kastrup area where warnings from the ground gave two aircraft a chance to escape and a hurried attack on a third from an unfavourable position brought no results. At Neubrandenburg they obtained a visual on an FW.189 making a final approach for a landing. One burst resulted in the extinguishing of all lights and apparently no damage was done. Another FW.189 was in the vicinity, however; this too was attacked. On the second burst the port engine took fire, and the aircraft crashed and blew up. The crew was then tempted to attack a Ju.290 at Kastrup but after they had inflicted some damage the flak became intense and evasive action had to be taken. The MacFadyen-Shail team worked in co-operation with F/O J. T. Caine, D.F.C. and Bar, and F/O B. F. Tindall and some flare-dropping aircraft. S/L MacFadyen reported that as the result of information from one of the flare droppers they decided to make Eferding their primary target. Flares were well placed and the two Lynx Mosquitos made their first run across the aerodrome in opposite directions. A single gun opened up in Caine's direction as he damaged a parked FW.190 and turned to strafe a Ju.88. The Ju.88 burst into flames and Caine carried his fire on to a second FW.190 which was damaged but did not burn. It was during this run that Caine's aircraft was hit in the tail by a high explosive shell which shot away part of the fin and made a hole in the fuselage. After some difficulty with the undercarriage and controls the Mosquito was landed safely at Manston. Meantime two, slightly camouflaged Ju.88s were attacked by MacFadyen. One of these was damaged and at the same time the other one burst into flames as the result of Caine's

attack. Flak by this time was getting pretty hot or, as one of the flare droppers expressed it, "the natives were pretty hostile in the area", and MacFadyen decided to follow Caine to friendlier pastures. MacFadyen was awarded a Bar to his D.F.C. in April. His final score was 13 destroyed, 3 probably destroyed and 17 damaged. In addition he had shot down five flying bombs. Shall was awarded the D.F.C. in July. Three months later Caine received a second Bar to his D.F.C. for this night's work.

The last victories of the month were obtained on April 26th by F/Ls Etienne and Boak operating from Brussels on an intruder sortie to Prague-Ruzyne. En route they had difficulty with friendly searchlights but they finally shook them off. On a second visit to Ruzyne they made a low altitude attack on a dozen or more aircraft dispersed in two fields. An He.III was set on fire in the first attack and subsequently they obtained strikes on a twin-engined aircraft that might have been a Ju.88. Flak prevented them from continuing their efforts. In the summer both members of this crew were awarded the D.F.C.

The last eventful operational sorties were flown on May 2nd when F/O Wyman and F/L Greene destroyed three Ju.52s and a Ju.352 and damaged three Ju.52s on the ground at Marrebaek while F/Os Caine and Tindall destroyed two more Ju.52s at the same place. Wyman and Greene were despatched to Vaerlose accompanied by a flare-carrying aircraft. The latter failed to put in an appearance and so, as dawn broke, Wyman made a run over the aerodrome sighting three single-engined fighters but was driven off before he could inflict any damage. Proceeding to Marrebaek he saw on the south side of the aerodrome a Ju.52 which Caine had set on fire. There were three more Ju.52s in the same area which Wyman attacked, one of which burst into flames. Turning to four other Ju.52s on the east side he attacked and set two on fire, strikes being obtained on a third one, while the fourth appeared to have

been burned in a previous attack. By this time it was getting quite light and a Ju.352 was discernible on the west side. The first burst caused it to burn violently. A further attack was made on two previously damaged Ju.52s and on a Ju.190 or 290 which was on its belly on the west side but none of these took fire and ammunition ran out during the attack on the Ju.190. After photographing the aerodrome Wyman set course for base, two ships off Gedserodde making a desperate effort to bring him down by throwing up everything they had "including the anchor". Caine, being out of contact with Wyman, operated independently. Coned by friendly searchlights as he crossed into Germany he dropped flares at Marrebaek as dawn broke. Fifteen or more aircraft were seen and on the third run these were successfully attacked, two Ju.52s bursting into flames. Flak began to get bothersome and Caine returned to base. As navigator for S/L Freeman and F/O Wyman, Greene had now participated in the destruction of seven enemy aircraft and the damaging of ten others, a record for which he later received the D.F.C.

The last operation in which the squadron participated took place on the 9th when they covered the liberation of the Channel Islands. Hitler's death was reported on May 1st though "flags remained at full mast". The "cease fire" order was given on the 8th. The squadron's fourth birthday was on the 10th. As intruders they had accounted for 33 destroyed, 2 probables and 36 damaged in addition to trains and road transport. The Lynx Squadron had become in five and a half months the top-scoring Fighter Command Intruder Squadron. In its four years of existence it had flown 1,836 operational sorties and had lost three crews before and seven after it had become an Intruder Squadron. In non-operational flying its losses amounted to fourteen men.

On the 17th W/C Bannock handed over to WIC R. G. Gray, D.F.C. and Bar, formerly of the City of Edmonton Squadron. Bannock was awarded the D.S.O. in August. As

commanding officer of the Lynx Squadron he had 4 destroyed and 3 damaged which, added to his score with the Edmontons, made his total 11 destroyed, 4 damaged and 19 flying bombs brought down.

The squadron was disbanded on September 1st, 1945.

#### **CHAPTER VIII**

# AIR SUPPORT FOR THE ARMY

#### CLOSE SUPPORT

January-May, 1945

HE City of Edmonton Squadron, flying Mosquitos and commanded by W/C Wickett, continued to operate from Hartford Bridge until March. Having changed its function from Intruder to Close Support Squadron it resumed its operational career in January, 1945. The new duties of the squadron were to disrupt enemy communications, bomb those places where troop concentrations or enemy headquarters were suspected and generally to create as much havoc as possible in the area immediately behind the enemy lines so as to facilitate the advance of our own troops.

Its first sorties in support of ground forces took place on the night of January 3rd when twelve crews took off to bomb St. Vith which had been retaken by the Germans in December in the Battle of the Bulge. Ten of these crews attacked but failed to observe any results because of the weather, though one destroyed a transport and damaged another on the way. When the same place was bombed again two nights later, F/L H. S. Glassco and his navigator, F/O T. Wood, R.A.F., did not return. F/O Redeker with F/O

Zimmer attacked a flying bomb en route but did not know if they had hit it, though they subsequently saw it crash.

There were no more operations until the 13th, the day of the elimination of the Bastogne pocket by the ground forces, when twelve crews patrolled the battle area in the Ardennes, bombing enemy beacons, attacking rail and road transport, and strafing barracks and lights seen in the woods. This was repeated the next night by sixteen crews one of which, F/O L. J. Berry, with F/O W. Brown, R.A.F., crashed on returning, both officers being killed.

Operating ahead of the British Second Army thrust towards Erkelenz, Heinsberg and Rheindahlen, north of Aachen, sixteen crews on the 17th bombed and strafed trucks and other mechanical transport, barracks, a landing ground, railway transport, villages and towns. Weather and trouble with equipment forced four out of five crews to return early on the 19th, the fifth pilot, S/L F. A. Montgomery, bombing a large factory at Vreden, between Arnhem and Munster, and attacking rail targets. The Second Army front was again the objective on the list for fifteen crews, strikes being seen on the usual variety of targets, and on the 22nd for fourteen crews, targets ranging from Wesel and Goch to Dorsten, Haltern and Koesfeld.

Snow, fog, and mist halted flying until the 28th when seventeen crews took off for the Cologne area, results being mostly unobserved, though a factory and some buildings were known to have been hit. Four crews wound up the month's operations on the 29th by attacks on road targets and small towns in the Cologne area. The squadron was saddened by the disappearance of F/L T. Matthew, F/Os G. Day and W. P. Retzer and WO J. Firth who left for Scotland in an Oxford aircraft on the 13th. It was later learned that they had crashed at Llanwrog in North Wales.

The bombing and strafing of railways and trains, mechanical transport, lights and buildings continued in February, about twice as many sorties being flown as the squadron had been able to get in during January. The Zwolle-Osnabrück area was visited by seventeen crews on the 1st and the Hengelo district by fourteen on the 2nd, F/L G. H. Hackett with F/O W. S. Brittain on the latter occasion attacking a flying bomb which was subsequently seen to crash near Zutphen. On the 3rd fifteen crews took off for the Cologne battle area, one returning early, while on, the 4th twelve patrolled between Munster and OsnabrUck, F/O M. Ewaschuk and F/O R. Stratton failing to return.

The Cologne district was again the objective on the night of February 5th, eleven crews taking off, and on the 7th it was the turn of Geldern when sixteen crews blew up mechanical transport, bombed a factory, attacked a junction, strafed roads and buildings, and generally played havoc behind the enemy lines. Kaltenkirchen, Viersen, München-Gladbach and other Ruhr targets were bombed and strafed by fifteen aircraft on the 9th, F/L W. C. Charde with Sgt. S. Rosenthal failing to return.

Railways and roads ahead of Field Marshal Montgomery's push were patrolled on the 10thby fourteen crews. Objectives in the Enschede, Zutphen, Almelo, Haltern, Zwolle and Koesfeld area all received attention, results being reported as good. Three days later as the Canadian Army entered Cleve twelve crews bombed Marienburg, Haltern, Hardenberg and other targets in the Osna brück-Munster area, incidentally strafing mechanical transport whenever it came into view, while the next night twelve aircraft attacked with bombs and cannon whatever they could see in the neighbourhood of Marienburg, Zwolle, Meppel, Koesfeld and Haltern, places through which the Germans could bring up troops to oppose the First Canadian Army's offensive between the Maas and the Rhine. Again mechanical transport was damaged and destroyed with cannon and machine-gun fire while buildings and railways were bombed.

There were five nights on which there were no activi-

ties though on February 16th the squadron lost F/O J. D. Sharples, D.F.C., who had gone on a daylight operation with a unit stationed at Ford. Sharples had four victories in the air to his credit. On the 10th the squadron returned to the battle line in Holland, despatching twelve aircraft. Again the Haltern and Marienburg districts were those principally combed for objectives. In broad daylight on the 22nd the squadron despatched twenty crews to the Zwolle-Osnabrück area where radar installations, barges, buildings and the usual road and rail targets were attacked. This operation was one in which 215 aircraft from fourteen squadrons participated. The aircraft took off in groups of squadrons and made a concentrated fifteen-minute attack between 1300 and 1315 hours. It is of interest that the Canadian squadron provided the largest number of aircraft of any unit in the force taking part. Unfortunately four crews failed to return, W/C Wickett, the commanding officer, with F/O W. Jessop, F/L M. Hope with F/O L. A. Thorpe, F/L Hackett with F/O Brittain, and F/L Miller with FS Hooper. To these four a fifth crew was added on the night of the 23rd/24th when F/L L. H. McLeod with F/O G. D. Morrison failed to return from Grevenbroch to which eight aircraft had been sent on a bombing mission. Wickett was succeeded as commanding officer by W/C Annan who, for his work in attacking ground targets, was awarded the D.F.C. in September, 1945.

Viersen, Kempen, Xanten, between the Maas and the Rhine, and other targets were attacked by eleven crews on the night of the 24th, some woods near the last-named coming in for a major share of the squadron's attention on the 26th when thirteen aircraft were despatched. Aldekerk, Kapellen, Wachtendonk and other points between Venlo and Essen were attacked by twelve crews on February 27th and operations for the month were completed when, on the next night, twelve crews patrolled Burgsteinfurt, Weener, Lengerich and other towns in Western Germany. The

squadron learned with pleasure of the award of a Bar to the D.F.C. of F/O Bruce who had formerly flown as observer with W/C Bannock.

Operations began on March 1st with attacks by ten aircraft on Meppen, Hengelo, Nunspeet, northeast of Arnhem, and lines of communication in the area behind the battle lines. Trains were attacked and one locomotive was blown up. Nine crews carried out similar tasks on the 2nd, 3rd and 4th in the Osnabrück-Münster area, a flying bomb being shot down on the last occasion by F/L W. L. Drake and F/O K. Gunning. Again, nine crews were despatched on the 5th, one returning early. This time they bombed Burgsteinfurt, Meppen and other towns. Eight crews took off on the night of the 8th and attacked Meppen, Dulmen and Isselburg, where the force of an explosion was felt by one pilot at 3,800 feet. The next night ten aircraft were despatched to the same area on the same kind of operation but F/Os G. I. Sheldrick and F. J. Klapkiw failed to return. Once more the Osnabrück-Münster area was visited on the 12th by nine aircraft, barges, mechanical and rail transport and a factory being hit. On March 15th the squadron moved from Hartford Bridge to Coxyde in Belgium.

Four nights without operations were succeeded on the 17th by a patrol of the Stendal-Magdeburg area in which eleven crews took part. The 18th was notable for the shelling of Coxyde by the guns of Dunkirk which was still in enemy hands. Several aircraft were damaged. This did not interfere with operations, however, since on a patrol of the railway lines in the Bremen-Munster-Stendal-Magdeburg area eleven Mosquitos strafed and bombed marshalling yards, locomotives, lights, mechanical transport and buildings. The same area was visited again the next night and on the 10thby nine crews, similar targets being attacked.

A patrol of Arnhem, Dulmen and Rees was followed by the bombing and strafing of communications behind the bomb-line on the night of the 21st by eleven crews while the next night six others bombed Borken, Haltern and Dulmen causing a number of fires.

As the British Second Army crossed the Rhine and thrust deeper into northwest Germany eleven crews took off on the 23rd for the Isselburg-Anholt area but were unable to observe results since they bombed on instruments only. Similarly, twelve aircraft attacked lines of communication in the Ruhr the next night and eleven more on the 25th. On this latter occasion S/L Montgomery's Mosquito was damaged by flak and he landed at Cambrai while F/Os A. Nicol and J. H. Wicken were both wounded by anti-aircraft fire. F/O Nicol distinguished himself by assisting F/O Wicken and getting his aircraft back safely despite loss of blood and a useless right arm. This earned him the award of a D.F.C. in June.

A crash on the 26th near Eindhoven caused the death of F/L R. E. Naylor who was returning from Gilze-Rijen with an aircraft on delivery.

Stadtlohn, near Koesfeld, was bombed by four crews, Dulmen by another four while five more attacked Koesfeld on the night of March 27th, no results being observed because of adverse weather. Twelve crews took off on the 31st for the Zwolle-Osnabrück area, one returning early and one, F/L George Graham and F/O Dick Styles, failing to return. It was this team that recently had claimed an unusual victim when, despite intense flak, they had gone down to fifty feet to strafe a small German coastal vessel which they left listing and on fire. Word was subsequently received that Graham was killed near Roogeveen in Holland. Other crews attacked transport, lights, a bridge, a junction, a railway and canal, leaving some of the transport in flames and starting fires where they bombed. The squadron diarist reported that by this time morale was running very high as the end of the war appeared to be in sight and personnel turned their thoughts towards Canada once more.

April, a relatively heavy month operationally, opened

with a patrol of enemy communications where the First and Ninth U.S. Armies were advancing, eight crews taking off for Eystrup, Bassum and Meppen, which were the principal targets. Eleven more took off on the night of the 2nd for objectives in Holland and northwest Germany where the First Canadian and Second British Armies were operating and twelve on the 3rd for points ranging between Bremen and Hanover. On the 4th eleven crews bombed and strafed Papenburg, Dannenberg, Nordhausen, and a number of other places, F/L D. S. McLaughlin with F/O A. Tekela damaging two singleengined aircraft on the ground. The Zwolle-Bremen-Hanover area was raided by twelve crews on the night of the 5th and twelve more ranged as far east as Berlin on the 6th, scoring heavily on road and rail transport. Again on April 7th eleven crews made sorties to the Bremen-Hanover-Magdeburg-Berlin area, trains suffering badly in attacks by F/L K. C. Mason with F/O W. R. K. Morris and F/L V. R. Cherry with F/L A. D. Birdsall. Northeast Holland and northwest Germany were patrolled by twelve crews on the 8th, Chemnitz, Lüneburg, Zeven and other towns being bombed, rail targets again suffering heavily. More towns, rail and road transport were attacked the next night by twelve crews and on the 10thby five more. The 11th saw twelve aircraft despatched to bomb railways and attack motor vehicles in the Bremen-Hanover-Berlin area. All successfully strafed mechanical transport, one causing an explosion.

On the 12th a dozen crews patrolled between Bremen and Lübeck and as far south as Berlin, destroying a bridge, starting fires, causing explosions and strafing transport, the squadron returning to northeast Holland and northwest Germany on the 14th with twenty-two crews. Eleven aircraft were sent out on April 15th to the Bremen-Kiel area, patrolling north to Kiel and south to Berlin, and another twelve on the 16th, a train being set on fire by S/L J. P. Coyne, D.F.C. with F/O D. L. Figgis. On the 17th twelve,

and on the 18th nine, aircraft patrolled the Bremen-LUbeck area again while twelve went to the same part of the Reich on the 19th bombing and strafing with success. The 20th witnessed a repetition by twelve crews with particular effect on trains and by twelve again on the 21st, towns, villages, woods and junctions, being the targets. On the 22nd nine crews bombed towns and rail targets, two trains being strafed, the locomotive of one blowing up under the fire of F/L Drake with F/O Gunning. Nine more took off on the night of the 23rd, a number of trains being successfully attacked in the Bremen-Hanover-Berlin area. Seven crews bombed Bremen with the co-operation of ground control and five bombed and strafed independently on the night of the 24th, three trains being attacked as well as other targets. A junction, a road, trains and towns were the objectives for nine crews on the night of the 26th, the last night of operations in the month of April. Except for a patrol of eight aircraft on the night of May 2nd and a reconnaissance sortie on the 3rd this was the, last operation before VE-Day.

The end of April also witnessed a move by the squadron to Volkel in Holland, where life in tents in a constant downpour of rain intensified the desire of most of the men to get the war over.

On September 7th the squadron was disbanded. It had been formed in England in November, 1941, when it almost immediately became operational with Boston aircraft as an Intruder Squadron. Subsequently it had converted to Mosquitos and in the course of its career, before its function had been changed from Intruder to Close Support, it had piled up an amazing record of victories in the air and on the ground. After November 1944 the nature of the work in which it was employed militated against further victories over enemy aircraft.

# Omnia Passim

No. 437 Squadron, the R.C.A.F.'s first overseas trans-

port unit, was formed at Blakehill Farm, near Swindon, early in September 1944. Like other units in Transport Command the Husky Squadron had to fulfill varied purposes. When airborne operations were undertaken its Dakotas were called upon to tow gliders and carry supplies and troops; at other times it transported freight that was urgently required or flew supplies to destinations where ordinary transport methods were too slow or inadequate. In a word the squadron carried "anything anywhere".

Unlike most new units the Husky Squadron was allowed no time to develop growing pains. The Commanding Officer, W/C J. A. Sproule, D.F.C., a Canadian in the R.A.F. who later transferred to the R.C.A.F., arrived together with his adjutant on September 4th; nine crews reported on the 15th and 48 hours later the unit began operations in the great airborne thrust at Arnhem. As quickly as new crews reported to the squadron they were pressed into service.

The objective of operation "Market" was to seize the key bridges over the Maas, the Waal and the Lower Rhine at Grave, Nijmegen and Arnhem, and thus open a corridor through which the British Second Army could sweep northward and turn the flank of the Nazi armies. The task of the transport squadrons, including the Huskies, was first to drop airborne troops by parachute or glider around the three objectives and then to keep them supplied with arms, ammunition, food and equipment until the regular land forces could link up with them.

On September 17th, when the airborne invasion of Holland began, fourteen Dakotas of the Husky Squadron, led by W/C Sproule, took off on their first operation; all were successful and all returned to base. The twelve Horsa III gliders, which the Daks towed to the Arnhem area, contained 146 troops, elements of the First British Airborne Division, together with sixteen cycles, ten motor cycles, five jeeps, six trailers, four blitz buggies, two handcarts and three wireless

sets. On the succeeding six days the Huskies hauled more gliders and supplies to Arnhem and ferried petrol, mail and passengers to Coulombs, Evere and Melsbroek, returning to England with stretcher cases and walking casualties.

During the first days of operation "Market" the Canadian aircraft suffered no losses, but the enemy quickly strengthened his flak defences and, unknown to the transport squadrons, held possession of the dropping zone over which the aircraft flew at low heights to release their panniers of supplies. As a result, the unarmoured Daks suffered severely on the list while trying to come to the aid of the airborne troops who were now cut off and hard pressed in the suburbs of Arnhem. The "Red Devils" who fought with such gallantry on the ground have paid tribute to their comrades of the R.A.F. who flew "straight into a flaming hell" to deliver their cargoes. Twenty per cent of the Stirlings and Dakotas were lost that day. Of ten Husky aircraft detailed to drop supplies four did not return, the crew had to bail out of another, and a sixth was forced to land on the Continent with severe flak damage. Casualties included twelve missing, F/L R. W. Alexander, F/Os W. S. McLintock, C. H. Cressman, J. S. Blair, P. N. Steffin, P/Os T. J. Brennan, M. S. R. Mahon, R. A. Kenny, A. H. MacAloney, WO R. E. English (R.A.A.F.), FS J. C. Hackett (R.A.F.) and Sgt. L. Evans (R.A.F.), in addition to several more wounded. In very truth it was a severe baptism of fire. Two days later another crew, made up of F/Os W. R. Paget and D. L. Jack, FS R. I. Pinner and Sgt. D. J. O'Sullivan, was lost while on the same task.

Recognition of the squadron's work during these critical days of the Arnhem lift was seen in the award of D.F.Cs. to F/O G. P. Hagerman and F/L A. C. Blythe and the D.F.M. to FS A. McHugh (R.A.F.). F/O John Rechenuc was mentioned in despatches. Despite intense and concentrated ack-ack fire Hagerman made two runs over the dropping zone to release his containers. After leaving the target

area his Dak was attacked by six enemy aircraft, receiving such extensive damage that the crew had to bale out. Hagerman coolly and courageously remained at the controls until he was sure his companions had left before he himself jumped. Blythe, a Canadian in the R.A.F.V.R., had previously taken part in supplydropping sorties in Burma and Normandy before joining the Huskies. Like Hagerman he flew through the storm of flak over Arnhem to deliver his supplies accurately. Rechenuc and McHugh were the only survivors from the crew of one Dak that was shot down in flames by enemy fighters over Holland.

Fortunately normal transport operations were not as costly as the squadron's first week on the Arnhem lift. It was more than a month before another crew was lost when FSs D. O. Schneider and J. W. Lockwood, WO J. H. Soper, Sgt. S. A. Gumlïrell and a W.A.A.F. passenger, after carrying a load to Antwerp, took off for the United Kingdom and were not heard of again.

In the six months interval between the Arnhem operation and the airborne crossing of the Rhine in March the Huskies were engaged in the humdrum job of ferrying much-needed equipment, ammunition or petrol, and personnel. The crews normally did about five "lifts" a week to and from the Continent. In October, for example, they carried newspapers, mail, documents, maps, money, rocket projectors, ammunition, phosphorus bombs, clothing, wireless and photographic equipment, machinery, tank tracks and wheels, tractor treads, drop tanks for aircraft, casualties, German prisoners-of-war, captured enemy bombs and equipment and even bedsteads. In one day they transported to the Continent 1,140 cans each containing 4½ gallons of petrol: on another three aircraft took 4,989 lbs. of ammunition, 92 drums of lubricating oil and 5,000 lbs. of freight for the army and returned with 4,916 lbs. of airborne equipment, 2,000 lbs. of freight, 2,500 lbs. of mail and one passenger. But one cannot measure their achievement in

terms of pounds of freight. Crews flew long hours and ground personnel performed miracles of serviceability. In the month of September they flew 58,153 ton/miles and carried 392 casualties together with 783 other passengers for a total of 337,386 passenger miles.

During their first full calendar month of operations (October) despite constantly changing ground crew, service-ability was maintained at 81%, 171,232 ton/miles were flown, 2,316 passengers were carried on 500,690 passenger miles, and 645 casualties were returned to the U.K. Serviceability in November went up to 83%, 521 tons of freight, 1946 passengers and 577 casualties being transported for totals of 166,575 ton/miles and 707,340 passenger/miles. Variations from October's programme were to be found in the appearance of Vipers (Very Important Persons), steel matting, pierced steel planking and paravanes in the passenger and cargo manifests and the making of much longer trips on the Continent.

On November 29th S/L C. N. McVeigh, F/Ls O. A. Simmons and G. P. Hagerman, D.F.C., and their crews left for Le Bourget airfield, near Paris, whence they carried petrol to Bordeaux. They returned to Merville on December 1st and thence to Blakehill Farm the same day. Nor were these peripatetic activities confined to only a few crews. It was quite common, for instance, for an aircraft to leave base for Hunsden, Warmwell or some other station in England, fly to the Continent with a load, return to Perranporth, Northolt, Broadwell or another designated point before returning to base.

A feature of the work in December that is of particular interest to those who were blood donors can be deduced from the following entries:

11 December—S/L A. C. Blythe (K.A.F.) took freight from Bicester to Melsbroek and returned to base with empty plasma boxes.

- 22 December–F/L R. D. Anderson took army freight to Melsbroek, returning from Vitry with blood boxes.
- 23 December-One aircraft took freight and blood to Caen/Carpiquet. Thence it went to Melsbroek with a load of blood, and returned to Down Ampney with 24. casualties.

It will be recalled that this was the period of the German counterthrust in southern Belgium. Another interesting cargo was that carried on the 24th by F/O E. Q. Semple, F/O C. N. Roy and FS R. S. Purkis. It consisted of 15,104 lbs. of Christmas pudding destined for Antwerp. Another 5,040 lbs. were flown to Melsbroek by F/O V. J. Dale. In keeping with the spirit of the times P/O J. A. Delahunt took musical instruments to Melsbroek also. On the 26th seven crews carried 137 American soldiers from Beaulieu in Hampshire to Denain. Weather interfered with the transport of more Americans in the latter part of the month. Despite this the squadron in December carried 445 tons of freight for 138,652 ton/ miles and 1,769 passengers for 500,580 passenger/miles. Since Arnhem the squadron had seen little of the enemy, but occasionally the Hun struck back. Once a Dakota was damaged by an enemy fighter and on another occasion an enemy intruder strafed an airfield on the continent and set fire to the cockpit of one of our aircraft on the ground.

January provided very little variation from the routine. Although the weather was bad the squadron carried 427 tons of freight for 154,876 ton/miles, while 1,743 passengers were flown for 561,763 passenger/miles.

On February 5th F/O J. H. Phillips was returning from Rosières-en-Santerre when, on letting down through low cloud, his aircraft crashed into some trees. The wing and the underside of the Dakota were damaged so that landing was impossible. He managed to gain sufficient height to allow the crew to bale out and all got down safely.

There was a considerable movement of Army personnel to the Continent between the 9th and 13th, the period of the attack on the northern end of the Siegfried Line. Reinforcements for the 21st British Army Group and the personnel and equipment of a Mosquito squadron, blood plasma and medical supplies were taken to Belgium while plasma boxes were carried to England for refilling. The Daks also brought back diplomatic mail and material for the Ministry of Economic Warfare. Ten machines of enemy origin were ferried to England and on the 21st a much prized load of rubber captured from the enemy was flown across the Channel. On the following day 18,896 lbs. of parachutes were taken to Nivelles and a number of troops were flown home. They followed this up with airborne supplies the next day and brought back casualties on the 24th. The total freight carried during the month of February was 328 tons and the number of passengers was 4,088, ton/miles being 103,689 and passenger/miles 1,131,711.

The state of some of the Continental airfields was not good due to persistent rain and on March 2nd 55,000 lbs. of steel matting was carried to Nivelles, 40,000 lbs. more being taken the next day. It was noted that one-third of the total load carried in the first half of the month was for the American forces.

On March 21st the Husky Squadron sent 26 crews to Birch in preparation for another great airborne operation, the crossing of the Rhine at Wesel. This operation, which has been called "the apotheosis of all airborne achievements", finally opened the high road into Germany for list Army Group. At 0702 hours on the morning of the 24th W/C Sproule took off, followed at one-minute intervals by 23 of his crews. Behind the tugs were Horsa gliders bearing 230 officers and men of the First Ulster Rifles, together with thirteen jeeps and trailers, six jeeps and six 6-pounder guns, two trailers, two handcarts, four bicycles, two motorcycles, machine-guns and boxes of ammunition. The

weather over the whole route was excellent, but as the Daks reached Wesel they found clouds of dust and smoke blowing over the landing zones. In spite of the thick haze the gliders were successfully released. There was some flak over the area but it was mostly inaccurate and only four aircraft received slight damage. On completion of the lift the Dakotas landed at Nivelles for possible supply duties in support of the airborne troops, but so successful had the combined land and air attack been that this was unnecessary. On the 26th the crews returned to England to resume their normal transport work. Five officers, S/L J. T. Reed, F/Os J. E. Seary, F. J. Andrews, J. M. Byrnes and R. S. Purkis, were subsequently awarded the D.F.C. for their services on this occasion. Reed, Byrnes and Purkis had also taken part in the earlier Arnhem operation. W/C Sproule, who had led his squadron on both lifts, received the Bronze Lion from the Queen of the Netherlands.

Despite the departure from its normal routine caused by the Wesel lift the squadron in March carried 551 tons of freight and 2,954 passengers for a total of 158,418 ton/miles and 859,225 passenger/miles.

At the beginning of April the Dakotas were flying exprisoners-of-war back to England, as many as 540 being carried in one day. Spare aircraft engines, Red Cross supplies for the Dutch, petrol, drop tanks and other commodities were taken to the Continent in a total of 364 sorties. In the middle of the month eighteen of the Husky kites set up an amazing record. In two days (April 17th and 18th) these aircraft transported 205,000 lbs. of petrol and M.T. fuel, 80,000 lbs. of ammunition, 681 liberated prisoners-ofwar, 76 casualties and two passengers in the almost incredible flying time of 310 hours and 25 minutes, and this was accomplished between 0900 one day and slightly after midnight the following day. One crew made up of F/L J. W. McGregor, F/O L. E. Cox, WO T. W. Connolly and FS E. S. Montgomery in 37 hours and 30 minutes elapsed time

spent exactly 21 hours in the air on twelve lifts.

Unlike the squadrons with an offensive role the Huskies did not cease operations with the downfall of Germany. On May 7th they moved from Blakehill Farm to Nivelles, Belgium. Thereafter their work was extended. They transported French, Russian, American and other Allied exprisoners-of-war and displaced civilian personnel. ENSA troupes and football teams were flown to and from various bases. Members of the German High Command, German scientists and other German prisoners were taken under guard to Great Britain. Greeks, Brazilians, Belgian children, Polish WAAFs and ATS girls added variety to their cargoes. Food and other supplies were ferried to the Continent or from Nivelles to aerodromes in Germany and Denmark. On May 10th S/L C. N. McVeigh and his crew flew from Nivelles to Oslo, Norway, with one of the first Allied aircraft to land at the Norwegian capital after the German surrender. The R.C.A.F. Dakota was detailed to carry the Nazi Peace Delegation from Oslo to Scotland.

Another move early in June, this time to Melsbroek, made no appreciable difference to the nature of their work except that it became heavier, 450 sorties being undertaken in one month. Many cargoes of yeast were taken to the Continent and on one occasion they carried the body of an admiral from the Continent to Lee-on-Solent. In the course of July the squadron helped to prepare the ground for the "Big Three" conference in Berlin by ferrying stores to Germany. Mrs. Anthony Eden and General Dempsey were among the V.I.P.s transported to the Continent. On the 17th they despatched a detachment to Oslo where a regular schedule of runs between that city and Stavanger and Bardufoss was maintained for some months, and on August 1st another detachment went to Odiham to operate between that place and various points in Europe. Thereafter Athens, Rome, Naples, Vienna, Marseilles, Oslo, Copenhagen and Paris were more and more frequently mentioned in squadron reports. In September the Commanding Officer, W/C J. A. Sproule, D.F.C., was replaced by W/C A. R. Holmes and the squadron moved from Melsbroek to nearby Evere where it remained until the middle of November. The Huskies then returned to England, to Odiham in Hampshire, the Oslo Detachment rejoining the squadron at about the same time. Through the winter and on into the spring of 1946 the work continued, some Daks maintaining a regular passenger service to Naples and Athens, while others shuttled between airfields in northwestern Europe carrying mail, freight and personnel. Operations ceased at the end of May. Two weeks later fifteen Husky Dakatos left Odiham to fly back to Canada. With their departure No. 437 Squadron disbanded.

# Air Observation Post Squadrons

The Air Force forms one tine in the trident of military power. Within certain limits each service may operate separately, but only when all three are wielded as one weapon is the full power of a nation's strength brought into most effective action. A neat example of combined operations between two of the services is to be found in the A.O.P. (Air Observation Post) squadrons which are composed of both Army and Air Force personnel. In the Great War of 1914-18 one of the major activities of the air service was the regulation of artillery fire on enemy targets. In the Second World War the course of events in Western Europe deferred for four years any close co-operation between the British Army and Air Forces in that theatre, except for commando raids. Experience in other theatres, however, demonstrated the need for aerial observation for the artillery and steps were taken to create special units for this work

Although the Canadian A.O.P. squadrons were not formed until the last months of the war, the germ of their inception was planted as early as September 1941, when

three R.C.A. officers were given an A.O.P. training course and subsequently posted to British units forming in England. In 1943, when the Canadian Divisions were being organized for Operation Husky (the invasion of Sicily), these officers were recalled to the Canadian Army. Some months later Capt. R. A. Donald was killed in action at Ortona and Capt. D. R. MacNeil captured.

The experience of the Italian operations confirmed the need for Air Observation units to work with the Army and, on the recommendation of the Canadian Army Commander, the Dominion Government in June 1944 authorized the formation of three squadrons. The original plan was to organize the units within the R.C.A., but it was later decided to follow the British example and set up squadrons manned with Army flying personnel and R.C.A.F. maintenance and administrative staff. Major D. R. Ely, one of the original trio of Canadian A.O.P. officers, was recalled from Italy to organize the units.

No. 664 Squadron mobilized at Andover on December 9th, 1944, moving to Penshurst, Kent, early in February, preparatory to proceeding overseas. Later in February Major Ely formed No. 665 Squadron at Andover, and early in March organized No. 666 at the same station. The war in the West ended before the third squadron had completed. training, but both Nos. 664 and 665 were able to participate in the closing stages of the campaign. The aircraft used by the A.O.P. units was the Auster, a small, low-powered monoplane which had been a familiar sight around flying clubs in pre-war days. For war use it was fitted with armour plating to protect the pilot, but carried no armament. Thanks to its low landing speed and short take-off run the Auster could work from small fields which required little preliminary preparation.

No. 664 was the first to reach the Continent, under the command of Major D. W. Blyth, R.C.A., who had taken over from Major Ely late in January. Moving by sea and air



Horsa gliders massed for the Arnhem lift. (2) Ground crew checking an Auster.
 S/L K. A. Boomer, D.F.C., of Ottawa. (4) W/C J. A. Sproule, D.F.C., of Toronto, commanding officer of the Husky Squadron, and S/L C. N. McVeigh, A.F.C., of Calgary.
 S/L J. P. Coyne, D.F.C., of The Pas. (6) The air lift crosses the French coast en route to Wesel. (7) to (9) City of Edmonton Squadron personnel: (7) W/C R. Bannock, D.S.O., D.F.C., and F/O R. R. F. Bruce, D.F.C. (R.A.F.V.R.). (8) W/C D. B. Annan, D.F.C., of Hamilton, W/C J. C. Wickett of Montreal and Lethbridge, and S/L P. Leggat of Montreal. (9) F/L S. H. R. Cotterill, D.F.C., of Toronto, and F/L D. E. Forsyth of Brooklyn, N.Y.



(1) A train load of V2's after an attack from the air. (2) An Me.109 shot down in the New Year's Day raid. (3) A V-bomb incident in the war zone. (4) A German truck destroyed by rocket fire. (5) Belsen.

during the last two weeks of March 1945, the squadron joined the Canadian Army in the Netherlands, two flights going to Breda while the third flight was nearby at Tilburg. The first sortie was carried out on March 22nd by Capt. G. E. Nixon who reconnoitred the front from Capellen to Geertruidenberg. During the next seven weeks the squadron's pilots completed almost 500 sorties, collecting information for the use of the various units with which they worked,1 regulating artillery fire, and occasionally taking photographs.

The flights seldom remained long in one place; in two months one flight worked from no less than a dozen landing strips. Highly mobile, the air and ground crews became expert at folding their tents-and all the paraphernalia of war-at short notice and forming into convoy to roll along the Dutch and German highways. After operating in the Maas sector for ten days "B" Flight began a series of rapid moves which carried it eastward to a strip near Nijmegen. then to Arnhem, next to Doetinchem (where one of the R.C.A. gunners captured a German soldier) and, in a long leap north-eastward across the German frontier, to Cloppenburg in Oldenburg province. The Canadian Army was still driving ahead and the Flight followed close behind to Wildeshausen and Delmenhorst, a few miles from Bremen. A week later when cease fire was ordered in Northwestern Germany the Austers were flying from a landing ground at Oldenburg.

Meanwhile "A" and "C" Flights had left the Maas front for the Ems, "A" and squadron headquarters going to Meppen in Germany, while "C" went first to Winschoten in northeastern Holland, then across the border to Weener. After a few days at one field "A" moved to a new advanced landing ground across the DortmundEms canal. The enemy had just been driven out of the area and the ALG was still

<sup>&</sup>lt;sup>1</sup> These included the Polish Armoured Division and the Canadian 2nd, 3rd, 4th (Armoured) and 5th (Armoured) Divisions.

within range of their guns. Before the Austers could use the field it was necessary to fill many shell-holes and remove numerous dead cattle. Furthermore the field was almost submerged-"a sea of wind and water" as the squadron diarist described it-and salvaged carpets were used to lengthen the short landing strip.

"C" Flight partook in the 3rd Canadian Division attack on Leer in the last days of April, observing the effect of bombing attacks on enemy defences and the efficacy of the smoke screen laid to cover the assault toops. After the fall of Leer "C" resumed its, peregrinations through East Friesland, stopping briefly at Leer, Hesel, Aurich, Heglitz and Jever. "A" and headquarters moved to Badzwischenahn, northwest of Oldenburg, just as hostilities ceased.

A few incidents from the squadron record book may illustrate its work during this period. On one sortie Capt. W. D. Hagarty saw two barges tied up at a pier and directed artillery fire on them. The larger barge was sunk, but the smaller, although obviously hit by shell fragments, remained afloat. A few days later a very effective shoot was carried out against some boats which had been discovered by an Auster pilot despite their camouflage. On another occasion Capt. R. T. Merchant engaged an enemy HQ and barracks, suspected to be those of the 19th Parachute Regiment. He reported that the artillery salvoes damaged, but did not quite destroy, the target. The only casualty, suffered by, the squadron during its operations was Capt. G. E. Nixon, R.C.A., who died of wounds on May 1st.

No. 665 Squadron, commanded by Major N. W. Reilander, R.C.A., left England on April 19th, to join 84 Group in 2nd-T.A.F. Headquarters settled down at Gilze-Rijen, near Breda, while the three flights were dispersed: to various sectors. Hostilities ended just eleven days after the Austers got into action, but in that brief time they made 58 sorties on photographic and reconnaissance missions and counter-battery shoots.

"C" Flight, which had been stationed at Tilburg under First Canadian Corps, made the first sortie on April 27th, when Capt. B. R. H. Watch, flying with a detached section on North Beveland Island, observed for a shoot on enemy gun positions on Duiveland Island across the Schelde estuary.

"A" Flight went to Papenburg, just east of the Ems River in Germany, to work with the Polish Armoured Division in Second Canadian Corps. After a few days it moved further north to an advanced landing ground which was still within range of the enemy's 88 mm. guns, and finally on May 7th reached Jever, not far from Wilhelmshaven. The German commander of the airfield surrendered to Capt. Scandrett, O.C. the flight, who posted his men to guard the aerodrome until the R.A.F. Regiment arrived and took over.

These two flights had ceased operations on May 4th when the Nazis in Northwestern Germany capitulated, but "B" Flight remained active until May 7th. It had been sent to Dunkirk to work with units of 21 Army Group besieging that port. The pilots of this flight were engaged in locating hostile batteries and directing our own fire against them. In the late afternoon of the 7th the last sortie was made and then the guns were silent. VE-Day had come. A fortnight later the flight was called on to assist in the rescue of some soldiers in a patrol boat which had capsized off the harbour. Thanks to the work of Capts. W. G. Milliken and F. R. Irwin, in particular, four men were found on a raft and picked up.

After the German surrender No. 665 Squadron collected its flights in Holland, eventually settling down at Apeldoorn, where it did communications work, carrying despatches for the First Canadian Army. On July 10th the squadron disbanded.

Although it was denied the opportunity to fly in action No. 666 did reach the Continent early in June, under the command of Major D. R. Ely. Dispersed at first between Hilversum, Dordrecht, Maarssen, Alkmaar and Ede in support of various formations of the Canadian Army, the

squadron later joined No. 665 at Apeldoorn. For the next four months the Austers were used as taxis to fly Army staff officers to points north, south, east and west in the Netherlands, Belgium, France and Germany. On the last day of October No. 666, then under the command of Major A. B. Stewart, was disbanded.

No. 664 Squadron had remained in Northwestern Germany, on road patrol and ferrying duties, until mid-June when it began moving westwards to join the other R.C.A.F. A.O.P. squadrons at Apeldoorn. Then it was designated as the A.O.P. unit for the Canadian forces in the Occupation Army and in August returned to Germany. After a few days at Jever, northwest of Wilhelmshaven, the squadron flew to Badzwischenahn, near Oldenburg, where it remained until disbanded at the end of May 1946.

#### CHAPTER IX

#### R.C.A.F. UNITS IN COASTAL COMMAND

## The War Against the U-Boat

## (I) Flying-Boat Squadrons

S the summer of 1944 drew to a close it was apparent that the long battle of the Atlantic was entering its final rounds. The loss of some Biscayan ports, the encirclement of others, the increasing range and hitting power of Allied aircraft, the effectiveness of the Royal and American navies, all combined to render the operations of Doenitz's raiders less effective than they once had been. This did not mean that the vigilance of Coastal Command could be, or was, relaxed. On the contrary until the day of victory—and for some time after—Coastal aircraft continued their patrols over the grey seas, hunting U-boats, shepherding convoys, sweeping back and forth, through weather fair and foul, ever on the watch.

But contacts now were relatively few and engagements between submarine and aircraft, such as had studded the pages of Coastal's record in 1943 and earlier in 1944, were now a rarity. U-boat commanders were less willing to fight it out on the surface and, thanks to the schnörkel, they were able to remain submerged for long periods with only a plume of smoke or vapour to betray the presence of their

craft below the surface.

For the three R.C.A.F. flying-boat squadrons serving with Coastal Command the last eight months of the war produced only eighteen attacks of which the lion's share went to the Sunderland crews. Indeed No. 162 the Canso squadron in Iceland, which had won well-merited fame by its successes against U-boats in the spring of 1944, had to be content with only five sightings and three attacks between September and May.

Two of the attacks occurred in November 1944, the first on the 3rd when a Canso crew, captained by F/L D. J. Orr, sighted a schn6rkel over which they released their depth charges with unobserved results. Two days later P/O M. A. Palmer and his seven companions returned from patrol with a similar report. There was much excitement on the 10th when a tanker was torpedoed and set on fire off Iceland. The survivors were rescued by an Icelandic ship which in turn was sunk by the lurking U-boat. Many of the gallant Icelanders lost their lives. No. 162 Squadron immediately despatched aircraft to cover the area but no trace of the submarine could be found. Almost six months elapsed before the Cansos again encountered an enemy U-boat.

The last attack was carried out by F/L J. K. Guttormson who already had participated in two engagements with U-boats. During a patrol on April 21st, Guttormson sighted a submarine which he attacked. No results could be determined. A few days later the same crew had a brief glimpse of another U-boat. The D.F.C. was later awarded to Guttormson for his services throughout his tour with the Canso squadron. No. 162's last sighting before the war ended was made by F/O N. A. Chubb on April 26th but a rain squall blotted out the target before the Canso could attack.

During March and April flying conditions were extremely poor. On one occasion the weather closed in so rapidly that four aircraft out on patrol were unable to land at base and had to be diverted to northern Scotland. A fifth crew landed at sea and taxied for an hour to reach base.

Anti-submarine searches were not the only duties on which the Cansos were engaged. Mercy flights were also undertaken. For example, on November 19th, F/L Orr, who a few days previously had made a vain search for the crew of an aircraft down on the sea, flew his Canso to a fishing village in northwestern Iceland to rescue an injured sailor. On another occasion, just after the termination of hostilities, F/L Guttormson was instrumental in rescuing the crew of a Sunderland that had forced-landed south of the Faeroe Islands. Circling the flying-boat Guttormson guided a fishing trawler to the scene.

After the final German surrender at Rheims and Berlin, units of Coastal Command continued convoy escorts and anti-submarine patrols for some days. During one of these patrols on May 10th F/L R. L. Clarke's crew encountered a surfaced German U-boat with which they exchanged signals in a mixture of German, French and English. On May 31st the Cansos carried out their last operational sorties from Iceland.

Through these months of shepherding convoys and hunting subs the Cansos lost three aircraft. In December 1944, F/L E. P. Oakford and all his crew were lost in a crash while returning from a patrol in bad weather. In April 1945, F/O L. C. Martin and P/O B. Lahey and their crews went missing. Extensive searches found no trace of Martin's Canso or the missing men. Some time later a ship picked up two bodies from the sea. Lahey and his companions were more fortunate. Their aircraft came down in Labrador in a remote area whence they were flown out by Norseman and helicopter. The story of their rescue is a dramatic one.

The Canso with its crew of nine had left Mingan, Quebec, on April 19th en route to Goose Bay. About one hour out severe icing was encountered which made it impossible to maintain height. Then one engine failed. Lahey tried to

reach a frozen lake, but the Canso could not make it and crashed into the tree-covered side of a hill about 130 miles south-west of Goose Bay. A little later while some of the crew were removing emergency supplies from the amphibian it exploded, severely burning Lahey and P/O W. R. Baggett, one of the flight engineers. When the Canso was overdue at Goose Bay a search was organized in which R.A.F. Transport Command, the U.S.A.A.F. and the R.C.A.F. participated. Weather greatly hampered the searchers, but finally on the afternoon of the 21st the crew of an American C.54 sighted distress signals from the marooned men. Supplies were dropped and the big four-engined Douglas remained circling over the spot to home a Norseman which took off at once from Goose Bay with a Medical Officer on board.

The Norseman made a safe landing on a lake  $2\frac{1}{2}$  miles away and the crew tramped through soft snow to the scene of the crash. The two injured men were carried on stretchers to the lake and flown out to Goose Bay. A second Norseman then attempted to pick up three members of the Canso crew who were trying to walk to Goose Bay and were about 12 miles away from the main party. The pilot set his aircraft down on a small lake, but when he tried to take off again the heavily-laden Norseman could not gain flying speed because of the slushy snow and crashed into trees at the end of the lake. Fortunately no one was injured and the aircraft was not badly damaged. With the help of tools and parts dropped to them the crew made repairs and a few days later when the weather turned colder the Norseman was flown out to Mecatina.

In the interval, however, the weather prevented further rescue efforts as rain made landing conditions even worse. Food, clothing, guns, tents and other equipment were dropped to both parties. As soon as conditions permitted a Norseman again flew to the scene of the crash, only to become bogged in the slush. While the men set to work to

build a runway of poles covered with snow, Goose Bay devised a new rescue scheme. Further attempts skiequipped aircraft seemed useless in view of the mild weather and soft snow. It would be weeks before the ice left the lakes and floats could be used. The men were likely to remain marooned in the bush for some time-unless a helicopter could pick them up. Signals went out. The United States Navy immediately offered its cooperation. A helicopter was dismantled at Floyd Bennett Field, New York, loaded into a C.54 and flown to Goose Bay. There it was assembled and on April 30th flew to Mecatina, nearer the scene of the crash. One by one the nine men were picked up, flown to Mecatina and thence to Goose Bay. Assisted by colder weather which hardened the snow surface, the two Norsemen were also able to take off and return to base. One of the most dramatic rescues in the annals of the R.C.A.F. had been successfully completed.

In September 1944. W/C C. G. W. Chapman, D.S.O. who had led the Canso squadron during the stirring period of early 194.4 handed over his command to W/C W. F. Poag, who in turn was succeeded at the end of November by W/C J. K. Sully. In June 1945, the Cansos bade farewell to Camp Maple Leaf at Reykjavik, Iceland, which had been their home for almost eighteen months and flew back to Nova Scotia. The squadron was disbanded at Sydney early in August 1945.

While the Canadian Cansos were working over the North Atlantic from their Icelandic base, two R.C.A.F. Sunderland squadrons were operating from Northern Ireland and Southern Wales. Their score for the period September 1944 to May 1945 was fifteen attacks on periscopes, schnörkels, or "suspects", of which all but two were logged by No. 423 Squadron commanded by W/C P. J. Grant.

September 1944. opened with a great flurry of activity in both squadrons. Enemy U-boats had inflicted some dam-

age on Allied shipping west of Ireland and Sunderland crews searching the area found considerable evidence of their work–dinghies, lifeboats, rafts, oil patches and wreckage. Several "suspects" were investigated and marked for surface vessels. A schnörkel sighted by F/O D. G. Steuart, navigator in F/O P.B.C. Pepper's crew, disappeared before an attack could be made. On the following day F/O J. K. Campbell, also of No. 423 Squadron, had a clear view of a schnörkel and periscope as he maneouvred his big flyingboat into position. On the first run the depth charges failed to release and by the time the Sunderland had come about for a second try, the target was gone. One of the Sunderlands engaged on these anti-submarine sweeps crashed at sea with the loss of all the crew save one who was picked up in a dinghy 21 hours later by the Navy.

The first success for Pat Grant's unit was on September 11th when F/O J. N. Farren, on patrol north of Ireland, sighted a whitish vapour rising from the sea nine miles away. Radar instruments gave no indication of a contact on the surface, nor could a search with binoculars determine the source of the vapour. Farren turned his Sunderland to investigate while the crew stood ready for action. When the flying-boat was still two miles distant the vapour cloud ceased, but a slight wake was now discernible on the rolling breast of the sea. Swinging down the track Farren released four depth charges, followed by a float marker. Then he circled while escort vessels were homed to the position to continue the attack. On the basis of subsequent evidence it was concluded that the U-boat was sunk. Credit was shared between H.M.C.S. "Dunver" and "Hespeler" and F/O Farren's crew-a fine example of Canadian combined operations.

Later in September both Sunderland squadrons experimented in flare dropping during night patrols over areas where U-boats were believed to be on the prowl. Results were negative.

The record for October showed a few radar contacts but neither sightings nor attacks by the R.C.A.F. flying-boat squadrons; on the other hand it showed no merchant shipping losses in the area covered by Coastal aircraft. The Command was fully executing its duty of protecting our seaborne commerce and forcing the enemy to remain submerged. For the crews the only break in the routine of wave searching was afforded by drifting mines which were marked and reported to escort vessels for attention, and by training exercises in the use of radar devices, flares and other equipment for detecting and illuminating U-boats and overcoming the advantage which the enemy had gained by the use of the schnörkel.

At the end of October the Flying Yachtsmen (No. 422 Squadron) were taken over by W/C J. R. Sumner, in succession to W/C J. R. Frizzle, and moved a few days later from Northern Ireland to Pembroke Dock in Wales, where it remained until the end of hostilities. While the Yachtsmen were settling in at their new home in November, Pat Grant's crews during boo hours flying over the sea made nine contacts or sightings. Of these two led to attacks by the same captain and crew. On the 15th F/L B. L. Whitney released depth charges and a flame float over a suspicious movement in the water below his Sunderland. Four days later he dropped D.Cs. over a disturbance in the sea and a cloud of smoke apparently issuing from a schnörkel. On both occasions escort vessels were called up to continue the search without result.

December's patrols—72 in number—were rather more productive of results as one Nazi submarine received a thorough shaking, if nothing more serious. Farren, now a Flight Lieutenant, was on patrol on the 28th when F/O C. Strobl, his second dickey, reported a cloud of whitish smoke twenty miles to port. As he turned to investigate the pilot sighted a second cloud billowing up six miles nearer the Sunderland. Farren headed for the second target, but

before he could reach it the vapour ceased. By this time the first target had also stopped "schnbrkeling". The enemy apparently was suspicious of danger. No sign could be found of the schnbrkel but the eagerly searching eyes of the Sunderland crew did detect a periscope dipping in and out of the slight swell. FS C. E. Goebel, in the front turret, reported that the periscope was turning as if searching for the aircraft. Swinging down track Farren let go eight D.Cs from a low height. After the eight cascades of water and spray had subsided, large blobs of heavy oil bubbled to the surface forming a large patch. Escort vessels raced to the scene to ferret out the U-boat which, there seems little doubt, had already sustained some damage. This attack, the second which Farren had carried out, was among the deeds for which this officer received the D.F.C.

Several sightings of schnôrkel vapour were reported in January with four inconclusive attacks by No. 423's Sunderlands. F/O A. R. Pinder, who made one attack on the 11th, celebrated his promotion to Flight Lieutenant by machine-gunning and depthcharging another schnürkel eleven days later. F/L R. M. Johnson and F/O R. M. Bartlett were captains of the other crews who found targets for their depth charges. In February F/L F. J. Grant, also of No. 423 Squadron, duplicated Farren's luck by sighting two schnôrkels on one patrol. The first U-boat received a dose of six D.Cs. While circling the turbulent waters looking for indications of damage to their target the Sunderland crew saw a second smoke cloud five miles to the north, presumably issuing from the schn6rkel of another U-boat. After releasing the remaining depth charges on the second target. Grant summoned a Liberator and escort ships to keep watch for further developments. There was none.

Ten days later, on March 5th, Grant's crew made a third attack on a German U-boat. After plummeting their missiles into the sea they dropped markers and called up an R.A.F. Liberator to join in the hunt. Together the two air-

craft kept watch over the area until escort vessels arrived several hours later. During the long vigil the Sunderland crew photographed patches of oil spreading on the surface. The skill and initiative which Grant displayed on these attacks were cited in the award of the D.F.C.

Several crews of the Yachtsmen Squadron also made contact with U-boats early in March-the first luck which 422 had had in a year. F/O D. Denroche's Sunderland was out on a navigation exercise on the 2nd when schnbrkel smoke was sighted, followed by a periscope. No attack could be made as the bomb gear was unserviceable but Denroche tracked the sub until surface vessels raced up to spread D.C. patterns over the area. A few days later F/L R. W. Berryman dropped some missiles on a suspected target. Bubbles of air and some bluish oil were noted after the D.Cs. exploded. F/L L. E. Giles twice sighted wakes while on patrol over the Irish Sea but could make only one attack without any obvious results.

On March 1st W/C Pat Grant handed over command of No. 423 Squadron to W/C S. R. McMillan who formerly had been C.O. of the Tuskers (Catalinas) in Ceylon.

April was the most active period in the history of the two R.C.A.F. Sunderland squadrons except for the invasion months of June to September 1944. Between them Nos. 422 and 423 logged 129 operational sorties (almost 1520 hours flying)—a figure exceeded only three times in their history. On one sortie S/L J. W. Langmuir, D.F.C., of No. 422, made a special reconnaissance in the Bay of Biscay, in conjunction with a naval force. From the mouth of the Gironde to the Franco-Spanish border the Sunderland flew along the coast at a low altitude, greeted by flak from shore batteries and guard ships of the Nazi holdout garrisons at Pte de la Coubre, La Pallice and Pte des Baleines. The Sunderland gunners returned the fire of the flakships and scored hits. Off La Pallice Langmuir closed in to take photographs of the shore positions amid a barrage of heavy and

continuous ack-ack bursts. No damage was sustained by the flying-boat.

The last attacks of the war for the R.C.A.F. squadrons were made on April 7th by F/O W. W. Moody of No. 423 Squadron who depth-charged a suspicious looking oil slick, and on the 24th by F/L A. R. Pinder also of No. 423 who released .six D.Cs over a U-boat. Five escort vessels joined in the search but no evidence of damage could be found.

Through May, the last month of Coastal's Battle of the Atlantic, the Sunderlands continued their convoy escorts and antisubmarine patrols to watch for U-boats flying the black flag of surrender. On the 11th, a Yachtsmen crew captained by F/L R. B. Duclos made contact with one submarine; F/L J. G. Goldthorpe also of No. 422 found another the following day, and on the 13th F/L J. F. Magor sighted two–U.516 and U.1010–and F/L H. D. Hughes (both of No. 423 Squadron) a third.

After making their final operational sorties on May 30th and 31st, the two Sunderland squadrons were transferred for a time to Transport Command before disbanding at the beginning of September 1945.

# (2) The Demons

In addition to the three flying-boat squadrons based in Iceland, Northern Ireland and Wales, there was an R.C.A.F. landplane squadron taking part in Coastal Command's campaign against the U-boat. The Demon Squadron (No. 407) under W/C R. A. Ashman was stationed in the far north of Scotland at the beginning of September 1944, making long night patrols with its Wellingtons equipped with Leigh Lights. These extremely powerful searchlights had been introduced early in 1943 as a new weapon in the Battle of the Atlantic. With radar equipment patrolling aircraft could locate submarines as they surfaced at night to recharge batteries and replenish air supplies. Once a contact had been obtained the aircraft could "home" on it, but it

was extremely difficult to detect the target visually against the dark surface of the sea. With the Leigh Light, however, the searching aircraft could illuminate its objective and hold it in a powerful beam of light while making the attack. The Demon Wellingtons began carrying Leigh Lights in April 1943, and had a record of almost twenty attacks in the following fourteen months.

Since June 1944, however, there had been less successthe Battle of the Bay had been won. The Demons had moved to Chivenor, on the Devon coast, late in April 1944, to take part in Coastal Command's intensive campaign against U-boats preceding and following D-Day. How successful that campaign was history has recorded. Driven out of the Bay, the Nazi submarine flotillas took refuge in the fiords of Norway, and the Demons, following this shift in the U-boat campaign, left southern England late in August for a new base at Wick in the far north of Scotland. Night after night the crews went out far over the sea to patrol the northern transit area through which the enemy must pass on his way to or from base. Their beat took them sometimes almost Soo miles away to sweep again and again along the Norwegian coast or over a black expanse of ocean. For several weeks their patrols were uneventful and September passed without one worthwhile contact or sighting. One Wimpy, piloted by F/O G. A. Biddle, did not return from a patrol to Norway. Serious engine trouble forced the aircraft down in Norway, but in little over a fortnight the crew had made their way back to England.

October closed with a good attack on the night of the 29th by F/O J. E. Neelin's crew. They found a sub west of Bremanger, picking up the conning tower in the beam of the searchlight. After the Wimpy had released a number of depth charges and flame floats on its target a Liberator joined in, illuminating the fully surfaced U-boat in the rays of its Leigh Light while more high explosives crashed into the sea. The sub's three groups of flak guns ceased fire af-

ter the Lib's second attack, and a large orange glow brightened the inky darkness of the night. Several hours later oil slicks covered the area. After studying the evidence the assessment board decided that the combined attack of the Wimpy and Lib had probably seriously damaged the Uboat forcing it to return at once to base.

Early in November W/C K. C. Wilson took over command of the Demons from Ashman who had been C.O. for a year. A few days later the squadron returned to Chivenor in south-west England, a base from which it had operated on previous occasions. The flight of the U-boats from their Biscay havens to Norwegian waters was now apparently ended, but there was a marked increase in enemy activity in British coastal waters, where U-boats lying close inshore presented very elusive targets. For several weeks routine patrols, averaging ten hours in duration, continued without incident over the English Channel and the South-West Approaches. F/O H. I. Hyslop's crew were somewhat shaken one night when lightning struck their Wimpy, burning away the trailing aerial, and St. Elmo's fire flickered through the aircraft. Then, in the last days of 194.4., there were four sightings in a period of ten days. F/O O. Olson and his crew, patrolling over the Channel in the early hours of December 10th, tracked several radar contacts which disappeared until finally their patience was rewarded by the visual sighting of a schnbrkel. The Wellington was not in position to carry out an attack in time but Olson called up surface forces to continue the search. Luck was still against the Demons a few days later when F/L W. H. Turnbull's crew while on a daylight training exercise caught sight of a U-boat as it crash-dived off Lundy Island. The Wimpy crossed directly over the spot where the periscope was disappearing in a swirl of foam. It was a perfect target-but the aircraft carried no depth charges!

On Boxing Day a Demon crew homed on a radar contact northwest of Cap de la Hague until the light could be

switched on to illuminate a feather on the surface. It disappeared before F/L H. L. Bouey could manoeuvre into position. The radar operator continued to scan the area until, forty minutes later, a contact was again secured. This time a schnbrkel was picked up in the searchlight beam, but again the sub slipped away. Persistently the crew continued the hunt and gained a third contact. With the aid of the Leigh Light an attack was carried out over the slim feather left by the schnbrkel as it moved through the water. Markers were then dropped to guide the naval escort group which hastened to the scene. This attack is typical of Coastal Command's dogged pursuit of the foe. Time and again hours of monotonous patrolling culminated in a few moments of action which in most cases had no visible results, other than the knowledge that a U-boat had been tracked down and its crew given a reminder of the danger that constantly followed them

Another Demon crew, captained by S/L C. J. W. Taylor, D.F.C., found a U-boat schnörkel in the same area, north-west of Alderney, three nights later and neatly straddled the sub with depth charges. Their explosions rocked the Wimpy. The schnörkel disappeared and radar contact was lost. For 47 minutes Taylor and his companions searched the area in mid-Channel watching the moonlit waters for evidence of damage to the U-boat. None could be found at the time but it was subsequently confirmed that the submarine had been sunk. Cam Taylor later added a bar to his D.F.C. for "his determined and well-executed attack" and F/L K. S. Goodman, the navigator, and F/L C. D. Myers, one of the wireless operators, were awarded the D.F.C. Myer's skill had been largely responsible for making the attack possible. Goodman had already completed one tour on anti-shipping operations and had in addition two U-boat attacks to his credit as well as numerous reconnaissances of Channel ports.

The first two months of 1945 passed without incident.

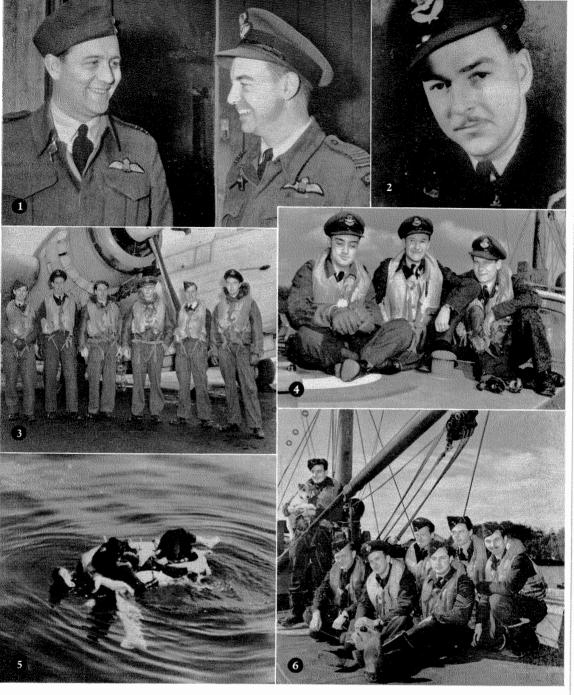
Patrols were carriedout over the English Channel, St. George's Channel and the Irish Sea, whenever impossible weather conditions did not ground the aircraft, and the crews went through an extensive training programme. Experience had repeatedly demonstrated that perfect crew drill was one of the keys to success in sub-hunting. Hours might pass without a blip on the radar, but the crew must be on the qui vive, alert and ready. When a contact was made and followed through, every second counted; each member of the crew had to know exactly what to do and when. Perfect co-operation and split-second co-ordination meant the difference between an abortive or unsuccessful attack and a job well carried out. Only by constant training to keep crews at the peak of efficiency could such teamwork be assured

This training paid off in March when the Demons broke the Group record for operational flying, completing iii sorties for a total of 1036 hours. Over 300 hours more were devoted to training. One attack was made by F/L R. D. Haryett and his crew on a suspicious disturbance in the sea west of St. Brides Bay. Some wreckage was subsequently noticed bobbing on the waves, but poor visibility made it impossible to identify the flotsam. Another crew patrolling near the Scilly Isles a few days later sighted a large oil patch where a U-boat had been killed. In the middle of the patch bobbed twelve dinghies filled with survivors while the victorious American Liberator circled overhead.

In April the squadron broke its own record for operational flying by 26 hours. Regular patrols over the Scilly Isles and South-West Approaches were uneventful, but crews on detachment at Langham, near the Norfolk coast, reported no less than seven attacks. In the previous month midget submarines had become active off the Dutch coast, seeking to attack our East Coast and Channel convoys, and the Demons provided a number of aircraft and crews to join in the campaign against these small, elusive vessels. In the



(1) "Rescue by helicopter"—the rescue of P/O B. Lahey's crew. (Oil painting by F/L A. E. Cloutier.)
 (2) "R.C.A.F. camp in Iceland." (Water colour by F/L C. F. Schaefer.)
 (3) "Over the convoy." (Water colour by F/L E. Aldwinckle.)
 (4) End of the Battle of the Atlantic—a U-boat on its way to surrender.
 (5) Leigh Light installation on a Coastal Liberator.
 (6) A German midget submarine.



(1) W/Cs P. J. Grant and J. R. Frizzle, commanding officers of two R.C.A.F. Sunderland Squadrons. (2) F/O R. B. Gray, G.C., of Winnipeg and Sault Ste. Marie. (3) A Demon Squadron crew: F/O A. V. Handy, F/O L. J. Harwood, F/L R. D. R. Sargent, W/C K. C. Wilson, WO G. W. Forrest and F/O F. K. Nevills. (4) and (6) A Sunderland crew with their mascots: F/O R. A. Simpson, F/L J. N. Farren, and F/O S. B. Hawthorne; Sgt. J. W. MacDonald, F/O C. Strobl, F/O R. Cape, FS G. F. Tait, FS C. E. Goebel, WO S. Semenchuk, and Sgt. N. Belcher. (5) The rescue of survivors of F/O Gray's crew; WO G. H. Bulley, D.F.C., clings to the dinghy in which two comrades huddle.

result the midgets accomplished little, while their own losses were very high. R.C.A.F. crews encountered three different types. The Biber was a one-man U-boat, approximately 30 feet in length and carrying two torpedoes. The Niger, sometimes called the human torpedo, was also operated by one man. It was constructed from two torpedoes, arranged one below the other; the lower torpedo was "live", while the upper carried an empty practice head in which the operator sat under a perspex hood. The Seehund class was larger, 39 feet long, and had a two-man crew.

The Demons' first engagement with the baby subs was on the night of April 18th when F/L O. Olson of the Langham detachment illuminated a Biber class U-boat which crash-dived. The Wimpy released its depth charges along the swirl. Later in the patrol Olson's crew machinegunned a Niger class sub. Two nights later the same crew tracked down three Biber U-boats. Two were illuminated together and on the first run both front and rear gunners opened fire, scoring strikes on the hulls. Tracking over the target a second time Olson dropped a stick of six D.Cs. Later another contact was made and a third Biber was illuminated on the surface. The sub was straddled by four depth charge plumes and disappeared from sight and radar contact. Olson's crew attacked yet another midget in the early morning of the 24th and saw tracer bullets hit the conning tower. The perseverance and skill displayed by Oke Olson in tracking down such extremely small targets were commended when the D.F.C. was later awarded to him

A week later yet another Biber boat was the target for F/O W. G. H. Grant's crew, but once. more no specific results could be determined- other than the absence of any further radar blips. Earlier on the patrol Grant had. sighted a Seehund which submerged before the Wellington could get in position. On, the following night too, a Seehund dived hastily before F/O H. H. Hooker could manoeuvre

into position for attack. Midgets were again encountered and attacked on the night of May 2nd by F/L P. T. Pengelley's crew. The first baby sub was straddled by six depth charges while machine-gun bursts spattered around the conning tower. Two hours after this Seehund had disappeared in the cascading waters of the D.C. explosions a second was located, illuminated and attacked. Air bubbles rose to the surface and spread over a small area. On May 9th the Langham detachment returned to base to receive congratulations from Group for its excellent work during the four weeks in Norfolk.

F/O F. C. Lansdall was awarded the D.F.C. about this time in recognition of his outstanding work as navigator; thanks to his example and instruction the Demons led the Group in navigation proficiency.

During the period from September 1944 to May 1945, the Demons had been fortunate in losing on operations only one aircraft, the crew of which, after forced-landing in Norway, had made their way home to Britain. Training accidents and test flights, however, took the lives of thirteen officers and men. F/L J. W. Hobbs, F/Os R. Kukurski and S. A. Hepburn, and WO G. L. Mulhall were killed in February when their Wellington crashed in the sea on an air test. A month, later F/L E. V. Duckworth lost his life together with P/Os C. J. Butler and J. K. Andrews in another flying accident. After the war had ended F/L W. M. Bowlen and his crew, F/L H. I. Malmas, F/O G. D. Bowes and P/Os J. E. Garrigan, L. J. M. Eisler and R. K. McGrath, went down in the sea while returning from a tactical exercise.

The Demons disbanded early in June 1945, after four years continuous service with Coastal Command. Organized in May 1941, the squadron had operated from, stations ranging from southwestern England to the far north of Scotland. It first won fame as a "strike" squadron attacking enemy vessels off the Netherlands coast and along the Fri-

sian Islands. Time after time the Demons in mast-height attacks broke up convoys and sank or damaged thousands of tons of Nazi shipping. The enemy had to divert many escort vessels and fighter units to protect the convoys and eventually the losses suffered by the Hudsons in their attacks forced a suspension of anti-shipping operations. The Demons were then re-equipped with Leigh Light Wellingtons and began a new career on anti-submarine operations from Norway across the North Sea to the Channel, the Bay of Biscay and the Irish Sea. Their later career was not as spectacular as their "strike" days had been, but over thirty Nazi U-boats and midgets were the target for Demon crews in the two years during which the squadron was employed on this important duty.

One incident in the squadron's history will never be forgotten as long as Demons gather to talk over the old days. It happened in the early period of 407's career when a number of Hudsons were making a night test of a new bombing procedure. Several "brass hats" had gathered at the practice site to observe results and all was going well until some German raiders, probably heading for Hull, noticed the lights on the ground and, joining in the circuit, proceeded to carry out a real attack. An anonymous bard has sung the tale in the following ballad:

Dark was the night-the stars scarce shone. With engines roaring one by one, The aircraft scrambled, their plans well laid For an orthodox practice bombing raid.

At Donna Nook the A.O.C.
Sat in the target hut, and he
Had others with him, to help him write
A report on the timing and bombing that night.

Above him, huge forms with winking eyes Rushed by, half seen in the darkened skies; Stars hung suspended above the ground, While searchlights circled slowly round—

A wild, fantastic, nightmare scene As if the mother of birds had been With all her prehistoric brood Released from Hell in a party mood.

The A.O.C. thought it too good to be true When all of a sudden, from where no one knew, A shower of incendiaries fell and shook The peace-loving people of Donna Nook.

Some Jerries were flying abroad that night And the flood-lit target had caught their sight; They couldn't make out what was going on And had joined the unsuspecting throng.

The lights were doused and helter-skelter Everyone dived for the nearest shelter; But no one minded and all went well, Until another incendiary fell

On the kitchen roof. Then, sharp as a knife, A Winco risked his limb and life, To remove it and save their supper from burning, Eternal gratitude justly earning.

The target doused, one Demon mistook
The flare path of Manby for Donna Nook;
With utmost precision and timed to the minute
He opened his bomb door and dropped what was in it

On a Hampden coming quietly home, After a raid, to his aerodrome; And the blinding flash and report like a gun Upset the pilot's e-qui-lib-ri-um.

He wrote off his kite and a car, while his crew Dived under the chance-light, but all they could do, Was hide head and shoulders and hope for the best And trust the Almighty to care for the rest.

The A.O.C's Anson was written off And so was the G/C's Tiger Moth; Which proves,' if you care to figure it out, That there is real justice somewhere about.

"Tis Goering wer sprechen on der behalffe Of Reichmaster Hitler and aile his Luftwaffe. Amazed by your tactics we send you this token For co-operation with Luftwaffe folken."

"It's a Cross made of Iron at our Fuehrer's behest Mit oak leaves and Mapel to pin on your breast." This noble insignia adorns Winco B—The head of the dare-devil Demons of D—.

After hostilities with Germany had ended A/C/M Sir Sholto Douglas, K.C.B., M.C., D.F.C., the A.O.C. in C., Coastal Command, was appointed to command the British Air Forces of Occupation. Before taking up his new post Sir Sholto sent this farewell message to the Canadian units and men who had served under him in Coastal Command:

Canadian squadrons and Canadians serving in R.A.F. squadrons may well be proud of the magnificent part they have played in bringing about the final victory over the Hun, and I wish to place on record my

gratitude and thanks to all ranks, both air and ground crews.

In anti-U-boat, anti-shipping, photographic reconnaissance, Met. flights and Air/Sea Rescue operations—from bases as widely scattered as Iceland, Gibraltar and the Azores—Canadians have contributed materially to the downfall of the enemy.

In the long grey battle of the Atlantic R.C.A.F. squadrons had flown and fought on both sides of the Ocean and over the 3,000 miles of restless sea that lay between the ports of Canada and those of Britain. Nineteen times aircraft from these squadrons had been responsible for the destruction of an enemy undersea raider, and on four other occasions R.C.A.F. aircrews were credited with a share in sinking a U-boat.. In addition to these successes in the North Atlantic a Canadian Bolingbroke aircraft working from a Pacific Coast base contributed to the killing of a Japanese submarine in July 1942.

No. 162 Squadron led with six confirmed kills on its record, all won in the short space of eleven weeks in the spring of 1944. No. 423 was a close second with five Uboats destroyed, entirely or in part, by its Sunderlands. The Leigh-Light Wellingtons of No. 407 single-handed had accounted for four. Another kill was credited to No. 422 Squadron, while the Mosquitos of No. 404 had participated in the sinking of a U-boat in the closing days of the war.

Squadrons of Eastern Air Command had scored six kills, including two on one day in October 194.2. No. 10 Squadron accounted for three of the six German submarines, with the others divided between Nos. 113, 145 and 5 Squadrons.

In addition to these successful attacks there were many other occasions on which Canadian aircraft had bombed or depth-charged, enemy U-boats without securing positive evidence of their destruction, although. in many cases there was little doubt that the enemy had suffered considerable damage. But Coastal Command and Navy did not assess an attack as a kill unless the evidence left no shadow of doubt

that the submarine had gone to the bottom permanently.

The two highest British decorations for. gallantry are the bronze Victoria Cross and. the silver George Cross. During the war six awards of these Crosses were made to members of the R.C.A.F., and two of the six were won by personnel serving in Coastal Command on anti-submarine operations. The R.C.A.F.'s first V.C. was awarded posthumously to F/L D. E. Hornell of No. 162 (R.C.A.F.) Squadron as the sequel to an attack on a German U-boat in the North Atlantic. Another officer won the G.C. for. bravery and self sacrifice of the highest order in another action. deep in the Bay of Biscay.

F/O Roderick Borden Gray wass the navigator in ,a Leigh-Light Wellington of No. 172 Squadron, R.A.F., that gained a radar contact on. a U-boat shortly after midnight on August 27th, 1944. The pilot homed on the contact until he was able to illuminate the sub on the surface. Jerry at oncee opened fire on the aircraft and hit the port engine which caught fire. Nevertheless the pilot continued his runin and, despite the fact that his starboard engine too was hit, pressed home the attack and dropped his depth charges. The Wimpy carried on for half-a-mile before plunging into the sea. Several of the crew, including a Canadian, F/O T. G. Robb, the Leigh Light operator, were lost, but Gray, the pilot and two others managed to extricate themselves from the aircraft before it went under. Despite a severe wound in the leg (his companions believed the lower part had been shot off), Gray succeeded in inflating his dinghy and assisted his wounded captain to scramble in. Soon after cries were heard from another member of the crew who had a broken arm. Gray helped him into the dinghy. Knowing it would not support more than two occupants, Gray, although in intense pain, refused to get in the dinghy and remained hanging on its side for some hours, assisted by two of his comrades. The pain from his wound increased and he was becoming exhausted, but he steadfastly refused to endanger the others by entering the dinghy. Eventually Gray lost consciousness and died. When it became light his companions, realising that he was dead, regretfully had to let his body sink. Later in the day a Sunderland rescued the three survivors. By his magnificent courage and unselfish heroism Roderick Gray had made it possible for the lives of his comrades to be saved. Throughout the fifteen-hour ordeal WO G. H. Bulley, another R.C.A.F. member of the crew, had remained in the water, clinging to the dinghy.

# Anti-Shipping Strikes

While four R.C.A.F. squadrons were flying hundreds of hours every month over the long reaches of Britain's sea approaches on guard duty for trans-Atlantic convoys, another R.C.A.F. unit was busy on armed reconnaissances and strikes against German coastal shipping. At the beginning of September 1944, the Buffalo Squadron (No. 404) had just terminated a two-month sojourn in Lincolnshire and moved north to Banff, Scotland, to the scene of its former patrols across the North Sea to Norway. On these "rover" missions the Buffalo Beaufighters normally flew as a wing with the torpedo Beaufighters of No. 144 and the Mosquitos of No. 235. Sometimes No. 248, No. 455 (R.A.A.F.) or No. 489 (R.N.Z.A.F.) contributed aircraft to the formation of strike machines and anti-flak escorts.

After several uneventful recces early in September the "Thundering Herd" got into action again on the 14th. Twelve Beaufighters formed part of a group of 43 aircraft, led by S/L R. A. Schoales, D.F.C., which attacked an enemy convoy of three merchant vessels and three escort ships off Kristiansand on the south Norwegian coast. While the anti-flak aircraft ran interference and took out the escort ships, the Torbeaus of No. 144 closed on the merchant vessels. One escort vessel blew up after repeated hits by rocket projectiles from three Buffalo aircraft flown by F/Os J. D. Taylor, G. A. Long and R. C. Ridge; all three m/vs, of

7,000 total tonnage, were left burning and smoking.

F/Os Arthur Menaul and John Tomes won immediate D.F.Cs for their part in the successful attack. As their Beaufighter went in on the enemy flakships it was hit on the starboard propeller. Fragments of the exploding shell shattered the pilot's perspex, severed the intercommunication cable and wounded Menaul in the right arm, shoulder, chest and face. In the heat of the action the pilot did not realize he had been injured and drove home his attack on the enemy vessels. Tomes immediately came forward to help the pilot regain control of the Beau. Then, after getting a fix on their position and the correct course for home, the navigator administered efficient first aid to Menaul, cutting the sleeve off his jacket and bandaging his shoulder. By their combined efforts they brought the Beau back to base and, despite the fact that it was extremely difficult to see through the shattered windscreen, landed safely. Exhausted by his injuries and strain Menaul then collapsed.

The leader of the Buffalo formation, Bobby Schoales, also picked up some flak and had to bring his Beaufighter home on one engine. This was the third time Schoales had returned from the Norwegian coast on a single engine. Another crew, F/O M. Baribeau and F/L C. H. Taylor, was less fortunate. With three other Buffalo crews "Moose" Baribeau and "Chuck" Taylor had attacked the largest of the three m/vs which was left in flames. Hit by the intense ack-ack barrage their Beau was seen to ditch and one member of the crew scrambled out to the dinghy. It was later learned. that Taylor was lost when the Beaufighter came down in the sea, but "Moose" was washed inshore in his dinghy and, after tossing against the rocks all night, was rescued in the morning and taken to a prisoner of war camp.

Schoales led another rover formation of Nos. 404, 144 and 235 Squadrons on September 19th in a successful attack on four enemy vessels near Askvoll, about 65 miles

north of Bergen. One armed trawler blew up, a 1500 ton merchant ship caught fire and ran aground, and a third 5000 ton vessel received direct hits, above and below the water line, from rockets and cannon shells. Two days later a formation of Buffaloes, led by S/L W. R. Christison, D.F.C., in co-operation with other aircraft, gave two small vessels so thorough a battering with RP and cannon that they probably sank. Christison had won his decoration during the Buffaloes' attack on enemy shipping at Le Verdon on August 24th when, with only one engine working, he succeeded in flying his Beaufighter to an advanced base in France.

For the next fortnight patrols in and along the Norwegian shipping leads were fruitless, but this lack of success was compensated by an armed. reconnaissance on October 9th when WIC E. W. Pierce led his crews with the other squadrons in the Banff wing. Northwest of Egersund the Beaus and Mossies intercepted and attacked a convoy of eleven vessels. Heavy, smoke made it difficult to determine the outcome of the torpedo and RP attack but it was subsequently ascertained that two of the five m/vs and one armed trawler were severely damaged and possibly sunk, another merchant ship was left on fire and a gunboat seriously damaged. Two more Nazi vessels were accounted for a few days later (October 15th) when the wing, on a reconnaissance, into the Skagerrak, smashed rockets and shells into a tanker and its, escort vessel near Kristiansand. The twelve Buffalo crews, led by Chris Christison, scored 48 direct hits with RP. The trawler was left burningg from stem to stern and sinking. The tanker blew up, flying debris damaging the tailplane of WO W. J. Jackson's Beaufighter. Several other aircraft were hit by flak but all the Buffaloes got home safely. The squadron ended its stay at Banff, with another successful recce on the 21st. The Beaufighters, once again led by Christison, entered Haugesund harbour to fire their rockets and cannons at two merchant vessels of 4,000 and 3,000 tons. Both were burning merrily as the aircraft withdrew amid a hail of flak.

From Banff the Buffaloes moved westward along the Scottish coast to Dallachy, just across the border in Morayshire. Squadron personnel felt like seasoned tourists since this was their fourth move since May that year. The firstweeks at Dallachy were quieter than the previous ones at Banff. The inevitable bad weather of winter made many patrols abortive or hindered observation in the narrow fiords of the Norwegian coast. On November 8th, however, the Buffaloes, flying in company with the Beaufighters of No. 144 and the Australian kites of No. 455, found several merchant and coastal vessels in Midtgulen Fjord, east of Bremanger. Despite the fact that the fjord was bounded by high hills on each side the crews went in to the attack. The narrowness of the fjord simplified matters for the enemy flak gunners who put up an intense barrage. Several Beaus were struck but none was lost. The two larger vessels, the German freighters "Helga Ferdinand" and "Aquila" of 2566 and 3530 tons, were sent to the bottom, all ablaze, while one of the smaller ships, "Framnes" of 307 tons, was so badly damaged it had to be beached. F/O L. C. Boileau (pilot) and F/L W. H. McCamus (navigator), who led the R.C.A.F.. machines in this wellexecuted attack, were awarded the D.F.C.

No further strikes were possible until November 27th when six Canadian Beaufighters and four New Zealand Torbeaus of No. 489, led by F/L S. S. Shulemson, D.S.O., while hunting for a large merchant vessel, found a group of five ships near Alesund. Through the usual curtain of intense and heavy flak the Beaus pressed home a spirited attack, as the result of which "Fidelitas", a 5,740 ton m/v, was hit by a torpedo and sank. A smaller ship of 3,500 tons was damaged by RP strikes and an escort vessel set on fire. F/L J. R. Stoddart, R.A.F. navigator for F/L H. L. Wainman, returned with. flak tears in his parachute and flying

suit. Shulemson finished his tour a few weeks later and pinned the ribbon of the D.F.C. alongside, his D.S.O.

At the end of the month three Buffalo crews enlivened their sortie by silencing a flak battery which had been annoying a British formation as it flew overhead.

Hitherto enemy fighter opposition had not often been encountered by the speedy Beaufighters and Mosquitos during their patrols over the Norwegian coast but the possibility was always present as a shipping strike on December 7th clearly demonstrated. Near Gossen, about mid-way between Kristiansund and Alesund, the Beaufighters, Mosquitos and their Mustang escort, of the Banff and Dallachy wings, were intercepted by about 25 Me.109s and FW. 190s. In the sharp air battle which ensued, four British aircraft were lost but six enemy fighters were shot down by the Mustangs and probably two more. The only casualty suffered by the Buffaloes was to WO M. H. Michael who received minor wounds when a cannon shell from an Me.109 exploded in his navigator's cupola.

Although no enemy shipping was attacked following this encounter with Nazi fighters the Buffaloes added another m/v to their tally' two days later. A patrol led by F/L Wainman, as part of a larger formation of Beaus and Mustangs, found the ship travelling unescorted and dived on it with rockets and shells weaving a pattern which converged on the target. One Beaufighter carried its attack so close that it struck the vessel, tore off a wing and crashed into the water. F/O A. K. Cooper and WO C. F. Smith were the missing crew. The enemy vessel, struck by thirty RPs, was rent by two explosions that hurled debris high in the air; when last seen it was limping shoreward enveloped in flames and smoke. Half an hour later a recce plane reported that the vessel had been beached and was still burning fiercely.

The New Year opened with a week of concentrated action. It began with an attack on a self-propelled barge on

the 6th and another on two merchant vessels, a tug and a barge, on the 8th. All these varied vessels were struck and damaged by rockets and cannon shells. In the second attack two Buffalo crews concentrated their fire on the tug' and barge, while two more attended to one of the m/vs. On the following day a Buffalo formation, led by Wainman, as part of a larger expedition, located a small boo ton ship which vainly sought shelter under high cliffs. The Beaufighters swept in, hammering RPs and cannon shells into the target until only the bow was visible above the water. Some of the aircraft made three runs, coming in so close that they were struck by rock fragments and flying debris.

The series of successful attacks was continued on January 10th when a large force of Beaufighters from the Dallachy Wing, led by Christison, with a Mustang escort from a Polish squadron, found two vessels near snow-covered Lepsoy and Harmasoy Islands, north of Alesund. A few rockets sufficed to set off two explosions in a trawler which began to burn furiously. The second ship, a minesweeper, was just about to dock at Harmasoy when RPs crashed into the hull and cannon shells raked the decks. The whole vessel was soon a mass of flames.

Another strike force, including a flight of Buffaloes led by Howie Wainman, was intercepted on the following day by a covey of nine enemy fighters near Lista airfield. Keeping good formation the Beaus turned out to sea again while the Mossie escort engaged the Jerries. Three Me.109s were destroyed, another damaged, and an FW.190 probably destroyed, but a Beaufighter, a Mosquito and a Warwick did not return. The latter aircraft was last seen attempting to drop a lifeboat near the crashed Mosquito. On the following day a Buffalo patrol noticed flares rising from the sea and, on investigation, located a dinghy 100 miles from the Norwegian coast. Two Beaufighters remained over the dinghy until an Air-Sea Rescue Warwick took over.

The attack on January 11th was the 13th strike in which F/Ls Howie Wainman and "Uncle John" Stoddart had participated during 49 sorties. Before joining the Buffaloes they had served with a Ferry Flight and once, in January 1944, spent 46 hours adrift in their dinghy after ditching in the sea. Wainman and Stoddart were decorated with the D.F.C., the citation mentioning this experience and their skilful leadership on December 9th.

Then for almost four weeks there was little to report. During the last part of January weather either cancelled operations or rendered them abortive. In February met. reports were more favourable but roving patrols scouring the narrow fjords found no targets to attack until the 9th. Then they sighted a target which compensated for weeks of vain searching. The tide of victory was now in full flood, pouring deeper and deeper into the Nazi Reich. From the east Russian armies were sweeping towards Berlin. In the west Allied armies were smashing through German defences west of the Rhine. Forced to fight a desperate two-front war-which Corporal Shickelgruber had promised would never again be permitted in German strategy-the Nazi High Command was pulling its naval and military forces out of Norway. A flotilla of eleven ships—a Narvik class destroyer. accompanied by escort vessels, minesweepers, tugs and trawlers-was sheltering in Ford Fjord on February 9th when a formation of 46 British aircraft found it and struck. The target, so vital to Germany's diminishing naval resources, was strongly defended. In addition to the ships' own ack-ack guns and numerous shore batteries which were able to maintain an intense cross fire, there was a fighter cover of twelve FW.190s. High cliffs rising steeply from the water's edge made the objective still more difficult to attack. The odds were heavily against the strike force; nevertheless the attack was driven home with the greatest determination. S/L W. R. Christison, who added a bar to his D.F.C. for skilful leadership on this occasion, directed the Buffalo group of eleven which formed part of the larger force. Dodging the attack of enemy fighters, weaving their way through. the heavy and accurate flak barrage, the Beaus roared down the narrow fjord, fired their cannons and rockets, pulled up and came round again.

As F/O J. E. Nelson and WO R. G. Gracie broke away from their attack they saw two FWs on the tail of another Beau. Nelson came to the rescue and picked off one enemy fighter which crashed. The second FW then turned on the Buffalo crew but Gracie put a, machine-gun burst into it and the Jerry pilot gave up the combat. Nelson's bravery and resolution throughout the action were cited in the award of the D.F.C. F/O H. P. Flynn and P/O M. H. Michaell engaged two more 190s in an inconclusive combat as they pursued another Beaufighter. This may have been the machine flown by, F/L J. B. A. Stewart and F/O A. A. Johnston who were chased for some distance by a pair of FWs. Neither member of the crew was injuredd but the Beaufighter was well shot up. Christison and F/L, F. J. Toon, D.F.C. (R.A.F.) were pursued by three 190s but shook them off.

The four crews mentioned above and one more returned safely; the others were lost–F/O J. R. Savard and P/O J. Middleton (R.A.F.), P/Os W. J. Jackson and W. E. Blunderfield, F/O H. Smook and WO A. M. Duckworth, F/Os C. Smerneos and N. D. Cochrane, F/Os H. C. Lynch and O. W. Knight, and F/O P. R. Myrick and FS C. G. Berges. Three Beaufighters and a Mustang from other squadrons did not return. Several Beaufighters were seen to crash into the mountains rimming the fiord; another ditched in the sea, and yet another which had caught fire made a wheels-up landing on the ice. This "fatal Friday" was the most severe loss suffered by the squadron in its long and successful career. Air-Sea Rescue searches on the following day were fruitless. The Beaufighter which landed on the ice-covered fiord was piloted by Rog. Savard who subsequently re-

ceived the D.F.C. When the enemy fighters sought to engage the strike force Savard and Middleton turned to meet the attack and cover their leader. In the combat their Beau was so badly damaged that Savard had no alternative but to land. He was taken prisoner and subsequently liberated in May.

With so many of the attacking force missing it was difficult to assess accurately the results. It was, however, definitely established that, in addition to the one e/a destroyed and one damaged, the Buffaloes scored hits on the destroyer, set fire to a patrol vessel and made two other ships belch clouds of smoke. Mustangs of the fighter escort claimed two FWs destroyed and two damaged. The citation accompanying the award of a bar to Christison's D.F.C. commended the "courage and resolution of a high standard" which this officer had displayed throughout his many attacks. "His undoubted skill contributed materially to the success achieved."

Enemy fighters were encountered again a week later when a large formation of Beaufighters, Mosquitos and Mustangs sought a target on the Norwegian coast. Low clouds prevented an attack on the ships and the Mossies and Mustangs fought off the attempts of forty e/a to break up the British formation as it turned homeward.

In the last days of February Buffalo crews made a number of night patrols along the south Norwegian coast. P/O C. N. Moe and his R.A.F. navigator, WO W. A. Wade, located a group of four vessels near Kristiansand on the night of the 26th and, attacking up-moon, scored several underwater RP hits on a minesweeper. F/O J. M. Coyne also found a target in the same area near Mandai. Despite flak and flares he carried out a successful strike, claiming four definite hits with his rockets on the deck of a 4000 ton merchant ship. Over the R/T Jack Coyne called up F/O R. A. Wallace, D.F.C., but by this time the barrage of flak had become so intense the crew of the third Beaufighter were

unable to observe the results of their attack. On the homeward flight Bob Wallace gave assistance to an R.A.A.F. aircraft which was in difficulties.

A month after the air battle over Ford Fiord the Buffaloes were in another successful daylight strike on March 8th. The formation of 49 aircraft included fourteen Mustangs as fighter escort and nine Buffalo Beaufighters, led by S/L Bobby Schoales. As the aircraft swept along the rocky island-studded coast of Norway they spotted six ships sheltering under the high cliff walls of a narrow fiord south of Midtgulen. The rock rising 2000 feet sheer above the vessels afforded them a considerable measure of natural protection and made them a difficult target to reach with rocket and cannon shell. Once again, however, skill and determination defeated the Nazis' careful dispersion of their ships. Five Buffalo crews concentrated their fire on a 2000 ton car ferry which received four dry (above water) and two wet (under water) RP hits with eight more possibles in addition to a hail of cannon shells across its deck. Schoales and another pilot shot up an auxiliary vessel, while F/O R. C. Ridge and P/O P. McCartney in another Beau picked out a 4500 ton m/v, the largest ship in the group. Their aircraft was hit by flak as Ridge went in to the attack and the crew did not return. Cliff Ridge and McCartney, his R.A.F. navigator, had been with No. 404 for exactly a year and were nearing the end of their tour. They had twelve strikes to their credit on 46 sorties. Ridge was later awarded the D.F.C. in tribute to the great courage and fearlessness that he had displayed on so many occasions. While the main group was attacking the ships in the fiord, F/O D. A. Catrano and F/L A. E. Foord, who had been flying as "outriders" for the formation, took the opportunity to shoot up an electric pylon on Bremanger Island

A different type of target was assigned to the squadron on March 12th when the Buffaloes despatched six aircraft to knock out three lighthouses on Vaagsoy Island-the scene of a Commando raid in December 1941, when the Buffaloes had provided part of the fighter cover. The first team, W/C Teddy Pierce and F/L J. B. A. Stewart with their observers, left their target at Skongsnaes, on the north-eastern tip of the island, wreathed in smoke. One of Stewart's rockets hit a ridge of rock in front of the lighthouse, throwing up a shower of debris which struck and caused considerable damage to the Beaufighter. At the second objective, the Nord Vaagso light, attacked by F/L J. L. Rancourt, who had just been awarded the D.F.C., and F/O J. B. Bedell, it was difficult to observe results since the pilots had to bank sharply after opening fire in order to clear the cliff on which the lighthouse was located. Dust was seen to rise over the target area, and the red sector light was extinguished. F/L L. A. Bolli and F/O D. A. Catrano had been detailed to attend to the Krakenes light on the north-western point of Vaagsoy and carried out their assignment despite a defensive barrage of light and heavy flak. Catrano reported four RP hits on the building in addition to many 20 mm. shell bursts. A pall of dust and smoke, rising to 200 feet over the scene, testified to the effectiveness of the attack.

Another shipping attack on March 24th took a further toll of the enemy but the Buffaloes lost two crews on the "do". The striking force of 44 aircraft, including Beaufighters, Mustangs and Warwicks, found their quarry in Egersund harbour in southern Norway. Diving through the curtain of intense flak which the vessels and shore defences hosed up at them, the six Buffaloes, led by S/L Christison, opened the attack. The largest of three merchant vessels was seen to explode; the others and three e/vs were damaged. Four aircraft, two of which came from No. 404, did not return. Christison's Beaufighter picked up some flak in the starboard engine and his navigator, F/L F. J. Toon, D.F.C. of the R.A.F., was wounded. Christison called over the R/T that he would, have to ditch. His comrades saw the

Beau come down in the sea ten miles off the Norwegian coast, The second Buffalo aircraft, flown by F/O L. R. Aljoe and FS, C. E. Orser, was also forced down near the coast. There was hope that some of the missing men might have escaped in their dinghies, but no further news was received and it can only be presumed that they met their death. Christison had first joined the squadron almost four years previously and was near the end of his second tour. With Freddy Toon, he had made fifteen strikes since rejoining the Buffaloes in April 1944. Christison's skilful leadership on numerous anti-shipping reconnaissances had been an outstanding factor in the squadron's successes. F/O Jack Coyne on "O" had a narrow escape when his Beau was struck by flak, damaging the leading edge of the mainplane and throwing the aircraft over on one side. Coyne righted the Beaufighter, continued the attack and, on return to base, made a skilful landing. His example of skill, courage and resolution won him the D,F.C. F/O Paddy Flynn also was decorated for his part in the attack. Paddy had smashed his rockets into an e/v which afterwards sank.

It was a month before the Buffaloes were again on operations. During the interval the squadron left Dallachy for Banff, its previous base, and was busily engaged converting to Mosquitos. The speed with which the change-over was completed brought commendation from Group Headquarters. The sands of war were rapidly running out when the Buffaloes returned to the line on April 22nd, but F/O D. A. Catrano and F/L A. E. Foord lost no time drawing first blood for the squadron on the new kites. While making a shipping reconnaissance over anchorages from near Haugesund to the Naze and eastward to Kristiansand, Catrano sighted a BV.138 and an He.115 anchored about 200 feet offshore from a seaplane base. Machine-gun and cannon bursts soon set the Blohm and Voss ablaze and forty miles away Catrano and Foord could still see the 500 foot column of black smoke which marked the flying boat's pyre.

On the 26th F/Os A. C. Gibbard and N. M. Burns reconnoitred Egersund, tossing, Flekke and Fede Fiords, returning with information which led to a successful strike by the Dallachy Wing.

In May the Buffaloes left their Norwegian hunting grounds to pursue the retreating Nazis into the Kattegat and Kiel Bay. S/L H. W. Jones took four Mossies as part of the fighter cover for the Banff Wing when a strong force made a strike against U-boats in the Kattegat on the morning of the 2nd. A U-boat was sunk, another damaged, and a mine-sweeper probably sent to the bottom during the attack by the other squadrons while the Buffaloes stood guard overhead.

Another strike the following day was less successful as very poor weather and restricted visibility in the Kiel Bay area forced the formation to abandon its mission. F/O J. E. Nelson and P/O R. G. Gracie, detached from their comrades in the poor visibility, had a brief brush with a Ju.188.

The last Buffalo operation of the war was carried out on May 4th when W/C Pierce led seven of his Mossies with 55 other aircraft of the Banff strike force to attack enemy shipping in the vicinity of Kiel. The squadrons struck across the North Sea to the Danish coast, crossed the peninsula to the Kattegat and then wheeled southwards. The first target sighted was a small ship resembling an R-boat which four Buffalo crews, together with four from another squadron, riddled with cannon and rockets and left a mass of burning debris. Farther south the strike force came upon a larger target, a convoy of seven vessels, steaming in line asterntwo merchant vessels of 4-6,000 tons, heavily guarded by a destroyer, a gunboat, a minesweeper and two auxiliaries. Their flak defences were of little avail as a determined attack by the aircraft inflicted severe damage on six vessels which began to burn or smoke heavily. Only one of the auxiliaries escaped punishment. The aircraft went in on their targets to such close range that one Mos-



Buffalo Squadron crews: (1) F/L C. C. Corder, C.G.M., and W/C E. W. Pierce. (2) P/O P. McCartney and F/O R. C. Ridge. (3) S/L R. A. Schoales, D.F.C., and F/L R. A. Jackson. (4) F/L J. R. Stoddart and F/L H. L. Wainman. (5) F/L W. H. McCamus and F/O L. C. Boileau. (6) F/O H. P. Flynn and P/O M. H. Michael. (7) F/L J. L. Rancourt and F/O F. G. H. Jones. (8) F/O J. E. Nelson, D.F.C., and P/O R. G. Gracie. (9) F/O J. M. Coyne and P/O R. J. Landry.



Two armourers shoulder rocket-projectiles.
 A Buffalo Beaufighter armed with rockets.
 Front row: Lt. F. F. Guyott (U.S.A.A.F.) and F/O R. C. Ridge; back row: F/O S. T. Faithfull, S/L W. R. Christison, D.F.C., and F/L F. J. Toon, D.F.C.
 Attack on U-boat, May 2nd, 1945.
 Crews of the Buffalo Squadron.
 The Buffalo strike on enemy shipping in Midtgulen Fiord, November 8th, 1944.

quito returned with part of the mast and the ensign of the Nazi destroyer attached to it. After leaving the scene of this attack, the formation encountered a merchant ship towing what appeared to be a submarine hull. Results of the cannon attack were obscured by smoke over the target.

This attack in which seven, possibly eight, enemy ships had been badly damaged was a fitting conclusion to the long and most successful career of the Buffalo Squadron. Since the beginning of September 1944-the period covered by this narrative—404's aircrews had participated in 19 attacks on enemy shipping and another on land targets, during which they had sunk, set on fire or battered 57 vessels and had destroyed two enemy aircraft in addition to beating up three lighthouses.

S/L Bobby Schoales and F/L R. A. Jackson made the squadron's last sortie on May 22nd when they escorted two squadrons of Norwegian Spitfires flying from Dyce to Stavanger and thence to Oslo. When their Mosquito returned to Banff on the evening of Victoria Day the Buffaloes' operational career ended.

On May 25th, 1945, four years after its formation as a Coastal Fighter squadron, No. 404 disbanded. Its record is a proud one in the annals of Coastal Command and the Royal Canadian Air Force. From Kristiansund to the mouth of the Gironde Buffalo Blenheims, Beaufighters and Mosquitos had sought out the enemy in the air and on the sea. Battered hulks rusting in a Norwegian fjord or lying at the bottom of a French harbour testified to the deadly effect of their rocket attacks. One incident, the full story of which became known after the liberation of France, may be cited as typical of the squadron's strikes.

On the morning of August 8th, 1944, four "M" class minesweepers put into the harbour at Fromentine to avoid Allied naval forces patrolling in the Bay of Biscay. They intended to leave again that evening under cover of darkness. Hours passed while the Nazi crews waited for night to

fall—but Coastal Command struck first. About six o'clock the roar of aircraft engines reverberated over the water and out of the sky streaked a group of Beaufighters from Nos. 404 and 236 Squadrons. Cannons barked; rockets wove smoke trails through the air. In fifteen minutes it was all over. The four minesweepers had gone to the bottom—and the Nazis had lost a hundred men.

#### CHAPTER X

## THE ITALIAN CAMPAIGN

September 1994–May 1945

HE City of Windsor Squadron, equipped with Spitfires, was commanded in September, 1944, by S/L O. C. Kallio, D.F.C. Its main task was to bomb bridges, batteries, gun emplacements, German headquarters and other buildings, and to shatter the enemy's communications.

As the Gothic Line in northern Italy was pierced and the Canadian troops were preparing to enter Rimini the squadron, closely following in the footsteps of the Eighth Army, moved early in the month from Loreto Landing Ground to Fano, some fifty miles up the Adriatic coast.

The town of Fano was abandoned and proved a fertile area for those who wished to "scrounge" for those little comforts that go to make life more pleasant in the field. Thus, with the permission of the town major, the apartments of an Italian fascist countess were raided for such household furniture as was needed for the officers' and sergeants' messes and the Windsor Club, "an exalted wet canteen" for airmen situated in a large brick warehouse near the camp site, was similarly equipped and made habitable. The Windsor Club even managed to acquire an Italian orchestra that was able to play "the hottest pieces of the day".

The new aerodrome was about two miles from the town but the camp, composed mainly of tents pitched in an orchard, was very much nearer to what had been civilization. The weather was hot but there was a lot of rain and a considerable amount of mud. On only some half dozen days, however, was the weather unfit for flying.

Typical entries in the squadron diary for these September days run as follows:

1st September 0630-0730 hours. Proceeded to bomb gun positions. Two bombs landed in target area. No gun positions seen but hay-stacks in area could conceal guns. Medium light ack-ack experienced. Weather clear.

2nd September 0640-0740 hours. Ground control called and requested the squadron attack four 88mm. guns which were firing on him. Target pointed out by ground control and one direct hit scored on house around which guns were sighted. One hit on road just east of house which landed beside small M.T. Remainder of bombs within sixty yards of target. Ground control called to say that bombing was good. Four bursts of heavy ack-ack in dive and then guns silent.

5th September 1115-1240 hours. Eight aircraft airborne to bomb road bridge. Attacked at 1140 hours from southeast to northwest, diving from 11,000 feet "to 4,000 feet. One direct hit scored on road at each end of the bridge and one direct hit on the railway bridge just to the north. Moderate light ack-ack exerienced from the target area. Carried out an armed reconnaissance northwest from Rimini to Forli and Faenza but no movement seen. Patrol then swept northeast to Ravennano aircraft seen.

Variations in the programme were an air-sea rescue, search on the 13th, another on the 26th when a dinghy was picked up by a Walrus, and an escort to another Walrus aircraft searching for mines on the 17th.

On September 15th F/L R. E. Evans led a formation of six aircraft to bomb motor transport in the village square at Faetano. The clouds were 9/10ths at 4,000 feet and Evans had to circle below in order to direct the rest of the section to the attack. Though, owing to camouflage and the

weather, the attack was not notably successful this incident was cited when Evans was awarded the D.F.C.

An entry for the 25th stated that six aircraft were directed to attack a target at San Giovanni. Pilots observed that three hits were scored on the town itself and that one bomb hit the eastern edge while a fifth one overshot. Five days later they learned that they had obtained a direct hit on a battalion command post, killing one colonel and filling four ambulances with casualties. It was as a result of two similar operations in September that F/L T. P. McElhanney was awarded the D.F.C.

There was one casualty during the course of the month when WO L. J. Baxter failed to return from a sortie to Monte Colombo on the 12th.

October was a month of heavy rains, particularly in the latter half, and this considerably hampered flying and called for some rearrangement of accommodation because of flooding. There was a regular deluge on the 26th which began at 0400 hours and lasted all day. It was accompanied by a strong wind from the sea which whipped sharply round to the south in the afternoon without slackening. By noon on the 26th the lower ground of the camp site resembled a series of lakes. Many tents had more than a foot of water and it was found impossible to cook in the airmen's mess. The rain was heavier on the 27th, thunder, lightning and hail all contributing to make things worse. A civilian hospital, built on Hollywood lines, had to be taken over as an airmen's mess and both sergeants and officers had to seek other accommodation for their messes. The weather improved sufficiently on the 28th to permit attempts to be made to get three-tonners and, trailers out of the orchard where every vehicle had sunk in the mud up to the hubs. It was an arduous task but it finally ended successfully.

Attacks on bridges over the Savio River and other targets on October 1st were followed on the 4th by a bandit hunt. Various vectors were given for the interception of a

Ju.88 which led WOs R. A. Shannon and R. P. Campbell on a merry chase as far as Jugoslavia but the enemy was not caught. The two warrant officers put up with much good natured banter about "getting in their Jugoslavia time". Thereafter the usual houses, haystacks, guns, gun pits, troop concentrations, railways, roads and bridges were bombed

The 24th provided the squadron with one of those colourful incidents that are the delight of squadron diarists. At 1125 hours six aircraft were detailed to attack two houses. Three very near misses were registered and the squadron then was ordered to undertake a reconnaissance. A staff car was hit and seen to turn over but between Forli and Ravenna the pilots encountered intense heavy flak and the aircraft of P/O H. J. Hayden was hit and glycol began to leak out. The engine sputtered, the cockpit filled with smoke and Hayden headed for friendly territory and made preparations for baling out. In his report he said:

I removed my helmet, brought my speed down to 140, put my flaps down and trimmed my kite to fly at 100 m.p.h. Then I jettisoned my coupé top, opened the door and undid my straps. I decided to dive out the door but my 'chute being too wide, caught. After a few seconds I managed to get back in and free it. I then crouched on the seat, put one foot out to make sure that my 'chute was clear and dove off the wing under the tail. After falling clear I straightened my body and pulled the rip-cord. My 'chute opened and I drifted down. Upon reaching the ground an Italian offered me a drink from a jug of vino and a soldier came up and said the General wanted to see me. The soldier took me in a jeep to the General's Headquarters.

At the Headquarters Hayden found Generals Burns and Hoff meister waiting for him. They informed him that he was just in time for dinner. First another drink was offered him-rum this time-and then they sat down. At dinner the pilot discussed the squadron's operations and the Generals praised the efficient cooperation of the Desert Air Force with the army. Later General Burns' Auster aircraft took

Hayden back to the squadron. An NCO had offered him a jeep for three days. Hayden's comment was, "Can you beat that? And I had to take the Auster".

A social note was struck on October 22nd when a tea dance was arranged. Local belles were invited but, to the amazement of squadron personnel they brought their own boy friends. When it was time to go home they were even more amazed to discover that all their guests were. properly chaperoned by mothers and aunts. Nevertheless, the party was voted a success.

November brought a change in command. On Armistice Day, S/L Kallio was succeeded by S/L David Goldberg who had previously seen service with the City of Oshawa and the Wolf Squadrons and had been shot down by flak over France in March, 1944. After two months of playing hide and seek with enemy patrols he had, with the assistance of the French underground movement, returned to England. In August he had been posted to the City of Windsor Squadron. Early in the new year Kallio, who had commanded both an R.A.F. and an R.C.A.F. squadron, was awarded the D.S.O.

The Savio River had been crossed by the Canadian Corps on October 10th and on November 10th the Eighth had taken Forli. By November 21st the City of Windsor Squadron was far behind the front-lines which then passed through Ravenna. A forward move by the squadron was anticipated in the near future. Meantime despite continued bad weather—flying was impossible on eleven days in the month—the usual bombings and strafing operations were continued, an occasional escort mission being thrown in to add variety.

On the 6th escorts were provided in the morning and afternoon to Baltimore aircraft attacking Fiume. Bombs were said to have been well concentrated on the docks and harbour installations as well as on the centre of the town. A headquarters was attacked the next day, a direct hit being registered, and another HQ on the 12th when two direct hits

were claimed. An observation post in a house on top of a hill similarly received a direct hit on the 16th.

In an attack on a defended house on November 17th P/O Shannon, recently commissioned, was hit by flak and had to bale out. He landed in a stubble field or, the right side of the line near Forli and returned to his unit the same evening.

The squadron provided another escort on the 18th, this time to 130 Liberators attacking Udine aerodrome. They found that the bombers had jumped the gun and had proceeded without waiting for the Spitfires. When the latter reached the target they saw the aerodrome already covered with small fires and black smoke.

Reconnaissances were flown on the 19th for motor transport and trains between Vicenza and Casarsa and for ships, which were identified as corvettes or destroyers, off Cervia. A German headquarters and other defended houses were attacked on the 10th, 21st and 22nd, one of the targets receiving no less than five direct hits. There was an unsuccessful attack on a number of tanks on the 23rd and some guns were bombed the next day. After the 26th flying was not possible.

The long expected move took place on December 5th when the squadron occupied a new site at Bellaria, about forty miles south of Ravenna. Officers, NCOs and half the airmen were placed in billets but the remaining half of the ground crew had to live in winterized tents. Rain and cold weather greeted them on arrival, a fog beshrouding the area on the 7th and a fifty-mile-an-hour gale sweeping up the coast on the 8th. Despite these conditions the airmen apparently preferred their tents to the more palatial quarters afforded them when a dilapidated military hospital was put at their disposal on the 11th. Another gale on the 22nd, however, made some of them reconsider, the occupants of at least one tent transferring their effects to something more calculated to withstand the force of the wind.

On the ground the Allied armies were doing very well.

Ravenna was taken on the 5th by the Eighth Army and the Canadian Corps stormed the Lamone River defences on the ioth. A week later the Eighth entered Faenza.

On half the days in December there was no flying. Operations began on the 2nd with thirteen sorties, three locomotives being destroyed on an armed reconnaissance and an escort being supplied for twelve Baltimores bombing Pola. Houses and strong points were attacked on the 4th and again on the 9th when, in addition, an escort to a sea rescue was flown. F/O J. Waslyk joined the caterpillar club on the 4th when his aircraft was hit by flak and he had to bale out. He got back to the squadron safely the same day.

There was a heavy schedule on December 10th, 29 sorties being undertaken. In the squadron's third operation against occupied houses two pilots, P/O R. A. Shannon and WO R. W. Rideout, were lost when they went down to check the location of a smoke shell while spotting for the rest of the formation with which they were flying.

The next day, the 11th, another 29 sorties were flown and another pilot was posted as missing. Six aircraft were despatched at 1430 hours to bomb some enemy guns. During the attack P/O H. C. Murray reported that his aircraft had been hit by flak and it was last seen breaking starboard into the enemy lines. On returning to base the section received an army report that a Spitfire pilot had been seen baling out and it was believed that this was Murray.

After several relatively uneventful bombing and strafing sorties against headquarters, occupied houses, gun and mortar positions in the intervening ten days the squadron despatched on the 22nd twelve aircraft equipped with long range tanks to patrol between Venice and Casarsa preparatory to an attack by medium bombers. Intense heavy flak from Verona loosened the formation and while the squadron was reforming three Me.109s came in to attack. The aircraft of P/O A. D. Gibson was damaged and he returned to base. This was one of the very rare encounters the squad-

ron had with enemy aircraft in these days.

Despite sabotage in the vicinity and a constant state of alert, Christmas Day passed off with the usual festivities. Operationally it was just another day with three sections of four aircraft attacking enemy gun positions on which three direct hits were scored.

Besides the usual gun positions and headquarters buildings the squadron attacked a radio station on Boxing Day. Two direct hits were obtained and a column of smoke rose up. Two days later further variety was added to the squadron's operational diet when a stationary train with ten or a dozen cars was hit in several places. A similar train was bombed and strafed successfully on New Year's Eve.

The year ended on a sad note. Four pilots were despatched to bomb some guns at 1000 hours on the 31st. While on this operation WO K. S. Hanson was forced to bale out over the sea. Despite an intensive search no further trace was found and it was believed that he had been drowned. As far as casualties are concerned December, 1944, was one of the squadron's worst months.

There were very few sunny days in January and on ten days no flying at all was possible. Operations consisted mainly of close support missions for the Eighth Army, the bombing of bridges, railways, locomotives, troop trains, motor transport and gun positions. Several escorts to bomber aircraft were also flown. These latter began on the morning of the 11th when, equipped with long range tanks, six of our aircraft escorted twelve Baltimores to the Castelfranco marshalling yards. Several fires were started. On the 15th four Spitfires, again with long range tanks, escorted twelve Kittyhawks to Latisana bridge. It was from this operation that WO R. J. Ashley failed to return.

On January 18th four aircraft, while on an armed reconnaissance of the area between the Po and Lake Comacchio, discovered 25 motor vehicles spaced about ten yards apart. These they bombed and strafed, twelve of the vehicles being claimed as damaged.

Two days later three pilots took off to bomb some gun positions. Engine trouble forced P/O S. A. Marshall to abandon the operation but the other two F/L J. Waslyk and F/O R. Edge failed to return.

After escorting Kittyhawks on bridge-bombing sorties on the 21st the squadron did some bombing on its own on the 22nd, when a headquarters was attacked, and on the 23rd when some seventy trucks were pounded at Monselice. More trucks were hit the next day and eleven Me.109s were sighted and engaged but without decisive results. The encounter was written up by one of the pilots in the following account:

Five fortunate pilots of the fighting City of Windsor pursuit and bombardment squadron took a new lease on life today when a formation of eleven Me.109s bore down on our section out of what some canny Luftwaffe boy thought was the sun. Led by W/C R. E. Bary, a New Zealander from the Kiwi country, a strong team of six sallied forth on a,routine job of cutting the rail line between Vicenza and Nervesa in northern Italy near the Alps.

The formation flew north and inland past Venice at 11,000 feet with cloud covering the whole area at 14,000 feet. A thick haze blotted out any detail in the distance to the east or west. Conditions were in Jerry's favour and the formation was on the alert for any attempts against us by the Luftwaffe. All of us had long since lost hope of ever seeing the black cross in our sights and, until today, only one of us, the Wing Commander, had used his guns against a German aircraft.

When a long gaggle of fighters emerged out of the haze from the west and crossed our course about two miles ahead our formation tightened as gun buttons, pressures and reflector sights were checked. Their formation was new to us. The four leading aircraft flew in finger formation with a formation of three about a quarter of a mile behind and stepped up about 1,000 feet, followed again by a finger formation of four aircraft similarly spaced. They were above us diving slightly as they crossed and merged gradually into the haze again. The formation and their actions left us wondering for they had not been identified as hostile. When we saw them break their course and split into two sections, one to the right swinging around behind us and one to the left coming into us from ahead, we needed no telling! F/O Pete Helmer of Ottawa, Ontario, reported the section bearing down on the starboard of F/O Tom Wilson

of Toronto and F/O Frank Doyle of Vancouver. The Wing Commander's crisp "Jettison bombs; this is it" cleared the air for action.

The Winco held us on course until the attack was well committed and, when the Hun was about to fire, called a well-timed break which swung us around and into them. So this was it!

The Jerries were firing on Tommy Wilson and Frank Doyle as we turned but they didn't have a clue according to Frank. They didn't face our guns as we came at them but broke up and circled as we swung around again in pairs. They had also split in pairs and were probing our defences with quick diving thrusts into our circle.

Things took the shape of a grand dog fight as we warded off attacks by turning up into the Messerschmitts. Their attacks were half-hearted and they broke off before firing when they saw us bring our guns onto them.

W/C Bary and his No. 2, F/O Jack Rose of Chapleau, Ontario, chased one section with the Winco getting in a good burst. The Hun half-rolled and headed for the deck with his ears pinned back. "Rosie" had in the meantime found himself a nice target and had a squirt but the German boys didn't like our game. Tommy Wilson and Frank Doyle were busy pointing their noses at anything that came near but the enemy gradually dispersed and broke for cover.

I and my No. 2, Pete Helmer, found two Jerries making a pass at us and pulled up into the pair of them for a shot. The Jerries were windy and broke off for the safety of the clouds before coming in range.

In search of a pugnacious Hun we then turned into a solo Messer-schmitt which came in close. A tight turn' brought my sights on him -and I issued a short sharp one as the frightened Hun did the usual half roll and headed for terra firma. With the odds against our formation two to one it was necessary to keep the section intact and we chose the discreet part of valour, broke off the chase and returned to the formation to find the sky sadly depleted of Me.s and our angry Spitfires buzzing like hornets.

We reformed and set off on an offensive patrol hoping that some innocent Hun would come our way. After a few moments it appeared evident that our foe had vanished and we began a search for ground targets. A string of railway trucks caught the Winco's eye and fifteen of them came before our guns in a nice strafing run. After blowing off steam on this target we re-formed and headed for home. No runs, lots of hits, no errors on our side and the firm conviction that, had the Hun stayed to fight, we should have scored a kill for the Wing. The morale of the pilots was raised to an alltime high. It was a wonderful experience.

On January 30th F/O Wilson led a formation of six aircraft on a reconnaissance of the Vicenza-Cittadella-

Castelfranco area. From the suburbs of Vicenza they encountered intense flak and Wilson was hit. Suffering from shock, loss of blood and partial blindness in one eye Wilson jettisoned his bomb and flew his aircraft back to base. There he found that his undercarriage would not lower and he was obliged to make a crash-landing. His fortitude on this occasion gained him a well-earned D.F.C.

Otherwise in the last part of January, the main concern of the squadron was the bombing of rail communications in the districts of Padua, Castelfranco, Treviso, Vicenza, Cittadella, Casarsa and other points in northern Italy.

Adverse weather reduced all flying activity to a discouragingly low level in February, fogs and low ceilings keeping aircraft grounded half the time. Nevertheless a good score was piled up. Fifteen goods trucks were destroyed and more than twice that number damaged, fourteen passenger cars were destroyed and twenty damaged, and a motor transport and six locomotives were damaged too. The 12th provided a little variety when an air-sea rescue was carried out and an oil patch was seen off Porto Corsini. A motor launch was directed to the area and retrieved an object from the sea. A similar search on the list was without result. Otherwise the squadron's activities consisted in the main of attacks on bridges, trains and motor transport in the province of Venetia. There was better flying weather in March enabling the squadron to carry out a more extensive, but not more varied, programme of bombing and strafing. The table of claims, for the month included:

	Destroyed	Damaged	
20	goods trucks	60 goods trucks	
6	barges	10 barges	
7	motor transports	15 motor transports	
1	horse-drawn vehicle	22 horse-drawn vehicles	
		2 ox-drawn vehicles	
		1 locomotive	

But the most surprising event in March was the discovery that, after the Canadian Corps had been withdrawn, the squadron was to co-operate with the Italian forces which were pushing north along the east side of Lake Comacchio. Twenty to thirty sorties a day were flown against railways, troop positions, bridges and transport of all kinds. From one of these operations on the 6th WO R. W. McKinnon failed to return. There was a similar casualty on the 16th when F/O J. W. R. Weekes was posted as missing.

A humorous note was struck on the 13th when S/L Goldberg described his attempt to strafe a horse-drawn hay cart. Many strikes were obtained but he could not kill the horse and the hay cart continued nonchalantly on its way. As it manoeuvred round a corner of the road it betrayed some peculiar characteristics but the Commanding Officer had a difficult time trying to convince a sceptical audience that his hay cart was really a cleverly camouflaged tank.

On the 20th F/L A. J. A. Bryan and Sgt. M. J. Carroll carried out a search off Porto Garibaldi. They found a dinghy, the occupant of which was picked up, and they successfully attacked shore batteries that were interfering with the operation.

Two days later the Commanding Officer, who had just been notified of the award of the D.F.C., led the squadron on the longest operation so far undertaken by pilots of the wing, a reconnaissance of the Brenner Pass on the Austrian border

On the 23rd two Me.109s attempted to bounce F/L R. C. Webster and F/O G. H. Slack who, with two other officers, were escorting Kittyhawks, but .failed to mix it and disappeared in the haze. The month ended with a number of sorties against barges in the Piave River, houses, railways and motor transport.

The weather was excellent for operations in April with abundant sunshine and many cloudless days. The General Officer Commanding the Eighth Army sent a special message to all units proclaiming an anticipated knock-out blow to the Germans. "With the powerful aid of the Desert Air Force", said General McCreery, "which has been our partner in every victory, we will destroy or capture the enemy south of the River Po." Indeed, from the amount of trafic going north on the roads, the City of Windsor Squadron had already deduced that something extra-special was being brewed for the enemy. A big offensive across the Senio River was launched on the 9th; the Santerno was crossed on the 12th. By the end of the month the Allies had taken Milan and reached the Swiss border. By May 2nd the Eighth Army was in Trieste.

The squadron's contribution to this effort was no mean one. Equipped with new Mark IX Spitfires, they followed the Eighth northwards and piled up an amazing total of damaged and destroyed objectives:

Destroyed		Damaged		Damaged	
7	tanks	1	locomotive	11	tanks
2	mobile vans	5	mobile vans	74	horse-drawn
25	horse-drawn	20	goods trucks		vehicles
	vehicles	8	barges	1	half-track
4	goods trucks	5	guns	2	carts
2	guns	1	bus	90	motor transports
49	motor transports	7	pontoon bridges	20	ox-drawn vehicles

This list takes no account of the large number of enemy occupied houses that were strafed or bombed with good effect.

All this was not without cost. On the 8th F/O Roy Cotnam failed to return from a dive-bombing sortie and on the 16th F/O Jack Rose was posted as missing. On the 22nd F/O Frank Doyle came down behind the enemy lines but after three adventurous days evaded the enemy and returned to his unit.

There was a successful air-sea rescue on April 1st when a pilot was found and picked up off Caorle. Another was equally successful the next day but this time the pilot was in a mine-field and the Walrus was unable to land. A boat was dropped, however, and the man was instructed to get out of the mine-field. On the 30th a search ended in the discovery of a wrecked aircraft on the beach with a number of footprints but the pilot was not seen.

On May and the German Army in Italy surrendered though the last operation of the City of Windsor Squadron took place on the 5th since the war in Europe was not over until that day. The 2nd also witnessed the last move by the squadron during the war, from Bellaria to Treviso, 130 miles to the north. The diarist remarked:

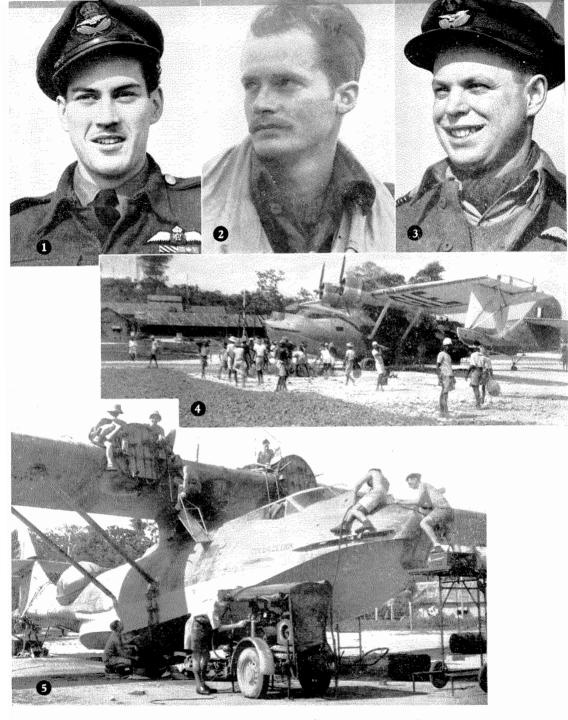
It was interesting to note a considerable improvement in the people and the countryside as we advanced north of the Po River. South of the river are heaps of rubble left by our bombers and the cheerless people who continued to exist in the shattered villages. At the great river which seems to be the dividing line, this desolation reached its peak. Skeletons of guns and motor transport line the banks and the bloated bodies of horses and oxen lie here and there in the stream.

Travelling north from the Po, these evidences of war gradually lessen. Fewer buildings bear the tell-tale pock marks of house-to-house fighting; there are no signs of shelling and only the obvious military target has been reduced to a pile of brick, dust and twisted metal girders. The friendliness of the people was noted immediately and appreciated by all of us. They are not so servile as their countrymen to the south, and while they are amazed by the length of our cigarette butts not many of them would stoop to collecting them.

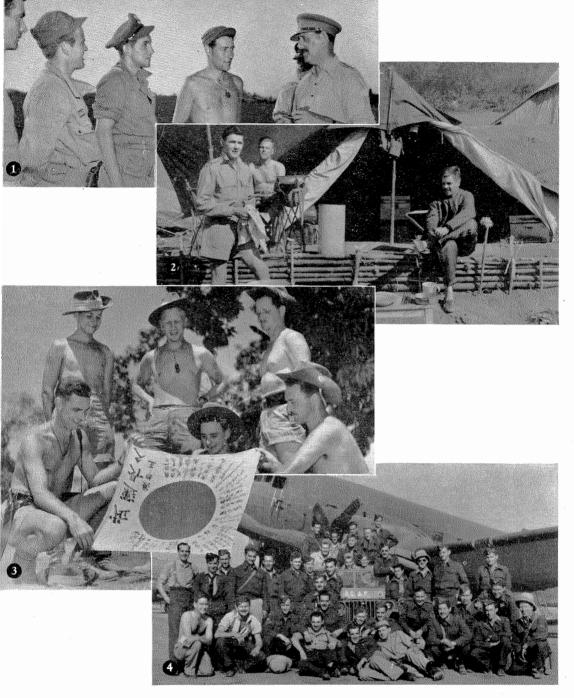
Inflation has not reached the district yet–eggs which cost 25 lire in Bellaria, can be purchased for 10 here and the tesera, the hundredth part of a lira, is still used. Nevertheless the old order of supply and demand rules in Venice where the prices of much sought souvenirs are rising accordingly.

At Treviso a public school and its playing fields were occupied but aircrew and officers soon found something more palatial in an abandoned castle about two miles away. It was a pleasant enough place in which to spend the remainder of their time in Europe. On July 1st the City of Windsor Squadron, that had been formed in December

1941 and had fought its way across Africa and all the way up the Italian peninsula, was disbanded. Its final score was 29 destroyed, 8 probably destroyed and 25 damaged but this represents only a small part of its achievements. During the last ten months of the war it had found its targets not in the air but on the ground.



to (3) City of Windsor Squadron pilots: F/L T. R. Wilson, D.F.C., of Toronto;
 WO R. W. Rideout of Leona, N.H., and S/L D. Goldberg, D.F.C., of Hamilton.
 (4) Natives prepare a landing strip at the Tusker Squadron station in Ceylon. (5) Repair crew at work on a Catalina of No. 413 Squadron.



(1) Lt. Gen. Sir Oliver Leese, K.C.B., C.B.E., D.S.O., commander of the Eleventh Army Group, with officers of No. 436 Squadron: (left to right) F/O M. MacLean of Winnipeg, F/L W. Lindsay of Toronto, F/O E. G. Lee of Toronto, and S/L R. L. Denison of Winnipeg. (2) Home on the Burma front: F/O E. Langrell of Warren, Man., F/O R. Bennett of Magrath, Alta., and P/O H. Olafson of Winnipeg. (3) Members of an R.C.A.F. transport squadron display their trophies. (4) Ground crew of an R.C.A.F. Dakota squadron in Burma.

#### CHAPTER XI

## AIR COMMAND, SOUTHEAST ASIA

### Over the Indian Ocean

INCE the spring of 1942 the Tusker Squadron (No. 413) had been based in Ceylon, doing coastal duties over the Indian Ocean and adjacent waters. Like other flying-boat squadrons based in Britain the Tuskers, equipped with Catalinas, escorted convoys, hunted submarines, and on occasions searched for survivors of torpedoed vessels. In addition to its home station, the squadron worked from other bases on Diego Garcia in the middle of the Indian Ocean, at Addu Atoll in the Maldive Island group, and on the coast of India. In earlier days detachments had gone as far afield as Aden, the Persian Gulf, Natal and the west coast of South Africa, justifying the Tuskers' claim to be the most dispersed unit in the R.C.A.F.

Through September, October and November 1944 the squadron continued its work, the only incident of note being a hunt for a submarine which had torpedoed a straggler from a convoy. The entire crew of the ship was rescued, but the sub escaped.

Early in 1945 No. 413 returned to Britain by ship, sailing through the Mediterranean which, when the Cats flew out to Ceylon in March 1942, had been one of the storm centres of war. Now the sea was free from Port Said to Gi-

braltar. On arrival in Britain, W/C S. R. McMillan, who had succeeded W/C L. H. Randall in command of the Tuskers in September 1944, took over one of the R.C.A.F. Sunderland squadrons. Personnel of No. 413 went on leave pending reconstitution of their squadron as a bomber unit, but hostilities ended before the reorganization had been effected.

Although the history of the Tusker Squadron was not replete with stirring incidents such as those which fill the record books of Bomber and Fighter units, three great achievements stand to its credit. Oustanding among these was the squadron's work in saving Ceylon from a Japanese invasion fleet in April 1942. A Catalina flown by S/L L. J. Birchall first discovered and reported the approaching armada; a second, with F/L R. Thomas, D.F.C. (R.A.F.) as captain, also located the Jap convoy. Neither aircraft returned, but their warnings flashed by W/T sufficed to put the island's defences on the alert.

Months later it was learned that Birchall had been taken prisoner. His gallantry while in captivity was of a measure with the heroism he had displayed in action. "Throughout his three and a half years as a prisoner of war, Wing Commander Birchall, as Senior Allied Officer in the prisoner of war camp in which he was located, continually displayed the utmost concern for the welfare of his fellow prisoners. On many occasions, with complete disregard for his own safety, he prevented, as far as possible, Japanese officials of the various camps from sadistically beating his men and denying prisoners the medical attention which they so urgently needed. Typical of his splendid gallantry was when, in the Niigato Camp, he called a sit-down strike in protest against ill treatment of his men. On another occasion when the Japanese wanted to send some sick prisoners of war to work, Wing Commander Birchall found it necessary, at great personal risk, to forcibly prevent the Japanese noncommissioned officer in charge from making these prisoners work. As a result Wing Commander Birchall spent several days in solitary confinement. Nevertheless, the sick prisoners of war did not have to work. 'Knowing thatt each time he forcibly intervened on behalf of his men he would receive brutal treatment, Wing Commander Birchall continually endeavoured to improve the lot of his fellow prisoners."

A second noteworthy achievement of the Tusker Squadron was an extremely long offensive reconnaissance, carried out by W/C J. C. Scott and his crew in the winter of 1942, from Ceylon across the Indian Ocean to Sumatra. Later, in the spring of 1943, Tusker crews played a significant part in re-opening air communication between India and Australia which had been severed by the Japanese conquests. This involved a non-stop flight of over 3000 miles across the sea. After several pioneer flights had been completed by the Canadian and R.A.F. squadrons the freight transport service was turned over to British Overseas Airways for operation by Qantas.

## The Burma Campaign

In June, 1944, an agreement was reached between the Air Ministry and the Department of National Defence for Air whereby the R.C.A.F. would provide two medium range transport squadrons for the Far Eastern theatre of operations. As a result Nos. 435 (Chinthe) and 436 (Elephant) Squadrons were formed. On August 30th, 1944 the greater part of the groundcrew for these squadrons sailed from Canada on the Aquitania and arrived at a British port a week later. Thence they were despatched by air to India, one aircraft with its complement of twenty airmen being lost on the way.

The R.C.A.F. Staff Officer at No. 229 Group H.Q. Delhi, W/C D. C. S. MacDonald, D.F.C., had devoted the greater part of his energies for some time past to the formation of the two squadrons. Before the appointment of the

squadron commanders he had ironed out most of the difficulties and to him goes most of the credit for the speed and efficiency with which the units got into working order. As a matter of fact aircrew had already begun their training in the dropping of paratroopers and supplies at Chaklala, near Rawalpindi, when the ground crew arrived.

By the end of October everybody had settled down at Gujrat. On the 31st W/C R. A. Gordon reported as Commanding Officer of the Elephant Squadron and a day later W/C T. P. Harnett as Commanding Officer of the Chinthes. Both these officers were later awarded the D.F.C. for their work in Burma, W/.C Gordon also gaining the D.S.O. As Wing Commander flying of the mobile wing which comprised the two squadrons W/C K. D. Dickson, A.F.C. (R.A.F.) was appointed. In November W/C MacDonald was made station commander.

The station at Gujrat was very dispersed. The aerodrome had been constructed as a fighter station in 1942 at a time when invasion of India by the Japanese had been feared. Its two runways were in sound condition but its hangarettes and the dispersal points had not been constructed with a view to accommodating the twin engined Dakota aircraft with which the squadrons were equipped. Furthermore the buildings, constructed partly of mud, had suffered severely in the last monsoon period. Despite these conditions and initial difficulties with transport, lack of tools and other equipment, and the need for certain essential types of ground personnel, things gradually settled down into a semblance of order and efficiency.

For some weeks the two squadrons trained intensively in preparation for airborne landings. Gliders were towed and paratroopers and supplies were carried and dropped until it was possible to put them down in DZs (dropping zones) "no bigger than geranium pots". There were some minor difficulties encountered. Villagers seemed resentful when airmen attempted to cross their fields to retrieve stray

parachutes, on occasion threatening to use their drawn knives. Some of the Indian troops of the Fiftieth Parachute Brigade training with the transport wing suffered somewhat from air sickness while malaria and sandfly fever were a constant menace to the health of all. Adjustment to life in the Orient came slowly, however.

In November the Chinese armies began to retreat as the Japanese made powerful thrusts and several American transport squadrons had to be withdrawn from the Burma front to help stem the tide. The Chinthe Squadron was ordered into the breach thus created and at midnight on December 18th it left Gujrat for Tulihal in the Imphal Valley, Manipur, Assam. With the assistance of the Elephant Squadron, the Chinthes transported themselves to the new station in less than a4 hours. The last remnants taxied in about midnight and by eleven o'clock on December 10th the squadron was on operations.

The Canadians came on the scene just after the Fifth and Eleventh Divisions had linked up in the Kalewa-Kalemyo area and as the Lushai Brigade was taking over from them for its push up the Gangaw Valley. In the centre the British Second Division, taking over from the East Africans on the east side of the Chindwin River, was starting its advance into the plains of Central Burma while farther to the north and east the British 36th Division was advancing from Banmauk in the direction of Indaw and Katha and driving south-east towards Mogok.

At Tulihal the Chinthes found themselves waging a jungle war. They were without lights, tents, cots, cooking facilities or food except K rations. Beds were rigged by stretching gunny sacks between bamboo poles and showers were constructed from odd parts taken from wrecked aircraft. Stoves were made from a few bricks and some steel plates. Groundcrew had to make their daily inspection by flashlight, their only tools being hammers and screwdrivers. Necessity was the mother of improvisation.

Throughout December the Chinthes made an average of 28 sorties daily. Christmas Day made no difference to them. While they carried cargoes of Christmas pudding, rum, turkey and mail for the Fourteenth Army, they themselves had their customary daily fare, the only departure from normal being canned chicken.

In the last half of December the 33rd Corps (2nd and 10th Divisions). of the Fourteenth Army, operating in the central sector, had pushed on from Kawlin and Yazagvo and by January 7th had reached Shwebo, an important road junction about sixteen miles west of the Irrawaddy River. The Chinthe crews, supplying the 33rd Corps, carried up to 156 tons of food and ammunition in a single day, dropping their loads in small clearings in the jungle and then returning for more. Everything seemed to be going well. Then on January 11th one crew reported two single-engined fighters which they could not identify and the next day the storm broke. Five aircraft were in the circuit at Shwebo when Japanese fighters came up and engaged them. Crews reported only two enemy aircraft but ground observers estimated that there must have been a dozen. The first Dakota to be attacked was that of F/O J. K. Ramsay whose prompt action in ringing the bale-out bell was instrumental in saving the life of the co-pilot, F/O A. L. Thomson, who at the time was acting as a kicker, i.e. helping to unload the aircraft. Thomson moved to the tail end of the fuselage before the aircraft crashed to the ground. He was critically injured, his skull, a clavicle, tibia and fibula all being broken and the sight of one eye destroyed. He was the sole survivor of the crew which consisted of Ramsay, F/O D. MacKinnon, WO E. F. Williams, LAC R. H. Prosser, and LAC K. A. Scott, the two LACs being employed as kickers.

Another aircraft, piloted by F/L R. F. Simpson of Leeds, the squadron's only English skipper, was carrying ammunition when an enemy fighter came in on the port side. The Jap attacked, the port engine burst into flames and

the ammunition caught fire. F/O A. E. ("Fearless") Foster, who had gone along just for the ride, started throwing the blazing ammunition boxes overboard despite two bullet wounds in his back. The navigator, F/L Lynn Dumont, put out the fire in the tail of the aircraft by beating it with his bare hands. F/O T. Jordan-Knox was wounded; LAC R. G. Evans, a groundcrew kicker, was hit in the arm and WO D. G. Cotter was mortally injured. The pilot picked out a clearing in the jungle and crashlanded. All got out safely though ammunition went off wildly in all directions. They got Dave Cotter to a hospital but he died a few days later. For his skill and courage in making the landing Bob Simpson was awarded the D.F.C.

The third aircraft was that of F/L H. L. Coons, D.F.C. As a Jap fighter closed on him he took violent evasive action. Then, although he was himself still under fire, Coons deliberately intervened to aid another Dakota which was being attacked by a second Jap fighter. He succeeded in diverting the enemy pilot who thereupon shifted his aim to Coons' Dakota. Five attacks were made in all, the fifth resulting in Coons' aircraft hitting a tree top and coming away minus four feet of wing tip. One groundcrew kicker, Cpl. A. M. White, was wounded but all got back to base safely. This action won for Coons a Bar to his D.F.C.

The result of this engagement was the inception of night flying though the Japs, who were only six or eight miles away, must have been able to see the navigation lights of the Dakotas as they took off or came in to land. Night flying continued until the end of the month of January when fighter protection became strong enough to justify abandoning it. On one occasion the Japs staged a surprise attack and captured a neighbouring army headquarters but were promptly wiped out by a contingent of Ghurkas.

On January 14th troops of the 19th Indian Division built up a bridgehead across the Irrawaddy at Singu. WO Frank Smith of the Chinthe Squadron had the distinction on the 2-4th of being the first pilot to fly in to the bridgehead area in support of the Fourteenth Army. Smith's sortie turned out to be quite an adventure. After searching for some time for the dropping zone he found that it was impossible to reach it without running into Japanese ground fire. He made three runs, Sgt. Nick Jarjour, a groundcrew kicker, being wounded on the third run. It was necessary to get the sergeant to a hospital at once so Jarjour was taken to Shwebo and then Smith returned to complete the dropping of his load. The enemy fire was still too hot for comfort so the pilot dropped a note announcing his intention of putting the remainder of his cargo on the beach. He completed his mission and returned to base, his aircraft full of bullet holes

Two days later F/O Bill Rodgers had a similar experience. On their fourth circuit of the dropping zone bullets cut the electric control cable, pierced the hydraulic fluid tank and tore the shirt of the navigator, F/O Glen Lineham. Returning to base the crew transferred the rest of their load to another aircraft and once more set out for the dropping zone. No markers were visible and, as it could not be determined whether our troops or the enemy were in possession of the area, they too put their cargo down on the beach.

On January 14th the Elephant Squadron moved from Gujrat to Kangla in the Imphal Valley. They found the living conditions there much the same as those "enjoyed" by the Chinthe Squadron at 'Iùlihal. They lived in 180 lb. tents, ate their food from mess kits and maintained and serviced aircraft in the open. Their new duties were to build up Shwebo, recently captured, as a main supply base for the push on Mandalay fifty miles to the south. They began operations on the 15th by transporting in seven aircraft 59 tons (if petrol, food and medical supplies for the 33rd Corps. In the course of the rest of the month they carried more than 5,000,000 lbs. of freight in addition to 735 passengers and casualties. The Chinthes during the whole

month carried almost 3,000 passengers and 8,000,000 lbs. of freight.

On the night of February 11th the 33rd Corps (loth Division) crossed the Irrawaddy near Myinmu and two days later the Seventh Division, a unit of the 4th Corps, crossed near Pagan. In the latter area the enemy was taken by surprise, inasmuch as he had no heavy concentration of troops there, and was forced to leave behind large quantities of food, fuel and ordnance. After consolidating their position the Seventh struck eastwards again on the 22nd, their objective being Meiktila on the Rangoon railway south of Mandalay 85 miles away. This was the second most important communications centre in Burma and its airfields, virtually intact, were a great prize. Thabutkon airfield was captured on the 27th and the following day transport aircraft began to land there with supplies and reinforcements. Meiktila fell on March 3rd. Yet the Japs did not give up without a struggle for there was grim fighting in this area for at least a month. The best of their troops, including the Imperial Guards, were thrown into the battle. Sometimes they gained a little only to be thrown back again but the transport squadrons never knew until they got there whether a particular airfield was in enemy hands or not. Since the army had no other reliable means of bringing up supplies the work of the transport crews was of the utmost importance. Sometimes they could land but frequently they had to resort to the use of dropping zones.

In the first ten days of February the Chinthes were mainly engaged in flying supplies to Shwebo, a routine that had come to be designated as the milk-run. On the 7th one crew repeated the experience on Christmas Day. They carried 26,000 bottles of Canadian beer and 1,100 bottles of Canadian rye but two guards accompanied each load and the crew were unable to secure a single bottle for themselves. A few days later the January beer ration arrived and they were consoled.

On the morning of February 12th, after the crossing at Myinmu, the Chinthes made sixteen sorties to Budalin in addition to the usual runs to Shwebo. One aircraft, piloted by F/O T. G. Burton and carrying ammunition, failed to arrive at Budalin. Despite a search of several days no trace of the aircraft or crew could be discovered. Besides Burton, F/O W. A. Eden, WOs R. H. Holtan and W. D. Coulson together with FS S. M. Duncan were posted as missing.

Meantime the Elephant Squadron was piling up operational hours so that by the end of the second week of February it was able to claim that it was the leading Dakota squadron in hours flown daily. For the first week they were engaged in delivering petrol, bombs, ammunition and other stores for the 33rd Corps to Shwebo and petrol for the R.A.F. to Thazi, Onbauk, Kan, Ye-U, Ywadan and for the 4th Corps to Tilin. Then on the 7th the squadron was engaged in moving an R.A.F. Spitfire squadron from Kan to Sinthe. One aircraft, captained by S/L R. L. Denison, got lost as it was returning to base after night had fallen. After a struggle to get a homing which proved unsuccessful, due partly to atmospherics, partly to jamming and partly to a suspected Japanese attempt to mislead them, the captain decided to abandon the aircraft. The pilot's account of what happened then was as follows:

We climbed steadily to 9,000 feet using all available power (the port engine had become unserviceable). At one point control broke through requesting my present course. I believe this was my last definite contact with the ground. After attaining altitude we orbited looking for a possible break in the overcast through which to see some familiar landmark before leaving the aircraft. At this point the port engine failed completely, although it did surge at irregular intervals. Fuel was very low and at 2250 (*i.e.* after two hours in the air since take-off) I ordered the crew into their parachute harness. The second pilot (F/O E. G. Lee) held control for a few minutes to enable me to fasten my own harness. I cleared everyone to the rear exit. LAC L. J. Van Nes removed the inner cargo door and secured it to its stowage and Sgt. T. F. Laffey made sure the self-destroying detonator was in the I.F.F. At 2300 hours everyone was ready. I steadied the aircraft and gave the signal to go. The crew at

all times worked efficiently and followed my orders quickly and implicitly. They left the aircraft in an orderly manner, Van Nes, Lindsay (F/L W. D. Lindsay, the navigator), Lee and Laffey. Before jumping Laffey (the Australian wireless operator), who had jumped before, gave each of us brief instructions on how best to land. My own pack and jungle kit had been left in the cabin for me. I trimmed the aircraft for one engine, left the controls and after considerable difficulty managed to capture the chest pack but could not get hold of my jungle kit as the aircraft had commenced a steep spiral dive. I managed to crawl out of the door about a minute to a minute and a half after the others had left. Everything functioned normally and I estimate I dropped from about 3.000 feet above ground level. Visibility was good. Almost at once I could see the outline of a river which, owing to its size, I was almost certain was the Chindwin. I heard and saw nothing coming down and as I neared the ground I tried to spill my 'chute in order to drift over the river but unfortunately I misjudged my height and dropped neatly in the middle of the stream. I was just out of my depth so, having released my canopy and harness, I drifted down to a sandbar about three or four feet deep and from there managed to bring myself and 'chute to the nearest shore.

I was quite tired by the time I reached the bank and sitting down for a breathing spell I saw the signal flare go up from across the river. This had been pre-arranged with my WAG (Sgt. Laffey) to help the crew consolidate on the ground. I called, whistled, and tried firing my revolver which I found was unserviceable due to water and mud. The flare had come from a point half a mile away but I could not attract their attention and felt too weary to swim the river. The night was spent trying to keep warm in narrow sand trenches which I scooped into the beach. This helped to break the wind and I got a little sleep at intervals. In the morning I checked my position against a compass rose I had drawn in the sand and planned to find a boat to take me over the river in search of the others. I spread my 'chute along the sand in case of searching aircraft and within a few minutes walk met a native who cooperated in every way. He took me into his little hut, brought out a coat and insisted I sleep. He woke me about 1100 hours and his wife provided food and tea. Immediately after, he and a neighbour by gestures indicated they wished to take me to a small village called Homalin where someone spoke English. I was put in a dugout canoe, my 'chute was picked up and after a two hour paddle upstream we arrived at an imposing little village. My whole crew were there to greet me and no one hurt.

F/L Lindsay then described his movements. Following

Van Nes out of the aircraft he landed at 1105 on a sand bank in the river, receiving a slight jar as he did so. Shortly afterwards he heard shouts and saw Sgt. Laffey's flare about a mile away to the south. Being both dazed and shocked he decided to wait a while before setting off to meet Laffey. After about twenty minutes he started to walk in the direction from which the flare had come. There was a glow in the sky, presumably from the wrecked aircraft. Soon he heard a shot, whistles and shouts. In about twenty minutes he met Laffey and Van Nes who said that F/O Lee, the second pilot, was dazed and lying nearby on the ground.

Meantime Laffey, loaded with pistol, medical and jungle kit, cartridges, water bottles and K rations, was fourth man out of the aircraft. Unfortunately he was unable to throw out the dinghy radio or to seize the bag of rations he had arranged near the door. He noticed as he went down that he was still wearing his headset and carrying the microphone in his hand. He landed rather heavily on a sand spit in a curve of the river, waited ten minutes and then fired a cartridge. He guided Van Nes to his position by the glow of a cigarette and left him in charge of the gear while he himself went to look for F/O Lee who could be heard in the distance. When he reached him Lee collapsed from concussion and shock. Finding that Lee had no broken bones he took him back to where Van Nes was waiting, wrapped him in a parachute for warmth and then left with Van Nes to search for Lee's gear. The parachutes of both Lee and Van Nes together with their gear were picked up. They then met F/L Lindsay. Charting a course by the stars all three returned to where Lee was lying. Lindsay lit a fire and, after Lee had been made comfortable, Laffey and Van Nes went down to the river to investigate a fire they could see. Approaching cautiously they discovered some natives who turned out to be friendly and supplied them with wood for their fire and told them by signs that there was an Englishman at Homalin. The two airmen then returned to Lindsay and Lee and made one more attempt to get in contact with Denison by firing another flare. Although they listened carefully nothing was heard. Lindsay then gave Lee two aspirins and Laffey also took two. After all had put their possessions into the common stockpile they rolled themselves in their parachutes and fell asleep.

At first light the four breakfasted from two chocolate bars, laid out two 'Chutes so that they could be seen from the air, hid the others, and went down to the river to fill their bottles with water which they chlorinated, and then set out along the river bank in search of Denison. Seeing no sign of him they followed a cowpath through the jungle until they came to a native village whence, after a friendly palaver, they were led to the river, ferried across and taken into Homalin.

The village turned out to be the headquarters of the British District Commissioner, Captain Carrot. Here they were made welcome, fed, washed and, later in the day, were joined by S/L Denison. On the morning of the 9th W/C R. A. Gordon and four other pilots landed in L.5s (Stinsons) on a nearby landing strip and by noon the whole crew had been flown back to their squadron. Denison was later awarded the D.F.C. for his part in this incident and for later achievements.

In the middle of February the Elephant Squadron operated from Tulihal for two days because the Kangla strip was unserviceable. It was at this time that an ammunition dump at Imphal halfway between Tulihal and Kangla containing over 3,000 tons of shells, bombs and small arms ammunition blew up with a terrific roar and, to add to the excitement, a Dakota got out of control on the runway at Tulihal, crashed into an ambulance, swung into a ditch and blew up, fortunately without serious injury to the crew.

On February 21st, the eve of the Seventh Division's drive on Meiktila, landings were made at Sadaung, Ywadan, Alon, Shwebo, Myitche, Sinthe, Onbauk, and other

places and supplies were parachuted into a number of dropping zones. Crews returning on the 23rd reported a great deal of movement south of Myitche and a fierce battle at Pagan, many shells being seen to burst in the river. The next day they said that the sky was full of Mustangs, Thunderbolts, Mitchells and Spitfires. It was in connection with these operations that F/Ls H. E. McNeil and H. W. Hingston of the Elephant Squadron successfully landed some much needed supplies and supervised their unloading under heavy enemy fire, an achievement that gained them the D.F.C.

The Chinthes participated in a special operation on the 25th, supplying ten aircraft for an army operation against the Jap airfields south of Meiktila. They dropped supplies near Taungtha and returned to report fierce fighting in the area.

Strong fighter cover was provided and no enemy aircraft were encountered. There were reports of enemy fighters in the vicinity of Sinthe on the 26th when the Elephant Squadron was taking supplies to that airfield but again nothing was seen. Further evidence of air superiority was noted on the 27th when crews reported Spitfires, Thunderbolts, Hurricanes and Liberators in the forward areas, a large flying boat also being seen on the Chindwin River the next day. The end of the month found the Chinthe crews dropping their loads at Katha, Sinthe, Ondaw, Shwebo, Monywa and a new zone southwest of Mandalay, while the Elephant crews were supplying Shwebo, Thazi, Sadaung, Sinthe, Monywa and Alon.

In the early morning of March 8th the 19th Division entered the northern outskirts of Mandalay. On March 14th Mandalay Hill was captured and Fort Dufferin after three days of siege was vacated by the enemy. Artillery had blasted the 20 foot thick walls of the fort and finally the Japs withdrew towards the Shan Hills, leaving their heavy equipment behind in the ruins of the city. The Mandalay

area was declared free of enemy troops by the loth. Frequently crews of both squadrons had splendid views of action on the ground and reported on one occasion "a squadron of Thunderbolts putting on a fine display of dive bombing and strafing while higher in the blue sky could be seen several Mustangs and Mosquitos soaring lazily about guarding our ground activity." Again they noted Mustangs and Mitchells roaming freely overhead during the siege of Fort Dufferin. They saw numerous bush and forest fires and observed that the Japs appeared to be pursuing a scorched earth policy since all the villages that could be seen from the air appeared to have been reduced to ashes. Frequently Japanese contingents would get cut off and our crews would experience ground fire from unexpected places.

Dropping cargoes in the battle for Mandalay was no simple matter. The dropping zone was only 50 X 100 yards in extent and was situated in a narrow valley up which it was necessary to fly before sufficient room could be found to circle round preparatory to dropping more of the cargo. It must be remembered that the speed of the Dakota allowed for only ninety seconds over the DZ and that all the unloading had to be done by hand without benefit of electro-magnetic release or modern bomb-sight. The presence of our fighter aircraft as they dived and zoomed within the circuit, the passing of artillery shells and the difficulties experienced on occasion in finding the parachute ripcord on a particular cargo, did nothing to simplify matters. On the credit side of the ledger were the ease with which the DZ could be found in the glare of the burning city of Manadalay and, once their initial tendency to fright and airsickness had been overcome, the enthusiasm of the East African kickers

On March 18th WO Frank Smith of the Chinthe Squadron took off for Meiktila with a load of ammunition. Japanese machine-guns and mortars fired at the aircraft from four directions but the parcels were dropped and the army

men were seen to hustle them away in waiting trucks. Two days later the same crew returned from Meiktila with five bullet holes in the aircraft. Other crews had similar experiences.

From Kangla the Elephant Squadron resumed delivery to the 33rd Corps by paradrops and free drops on March 1st. Several crews reported seeing artillery action on the ground at the time of the battle for Meiktila. On the 3rd a letter was received in which Lt. General Sir Montague Stopford, K.B.E., C.B., D.S.O., M.C., commanding the 33rd Corps, congratulated the Combat Cargo Task Force on its work of supplying the ground forces at the opening of the battle for Mandalay. Testimony to the effectiveness of their work might also be seen in the fact that the very next day they were called upon to drop supplies at Singu East, a new strip east of Shwebo, and on the 5th at still another across the Irrawaddy, while on the 6th one crew landed at Meiktila on a strip just captured from the enemy and around which fighting was still taking place. On the 9th there were several deliveries to Meiktila and two Dakotas ferried casualties from that point to Sinthe.

Towards the middle of March preparations were made by the Elephant Squadron for a move from Kangla to Mawnubyin, near Akyab, from which place it was anticipated that provisions and supplies could be ferried to those forces that were operating south of Meiktila. Since everything had to be taken by air while operations were still being continued the move took ten days to complete but the squadron boasted that not a single day's supply operations was lost though only a small number of aircraft operated from Kangla during the period.

At the new aerodrome an attractive site beneath some clumps of trees which offered both shade and camouflage was found. A saltwater chaung with excellent swimming facilities was only five minutes walk away. This was to prove a great boon in the tropical climate of western Burma. The advance party had neither transport nor cranes with which to unload their aircraft, however, until three trucks were flown from Kangla in the course of a day or two. A spy scare, caused by the presence of an overseer of coolie labour who was making mysterious entries in a book, was solved when the oriental method of time-keeping was explained to the suspicious Canadian airmen.

There was a serious accident at Akyab on the 14th. Two aircraft were standing near the landing strip waiting for permission to take off when a Beaufighter, coming in to make an emergency landing, crashed into them. Fire broke out and one of the Dakotas was completely destroyed. The co-pilot of the Dakota, FS E. O. England of the R.N.Z.A.F., was so severely hurt that he died of his injuries three days later. The pilot, F/L G. S. L. Anderson, who was in the aircraft, and the navigator, F/L T. W. Farquhar, who was standing under the wing at the moment of impact, were slightly injured. On the same day aircraftman L. Blondeau, injured in a swimming accident, died in hospital. It was an unlucky day for the Elephant Squadron.

Crews still operating out of Kangla had an interesting time on the 15th. On their second lift they were unable to find the usual markers at the place where the dropping zone should have been. There was a considerable amount of shelling going on in the neighbourhood and our troops were seen entering a village. Crews decided therefore to drop their loads at a point three miles to the south-west. There the ground forces rose to the occasion And put out markers, a procedure that made things easier for those crews on the third lift

On the aoth operations supplying the 4th Corps began as scheduled from Akyab. Crews flew to DZs near Myitche and Meiktila and some who landed at Meiktila were under enemy fire. It was on one such occasion that F/L W. S. Robertson of the Elephant Squadron, who was engaged in supplying Meiktila, landed an important cargo and super-

vised the unloading while the air strip was being subjected to enemy artillery and machine-gun fire. For this he was awarded the D.F.C. The same award was made to F/Os A. V. Foord and H. C. Olafson for like achievements. On the list one aircraft sustained a few bullet holes while another, piloted by F/O W. J. Holland, lost all the fuel in the port tank due to a bullet puncture, the co-pilot barely escaping with his life.

Four days later crews were making deliveries for the Fourth Corps to Mandalay which had been captured on the loth. They reported that the town had been well "bashed in" but no enemy activity in the vicinity was observed. The enemy made up for their inaction on the ground, however, by raiding Akyab harbour on the night of the 25th.

Cargoes usually consisted of ammunition and rations. Engines, petrol, empty petrol drums, gas respirators, machine-guns, pistols, carpenters' tools, rice for the civilian population, potatoes and even a load of steam coal were transported in the course of the month. In March the two squadrons together made 3,600 sorties and flew about 10,000 operational hours.

On April 1st British troops achieved one of the objects of the campaign by linking up with the Chinese forces on the Lashio Mandalay road.

In the centre the advance on Rangoon was developing into a two-pronged drive, the 4th Corps led by the 5th Indian Division thrusting from the Meiktila area through Yamethin and Pyinmana to Toungoo and Pegu, the 33rd Corps driving through Chauk, Yenangyaung, Minbu, Taungdwingyi and Allanmyo to Prome. Along the west coast the 15th Corps was preparing for an attack on Rangoon by sea and air timed to coincide with arrival of the 4th Corps at that city.

Air operations in April, while continuous, were hampered in the mornings by heavy rains that made the landing strips soggy and sometimes compelled our crews to drop their loads by parachute. The Chinthes at the beginning of the month were still supplying the 4th Corps in the Meiktila area, Alon, Sinthe, Sadaung, Myitche, Ondaw and Thungtha being among the places to which they made more or less constant runs. As the armies advanced on Rangoon new names began to appear in the list of landing strips and dropping zones but there was no departure from normal operational routine until towards the end of the month when the squadron made an arrangement with the U.S. 12th Combat Cargo Squadron for the supplying of the 36th Division as it pushed eastwards to the borders of the Federated Shan States. The squadron transported 3,390 tons of cargo and carried 3,562 passengers and casualties in the course of the month.

The Elephant crews found the fighting on the ground in the supply dropping area so fierce that aircraft sometimes had to fly by instruments through the thick haze that was created. The monsoon season was at hand too as cumulonimbus clouds towering up to 25,000 feet with well shaped, "anvils" made their appearance. Nor was flying made easier by the use of grade "X" oil which reduced the serviceability of engines, a subject about which there was some controversy until the squadron demonstrated that "T" oil was essential for their aircraft.

Mosquitos, with attendant danger of malaria, were a constant menace and strict regulations were promulgated and enforced to prevent officers and men running the risk of infection. These measures were later amplified to offset the dangers from scrub typhus, jungle sores, leach bites and ticks

On the last day of April one aircraft was detailed to transport thirty British and American escaped prisoners of war. These men had been held at Rangoon by the Japs but had eluded their captors while being evacuated and had walked northwards until they met Allied troops. In the month of April the Elephants flew 1,238 sorties for 3,808

hours and carried 7,814,870 lbs. of freight. They also transported 1,130 passengers and 204 casualties.

The attack on Rangoon, known as operation "Dracula", was a combined operation in which land, sea and air forces all participated. After a week of preparation in which R.C.A.F. jump masters worked with American air crews, briefing for the operation was carried out at the American camp at Akyab where a sand table replica of the Elephant Point area was exhibited together with photographs taken by reconnaissance aircraft the previous day. At 0300 hours on May 1st the aircraft, loaded with paratroopers and their equipment, took off. They arrived over Elephant Point just as dawn was breaking and dropped their loads in the dropping zone while fighter bombers dealt with the scattered Japanese positions in the vicinity. Crews returned to base for further loads and some of the jump masters put in a total of thirteen hours of flying and hard work during that day. The operation was successful. Burma was cut in two and the Japanese lines of communication were completely severed. Among the awards made for participation in this operation was that of the D.F.C. to F/L H. N. Cuming of the Elephant Squadron.

Admiral the Lord Louis Mountbatten, Supreme Allied Commander, sent the following signal to all those taking part in the operations:

You have wor. the race for Rangoon and beaten the monsoon as well as the Japanese. The fall of the capital, ten days before the rains and storms will be upon you, brings to an end the Battle of Burma for, although isolated pockets of the enemy remain, their doom is now sealed. From the Chinese armies in the north, who fought their way with the American Brigade down to Lashio, to the British and Indian and East and West African Divisions who have fought from Kohima to Rangoon, you have covered in this great battle 1,000 miles of the worst country in the world and under the world's worst climate and conditions.

In the process you have killed 97,000 Japanese and inflicted a quarter of a million casualties. You have in fact given the enemy such a

beating and harried him so hard that the vaunted. Japanese army, about whose toughness and fanaticism we have heard so much, has in some cases pulled out rather than face your final assault. Your victories have been a magnificent example of interservice, inter-allied co-operation. To achieve them the ground forces have not only received their normal support but have had to be supplied by air on a scale never before achieved, and American Air Forces have worked with the Royal Air Force right through to the capture of Rangoon. Meanwhile the Royal Navy have cut the enemy's sea communications and have made possible a series of amphibious hooks around the coast of Arakan, culminating in a combined operation in which the 15th Corps assaulted Rangoon from the sea just as the 14th Army approached the town from the north.

The liberation of Burma, in which we have had the active assistance of the Burmese, marks not only the successful accomplishment of the first stage in your advance, it will also be your springboard for further and greater victories.

A fortnight after the attack on Rangoon the Chinthe diarist recorded "no sign of any river shipping, no sign of road movements, not even a cow to be seen in the paddy fields. No nothing in fact". Possibly the arrival of the monsoon had something to do with this, possibly the departure of the Japanese to points farther east had something to do with it too.

Supplies still had to be flown by the Chinthes to Meiktila, Myingyan, Sinthe, Taungtha and other areas where resistance was being encountered while the Elephants made another move further down the coast to Ramree Island in the middle of May, since it was found that Toungoo was the farthest point on the Allied line of advance that could be economically reached from Akyab. They found Kyaukpyu strip very compact, the technical, headquarters, and domestic tents immediately adjoining the dispersal area. Wells produced sufficient water for bathing and laundry purposes and by careful conservation the supply of drinking water was made to last until the rains came. Rations were somewhat unbalanced and without variety, a situation that many personnel found difficult to bear when they observed

the higher standard of living enjoyed by neighbouring American units. The food served to officers was, however, the same as that served to the airmen and the sleeping accommodation for all, aircrew as well as ground crew, was identical. To offset these disadvantages to some extent Sgt. Ross Huston and his staff devised a new type of kitchen with oil furnaces that attracted considerable attention from other units, to say nothing of staff officers.

The weather interfered with operations from Ramree Island but the squadron flew 4,315 hours and carried nearly 8,000,000 pounds of cargo and nearly 2,000 passengers. Pyagyi, Yubatoung, Kinmagon, Mingaladon, Toungoo, Magwe, Myingan and Meiktila were the principal areas supplied; The end of the month witnessed the withdrawal of American units to China and the disbandment of the integrated Combat Cargo Task Force. The full burden of supplying the army in Burma, as a consequence, fell entirely on the British and Canadian squadrons that were left behind.

Rice was the commodity that seemed to be most in need in Burma as the month of June opened. The Chinthes were inundated with it for transport to those areas that required it most. Lashio, Myitkyina and Bhamo received a lot for civilian use on succeeding days. On one occasion by way of variety the squadron carried from Dum Dum to Imphal cages containing 1,000 white mice for typhus research, Boo more with 35 guinea pigs being taken from Comilla to base on a later occasion for the same purpose. But flying in monsoon weather was no picnic. Clouds towered from 800 to 20,000 feet and once a crew took forty minutes to find a way out of the Imphal valley before they could get to their destination. On the 21st one crew failed to return from Myitkyina, the missing being: WO W. B. Rogers, F/O W. J. Kyle, F/O D. M. Cameron, FS C. P. McLaren, WO S. J. Cox and LAC C. J. Kopp. In the whole month of June almost 2,000 sorties were made with over 3,000 tons of freight, 3,758 hours of flying time being consumed.

The Maharajah of Manipur extended an invitation to Chinthe Squadron personnel to attend the three day celebration he had for VE-Day and officers and airmen were able to relax while watching horse races, Manipuri and Naga dancing, wrestling, bicycle polo and other sports.

At Kyaukpyu heavy rains made life miserable for the Elephant Squadron in June. Floods washed away the foundation of the runway and rotted the tents while an all pervading dampness caused mould to appear on clothes and other personal possessions.

Troops eliminating the Japanese around Toungoo, Kalaw and Pegu still had to be supplied if the enemy was to be prevented from making a fresh stand in the Chin Hills. To add to their difficulties the withdrawal of the Americans deprived the remaining squadrons of a meteorological service. The Elephants therefore inaugurated the "Watchbird" meteorological reconnaissance whereby one of their aircraft was sent out one hour before the time of take-off for the rest and kept watch on conditions until all had safely returned to base. W/C R. A. Gordon made the first of these flights on May 12th. The technique was for the Watchbird to broadcast the weather twice an hour and give advice when it was requested. When it is realized that in one day there was a rainfall of five and a half inches the necessity for this service becomes apparent. That the Watchbird crew came in for some good-natured "ribbing" goes without saying. A short poem sums up the kind of attack they had to face:

> Oh where, Oh where has my watchbird gone? Oh where, Oh where can it be? We can't see our plane for the snow, sleet and rain Still his broadcasts say "J.1–Class 3".

The value of the scheme lay, however, in certain discoveries. First it was noted that flying conditions in the

monsoons are normally good. Then, by flying at 8,000 to 9,000 feet the turbulent cores of the cloud masses could be seen and avoided. Finally it was recommended that contact or low altitude flying be abandoned as a dangerous procedure in a countryside that was notoriously hilly. Undoubtedly the squadron contributed considerably, as other squadrons testified, to the safety of flying in monsoon weather in Burma. For his work in connection with this service S/L F. E. W. Smith, A.F.C. was awarded the D.F.C.

An exciting experience in a thunderstorm was recorded by F/L R. W. Cornell, a pilot, as follows:

Returning from a sortie into Central Burma I was cruising at 8,000 feet, airspeed 14.5 m.p.h., clearing the built-up cumulus cloud and layers of stratus very easily. After crossing the Irrawaddy River and starting over the Arakan Zone the clouds started to build up higher, but conditions were very good and I was brushing through the tops of the clouds, alternating between clear and momentary instrument flying. There was the usual high overcast of course. I had entered what appeared to be a small layer of cloud when it began to rain. After flying instruments for about a minute three sudden bursts of extremely heavy rain, possibly hail, hit the aircraft, giving the impression that it would break the windscreen, and severe bumpiness started. I immediately put the aircraft into a turn to starboard intending to turn 180 degrees but had only completed about half of it when the force of the C.N. cloud hit the aircraft.

My recollection of what happened at that instant is rather hazy. Both gyro horizons toppled and I had to rely on needle, ball and airspeed and a directional gyro which very fortunately remained working. The next thing I knew we were in a terrific dive. The control column was absolutely frozen so that I had to rely entirely on elevator trim to try and pull out. The airspeed indicator was reading in the vicinity of 300 miles per hour, the vertical speed was at 6,000 feet per minute down and the altimeter was unwinding at a frightening rate. I can't say how much altitude I lost as my one idea was to pull out of the dive before the aircraft went right into the ground. It finally did pull out and in a fraction of a second the vertical speed read 6,000 feet per minute up. I frantically applied more down trim and forward pressure on the control column but could not do it fast enough and the next thing I knew the aircraft was on its back and I was hanging on my safety belt. I applied full aileron and kicked the rudder and, as far as I can see, the aircraft

must have half rolled and ended up in another dive. This time I was able to level out and suddenly came into a clearing between the clouds. From there I was able to pick my way through the cloud till we reached clear conditions over the water.

Despite these appalling monsoon conditions the squadron put in 4,767 hours and carried 7,907,300 lbs. of freight and 1,161 casualties and other passengers in the month of June, all this at a time when normally a drop of 40% in flying hours might reasonably have been expected.

There was little variety from routine for the Chinthes in July, large quantities of rice being still carried in to Northern Burma. One aircraft carried a cargo of 20,000 rupees but, unable to find the dropping zone, had to take the money back again. Towards the end of the month F/O E. J. Mackie had a harrowing experience when rice was being dropped from his aircraft at Falam. The sacks of rice had been tied together in pairs, one of which, on being thrown out, wrapped itself around the tail of the aircraft but the pilot got back to base and made a safe landing. F/O T. Kiez of the Elephant Squadron had a similar experience at Taungup when two bales got wedged in his tail plane. He too, after jettisoning his load, had got back safely.

VJ-Day for the Chinthes was celebrated on the 17th and 18th August when the Maharajah of Manipur invited all the Chinthe personnel to his estate;. After a speech by the court chamberlain the dancing girls gave: a performance and the squadron orchestra rendered a few swing numbers. Fireworks, mainly consisting of Very lights, were set (off as night fell. On the second night the dancers performed on a platform erected on the bows of three enormous Manipur war canoes which moved from end to end of the royal lagoon so that all the spectators could see what was taking place. On the 19th the C.O. was able to announce that the squadron would leave Burmai in about a week for the United Kingdom.

In the period December 10th, 1944, to August 29th,

1945 the Chinthe Squadron had! flown 29,873 operational' hours, had made 16,592 sorties, carried 14,440 passengers in addition to 851 casualties and had transported 27,460 tons of supplies.

The Chinthes left the Imphal Valley in seven waves, of. three aircraft each and one oif two going to England via Alipore, Maharajpore, Karachi, Masirah, Aden, Wadi Haifa, Lydda, El Adem, El Aouina and Istres.

That the Jap was mot yet beaten in July was clear from the Elephant Squadron's account of events on the 5th and 6th of that month. At a dropping zone east of Pegu near the Sittaung River crews reported much ;groundd fire' and shelling from field guns. Thunderbolts afforded protection to the Dakotas but the Japanese managed on one occasion to break through and seize all the supplies that were dropped. A subsequent delivery was seen to be taken away by Ghurkas.

On the 7th an aircraft failed to return. Bad weather interfered with the searches that were conducted but eventually wreckage was found, the crew having been killed. The names of the dead were: Flying Officers A. R. W. Harrison, W. J. Friesen and W. C. Campbell and FS S. H. L. Smith. A later search for an aircraft of an R.A.F. squadron had a more fortunate ending, a naval craft being successfully directed to a beach where members of the crew of the aircraft were seen standing by.

There were several near tragedies with home-made sail boats which drifted in the currents off shore and resulted in rescue calls being put in to the navy. F/O G. C. Tozer was carried two or three miles out and had to swim back, search parties having failed to find him.

At the end of the month the Commanding Officer of the Elephant Squadron, W/C R. A. Gordon, was repatriated and his place was taken by S/L R. L. Denison. Almost immediately the new C.O. had to break the news that the squadron was to be moved back to Akyab and to send a detachment

to Kinmagon. He was, however, able to sweeten the pill by announcing that "starting about September 1st the squadron flies to the United Kingdom."

Two pilots operating from Toungoo in the early part of the month were subsequently awarded D.F.Cs. for their work. Their names were F/L H. W. Pearson and WO D. G. Parker. Supplying isolated units in the Shan Hills they worked in the worst monsoon weather without radio aids and had to search for dropping zones in narrow valleys that, more often than not, were cloud obscured. They flew 22 days under very hazardous conditions without relief and their work was deserving of the recognition it received.

VJ-Day made little difference to the work of transport squadrons since troops still had to be supplied and personnel and equipment moved but on August 19th a signal was received that the Elephant Squadron was to be prepared to go to Chittagong and the next day they were informed that they were to proceed to the United Kingdom. Six days later, on the very eve of their departure, one crew, captained by F/L A. F. Aikman, D.F.C., was detailed for a journey to Hong Kong with medical comforts and Red Cross parcels for Canadian prisoners of war held there. The expedition was organized by W/C D. S. Patterson. The crew left on the 31st, the day on which the last operations of the squadron in Burma were carried out.

Ill fortune dogged their path. Delayed at Rangoon for lack of clearances they experienced engine failure at Bangkok and by the time the aircraft was again serviceable the crew learned that the P.O.Ws at Hong Kong had been succoured by a party landed by sea. The mission was therefore abandoned.

A message from Sir Keith Park, K.C.B., K.B.E., M.C., D.F.C., bidding the squadron farewell stated that "the armies fighting in the Burma campaign have depended for their very existence on air supply and 436 Squadron have taken a large part of the burden".

As a matter of fact between the middle of January and the end of July the squadron had transported more than 25,000 tons of supplies and had flown almost four million miles

A record of the route followed by W/C Denison and his crew shows them taking a total of 44 hours flying time to reach the United Kingdom via Chittagong, Allahabad, Karachi, Masirah Island, Aden, Wadi Halfa, Cairo, Lydda (Palestine), El Adem (Libya), Sardinia and Down Ampney in Gloucestershire. At Cagliari in Sardinia one aircraft came in for a landing on a strip that turned out to be under repair. By skilfully avoiding an assortment of steam rollers and mounds of gravel the aircraft was brought to a stop with nothing worse than a burst tire. This was the first aircraft to land on this particular strip in eight months.

At Down Ampney in England the Chinthes, having despatched to Canada those who were due for repatriation, settled down to a short period of training before undertaking transport work to the Continent. They carried supplies and personnel to Istres, Ghent, Brussels, Naples, Hamburg, Copenhagen, Oslo and Buckeburg as well as to various points in Great Britain. On October 19th a crash at Croydon, where a detachment was operating, resulted in the deaths of Flying Officers G. A. McIntyre, F. H. Seaman and E. J. Shaw. Eight weeks later another crash, near Oslo, caused the deaths of F/L W. A. Young and F/Os R. J. M. J. Dagenais, W. R. Fee and K. F. Study. Thirteen passengers lost their lives in the same accident. A third crash in the following February took the lives of S/L R. G. Joyce, F/O A. J. Clark and six passengers, the rest of the crew and thirteen passengers sustaining injuries. One of the passengers, Col. S. E. H. Daw of the Allied Control Commission Austria, wrote in commendation of Joyce and his crew for the attention and care shown by them to their passengers in lending them their own overcoats and making themselves responsible for the billeting arrangements at Frankfurt.

Throughout November and December there was little variety in the programme though on one occasion a crew carried the British official hangman as he returned to the United Kingdom from officiating at the execution of Klein, Kramer and the other officials of the notorious prison camp at Belsen. Another interesting passenger in the middle of January was Major General, Kurt Meyer who was flown from Rostrup to Odiham on the first stage of his journey to a Canadian prison.

On February 5th the airmen at Odiham went on strike, those at Down Ampney coming out in sympathy the next day. The sitdown was not organized. It was an expression of the discontent aroused by statements in the Canadian press about the proportion of volunteers in the R.C.A.F. in Europe, the airmen contending that four-fifths of their number wished to return to Canada while an impression prevailed at home that this was not so. By the 9th it was estimated that 90 per cent of the men had returned to work. Two days later regular routine was being followed at both stations.

On April 1st, 1946, the squadron was disbanded and the first of its aircraft took off for the flight home to Canada.

At Down Ampney, after a period of training, the Elephants carried their first cargoes to Paris and Auxerre on October 9th. Two days later fog rolled in over the aerodrome and an aircraft captained by F/L K. J. Blevins crashed on landing, killing the pilot and copilot, F/L W. E. Hopkins; the wireless operator and the navigator, F/Os E. H. Neufeld and R. R. Harrison, both subsequently died of injuries.

As the month progressed and throughout November their range of activities increased. Oslo, Hamburg, Brussels, Valkenburg, Frankfurt, Berlin and Naples began to appear on the schedule. They carried troops, casualties, mail, clothing and other supplies to and from these various points. Beginning on December 8th the squadron undertook

a commitment to transport on a daily schedule casualties from Brussels, Buckeburg, München-Gladbach, Hamburg and Celle and the next day a detachment was despatched to Biggin Hill to carry supplies for the Canadian Army, the detachment of No. 168 (R.C.A.F.) Squadron which had been doing this work being due for repatriation to Rockcliffe. A typical entry in the squadron's diary in these days ran as follows:

One aircraft carried passengers, mail and freight Odiham to Gatow. One aircraft carried one passenger Gatow to Odiham. One aircraft carried passengers and freight Buckeburg to Celle and returned to base with casualties and passengers. Three aircraft proceeded from base to Buckeburg with passengers and freight. One aircraft from base carried mail to Brussels and returned with casualties. One aircraft from base collected casualties and passengers at Munchen. One passenger and one freight run to Amsterdam; one passenger and mail run Munster and Amsterdam; and one passenger and freight run Amsterdam and Brussels.

Nothing unusual occurred in March though there were increasing signs that the Elephant Squadron would shortly be closing its career. Scheduled runs ceased on the 31st, only the detachment at Biggin Hill continuing to fly its commitments for the Canadian Army. On April 4th the squadron moved to Odiham and ten days later the detachment at Biggin Hill returned to its parent unit. After continuing for some eight weeks to make flights to the Continent and to Ireland the first aircraft of the squadron took off for Rockcliffe on June and. The last left Odiham on June 22nd and the squadron was disbanded.

## CHAPTER XII

## **POSTSCRIPT**

N the three volumes of this narrative numerous deeds of heroism have been cited. They are but a sample of the countless acts of gallantry which have created the high traditions of all the Royal Air Forces. Many of these feats of arms are known and have been recognized by the award of crosses and medals. But it should not be forgotten that many, many deeds of truest heroism remain unknown because no one returned to tell the story. It may well be that the bravest acts of all will never be recorded in chronicles written here below.

When the war ended and the prisoners of war were liberated, some brave deeds previously unknown were revealed. Among them was one which brought a posthumous Victoria Cross to P/O Andrew Charles Mynarski, a midupper gunner in No. 419 (Moose) Squadron. At 2144. hours on the night of June 12th, 1944, Lancaster A-Able, piloted by F/O A. de Breyne, took off from Middleton St. George, briefed to make a low-level attack on the marshalling yards at Cambrai. There was strong flak and night 'fighter opposition and A-Able did not return. The citation which accompanied the award of the R.C.A.F: s second bronze cross completes the story:

The aircraft was attacked from below and astern by an enemy

fighter and ultimately came down in flames. As an immediate result of the attack, both port engines failed. Fire broke out between the midupper turret and the rear turret, as well as in the port wing. The flames soon became fierce and the captain ordered the crew to abandon the aircraft.

Pilot Officer Mynarski left his turret and went towards the escape hatch. He then saw that the rear gunner was still in his turret and apparently unable to leave it. The turret was, in fact, immovable, since the hydyraulic gear had been put out of action when the port engines failed, and the manual gear had been broken by the gunner in his attempts to escape.

Without hesitation, Pilot Officer Mynarski made his way through the flames in an endeavour to reach the rear turret and release the gunner. Whilst so doing, his parachute and his clothing, up to his waist, were set on fire. All his efforts to move the turret and free the gunner were in vain. Eventually the rear gunner clearly indicated to him that there was nothing more he could do and that he should try to save his own life. Pilot Officer Mynarski reluctantly went back through the flames to the escape hatch. There, as a last gesture to the trapped gunner, he turned towards him, stood to attention in his flaming clothing and saluted, before he jumped out of the aircraft. Pilot Officer Mynarski's descent was seen by French people on the ground. Both his parachute and his clothing were on fire. He was found eventually by the French, but was so severely burnt that he died from his injuries.

The rear gunner had a miraculous escape when the aircraft crashed. He subsequently testified that, had Pilot Officer Mynarski not attempted to save his comrade's life, he could have left the aircraft in safety and would, doubtless, have escaped death.

Pilot Officer Mynarski must have been fully aware that in trying to free the rear gunner he was almost certain to lose his own life. Despite this, with outstanding courage and complete disregard for his own safety, he went to the rescue. Willingly accepting the danger, Pilot Officer Mynarski lost his life by a most conspicuous act of heroism which called for valour of the highest order.

From the prison camps came other tales of escapes and hardships which challenge the imagination and admiration of the reader. Particularly noteworthy were the experiences which won for Sergeant J. L. N. Warren of No. 434 (Bluenose) Squadron the British Empire Medal. Warren was rear gunner in a Halifax that was shot down over Cologne during a raid on Leverkusen on November 19th, 1943.

He got clear of the burning wreckage and hid in a haystack for the night. In the morning he left his hiding place and walked across fields most of the day, sleeping in the woods at night. He was so weak as a result of wounds and bruises sustained when the aircraft crashed that he eventually went to a farm and gave himself up. He was imprisoned in Dulag Luft at Wetzlar and sent on to Stalag IVB at Muhlberg.

On 17th March, 1944, Sergeant Warren made his first attempt to escape by joining a party of French prisoners going out for supplies. When the party reached the stores he broke away and went to a cemetery where, by pre-arrangement, he was to have met a Canadian airman who had previously escaped. On arrival, Sergeant Warren learned that the other airman had been recaptured and the guards had been reinforced. As he had neither food nor maps, Sergeant Warren decided to return to the camp and await a more favourable opportunity. He regained the camp undetected.

On 1st May, 1944, Sergeant Warren made a further attempt, using the same method as before. He met an R.A.F. officer and both successfully evaded the search parties and guards for five days. Four other escapers soon joined them and all managed to get on a train carrying rolls of paper to Holland. On arrival in Holland the party split up, and Sergeant Warren and one companion travelled north until they made contact with the Dutch underground movement at Borne. They stayed for five weeks and then moved on to Nijverdal, owing to the activities of the Germans.

Early in August, 1944, Sergeant Warren moved to Zwolle and hid in a boat until the end of the month when he was given shelter in a castle near Hattem. The German search parties were very active, but he successfully evaded them and eventually reached Gorssel, where he remained for eight weeks. Of the period, six weeks were spent hiding in a cave under a pigsty, in company with two Poles and a Dutchman. The Germans made a surprise search and the members of the party were ultimately arrested. After brutal treatment, they were taken to the Landwach prison. Although Sergeant Warren produced his R.A.F. identity discs, he was treated as a "terrorist" and badly manhandled during interrogation, after which he was put in a cell measuring 1a ft. X 6 ft. with thirteen others. For three weeks they remained in the cell, no one being allowed out for any purpose. Later he was taken to an empty house for interrogation and further brutal treatment was carried out. Eventually Sergeant Warren was moved to Oxelhoft, where conditions were even worse.

On 1st February, 1945, he and ninety-three others were put into two box-cars and sent to Germany. During the journey some of the party pried open a window of the truck and made an attempt to escape, but the guards saw them and opened fire. Sergeant Warren succeeded in getting away and evading capture by walking all night, through water waist-high. The next evening he made contact with an underground organization, and was taken to Lobith. The next night an attempt to cross the Rhine was made, but those who tried had to return to the starting point owing to strong enemy opposition. The party was then taken to a farm by a Dutch nurse and given shelter. On 22nd February, 1945, the Germans ordered all farms to be evacuated, so Sergeant Warren and some others posed as members of the farmer's family and moved with them. Later he posed as a Dutch policeman in order to prevent being taken again. He continued to evade capture until liberated by British forces in April, 1945.

Another story of indomitable courage in adversity is briefly told in the citation awarding the B.E.M. to FS (later F/O) A. R. Lacharite who flew with an R.A.F. squadron.

Flight Sergeant Lacharite was a member of the crew of an aircraft which was shot down over Holland on 25th July, 1941. He was captured by the Germans after landing by parachute, and taken first to Dulag Luft, and a month later to Stalag VIII B at Lamsdorf. By changing identities with a New Zealander, Flight Sergeant Lacharite managed to be sent out on a working party and made three escapes, all of which were eventually unsuccessful, although on the first occasion he was at liberty for three months and on the second and third occasions he reached Prague and the Polish border respectively. After the last attempt, his true identity was discovered and Flight Sergeant Lacharite was sent to Stalag Luft III at the end of July, 1942. Subsequently he engaged in tunnelling and other escape activities. In the autumn of 1944, the whole camp was moved to Fallingbostel where this airman worked in liaison with French workmen in order to obtain passports, food, and equipment for the use of escapers. Later, while on the march from Stalag 357, Flight Sergeant Lacharite and a companion left the column on the fifth day of the march and, after three days in the woods, made contact with Allied troops. Throughout his period of captivity, Flight Sergeant Lacharite showed great determination to escape and also to assist other escapers. He set a fine example to his fellow prisoners.

Equally determined efforts to escape were made by. F/L Hubert Brooks of No. 419 (Moose) Squadron and WO V. J. Bastable who served with an R.A.F. unit. Both were decorated with the M.C. Their stories follow:

On 8th April, 1942, Flight Lieutenant Brooks was navigatorbomb aimer of a Wellington aircraft, detailed to attack Hamburg. Prior to reaching the target, the aircraft caught fire and had to be abandoned. Flight Lieutenant Brooks landed near Oldenburg. Despite an injury to his knee, he disposed of his parachute and attempted to evade capture. Eventually, his injuries caused so much pain that he was compelled to seek assistance and in doing so, was handed over to the German authorities. He was taken to a prisoner of war camp at Lamsdorf on 16th April, 1942, and remained there till 10th May, 1943. During this time, Flight Lieutenant Brooks made two unsuccessful attempts to escape and, finally in May, 1943, he succeeded in getting away to, join Polish partisans with whom he remained till liberated by Russian forces in January, 1945.

The first escape entailed cutting the barbed wire on the hut window and also the wire of a double fence, brilliantly lighted and patrolled by guards. Flight Lieutenant Brooks and a companion succeeded in doing this and were travelling towards Cracow, moving by night and existing on food saved from Red Cross parcels, when they were recaptured owing to information given by pro-German Poles. After a long interrogation, Flight Lieutenant Brooks was placed in solitary confinement for fourteen days and, when this was over, had to go to hospital as his feet had been badly blistered.

On 10th September, 1942, Flight Lieutenant Brooks made his second bid for freedom, escaping this time with five other prisoners from the top storey of a building despite the armed guard on the ground floor. He walked to Lunenburg and successfully concealed himself on a train to Vienna, where he was again arrested. While en route to another prisoner of war camp, Flight Lieutenant Brooks was confined in a dugout for eight days and was severely beaten by a German non-commissioned officer for trying to escape. On arrival at the camp, he was put in solitary confinement for fourteen days. Finally in November, 1942, Flight Lieutenant Brooks was sent to work at a sawmill at Tost. While there he planned an escape but details became known to the Germans and he was warned that he would be shot if any attempt was made. Undeterred, this officer revised his plans. He made several useful contacts with Poles outside the camp and obtained civilian clothing and maps. On 10th May, 1943, he and a Sergeant cut through the window bars and escaped. They successfully evaded all efforts to capture them and reached Czestochowa. where they remained hidden till January, 1945.

Throughout the whole period, Flight Lieutenant Brooks showed great determination. He was not dismayed or deterred from attempting to escape by punishments or hardships and even when he knew he was a marked man, he continued to make further plans and efforts to escape.



(1) P/O A. C. Mynarski, V.C., of Winnipeg. (2) F/O A. de Breyne of St. Lambert, P.Q., skipper of the Moose Lancaster in which P/O Mynarski was air gunner. (3) F/O G. Brophy of Port Arthur, Ont., the rear gunner whom P/O Mynarski endeavoured to release from his turret. (4) F/L W. F. Ash of Dallas, Texas. (5) P/O Mynarski and his crewmates: (left to right) F/O Brophy, P/O W. J. Kelly of Winnipeg, FS R. Vigars of Guildford, England, F/O de Breyne, P/O Mynarski, P/O J. W. Friday of Port Arthur, Ont., and F/O A. R. Body of Ocean Falls, B.C.



V-E! A crumpled FW.190 on a captured airfield in Germany.

Warrant Officer Bastable was captured in the Rouen area in September, 1942, and was held in various prison camps. He made his first attempt to escape in May, 1943 whilst with a working party at Metsdorf, Sudetenland, having obtained civilian clothing from the Czechs. His true identity was discovered and he was returned to Stalag 344. Warrant Officer Bastable then decided to make an immediate attempt to escape in an Army uniform. He cut the wire of a second floor window and timing his action as to miss the guards, he jumped clear and escaped. He travelled in the direction of Prague, but after three days he was discovered by some German civilians. He was handed over to the authorities and sent to a Gestapo prison where he was kept for fourteen days in solitary confinement. He was then sent back to Stalag 344 and spent a further ten days in solitary confinement.

In October 1943, Warrant Officer Bastable made another attempt to escape by means of an emergency ladder in the mainshaft of a coal mine in which he was working. He gained his liberty for two days after which he was recaptured by German police in company with a Czech Air Force sergeant. He made another attempt to escape from Stalag 344, but both were recaptured and were returned to camp. Warrant Officer Bastable and the same Czech sergeant finally escaped in October, 1944, by jumping from the roof of their billets over the fence and proceeding into some woods nearby. Here they were assisted by Czech civilians. They eventually made contact with the Czech underground with arms and ammunition and took part in many operations, destroying railways, bridges, road blocks, and electrical installations. The Czech sergeant was captured again and has not been heard of since. Warrant Officer Bastable continued serving in the underground movement until he was liberated by the Russians in May, 1945

One of the most ambitious escape enterprises was that undertaken by P.O.W.s confined in Stalag Luft III at Sagan. Elaborate and painstaking plans were made by "X Organization", formed by personnel of the prison camp, and three tunnels were started. One was finally completed and, on the night of March 24th, 1944, seventy-six air force officers made their escape. Three eventually made their way to freedom, but the others were all recaptured and fifty of them were murdered in cold blood by the Gestapo. Among these victims of Nazi sadism were six R.C.A.F. officers, F/Ls Henry Birkland, Gordon A. Kidder, Patrick W. Langford, George E. McGill, James C. Wernham and George W.

Wiley. Many other R.C.A.F. officers in the Stalag had been active in "X Organization" and a number were included among the escapers in addition to the six who lost their lives. One of these was F/L C. D. Noble, who had won the D.F.C. with an R.A.F. squadron.

Flight Lieutenant Noble was forced to abandon his aircraft on June 18th, 1942, when it was shot down near the Dutch-German frontier. He and another member of the crew began to walk westward and, on the fourth day, were arrested by two Dutch policemen. After a struggle, Flight Lieutenant Noble succeeded in getting away and continued alone till he reached the outskirts of Arnhem, where he was again arrested and sent to a prisoner of war camp at Sagan in Germany. While there, he himself made three unsuccessful attempts at escape and aided in the escape of many other prisoners. Early in 1943, he attempted to get away in a garbage wagon but was discovered before it left the camp. Shortly afterwards, he made a similar attempt in a truck loaded with tree branches but was discovered before the truck passed the camp entrance. In June, 1943, a mass attempt was made by 26 prisoners of whom Flight Lieutenant Noble was one. They planned to, escape as they were being marched to the showers but the attempt was discovered within half an hour and all were recaptured the following day.

Between June, 1943, and March, 1944, Flight Lieutenant Noble took part in various tunnel digging operations and was also a member of the escape committee. On 25th March, 1944, a tunnel was successfully broken and 75 officers escaped through it. Flight Lieutenant Noble was immediately apprehended on the discovery of the escape and subsequently sentenced to three weeks solitary confinement. In January, 1945, the camp was evacuated and the risoners forced to march to Bremen. One extremely cold night, light Lieutenant Noble was instrumental in arousing or finding shelter for men who were on the verge of collapse from fatigue or cold. He was responsible on that occasion for saving at least 30 lives. Flight Lieutenant Noble was liberated on 2nd May, 1945. His enthusiasm and keenness never failed despite the many disappointments and punishments which he had to undergo. Throughout his imprisonment his services were of the highest value to his fellow prisoners.

F/L C. W. Floody of No. 401 (Ram) Squadron also had taken an active part in planning the mass escape, his civilian experience as a mining engineer making him invaluable as technical adviser in digging the tunnels.

Flight Lieutenant Floody's aircraft was shot down during operations in October, 1941. During the whole of his captivity he took a leading part in all escape activities. Flight Lieutenant Floody made a very thorough study of tunnelling work and devised many different methods of technique. He became one of the leading organizers and most indefatigable workers in the tunnels themselves. Besides being arduous, this work was frequently dangerous and, on two occasions, Flight Lieutenant Floody was buried under heavy falls of sand. In both cases, it was only due to extraordinary luck and the presence of mind of his helpers that he was rescued alive. On other occasions, he had narrow escapes from being buried, as the soil was of a sandy nature and wood for supports was extremely difficult to obtain. Flight Lieutenant Floody was largely responsible for the construction of the tunnel through which 76 officers escaped from Stalag Luft III in March, <sup>1</sup>944. Throughout his imprisonment, he showed outstanding determination to continue with this work. Time and time again, projects were started and discovered by the Germans but, despite all dangers and difficulties, Flight Lieutenant Floody persisted, showing a marked degree of courage and devotion to duty.

# Another determined escaper was F/L W. F. Ash of No. 411 (Grizzly Bear) Squadron.

Flight Lieutenant Ash crash-landed near Calais on 24th March, 1942, and made his way to Lille where arrangements were made for him to reach Paris. He was arrested in Paris at the end of May, .1942, and imprisoned at Schubin. In September 1942, he exchanged identities with an Army private and joined a fatigue party. He escaped from this party but was recaptured the same night. In the spring of 1943, Flight Lieutenant Ash and thirty-two others escaped from Schubin through a tunnel. With a companion he tried to reach Warsaw, but was recaptured four days later. Shortly afterwards he was transferred to Stalag Luft III, Sagan, where he was an active member of the escape committee for the next twenty-one months.

When other ranks were being transferred from Sagan to Stalag Luft VI, Heydekrug, Flight Lieutenant Ash changed his identity and accompanied them. Under his direction a tunnel was later made for a mass escape, but the tunnel was discovered when ten prisoners had got away. Flight Lieutenant Ash, nevertheless, continued the attempt and eventually gained his freedom. He boarded a goods train for Kovno, but was discovered by station guards and returned to Sagan. He was liberated by Allied forces at the end of April, 1945.

"Red" Noble, Wally Floody and Bill Ash were all three decorated with the M.B.E.

From the hell of Japanese prison camps there came other stories of unconquerable determination and courage. The case of W/C Birchall has already been cited. Another example of resource, ingenuity and cool bravery behind prison barbed wire is provided by F/L J. P. Fleming who served with an R.A.F. squadron in the Pacific theatre.

Flight Lieutenant Fleming was captured by the Japanese early in the war and was transferred to the Prisoner of War camp in Kuchihg, Borneo, in 1942. At an obvious risk, a plan was laid to build a small wireless set. Those responsible were faced with severe punishment and perhaps death if discovered. A Royal Air Force warrant Officer elected to build the set with the aid of a few selected volunteers who obtained scraps and bits and pieces of make-shift materials and finally the valves. Flight Lieutenant Fleming undertook the task of officer in charge of security and organized an ingenious scheme of warning fuses, look-outs and hiding places for the set which, despite vigorous searches, successfully avoided discovery. During a period of over two years, Flight Lieutenant Fleming guarded the tiny set. As the responsible officer, his punishment if caught was certain. By his disregard for his own safety, he won the admiration of his fellows and contributed materially to their high standard of morale.

## ORDERS, DECORATIONS AND MEDALS

# AWARDED TO R.C.A.F. PERSONNEL BETWEEN SEPTEMBER 1st, 1944 AND MARCH 31st, 1947.

This nominal roll supplements those published in "The R.C.A.F. Overseas: The First Four Years" and "The R.C.A.F. Overseas: The Fifth Year" which included awards for gallantry in action made up to August 31st, 1944.' The present list also includes all other awards made from the outbreak of hostilities to the end of March 1947. Limitations of space prevent publication of the names of those mentioned in despatches or commended for valuable services.

Rank and decorations shown are those held at the time of the award.

Appended to the nominal roll is a tabulation of all decorations and honours awarded to R.C.A.F. personnel from September 10th, 1939 to March 31st, 1947.

VICTORIA CROSS P/O A. C. Mynarski

GEORGE CROSS F/O R. B. Gray; A/C A. D. Ross, O.B.E.

#### COMPANION OF THE ORDER OF THE BATH

A/V/M N. R. Anderson; A/M W. A. Bishop, V.C., D.S.O., M.C., D.F.C.; A/M L. S. Breadner, D.S.C.; A/V/M G. E. Brookes, O.B.E.; A/V/M W. A. Curtis, C.B.E., D.S.C.; A/V/M J. L. E. A. De Niverville; A/M H. Edwards; A/V/M A. Ferrier, M.C.; A/V/M K. M. Guthrie, C.B.E.; A/V/M F. V. Heakes; A/V/M G. R. Howsam, M.C.; A/V/M G. O. Johnson, M.C.; A/V/M T. A. Lawrence; A/V/M R. Leckie, D.S.O., D.S.C., D.F.C.; A/V/M C. M. McEwen, M.C., D.F.C.; A/V/M F. S. McGill; A/V/M A. L. Morfee, C.B.E.; A/V/M K. G. Nairn; A/V/M C. R. Slemon, C.B.E.; A/V/M E. W. Stedman, O.B.E.; A/V/M L. F. Stevenson; A/V/M J. A. Sully, A.F.C.; A/V/M G. V. Walsh, C.B.E.

# COMMANDER OF THE ORDER OF THE BRITISH EMPIRE A/C J. G. Bryans, O.B.E.; G/C A. P. Campbell; A/C H. L. Campbell; A/C J.E. A. Charest; A/C H. G. Clappison; A/C W. E. Cockram; A/C R. R. Collard;

A/C M. Costello, O.B.E.; A/V/M A. T. N. Cowley; A/V/M G. M. Croil, A.F.C.; A/V/M W. A. Curtis, D.S.C.; G/C C. R. Dunlap; A/C H. B. Godwin, O.B.E.; A/C R. C. Gordon; A/C K. M. Guthrie; G/C W. F. Hanna; A/C J. L. Hurley; A/C G. N. Irwin; A/C A. L. James; A/C A. L. Johnson; A/C J. G. Kerr, A.F.C.; G/C D. E. MacKell; A/C R. E. McBurney; A/C E. E. Middleton; A/C F. R. Miller; A/C A. L. Morfee; A/C N. F. Mossop; A/C J. M. Murray; A/C G. S. O'Brian, A.F.C.; A/C W. A. Orr, O.B.E.; A/C J. L. Plant; G/C G. J. Powell; A/V/M A. Raymond; A/C A. D. Ross, G.C., O.B.E.; A/C A. H. K. Russell; G/C C. R. Slemon; A/C D. M. Smith; A/C S. G. Tackaberry; A/C J. W. Tice, A/C F. G. Wait; A/C G. E. Wait; A/V/M G. V. Walsh, M.B.E.

# SECOND BAR TO THE DISTINGUISHED SERVICE ORDER G/C J. E. Fauquier, D.S.O., D.F.C.

# BAR TO THE DISTINGUISHED SERVICE ORDER W/C G. C. Keefer, D.S.O., D.F.C.

#### DISTINGUISHED SERVICE ORDER

F/L J. A. Anderson; W/C A. F. Avant, D.F.C.; W/C R. Bannock, D.F.C.; F/L R. E. Curtis, D.F.M.; F/L R. G. Dale, D.F.C.; S/L J. R. Dow, D.F.C.; S/L G. B. Ellwood, D.F.C.; F/L W. L. Foote; W/C V. F. Ganderton, D.F.C.; W/C R. A. Gordon, D.F.C.; W/C F. G. Grant, D.F.C.; S/L J. T. Hall, D.F.C.; F/O C. M. Hay; S/L R. K. Hayward, D.F.C.; S/L O. C. Kallio, D.F.C.; W/C' G. C. Keefer, D.F.C.; S/L H. G. Keillor, D.F.C.; S/L W. T. Klersy, D.F.C.; S/L D. A. MacFadyen, D.F.C.; S/L L. L. MacKinnon, D.F.C.; F/O D. A. McGillivray; S/L H. W. McLeod, D.F.C.; W/C D. J. McQuoid, D.F.C.; F/O J. F. Mooney; W/C H. A. Morrison, D.F.C.; S/L C. H. Mussells; G/C W. F. M. Newson, D.F.C.; S/L G. W. Northcott, D.F.C.; S/L W. A. Olmsted, D.F.C.; S/L J. W. Perry, D.F.C.; W/C B. D. Russel, D.F.C.; F/L E. W. Smith; W/C J. D. Somerville, D.F.C.; W/C B. N. G. Sparks; S/L G. A. Sweany, D.F.C.; S/L H. Tilson, D.F.C.; S/L H. C. Trainor, D.F.C.; S/L W. C. Vanexan, D.F.C.; W/C R. C. A. Waddell, D.F.C.; F/L H. A. Walker, D.F.C.; S/L J. V. Watts, D.F.C.; S/L D. J. Williams, D.F.C.

#### OFFICER OF THE ORDER OF THE BRITISH EMPIRE

G/C A. O. Adams; S/L J. P. Alexander; W/C C. L. Annis; G/C A. K. Aspden; G/C H. H. Atkinson; G/C W. W. Bean; W/C L. J. Birchall, D.F.C.; S/L W. B. Boggs; S/L D. A. Brewster; W/C M. Brown; A/C J. G. Bryans; G/C S. N. F. Chant; W/C A. C. P. Clayton, D.F.C.; G/C W. I. Clements; W/C W. B. Cleveland; G/C M. L. Colp; G/C C. A. Cook; W/C T. F. Cooper; G/C M. Costello; G/C S. G. Cowan; W/C R. S. Cross; S/L J. H. Curry, D.F.C.; Sqn/O J. F. Davey; G/C C. A. Davidson; G/C R. C. Davis; G/C P. Y. Davoud; G/C H. A. W. Dickson; G/C H. R. Dowie; G/C C. G. Durham, M.M.; W/C H. R. F. Dyer, D.F.C.; G/C J. A. Easton; G/C J. H. Ferguson; G/C R. H. Foss; S/L W. R. Franks; S/L L. R. Freeman; W/C J. H. Giguere; W/C A. H. S. Gillson; G/C H. B. Godwin; W/C D. Gooderham; W/C E. B. Goodspeed; G/C C. C. P. Graham; G/C C. H. Greenway; G/C A. M. Haig; G/C C. H. Hall; G/C A. J. Hanchet-Taylor; G/C D. A. Harding, A.F.C.; G/C M. M. Hendrick; G/C B. D. Hobbs,

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Fox; P/O G. W. Fox; P/O K. C. Fox; F/O H. O. Foy; P/O J. H. Frame; W/C K. A. France; F/O J. P. W. Francis; P/O N. A. Francis; F/O B. Frankel; F/L E. M. C. Franklin; F/O G. R. Frankling; S/L S. R. Frankling; F/L H. G. Franks; P/O A. D. Fraser; F/O D. J. Fraser; F/O J. W. Fraser; F/O K. V. Fraser; P/O L. M. Fraser; P/O M. E. Fraser; P/O R. C. Fraser; F/O G. H. Free; F/O D. B. Freeborn; F/L A. B. Freeman; S/- D. B. Freeman; P/O G. C. Freeman; F/O A. B. French; F/O C. D. French; F/L J. A. French; F/L J. B. Friedlander; F/L L. A. Friedman; F/O J. K. Friesen; P/O H. D. F. Frith; F/L H. J. Fritz; F/O D. P. Frost; F/O G. R. Frost; F/O C. W. Fry; F/O R. N. Fuller; F/O K. R. Fulton; F/L W. H. Fulton; F/O J. G. Fultz; F/L T. R. Futer; F/L K. V. Gadd; F/L J. A. E. Gagnon; F/L H. P. Galarmeau, D.F.M.; F/O J. A. Galbraith; F/O J. R. Galbraith; F/O L. J. Galbraith; F/O L. L. Galbraith; F/L J. Galipeau; F/L R. Gall; P/O J. U. E. Gallant; F/O R. M. Gallen; F/O J. N. Gallicano; P/O I. M. 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Hassan; FS W. R. Hawes; FS J. B. Hawthorne; Cpl. A. S. Hayton; Cpl. A. E. J. Henry; Sgt. G. Heyworth; FS B. H. Higginbottom; Sgt. P. N. Hills; FS W. B. Hindley; Sgt. C. A. Hobbs; FS D. B. Hogg; FS A. Holley; FS R. C. D. Honour; Sgt. H. M. Hopkins; LAC G. G. Hosken; Sgt. J. S. Hoye; FS W.' O. Hudson; Sgt. J. M. T. Hughes; Sgt. W. L. R. Huston; FS J. J. Huyck; Sgt. F. R. Ireland; FS W. G. Jackson; FS P. C. Jacobs; LAC C. R. James; FS H. D. L. James; Sgt. T. D. Jamieson; Cpl. E. J. Jenkins; FS E. T. Johnson; LAC F. L. Johnson; Cpl. W. J. Johnston; FS H. G. Josey; Cpl. E. H. Kassie; FS W. J. Kelley; Sgt. A. G. Kelly; FS S. R. Kerr; Cpl. W. B. Kerr; LAW S. G. Kidd; FS T. B. Kirkey; Sgt. F. H. Klappstein; Cpl. K. A. T. E. Knowles; Cpl. J. W. Kressler; LAC J. J. T. Labonte; FS A. R Lacharite; Cpl. A. Lee; FS L. A. Lee; FS R. P. Leitch; Sgt. P. Lepage; FS V. M. Lethangue; Sgt. J. W. Linn; FS E. B. Locke; FS R. E. Longard; Sgt. E. J. Love; Sgt. A. M. Lynass; FS J. H. Lyon; Sgt. L. R. MacBride; LAC G. W. MacDonald; Sgt. M. D. MacDonald; FS S. MacDonald; FS D. E. MacKenzie; Sgt. A. B. MacQueen; FS J. H. A. McAnally, FS J. McCaig; Cpl. R. J. McCarthy; Sgt. T. McCormack; Sgt. W. T. B. McDermot; Sgt. D. McDougall; FS A. J. McGilvray; Sgt. H. J. McGovern; Sgt. A. L. McIntosh; LAC M. M. McKenzie; FS R. I. McKenzie; FS S. A. McKenzie; FS R. G. McLean; AC2 E. G. Machan; Sgt. D. L. Magee; LAC G. R. Magee; FS N. W. Mains; FS J. O. Major; Cpl. W. M. Malcolmson; FS A. M. Marier; Sgt. R. J. Mark; FS J. D. Massie; FS A. L. Meades; FS J. B. Medlen; FS H. H. Mellish; FS J. W. H. Mellor; Cpl. S. L. Mellows; FS J. P. G. Mercier; FS E. V. R. Merrick; FS J. R. L. Meyers; FS A. A. Miller; Cpl. H. G. Minter; Sgt. G. M. Mooney; FS B. I. Moore; FS D. E. Moore; FS J. R. Moore; Sgt. P. W. Moote; FS J. M. J. Morel; FS H. Morrison; Sgt. H. W. Morrison; Cpl. S. Mosey; FS H. M. Mossip; FS H. H. Muncaster; FS L. S. Munsie; FS W. A. Murray; FS W. A. Murrell; Sgt. R. B. S. Myers; FS E. S. Neill; Sgt. R. H. Nelson; Sgt. A. W. Nichols; FS B. W. Nicholson; Sgt. D. M. Nicholson; FS J. A. Nicholson; Cpl. G. F. Nicholson; Cpl. H. J. Nielsen; AC1 W. F. Nightingale; FS R. Nisbet; FS N. R. Noakes; FS H. L. Ogletree; FS A. Oldham; Sgt. M. E. Oliver; Sgt. A. P. Olson; PS D. E. Orchard; FS D. J. Page; LAC H. Parfitt; Sgt. A. M. Parker; Sgt. L. I. Parliament; Cpl. N. I. Parnham; Sgt. W. A. Patten; FS F. J. Payne; FS G. Pelletier; FS J. A. Perkins; LAC G. A. Peterson; Cpl. A. B. Phillips; Sgt. R. A. Picard; FS L. C. Pingel; FS J. B. Poppitt; FS S. M. Porter; FS S. C. S. Radford; Sgt. G. K. Reardon; Sgt. T. G. Rhodes; FS R. J. L. Ricard; Cpl. W. W. Riglin; 'Cpl. A. P. Robertson; FS J. R. Robertson; Sgt. G. R. Roblin; Sgt. J. B. Rogan; FS R. R. L. Rogers; FS H. M. O. Rooke; Cpl. C. L. M. Roschaert; Cpl. W. L. Sangster; Sgt. D. E. E. Sankey; Sgt. H. G. J. Saye; FS C. W. Scott; Sgt. E. L. Scott; LAC L. A. Scrimshaw; FS E. D. Sharp; FS M. Sheine; LAC A. E. Sinclair; FS G. R. Slaughter; Sgt. L. E. Smallwood; FS D. Smith; FS D. E. Smith; FS E. Smith; FS L. G. Smith; FS S. L. Smith; Cpl. W. H. Smith; FS G. Snape; LAC C. A. G. Snelling; FS D. Stannah; PS R. G. Stantial; Cpl. O. C. Steele; Cpl. E. Stevens; Sgt. H. G. Stewart; Cpl. H. R. Stewart; FS H. W. Stewart; FS T. Stewart; Sgt. O. H. Stibbon; FS J. W. Stocker; Cpl. S. E. Stubbs; FS F. J. M. Sullivan; FS G. F. Sullivan; Sgt. C. M. Sweigard; Cpl. R. Taverner; Sgt. C. W. Teasdale; FS L. L. Tercier; FS B. L. Thomas; Sgt. G. E. Thomas; FS K. L. Thomson; FS W. G. Tomkins; FS A. Topham; FS J. C. Trethowan; Sgt. E. D. Trevors; Cpl. E. Tupper; Sgt. N. J. Turnbull; Sgt. M. J. Turpin; Cpl. G. L. Twiss; FS G. H. Vacola; FS L. J. D. Valpy; FS W. N. Veale; Sgt. V. E. Vinen; FS C. N. Vollick; FS D. A. Walrod; Sgt. J. L. N. Warren; Sgt. M. E. Warren; FS A. D. Watson; FS W. A. West; FS D. L. Whellamg; FS R. A. Whyte; FS W. J. Widger; Sgt. B. C. M. Wiebe; FS A. F. Wigglesworth; LAW E. Wilde; LAC P. P. Wilkinson; FS E. R. Williams; FS W. E. Williams; FS B. Wilson; Sgt. J. H. Wilson; Sgt. W. Wilson; LAC R. R. Wolfe; FS D. M. Wolochow; Cpl. N. A. Wright; PS H. P. Yandon; WO L. A. Yellowlees.

### FOREIGN DECORATIONS

Awarded To Personnel of the R.C.A.F. (September 10th, 1939 to March 31st, 1947)

#### BELGIUM

MILITARY CROSS, First Class A/M L. S. Breadner, C.B., D.S.C.

#### **CZECHOSLOVAKIA**

ORDER OF THE WHITE LION, Class II A/C/M L. S. Breadner, C.B., D.S.C.; A/V/M J. L. E. A. de Niverville, C.B.; A/M R. Leckie, C.B., D.S.O., D.S.C., D.F.C.

ORDER OF THE WHITE LION, Class III A/V/M H. L. Campbell, C.B.E.; A/V/M G. R. Howsam, C.B., M.C.

ORDER OF THE WHITE LION, Class IV W/C J. L. P. A. Gelinas, M.B.E.; W/C G. W. Jacobi; S/L F. W. McCrea; S/L S. E. Sparling.

WAR CROSS 1939 (Military Cross)

A/V/M H. L. Campbell, C.B.E.; F/L J. Gellner, D.F.C.; F/L J. H. C. Lewis; P/O R. P. Wilkin; A/C L. E Wray, O.B.E., A.F.C.

MEDAL FOR VALOUR F/L J. Gellner, D.F.C.

MEDAL OF MERIT, First Class

F/O M. Hlady; F/L P. J. Roy, D.F.C.; S/L E. H. M. Walsh; F/L G. G. Wright, A.F.C.

MEDAL OF MERIT, Second Class LAC C. Martin; Cpl. G. J. S. Stoker; Cpl. D. G. Turner.

#### FRANCE

### LEGION OF HONOUR

W/C J. J. Desloges; A/M G. O. Johnson, C.B., M.C.; A/V/M C. M. McEwen, C.B., M.C., D.F.C.

CROIX DE GUERRE WITH PALM F/L J. A. King, D.F.C.

### CROIX DE GUERRE WITH GOLD STAR F/L K. Tyley

CROIX DE GUERRE WITH SILVER STAR

WO M. A. Botterill; FS W. H. Bowles; P/O P. H. Gingras; F/O, D. R. Robertson, D.F.C.; F/O H. V. Smith, D.F.C.

#### CROIX DE GUERRE

FS F. M. Adair; F/L A. J. Allison; F/L J. A. Anderson, D.S.O., D.F.C.; FS R. L. Beckingham; F/L E. M. Bishop; F/L F. J. Bitz; F/L V. J. Blake, D.F.C.; F/O R. G. Burns; F/L J. H. Cartmell, D.F.C.; F/L R. B. Charters, D.F.M.; P/Q J. Clark; F/O L. E. Cochand; F/O L. R. Copp; F/O H. H. S. Cush; F/L R. H. Davidson, D.F.C.; WO M. D. Donodan; F/O R. Dutkowski, D.F.C.; S/L W. M. Fairey, D.F.C.; F/L G. W. Forman, D.F.C.; S/L W. G. Gardiner; F/O G. L. Gibson; F/O W. H. Godfrey, D.F.C.; S/L F. E. Guillevin, D.F.C.; F/O H. A. Hannah; F/L G. A. Harpur; F/O E. J. Harrington; F/L G. L. Heron, D.F.C.; WO J. E. Hill; F/O E. Hunter; P/O D. G. Irwin, D.F.C.; F/O L. J. Isaacson; F/O S. J. Licquorish; WO R. T. Lippincott; F/O J. A. Lowndes; F/O B. M. Mackenzie; F/L G. E. MacNeill; FS R. P. McBean; FS E. W. McGregor; FS W. J. Markey; F/O J. G. Mills, D:F.C.; F/L T. H. Prescott; WO V. E. Scott; F/O F. G. Sheppard; S/L W. M. Stephen, D.S.O.; F/O I. R. Sterling, D.F.C.; F/O J. M. Stevenson; F/L D. G. Stewart, D.F.C.; F/O W. E. Umpherson; F/O R. A. Wallace, D.F.C.; F/L D. M. Walz; F/O R. A. Watson; F/L J. F. Weaver, D.F.C.; WO W. S. Weaver; F/O G. G. Wharry; P/O G. M. Whelpdale.

#### NETHERLANDS

KNIGHT OFFICER OF THE ORDER OF ORANGE-NASSAU WITH SWORDS S/L H. D. Irwin

OFFICER OF THE ORDER OF ORANGE-NASSAU WITH SWORDS W/C J. F. McCreary; W/C H. P. Rickard.

OFFICER OF THE ORDER OF ORANGE-NASSAU S/L H. D. Branion

#### FLYING CROSS

F/L R. N. Bassarab; F/L R. E. Churchill; WO J. P. E. de Chaplaine; P/O J. F.

Ellis; F/L E. G. Ireland, D.F.C.; F/L J. D. Mitchner, D.F.C.; S/L W. A. Prest; F/L A. J. de L. Ruttledge, D.F.C.; P/O D. S. Sellars; WO W. P. Stewart; F/L H. A. Walker, D.S.O., D.F.C.

# BRONZE LION W/C J. A. Sproule, D.F.C.

#### **NORWAY**

KING HAAKON VII COMMEMORATION MEDAL Sgt. T. L. Hardwell; F/L S. G. K. MacDonald; P/O K. A. Solmundson.

#### POLAND

GRAND OFFICER'S CROSS OF THE ORDER OF POLONIA RESTITUTA A/M L. S. Breadner, C.B., D.S.C.; A/M R. Leckie, C.B., D.S.O., D.S.C., D.F.C.

#### UNION OF SOVIET SOCIALIST REPUBLICS

MEDAL FOR VALOUR FS W. L. McGuinty

#### UNITED STATES OF AMERICA

SILVER STAR

A/C C. R. Dunlap, C.B.E.; F/L K. O. Moore, D.S.O.

#### LEGION OF MERIT, DEGREE OF COMMANDER

A/C/M L. S. Breadner, C.B., D.S.C.; A/V/M H. L. Campbell, C.B.E.; A/V/M W. A. Curtis, C.B., C.B.E.; A/V/M J. L. E. A. de Niverville, C.B.; A/V/M F. V. Heakes, C.B.; A/V/M G. R. Howsam, C.B., M.C.; A/V/M T. A. Lawrence, C.B.; A/M R. Leckie, C.B., D.S.O., D.S.C., D.F.C.; A/V/M C. M. McEwen, C.B., M.C., D.F.C.; A/V/M L. F. Stevenson, C.B.;, A/V/M J. A. Sully, C.B., A.F.C.; A/C S. G. Tackaberry, C.B.E.; A/V/M G. V. Walsh, C.B., C.B.E.

#### LEGION OF MERIT. DEGREE OF OFFICER

W/C J. I. M. Beddall, M.B.E.; S/L G. Bronfman; G/C C. A. Davidson, O.B.E.; W/C W. R. Franks, O.B.E.; A/V/M K. M. Guthrie, C.B., C.B.E.; G/C G. E. Hall, A.F.C.; G/C W. F. Hanna, C.B.E.; S/L F. F. Lowe; W/C E. G. MacPherson; S/L D. S. D. McDonald, M.B.E.; G/C V. H. Patriarche, O.B.E., A.F.C.; W/C K. R. Patrick, O.B.E.; A/V/M C. R. Slemon, C.B., C.B.E.; W/C E. E. Smith, M.B.E.; G/C F. H. Smith, O.B.E.; G/C R. M. Smith; W/C J. L. Walmsley, M.B.E.; W/C P. L. P. W. Webb, M.B.E.; S/L P. E. Willis.

# LEGION OF MERIT, LEGIONNAIRE G/C F. A. Sampson, O.B.E.

#### DISTINGUISHED FLYING CROSS

F/L J. G. Aldrich, D.F.C.; P/O T. M. Anderson; F/O A. E. Andrews; F/O R. A. Brown; F/L R. A. Buckham, D.F.C.; P/O A. L. Carr; F/O J. M. Churchill; F/L J. B. Davidson; F/L D. M. Elliott; F/L D. H. Gross; W/C K. L. B. Hodson, O.B.E., D.F.C.; F/O D. P. MacIntyre, D.F.C., A.F.C.;

F/O A. J. Mackie; F/O A. A. Martin; W/C J. W. Reid; P/O H. T. Rennie; W/C J. M. W. St. Pierre, A.F.C.; F/L J. A. Stephens; F/L B. W. Wilkesman.

SOLDIER'S MEDAL Cpl. D. M. Harrett

**BRONZE STAR** 

W/C D. Gooderham, O.B.E.; F/L W. L. C. Jones; S/L D. A. Willis, D.F.C.

MEDAL OF FREEDOM S/L J. R. Alexander

AIR MEDAL AND SEVEN OAK LEAF CLUSTERS P/O T. M. Anderson

AIR MEDAL AND SIX OAK LEAF CLUSTERS F/O A. A. Martin

AIR MEDAL AND FOUR OAK LEAF CLUSTERS P/O C. S. Fleck; F/O W. A. J. Miron

AIR MEDAL AND THREE OAK LEAF CLUSTERS P/O R. D. Gall; P/O A. P. Lamoureux; P/O R. D. Robertson

AIR MEDAL AND TWO OAK LEAF CLUSTERS
F/O J. A. Brown; P/O A. L. Carr; P/O D. H. Cruikshank; F/O C. E. M. Emery;
F/O S. L. Hall; F/O C. MacLean; P/O G. W. Martino; P/O F. Robertson; Sgt. A. L. Rodgers.

AIR MEDAL AND ONE OAK LEAF CLUSTER Sgt. D. S. Fraser; P/O J. J. P. Paradis; P/O R. E. Sibbald

#### AIR MEDAL

S/L R. J. Bennell, D.F.C.; S/L K. A. Boomer, D.F.C.; F/O L. E. Cochand; F/L R. S. Cox; F/L E. B. Elliott; F/O R. F. Galbraith; Sgt. W. T. Galliver; F/L R. F. Gill; F/O J. G. Gohl; P/O H. O. Gooding, D.F.C.; P/O N. H. Hobbie; F/O R. Lynch; F/O W. M. MacLean; F/O D. M. McDuff; F/L D. .M. McKenzie, D.F.C.; F/O L. McMillan, D.F.C.; P/O J. R. Myles, D.F.C.; F/L W. A. Prest; F/L A. W. Roseland; F/O D. G. Scott, D.F.C.; S/L B. R. Walker, D.F.C.; F/L J. M. Wallace, D.F.C.; F/L B. Warren, D.F.C.; F/L D. Warren, D.F.C.; F/L G. R. Warrington.

PURPLE HEART Sgt. W. D. Brown

# SUMMARY OF DECORATIONS AND HONOURS CONFERRED UPON R.C.A.F. PERSONNEL

(September 10th, 1939-March 31st, 1947)

(September 10th, 1757-Waren 51st, 1747)	
Victoria Cross	2
George Cross	4
Companion of the Order of the Bath	23
Commander of the Order of the British Empire	
Second Bar to the Distinguished Service Order	
Bar to the Distinguished Service Order	
Distinguished Service Order	73
Officer of the Order of the British Empire	111
Member of the Order of the British Empire	315
Royal Red Cross (Class I)	
Military Cross	
Second Bar to the Distinguished Flying Cross	212
Bar to the Distinguished Flying Cross	
Distinguished Flying Cross  Bar to the Air Force Cross	4,01
Air Force Cross	42
Royal Red Cross (Class II)	20
Distinguished Conduct Medal	20
Conspicuous Gallantry Medal (Flying)	12
George Medal	20
Military Medal	
Distinguished Flying Medal	51:
Air Force Medal	42
British Empire Medal	38
Mentioned in Despatches	
Commendation	29
FOREIGN DECORATIONS	
BELGIUM	
Military Cross, First Class	
CZECHOSLOVAKIA	
Order of the White Lion, Class II	3
Order of the White Lion, Class III	7
Order of the White Lion, Class IV	
Military Cross (War Cross 1939)	
Medal for Valour	
Medal of Merit, First Class	
Medal of Merit, Second Class	3
FRANCE Legion of Honour	
Croix de Guerre with Palm	
Croix de Guerre with Palm  Croix de Guerre with Gold Star	
Croix de Guerre with Silver Star	
C101A GC GGC11C WITH DILVEL DIGI	

Croix de Guerre	55
NETHERLANDS	
Order of Orange-Nassau, Knight Officer with Swords	1
Order of Orange-Nassau, Officer with Swords	2
Order of Orange-Nassau, Officer	I
Flying, Cross	11
Bronze Lion	1
NORWAY	
King Haakon VII Commemoration Medal	3
POLAND	
Order of Polonia Restituta (Grand Officer's Cross)	2
UNION OF SOVIET SOCIALIST REPUBLICS	
Medal for Valour	1
UNITED STATES OF AMERICA	
Silver Star	2
Legion of Merit, Degree of Commander	13
Legion of Merit, Degree of Officer	19
Legion of Merit, Legionnaire	I
Distinguished Flying Cross	19
Soldier's Medal	1
Bronze Star	3
Medal of Freedom	1
Aid Medal and Oak Leaf Clusters	19
Air Medal	25
Purple Heart	1

### ORDERS, DECORATIONS AND MEDALS AWARDED TO PERSONNEL. OF THE ALLIED AIR FORCES SERVING WITH R.C.A.F. UNITS OVERSEAS

BAR TO THE DISTINGUISHED SERVICE ORDER W/C K. J. Lawson, D.S.O., D.F.C. (R.A.F.V.R.) No. 405 Squadron.

### DISTINGUISHED SERVICE ORDER

S/L P. Mains-Smith, D.F.C. (R.A.F.V.R.) No. 405 Squadron; F/L G. A. Martin, D.F.C. (R.A.F.V.R.) No. 405 Squadron.

## MEMBER OF THE ORDER OF THE BRITISH EMPIRE

WO D. D. P. Leitch (R.A.F.V.R.) No. 408 Squadron; WO V. R. J. Slaughter (R.A.F.V.R.) No. 405 Squadron; WO D. B. Thrower (R.A.F.V.R.) No. 405 Squadron.

#### BAR TO THE DISTINGUISHED FLYING CROSS

F/L V. E. Bowden, D.F.C. (R.A.F.V.R.) No. 405 Squadron; F/O R. R. F. Bruce, D.F.C. (R.A.F.V.R.) No. 418 Squadron; F/O F. Cousins, D.F.C. (R.A.F.V.R.)

No. 405 Squadron; W/C A. K. Gatward, D.S.O., D.F.C. (R.A.F.) No. 404 Squadron; F/L G. F. W. Gillespie, D.F.C. (R.A.F.V.R.) No 405 Squadron; F/L W. F. Howard, D.F.C. (R.A.F.V.R.) No. 405 Squadron; F/L A. D. N. Kanarens, D.F.C. (R.A.F.V.R.) No. 405 Squadron; S/L L. L. McLeod, D.F.C. (R.A.A.F.) No. 405 Squadron; F/L G. A. Martin, D.S.O., D.F.C. (R.A.F.V.R.) No. 405 Squadron; F/L J. W. C. Nairn, D.F.C. (R.A.F.V.R!) No. 405 Squadron; F/L E. O'Connor, D.F.C. (R.A.F.V.R.) No. 405 Squadron; F/L D. B. Ross, D.F.C. (R.A.F.V.R.) No. 427 Squadron; F/L G. B. Sharman, D.F.C. (R.A.F.V.R.) No. 433 Squadron; F/O D. G. Tongue, D.F.C. (R.A.F.V.R.) No. 410 Squadron; S/L H. W. A. Trilsbach, D.F.C. (R.A.F.V.R.) No. 405 Squadron.

## DISTINGUISHED FLYING CROSS

P/O E. Appleton (R.A.F.V.R.) No. 429 Squadron; P/O W. J. Armour (R.A.A.F.) No. 428 Squadron; F/L F. A. Badgery (R.A.A.F.) No. 431 Squadron; F/O R. Bannister (R.A.F.V.R.) No. 434 Squadron; F/O L. J. Barcham (R.A.F.V.R.) No. 404 Squadron; P/O A. Barnes (R.A.F.V.R.) No. 43,1 Squadron; P/O C. O. Beadman (R.A.F.V.R.) No. 405 Squadron; P/O P. Beaumont (R.A.F.V.R.) No. 427 Squadron; P/O J. T. H. Beech (R.A.F.V.R.) No. 431 Squadron; P/O G. G. Bellamy (R.A.F.V.R.) No. 405 Squadron; P/O W. Bentley (R.A.F.V.R.) No. 432 Squadron; F/O B. Bevan (R.A.F.V.R.) No. 405 Squadron; F/O G. G. F. Bickerstaff (R.A.F.) No. 405 Squadron; P/O I. H. Black (R.A.F.V.R.) No..431 Squadron; S/L R. S. Boast (R.A.F.V.R.) No 405 Squadron; P/O P. J. Brickstock (R.A.F.V.R.) No. 420 Squadron; F/O R. J. Bromley (R.A.F.V.R.) No. 424 Squadron; F/L R. Brook (R.A.F.V.R.) No. 405 Squadron; F/L F. K. Brown (R.A.F.V.R.) No. 433 Squadron; F/O R. R. F. Bruce (R.A.F.V.R.) No. 418 Squadron; F/O J. Buckley (R.A.F.V.R.) No. 431 Squadron; P/O W. S. Burton (R.A.F.V.R.) No. 426 Squadron; F/L S. M. Byrne (R.A.F.V.R.) No. 433 Squadron; P/O R. J. Capon (R.A.F.V.R.) No. 433 Squadron; F/O C. F. Carter (R.A.F.) No. 427 Squadron; P/O J. W. Chadwick (R.A.F.V.R.) No. 432 Squadron; F/O A. J. B. Childs (R.A.F.V.R.) No. 428 Squadron; F/L S. Chiles (R.A.F.V.R.) No. 428 Squadron; P/O W. A. Clare (R.A.F.V.R.) No. 428 Squadron; P/O A. S. Clark (R.A.F.V.R.) No. 434 Squadron; P/O D. Clark (R.A.F.V.R.) No. 428 Squadron; F/L A. J. F. Clark (R.A.F.V.R.) No. 427 Squadron; F/L P. H. Clifton (R.A.F.V.R.) No. 408 Squadron; F/O G. B. Collins (R.A.F.V.R.) No. 431 Squadron; P/O C. J. Colvill (R.A.F.V.R.) No. 428 Squadron; F/L E. Cook (R.A.F.V.R.) No. 427 Squadron; F/L W. G. Craig (R.A.A.F.) No. 431 Squadron; F/O G. D'Arcy (R.A.F.V.R.) No. 426 Squadron; P/O H. G. Davies (R.A.F.V.R.) No. 424 Squadron; F/O J. T. H. De'Middelaer (R.A.F.V.R.) No. 415 Squadron; F/O L. Dennis (R.A.F.V.R.) No. 433 Squadron; P/O J. R. Dixon (R.A.F.V.R.) No. 431 Squadron; F/L J. P. Dooley (R.A.F.V.R.) No. 405 Squadron; F/L R. W. Duncanson (R.A.F.V.R.) No. 432 Squadron; F/L J. Eames (R.A.F.V.R.) No. 409 Squadron; P/O G. J. Edwards (R.A.F.V.R.) No. 405 Squadron; P/O K. M. Evans (R.A.F.V.R.) No. 429 Squadron; F/O S. T. Faithful (R.A.F.V.R.) No. 404 Squadron; P/O F. W. J. Flippant (R.A.F.V.R.) No. 419 Squadron; F/L H. Fogg, D.F.M. (R.A.F.V.R.) No. 427 Squadron; P/O R. A. Forsdyke (R.A.F.) No. 405 Squadron; F/O W. J. Fry (R.A.F.V.R.) No. 433 Squadron; WO H. C. Geddes (R.A.A.F.) No. 405 Squadron; F/O J. Geddes (R.A.F.V.R.) No. 431 Squadron; P/O M. A. Gerard

(R.A.F.V.R.) No. 419 Squadron: F/L G. F. W. Gillespie (R.A.F.V.R.) No. 405 Squadron; P/O R. G. Gillett (R.A.F.V.R.) No. 424 Squadron; F/O O. M. Gilmour (R.A.F.V.R.) No. 431 Squadron; F/L H. J. Goodwin, D.F.M. (R.A.F.V.R.) No. 425 Squadron; F/O D. Gray (R.A.F.V.R.) No. 434 Squadron; P/O R. Grieve (R.A.F.V.R.) No. 428 Squadron; F/O J. H. Gribbon (R.A.F.V.R.) No. 427 Squadron; P/O W. H. Griffiths (R.A.F.V.R.) No. 429 Squadron; F/O G. O. Gurney (R.A.F.V.R.) No. 427 Squadron; F/O J. L. N. Hall (R.A.F.V.R.) No. 406 Squadron; F/O A. W. Hallett (R.A.F.V.R.) No. 434 Squadron; F/L A. H. Hamel-Smith (R.A.F.V.R.) No. 429 Squadron; F/L R. H. Hamer (R.A.F.V.R.) No. 432 Squadron; F/L W. E. Hamilton, D.F.M. (R.A.F.V.R.) No. 425 Squadron; F/O R. J. Hannaford (R.A.F.V.R.) No. 405 Squadron; P/O A. R. W. Hardes (R.A.F.V.R.) No. 433 Squadron; P/O S. Harle (R.A.F.V.R.) No. 420 Squadron; F/O A. G. T. Hart (R.A.F.V.R.) No. 408 Squadron; WO H. R. Hart (R.A.F.) No. 405 Squadron; P/O A. L. Haynes (R.A.F.V.R.) No. 428 Squadron: F/L D. W. Haseldine (R.A.F.V.R.) No. 419 Squadron; F/O 1. L. C. Heames (R.A.F.V.R.) No. 405 Squadron; P/O A. H. Henderson (R.A.F.V.R.) No. 429 Squadron; P/O R. G. Henderson (R.A.F.V.R.) No. 405 Squadron; P/O J. W. Holt (R.A.F.V.R.) No. 428 Squadron; P/O W. F. Howard (R.A.F.V.R.) No. 405 Squadron; F/L J. E. Howell (R.A.F.V.R.) No. 418 Squadron; P/O T. Hume (R.A.F.V.R.) No. 427 Squadron; P/O A. F. Illingworth (R.A.F.V.R.) No. 434 Squadron; F/L R. C. Instrell (R.A.F.V.R.) No. 431 Squadron; P/O D. Jackson (R.A.F.V.R.) No. 428 Squadron; F/O P. R. Janson (R.A.F.V.R.) No. 433 Squadron; P/O C. F. Jelley (R.A.F.V.R.) No. 426 Squadron; F/L A. W. Jenning (R.A.F.V.R.) No. 433 Squadron; F/O B. Job (R.A.F.V.R.) No. 418 Squadron; F/O E. C. G. Jones (R.A.F.V.R.) No. 426 Squadron; F/O T. L. Jones (R.A.F.V.R.) No. 433 Squadron; F/O W. F. Jowsey (R.A.F.V.R.) No. 428 Squadron; P/O A. D. N. Kanarens (R.A.F.V.R.) No. 405 Squadron; WO N. W. Karpassiti (R.A.F.V.R.) No. 419 Squadron; F/L H. J. S. Kemley (R.A.F.V.R.) No. 432 Squadron; P/O L. Kier (R.A.F.V.R.) No. 431 Squadron; P/O D. E. King (R.A.F.V.R.) No. 405 Squadron; F/O J. C. King (R.A.A.F.) No. 431 Squadron; P/O R. S. King (R.A.F.V.R.) No. 427 Squadron; F/O C. H. A. Kirtland (R.A.F.V.R.) No. 427 Squadron; F/O E. Lainchbury f R.A.F.V.R.) No. 431 Squadron; F/O W. V. Lane (R.A.F.V.R.) No. 434 Squadron; F/L D. J. Langley, D.F.M. (R.A.F.V.R.) No. 405 Squadron; F/O B. D. J. Lanktree (R.A.F.V.R.) No. 408 Squadron; F/O P. E. Larke (R.A.F.V.R.) No. 415 Squadron; P/O N. W. Larman (R.A.F.V.R.) No. 431 Squadron; F/O R. D. Lawson (R.A.F.V.R.) No. 431 Squadron; P/O H. Lees (R.A.F.V.R.) No. 433 Squadron; F/O A. Livesy (R.A.F.V.R.) No. 405 Squadron; F/O J. A. Longmuir (R.A.F.V.R.) No. 425 Squadron; P/O R. G. Luckett (R.A.F.V.R.) No. 428 Squadron; F/O P. McCartney (R.A.F.V.R.) No. 404 Squadron; P/O F. J. McGovern (R.A.F.V.R.) No. 426 Squadron; F/L J. MacKay, D.F.M. (R.A.F.V.R.) No. 429 Squadron; P/O H.S. MacLean (R.A.F.V.R.) No. 426 Squadron; F/O R. W. Marshall (R.A.F.V.R.) No. 427 Squadron; F/O S. J. Mason (R.A.F.V.R.) No. 428 Squadron; WO R. A. Matcham (R.A.F.V.R.) No. 405 Squadron; P/O R. W. Meredith (R.A.F.V.R.) No. 429 Squadron; P/O C. Monks (R.A.F.V.R.) No. 425 Squadron; F/O B. P. A. Mose (R.A.F.V.R.) No. 433 Squadron; F/L D. B. Moyes (R.A.F.V.R.) No. 431 Squadron; F/L E. S. Mulholland (R.A.F.V.R.) No. 420 Squadron; F/O J. W. C. Nairn (R.A.F.V.R.) No. 405 Squadron; F/L E. J. New (R.A.F.V.R.) No. 405 Squadron; F/L J. H. R. Oakley (R.A.F.V.R.) No. 428 Squadron; F/O E. O'Connor (R.A.F.V.R.) No. 405 Squadron; P/O H. R. Oldland (R.A.F.V.R.) No. 405 Squadron; F/O W. Ormson (R.A.F.V.R.) No. 433 Squadron; F/O R. Packer (R.A.F.V.R.) No. 405 Squadron; F/O S. C. B. Parker (R.A.F.V.R.) No. 433 Squadron; F/O J. E. Parkinson (R.A.F.V.R.) No. 427 Squadron; F/O R. W. Parry (R.A.F.V.R.) No. 425 Squadron; P/O A. S. Paterson (R.A.F.V.R.) No. 428 Squadron; P/O H. L. Pattinson (R.A.F.V.R.) No. 428 Squadron; P/O R. Payne (R.A.F.V.R.) No. 434 Squadron; F/L A. G. Pettit (R.A.F.V.R.) No. 405 Squadron; F/O C. J. Phillips (R.A.F.V.R.) No. 434 Squadron; P/O A. F. Pinder (R.A.F.V.R.) No. 420 Squadron; F/O A. Pitt (R.A.F.V.R.) No. 431 Squadron; F/O G. E. Pratt (R.A.F.V.R.) No. 428 Squadron; P/O P. S. V. Preece (R.A.F.V.R.) No. 405 Squadron; WO W. Price (R.A.F.V.R.) No. 405 Squadron; P/O F. D. Pym (R.A.F.V.R.) No. 431 Squadron; P/O J. P. Quane (R.A.A.F.) No. 409 Squadron; F/O D. S. L. Reid (R.A.F.) No. 420 Squadron; F/O G. Reynolds (R.A.F.) No. 434 Squadron; F/L K. H. Reynolds (R.A.F.V.R.) No. 405 Squadron; F/O W. Richardson (R.A.F.V.R.) No. 434 Squadron; P/O D. J. Roberts (R.A.F.V.R.) No. 428 Squadron; P/O A. J. R. Robson (R.A.F.V.R.) No. 428 Squadron; F/O C. Robson (R.A.F.V.R.) No. 427 Squadron; P/O J. Rothwell (R.A.F.V.R.) No. 424 Squadron; P/O G. W. Rowland (R.A.F.V.R.) No. 433 Squadron; F/O C. Rowsell (R.A.F.V.R.) No. 415 Squadron; F/L R. P. Rubie (R.A.F.V.R.) No. 431 Squadron; P/O H. Rumble (R.A.F.V.R.) No. 433 Squadron; P/O M. F. Sanders (R.A.A.F.) No. 419 Squadron; P/O J. B. A. Scannel, D.F.M. (R.A.F.V.R.) No. 405 Squadron; F/O R. F. Sculthorpe (R.A.F.V.R.) No. 434 Squadron; F/O D. Shaw (R.A.F.V.R.) No. 426 Squadron; F/O K. M. Shaw-Brown (R.A.F.V.R.) No. 433 Squadron; F/L J. B. Sheriff (R.A.F.V.R.) No 432 Squadron; F/L A. F. Simpson (R.A.F.V.R.) No. 435 Squadron; P/O M. H. Sims (R.A.F.V.R.) No. 418 Squadron; F/O J. Skelton (R.A.F.V.R.) No. 427 Squadron; F/O V. P. Skone-Rees (R.A.F.V.R.) No. 428 Squadron; WO W. H. Smart (R.A.F.V.R.) No. 429 Squadron; F/O J. C. Smith (R.A.F.V.R.) No. 433 Squadron; P/O D. W. Smith (R.A.F.V.R.) No. 424 Squadron; F/O P. J. Smith (R.A.F.V.R.) No. 409 Squadron; P/O S. Smith (R.A.F.V.R.) No. 434 Squadron; F/L W. V. Smith (R.A.F.V.R.) No. 419 Squadron; F/O D. R., Smyth (R.A.F.V.R.) No. 426 Squadron; F/O W. I. Stables (R.A.F.V.R.) No. 429 Squadron; P/O H. E. Stanley (R.A.F.V.R.) No. 405 Squadron; F/O G. D. Stewart (R.A.F.V.R.) No. 405 Squadron; F/O J. R. E. Stoddart (R.A.F.V.R.) No. 404 Squadron; P/O J. Surtees (R.A.F.V.R.) No. 433 Squadron; WO L. P. Taylor (R.A.A.F.) No. 435 Squadron; F/O G. L. Thomas (R.A.F.V.R.) No. 431 Squadron; P/O G. R. H. Thomas (R.A.F.) No. 429 Squadron; F/O J. N. Thompson (R.A.F.) No. 415 Squadron; P/O R. Thompson (R.A.F.V.R.) No. 426 Squadron; F/O R. C. G. Tibbles (R.A.F.V.R.) No. 427 Squadron; F/L L. E. Tomkins (R.A.F.) No. 424 Squadron; F/O D. G. Tongue (R.A.F.V.R.) No. 410 Squadron; F/L F. J. Toon (R.A.F.V.R.) No. 404 Squadron; P/O N. L. Ulph (R.A.F.V.R.) No. 428 Squadron; F/O A. D. Vockins (R.A.F.V.R.) No. 405 Squadron; F/L G. W. W. Waddington (R.A.F.) No. 432 Squadron; P/O G. P. Wadington' (R.A.F.V.R.) No. 432 Squadron; P/O G. W. Walker (R.A.F.V.R.) No. 420 Squadron; P/O R. G. Wall (R.A.F.V.R.) No. 429 Squadron; P/O W. L. Walters (R.A.F.V.R.) No. 428 Squadron; F/O H. F. Watson (R.A.F.V.R.) No.

405' Squadron; F/O P. Watson (R.A.F.V.R.) No. 424 Squadron; WO G. L. Watts (R.A.F.V.R.) No. 405 Squadron; P/O C. W. Way (R.A.F.V.R.) No. 420 Squadron; F/O J. O. Weekes (R.A.A.F.) No. 433 Squadron; F/O J. F. Whone (R.A.F.V.R.) No. 427 Squadron; F/O J. H. Wicken (R.A.F.V.R.) No. 418 Squadron; F/O E. W. Wiley (R.A.F.V.R.) No. 433 Squadron; F/L F. J. Willgress (R.A.F.) No. 427 Squadron; WO C. J. Williams (R.A.F.) No. 405 Squadron; F/L L. H. Williams (R.A.F.) No. 424 Squadron; F/O D. H. C. Willoughby (R.A.F.V.R.) No. 405 Squadron; F/O D. Wilson (R.A.F.V.R.) No. 429 Squadron; F/O P. E. Wort (R.A.F.V.R.) No. 428 Squadron; F/L,E. R. Wright, D.F.M. (R.A.F.) No. 405 Squadron; F/L J. F. W. Yates. (R.A.F.) No. 415 Squadron; F/O C. E. Young (R.A.F.V.R.) No. 431 Squadron; F/O H. G. Young (R.A.F.V.R.) No. 427 Squadron.

## CONSPICUOUS GALLANTRY MEDAL

Sgt. E. W. Knight (R.A.F.) No. 432 Squadron; WO A. Robb (R.A.F.V.R.) No. 405 Squadron.

# DISTINGUISHED FLYING MEDAL

FS A. G. Abbott (R.A.F.V.R.) No. 405 Squadron; Sgt. F. Addy (R.A.F.V.R.) No. 432 Squadron; Sgt. G. A. Bancroft (R.A.F.V.R.) No. 405 Squadron; Sgt. P. F. Bolderstone (R.A.F.V.R.) No. 429 Squadron; FS G. E. Bolland (R.A.F.V.R.) No. 405 Squadron; FS J. R. Briston (R.A.F.V.R.) No. 405 Squadron; Sgt. N. H. Bullock (R.A.F.V.R.) No. 419 Squadron; Sgt. John Isaac Burgess (R.A.F.V.R.) No. 405 Squadron; FS William Owyn Blythin (R.A.F.V.R.) No. 431 Squadron; FS R. H. Catlin (R.A.F.V.R.) No. 405 Squadron; FS J. Church (R.A.F.V.R.) No. 405 Squadron; FS G. Connell (R.A.F.V.R.) No. 406 Squadron; FS J. Cosgrove (R.A.F.V.R.) No. 432 Squadron; FS A. Cox (R.A.F.V.R.) No. 405 Squadron; Sgt C. Cox (R.A.F.V.R.) No. 405 Squadron; FS B. A. Crisp (R.A.F.V.R.) No. 405 Squadron; FS J. Critchley (R.A.F.V.R.) No. 424 Squadron; Sgt. C. Deaves (R.A.F.V.R.) No. 428 Squadron; FS A. J. Dennis (R.A.F.V.R.) No. 415 Squadron; Sgt. F. Dennis (R.A.F.V.R.) No. 419 Squadron; FS G. W. F. Fell (R.A.F.V.R.) No. 424 Squadron; FS D. D. Finlay (R.A.F.V.R.) No. 429 Squadron; Sgt. C. F. Gibbs (R.A.F.V.R.) No. 420 Squadron; FS W. M. Grant (R.A.F.V.R.) No. 424 Squadron; FS J. E. Hall (R.A.F.V.R.) No. 429 Squadron; Sgt. A. Harrison (R.A.F.V.R.) No. 426 Squadron; FS J. Harrison (R.A.F.V.R.) No. 405 Squadron; FS J. R. D. Henderson (R.A.F.V.R.) No. 405 Squadron; FS E. Hilton (R.A.F.V.R.) No. 405 Squadron; Sgt. J. A. Innes (R.A.F.V.R.) No. 408 Squadron; FS H. Jones (R.A.F.) No. 405 Squadron; Sgt. S. E. Kanka (R.A.F.V.R.) No. 405 Squadron; Sgt. A. Kenyon (R.A.F.V.R.) No. 419 Squadron; Sgt. W. A. King (R.A.F.V.R.) No. 405 Squadron; FS D. Kitto (R.A.F.V.R.) No. 405 Squadron; FS E. C. H. Knowles (R.A.F.V.R.) No. 428 Squadron; Sgt. E. A. McAbendroth (R.A.F.V.R.) No. 425 Squadron; FS A. McHugh (R.A.F.V.R.) No. 437 Squadron; FS E. H. McKenna (R.A.F.V.R.) No. 418 Squadron; FS P. J. McMonagle (R.A.F.V.R.) No. 405 Squadron; FS H. E. Madgwick (R.A.F.V.R.) No. 428 Squadron; FS S. Manierka (R.A.F.V.R.) No. 405 Squadron; FS T. H. J. Meadows (R.A.F.V.R.) No. 428 Squadron; Sgt. J. Norman (R.A.F.V.R.) No. 419 Squadron; FS R. Nutley (R.A.F.V.R.) No. 433 Squadron; FS L. J. S. O'Hanlon (R.A.F.V.R.) No.

405 Squadron; FS T. O'Toole (R.A.F.Y.R.) No. 405 Squadron; FS L. F. Owen (R.A.F.V.R.) No. 405 Squadron; Sgt. L. S. Owen (R.A.F.) No. 425 Squadron; Sgt. A. V. Plummer (R.A.F.V.R.) No. 432 Squadron; Sgt. M. A. Potter (R.A.F.V.R.) No. 405 Squadron; FS J. S. Rennie (R.A.F.V.R.) No. 405 Squadron; Sgt. J. D. Rose (R.A.F.V.R.) No. 428 Squadron; FS J. H. Scott (R.A.F.V.R.) No. 433 Squadron; Sgt. S. Scott (R.A.F.) No. 425 Squadron; Sgt. H. W. Slipper (R.A.F.V.R.) No. 420 Squadron; Sgt. J.' Warner (R.A.F.V.R.) No. 428 Squadron; FS T. Waters (R.A.F.V.R.) No. 405 Squadron; FS J. B. Whitehouse (R.A.F.V.R.) No. 405 Squadron; FS G. L. Woods (R.A.F.V.R.) No. 405 Squadron.

BRITISH EMPIRE MEDAL Sgt. J. S. Eadie (R.A.F.V.R.) No. 422 Squadron.

# ROLL OF HONOUR

The following lists contain the names of all members of the R.C.A.F. who were reported killed between September 1st, 1944 and December 31st, 1946, and also those who, previously reported missing, were during this period officially presumed to have died. In the case of some officers and airmen listed as presumed dead the date of the casualty was previous to September 1st, 1944.

Appended to the Roll of Honour is a tabulation of R.C.A.F. casualties in the period September 10th, 1939, to December 31st, 1946.

### KILLED

# A

FS R. J. H. Abell; Sgt. C. F. Adair; F/O L. J. Adams; F/L L. L. Aide; F/O S. S. Aird; F/L E. G. Aitchison; F/O A. Aitken; F/L T. L. Akin; F/L E. B. Allan; F/O J. D. Allan; P/O J. L. Allan; P/O J. A. Allen; F/L W. J. Allison; F/O F. R. Alty; Cpl. C. C. Anderson; Sgt. C. E. Anderson; P/O C. W. Anderson; LAC G. J. Anderson; LAC M. H. Anderson; P/O M. S. H. Anderson; Sgt. N. J. Anderson; F/O P. G. Anderson; F/L P. M. Anderson; P/O W. S. Anderson; P/O W. W. E. Anderson; F/O J. K. Andrews; F/O S. Angeline; F/O R. H. Appleyard; P/O J. J. R. Arcand; WO V. G. H. Archibald; F/O S. G. Arlotte; P/O W. G. Armour; P/O C. N. Armstrong; F/O D. M. Armstrong; S/L J. D. Armstrong; Sgt. J. E. Armstrong; P/O L. B. Armstrong; F/L L. I. Armstrong; F/O L. W. Armstrong; P/O R. H. Armstrong; P/O R. K. Armstrong; F/O W. B. Arnold; P/O E. T. Ashdown; P/O W. R. Ashdown; P/O J. L. Atkinson; P/O J. N. Atkinson; WO E. R. Atree; AC B. L. Atwood; F/O G. A. Aubrey.

### B

P/O O. G. Backes; F/O J. D. Baird; Sgt. N. Baker; Sgt. E. A. Balderston; P/O C. H. Baldwin; F/L S. H. Balkwill; F/O J. D. Ball; Cpl. R. S. Ball; FS A. Banks; F/O C. A. Bardwell; F/L G. A. Barker; WO J. M. Barker; F/L J. P. Barlow; FS G. J. L. Barnes; P/O G. H. Barnett; Sgt. H. C. Barr; LAC G. J. Barraball; LAC C. S. Bascom; FS D. R. Bates; P/O R. O. Battler; LAC L. H. Bauer; P/O A. G. Baxter; F/O J. W. Bayard; Cpl. S. M. Bayley; F/O J. D. Beagley; FS D. C. Beattie; Cpl. G. W. Beattie; P/O J. E. R. Beaudry; LAC J. D.

Beck; P/O D. A. Becker; LAC J. D. M. Bedard; LAC W. W. Beddow; LAC J. I 1. P. R. Begin; S/L J. R. Beirnes; LAC J. M. Belanger; WO A. P. Bell; P/O F. A. Bell; LAC G. R. Bell; F/L V. R. Bell; FS D. Bellantino; F/O R. S. Bellis; F/O D. H. Bennett; F/O K. B. Bennett; FS L. D. Bennett; F/O L. O. Berg; Sgt. J. P. O. Berlinguette; P/O P. N. Bernhart; F/O J. W. L. F. Bernier; F/O M. Bernyk; F/O L. J. Berry; FS S. Berryman; W/C M. W. Beveridge; Sgt. D. G. Bewley; F/L P. W. Bickford; P/O R. Biggerstaff; F/O H. K. Billingsley; Sgt. E. A. Bishop; F/O J. S. Blair; P/O A. G. W. Blayney; F/L K. J. Blevins; WO H. C. Blizard; AC L. Blondeau; P/O W. Bluriderfield; FS L. Boardman; FS E. W. Bock; P/O H. A Boddy; F/L S. L. Bolhay; WO E. J. Bolingbroke; Cpl. J. J. B. Bordeleau; LAC P. P. E. Bordeleau; 'FS W. T. Borrowman; F/O N. H. Boss; FS S. E. Bostwick; F/O J. A. C. Bouchard; F/O V. J. Bouchard; F/O J. R. Boudreau; F/O F. C. Bower; P/O G. D. Bowes; F/L W. M. Bowlen; Sgt. E. M. Bowman; P/O E. B. Boyce; FS J. D. Boyd; P/O A. G. Bradley; F/O R. A. Brandser; F/L J. G. Brass; F/O E. H. Brautigam; P/O D. L. Breadner; P/O M. W. Bredin; P/O R. F. Breen; F/O T. J. Brennan; P/O K. S. Brenton; P/O A. G. Brett; FS M. J. Brewer; FS R. T. Bridger; F/O D. A. Bridgen; P/O C. W. A. Britton; P/O V. A. G. Brochu; FS R. A. Brock; F/O W. -A. Brodie; F/O C. E. Brooks; LAC W. Brotherston; Sgt. E. D. Bround; P/O D. S. Brown; WO J. Brown; S/L J. G. Brown; AC R. K. Brown; F/L Sydney W. Brown; FS S. W. Brown; F/O E. D. Brydon; F/L D. S. J. Buchanan; Sgt. T. S. Buchkowski; WO F. P. Buck; F/O F. C. Bull; WO R. L. Bulley; FS M. R. Bullock; F/O W. V. J. Burdis; Sgt. J. P. E. Burke; Sgt. D. E. Burrows; LAC R. E. Burse; F/O C. J. Butler; Cpl. R. L. Butler; WO J. W. Buttrey; F/L H. Byers; FS W. J. Byrne.

C

F/O G. A. Cahoon; F/O J. W. Cairns; FS A. G. Caldwell; F/L D. E. Caldwell; FS G. F. Caley; FS H. J. Callin; Sgt. T. M. Calloway; Sgt. A. A. Cameron; LAC J. O. Cameron: P/O L. E. Cameron: WO M. C. Cameron: F/L T. H. Cameron; P/O F. W. Campbell; F/O H. Campbell; P/O J. D. Campbell; LAC J. P. Campbell; P/O R. Campbell; F/L R. A. Campbell; F/O R. G. Campbell; LAC S. Campbell; F/O T. M. Campbell; F/L W. C. Campbell; P/O W. C. Campbell; F/O R. L. Cann; Cpl. N. W. Cant; Cpl. O. W. Carey; F/O E. B. Carleton; AC J. H. Carmichael; P/O R. Carnegie; F/L J. Carr; LAC A. Carreau; S/L C. H. Carscadden; F/O S. T. Carson; P/O F. P. Cartan; F/O A. V. Carter; FS J. H. Carter; P/O j. E. Cartman; F/O J. J. Casey; F/O F. E. Casher; LAC R. J. Caverly; F/L J. H. Chandle; LAC R. F. Charbonneau; FS G. P. Charlesbois; F/L R. C. Charlton; F/O R. E. O. Charron; P/O F. R. Charnock; P/O R. E. Chatfield; FS J. L. A. Chauvin; Sgt. G. A. Chevrier; WO L. Chevrier; P/O B. C. Chinnery; P/O J. A. Chisamore; F/O W. J. Chittenden; F/O E. G. Christie; F/O N. Chobaniuk; Sgt. A. E. Churcher; P/O G. Churshard; F/O A. J. Clark; F/O E. W. Clark; P/O H. L. Clark; LAC W. R. Clark; F/O G. W. Clarke; F/O R. W. Clarke; F/O O. M. W. Clarson; Sgt. H. H. Clegborne; FS H. Clements; F/O J. E. Clements; P/O A. A. Clifford; FS V. E. Clin; F/L J. G. Clothier; LAC J. E. R. Clouthier; P/O J. F. O. Cloutier; S/L R. E. Coffey; WO A. G. Cole; F/L S. M. Cole; F/O J. V. Collingwood; F/O A. W. Collins; LAC H. W. Collins; P/O J. T. Collins; P/O R. T. F. Collins; F/O W. F. Conley; F/O H. Connelly; P/O H. J. Cook; F/O W. L. Cook; F/O W. W. Cook; FS D. A. Cooke; F/O M. J. G.

Cooke; FS W. H. Cooke; P/O M. W. Coones; F/O E. E. Cooper; P/O E. H. Cooper; Sgt. E. J. Cooper; F/O W. D. D. Cooper; F/O W. A. Coott; F/O C. S. Coppin; G/C V. B. Corbett; F/O B. S. Corbett; FS S. P. Cormier; F/O T. Cormie; F/O L. R. Corney; FS F. W. G. Cosgrave; P/O D. G. Cotter; Sgt. W. R. Courage; F/O H. H. Cowan; F/O W. Cowan; F/O W. S. Cowan; WO W. J. Coward; F/O J. H. Cowie; P/O R. J. Cowie; WO J. M. Cox; P/O J. W. Coyle; P/O E. K. Coyne; LAC W. Craig; F/O A. B. Crawford; FS T. R. Crawford; F/O G. E. Creswell; Sgt. S. E. Croww; F/O P. B. Crosswell; WO C. Cruickshank; F/O J. D. Cruickshank; LAC L. A. Cudmore; F/L A. J. Cull; F/O D. H. Cumming; Sgt, G. F. Cumming; F/O J. C. Cummings; FS M. M. Cummins; F/O C. Currie; P/O R. R. Currie; F/L M. C. Cuthbert; LAC E. O. Cuthill; WO W. H. Cyples.

D

F/O R. J. M. J. Dagenais; FS W. R. Darling; F/O W. Darlington; F/O W. R. Dauphin; F/O E. R. Davey; P/O H. A. Davey; FS C. G. Davidson; P/O J. Davidson; FS P. W. Davies; F/O W. -E. Davies; FS N. H. Davis; F/L R. W. C. Davis; P/O D. Dawson; FS J. C. Daze;, S/L T. J. DeCourcy; FS J. M. H. Delanev; A/C R. A. Delhaye; Sgt. J. Derbyshire; F/O R. J. M. Desmaris; Sgt. C. Dessertine; F/L W. G. Deveson; F/O W. N. Dewitt; FS W. J. Dickie; Sgt. J. J. L. P. Dion; WO A. Divitcoff; F/O N. H. Dixon; LAC T. H. Dixon; FS P. C. Doherty; FS S. A. Doherty; LAC E. G. Dohoo; F/O T. P. Dollery; F/O J. E. Donoghue; P/O W. J. Doughty; F/L D. B. Douglas; FS J. D. M. Douglas; Sgt. S. R. B. Douglas: F/O W. N. Douglas: P/O J. F. Dowding: F/O R. B. Dowding: P/O A. E. Downing; P/O G. J. Doyle; Sgt. H. R. Drake; Sgt. W. Drozdiak; FS J. L. M. Dube; F/O R. J. Dubeau; P/O J. E. L. Dubois; Sgt. V. R. Ducklow; F/L E. V. Duckworth; FS F. A. Duench; F/L I. A. N. M. Duff; Sgt. J. A. C. Duhamel; F/O J. L. G. G. Dumas; F/O G. R. Duncan; P/O J. R. Dunne; Sgt. W. J. A. Dunning: Set. M. V. Durling: P/O R. O. Durling: P/O H D. Durrant: Set. J. L. U. Dusablon; Cpl. R. E. Dutton; Sgt. H. Dynes.

E

LAC A. R. O. Eardley; P/O J. D. A. East; F/O D. M. Eastman; FS A. J. Eberle; Sgt. L. E. Eddie; F/O W. Edmondson; P/O G. F. Edwards; F/O R. E. C. Edwards; F/O W. H. Egan; F/O L. J. M. Eisler; F/L R. J. Ellard; LAC A. J. Elliott; FS J. S. Elliott; F/O R. L. Elliott; P/O J. P. Ellingson; 'F/L H. S. Ellis; Cpl. W. J. Ellis; F/L I. Emerson; FS J. A. Emerson; F/L S. J. Emery; P/O J. A. Epoch; AC W. S. Eustace; LAC N. G. Evan; P/O O. C. Evers; F/L M. Ewaschuk; F/O W. R. Ewing.

F

F/O W. R. Fair; P/O M. L. Fairies; F/O J. R. G. Farlette; P/O E. J. Farrell; P/O J. P. Farrell; LAC W. B. Farrow; P/O W. Fedorchuk; F/O W. Fedoruk; F/O W. R. Fee; F/O D. A. Fehrman; F/O K. G. Fenske; F/O E. E. Fernandez; P/O V. J. Fernquist; Sgt. H. L. Fernstrom; LAC M. J. Ferrier; F/L A. N. Ferris; P/O H. W. Ferris; LAC G. A. Ferron; P/O G. H. Fetherston; FS J. E. Fielder; F/L J. W. Fiezelle; FS S. Filipchuk; F/L J. F. Filteau; P/O J. Firth; Sgt. F. G. Fisher; Sgt. J. A. Fisher; Sgt. J. F. Fitzgibbon; F/O W. Fleming; LAC A. N. B. Fleury; FS

T. V. Flint; P/O D. G. Flood; F/L J. J. Flood; F/O R. A. O. Floripe; LAC E. J. Flower; F/L H. L. Flynn; F/O G. E. B. Forbes; LAC C. H. Ford; F/O E. I. Ford; P/O E. M. Ford; F/O K. G. Forseth; P/O E. B. Forsythe; F/L R. P. Foulds; FS C. A. Fowler; Sgt. R. E. Fox; F/O A. D. Fraser; Sgt. John W. Fraser; Sgt. J. W. Fraser; FS W. M. Freeman; LAC A. S. Friar; LAC J. Friesen; F/O J. N. Friesen; F/O J. W. Friesen; S/I. S. J. Fulton.

G

P/O W. Gaba; F/O A. Gaddess; F/L R. H. Galbraith; S/L E. B. Gale; WO M. E. Gallagher; FS J. L. Gallipeau; Sgt. S. S. Galvin; Sgt. J. Gamborski; F/O M. G. Gant; LAC R. E. Gardiner; F/O M. M. Gardner; S/L E. T. Garrett; P/O H. L. Garriock; F/L R. L. Garvie; P/O S. D. Gaudin; WO J. E. A. Gauthier; P/O R. C. Gauthier; F/O C. G. Gavan; Sgt. J. F. Gazzard; WO F. E. George; F/O J. A. Gibbs; F/O E. F. Gilbert; F/O J. D. N. Gillingham; F/O F. D. Gillis; F/L M. L. Gillis; P/O R. K. Gillis; F/O V. B. Gilson; F/O J. R. E. Gingras; P/O J. Gingrick; LAC J. O. R. E. Girard; Sgt. J. A. A. Giroux; F/O M. Gleason; Sgt. K. C. Glinz; Sgt. G. G. Goehring; FS P. F. Gonroski; LAC R. G. Goodfellow; F/O N. L. Gordon; LAC M. D. Goss; FS K. I. Gove; P/O J. Grabowski; Cpl. E. Graham; F/L G. K. Graham; FS H. A. Graham; Cpl. F. H. Granger; P/O J. V. Grant; P/O N. C. Grant; P/O C. R. Grassie; F/O L. P. Gravel; P/O R. G. Green; P/O R. J. S. Green; F/O F. Greenwood; Sgt. C. B. Greer; P/O G. K.. Grier; P/O K. W. Griffey; F/L G. H. Grist; Sgt. J. A. E. Grould; F/O D. H. Grundy; F/O G. J. Guay; F/L R. D. Guild; FS D. A. Gunn; F/O W. A. Gunning; F/L N. W. Guy.

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Sgt. V. A. Haglund; P/O T. R. Hailstone; F/O A. E. Hall; F/O A. R. Hall; P/O C. B. Hall; F/L F. W. Hall; F/O P. Hall; F/O R. J. W. Hall; P/O S. G. Hall; FS W. Halowaty; F/L F. A. Halpin; FS C. J. Halvorson; F/O M. J. Hamblin; P/O C. Hamel; F/O B. G. Hamilton; F/L R. C. Hammill; P/O J. R. Hammond; P/O J. E. Hanley; F/O W. J. Hanna; F/O H. A. Hannah; F/O L. A. Hannah; F/O S. R. Hannah; P/O K. S.' Hanson; FS N. S. Harbor; F/L J. T. Hardy; F/L D. W. Harling; F/L E. P. Harling; F/L G. R. Harris; F/O A. R. Harrison; F/O R. R. Harrison; F/O T. Hartnett; F/O M. Hartog; LAC C. A. Harvey; P/O E. P. Harvey; P/O E. J. F. Harwood; FS R. C. Hase; FS-W. Hashim; Cpl. G. K. Hatt; P/O C. M. Hay; F/O G: J. Hay; WO J. A. Hay; P/O S. A. Hay; F/O A. E. Hayes; S/L E. A. Hayes; F/O R. M. Hays, F/L R. A. Haywood; P/O W. M. Hazelton; LAC R. C. Healy; Sgt. A. W. Heard; Cpl. E. W. Hearn; Cpl. J. E. A. Hebert; F/O L. P. Hedley; Cpl. A. B. Hellard; FS L. C. Hellekson; P/O S. E. Hencher; P/O H. R. J. Hennessey; F/O G. E. Henry; FS R. W. G. Henry; F/O S. A. W. Hepburn; F/O G. Hetherington; F/O A. W. Heughan; LAC H. F. Hicks; Sgt. G. F. Higgins; F/O R. B. Hilchey; Sgt. M. L. Hill; Sgt. K. M. Hillis; F/L B. I. Hillman; Sgt. J. R. Hillsdon; P/U L. G. Hinch; F/O A. C. Hirst; P/O D. Hitchock; F/U J. W. Hoad; F/L J. W. Hobbs; F/O H. F. Hoblitzell; FS H. H. Hockley; F/L R. G. Hodge; F/L W. G. Hodges; Sgt. E. H. Hodgins; F/U R. W. Hodgson; P/O C. J. Hogan; Sgt. J. A. Holding; F/O G. J. Hollinger; F/U A. D. Hone; Sgt. J. S. Hood; FS D. W. Hope; F/L W. E. Hopkins; F/O G. I. Hopper; LAC G. Horst; FS D. D. Hoskins; P/O C. E. Houston; F/O G. M. Houston; P/O C. H. Howald; P/O D. S. Howard; F/O J. C. Howden; LAC L. M. Howe; P/O C. K. Howes; Cpl. W. Hrysko; F/O B. C. Hunt; P/O T. J. Hunt; P/O N. A. Hurst; P/O A. M. Hutchison; LAC J. Hutton, WO R. G. Hutton; P/O J. W. Hyde; F/L R. T. Hyde.

### I

P/O A. C. Ineson; F/O F. H. Irwin; FS H. R. Irwin; F/L W. D. Irwin.

### J

F/U D. L. Jack; F/O J. C. Jackman; F/L W. M. Jackson; LAC L. C. Jansonn; P/O L. H. Janzen; F/L L. F. Jarvis; P/O A. P. Jensen; F/L D. E. Jenvey; F/L J. P. Jessee; FS P. A. M. Jobin; FS I. L. Johns; F/L F. G. Johnson; F/U G. B. Johnson; F/L J. A. Johnson; Cpl. N. M. Johnson; F/O J. A. Johnston; Sgt. E. H. M. Johnstone; F/O F. D. Jolicoeur; F/O D. R. Jones; F/O H. A. Jones; F/O L. I. Jones; LAC R. F. Jones; F/O R. H. Jones; WO Roy H. Jones; F/U R. M. Jones; F/O N. Jordan; S/L D. G. M. Joy; S/L R. G. Joyce; P/U J. Judges.

### K

F/U E. S. Kaechele; P/U W. R. Karstens; Sgt. 'J. H. Kay; WO R. P. Keaist; F/L W. R. Kearns; P/O J. A. Keating; P/O R. W. Keller; F/U L. Kelly; F/O C. M. Kendall; P/O G. H. Kendall; F/O J. N. Kerry; P/O K. B. Ketcheson; P/O J. A. S. King; P/O B. G. Kinsman; WO C. Kinton; LAC V. L. Kirko; F/L L. V. Kirsch; Sgt. B. G. Kitchen; F/U G. R. G. Kite; F/O F. J. Klapkin; FS W. J. Klementoski; S/L W. T. Klersy; WO E. F. Knibbs; F/O W. L. Knight; FS F. Knowles; F/O P. Koleda; P/O T. C. Kossatz; LAC M. W. Kotanko; Cpl. G. Krasium; P/O R. Kukurski; P/O A. E. Kurtzhals.

### L

P/O J. R. J. Labrecque; P/O M. J. Laderoute; F/L J. G. L. Laffoley; P/O J. C. Laing; LAC J. B. Lalonde; LAC L. L. Lamarche; F/O R. J. Land; P/O J. F. Landsky; F/U W. E. Lang; P/O W. W. Lankin; FS J. R. Lariviere; F/O F. E. Larkman; F/U H. D. Laronde; LAC O. F. Larson; F/O F. W. Latham; Cpl. H. H. A. Lauenture; FS G. W. Laut; F/O I. Law; WO J. F. Law; WO T. D. Lawley; F/U J. R. R. Lawlor; F/O M. P. Laycock; F/O W. G. Layng; P/O V. J. Lazier; F/O T. W. Leahy; FS J. E. Leaman; P/O J. L. Leckie; P/O W. J. Lee; P/O J. Leeming; F/O J.. C. Lees; F/L J. S. Lees; F/O S. I. Lees; P/O W. H. Leese; P/O F. R. Leet; AC A. W. Lefevre; F/O A. H. Leitch; P/O J. G. N. Lejambe; F/O H. F. Lenoury; F/O S. E. Leppert; P/O A. S. Leroux; F/L C. Lesesne; Cpl. W, Leslie; F/O W. A. Leslie; FS D. Levine; LAC D. Levy; F/L T. L. Lewis; Sgt. S. E. Ley; F/O P. J. Lim; F/O T. M. Lincoln; LAC S. H. Ling; P/O J. B. Linstead; P/O G. L. Lister; F/O J. G. S. J. Livingstone; P/O G. T. Llewellin; F/O D. D. Lloyd; F/O G. H. Lloyd; Sgt. H. Loewen; F/L R. F. Logie; F/L G. A. Long; F/O R. H. Long; P/O S. H. Lorenz; P/O T. J. Lothian; F/O E. A. Love; P/O D. L. Loveridge; P/O A. R. Lowe; P/O H. Lowe; AC R. B. Lowe; F/O H. S. Luck; P/O E. L. Luxton; Sgt. J. L. Lynch.

# M

F/L T. H. R. MacAulay; F/O A. MacDonald; WO J. N. D. H. MacDonald; Cpl. L. I. MacDonald; F/O N. H. MacDonald; P/O R. E. MacDonald; F/O R. N.

MacDonald: Sgt. A. J. MacDonnell: P/O J. N. MacDougall: S/L R. M. Mace: F/L C. T. H. Macintosh; FS H. M. MacKenzie; Sgt. W. D. MacKenzie; F/L H. D. Mackey; P/O A. Mackie; F/L D. J. MacKinnon; P/O C. W. MacKlaier; F/O 'G. M. MacLean; F/O. N. J. MacLean; FS G. A. MacLeod; F/O G. D. MacLeod; P/O H. J. MacMillan; LAC J. D. MacMillan; F/L D. S. MacNabb; FS D. H. MacNeil; P/O D. K. I. MacNicol; F/O P. A. C. Maeder; P/O M. S. R. Mahon; Cpl. A. W. Mailman; FS A. Malaidack; P/O C. H. Males; F/L H. I. Malmas; P/O W. T. Maltby; P/O F. W. Manchip; F/O R. G. Mansfield; F/L N. D. Mara; LAC J. D. J. R. Marceau; AC J. J. G. Marcoux; Cpl. W. J. Marshall; F/O R. J. Martello; P/O A. J. Martin; F/O J. D. Martin; WO S. D. Martin; F/O D. S. Martinson; LAC C. R. Mason; LAC T. F. S. Mason; F/L J. W. Mathers; F/O W. H. Matheson; F/O R. D. Mathew; Sgt. W. R. Mattless; LAC V. G. Mattson; F/L R. E. Maynard; F/L J. C. McAllister; WO H. J. McArthur; F/O B. D. McBride; F/O J. L. McBride; P/O P. J. McBrinn; F/O E. J. McCabe; WO J. McCallum; F/O E. W. McCann; LAC P. McCanney; P/O B. J. McCarthy; P/O L. W. McChesnie; FS K. C. McCormick; F/O G. McCracken; F/O J. A. McCrae; Sgt. S. L. W. McCron; FS H. E. McDonald; F/O K. J. McDonald; LAC S. A. McEwen; F/O I. L. McFadyen; P/O D. A. McFayden; F/O D. R. McGillivray; F/O G. G. McGolrick; WO J. B. McGovern; FS J. D. 'McGowan; F/O D. P. McGregor; P/O R. M. McIlveen; P/O G. A. McIntyre; F/O R. J. McIntyre; P/O K. B. McIvor; LAC G. B. McKay; P/O T. V. McKee; Sgt. J. A. McKendry; F/O G. P. McKenna; F/O N. C. McKillop; F/L B. J. McLaughlin; F/O G. G. McLean; P/O B. H. McLellan; F/O J. A. McLennan; P/O H. D. McLeod; F/O J. C. McLeod; F/O D. J. McMillan; P/O W. S. McMullin; Sgt. J. W. McMurdo; Sgt. A. F. McMurtry; F/L J. A. H. McNally; F/L W. H. McPhail; F/O G. E. McPherson; Sgt. J. P. McQuarrie; F/L R. C. McRoberts; P/O J. T. McShane; WO G. D. McVicar; Sgt. G. R. McWhirter; P/O O. McWilliam; LAC R. C. Medforth; F/O W. L. Melbourne; FS R. L. Melville; F/O J. R. Menzies; F/O K. M. Merriam; P/O S. E. Messum; FS E. M. Milks; F/O J. B. Millar; F/O D. M. Miller; P/O W. G. Miller; P/O J. J. Milne; P/O C. D. Mison; FS G. C. Moir; LAC J. A. J. M. Mongrain; FS G. F. Montgomery; P/O F. W. Mooney; P/O R. E. Mooney; Sgt. R. H. Moorcraft; LAC D. S. Moore; LAC T. J. Moreau; F/L H. C. Morgan; F/O J. C. Morgan; F/O J. R. Morin; Cpl. J. C. E. G. Morneau; Sgt. G. C. Morris; F/L F. W. Massing; P/O W. L. Moxley; Sgt. J. E. A. Mugan; F/O J. F. Muir; F/O W. G. Muir; F/O R. B. Mumberson; F/U J. A. Murphy; FS J. J. Murphy; F/L L. E. J. Murphy; F/O R. G. Murphy; P/O W. J. Murrell; P/O F. M. Myers; P/O I. T. Myron.

### N

P/O J. P. Nault; F/L R. E. Naylor; LAC W. Nazarko; F/O D. L. Neil; F/O H. P. Nelson; P/O T. J. Nelson; P/O V. E. Nelson; F/O E. H. Neufeld; Sgt. E. J. Neuman; FS D. W. Newman F/O R. J. Newman; F/O C. S. Newton; F/L R. W. Newton; LAC R. K. Nicholson; P/O R. J. Nicolls; P/O M. B. Nielson; Sgt. H. J. Niemi; F/O W. Nightingale; P/O R. F. Nimmo; FS G. Noble; Cpl. C. J. Noren; F/O J. L. Norris; F/O G. A. Nowell.

O'Connor; P/U S. M. Ogilvie; FS C. J. O'Grady; P/O T. L. O'Kane; WO G. W. Olafsen; Sgt. J. L. Oliver; Sgt. L. J. Olmstead; LAC M. Olshansky; LAC H. G. Olson; P/U I. D. Olson; F/O S. M. Olson; LAC M. J. Oneson; Sgt. G. E. Opie; P/O M. O. Orr; P/O G. M. Orser; P/O N. R. Orton; Sgt. D. J. O'Sullivan; F/O R. K. Ouram; F/O G. J. S. Overend; Sgt. J. S. Overland.

### P

Cpl. J. P. H. Packwood; P/O J. P. F. Palleck; FS J. M. Paradis; P/O G. L. Pare; F/L E. Parish; P/O K. G. Parker; F/O M. A. Parker; F/O G. W. Parliament; P/O C. W. Parrish; F/L J. M. Parrott; Sgt. O. Parsons; F/O E. A. Paterson; FS G. W. H. Patterson; P/O J. W. L. Patterson; P/O R. A. Paul; P/O J. G. Paxton; F/O W. G. Peacock; P/O J. F. Peak; F/O S. H. J. Pearce; F/O L. G. Peardon; Sgt. W. N. M. Peden; P/O J. L. G. Pelletier; F/O J. L. J. Pelletier; F/L A. F. Penhale; FS J. M. Penonzek; F/O W. A. Perry; F/O T. I. Pervin; WO F. J. Peters; F/O A. T. Phillips; Sgt. E. E. Phillips; AC J. P. H. R. Picard; F/L A.' A. Pierce; P/O R. Pierson; F/O L. E. Pike; F/O A. V. Plante; P/O R. A. Playter; Sgt. C. H. Pogson; P/O W. H. Pogson; P/O J. R. Pollock; Cpl. M. Pompilio; F/O S. Pond; P/O N. R. Poole; F/O N. M. Popovitch; WO J. E. Porret; F/O W. H. Porritt; F/L J. E. Porter; P/O J. E. Poster; FS J. M. Pougnet; F/O J. R. Pound; P/O C. O. Powell; Sgt. J. L. Powell; F/O C. J. Prawdzik; F/O C. J. Preece; FS J. H. Preece; LAC J. V. Preece; Sgt. R. B. Prest; F/O A. K. Price; Sgt. E. J. Pridham; F/O K. M. Pridham; LAC J. Primok; P/O H. N. Prince; F/L C. S. W. Proctor; LAC R. H. Prosser; F/L L. E. Prowse; F/L J. N. Punshon; WO R. S. Pyatt; Sgt. H. E. Pyche.

#### R

P/O H. Rabkin; F/L R. J. Radcliffe; F/O K. W. Raintord; Cpl. C. A. Ralph; F/O J. K. Ramsay; WO R. B. Rathbone; LAC P. E. A. Rawlings; FS E. W. P. Rayner; F/O L. J. Reaume; FS S. G. Redknap; F/O B. N. Reed; F/O K. Reed; F/O W. H. Regimbai; P/O D. E. Reiber; F/O D. C. Reid; Sgt. E. W. Reid; FS J. H. Reid; F/L M. D. Reid; F/O S. J. Reid; F/O T. E. Reilly; F/O C. L. Reitlo; F/O W. P. Retzer; P/O H. E. Reynolds; Sgt. J. L. Rheaume; P/O E. A. Rhude; F/L J. M. Rice; Cpl. J. R. Richard; F/O J. N. Richardson; Sgt. K. C. Richardson; F/O W. B. Richardson; P/O H. E. Rickert; Sgt. G. Riddoch; WO R. W. Rideout; F/O N. G. Riley; Cpl.. J. H. P. Rinfret; P/O J. D. Ringrose; AC H. I. Rivkin; F/L P. F. Robb; F/O L. G. Roberts; S/L D. R. Robertson; F/L W. J. Robertson; F/O L. J. Robillard; LAC A. H. Robinson; F/L G. D. Robinson; P/O J. J. O. Robinson; F/O L. E. E. Robinson; F/O E. A. Robitaille; FS F. Robitaille; Sgt. A. R. Robson; F/L N. D. Roche; P/O J. Rochford; FS D. J. Rodgers; WO J. A. M. Rondeau; F/O J. T. Rose; F/L N. L. Roseblade; P/O A. Rosen; F/O D. F. Ross; F/O J. D. Ross; FS J. W. Ross; P/O P. D. Rossross; F/O J. G. M. Rowe; P/O D. M. Roy; P/O J. A. P. E. Roy; P/O J. D. F..E...Roy; S/L J. M. Rutherford; FS G. Rye.

### S

F/L K. F. Sage; F/O D. W. Saidler; F/O R. J. Sanders; F/L M. W. Sanderson; Sgt. J. L. N. Savard; LAC A. Savoie; FS J. A. Savy; F/O W. G. Scanlan; FS A. O. Scherbarth; F/O W. Schneeberger; F/O H. H. Schopp; P/O D. D. Schurr; P/O J. E. Schwerdfager; F/O J. C. Scorer; S/L A. E. Scott; F/O A. G. Scott; F/O F. Scott;

LAC K. A. Scott; P/O R. B. Scott; F/O R. M. Scott; F/L W. F. Scott; F/O M. E. Scoverell; Sgt. D. P. Scratch; F/L W. J. Sealey; F/O F. H. Seaman; Sgt. B. W. Seeker; LAC R. Seefried; F/O J. R. Seeger; F/O T. A. Seeman; FS J. L. P. Sequin; LAC J. M. Seymour; F/O J. H. Shand; P/O R. A. Shannon; F/O A. Sharp; F/O E. J. Shaw; Sgt. J. J. Shaw; F/L G. E. Sheldrick; F/O H. L. Shepherd; FS K. J. Shields; F/O J. W. Shirey; P/O C. W. F. Short; Sgt. J. D. Shykoff; F/O B. Shylega; P/O E. A. H. Sills; WO J. J. M. Simard; P/O E. Simonato; FS F. J. Simpson; F/O J. C. Simpson; F/O J. C. Sinden; F/L J. H. Skeily; F/O H. N. Skelton; FS J. H. Skinner; F/L K. S. Sleep; F<sub>1</sub>/O R. J. Sloan; FL R. C. Smalley; F/O J. A. Smallwood; Sgt. J. C. Smart; Sgt. D. R. Smith: F/O G. S. Smith; WO H. W. Smith; FS M. M. Smith; P/O N. A. Smith; FS R. Smith; FS R. A. Smith; F/O R. F. D. Smith; F/O R. G. Smith; F/O R. M. Smith; P/O R. W. Smith; FS S. H. L. Smith; LAC S. M. Smith; FS S. S. J. H. Smith; P/O M. R. Smyth; F/O A. J. Snetsinger; P/O R. F. Sollie; F/O O. G. Solmundson; F/O J. H. Somerville; F/O V. J. Sopuck: WO B. W. Soroski: LAC L. M. Soubliere: WO J. M. Soucie: P/O W. R. Southcott; LAC W. H. Sparks; Sgt. J. D. M. Spears; FS D. J. Spence; P/O D. W. Spence; Sgt. G. L. Spencer; F/O G. R. Spencer; LAC M. J. Staddon; F/O D. A. Staples; F/L P. Steffin; P/O H. Steinberg; FS H. J. Stell; Cpl. R. C. Stenhouse; Sgt. L. C. Stevenow; P/O D. J. Stevens; FS G: B. Stevens; F/O M. F. Stevens; P/O R. S. Stevens; P/O J. T. Steventon; FS C. Stewardson; F/L E. C. Stewart; F/O G. A. Stewart; F/O J. A. Stewart; P/O J. O. Stewart; F/O F. M. Stickwell; F/L R. J. Stingle; FS A. E. Stinson; S/L H. K. Stinson; Sgt. H. A. Stock; F/O M. B. Stock; F/O L. S. Stockwell; F/O J. B. Stoehr; Sgt. J. R. Stokes; FS G. W. Stone; F/O J. R. Stoneman; P/O C. T. Storey; F/O H. E. Storey; P/O G. J. Storkey; P/O W. R. Strand; F/O G. J. Strickland; LAC W. G. M. Strong; Sgt. N. R. Stubbs; F/O K. F. Study; LAC G. J. Stumph; F/O J. M. Styles; P/O M. S. Sucharov; P/O A. W. E. Sugden; F/O G. A. Sullivan; P/O H. Sulz; F/L A. B. Summers; P/O A. L. Sunstrum; FS R. J. Sutherland; Sgt. T. C. V. Swift; LAC J. E. Sykes; Cpl. G. A. Symmonds.

## T

FS L. C. Taerum; P/O E. D. Tait; P/O J. Talocka; FS L. J. Tame; Sgt. A. M. Taylor; Cpl. D. D. Taylor; P/O J. E. Taylor; S/L L. J. Taylor; P/O A. J. G. Temple; P/O C. W. Tetroe; FS F. E. Thistle; LAC L. M. Thomas; F/O M. Thomas; F/O W. P. Thomas; F/L J. B. Thompson; LAC A. C. Thorns; F/L A. G. Thomson; Sgt. A. R. Thomson; F/O J. E. Thomson; P/O S. M. Thomson; F/O W. R. Thomson; P/O I. Thorndycraft; F/O R. A. Thorne; P/O T. B. Tierney; LAC N. A. Timmins; S/L C. N. Tingle; F/O D. G. Tinkess; Sgt. D. F. Titt; F/O F. G. Todd; F/O J. C. Todd; P/O R. M. Toms; FS L. M. Toth; F/O J. E. Traill; WO J. Train; F/O J. D. Travis; F/L R. M. Trites; P/O D. A. Trott; P/O R. B. Trout; P/O R. H. Turner; F/L E. 1. Turtle; F/L D. A. Twaddle; FS J. L. Tweedy; P/O L. A. Tweter; F/O A. J. Tyrrell.

U F/O A. D. Ulry; WO J. L. Underwood.

V

F/ O J. R. Vandekinder; F/I, R. B. Vankleeck; F/O J. H. Vanular; FS O. E.

Venning; Sgt. J. A. Vermette; P/O C. H. Vickery; Sgt. J. P. A. Vigneault; Sgt. J. R. R. Villeneuve; Sgt. T. A. Vincent; P/O J. A. Vogt; Sgt. A. Volny.

## W

LAC W. R. L. Wabb; P/O D. A. Wade; LAC E. G. Wagner; Sgt. J. Wakefield; LAC E. Wahlers; Sgt. C. D. Walker; F/L 1. P. Walker; F/O W. Walker; LAC W. G. Walker; F/O W. D. Wall; LAC H. R. Wallbridge; F/L K. R. Walley; F/O T. L. Walmsley; P/O J. W. R. Walsh; LAC R. E; Walton; FS S. E. Wanvig; P/b J. Warburton; P/O D. M. W. Ward; F/O W. Warfield; F/O J. F. Warrell; LAC W. C. Warrell; P/O G. Warren; P/O G. Warrendarley; Sgt. G. L. Warthe; P/O M. Washook; Sgt. Z. Wasserman; F/O J. W. Watson; Sgt. K. A. Watson; WO T. S. Watson; Sgt. J. Watt; F/O R. H. Watt; F/O H. S. Watts; FS W. C. Watts; P/O W. A. Way; F/O R. C. E. Webb; F/L S. D. Webb; S/L A. E. Webster; F/O W. M. Weeks; F/L W. J. L. Weicker; P/O H. S. Weiss; Sgt. S. W. Wells; P/O L. A. Welsh; LAC J. E. Werstine; WO R. V. Weston; F/O L. R. Wheatcroft; Sgt. B. L. White; Sgt. D. G. White; LAC G. H. White; P/O W. G. S. White; F/O W. T. White; WO L. M. Whitehead; F/O K. F. Whitehouse; F/O A. Whitelaw; LAC R. R. Whiteside; P/O R. N. Whitley; F/O A. L. Whitney; Sgt. C. Whittingstall; F/O W. G. Whitton; P/O W. E. Whyte; Cpl J. K. Wightman; F/O M. Wilbee; FS A. R. Wilde; F/O J. A. Wilding; P/O J. E. F. Wilkinson; F/O D. A. Willett; P/O E. F. Williams; W/C E. M. Williams; G/C D. G. Williams; LAC J. L. B. Williams; FS J. R. Williams; F/O R. E. Williams; Sgt. S. A. Williams; P/O R: P. Willison; Sgt. F. Willmek; FS D. R. Wilson; F/O J. R. Wilson; P/O J. S. Wilson; Sgt. M. B. Wilson; P/O W. C. Wilson; FS H. A. Wintermute; F/O D. M. Wise; P/O G. A. Wood; F/L W. J. Wood; Sgt. C. C. W. Woodford; P/O S. D. Woodman; FS W. Wooffinden; F/O D. Woolf; F/O W. F. Woolgar; FS E. J. Wright; F/O J. L. Wright; P/O W. H. Wright; P/O G. P. Wrigley; WO W. C. Wrynn; WO W. P. Wynnyk.

### Y

F/O F. Yarush; FS H. R. J. Yerdon; FS C. Young; F/O T. M. Young; F/L W. A. Young; P/O J. J. Yule.

# **Z** P/O J. Zareikin.

## PRESUMED DEAD

## A

F/L K. I. Aalborg; F/O E. O. Aaron; F/O A. W. Abbott; P/O C. Abildgaard; P/O R. W. Abrams; F/O M. L. Abramson; P/O A. Achtymichuk; P/O J. P. H. Adam; P/O R. F. Adam; F/L A. A. Adams; F/O D. A. Adams; FS G. P. Adams; P/O H. A. Adams; F/L J. C. Adams; F/O V. R. Adams; P/O W. G. Adamson; F/O D. K. Adiar; F/L B. M. Adilman; F/O R. R. A. Adrian; F/L W. C. Ahrens; F/L L. L. Aide; P/O D. E. Aiken; F/L C. S. Aistrop; F/O R. W. Akey; P/O W. M. Aldred; F/L F. C. Aldworth; F/O L. S. Alexander; F/O J. R. Alexander; S/L R. W. Alexander; FS W. E. Algar; F/O L. R. Aljoe; F/O G. I. Allan; F/O J. Allan; P/O J. L. Allan; P/O A.

G. Allen: WO2 C. T. Allen: F/O E. Allen: F/O E. J. Allen: Cpl. James E. Allen: WO2 Joseph E. Allen; P/O J. F. Allen; F/O R. A. H. Allen; WO2 T. W. Allen; P/O F. R. Alleyn; FS E. R. Alm; P/O R. M. Aimas; P/O J. N. Almond; F/O L. H. Amos; P/O N. W. Amstein; FS P. Andersen; F/L A. E. F. Anderson; P/O A. J. Anderson; F/O B. B. Anderson; P/O F. Anderson; P/O G. Anderson; FS J. K. Anderson; FS J. W. Anderson; F/O L. E. Anderson; FS L. G. Anderson; P/O N. P. H. Anderson; F/O R. W. Anderson; F/O W. Anderson; P/O W. F. Anderson; Cpl. W. G. Anderson; F/L W. J. Anderson; FS J. A. Anderton; F/L E. M. Andrew; FS H. H. Andrews; P/O J. F. Andrews; F/O N. T. Andrews; F/O O. H. Antoft; P/O D. J. Applin; F/L G. F. R. Apps; P/O J. E. J. G. Arbour; F/O R. W. Archer; P/O W. E. Archer; F/L G. A. Argument; P/O W. L. Arksey; F/L J. Armitt; F/O J. K. Armour; F/O W. D. Armour; F/O A. Armstrong; Sgt. A. R. Armstrong; F/L E. A. Armstrong; F/O H. A. Armstrong; F/O J. K. Armstrong; F/O O. W. Armstrong; P/O A. L. Arnell; P/O H. J. Arnold; P/O J. W. Arthurs; P/O J. P. Artyniuk; P/O J. W. Ash; F/L E. L. Ashbury; F/O B. B. Ashley; P/O R. J. Ashley; F/L R. B. Ashley; F/O R. G. Askew; P/O J. M. Atchison; F/L T. B. Atkinson; P/O A. E. Attewell; F/L R. J. Audet; P/O W. N. Auld; P/O A. D. Aumell; P/O C. N. Aune; P/O K. H. Austin; F/O J. L. G. Avon; P/O P. P. Awad; P/O H. F. Axford.

# В

P/O J. F. Bachant; FS H. Backler; F/O J. C. Badgley; F/O D. J. Bailey; P/O E. L. Bailey; FS H. R. Bailey; F/O N. Bailey; F/O T. R. Bailey; P/O W. A. Bailey; F/L J. L. Baillargeon; F/O N. G. Baily; F/O A. Bain; P/O G. H. Bainbridge; WO2 N. G. Baird; F/O D. G. Baker; P/O E. E. Baker; P/O J. D. Baker; P/O N. Baker; F/O P. J. Baker; WO2 R. M. Baker; P/O T. L. Baker; F/O W. Baker; F/O W. L. Baker; F/O J. M. Baldwin; WO2 W. B. Baldwinson; P/O A. G. Balfour; P/O H. L. Ball; WO2 E. W. Bancroft; F/L R. E. Banks; F/O R. H. Bannihr: P/O M. Baran: P/O J. W. Barber: P/U R. J. Barber: F/O E. H. Barbet: FS J. R. Baril; Sgt. A. C. S. Barker; F/O H. Barker; F/O K. H. Barker; WO1 L. S. Barker; P/O M. M. Barker; F/O T. F. Barker; P/O P. J. W. Barkway; F/O C. O. Barlow, F/O G. M. B. Barlow, P/O P. Barlow, P/O D. R. Barnard, FS A. J. G. Barnes; F/L J. B. Barnes; F/L J. M. Barnes; P/O P. Barnicke; F/O A. Barr; FS R. J. Barr; P/O W. J. Barr; S/L C. K. Barrett; WO2 R. J. Barrett; P/O H. J. Barrons; F/O G. R. Barry; P/O I. V. Bartlemay; F/O R. N. Bartlett; P/O T. C. Barton; P/O L. Basarab; P/O N. G. Baskerville; F/O A. J. Bate; P/O D. W. Bateman; P/O P. T. Bath; FS J. H. Batt; F/O A. V. Batty; P/U G. R. Baumann; P/O D. F. J. Baxter; FS J. R. Baxter; P/O L. E. Baxter; FS L. J. Baxter; F/O R. L. Bayard; F/O D. A. Bayley; P/O E. V. Beach; LAC L. I. Beach; WO2 R. B. Beach; P/O F. Beales; P/O H. D. Beames; FS B. G. H. R. Bean; FS C. A. Beanland; F/O J. R. Beasley; F/O H. J. Beaton; F/L E. W. Beattie; F/U W. B. Beatty; Sgt. C. H. M. Beaudoin; FS L. H. Beaumont; F/O H. Beazley; F/O A. J. Beck; P/O C. D. Beck; FS B. J. Becker; WO2 A. C. Beckett; FS L. E. Bedell; P/O C. T, Beech; Sgt. S. P. Beech; F/O F. K. Beers; F/O L. R. Beicher; F/O J. A. R. Belanger; P/O P. Belkin; P/O A. M. J. Bell; F/O D. Bell; P/O J. B. Bell; FS M. R. Bell; F/O T. Bell; F/O W. A. Bell; F/O G. C. Bellamy; P/O J. A. Bellamy; F/O W. H. Bellingham; F/O D. E. Belt; W/C R. J. Bennell; P/O K. H. Bennett: Sgt. P. G. Bennett: P/O R. A. J. Bennett: F/U R. J. Bennett: F/L I. B.

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J. Earl; F/O J. W. B. Earle; F/L R. N. Earle; F/O F. C. Eastley; F/O E. L. Easton; F/O R. W. Easton; LAC W. R. Eaton; F/O R. A. Ebber; F/O A. G. Echlin; F/O W. A. Eden; F/O R. Edge; P/O R. S. Edick; P/O K. J. Edmison; P/O H. F. Edmunds; F/L A. G. Edwards; P/O B. F. Edwards; F/L J. W. Einarson; FS E. L. Eitel; WO2 J. C. B. Ekeberg; F/L W. R. Elcoate; F/O A. H. Eldridge; F/O P. J. Elfner; F/O E. F. Elford; F/O S. W.Elgie; P/O A. R. Elliott; P/O C. A. Elliott; P/O H. W. Elliott; P/O, T. H. Elliott; FS V. D. Elliott; Sgt. J. W. Ellis; F/O R. G. Ellis; P/O R. O. Ellis; Sgt. W. C. Ellis; F/O D. Elphick; P/O C. I. Elsley; F/O R. N. Elwin; F/L A. B. Ely; P/O R. F. Emerson; F/O R. H. Emerson; WO1 J. F. Emery; F/O J. L. Emery; F/L B. D. Emmet; F/O M. Emsig; P/O P. F. English; F/O R. M. English; Sgt. D. F. Enright; P/O E. W. Eppler; F/O'J. W. Erickson; F/O W. B. Ernst; P/O W. Essar; F/O E. Essenberg; P/O R. Etherington; F/L E. E. Ettinger; F/O A. L. Evans; P/O C. C. Evans; F/O D. J. Evans; F/O E. R. Evans; F/O H. A. Evans; WO1 L. G. Evans; F/L R. S. Evans; F/O R. W. Evans; P/O T. G. Evans; FS A. L. Evens; P/O V. Everest; FS G. Ewen; F/O G. W. Exel.

F

F/O N. G. Fadden; Sgt. R. E. Fahselt; P/O T. W. Fair; P/O M. E. Fairall; P/O E. R. Fairey; F/L C. E. Fairfield; F/O W. C. Fairgrieve; P/O A. G. Fairless; F/O L. M. Falkins; P/O J. Faragher; FS J. A. Farr; S/L D. W. Farrell; P/O J. P. Farrell; P/O K. D. Farrow; F/O T. E. Farrow; F/O R. A. Faulafer; F/O A. J. Faulkner; F/O G. Faulkner; LAC E. G. Feil; P/O L. L. Feindell; F/O H. J. Feldhans; P/O Jacob Feldman: F/O Joseph Feldman: F/O L. R. Fennell: P/O R. E. Fennell: F/O J. F. Fennessey; F/O G. W. Ferguson; WO2 H. L. Ferguson; P/O J. H. Ferguson; P/O L. W. Ferguson; P/O R. S. Ferguson; F/O R. J. Fern; P/O D. M. A. Fernandez; P/O W. Fernyhough; F/O J. S. Ferrier; P/O W. R. Ferrier; P/O M. Fetchison; FS W. H. Fetherston; F/O J. R. Fichtner; Sgt. W. H. G. Field; WO2 W. R. Fields: F/O M. G. Fife: F/O E. D. Figg: Sgt. G. F. Finch: S/L G. H. Finch; P/O L. E. Findlay; P/O W. J. Fingland; FIL C. G. Finlayson; F/O J. M. Finnie; FS E. J. Firth; F/O M. N. Firth; F/L C. H. Fisher; F/O J. G. M. Fisher; F/O R. G. H. Fisher; F/O R. H. Fisher; P/O T. F. Fisher; F/O W. J. K. Fisher; P/O N. F. Fitton; F/O J. B. Fitzgerald; FS J. E. Fitzgerald; WO2 J. E. Fitzpatrick; F/O J. S. Fitzpatrick; Sgt. L. Fitzpatrick; P/O R. J. Fitzpatrick; F/O L. Flack; P/O T. E. Flanagan; F/O L. C. Flather; P/O A. L. Flatt; F/O G. Flegel; WO2 K. M. G. Fleming; F/O M. H. Fleming; P/O V. B. Fleming; P/O R. C. Fletcher; P/O W. A. Flett; Sgt. C. N. Flette; P/O J. M. Flood; F/O G. Floyd; F/L J. P. Flynn; FS L. O. Foisy; F/O T. L. Foley; F/O E. W. Folliott; P/O S. W. Follows; P/O D. E. Fonseca; F/L A. P. Forbes; F/O R. D. Ford; P/O J. L. Foreman; P/O J. K. Forest; F/O R. S. Forestell; F/O A. Forsyth; P/O A. M. Fostey; F/O T. Foster; P/O A. M. Fournier; P/O M. A. G. Fournier; F/L A. F. Fowke; F/L J. M. Fowlie; S/L N. R. Fowlow; P/O E. G. Fox; F/O G. G. Fox; P/O H. W. G. Fox; WOl V. A. Fox; F/O B. G. Foy; P/O C. J. Foy; F/O T. E. Frair; F/O D. Frame; WO1 J. C. Francis; P/O R. W. Francis; Sgt. M. Frank; P/O R. L. Frankfurth; Sgt. L. S. Franklin; P/O C. W. Fraser; F/O J. Fraser; P/O J. B. Fraser; FS J. M. Fraser; P/O W. F. Fraser; P/O T. Frederickson; F/L J. H. Freeman; F/O R. A. French; P/O F. J. A. Frey; WO2 J. Friedt; F/L W. L. Friker; FS S. R. Frith; P/O L. W. Frizzell; AC2 E. A. Frymark; F/O H. A. Fuhr; WO2 R. E. Futcher; F/O D. Fuller; F/O J. Futiranski.

G

FS J. A. P. H. Gaboury; P/U T. A. Gabriel; P/O D. I. Gage; F/O R. P. Gagnebin; P/O G. A. Gagnon; P/O D. I. Galbraith; F/O R. F. Galbraith; WO2 T. F. Galbraith; FS H. Gallagher; P/O J. Gallagher; P/O J. C. Gallagher; P/O J. D. Gallagher; F/O J. P. Gallagher; P/O J. L. Gallant; P/O R. C. Gallaugher; F/L T. E. Gallivan; WO2 J. E. Gallop; P/O L. P. Galvin; FS T. M. Galvon; F/O T. C. Gamey; F/O A. G. Gamsby; F/O P. J. Gandy; WO2 D. E. Gapp; FS J. A. Garbutt; FS J. Gardiner; F/O L. H. Gardiner; P/O W. H. Gardiner; P/O J. E. Gardner; P/O E. J. Gares; F/L S. F. Garland; P/U A. W. Garnet; F/U J. E. Garrigan; F/O S. V. Garside; FS E. P. Gartley; F/O H. S. Gartrell; P/O R. A. Gaskin; P/O M. E. Gates; LAC R. L. Gates; AC2 J. L. Gaudet; P/O B. A. Gauthier; Sgt. J. P. A. Gauthier; P/O L. A. J. Gauthier; F/O N. V. Gautschi; P/O W. C. Gay; Sgt. J. Geddes; FS R. S. Geddes; F/O M. H. W. Gee; F/O G. E. Geeves; F/O J. E. Gelinas; F/O W., Gell; F/O A. B. George; Sgt. G. L. George; P/O G. E. Germiquet; P/O V. C. Gerrie; P/O J. S. M. Gibb; F/O A. S. Gibbon; P/O J. D. Gibbons; F/O N. Gibbons; F/O R. C. Gibbs; F/O W. R. Gibbs; P/O J. Gibson; WUI R. W. Gibson; P/O W. J. C. Gibson; FS F. T. Gidilevich; FS R. Giesbrecht; F/O R. R. Giffin; F/O G. L. Gilbert; FS J. R. Gilbin; FS C. C. Gilchrist; F/U H. G. Gilchrist; P/O J. R. Giles; WO1 W. Gill; FS H. Gillender; FS E. B. Gillespie; P/O W. L. Gillespie; F/O O. R. Gillette; F/O W. G. Gillissie; F/O F. U. Gilmore; P/O H. B. Gilmore; F/O W. J. Gilmore; FS K. A. Gilrov: F/O A. Girolami: WO1 J. E. G. Girouard: P/O J. Z. Giroux: P/U W. I. Girvin; FS M. A. Gislason; R/O J. J. Gladish; F/O W. J. Gladwell; P/O W. J. Glass; F/L H. S. Glassco; F/O A. Glendenning; F/U J. E. Gloeckler; P/O M. Gnida; P/U C. C. Goble; F/U R. S. Goddard; WO2 E. H. Goehring; Sgt. J. A. Goff; F/L J. G. Gohl; P/O J. H. E. Goldfinch; P/O A. J. Goldman; FS M. Goldwater: F/L M. Golub: F/O F. E. Good: F/O H. R. Good: LAC M. J. F. Good; P/O R. E. Good; P/O W. A. Good; WO1 E. W. Goodchild; P/O D. G. Goodfellow; F/O D. W. Goodwin; P/O E. A. Goodwin; Sgt. L. F. B. Goodwin; F/O T. Gorak; F/O F. M. Gordon; F/U H. P. Gordon; Sgt. J. N. Gordon; F/U F. C. Goring; F/O A. T. Gorman; P/O A. E. E. Goudreau; P/O A. N. Gould; P/U T. A. Goundry; F/O R. B. Gowan; F/O J. P. Grace; P/O W. Gracie; FS W. B. Gracie; P/O J. B. Grady; P/O D. C. Graham; P/O F. G. Graham; FS I. P. Graham; FS J. Graham; P/O L. T. Graham; P/U R. Graham; P/O R. M. Graham; P/O R. R. Graham; FS J. H. J. Grahame; P/O W. J. Gramson; WO2 M. E. Granbois: P/O W. L. Granbois: F/U A. H. Grange: P/U B. Granka: P/O A. F. Grant; P/O C. Grant; P/U J. F. Grant; F/U M. C. Grant; P/O W. R. Grant; P/U J. V. J. Gravel; P/O M. Gravel; WOI J. R. Gravelet-Chapman; F/O C. Gray; WOl F. E. Gray; Sgt. R. S. Gray; P/U William Adam Gray; P/O William Alexander Gray; P/6 D. T. Greatrex; P/O E. C. Green; F/O G. A. Green; P/U<sup>-</sup> J. S. W. Green: F/O L. A. Green: P/O R. L. Green: WO2 W. M. L. Green: P/O P. S. Greene; FS W. Greene; P/O J. A. Greenidge; FS B. E. Greenhalgh; P/O G. F. Greenlee; FS M. Greenstein; F/O J. K. Greenway; WO2 W. L. Greer; F/O L. J. R. Gregoire; F/L F. B. Gregory; WO1 R. J. Gregory; F/O Q. T. R. Grierson; P/O J. D. Griffin; F/O M. F. Griffin; FS L. G. Griffith; P/O L. G. H. Griffiths; F/O R. J. Grigg: F/O H. Grimble: F/O J. A. Grinde: F/O R. J. Grisdale: Sgt. N.

Gronbeck; F/L D. H. Gross; F/O D. F. Grosse; P/O R. G. Grount; P/O L. S. Guernsey; F/L J. A. Guest; P/O J. R. L. N. Guillot; P/O P. Gulevich; P/O R. B. Gunderson; P/O W. Gunn; P/O C. Gurevitch; F/O M. S. Gurski; P/O J. K. Gustafson; P/O J. R. C. Gutcher; F/O K. G. Gutensohn; P/O G. S. Guthrie; F/O J. T. Guthrie; F/O L. L. Guthrie; P/O H. Guttormson; P/O J. Gynane.

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P/O C. B. Haaland; FS D. L. Haberthur; P/O M. Habiluk; F/O R. M. Habkirk; F/O F. N. Hack; F/L J. F. Hadley; F/O J. G. Hagell; F/O E. J. Hagen; P/O N. E. Hagerty; FS S. S. Hagerty; P/O D. S. Haggis; F/L J. A. F. Halcro; P/O K. W. Halden; F/O R. W. Hale; F/L W. M. Hale; P/O A. W. Haley; P/O W. St. C. Haley; FS R. R. Halford; F/O G. F. Haliburton; F/O A. H. B. Hall; F/L B. E. W. Hall; P/O C. J. Hall; F/O C. W. Hall; WO1 F. R. Hall; S/L J. D. Hall; P/O W. D. Hall; FS G. T. Hallam; FS W. A. Hallett; F/L T. H. O. Hallihan; F/O G. L. Halsall; F/O V. H. Halstead; F/O C. W. Hamann; WO2 L. W. L. Hambrooke; P/O D. M. Hamilton; FS G. B. Hamilton; P/O Ian McCallum Hamilton; P/O Ian McKenzie Hamilton; Sgt. J. Hamilton; P/O J. H. Hamilton; F/O C. Hamlyn-Lovis; P/O H. R. Hammerton; F/O D. W. Hammond; P/O K. M. Hammond; F/O R. D. Hanbidge; F/O A. H. Handley; P/O W. H. Hanes; FS D. L. Hann; P/O D. Hanna; F/O W. E. Hanna; P/O I. M. Hannon; FS S. W. Hans; F/O H. R. Hanscom; P/O E. M. Hansen; F/L J. R. Hanson; S/L J. A. Hanway; FS O. Harding; F/O D. R. Hardy; P/O L. G. Hardy; P/O S. M. Harju; P/O F. C. Harman; F/L R. L. Harman; P/O C. R. Harnish; P/O J. R. Harper; S/L W. J. Harper; Sgt. T. R. Harringan; P/O T. A. Harrington; F/L A. H. Harris; P/O H. R. Harris; F/O J. F. Harris; F/O R. D. Harris; Sgt. W. G. Harris; P/O W. L. Harris; P/O F. A. Harrison; WOl G. F. Harrison; F/O J. L. Harrison; F/O R. W. Harrison; P/O F. G. Harrop; F/O J. W. Hart; P/O T. G. Hart; P/O W. R. Hart; F/L J. W. E. Harten; F/O A. B. Harvey; F/O J. A. Harvey; P/O L. W. Harvey: P/O R. E. Harvey: F/O C. F. J. Harwood: P/O W. H. Harvett: P/O F. Hatchman; F/L R. R. Haw; P/O L. M. Hawkes; P/O J. R. Hawkins; F/O A. A. Hawthorne; P/O G. Hay; F/O P. F. C. Haydock; P/O E. Hayes; P/O J. D. Hayes; P/O M. E. Hayward; LAC L. E. Heal; FS D. J. Heath; WO1 J. W. Heavner; FS H. R. Hebert; F/O D. K. J. Hector; F/O R. T. Heeney; P/O W. H. O. Heidman; Sgt. G. W. Hemming; P/O J. T. Hemsworth; FS A. J. Henderson; P/O D. A. Henderson; P/O D. L. S. Henderson; P/O H. L. Henderson; FS K. G. W. Henderson; P/O W. Henderson; P/O T. A. Hennessy; WO2 P. E. A. Henrichon; WO2 E. F. Henry; P/O F. Henry; P/O G. A. Henson; P/O R. B. Herger; P/O G. A. Hergott; P/O W. H. Herman; F/O J. W. Hermiston; F/O K. Heron; F/O J. A. R. G. Heroux; F/O R. G. Hervey; P/O G. W. Hess; F/O W. R. Heuchert; P/O W. R. Hewetson; F/O R. W. Hewitt; P/O S. D. Hewson; F/O E. O. Heyworth; FS L. U. M. Hiatt; P/O J. M. Hickey; Sgt. W. Hickox; P/O E. W. Hicks; P/O K. B. Hicks; P/O J. W. Hickson; FS L. A. Higgins; F/L D. W. Hill; F/O F. C. Hill; WO2 F. I. R. B. Hill; FS G. W. Hill; F/O J. B. Hill; F/O J. S. Hill; F/O L. G. Hill; F/L H. B. Hillcoat; F/L D. E. Hillman; F/O J. G. Hillman; Sgt. R. F. Hillman; FS H. D. Hilts; P/O R. A. Hiltz; F/O E. A. Hine; P/O R. E. Hine; F/O A. Hinscliffe; P/O J. M. 1-lirak; P/O A. Hisette; FS G. E. Hitchcock; F/O A. M. Hoar; FS G. H. Hobson; F/O A. J. Hoddinott; P/O D. W. Hodge; FS R. B. Hodgins; FS G. A. Hodgkins; F/O E. D. Hodgson; F/O G. R. Hodgson;

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T

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J

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L

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### M

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### N

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P

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Petrina; WO2 G. D. Pettes; P/O A. C. Pettifor; F/O.R. W. Pettigrew; S/L W. R. Pettit; P/O E. J. Peverly; F/O F. A. Pfeffer; P/O G. W. Pharis; F/O T. B. Phelan; F/O C. A. Phelps; F/O C. S. Phillips; FS G. J. Phillips; F/O J. M. Phillips; P/O R. J. Phillips; P/O W. J. Phillips; F/O F. G. Physick; F/O A. A. Picard; WO1 R. D. Picciano; P/O J. A. F. Piche; F/O L. P. E. Piche; F/O F. E. Pickering; FS R. G. Pickering; F/O J. W. Piercy; FS R. F. Piercy; F/L D. M. Pieri; Sgt. R. S. Piers; P/O T. C. Pierson; F/O R. E. W. Pike; WOl R. I. Pinner; F/O J. B. Pittman; Sgt. R. M. Pitts; WOl A. N. Pixley; P/O F. G. Plecan; F/O L. S. Plunkett; Sgt. D. L. Pocock; P/O W. F. Pocock; F/O P. Pokryfka; F/O D. C. Pole; F/O R. N. Pole; F/O E. W. Pollard; P/O A. L. Pollock; F/O E. C. Pomeroy; P/O- G. R. Pond; F/O H. W. Pond; F/L G. R. Pool; P/O W. H. Pool; P/O H. M. Pope; F/O R. A. Porrett; F/O C. R. Porter; P/O F. F. Porter; Sgt. E. J. Post; F/O W. Poterfield; P/O B. F. Pothier; F/O J. F. Potter; WOl J. M. Potter; F/O J. M. Potts; F/O J. R. Potts; WOl J. A. L. Potvin; P/O P. Poulos; F/O L. G. D. Pow: F/L R. Powdrill: F/L J. M. J. Powell: P/O J. M. Power: P/O J. R. Power; WOl W. C. Powers; P/O G. E. Pratt; P/O G. L. Preece; P/O T. J. Preece; F/O J. M. Prentice; WO2 J. B. Presse; FS A. W. Preston; F/O S. M. Preston; F/O W. G. Preston; F/O D. M. Price; P/O J. H. Price; P/O T. W. P. Price; F/O-W. W. Price; F/O G. F. Pritchard; WOI W. N. Procter; FS B. J. Profit; P/O A. W. Prosofsky; P/O D. H. Proudfoot; F/O W. W. Proudfoot; FS R. G. Proulx; P/O V. E. Prouse; FS R. Prunkle; F/L W. S. Pullar; P/O E. C. Purney; FS T. A. Purvis.

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F/O W. Quanstrom; F/O S. J. Queen; F/L F. T. Quigley; P/O D. S. Quinn; P/O G. E. Quinn; P/O H. E. Quinn; P/O J. D. Quinn; FS R. A. Quinn; P/O T. P. Quinn; F/O J. H. Quirt.

### R

FS J. Rabiner; F/O M. Rabovsky; F/O E. E. Radcliffe; P/O G. A. Rae; FS J. M. Rae; P/O L. E. Rae; F/O F. S. Raftery; F/O G. S. Ragan; FS W. J. Rahkola; WO2 J. Raike; P/O L. P. Ramey; P/O A. J. Rammage; F/L G. B. N. Ramsay; F/O J. Ramsay; F/O K. G. Ramsay; WOI S. S. Ramsden; F/O C. J. P. Ramsey; F/O R. W. A. Rankin; F/O D. G. Rathwell; P/O R. W. Rathwell; WO2 O. J. Rau; F/L A. J. Rawland; P/O J. Rea; LAC N. F. Ready; P/O E. E. Reaney; P/O G. C. Reason; FS R. F. C. Reaume; F/O E. W. Rech; F/O C. G. Redden; F/O A. S. Redmonds; Sgt. D. A. Redshaw; P/O J. C. Reeb; FS N. T. S. Reed; P/O R. A. Reed; F/O A. J. Reeder; F/O T. C. Reeve; P/O W. W. Reeve; F/O M. Reeves; F/O A. J. Reid; F/O E. K. Reid; F/O H. H. Reid; F/O H. W. Reid; F/O J. Reid; F/O J. K. Reid; F/O J. L. Reid; F/L P. T. Reid; P/O S. A. Reid; P/O William Ferguson Reid; Sgt. William Francis Reid; F/O W. V. F. Reid; F/L A. W. Reif; P/O R. J. Reilly; F/O R. A. Rember; FS J. L. R. Remillard; F/O G. K. Renaud; FS J. A. R. Renaud; WO2 R. B. Rennie; F/O R. E. Rennie; FS W. W. Rennie; P/O P. P. Repsys; P/O A. J. Retter; P/O P. C. Revell; P/O F. L. Rey; F/O H. C. B. Reynolds; WO2 J. A. Reynolds; FS R. E. Reynolds; FS W. C. Reynolds; P/O A. E. Rheubottom; FS J. Rheubottom; F/O E. Rhind; P/O J. C. Rhind; Sgt. E. A. Rhoades; P/O K. E. Rhodes; FS A. J. Ricci; FS R. S. Rice; FS E. G. C. Richards; F/O W. S. Richards; FS D. B. Richardson; P/O E. J. Richardson; FS H. F. Richardson; P/O J. M. Richardson; Sgt. W. M. Richmond; F/O J. M. Rickard; P/O A. E. Rickert; FS R. A. Riddoch; F/L R. C. Ridge; F/L R. H. Ridgway; F/L H. W. Rieger; P/O C. T. Rielly; FS L. E. Riggs; F/O V. L. Riley; P/O J. A. Rinder; P/O J. J. Ringer; F/O W. Rink; F/O J. L. Ritchie; F/O J. S. Ritchie; P/O W. M. Ritchie; P/O E. T. Rivers; P/O F. Roach; P/O J. C. Roach; F/O T. G. Robb; F/O I. C. Robbie; F/O B. E. Roberts; P/O C. A. Roberts; P/O C. E. Roberts; P/O C. J. Roberts; P/O D. W. Roberts; F/O J. M. Roberts; FS W. G. Roberts; FS C. C. Robertson; F/O D. B. Robertson; F/O D. J. M. Robertson; P/O Gerald E. Robertson; P/O Gordon E. Robertson; F/O J. D. A. Robertson; F/O J. M. Robertson; FS J. R. Robertson; P/O W. D. Robertson; P/O G. E. R. Robineau; F/O D. W. B. Robinson; F/O G. Robinson; P/O G. A. Robinson; P/O H. G. Robinson; F/O J. T. Robinson; P/O R. W. Robinson; F/L V. T. Robinson; P/O A. E. Robson; P/O D. M. Robson; F/L T. C. Robson; P/O K. A. Roche; F/O P. M. Roche; FS J. L. Rochester; FS A. Rodd; P/O H. H. Rodgers; P/O A. E. Roe; F/L G. R. B. Roe; P/O H. T. Rogers; WO2 W. B. Rogers; F/O E. R. Rognan; Sgt. R. S. Roller; F/O R. H. Rolph; P/O J. M. Ronahan; WOl J. A. Rooney; FS C. E. Root; P/O H. K. Rose; P/O J. T. Rose; P/O R. H. M. Rose; F/L A. W. Roseland; P/O A. Roski; P/O C. V. Ross; F/L D. A. Ross; P/O E. B. Ross; F/O F. R. Ross; F/O J. D. C. Ross; F/O W. Ross; P/O W. M. Ross; FS S. Rosu; WO2 K. L. Roth; F/O R. T. Roth; F/O C. J. Rouse; F/O J. L. P. Routhier; P/O W. A. Routley; F/L A. G. Rowe; WO2 G. L. Rowe; P/O A. B. Rowley; FS J. J. P. R. Roy; F/O V. S. Roy; F/L H. B. Rubin; P/O G. J. Rude; P/O L. J. Ruhl; P/O H. M. Rumball; P/O S. G. Rundle; P/O G. A. Running; FS K. M. Rupert; F/O E. J. Rusenstrom; F/O W. J. Rushforth; Sgt. N. C. Rushton; F/L H. Russel; P/O D. G. Russell; P/O E. A. Russell; P/O J. A. Russell; F/O J. B. Russell; P/O L. A. Russell; F/O M. A. Russell; F/O W. Russell; P/O B. A. Rutherford; F/O B. W. Rutland; P/O A. L. Rutter; F/L A. J. Ruttledge; WO2 A. J. Ryan; F/O D. T. Ryan; P/O G. E. Ryan; F/O C. R. Rverse; F/O D. A. Rverse; FS J. B. Rvnski.

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Sgt. J. E. Sabine; F/O H. Sager; F/L J. E. Sales; F/O E. A. Salomaa; P/O R. A. Saltzberry; P/O D. W. Sammon; F/O J. T. Sammon; P/O C. N. Samson; P/O A. G. Samuel; F/O W. H. Sanders; F/L D. M. Sanderson; P/O R. L. Sanderson; WO2 M. M. Sandomirsky; P/O J. A. Santo; P/O S. Saprunoff; Cpl. F. W. Sargeant; FS M. A. Saruk; F/O E. L. Saslove; FS R. J. Saundercook; F/L W. L. Saunders; FS E. R. Savage; P/O J. G. M. Savard; W/C J. L. Savard; F/O J. L. M. R. Savard; F/L J. W. Saville; P/O J. W. Savoie; FS M. Sawry; F/O S. L. Saxe; F/O R. H. Schaefer; FS J. Schafer; Sgt. L. Schaff; F/L W. K. Scharff; F/L A. F. Scheelar; P/O L. F. Schell; WO2 R. F. Schimmens; FS J. W. Schleihauf; P/O R. C. Schlievert; P/O F. J. Schmidt; P/O K. L. Schmidt; P/O D. J. E. Schmitz; Sgt. R R. H. Schnaufer; FS D. O. Schneider; F /L W. G. Schroeder; P/O D. K. Schroder; WOl J. A. Schryer; F/O A. B. Schultz; F/O G. T. Schwalm; F/O F. W. Schwartz; P/O M. Schwartz; P/O M. E. Schwartz; WO2 G. A. Schwerdfeger; P/O B. C. Scobie; FS A. N. Scorah; WO2 D. J. Scott; F/O George Scott; F/O Gibson Scott; F/O G. E. Scott; FS J. K. Scott; P/O N. L. W. Scott; P/O R. D. Scott; P/O T. D. Scott; Sgt. T. F. Scott; P/O W. H. Scott; P/O J. J. Scully; F/O F. E. Seaby; P/O J. E. Searson; P/O D. Sebestyen; P/O H. C. Seedhouse: P/O F. G. Seelev: P/O J. C. Seelv: P/O D. L. Sehlin: F/O H. S. Seibold; F/O G. W. Sellers; F/O W. Semeniuk; P/O C. Senton; F/O M. F. E. Sergeant; P/O C. Service; P/O D. T. Serviss; P/O J. R. Seymour; P/O J. L. Shanks; F/O A. M. Shannon; F/O G. R. G. Shannon; F/O F. W. Shantz; P/O I. W. Shantz; F/O M. Shapiro; F/O D. J. Shapter; FIL D. H. Sharpe; F/O G. H. Sharpe; F/O H. M. Sharpe; F/O J. D. Sharples; P/O M. Shatzky; F/L C. L. Shaver; P/O G. G. Shaw; WOI R. W. R. Shaw; P/O S. R. Shaw; F/O W. S. Shea; P/O J. J. H. Sheahan; F/O W. J. Shearstone; F/O E. B. Sheehy; F/O R. J. Sheen; P/O B. T. Sheeran; P/O G. H. P. Shephard; P/O H. I. Shepherd; P/O J. E. Shepherd; P/O D. E. Sherman; F/O L. Sherman; FS M. Sherman; F/O S. G. C. Sherman; F/O J. F. L. Sherrill; F/L J. A. Sherry; F/L H. A. Shewfelt; P/O R. H. Shiells; FS R. C. Shilliday; P/O IN. Shlahetka; F/O G. E. Sholte; FS D. Shoobridge; P/O J. T. Short; F/O W. E. Short; P/O J. P. Shortt; P/O J. E. Shuster; P/O J. Sibbald; P/O J. G. L. R. Sicotte; P/O G. E. Sidebottom; P/O J. G. Sieben: P/O A. H. Siemins: P/O R. L. Siewert: P/O H. Sigal: P/O J. Sigurdson; P/O R. G. E. Silver; FS S. L. Silver; P/O A. M. Silverthorn; P/O A. G. S. Simard; P/O S. Simm; P/O A. M. Simmons; P/O H. E. Simmons; P/O B. G. Simonin; P/O R. A. Simpson; P/O R. J. Simpson; FS G. R. Sims; P/O A. G. Sinclair; P/O D. S. Sinclair; FS R. J. Sinclair; P/O J. H. Singer; WO2 J. Sirovyak; FS E. W. Sivell; Sgt. B. A. Skebo; F/O R. F. Skelly; P/O D. D. Skingle; FS K. E. C. Slack; P/O G. A. Slater; F/L J. W. Slater; P/O L. L. Slauenwhite; P/O M. C. Slaughter; F/L M. E. Slaughter; P/O J. C. Slawson; F/O R. L. Sleeth; F/O A. G. Slocum; F/O G. H. Small; WO2 R. W. Smalley; F/O C. Smerneos; F/O A. G. Smith; FS A. R. Smith; F/L B. H. Smith; P/O C. F. Smith; P/O C. W. Smith; F/O D. G. Smith; F/O D. W. Smith; P/O E. Smith; FS E. G. Smith; FS E. R. Smith; F/L E. S. Smith; Sgt. F. C. Smith; P/O Gerald Albert Smith; F/O Gerald Alfred Smith; F/L Gibson A. Smith; FS George Earl Smith; P/O George Edward Smith; F/L G. J. Smith; P/O H. A. Smith; P/O H. I. Smith; F/L H. R. Smith; P/O James Smith; P/O John Smith; F/O J. A. Smith; P/O J. D. Smith; FS J. J. S. R. Smith; F/O J. M. Smith; P/O J. O. Smith; P/O L. H. Smith; F/O M. A. Smith; F/O N. F. Smith; LAC N. L. Smith; P/O N. L. L. Smith; P/O P. S. Smith; P/O R. B. Smith; WO2 R. C. Smith; F/O R. H. Smith; P/O R. J. Smith; P/O R. M. Smith; FS R. N. Smith; F/L R. S. Smith; F/O S. E. F. H. Smith; P/O V. B. Smith; F/L W. D. Smith; F/O W. J. Smith; F/L W. R. Smith; P/O H. Smook; FS J. E. Smythe; F/O R. H. Sneath; P/O D. R. Snell; P/O G. W. Snow; Sgt. V. Sobeski; P/O C. Soderstrom; F/O W. E. P. Soeder; F/O P. L. Soesman; F/O B. A. Somers; P/O W. M. Sommerville; LAC N. Somolenko; F/O M. Sonshine; WO2 J. H. Soper; F/O W. Y. J. Soper; P/O W. G. Sorel; F/O V. A. Sorrenti; WO2 M. E. Soules; Sgt. W. L. Southwick; P/O R. T. Sowter; F/L E. Spankie; F/L L. G. Sparling; F/O R. H. Sparling; P/O T. B. Sparrow; FS V. A. Spearn; F/O J. A. Spearin; P/O G. D. Spearman; F/O J. Spector; F/O G. H. Speirs; F/L D. W. Speller; P/O D. J. Spence; P/O G. D. M. Spencer; WOl W. W. Spencer; P/O J. Spevak; F/O D. A. Spice; WO2 J. Spiegel; Sgt. W. E. Spinks; F/O L. W. Splatt; F/O J. E. Spraggett; P/O J. L. Springsteele; P/O N. R. Springstein; F/O J. C. Sprott; F/O L. M. Spry; FS H. E. Squibb; F/O J. R. G. Srigley; F/O J. G. Stables; F/O W. F. Stafford; FS A. J. Stainton; WOI W. Stairs; F/O D. A. Standfield; F/O J. K. Stanley; F/O R. S. Stanzel; P/O A. I. Staples; F/O J. W. Stapleton; F/O A. W. Staves; P/O V.

Stear; P/O J. M. Stecyk; F/L D. T. Steele; P/O F. A. Steels; F/O J. R. Steepe; F/O A. G. Stein; P/O J. K. Stenhouse; F/O A. L. Stepharnoff; WOl H. A. Stephen; F/O D. E. Stephens; F/O W. Stephen; P/O N. D. Stephenson; P/O M. Stern; P/O E. L. Stevens; Sgt. F. C. Stevens; F/O D. G. Stevenson; Sgt. J. Stevenson; FS L. H. Stevenson; P/O C. R. Stewart; WOI D. C. Stewart; S/L W. B. Stewart; F/O A. Stienstra; Sgt. L. G. Stiff; P/O R. E. Stillinger; F/O J. E. Stillings; F/L G. E. Stockdale; P/O T. A. Stone; FS M. H. Stoner; P/O A. L. J. St. Pierre; F/O F. Stratford; P/O J. Street; P/O W. A. Streich; F/O A. J. Stringer; S/L R. H. Stringer; F/O A. G. Striowski; F/O'K. A. Stroh; P/O M. Strosberg; F/O A. C. Strout; P/O M. L. Strumm; F/L W. M. Struthers; P/O R. R. Stuart; WO2 J. L. Stubbs; FS R. F. Stubelt; F/O D. G. Sturrock; P/O N. E. Stuttle; F/O S. J. Sullivan; P/O J. W. Summerhayes; P/O C. P. Suries; P/O E. G. Surridge; FS A. C. Sutherland; P/O A. T. Sutherland; LAC J. C. Sutherland; FS J. W. A. Sutherland; P/O R. E. Sutherland; F/O J. E. Suttak; P/O C. B. Sutton; F/L W. R. R. Sutton; P/O J. K. Swan; P/O S. J. Swartz; F/O V. D. Sweeney; P/O R. I. Sweet; FS A. A. Swihura; F/L B. P. Swingler; P/O T. R. Swinton; F/O W. A. Swinton; Sgt. J. R. Switzer; F/O L. T. Sykes; F/O G. J. Symes; F/L C. R. Symons.

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F/O J. F. E. Tabor; F/O H. G. Tackaberry; F/O S. A. Tafler; WO2 L. P. R. Taillefer; P/O A. F. Taillon; P/O C. R. Tait; P/O I. F. Tait; WOl W. R. Tait; F/O R. Talbot; P/O F. A. E. Tandy; P/O G. S. Tanuck; P/O L. A. Tarpley; P/O H. C. Tarzwell: F/O H. G. Taverner: F/O A. M. Tavlor: F/O A. R. Tavlor: Sgt. B. T. Taylor; F/L C. H. Taylor; FS D. A. Taylor; P/O G. H. Taylor; P/O G. M. Taylor; P/O G. S. Taylor; P/O G. W. Taylor; F/O J. E. Taylor; F/O J. M. Taylor; F/L J. R. Taylor; F/L L. E. Taylor; P/O L. K. Taylor; P/O R. Taylor; F/O R. D. Taylor; F/O W. M. Taylor; P/O J. E. Tazuk; WOl H. L. Teasdale; F/L G. O. Tedford; P/O R. D. Teevin: P/O J. P. H. Terreau: F/O G. T. G. Terris: P/O S. J. Teskey: F/O C. K. Thain; P/O F. B. Thaine; WOI T. K. Theaker; F/O J. N. R. Theriault; P/O D. A. Thicke; P/O G. M. Thickett; F/L L. B. Thistle; P/O A. E. C. Thomas; F/O J. R. Thomas; F/O K. G. Thomas; F/L L. D. Thomas; P/O B. S. Thompson; F/O C. B. Thompson; P/O C. S. Thompson; WO2 F. A. Thompson; F/O John Willard Thompson; F/O John William Thompson; P/O R. B. Thompson; F/O R. F. Thompson; P/O R. L. Thompson; P/O A. S. Thomson; P/O C. S. Thomson; F/L G. H. Thomson; P/O H. D. Thomson, FS J. A. Thomson; P/O R. C. Thomson; P/O J. H. Thornton; Sgt. W. L. Thornton-White; F/O W. E. Thoroldson; F/O B. J. M. Thorp; WO2 D. M. Thorpe; P/O G. R. Thorpe; F/O A. R. Thrasher; F/O J. A. Thurlow; F/L E. G. Thurston; Sgt. H. R. Thyret; F/O L. Tilley; F/O F. G. Tilt; F/L A. F. Timmermans; F/O C. E. Tindall; F/L J. Tite; P/O L. S. Tobin; P/O E. G. Todd; F/O J. Todd; P/O H. K. Tole; P/O J. A. Tolmie; P/O W. H. Tomlinson; P/O L. E. Toneri; P/O D. C. Tonkin; F/O I. J. Toppings; Sgt. A. F. W. Torbett; FS J. W. Torscher; WO2 C. Z. Toupin; F/O E. A. Townsend; P/O C. E. Towsley; P/O J. C. Tracey; F/L W. M. Tree; F/L E. H. W. Treleaven; WO2 A. A. J. Tremblay; P/O J. J. M. Tremblay; P/O T. B. Trent; F/L T. W. Trewin; F/L E. E. Tribble; F/L D. H. Trickett; Sgt. J. R. A. Trudel; F/O G. F. Trudgeon; P/O H. E. Truscott; P/O J. R. Truscott; FS B. Trymbulak; P/O H. S. Tulk; LAC L. H. Tull; F/O S. Tullock; P/O J. C. Tuplin; FS J. M. Turachek; FS W. M. Turnbull; WOI A. F.

Turner; WO2 A. F. D. Turner; P/O D. Turner; P/O W. B. Turner; F/O W. A. Tustin; P/O T. W. Tuttle; P/O A. W. Tuuri; F/L L. V. Tyndale.

## U

FS R. W. T. Ulens; F/O A. D. Ulry; P/O J. Unger; P/O V. A. Unruh; F/L L. A. Unwin; P/O B. P. Upper: FS D. Urquhart; P/O J. A. Urquhart; F/O K. R. Urquhart; P/O P. Uzelman.

## $\mathbf{V}$

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#### W

F/O G. A. Waddell; P/O W. W. Wagner; P/O L. P. Wakely; F/O H. F. Wakeman; F/O C. Walford; P/O A. M. O. Walker; F/O B. D. Walker; F/L C. A. Walker; F/O D. E. Walker; WO2 G. V. Walker; P/O J. A. Walker; P/O J. D. Walker; F/L S. K. Walker; P/O W. A. Walker; P/O A. L. Wall; F/L A. J. Wallace; F/L D. Wallace; F/O I. J. V. Wallace; F/O J. D. Wallace; P/O J. M. Wallace; WO2 R. G. Wallace; F/O W. A. Wallace; P/O K. Wallingford; F/O R. M. Wallis; WO2 J. F. Walterhouse; P/O R. J. Walton; F/L W. A. Walton; F/O F. W. Ward; F/O R. R. Ward; P/O G. N. Ware; FS H. P. Warll; P/O G. R. Warnock; F/O E. F. Warren; FS G. R. M. Warren; F/O R. J. B. Warren; P/O W. L. Washbrook; P/O D. J. Washburn; F/O J. Waslyk; F/O C. Watson; F/O D. Watson; F/O E. W. Watson; P/O F. S. Watson; LAC H. S. Watson; P/O L. G. Watson; P/O W. W. Watson; P/O A. Watt; F/O A. C. Watt; F/O C. R. Watts; F/L W. H. Way; WO2 W. C. Waye; F/O R. L. Weatherall; F/O G. M. Weaver; F/O H. M. Weaver; P/O D. A. Webb; F/O R. J. Webb; P/O W. Webb; F/O J. A. Webber; P/O W. W. Webber; F/O W. E. Weber; F/O L. C. E. Webley; F/O L. Webster; WO2 L. W. Webster; P/O J. F. G. Weedon; P/O D. F. C. Weeks; FS W. A. Wegenast; FS C. H. Weicker; P/O I. A. Weir; F/L J. W. Weis; F/O G. T. Weiss; F/O G. G. Welch; F/O J. G. Welk; P/O R. D. Weller; FS A. E. Wells; P/O B. E. Welsh; P/O J. Welsh; F/O W. D. Wendt; F/O J. Wenger; P/O C. M. Wert; P/O J. E. West; P/O N. C. E. West; FS R. W. Westergard; F/O J. M. Westlake; F/O J. L. Westphal; P/O J. W. Wettlaufer; P/O N. H. Wettlaufer; F/L E. G. Wey; P/O J. W. Weyers; FS L. E. Whalen; W/C A. B. Wheeler; F/O C. T. Wheeler; Sgt. M. W. Wheeler; P/O G. A. F. Winfield; F/L A. S. White; Sgt. C. C. White; P/O C. H. White; F/O G. A. White; Sgt. W. R. White; P/O J. A. Whitehead; F/O W. A. Whitehead; P/O D. S. Whiting; F/O H. B. Whitlock; WO2 L. I. Whitlock; WO1 W. C. Whitney; P/O R. D. Whitson; P/O J. A.

Whittaker; P/O G. E. Whyte; F/L S. P. Whyte; F/O H. A. Wickens; FS W. R. Wickhan; F/O E. H. Widdess; P/O E. R. Wightman; P/O C. V. R. Wigley; F/L B. K. Wiley; Sgt. J. V. Willbee; WO2 E. F. Williams; P/O J. E. Williams; F/L J. F. H. Williams; FS J. H. Williams; WO2 R. J. Williams; F/O R. L. Williams; P/O R. W. Williams; P/O T. A. T. Williams; P/O A. J. Williamson; F/L B. A. Williamson; FS H. R. Williamson; P/O J. S. Williamson; F/O J. G. Wills; P/O D. G. Willson; Sgt. J. C. Willson; P/O E. D. Wilmont; F/O F. H. Wilsher; F/O D. G. C. Wilson; Sgt. E. A. Wilson; P/O E. C. Wilson; P/O E. K. Wilson; P/O G. A. Wilson; P/O G. D. Wilson; P/O H. E. Wilson; F/O H. J. Wilson; P/O H. K. Wilson; P/O H. W. Wilson; P/O James H. Wilson; F/O John Henry Wilson; WOI John Howard Wilson; F/L M. G. Wilson; P/O N. A. Wilson; P/O R. Wilson; WO2 R. G., Wilson; WO1 R. J. Wilson; F/O R. N. Wilson; P/O R. T. Wilson; P/O S. A. Wilson; F/O T. Wilson; F/O V. H. Wilson; F/O W. H. Wilson; F/L W. L. Wilson; P/O W. T. Wilson; P/O D. W. Wincott; P/O J. S. Winder: P/O W. F. Windsor: F/O K. C. Wing: P/O T. S. Winstanley: WOl B. Winter; Sgt. C. E. Wisrodt; F/O F. Wittmack; P/O C. H. Woelfle; F/L H. L. Wolf; F/O J. J. Wolfe; P/O H. R.. Wood; F/O J. W. Wood; F/L M. Wood; FS R. M. Wood; P/O W. E. Wood; F/O W. T. Woodall; F/O C. D. Woodley; P/O E. D. Woods; F/L N. P. C. Woodward; P/O S. E. Woolhether; P/O H. E. Wort; P/O A. E. Wotherspoon; F/O B. H. Wrenshall; P/O A. J. S. Wright; P/O A. R. Wright; P/O C. T. Wright; F/O H. Wright; F/O H. C. Wright; P/O J. Wright; F/O J. L. Wright; FS W. A. Wright; P/O W. J. L. Wright; P/O L. A. Wry; F/O V. F. Wunsch; P/O C. B. Wyckoff; FS C. B. Wylie; F/O J. F. Wyllie; F/L G. P. Wyse.

## Y

Sgt. J. F. Yacko; P/O A. E. Yarington; P/O J. F. E. Yates; FS N. S. Yates; FS P. E. G. Yates; P/O T. Yates; F/O B. Yellin; F/O D. B. Young; P/O H. D. L. B. Young; P/O J. P. Young; F/O R. A. Young; P/O S. Young; P/O W. H. Young; F/O J. C. Younge; FS W. A. Youngs; P/O W. A. Younie; F/O M. Yowney; F/L B. Yunker; P/O W. Yunsko.

## $\mathbf{Z}$

P/O S. E. Zadorozny; F/O N. Zakow; F/L J. Zavitz; F/O G. J. Zbura; P/O T. Zbytnuik; F/O W. R. Zeller; F/O I. Zierler; F/O M. D. Zimmerman; F/O B. Zimring; P/O G. A. Zuback; P/O V. Zulinov; F/O J. Zywina.

## CASUALTIES1

## (10 September 1939-31 December 1946)

Casualties Due to Flying Operations	Officers	Other Ranks	Total	
(Including enemy action, ground or sea)				
Killed or Died	1,742	1,408	3,150	
Presumed Dead	5,633 (1)	4,253 (3)	9,886	(4)
Killed or Died While Prisoners of War	24	25	49	
Wounded or Injured (Not Fatal):	189	304(3)	493	(3)
Prisoners of War <sup>3</sup>	1,450	1,025	2,475	
Casualties Due to Training Accidents				
Killed or Died	943 (2)	1,753 (1)	2,696	(3)
Presumed Dead	146	234	380	
Injured (Not Fatal)	111	245 (1)	356	(1)
Casualties Due to Other Causes				
Killed or Died	154	752(23)	906	(23)
Presumed Dead	6	27	33	
Wounded or Injured (Not Fatal)	95 (l)	473(16)	568	(17)
Ill (Not Fatal)	245 (3)	1,265(83)	1,510	(86)

## Notes:

- Casualties to personnel of the Women's Division, included in the figures in this table, are indicated in brackets.
- Wounded, injured and ill includes only those seriously or dangerously wounded, injured or ill and does not include those who have died of wounds, injuries or illness, nor wounded, injured or ill prisoners of war and internees.
- Does not include personnel killed or died while prisoners of war.

(Only names mentioned in the narrative are included in the Index. As the Roll of honour and the list of personnel decorated are arranged alphabetically, the names are not repeated in this Index.)

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