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# REPORT OF THE DEPARTMENT OF NATIONAL DEFENCE

CANADA

FOR THE

FISCAL YEAR ENDING MARCH

1923

(MILITIA SERVICE)

PRINTED BY ORDER OF PARLIAMENT



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OTTAWA  
F. A. ACLAND  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1923

REPORT OF THE DEPARTMENT

OF

## NATIONAL DEFENCE

CANADA

To General His Excellency the Right Honourable Lord Byng of Vimy, G.C.B.,  
G.C.M.G., M.V.O., Governor General and Commander in Chief of the  
Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to present to Your Excellency the report of  
the Department of National Defence (Militia Service) for the fiscal year ending  
March 31, 1923.

Respectfully submitted,

E. M. MACDONALD,

*Minister of National Defence.*

DEPARTMENT OF NATIONAL DEFENCE,

OTTAWA, November 15, 1923.



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OTTAWA, November 12, 1923.

The Honourable the Minister,  
Department of National Defence,  
Ottawa.

SIR,—I have the honour to submit for your consideration, to be laid on the Table of the House, this the Annual Report of the Department of National Defence (Militia Service), for the fiscal year, 1922-23.

I have the honour to be, sir,

Your obedient servant,

G. J. DESBARATS,  
*Acting Deputy Minister.*

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REPORT OF THE  
DEPARTMENT OF NATIONAL DEFENCE, CANADA  
(PART II. MILITIA SERVICE)

FOR THE FISCAL YEAR ENDING MARCH 31, 1923

REPORT OF THE CHIEF OF STAFF FOR THE YEAR ENDING  
MARCH 31, 1923

(1) Military Policy and Organization for Defence

In the 1922 Session of Parliament an Act was passed constituting a "Department of National Defence" by the amalgamation of the Department of Militia and Defence, the Department of the Naval Service and the Air Board under one minister. The Act came into effect by Order in Council on January 1, 1923, and simultaneously the Militia Council and the Air Board were dissolved. The amalgamation aims at better and unified control of the Defence Services, closer co-operation between Land, Water and Air Forces and greater economy in their administration.

The reorganization has proceeded slowly and has not yet been completed. The most important task still to be effected is the assembly of the Defence Council and the commencement of its regular meetings. Of secondary importance only to the Defence Council is the authorization of the Departmental Defence Committee. The old Inter-Departmental Defence Committee which consisted of the heads of the Militia, Naval, Air and Police services and which used to hold frequent and regular meetings to co-ordinate arrangements for defence, no longer exists, and until both the Defence Council and the Departmental Defence Committee are properly functioning the work of the department will not be efficiently performed and the full advantages of the amalgamation of the several departments in the Department of Defence will not be realized.

Consequent on the reorganization the Chief of the General Staff's appointment, which pertained especially to the Militia, has been changed to that of Chief of Staff and he has become the chief adviser of the minister on matters of defence. He is also charged with the co-ordination of the work of the different branches of the Staff.

The appointment of Inspector General has been abolished with effect from April 1, 1922, and the control of inspectional work transferred to the Chief of Staff. The annual inspections of units are largely carried out by general officers and Colonels Commandant in command of districts under the orders of the Chief of Staff, but also by the Chief of Staff himself, the Adjutant-General and the Quartermaster-General when opportunity offers.

Chiefly for financial reasons, as a temporary expedient the office of Master General of the Ordnance has been suspended with effect from April 1, 1922, and the duties divided between the General Staff and the Quartermaster-General's Branch of the Staff.

Reports of the several branches and Directorates of Defence Headquarters are included herein. These go into matters affecting them in considerable detail but it is desired here to comment briefly upon some of the main features.

The strength of the Permanent Force on March 31, 1923, is 3,475. It is considered that the minimum strength should be 4,000. No lower figure will permit of units performing their instructional work and keeping up their efficiency, and at the same time provide garrisons for defended ports and allow the troops to carry out their routine garrison and barrack duties. Over and above their functions as Instructional Corps to the non-permanent Active Militia, Permanent Force units are liable to be called upon by the civil authorities to maintain order in strike areas. This duty—which is naturally repugnant to the instincts of a soldier but has nevertheless to be cheerfully borne—necessitates a larger Permanent Force than at present exists if the regular functions of the corps are also to be maintained. During the year under review the small existing Permanent Force was strained to the uttermost in providing sufficient numbers to meet demands for troops for strike duty and the call coming, as it did, in the middle of the training season, the instructional work was badly disorganized and the Militia suffered generally.

It continues to be a matter of regret that for financial reasons the training period of the Non-Permanent Active Militia has again had to be restricted to nine days and to a limited establishment. This period is not sufficiently long to permit of adequate training, though the keenness of all ranks has enabled the utmost possible to be made of it. But with a limited training establishment which is of necessity below the full peace establishment, it is not possible to give to all Militia men even this nine days' instruction. It is hoped that more funds will be available in future years so that the period of training may be extended and be opened up to the full available strength of militia units.

Lack of funds has unfortunately not permitted of the purchase of tanks and no training in that necessary branch of warfare has therefore been possible. For the same reason no equipment is available for training in Chemical Warfare (use of gas) either offensive or defensive. While the Washington Treaty debars the use of noxious gases as between the signatories thereto no such restriction applies to other nations, and in future wars, in which such other nations are engaged, chemical means of crippling the opposing forces are certain to be employed.

It is satisfactory to report that it has been possible to resume the Militia Staff Course after its suspension due to the war. The lectures connected with the theoretical portion of this, the most advanced course of instruction for Non-Permanent Active Militia Officers, were well attended at the different centres where they were delivered during the winter and a good number of candidates sat for the subsequent examination.

Other points in the report of the Training and Staff Duties Directorate which may be noted as of special interest are the training of Artillery specialists and the Instructional Courses at Schools of Instruction for Officers and N.C.O.'s. It is regrettable that owing to restricted funds the attendance at Royal Schools of Instruction was not so good as might have been wished. This deficiency in attendance was offset by the numbers attending Provisional Schools at local centres, but the benefits to be derived from Provisional Schools can never be of equal value to the course of training at the permanent Royal Schools of Instruction.

The reduction of \$100,000 in the Cadet Vote has unfortunately resulted in the cancellation of all Cadet Camps. Nevertheless some satisfactory features connected with this important branch are to be noted. Approval has been given for the purchase of 2,000 .22 Martini Rifles and delivery is about to be made.

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They will be a great boon to the Cadets and it is hoped that gradually the whole Cadet Force will be re-armed with them. The regulation Militia Ross or Lee-Enfield rifle is too heavy for many of the younger boys and authority has been given to local authorities to exempt from arm drill those Cadets whose physical development would render it unwise for them to carry rifles.

The detachments of the Boys' Naval Brigade have now practically been incorporated in the Cadet Service and are permitted to benefit by the per capita allowance for Military Cadets. The boys carry out a portion of the training laid down for Military Cadets; the remainder of their training is devoted to specialization in their naval work.

The policy which has now been laid down for the Cadet Service is to concentrate on bringing existing Cadet Corps to a higher state of efficiency rather than on still further increasing the number of units. The syllabus of training has been modified in certain respects and it now approximates more closely to that of the Boy Scouts organization. More attention than formerly is being given to such subjects as—

Physical Training.

First Aid.

Signalling.

Scouting.

Organized Games.

Lectures on Citizenship.

The new syllabus by means of the training imparted at the course of lectures laid down aims at improving the physique of the boys and inspiring them to lead clean, honourable lives and thereby to make good and useful citizens, proud of their country, versed in its great traditions and anxious to promote its welfare.

Although no special efforts are being made to increase the number of our Cadets, it is gratifying to observe that the total enrolled has risen by 8,000 from 101,000 on March 31, 1922, to 109,000 on March 31, 1923. No work of the Department of National Defence is more fruitful in future good for the nation than that devoted to the development of the Cadet Services.

The work of the Signal Services presents some features of special interest. The Signal Corps, small in number but efficient in its duties, has kept up with the rapid developments of wireless telephony. During the summer of 1922 some quite notable experimental work was carried out with old equipment by the wireless officer from aeroplane to aeroplane and between aeroplane and ground station in the vicinity of High River, Alberta. The value of the forestry patrols maintained by the Royal Canadian Air Service has been greatly increased by this development of wireless. As stated in the detailed report of the Signal Service, "one of the largest forest fires detected in Alberta last year was reported by radio-telephony from the air at a distance of 190 miles from the air station from which the plane had set out on its patrol."

Arrangements have been completed for the establishment of a chain of wireless stations up the MacKenzie valley manned by personnel of the Royal Canadian Corps of Signals, which will place points as distant as Dawson City and the Mayo Mining Camp in telegraphic communication with other parts of Canada. A small increase in the establishment of the corps has been approved for this purpose.

In connection with the work of the Historical Section of the General Staff, the History of the Canadian Medical Services in the Great War has been written by Sir Andrew MacPhail, based on material compiled in the Section. This, the first volume of the Official History of the Canadian Forces, 1914-19, will probably be issued from the press shortly.

In connection with the Military Survey Division which now comes under the Military Operations and Intelligence Directorate, the most interesting development has been the establishment of the Board of Topographical Surveys and Mapping composed of representatives from the Department of the Interior, the Department of Mines and the Department of National Defence. This co-operation between the three departments will allow of mutual arrangement of programmes of work and will obviate much overlapping, which was inevitable when each department operated independently of the other in planning and carrying out its surveys and mapping.

The distinction "Royal" has been conferred by His Majesty the King upon the Canadian Air Force, which is now known officially as "The Royal Canadian Air Force."

Details of the work of the Force appear elsewhere in this report, but the change in its organization and functions may be noted here. From a dual organization, divided into a military and civil side, each working largely independent of the other, the Force has been reorganized into a single military unit with four instructional centres. The policy followed is to keep the organization as closely as possible on the same lines as the "Royal Air Force" with regulations based on those of that service.

In the establishment of these four main centres (Dartmouth, N.S.; Borden, Ont.; Winnipeg, Man.; and Vancouver, B.C.) on a military basis the foundation has been laid for an Air Service which will be a credit to Canada in future years. The change in status from a civilian to a military organization does not interfere with the carrying out by the Force of duties of a civil character, and its activities in forest patrols, aerial survey and other operations on behalf of different Dominion and Provincial Government departments are being expanded rather than curtailed. It is the fortunate privilege of the Royal Canadian Air Force to be able to use its personnel and equipment to develop and serve the country and at the same time afford useful experience to pilots and observers.

An important step towards improving the efficiency of the Royal Canadian Air Force has been taken by the placing of orders for eight new flying boats of the latest pattern best calculated for the work required in Canada. Six of these are being built in Canada, and it is hoped that this may be the beginning of a new industry in this country. This purchase of new machines is a welcome step in the right direction, but if this service is to retain its efficiency it will be necessary to spend a considerable sum each year in re-equipping it with modern equipment. The existing equipment consists of aircraft, etc., presented by the British authorities; all of it dates back to the period of the war and much of it to an early date in the war. Aircraft deteriorates rapidly and there is scarcely any of the material which is not now obsolete and unreliable. In the Air Service, almost above any other service, it is essential that the equipment should be up to date and that its reliability should be beyond suspicion if loss of life due to defective material is to be avoided.

The Adjutant-General's report details fully all changes in organization made during the year under review. It is a matter of great regret that owing to the reduction in the appropriation of the Militia, No. 4 Company, Royal Canadian Garrison Artillery, and the Royal Canadian Machine Gun Brigade have had to be disbanded and are now no longer maintained as active units. This reduction of the Permanent Force seriously restricts its usefulness, as already mentioned.

The authorization of the Canadian Railway Corps makes provision for a very necessary branch in any future military operations, should such ever unhappily occur. It is true that the organization exists practically only on

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paper and that for the present no more than the posting of officers can be carried out, but the fact that an organization based on an approved establishment is in being, with officers appointed and mobilization store tables worked out, is a considerable step towards improving our preparations for defence. Hurried improvization on war occurring may be fatal to success and plans must be prepared in advance. The work of the personnel of a Railway Corps in war will follow the lines of their work in peace and military training is therefore not so essential in such a unit as in a purely military formation.

## (2) Military Operations and Intelligence

### *Operations*

Further attention has been given to the work referred to in the annual report of 1921-22.

### *Mobilization*

Further progress has been made in the General Staff's arrangements for mobilization.

### *Intelligence*

Considering the paucity of funds and the limited staff, very good progress has been made in the collection and collation of Military Intelligence.

### *Organization and Liaison*

This Directorate has been able to furnish information on various questions to other Directorates of the Department of National Defence. It has been invariably consulted in questions of military policy. It has established liaison with other departments of the Government.

### *General*

The Director and Assistant Director have lectured in various places, on various subjects, during the year.

The Assistant Director has given a good deal of time to perusal of Annual Inspection Reports of Units and made comments thereon for information of the Chief of Staff, and other branches of the department.

The officers of this Directorate have served on various committees, Courts of Inquiry and Boards of Officers.

### *Departmental Library*

During the year the Libraries of the Department of Militia, the Air Board and Naval Services, have been consolidated into the Library of the Department of National Defence. As each of these libraries had formerly a different system of cataloguing it was necessary to re-catalogue the books on a uniform system.

One thousand one hundred and thirty-five volumes were received from the Air Board and approximately 1,000 for the Naval Services.

The Library of congress classification was chosen as the most modern and most suitable for a military library. The work of recataloguing commenced in January and by the end of the fiscal year 1,579 volumes had been reclassified.

A new dictionary card index has been begun.

OHU

Monthly lists of addenda which includes all old material reclassified, were issued. These will eventually be compiled into a dictionary catalogue.

Press clippings of interest, to Military, Naval, and Air Force Officers were circulated daily.

More than 100 periodicals were received, circulated and filed. During the year 93 new volumes were ordered, of which number 81 were received.

### *Military Survey Division*

During the year the Military Survey Division was transferred back to the General Staff, its logical place, and came under this Directorate.

Immediate steps were taken to seek the co-operation of the Department of the Interior.

During the year the Board of Topographic Surveys and Mapping with representatives from the Department of Mines, the Department of the Interior and Department of National Defence commenced to function.

The representatives of the department are,—

- Colonel S. H. Osler, C.M.G., D.S.O.,  
 Assistant Director of Engineer Services.  
 Major J. B. Cochrane,  
 Assistant Director of Military Surveys.

A rotary offset press, long required by the Survey Division, was ordered and received at the end of the fiscal year.

A course of Instruction in Surveying was carried out from February 1, 1922, to November 1, 1922, eight other ranks from various units of the Permanent Force attending.

The Director of Military Operations and Intelligence, the Assistant Director of Military Surveys and other Officers of the Surveys, together with representatives of the Topographical Surveys of the Department of the Interior, visited the survey parties during the year.

### *Field Work.*

*Control.*—Horizontal and vertical control was carried out during the last week of April and the month of May in the Ottawa sheet for the revision—one hundred and nineteen miles of chain traverse, one hundred and sixteen miles of stadia traverse and one hundred and seventy-three miles of level lines being completed. This control is in addition to that of former years, and was considered necessary in order to bring the accuracy of the Ottawa sheet up to the standard of the survey work being carried out at the present time. The control party then proceeded to Quebec, where their work was confined to the control of the Warwick, D'Israeli, Armstrong and Ste. Evariste sheets, which was completed.

In addition to the above about fifty miles of transit and level control of a secondary nature was carried out in the wooded area of the Lotbiniere and Megantic sheets.

During November a party of seven was employed for five days at Petawawa Camp in fixing the artillery ranging points erected during the summer.

The many advantages of motor transport for the control work were again made evident during this season.

The total control for the season:—

Chain transit traverse.. . . . .	304 miles
Stadia traverse.. . . . .	605 "
Levelling.. . . . .	959 "



all ranks; the standard of discipline was most satisfactory, and with sufficient funds to permit of training at full peace strength for a longer period at Central Camps, a high state of efficiency would undoubtedly result.

## PERMANENT ACTIVE MILITIA

Units of the Permanent Active Militia as shown below carried out training at the camps stated. The training in camp of the units marked \* was not completed owing to the strike in Nova Scotia.

Unit	Camp	Period	
		From	To
<i>R.C.D.—</i>			
Headquarters.....	Niagara.....	1- 6-22	24- 8-22
"B" Squadron.....	Petawawa.....	1- 6-22	14- 8-22
<i>L.S.H.(R.C.)—</i>			
Headquarters.....	Sarcee.....	1- 6-22	15- 9-22
"A" Squadron.....	Hughes.....	29- 5-22	7- 8-22
"B" ".....	Sarcee.....	1- 6-22	15- 9-22
<i>R.C.H.A.—*</i>			
Headquarters.....	Petawawa.....	27- 5-22	18- 7-22
"A" and "B" Batteries*.....	".....	27- 5-22	18- 8-22
"C" Battery*.....	Hughes.....	29- 5-22	9- 7-22
	Sarcee.....	10- 7-22	15- 9-22
<i>R.C.G.A.—</i>			
Headquarters.....	McNab Island.....	8- 5-22	29- 7-22
No. 1 Battery.....	".....	8- 5-22	17- 6-22
No. 2 ".....	".....	19- 6-22	20- 7-22
No. 3 ".....	Petawawa.....	27- 5-22	18- 8-22
No. 4 ".....	".....	25- 5-22	18- 8-22
No. 5 ".....	Rodd Hill.....	15- 7-22	1- 9-22
<i>R.C.E.—</i>			
No. 6 Detachment.....	McNab Island.....	17- 6-22	18- 8-22
		5- 9-22	15- 9-22
<i>R.C.R.—</i>			
Headquarters.....	Cove Ranges.....	15- 8-22	15- 9-22
"A" Company.....	McNab Island.....	6- 9-22	21-10-22
"B" ".....	Niagara.....	1- 6-22	23- 8-22
"C" ".....	Cove Ranges.....	15- 8-22	15- 9-22
"D" ".....	Point aux Trembles.....	15- 6-22	15- 9-22
<i>P.P.C.L.I.—</i>			
Headquarters.....	St. Charles.....	11- 7-22	27- 8-22
"A" Company.....	".....	11- 7-22	27- 8-22
"B" ".....	Heal's R. R.....	1- 6-22	15- 7-22
<i>Royal 22nd Regt.*</i>	Levis.....	1- 6-22	15- 9-22
<i>R.C.M.G. Bde.—</i>			
Headquarters.....	Niagara.....	1- 6-22	23- 8-22
No. 1 Company.....	Heal's R. R.....	15- 7-22	1- 9-22
No. 2 ".....	Niagara.....	1- 6-22	23- 8-22

In cases other than above Permanent Force units trained in their respective areas under arrangements made by District Commanders. In view of the very limited strength of this Force, the heavy calls upon it for strike duty and for instructional and administrative work with the Non-Permanent Active Militia drained it to its utmost resources and interrupted its training to a great extent.

## NON-PERMANENT ACTIVE MILITIA

Non-Permanent Active Militia units (except Artillery and C.O.T.C.) were authorized to train at approximately 50 per cent of Peace Establishment for a period of 9 days at a Central Camp, a Local Camp, or Local Headquarters.

The Artillery were authorized to train at 75 per cent of Peace Establishment for 6 days at Local Headquarters and 6 days at Practice Camp for Firing Detachments only.

The C.O.T.C. were authorized to perform 12 days at Local Headquarters.

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Units trained at Camps of Instruction or Local Headquarters as shown below:—

*Camps of Instruction**Cavalry—(9 days)—*

Governor General's Body Guard.  
 The Princess Louise Dragoon Guards.  
 Fort Garry Horse.  
 2nd Dragoons.  
 3rd Dragoons.  
 4th Hussars (1 Sqdn.).  
 7th Hussars.  
 8th P.L.N.B. Hussars.  
 9th Grey's Horse.  
 11th Hussars.  
 12th Manitoba Dragoons.  
 13th Scottish Dragoons.  
 14th Canadian Light Horse.  
 15th Canadian Light Horse.  
 16th Canadian Light Horse.  
 17th D. of Y. R.C. Hussars.  
 18th Canadian Light Horse.  
 19th Alberta Dragoons.  
 The Border Horse.  
 The New Brunswick Dragoons.  
 P.E.I. Light Horse.  
 1st Regt. Sask. Mtd. Rifles.  
 1st Regt. (2nd C.M.R.) B.C. Mounted Rifles.  
 1st Regt. (3rd C.M.R.) Alberta Mounted Rifles.  
 Ontario Mounted Rifles.  
 1st E. T. Mounted Rifles.  
 1st Regt. King's N.S. Mtd. Rifles.  
 1st Regt. The Manitoba Mounted Rifles.  
 5th Mounted Bde. Hd. Qrs.  
 6th Mounted Bde. Hd. Qrs.

*Artillery—(6 days Practice Camp)—*

1st Brigade C.F.A.—	5th Brigade C.F.A.—
Headquarters	Headquarters
1st Battery	13th Battery
2nd Battery	17th Battery
2nd Brigade C.F.A.—	38th (H) Battery
5th Battery	6th Brigade C.F.A.—
7th Battery	24th Battery
27th (H) Battery	35th Battery
66th Battery	8th Brigade C.F.A.—
3rd Brigade C.F.A.—	10th Battery
Headquarters	11th Battery
9th (H) Battery	40th Battery
15th Battery	9th Brigade C.F.A.—
30th Battery	3rd Battery
53rd Battery	34th Battery
4th Brigade C.F.A.—	10th Brigade C.F.A.—
Headquarters	Headquarters
4th Battery	18th Battery
	77th Battery

*Artillery—Continued*

- 11th Brigade C.F.A.—
  - 16th Battery
  - 29th (H) Battery
- 12th Brigade C.F.A.—
  - Headquarters
  - 8th Battery
  - 89th Battery
  - 90th Battery
- 13th Brigade C.F.A.—
  - Headquarters
  - 57th Battery
  - 82nd Battery
- 14th Brigade C.F.A.—
  - Headquarters
  - 57th Battery
  - 84th Battery
  - 87th Battery
- 15th Brigade C.F.A.—
  - 31st Battery
  - 68th Battery
  - 85th (H) Battery
  - 5th Siege (attached)
- 16th Brigade C.F.A.—
  - 26th (H) Battery
  - 83rd Battery
  - 86th Battery
- 17th Brigade C.F.A.—
  - 21st (H) Battery
  - 44th Battery
- 18th Brigade C.F.A.—
  - 93rd (H) Battery
- 19th Brigade C.F.A.—
  - 23rd (H) Battery
  - 91st Battery
- 20th Brigade C.F.A.—
  - 61st Battery
  - 78th Battery
  - 92nd (H) Battery
- 1st Heavy Brigade C.G.A.—
  - Headquarters
  - 2nd Siege Battery
  - 8th Siege Battery
- 2nd Heavy Brigade C.G.A.—
  - 1st Heavy Battery
  - 7th Siege Battery
- 3rd Heavy Brigade C.G.A.—
  - Headquarters
  - 4th Siege Battery
  - 6th Siege Battery
  - 15th Heavy Battery
- 1st Regiment C.G.A.—
  - Headquarters
  - Nos. 1, 2, 3 and 4 Cos.
  - 9th Siege Battery

*Artillery—Concluded*

- 5th Regiment C.G.A.—
  - Headquarters
  - Nos. 1 and 2 Cos.
  - 12th Siege Battery (attached)
- 6th Quebec & Levis Regiment  
C.G.A.—
  - Headquarters
  - Nos. 1, 2 and 3 Cos.
- Engineers*—(9 days)—
  - 1st (Brighton) Field Co.
- Canadian Corps of Signals*—
  - No. 8 Signal Co. (9 days)
- Corps of Guides*—
  - No. 1 Cyclist Co. (9 days).
- Infantry* (9 days)—
  - H.Q. 1st Infantry Brigade
  - 1st Bn. Middlesex Light Infantry
  - 1st Bn. Huron Regiment
  - 1st Bn. Bruce Regiment
  - 1st Bn. Lambton Regiment
  - H.Q. 5th Infantry Brigade
  - 1st Bn. Haldimand Rifles
  - 1st Bn. Lincoln & Welland Regt.
  - 1st Bn. Grey Regiment
  - 1st Bn. Simcoe Foresters
  - 1st Bn. Halton Rifles
  - Le Regiment de Chateauguay
  - Le Regiment de Joliette
  - Le Regiment de Montmagny
  - Le Regiment de Beauce
  - Le Fusiliers du St. Laurent
  - Le Regiment de Levis
  - Le Regiment de Quebec
  - Les Chasseurs Canadiens
  - Les Franc-Tireurs du Saguenay
  - 1st Bn. P.E.I. Regiment
  - 1st Bn. Colchester & Hants Regiment
  - 1st Bn. Pictou Highlanders
  - 16th Infantry Brigade H.Q.
  - The Carlton Light Infantry
  - The York Regiment
  - The North Shore (N.B.) Regiment
  - The New Brunswick Rangers
  - 3rd Bn. South Saskatchewan Regiment
  - 4th Bn. South Saskatchewan Regiment
  - 5th Bn. South Saskatchewan Regiment
  - 3rd Bn. North Saskatchewan Regiment
  - 2nd Bn. Alberta Regiment

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*Canadian Machine Gun Corps*  
 (9 days)—  
 1st Can. Machine Gun Squadron

*Canadian Army Service Corps*  
 (9 days)—  
 1st Divisional Train—  
     No. 1 Co.  
     No. 2 Co.  
 2nd Divisional Train—  
 10th Divisional Train—  
     No. 1 Co.

*Canadian Army Medical Corps*  
 (9 days)—  
 No. 5 Field Ambulance

*Canadian Army Medical Corps—Con.*  
 No. 15 Field Ambulance  
 No. 19 Field Ambulance  
 No. 2 Cas. Clearing Station

*Canadian Army Veterinary Corps* (9 days)—  
 No. 7 Mobile Vet. Section  
 No. 10 Section

*Canadian Ordnance Corps* (9 days)—  
 No. 10 Detachment

*Canadian Postal Corps* (9 days)—  
 No. 1 Detachment  
 No. 10 Detachment

*At Local Headquarters—(9 days except where otherwise stated)*

*Cavalry—*  
 1st Hussars  
 5th B.C. Horse

*Artillery* (6 days)—  
 1st Brigade C.F.A.—  
     1st Battery  
     2nd Battery

2nd Brigade C.F.A.—  
     Headquarters  
     5th Battery  
     7th Battery  
     27th (H) Battery  
     66th Battery

3rd Brigade C.F.A.—  
     Headquarters  
     9th (H) Battery  
     15th Battery  
     30th Battery  
     53rd Battery

4th Brigade C.F.A.—  
     4th Battery  
     2nd Heavy Battery

5th Brigade C.F.A.—  
     Headquarters  
     13th Battery  
     17th Battery  
     19th Battery  
     38th (H) Battery  
     11th Siege Battery (att'd)

6th Brigade C.F.A.—  
     24th Battery  
     35th (H) Battery  
     79th Battery  
     81st Battery

8th Brigade C.F.A.—  
     Headquarters  
     10th Battery  
     11th Battery  
     40th Battery

9th Brigade C.F.A.—  
     3rd Battery  
     34th Battery

10th Brigade C.F.A.—  
     18th Battery  
     77th Battery

11th Brigade C.F.A.—  
     Headquarters  
     16th Battery  
     29th (H) Battery

12th Brigade C.F.A.—  
     Headquarters  
     8th Battery  
     89th Battery  
     90th Battery

13th Brigade C.F.A.—  
     57th Battery  
     82nd Battery

14th Brigade C.F.A.—  
     Headquarters  
     52nd Battery  
     84th (H) Battery  
     87th Battery

15th Brigade C.F.A.—  
     Headquarters  
     31st Battery  
     68th Battery  
     85th Battery  
     5th Siege Battery (att'd)

*Artillery (6 days)—Con.*

16th Brigade, C.F.A.—  
 36th (H) Battery  
 83rd Battery  
 86th Battery

17th Brigade C.F.A.—  
 21st (H) Battery  
 44th Battery

18th Brigade C.F.A.—  
 20th Battery  
 39th Battery  
 93rd (H) Battery

19th Brigade C.F.A.—  
 23rd (H) Battery  
 91st Battery

20th Brigade C.F.A.—  
 61st Battery  
 78th Battery  
 92nd (H) Battery

*Artillery (6 days)—Con.*

1st Heavy Brigade C.G.A.—  
 Headquarters

2nd Siege Battery  
 8th Siege Battery  
 14th Siege Battery

2nd Heavy Brigade C.G.A.—  
 1st Heavy Battery  
 7th Siege Battery

3rd Heavy Brigade C.G.A.—  
 Headquarters

4th Siege Battery  
 6th Siege Battery  
 15th Heavy Battery

1st Regiment C.G.A.—  
 Headquarters  
 Nos. 1, 2, 3 & 4 Cos.

9th Siege Battery (att'd)  
 6th Quebec & Levis Regt., C.G.A.—  
 Headquarters  
 Nos. 1, 2 & 3 Cos.

*Canadian Engineers.—*

3rd Divisional Engineers H.Q.

5th Divisional Engineers H.Q.

2nd Field Company.

3rd Field Company.

5th Field Company.

6th Field Company.

8th Field Company.

13th Field Company.

14th Field Company.

15th Field Company.

1st Field Troop.

4th Field Troop.

6th Field Troop.

*Canadian Corps of Signals.—*

Headquarters, 2nd, 3rd, 10th and 12th Signal Bns.

Nos. 1, 2, 3, 4, 5, 6, 10, 11, 14, 16, 17 and 19 Signal Cos.

Nos. 7 and 11 Fortress Signal Companies.

1st, 3rd 4th, 5th, and 6th Signal Troops.

*Corps of Guides.—*

No. 4 Cyclist Company.

*Canadian Officers Training Corps (12 days).—*

Western University Contingent.

Toronto University Contingent.

Queen's University Contingent.

McGill University Contingent.

Loyola College Contingent.

Laval University Contingent.

Nova Scotia Technical College Contingent.

New Brunswick University Contingent.

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*Canadian Officers Training Corps (12 days)—Continued*

Mt. Allison University Contingent.  
 Manitoba University Contingent.  
 Saskatchewan University Contingent.  
 Alberta University Contingent.

*Infantry—*

1st Bn. Perth Regiment.  
 1st Bn. The Western Ontario Regiment.  
 1st Bn. The Oxford Rifles.  
 1st Bn. The Highland Light Infantry.  
 1st Bn. The Wellington Rifles.  
 1st Bn. The Elgin Regiment.  
 1st Bn. The Essex Fusiliers.  
 1st Bn. The Kent Regiment.  
 1st Bn. The Hamilton Regiment.  
 1st Bn. The Dufferin Rifles.  
 1st Bn. The Wentworth Regiment.  
 1st Bn. Princess Louise's (A. & S.) Hldrs. of Can.  
 1st Bn. The Lincoln Regiment.  
 1st Bn. The Peel Regiment.  
 1st Bn. The Norfolk Rifles.  
 1st Bn. The Queen's Own Rifles of Canada.  
 2nd Bn. The Queen's Own Rifles of Canada.  
 1st Bn. The Royal Grenadiers.  
 1st Bn. The 48th Regiment (Highlanders).  
 1st Bn. The Irish Regiment.  
 1st Bn. The Toronto Regiment.  
 1st Bn. The Toronto Scottish.  
 1st Bn. The Northern Pioneers.  
 2nd Bn. The York Rangers.  
 1st Bn. The Ontario Regiment.  
 1st Bn. The Princess of Wales' Own Regiment.  
 1st Bn. The Argyll Light Infantry.  
 1st Bn. The Hastings and Prince Edward Regiment.  
 1st Bn. The Frontenac Regiment.  
 1st Bn. The Lanark & Renfrew Regiment.  
 1st Bn. The Brockville Rifles.  
 1st Bn. The Grenville Regiment (Lisgar Rifles).  
 1st Bn. The Stormont, Dundas & Glengarry Regiment.  
 1st Bn. The Ottawa Regiment (The D. of C. Own).  
 1st Bn. The Hull Regiment.  
 1st Bn. The Northumberland (Ontario) Regiment.  
 1st Bn. The Victoria & Haliburton Regiment.  
 1st Bn. The Durham Regiment.  
 1st Bn. The Peterborough Rangers.  
 1st Bn. The Governor General's Foot Guards.  
 1st Bn. The Sherbrooke Regiment.  
 1st Bn. Les Carabiniers de Sherbrooke.  
 1st Bn. Le Regiment de St. Hyacinthe.  
 1st Bn. Les Carabiniers Mont Royal.  
 1st Bn. The Three Rivers Regiment.  
 1st Bn. The Victoria Rifles of Canada.  
 1st Bn. The Royal Highlanders of Canada.

*Infantry—Continued*

- 2nd Bn. The Royal Highlanders of Canada.
- 1st Bn. The Royal Montreal Regiment.
- 1st Bn. The Canadian Grenadier Guards.
- 1st Bn. The Royal Rifles of Canada.
- 1st Bn. Les Voltigeurs de Quebec.
- 1st Bn. The Princess Louise Fusiliers.
- 1st Bn. The Halifax Rifles.
- 1st Bn. The Cumberland Regiment.
- 1st Bn. The St. John's Fusiliers.
- 1st Bn. The Winnipeg Rifles.
- 1st Bn. The Winnipeg Grenadiers.
- 1st Bn. The Cameron Highlanders.
- 1st Bn. The Winnipeg Light Infantry.
- 1st Bn. The Lake Superior Regiment.
- 1st Bn. The Kenora Light Infantry.
- 1st Bn. The 1st B.C. Regiment.
- 2nd Bn. The 1st B.C. Regiment.
- 3rd Bn. The 1st B.C. Regiment.
- 1st Bn. The Seaforth Highlanders of Canada.
- 1st Bn. The Irish Fusiliers.
- 1st Bn. The Rocky Mountain Rangers.
- 1st Bn. The Canadian Scottish.
- 1st Bn. The South Saskatchewan Regiment.
- 2nd Bn. The South Saskatchewan Regiment.
- 1st Bn. The North Saskatchewan Regiment.
- 2nd Bn. The North Saskatchewan Regiment.
- 4th Bn. The North Saskatchewan Regiment.
- 1st Bn. The Edmonton Regiment.
- 2nd Bn. The Edmonton Regiment.
- 1st Bn. The Calgary Regiment.
- 2nd Bn. The Calgary Regiment.
- 1st Bn. The Alberta Regiment.

*Canadian Machine Gun Corps.—*

- 1st Canadian Machine Gun Squadron.
- 1st Canadian Machine Gun Brigade.
- 2nd Canadian Machine Gun Brigade.
- 3rd Canadian Machine Gun Brigade (Hd. Qrs. Nos. 1 & 2 Cos. only).
- 4th Canadian Machine Gun Brigade.
- 5th Canadian Machine Gun Brigade (Nos. 1 & 2 Cos. only).
- 6th Canadian Machine Gun Brigade (No. 3 Co. only).
- 7th Canadian Machine Gun Brigade.
- 8th Canadian Machine Gun Brigade.
- 10th Canadian Machine Gun Brigade (Hd. Qrs. Nos. 1 & 2 Cos.).
- 11th Canadian Machine Gun Brigade.
- 12th Canadian Machine Gun Brigade.
- 13th Canadian Machine Gun Brigade (Hd. Qrs. Nos. 2 & 3 Cos.).

*Canadian Army Service Corps.—*

- Hd. Qrs. & No. 1 & 2 Cos. 3rd Divisional Train.
- Hd. Qrs. & No. 2 Co. 10th Divisional Train.
- Hd. Qrs. & Nos. 1 and 2 Cos. 11th Divisional Train.
- Hd. Qrs. & No. 1 Co. 12th Divisional Train.
- 13th Divisional Train.

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*Canadian Army Medical Corps.—*

- No. 7 Cavalry Field Ambulance.
- No. 17 Cavalry Field Ambulance.
- No. 1 Field Ambulance.
- No. 2 Field Ambulance.
- No. 3 Field Ambulance.
- No. 8 Field Ambulance.
- No. 10 Field Ambulance.
- No. 16 Field Ambulance.
- No. 18 Field Ambulance.
- No. 23 Field Ambulance.

## SCHOOLS OF INSTRUCTION

*Remarks.*—Instructional work has been carried on to the limited extent permissible on the funds available, and under the circumstances very satisfactory results have been obtained.

## COURSES IN ENGLAND

During the year officers and N.C.O.'s of the Permanent Active Militia were undergoing courses in England as shown below:

*Staff College*

Major (Bvt.-Col.) H. F. H. Hertzberg, C.M.G., D.S.O., M.C., R.C.E. January, 1921, to December, 1922.

Capt. (Bvt.-Major) H. T. Cock, M.C., R.C.R. January, 1921, to December, 1922.

Major (Bvt. Lt.-Col.) W. G. Beeman, D.S.O., R.C.A. January, 1922, to December, 1923.

Capt. (Bvt. Lt.-Col.) R. J. Brook, C.B.E., D.S.O., R.C.R. January, 1922, to December, 1923.

Major (Bvt. Lt.-Col.) H. D. G. Crerar, D.S.O., R.C.A. January, 1923, to December, 1924.

Major G. P. Vanier, D.S.O., M.C., Royal 22nd Regt. January, 1923 to December, 1924.

*Advanced Course Artillery College*

Lieut. (Bvt.-Captain) H. M. Reynolds, R.C.A. November, 1920, to December, 1922.

Lieut. G. F. Morrison, R.C.A. November, 1920, to December, 1922.

*Ordnance Officers' Course*

Captain (Bvt.-Major) D. E. Dewar, R.C.O.C. January, 1922, to December, 1922.

*Gunnery Staff Course*

Captain J. H. Roberts, M.C., R.C.A. October, 1921, to July, 1922.

Captain C. C. Shaw, R.C.A. October, 1922, to July, 1923.

Captain R. L. Fortt, R.C.A. October, 1922, to July, 1923.

No. 8070, B.Q.M.S. W. Gray, R.C.H.A. October, 1921, to July, 1922.

No. 8387, Sergt. C. F. Wolfe, R.C.H.A. October, 1921, to July, 1922.

*Master Gunners' Course*

No. 6568, Sergt. C. Henshaw, R.C.G.A. April, 1922, to March, 1923.

No. 4131, Sergt. W. Rawlings, M.M., R.C.G.A. April, 1922, to March, 1923.

*Physical Training Course*

Captain F. M. W. Harvey, V.C., M.C., L.S.H. (R.C.) April, 1922, to July, 1923.

*School of Military Engineering*

Captain J. E. Lyon, R.C.E. September, 1922, to July, 1924.

## COURSES IN CANADA

*Permanent Active Militia*

*Staff College Preparatory Course.*—The second post-war course for officers preparing for the examination for admission to the Staff College was held from October 1, 1922, to February 26, 1923, at the Royal Military College, Kingston. This course was attended by six officers of the Permanent Active Militia, all of whom competed at the examination for admission to the Staff College for the two vacancies allotted to Canada.

*Refresher Course.*—In conjunction with the above, a Refresher Course was held for officers of the Permanent Active Militia from October 1 to the end of December, and was attended by eight officers.

*Artillery Staff Course.*—The first post-war Artillery Staff Course commenced during the last financial year (March 1, 1922), and continued for the following nine months. Five officers and 10 N.C.O.'s qualified at this course.

*S.M.E. Halifax.*—Courses were held for foremen of works and searchlight operators of the R.C.E. at this school. A total of 8 other ranks attended during the year.

*Signal and Small Arms Courses.*—See under "Signal Service" and "Small Arms Training" respectively.

*Non-Permanent Active Militia*

*Militia Staff Course.*—The Militia Staff Course Syllabus is drawn up so as to enable officers of the Non-Permanent Active Militia to fit themselves for employment on the staff of formations in the field. The theoretical portion of the first post-war course was held in the several districts during the winter months, and proved very popular. Eighty officers attended all the lectures in this portion, while many others attended unofficially from time to time as opportunity offered.

*Qualifying and Special Courses.*—Qualifying and Special Courses for Non-Permanent Active Militia were held at all Royal Schools of Instruction, but owing to the paucity of funds and the consequent necessity of reducing the pay of candidates, the attendance was not up to the desired standard. This, however, was offset by an increase in the number of Provisional Schools asked for, and, as was the case last year, to cope with the demands made upon them the limited Instructional Staff available was fully taxed.



*Staff Tours, War Games, etc.*

Staff Tours, War Games and Tactical Exercises were carried out at various times and places under arrangements made by District Commanders. These exercises were well attended and produced good results.

## EXAMINATIONS

*Promotion Examinations—Permanent Active Militia*

During the year a total of 41 officers presented themselves at the examinations held in April and October. Of this number, 4 qualified in one or more subjects for the rank of Lieutenant-Colonel, 10 for the rank of Major, and 13 for the rank of Captain.

*Foreign Languages*

Interpretership examinations in French were held under the regulations of the British Civil Service Commissioners, at certain centres in Canada in June, 1922, and January, 1923, at which officers qualified as follows: 1st Class Interpreter, 1; 2nd Class Interpreter, 7.

*Canadian Officers Training Corps*

In addition to the work carried out by contingents of the C.O.T.C. as shown under "Training" above, at the examinations held in November and March, 181 candidates obtained Certificate "A," and 32 passed for Certificate "B."

The former qualifies a candidate for a commission in the Non-Permanent Active Militia, and the latter is equivalent to a certificate for the rank of Captain in that force.

A summary of results of the above examination are as follows:

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District	Contingent	Certificate "A"				Certificate "B"			
		Practical		Written		Practical		Written	
		Attending	Passed	Attending	Passed	Attending	Passed	Attending	Passed
1.	Western University.....	6	6	6	6				
2.	Toronto University.....	37	35	34	34	3	3	3	3
3.	Queen's University {5th Field Company.....	36 22	34 22	34 22	23 19	12	11	11	8
4.	McGill University..... {Loyola College.....	28 13	16 7	16 7	14 7	9	7	7	4
5.	Laval University.....	33	21	19	13				
6.	Nova Scotia Technical College.....	16	9	9	9	1	1	1	1
7.	New Brunswick University..... {Mount Allison University.....	22 20	22 17	22 15	21 2	9 8	9 8	9 8	2 2
10.	Manitoba University.....	29	27	27	19	12	12	12	9
12.	Saskatchewan University.....	18	18	18	14	5	4	4	4
13.	Alberta University.....	11	5	5	2				
	Totals.....	291	239	234	183	59	55	55	33

1.	Western University.....	6	6	6	6				
2.	Toronto University.....	37	35	34	34	3	3	3	3
3.	Queen's University {5th Field Company.....	36 22	34 22	34 22	23 19	12	11	11	8
4.	McGill University..... {Loyola College.....	28 13	16 7	16 7	14 7	9	7	7	4
5.	Laval University.....	33	21	19	13				
6.	Nova Scotia Technical College.....	16	9	9	9	1	1	1	1
7.	New Brunswick University..... {Mount Allison University.....	22 20	22 17	22 15	21 2	9 8	9 8	9 8	2 2
10.	Manitoba University.....	29	27	27	19	12	12	12	9
12.	Saskatchewan University.....	18	18	18	14	5	4	4	4
13.	Alberta University.....	11	5	5	2				
	Totals.....	291	239	234	183	59	55	55	33









#### (4) Artillery

##### *Armament*

Four additional Q.F. 12-pr. guns of the coast Defences were secured from the Department of Naval Service to replace a similar number which had almost reached the end of their life.

Two Q.F. 6-inch guns and mountings were taken over from the Department of Naval Service during the latter part of the year, and arrangements made to mount them at an early date. These guns were secured to replace two entirely obsolete B.L. 6-inch guns, and were much needed to give training and practice to the N.P. Coast Artillery units in a more modern equipment of this calibre.

The serviceability of armaments was maintained in so far as the limitation of funds permitted. A large amount of alterations are however outstanding to keep the equipment up to the changes required for modern requirements. These will be carried out when stores now due arrive and as additional funds become available.

#### (5) Signal Service

The Royal Canadian Corps of Signals, since reconstitution with an establishment of 5 officers and 14 other ranks, which included the Instructional Cadre of 12 non-commissioned officers, has been gradually increased until at the end of the fiscal year the limited establishment consisted of 6 officers and 57 other ranks.

The primary object of having in Canada a Permanent Corps of Signals is to provide for an efficient body of officers, non-commissioned officers and men thoroughly trained in Signal work, in order that it may be possible to provide for an efficient Signalling Instructional Staff in the various Military Districts in Canada to:—

- (a) Establish Schools of Signalling at Regimental Headquarters and Camps for the Signal Battalions, Companies and Troops of The Canadian Corps of Signals, and the Regimental Signal Sections of Cavalry, Artillery, Infantry and Machine Gun Units of the Non-Permanent Active Militia.
- (b) To provide for inspection, research and experimental work in connection with Signal equipment for use in the Army.
- (c) To provide, where necessary, personnel for the operation of Army telephone systems at defended localities throughout the Dominion.
- (d) To provide for the operation of Wireless Stations in the various Military Districts as circumstances warrant.
- (e) To provide for the operation of Wireless Stations which may be required by various Departments of the Government.

The limited establishment, as authorized, is quite inadequate to cover properly the large field of operations open to the Signal Service, in addition to furnishing the requisite number of Instructors in Signalling to the various Military Districts throughout the Dominion. However, during the past year notable progress has been made in all branches of the Signal Service as compared to results obtained during the preceding year.

##### *Signals Inspection and Test Division*

A small staff is employed in this division and the personnel have been kept fully employed throughout the year at the testing and assembling of Wireless Telegraph Sets for issue to Canadian Corps of Signals Units, Non-Permanent

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Active Militia. In addition, a large amount of test and research work has been performed and Wireless Telegraph Sets have been constructed for use by other Departments of the Dominion Government.

It is to be anticipated that the importance of this division of the Royal Canadian Corps of Signals will be further increased during the coming year consequent upon the installation and operation of Wireless Stations for the Department of the Interior (Yukon and Northwest Territories Branch) and the various additional Stations required by the R.C.A.F. during the coming summer. The whole of the equipment mentioned is assembled and tested in the Signals Inspection and Test Division, Ottawa.

*Radio Station Operations by the Royal Canadian Corps of Signals*

The wireless communication established in 1921 by the R.C.C.S. for use by the Royal Canadian Air Force between Ottawa and Camp Borden Station has been in continual operation throughout the year, resulting in a very considerable degree of saving in the cost of Long Distance calls and telegrams for the R.C.A.F. and the speed-up of the work and the facility with which messages between Ottawa and Camp Borden may be passed and replies received.

These stations give the necessary facilities for the practical training of Radio operators.

All the men of the R.C.C.S. now in charge of the operating of the various other stations installed for the R.C.A.F. have received their preliminary training on the Ottawa-Borden system.

The R.C.C.S. have taken over all Air Force wireless equipment and now control the operation of their Radio Stations throughout Canada.

Throughout the summer of 1922 the R.C.C.S. established and operated Wireless Stations for the R.C.A.F. at Winnipeg, Victoria Beach and Norway House on Lake Winnipeg, and at High River, Alberta. This service was carried out in connection with the Forestry Patrols conducted by the Air Force in Manitoba and Alberta, radio telegraph and telephone communications being maintained between the planes and the ground stations located at these centres.

In the case of High River, for instance, the range covered has been between 125 and 150 miles, and a distance of 170 miles has been reached with perfect results. It is a matter of record that one of the largest forest fires detected in Alberta last year was reported by radio telephony from the air at a distance of 190 miles from the Air Station from which the plane had set out on its patrol.

Over five hundred flights were made between June and December, 1922, from the High River Air Station and over 90 per cent of these were entirely successful from a communication point of view.

The Air Station at Victoria Beach on lake Winnipeg was in continuous communication with the Station at High River by radio telegraph, a distance of 790 miles.

The value of this service cannot be reckoned in dollars and cents and during the year 1922 it paid for itself many times over, due to the rapidity with which information was obtained in connection with forest fires which were extinguished before they had had sufficient time to grow and get beyond control.

The operations of these Stations are to be carried on again for the R.C.A.F. during the summer of 1923.

*Northwest Territories and Yukon*

Negotiations between the Department of the Interior and the Department of National Defence have resulted in an arrangement for the establishing of Wireless Stations up the Mackenzie Valley connecting with Stations to be located at Dawson City and the mining camp of Mayo.

*Instructional Cadre—Signals*

*Provisional Schools of Signalling.*—During the year under report, a total of 49 Provisional Schools of Visual Telegraphy were conducted as compared to 47 in the previous year. Provisional Schools of Line Telegraphy to the number of 6 were held as compared to 1 during the year 1921-22.

*Cadet Classes in Signalling.*—During the year under report, Cadet Classes have been held concurrently with Provisional Schools above reported upon, and in addition, at certain centres special Cadet Classes only, were held.

The total number of Classes of Cadets conducted during the year amounts to 53 as compared with 44 for the previous year.

A total of 129 Annual Inspections of Signallers were held with Signal Sections of the Non-Permanent Active Militia. The number presenting themselves for Classification during the year shows a considerable increase. 796 Signallers were presented for classification and of these 435 qualified as 1st Class Signallers, and 225 as 2nd Class Signallers.

The Assistant Instructors on the Instructional Cadre-Signals were kept actively employed in the training and conducting of schools in connection with the Regimental Signallers of other units of the Permanent Active Militia of the Dominion.

From June 1 to August 30, Officers and Instructors of the R.C.C.S. assembled at Camp Borden for intensive training, and concurrently with such training, a very successful school in Visual Telegraphy for Officers and N.C.O.'s of other Permanent Force units was conducted.

*Canadian Corps of Signals, Non-Permanent Active Militia.*—The organization and training of the Canadian Corps of Signals has progressed favourably throughout all districts during the year under report.

**(6) Small Arms Training**

## PERMANENT ACTIVE MILITIA

During the period under review the following weapon training courses were carried out:—

1. *Rifle Course.*—Recruits of Cavalry, Engineer, Infantry and Machine Gun units fired the practices of Table "A" of Addendum No. 7 to Musketry Regulations, Part I, 1909 (Reprint 1914).

Trained soldiers of Cavalry and Infantry units fired Table "B" of Addendum No. 7.

Trained soldiers of all other units fired the practices as shown in Part I, Table "C," also classification practices 21 to 29 inclusive of Part III, Table "B" of Addendum No. 7.

The Royal Canadian Machine Gun Brigade, in addition, fired Part III, Table "C."

2. *Revolver Course.*—All ranks authorized to be armed with the revolver fired the practices as laid down in Parts I and II of Addendum No. 3. In addition, Cavalry personnel fired the mounted practices as laid down in that Addendum.

3. *Light Gun Course.*—Units armed with Lewis and Hotchkiss guns fired Parts 1, 2, 3 and 5 of Table "L," Addendum No. 6.

The results obtained in the foregoing courses showed a marked improvement over those of the previous fiscal year, and may be considered quite satisfactory.

## NON-PERMANENT ACTIVE MILITIA

1. *Rifle Course*.—The course as fired was that laid down in "Memorandum for Camps of Instruction, 1922—Part I."

2. *Revolver Course*.—All ranks armed with the revolver fired Part I of Addendum No. 3 to Musketry Regulations, Part I, 1909 (Reprint 1914).

3. *Light Gun Course*.—The practices fired by units armed with the Lewis and Hotchkiss guns were those as shown in the memorandum already referred to. The results obtained in the foregoing courses were quite satisfactory.

## CAMBRIDGE CHALLENGE BOWL

In accordance with the conditions set forth in Militia Order No. 76 of 1922, the Cambridge Challenge Bowl was competed for and won by No. 3 (Hvy.) Battery, The Royal Canadian Garrison Artillery, Kingston, Ontario, with an average score of 129.5 points.

## BEST SHOT BADGES

Best Shot Badges were awarded to the best shots in the various units of the Non-Permanent Active Militia, in accordance with the conditions set forth in Militia Order No. 78 of 1922. The names of the winners have appeared in Militia Orders.

## RIFLE ASSOCIATIONS

On March 31, 1923, there were in existence 130 Military Rifle Associations with a total membership of 23,273, and 110 Civilian Rifle Associations with a total membership of 6,160.

The Dominion of Canada Prize, the conditions in regard to the competition for which are contained in Militia Order No. 58 of 1922, was competed for in 14 Civilian Rifle Associations.

The Dominion of Canada Rifle Association and the Provincial Rifle Association held annual rifle meetings during the fiscal year.

## CANADIAN SMALL ARMS SCHOOL COURSES

Regular Courses (Nos. 3 and 4) opened at Rockcliffe, Ottawa, Ontario, on 17th July, 1922 and ended 30th September, 1922. The courses were originally intended to conclude on 16th September; but the School suddenly received orders to proceed to Cape Breton, N.S., for duty in the Glace Bay area. At a few hours notice the Commandant, Staff and students, left Ottawa by special train for that place.

On returning to Ottawa the courses were extended to September 30, consequently the full courses as originally planned were completed.

"A" and "B" Wings only were in operation. "C" Wing was not in operation during the period under review.

Students for the foregoing courses were accepted from all Military Districts, the numbers being as follows:—

	" A " WING	
Officers.—8		Other ranks.—24
	" B " WING	
Officers.—3		Other ranks.—11

Those attending the courses were:—

- (i) Selected officers of the Permanent Active Militia.
- (ii) W.O's. & N.C.O's. of the Instructional Cadre.
- (iii) Prospective Instructors for the Instructional Cadre.

Examination results were as under:—

" A " WING		
	Passed	Failed
Officers.. . . . .	8	Nil.
Other ranks.. . . . .	23	1
" B " WING		
Officers.. . . . .	3	Nil.
Other ranks.. . . . .	11	Nil.

The courses were a success in every respect.

## (7) Historical Section

### *Collection, Classification and Disposal of Historical Documents*

The work of opening up and disposing of "Custody Parcels," containing the files, maps, reports, orders, returns and correspondence of overseas units and formations has been continued. This involved the classification, indexing and filing of the undermentioned material:

of 97 large packing cases <sup>and</sup> containing 1,004 custody parcels <sup>have been sorted from which</sup> consisting of 5,263 files and folders and a large number of maps and plans. <sup>have been classified in order.</sup>

A quantity of valuable reports, field messages, confidential documents, maps, etc., pertaining to Canadian Military activities during the War have been collected from individual officers of the C.E.F.

### *Official History of the C.E.F. in Canada*

Skeleton histories of the four Canadian Cavalry Regiments, the 13 C.M.R. Regiments and 262 Canadian Overseas Infantry Battalions have been compiled showing—

- Designation and change of designation.
- Authority for formation.
- Date mobilization commenced and where recruited.
- Date of sailing from Canada.
- Date of arrival in England.
- Date of sailing for France.
- Date of arrival in France.
- Date of return from France
- Date of arrival in England.
- Date of sailing for Canada.
- Date of arrival in Canada.
- Date and place of demobilization.
- Date disbanded and disposal of personnel.
- Designation of perpetuating unit in the reorganized Militia.

An equitable scheme for the awarding of Battle Honours to Canadian Cavalry Regiments and Infantry Battalions was drawn up by this Section and is being recommended by the Battle Honours Committee for adoption after endorsement by Military Districts and units of the Active Militia. The fact that the award to each unit is based on the actual number of men engaged in battle necessitated close perusal of acquittance rolls, Part II orders and sailing lists, as well as a comparison with Battle Honours awarded in the British Army. The work of compiling a statement for each battalion in the field, showing its composition at the end of each month in terms of reinforcements from depleted C.E.F. battalions is being proceeded with.

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*Compilation of an Historical Account of the Military Forces of Canada in the Great War*

An outline history of the 1st Canadian Division has been written and submitted to the Chief of Staff.

The History of the Canadian Medical Services in the Great War by Sir Andrew Macphail, Kt., O.B.E., B.A., M.D., C.M., LL.D., M.R.C.S., L.R.C.P., F.R.S.C., has been submitted to the Chief of Staff for approval prior to publication. This will be the first of a series of official volumes dealing with the history of the Canadian Forces, 1914-1919.

Data for an outline history of the 2nd Canadian Division and also for the first general volume of the official history of the Canadian Forces in the Great War are in course of preparation.

Lists of Commanding Officers and Staffs of all units in the Canadian Corps have been compiled, giving the name of the officer actually filling the appointment, and all changes in tactical command throughout the period of the Great War.

Progress has been made in the compilation of the "Who's Who" of Canadian Airmen in the War. Lists have been compiled and forwarded to the Record Office and to the Air Ministry, London, requesting further information.

Maps have been prepared, illustrating the fighting of the Canadian Division during the Second Battle of Ypres, for inclusion in the official history. The dispositions shown have been corroborated by a number of officers who were present at the battle.

Maps have been prepared to illustrate a monograph written by the Deputy Director General of the Medical Service on "the Canadian Army Medical Corps with the Canadian Corps during the Last 100 days, Aug.—Nov. 1918."

Charts have been prepared giving the following daily information relating to the Canadian Corps, the four Canadian Divisions and the twelve Canadian Infantry Brigades:—

- (i) Location of Headquarters.
- (ii) Frontage held (by map location).
- (iii) Reliefs.
- (iv) Attacks, with the Zero hour.
- (v) Short précis of operations.

These are now completed for the full period up to 30th November, 1918.

Charts have been completed showing daily disposition of units of the Canadian Corps during the battles of Mount Sorrel, the Somme, 1916, Vimy Ridge, Hill 70, and the Last 100 days.

The British battle areas as adopted by the War Office have been plotted on large scale maps and a table prepared showing the days of battle on which Canadian units were in these areas. Discrepancies and inconsistencies have been noted with a view to amendment.

*Historical Monographs on Military Subjects in Connection with the History of Canada*

Notes, statistics, maps and charts were drafted illustrative of Canadian service on the Western Front as exemplified by casualties sustained in the various battle areas during the war. The facts outlined formed the basis for the decision made by the Battlefields Memorials Committee to erect the main Canadian Memorial on Vimy Ridge instead of on Hill 62 (near Mount Sorrel) as had previously been the intention. As a result France has made a gift to Canada of the battleground on Vimy Ridge.

The Order of Battle of the Canadian Division and a suggested inscription for the St. Julien War Memorial was prepared on request of the Canadian Battlefields Memorials Committee.

The following material was prepared for the Sir Arthur Currie Hall, at the Royal Military College, Kingston:—

(i) A complete list of all Canadian units which served in France—over 600 in number—with notes on formation, designation and disposition.

(ii) Coloured plate showing identification patches worn by Canadian units in the field.

(iii) Photostat copies of Canadian Regimental badges.

(iv) Plan for suggested bronze plate giving the chief battles and other engagements on the Western Front in which Canadian formations participated, 1915-1918.

A report was prepared on motion picture activities during the war, dealing with the development of the organization, the profits derived therefrom and the final disposition of negatives and prints.

A summary of the history of the 106th Regiment (Winnipeg Light Infantry), together with outline histories of the following C.E.F. battalions was prepared and forwarded to the Durham Light Infantry Association, England, with which regiment these units are allied.

10th Battalion (Canadians)—now

1st Battalion the Calgary Highlanders.

1st Battalion the Winnipeg Light Infantry.

27th Battalion (City of Winnipeg)—now

1st City of Winnipeg Battalion (The Manitoba Regiment).

44th Battalion—now

1st Battalion, the Carleton Light Infantry.

61st Battalion (Winnipeg)—now

2nd (Reserve) Battalion, the Winnipeg Light Infantry.

101st Battalion (Winnipeg Light Infantry)—now

3rd (Reserve) Battalion, the Winnipeg Light Infantry.

222nd Battalion—now

4th (Reserve) Battalion, The Winnipeg Light Infantry.

226th Battalion—now

5th (Reserve) Battalion, The Winnipeg Light Infantry.

With a view to showing that the contribution in men of Simcoe County to the C.E.F. is perpetuated in the Active Militia, a short history of the Simcoe Foresters was compiled which provided information concerning the 35th Regiment (Simcoe Foresters), the 157th and 177th Overseas Battalions, together with a statement showing recruiting statistics for Simcoe County.

Statistics have been compiled relating to the number of men supplied from the 12th York Rangers to the C.E.F. and notes re the 35th, 127th and 220th Battalions, C.E.F., whose memory the York Rangers perpetuate.

A list of Battles and other Engagements in which Canadian units participated on the Western Front, 1915-1918, and based on the Report of the War Office Committee, has been prepared and issued to the press and will appear in newspapers throughout Canada.

Summaries of battles and various outline histories were compiled during the year, including the following:—

(i) A short summary of the Battle of Vimy Ridge.

(ii) Statistics and notes relating to Hill 70 operations.

(iii) Summary of operations and moves of the 31st (Alberta) Battalion from June, 1916, to October, 1917.

(iv) Short summary of operations and moves of the 16th Battalion (Canadian Scottish) from April, 1915, to June, 1916.

(v) Short outline history of the 21st Battalion (Eastern Ontario Regiment).

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(vi) Information relating to operations and moves of the 49th Battalion (Edmonton Regiment).

A statement in detail showing number of Prisoners of War captured by Canadians on the Western Front was drawn up.

Assistance has been given in the preparation of Regimental Histories. This includes the copying, checking and despatch of triplicate War Diaries of the following units of the Canadian Expeditionary Force:—

The Royal Canadian Regiment.  
 Princess Patricia's Canadian Light Infantry.  
 19th Alberta Dragoons.  
 4th C.M.R. Battalion.  
 7th Battalion (1st British Columbia Regiment).  
 8th Battalion (90th Rifles).  
 13th Battalion (Royal Highlanders of Canada).  
 21st Battalion (Eastern Ontario Regiment).  
 29th (Vancouver) Battalion.  
 47th Battalion.  
 49th Battalion (Edmonton Regiment).  
 72nd Battalion (Seaforth Highlanders of Canada).  
 87th Battalion (Canadian Grenadier Guards).  
 9th Battalion, Canadian Railway Troops.

The manuscript of a monograph on the "C.A.M.C. with the Canadian Corps during the last 100 days" written by the Deputy Director General of Medical Services was read with a view to publication.

*Compilation of Information for the Historical Section of the Committee of Imperial Defence*

Copies of 87 War Diaries (including 36 maps) of various Canadian formations and units have been prepared and despatched to the Historical Section (Military Branch) Committee of Imperial Defence.

*Preparation of Location Ledgers for Canadian Units in the Field for the Imperial War Graves Committee and for the Record Office*

Numerous enquiries have been received from the Record Office as to location and employment of units on certain dates. This information has been supplied and where necessary, a brief summary of operations has been given.

*Supply of Information to Historical Investigators*

Many requests for historical information made by individuals, Associations and the Press have been answered.

(8) Cadet Services

Owing to a reduction of \$100,000 in the Appropriation for Cadet Services, the activities of this Directorate were much curtailed, and the usual summer courses held for the purpose of enabling male School Teachers to qualify as Cadet Corps Instructors were cancelled, as were also the Cadet Camps, which during the previous year were attended by over 11,000 Cadets.

Provisional Schools were, however, held at various centres and 196 Teachers obtained Cadet Instructors' Certificates, and with the co-operation of these gentlemen it was found possible to raise 80 Cadet Corps during the year; the enrolled strength at the close of the fiscal year, 1923, being 109,395, a gain of 7,964 Cadets over the previous year.

The number of Cadets by provinces is as follows:—

Nova Scotia.. . . . .	3,444
Prince Edward Island.. . . . .	885
New Brunswick.. . . . .	1,637
Quebec.. . . . .	47,116
Ontario.. . . . .	31,836
Manitoba.. . . . .	9,174
Saskatchewan.. . . . .	3,959
Alberta.. . . . .	5,453
British Columbia.. . . . .	5,891
Total.. . . . .	109,395

### *Physical Training*

The department has continued to provide instructors for duty at normal schools, and during the year 6,753 teachers-in-training attended courses of instruction in physical education, of whom 5,088 obtained certificates of qualification issued by the department. In addition to these classes refresher courses were held at various centres, attended by 1,411 school teachers.

### *Permanent Force Instructors*

To enable the department to meet the constantly increasing demands for the services of highly qualified Physical Training Instructors, special courses were held during the year at which two officers and twenty-three non-commissioned officers of the Permanent Force obtained advanced certificates of qualification.

### *Signalling*

Much attention has been given during the year to instruction in Signalling; fifty-three classes were held and the following certificates issued to Cadets:—

Semaphore.. . . . .	1,186
Morse.. . . . .	242
Advanced.. . . . .	60
Total.. . . . .	1,488

### *Competitions in Musketry*

Canadian Cadets took part during the year in many important competitions.

In the Imperial Challenge Shield Rifle Match, which is open to teams of boys from all parts of the British Empire, 209 Canadian teams took part; the Governor General's Trophy, awarded to the Unit from Canada making the greatest all-round effort in the competition, being won by No. 328, Saskatoon Collegiate Institute Cadet Corps, Saskatoon, Sask.

Twenty-two teams competed in the King George V Cup competition, which was won by No. 526, The Winnipeg Grenadiers Cadet Corps, Winnipeg, Man., with No. 14, Quebec High School, in second place.

The Royal Military College Shield Competition was won by No. 62, Hamilton Collegiate Institute Cadet Corps, Hamilton, Ont., with No. 112, Victoria High School Cadet Battalion, Victoria, B.C., second.

### *The Governor General's Challenge Shield*

This Shield, which is awarded annually to the province having the largest number of enrolled Cadets in proportion to the school attendance, was won by the Province of Quebec, to be held for a period of six months by each of the

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following Cadet Corps, who were found to be the most proficient in drill and musketry in that province:—

- No. 247, Academie de La Salle Cadet Corps, Three Rivers, P.Q.  
 No. 352, Academie Commerciale Cadet Corps, Quebec, P.Q.

*Dominion of Canada Rifle Association*

One hundred and ninety-two Cadets were admitted to membership in the Dominion of Canada Rifle Association during the year, 95 of whom attended the annual prize meeting at the Connaught Rifle Range, an increase of 52 over the previous year. These young marksmen were very successful.

## (9) Aviation

*January 1 to March 31, 1923*

A report on aviation in Canada covering the calendar year 1922, has already been published in the final report on the Air Board, which ceased to exist on December 31, 1922. On that date, under the Act creating the Department of National Defence, the powers, duties and functions of the Air Board were assumed by the Minister of National Defence. In this report it will, therefore, only be necessary to cover the last quarter of the financial year 1922-23.

In the present stage of development of aviation, there is little demand for flying in Canada during the winter months. The period is, therefore, one of quiet in so far as actual flying operations are concerned. It is rather one of planning and preparation for the coming flying season. Actual flying is confined to experimental work in the investigation of winter flying conditions and to Air Force training. It is an active time, however, in the repair shops and depots of the Royal Canadian Air Force and of commercial companies. Machines are being overhauled and repaired, the results of the previous season's operations are being compiled and studied, and plans being perfected for the coming summer's work.

For convenience this report will be divided into sections as follows:—

1. Royal Canadian Air Force.
  - (a) Organization and Training.
  - (b) Operations for other Government Departments.
  - (c) Equipment and Technical Services.
  - (d) Expenditures.
2. Civil Aviation.
  - (a) Commercial Flying.
  - (b) The Aircraft Industry.
  - (c) International Convention for Air Navigation.

*1. Royal Canadian Air Force**(a) Organization and Training.*

The reorganization of the flying services undertaken during 1922 has been completed. The Civil Operations Branch has been amalgamated with the Canadian Air Force. The civil positions, in which its officers and men were employed, have been abolished and they have been granted commissions, or enlisted, in the Canadian Air Force. The Air Service is now wholly under Air Force Regulations, and its members employed on a uniform basis. The change has been brought about gradually during the nine months following June, 1922, and has been carried out, in so far as possible, without dislocating the work of any of the units affected.

The limited funds available for aviation during the financial year have prevented training being given on a large scale to non-permanent officers and men.

Training has, therefore, been confined to the personnel permanently employed in the Canadian Air Force.

During the winter months the work of overhauling the engines was concentrated at Camp Borden and the mechanical staff of the various units were sent there to undertake the work in the repair shops at the central depot. While at Camp Borden they have been given courses of instruction in their duties as members of the Royal Canadian Air Force, in addition to their ordinary work of overhauling the engines and equipment required for the conduct of flying operations.

A number of the mechanics on the stations employed in the past as Civil Servants, were over age or were medically unfit for service in the Royal Canadian Air Force. Others were unwilling to enlist in a permanent Air Force and have consequently been released. Some difficulty has been experienced in recruiting the right class of men for Air Force mechanics, but every effort is being made to obtain suitable men to fill the vacancies.

The enlistment of sufficient skilled mechanics with proper qualifications and experience for Air Force duties will always be a matter of some difficulty. Wages are high and employment easily obtainable in civil life for such men. This problem will have to be faced in the near future. The best solution will probably be found in the formation of a boys' training establishment where selected youths, of good education and antecedents, can be sent for a thorough grounding in Air Force duties. Such men, after passing through the training establishment and serving for a period in an active service squadron, could revert to civil life, at the expiration of their service, with the full assurance that their experience and training in the Air Force will ensure them ready employment in civil life at good wages. Industry in Canada would also benefit considerably by the addition, in a few years, of a steady stream of highly skilled and efficient mechanics from the Air Force. Civil Aviation, in the same way, would benefit by employing time expired men from the Air Force.

Arrangements have been completed with the University Authorities for the entry for Air Force training of a class for cadets in May, 1923. The course will be held at Camp Borden, the training station, and will consist of three terms, each of from approximately May 15 to September 1, during three consecutive years. To be eligible for selection it has been decided that the candidate must have the following qualifications:—

- (a) A member of the Canadian Officers Training Corps who has performed the requisite qualifying service and passed the practical examination for certificate "A" C.O.T.C.
- (b) Following a course of study as an undergraduate leading to a degree in Applied Science.
- (c) Physically fit for Air Force Service as a pilot.
- (d) Unmarried.
- (e) Under 21 years of age at the commencement of the course.
- (f) Recommended by the Military Committee of the University as likely to become an efficient Air Force Officer.
- (g) Give an undertaking to complete the whole course.

Before attending the second term the candidate will be required to be in possession of certificate "A" C.O.T.C.

The status while under training will be as follows:—

During the period that candidates are in attendance at the Royal Canadian Air Force training station, they will be granted temporary commissions as provisional Pilot Officers, and will receive pay and allowances in accordance with

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Pay and Allowance Regulations for the Canadian Air Force. The proposed rates are as follows:—

During the first term.. . . . .	\$3.00 per day
“ “ second term.. . . . .	3.50 “ “
“ “ third term.. . . . .	4.00 “ “

While under training the cadets will receive free quarters, rations, travelling allowance, a uniform, and medical and dental treatment.

On the completion of the course the cadets will be granted a Commission in the R.C.A.F. and will be eligible for:—

- (a) Appointment as Pilot Officers in the Royal Canadian Air Force for permanent duty (the number of vacancies for such appointments will, in all probability, be very limited).
- (b) Appointment as Pilot Officers in the Active non-permanent Royal Canadian Air Force.
- (c) Transfer to the reserve of officers in which case they will not be liable for further service except in time of emergency.

The names of cadets will be received by the Military Committees of the various Universities and submitted through the Officers Commanding Military Districts, with recommendations as to their suitability for service. It is hoped that a large number of students from Canadian Universities will avail themselves of this opportunity and that the scheme of training will prove successful. It is felt that from no other source can be drawn a type of young officer more likely to give satisfactory service. Those for whom places in the Royal Canadian Air Force cannot be found, at the expiration of their training, will have lost no valuable time and will have gained much experience which will be of value to them in their engineering or scientific career.

The average strength return of the Royal Canadian Air Force for the quarter was 45 officers and 195 airmen.

The following statement shows the flying undertaken during the period under review.

JANUARY 1 TO MARCH 31, 1923

Station	Aeros or Scaplane	Flying period to date	Nature of Flights						Total Hours flown	Approx. Miles flown	Average Flight Duration	Days on which Flying took place
			Regular training	Combined manoeuvres with other Forces	Photographic operations	Communication	Winter Flying Tests	Other operations				
		Days									H. M.	
T.D.S. Camp Borden.....	A	78	45				4	49	16.15	1,065	.19	21*
High River C.A.F. Unit.....	A	78					25	25	17.00	1,190	.40	25*
Vancouver C.A.F. Unit.....	S	78	47		1			62	52.56	3,176	.51	21*
Totals.....		234	92		1		29	14	86.11	5,431	.30	67

\* No flying undertaken on Sundays.

Total Aeroplane mileage, 2,255.

Seaplane Machine mileage, 3,176

*(b) Operations for Other Government Departments.*

Flying operations for other government departments during the winter season have not yet been developed to any extent. This work has been chiefly in connection with forestry, exploration and transportation in the remoter parts of the country and does not call for flying at all seasons of the year. The only patrols carried out during the winter season have been for the preventive services on the Pacific Coast in connection with the prevention of narcotic drug and liquor smuggling and illegal fishing.

The results of the flying done for other government departments during the season of 1922 have been under consideration and a programme of flying operations for 1923 has been drawn up and considered.

With a view to placing the relations between the Air Service and other government departments on a better basis, it was decided to form a permanent inter-departmental committee for the consideration of such work. The assent of the Deputy Ministers of the departments concerned was readily obtained and this committee held its first meeting on March 14, 1923. In addition to representatives of this Department, including the Deputy Minister, the Director of the Naval Service, the Deputy Chief of Staff, Director of Military Operations and Intelligence, the Director of Signals and the Director of the Canadian Air Force, the following branches of the Government Service were represented: The Director General of Surveys, the Topographical Surveys Branch, the Forestry Branch, the National Parks Branch, the International Boundary Commission, the Northwest Territories Branch, the Geodetic Survey Branch, the Service Bureau, the Water Powers Branch and the Dominion Observatory, all of the Department of Interior; the Department of Mines, Geological Survey Branch; the Department of Agriculture, Entomological Branch; the Department of Public Works, Chief Engineers' Branch; and the Department of Indian Affairs.

Proposals had been received in advance from the various branches interested, as to the work which would probably be required during 1923. These proposals had been considered by the Air Force staff and a tentative programme drawn up for discussion at the meeting. The amount of work which could be undertaken was limited by the number of machines available and the funds voted by Parliament for such work. As neither of these factors would permit of all the operations proposed being undertaken, a selection was made of those which were considered of most importance and which could be carried out most readily with the means available. After full discussion of all the proposals received, the committee finally adopted a programme, subject to further discussion of each item with the individual branches concerned, as follows:—

*Vancouver, B.C.—*

Forestry Branch—Fire patrols in Railway Belt . . . . .	40 hours.
Water Powers Branch—Aerial photography . . . . .	10 "
Operations for Customs, Fisheries, Department of Agriculture, etc. . . . .	25 "

*High River, Alberta—*

Forestry Branch—Fire patrol over Crow's Nest and Bow River reserves . . . . .	700 "
Topographical Survey Branch—Photographic work on sectional maps between Edmonton and Calgary . . . . .	50 "
Parks Branch—Occasional patrols in the Rocky Mountain Park . . . . .	25 "
Reclamation Service—Photographic work on various rivers . . . . .	20 "
Geodetic Survey—Transportation from Jasper Park to Jarvis Pass . . . . .	20 "
Agriculture Department—Operations for combatting caterpillar pest in the Moose Mountain area . . . . .	20 "

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*Winnipeg Air Station—*

Regular fire patrols. . . . .	700	"
Topographical Survey—Interprovincial Boundary and surveys in the northern part of the province. . . . .	30	"
Dominion Water Power Branch—Aerial photography. . . . .	30	"
Reclamation Service—Aerial photography. . . . .	20	"
Department of Indian Affairs—Transportation of treaty money paying parties. . . . .	35	"
Department of Mines—Transportation of survey parties and supplies		
In northern area. . . . .	25	"
In eastern area. . . . .	25	"

*Ottawa Air Station—*

Forestry Branch—Photographs of French river. . . . .	20	"
Parks Branch—Reconnaissance in Gatineau and Lievre valleys	25	"
Water Power Branch—Photographic work on the Riviere des Prairies . . . . .	10	"
Department of Agriculture—Experimental work on scattering poison dust from the air. . . . .	10	"

The development of aerial photography has received careful attention during the period under review. Its application to surveying is a matter which, it is considered, can best be developed by the existing Survey Services. It was therefore decided to approach the Department of Interior with a view to making more definite arrangements to ensure steady development of this work. The following quotation from a letter, dated January 12, 1923, from the Deputy Minister of National Defence to the Deputy Minister of the Interior, clearly shows the position:—

"It is in regard to aerial photography that closer control appears necessary. At present we are receiving requests from many services for work of this kind, each Branch with a different purpose in view. The experience gained during the past season has shown that much of the information in an aerial picture may be useful for mapping purposes provided that the pictures are taken under proper conditions. The Topographical Survey Branch has, I understand, done some very interesting work along this line and are making further inquiries into the subject which may have far reaching results. This being the case, may I suggest that this branch act in an advisory and consulting capacity in regard to aerial photography in the future, and be considered as the central authority on this branch of the work. If all approved photographic operations were considered by one branch and that branch empowered to study the practical application of aerial photography in this country, it would, I am certain, result in the speedy development of the science; economy in operations through saving of overlapping and duplication of work; and, in addition, make all pictures available for mapping purposes for whatever service they were taken."

On January 30, a reply was received to this proposal as follows:—

"You first suggest that the Topographical Surveys Branch, which has given special attention to the utilization of aerial photographs for mapping purposes should act in an advisory and consulting capacity in regard to aerial photography in the future. The Topographical Surveys Branch will be glad to co-operate with the Air Force in that connection and to give every possible assistance."

Arrangements have been made to carry out the decision reached and the closest co-operation now exists in this work between the Topographical Surveys Branch and the Air Force. The actual taking of the pictures and their development and printing rests wholly with the Air Service, while the technical work of examining the results and devising means for using them for mapping purposes is a matter within the province of the Topographical Surveys Branch. In the preparation of the programme for 1923, that branch is co-operating with our officers in drafting the operation orders for all photographic work, with a view to obtaining the best possible results for each branch requiring work of this nature and ensuring that the pictures taken will give the results required from a scientific point of view and not merely be "pretty pictures."

The Topographical Surveys Branch are also advising the Air Service in regard to the types of camera which should be employed, the length of the lens, the altitude, inclination and direction of the pictures, the use of special films and plates, light filters, etc. Dr. Deville, Director General of Surveys, is taking a personal interest in this work and the thanks of the Department are due to him and his officers for much valuable assistance.

(c) *Equipment and Technical Services.*

The reorganization of the technical and equipment establishments commenced in 1922 was completed by the end of the financial year. The contract and purchasing duties have been transferred to the branch of the Director of Contracts and consolidated with the other similar work of the military and naval services. The storekeeping staff at headquarters and on all the stations has been transferred from civil to an Air Force basis and the same course has been followed in regard to the technical and designing staffs. All the employees both at headquarters and on the stations have been granted commissions or enlisted in the Royal Canadian Air Force.

The work of installing store accounting systems and procedures on the lines of those in force in the Royal Air Force has been finished. The Canadian service now functions in the same way as the Royal Air Force, so that if ever units of the two forces are called out to work together, no confusion will result. A complete stock taking has been made on all stations of stores on hand. This has been done by a board consisting of a representative of the Accounts Branch, Stores Branch and the station storekeeper. The stores audit will, in future, be done by the Stores Audit Section of the Department, in common with the other storekeeping branches of the Department. The preparation of demands for, and the supply of, the material necessary for the coming season's operations have been undertaken.

The Technical Section has been engaged on the details of the design of the modifications necessary to transform the "Avro" training machine into a single float seaplane, fitted with a Wolsley "Viper" engine. This machine is intended for trial as a light patrol machine for forest fire detection. The intention is to use the single-seater light machine for the daily patrols and only to bring the heavier passenger-carrying types into action when the transportation of men and supplies is necessary.

Research has been continued on the operation of aero engines at low temperatures and winter flying tests have been carried out at High River Air Station, with very satisfactory results. The design of special mounts for aerial cameras has also been taken in hand, as the existing mounts are not satisfactory for their purpose. Numerous other details in regard to apparatus required for flying operations have also been considered.

(d) *Expenditure*

STATEMENT OF APPROPRIATIONS AND EXPENDITURE FOR FISCAL YEAR 1922-23

Appropriations		Expenditure	
	\$ cts.		\$ cts.
Vote 552.....	5,000 00	Capital.....	162,708 83
Vote 298.....	1,000,000 00	Research and experiment.....	7,500 00
Revenue from operations on repayment basis.....	61,596 88	R.C.A.F. pay.....	505,230 92
		R.C.A.F. allowances.....	68,439 09
		Civil wages.....	33,541 10
		Travelling expenses.....	37,579 89
		Grants for C.A.F. Associations.....	11,141 88
		Equipment.....	152,916 59
		General account.....	87,521 91
		Unexpended.....	16 67
	1,066,596 88		1,066,596 88

## 2. *Civil Aviation*

(a) *Commercial Flying*.—There is little to report in regard to commercial flying during the period under review. Commercial companies are busy making plans for the operating season of 1923 and overhauling their machines. Statistics and information regarding the work done during 1922 have already been published in the Air Board Report for that year and need not be repeated here. There is every prospect that 1923 will show considerable increase in the amount of useful commercial flying done in the country. Companies are securing more aircraft for their work and are extending their operations very considerably. The Department, in pursuance of its policy to encourage commercial aviation in every way, has notified the Provincial Governments that they are prepared to relinquish to commercial companies or provincial services, the experimental operations, undertaken on repayment during the past three seasons with a view to showing the benefits which can be obtained by the use of aircraft in connection with forestry. It is expected that this work in the Provinces of Ontario and Quebec may be taken over by commercial firms during the coming season. Neither funds nor equipment are available at present to undertake all the work required by the various Departments of the Dominion Government. It is very desirable, therefore, that the Provinces should arrange independently for the carrying out of all operations under their jurisdiction.

In British Columbia, the situation is somewhat different. There is as yet no commercial firm well established on the Pacific Coast. The Dominion Government has much work which can be done to good advantage by aircraft and must maintain a Station there in any event. It may therefore be found desirable to continue operations for the Provincial Government on a repayment basis on the Pacific Coast if they so desire.

It is gratifying to report a very considerable increase in the interest shown by commercial firms in the operation of aircraft on a business basis with forestry work, and also in aerial photography. This latter work will undoubtedly increase rapidly with the perfection of photographic methods. In the United States a large and increasing business is growing up rapidly and the demand for the time being exceeds the facilities of the operating companies.

There will be in Canada, it is safe to say, a wide field for commercial aviation in a very few years. The day has not yet arrived in this country when aircraft can be used economically for the transportation of mail and passengers over regular routes in competition with the railways and steamships. An opening exists, however, as an auxiliary to such services where the conditions do not justify large capital expenditures, but fast and reliable methods of transportation are required. The establishment of regular air service routes will probably follow the successful running of such services in countries where the physical conditions are easier and the traffic greater.

### (b) *The Aircraft Industry.*

It is gratifying to note that contracts for the construction of aircraft in Canada have been let during the period under review and that the aircraft industry in this country has again been revived, after a lapse of four years. Tenders were called in the Fall of 1922 for the construction of eight amphibian type flying boats. The specifications called for a machine carrying a pilot and the equivalent of four passengers, at a cruising speed of 80 miles per hour, with a range of six hours' flying at a cruising speed and a working ceiling of not less than 12,000 feet. Tenders were received from various firms in Canada, Great Britain and the United States. Two of these complied with the stipulation that machines constructed in Canada would receive preference. After consideration of the various tenders received, it was decided to accept, as being the most suitable, that of Messrs. Canadian Vickers Ltd., of Montreal, for the construction in

Canada of six machines and delivery of two others of the same type from the factories of their English firm. The acceptance of two British-built machines was decided on, as the preparations for building machines in Canada would take time and it was desired to obtain two of the machines at the earliest possible date. The contract was, accordingly, let on this basis and work is now progressing in Montreal on the construction of the machines.

It is hoped that the aircraft industry will now become a permanent one in this country. The advantages of having the machines used in Canada built here are self evident.

(c) *International Convention for Air Navigation.*

The third meeting of the International Commission for Air Navigation was held on the 28th of February, 1923, in Brussels. Belgium, the British Empire, France, Japan, Portugal, the kingdom of the Serbs, Croats and Slovenes, were represented. Wing Commander J. S. Scott, R.C.A.F., attended with the British delegation. Numerous matters in connection with international flying were considered, including an application from Canada for a derogation from the terms of the International Convention in respect of flying between the United States and Canada. The following memoranda presented to the Commission in support of this application shows the position:—

In the present stage of the development of aeronautics Canada is only concerned with inter-state flying in so far as it affects the United States. The boundary between the two countries is over 3,000 miles long; business and social relations between the two countries are close; conditions are similar on both sides of the border and international communications fully developed. The importance to both countries of having a mutually satisfactory agreement regarding inter-state traffic is great. With the growth of aviation, inter-state traffic by aircraft will undoubtedly become of great importance.

The United States was a signatory to the original Convention, but so far has not ratified it and is, therefore, not a contracting party within the terms of the Convention. The question is further complicated by the fact that the United States has not yet passed any legislation creating a body to deal with aeronautics. No federal laws have yet been passed regulating air traffic or granting authority to register aircraft or the personnel engaged in aerial navigation.

Notwithstanding this, aviation in the United States is growing rapidly and an increasing number of American pilots and aircraft desire to cross into Canada and fly in Canadian territory.

To deal with this situation the Air Board of Canada passed an amendment to the Air Regulations Canada on May 17, 1920, in the following terms:—

(a) That pending the organization of a body in the United States of America having authority to issue civil certificates to air personnel and until the 1st of November, 1921, qualified American military pilots be excepted from the provision of paragraph 33 of the Air Regulations, 1920, so far as is necessary to put them in the same position with regard to flying in Canada as if they were the holders of certificates from the Government of the United States, that is, in the same position of being entitled to fly United States aircraft in Canada but not to carry passengers or goods for hire, and

(b) That pending the organization in the United States of a body having authority to issue Registration Certificates for Aircraft and until the first day of November, 1921, aircraft which would under the Convention relating to International Air Navigation be registerable in the United States of America, be excepted from the provisions of paragraph 3 of the Air Regulations, 1920, provided that:—

(a) Full particulars of the aircraft are furnished.

(b) The aircraft is marked in accordance with the Regulation with a nationality and registration mark of which the first letter is the letter "N" and the second letter is the letter "C".

(c) If such aircraft is one which under the Regulations would require a certificate of airworthiness, a temporary certificate of airworthiness is issued;

(d) In all cases the same fees are paid as in the case of Canadian aircraft.

The Controller of Civil Aviation is to be authorized to administer this exception to the Regulations.

The effect of these regulations is to place aircraft and pilots of United States nationality in the same position as they would have been had that country enacted similar regulations

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to those existing in Canada. When an American machine or pilot wishes to cross the International Boundary and fly in Canada, it is necessary that the Canadian authorities should be advised in advance of the proposed flight, with particulars of the route it is proposed to follow; the purpose of the flight; the date; the owner's name and address; the pilot's name and qualifications and the type of aircraft it is proposed to use. Should the aircraft be of a type not already recognized as airworthy and fall within the category of commercial aircraft, an investigation of its design is made. If it is found to comply with the standards approved in Canada in all essentials, a type certificate is issued. If, on the other hand, it is below the standard called for in Canadian machines, permission is refused for it to fly in Canada. For private aircraft no certificate of airworthiness is necessary and no responsibility is taken for the design of the machine.

The clause limiting the permission to "Military pilots" was inserted because there was no authority other than the Military (including Naval) Air Services who could grant pilot's certificates. The great majority of American pilots had served in one or other of the services during the war and had passed through an Army or Naval School of Aviation. Exceptions have been made on one or two occasions in favour of pilots without either military or naval training. In such cases proof must be given that the pilot is experienced and has the necessary qualifications to enable him to take a pilot's certificate in Canada.

Registration marks as called for in the Convention, are insisted on for all machines flying in Canadian territory.

Commercial operations of any nature are prohibited within Canada by United States machines, but they may carry goods or passengers from a point in the United States to a point in Canada and vice versa.

The provisions of Part 10, Air Regulations Canada, 1920, in regard to reporting to the Customs authorities when entering and leaving Canada are strictly enforced. Owing to the fact that there are so few licensed Customs air harbours in the country it has not always been possible to enforce regulation 96 calling for an initial and final landing at a Customs Harbour. Arrangements have been made when necessary to have the Customs authorities at the nearest port of entry on the border make the necessary entries.

Until legislation is passed in the United States creating a body to deal with air navigation it will not be possible to arrange mutually for a regular convention between the two countries, and until this is done the present arrangements with modifications, as necessary, will be adhered to. The original agreement expired on November 1, 1920, and has been extended at the request of the United States Government from time to time. The present agreement expires on the 1st of May, 1923.

The Commission decided to recommend, to the contracting states, the grant of the derogation asked for. Reports of the sub-committees on the technical annexes to the Commission were considered and progress made in many lines of work. The question of the voting power of the various States represented on the Commission was also considered. Proposals from the Belgian and French Governments had been received for amendments to the International Convention, altering the voting basis of the States represented. A decision in regard to these was postponed to the next meeting, to be held in London in June. Uniform certificates for pilots, engineers and navigators and certificates of airworthiness of aircraft were submitted by the sub-committee in charge of this work and adopted. The Government of Italy notified its ratification of the Convention on the 13th of March, 1923.

## REPORT OF THE ADJUTANT-GENERAL

On March 31, 1922, the date of the last annual report of the Department of Militia and Defence, the Adjutant-General's Branch consisted of the following Directorates, each being subdivided into a number of sections to facilitate the distribution and performance of its various duties:—

- The Directorate of Organization and Personal Services.
- The Directorate of Medical Services.
- The Directorate of the Judge-Advocate-General.
- The Directorate of Records.
- The Directorate of Pay Services.

On the 1st January, 1923, "The National Defence Act, 1922," came into force, and among the changes thereby effected, the Directorate of the Judge-Advocate-General ceased to form part of the Adjutant-General's Branch, and became responsible to the Deputy Minister. The Adjutant-General's Branch, therefore, now consists of the remaining four Directorates, as indicated above. The Directorate of Pay Services is a part of the Adjutant-General's Branch so far as administrative and disciplinary matters are concerned, but is under the Deputy Minister for financial matters generally.

The reports of the Directorates of Organization and Personal Services, Medical Services and Records follow; the report of the Director of Pay Services is on page 82.

## Directorate of Organization and Personal Services

## I. ORGANIZATION

*Permanent Active Militia*

In effecting a reduction of 350 Other Ranks in the strength of the Permanent Force, No. 4 Company, R.C.G.A., and the Royal Canadian Machine Gun Brigade ceased to be maintained as active units.

The Band of the Royal Canadian Garrison Artillery has been transferred to the Royal 22nd Regiment.

The Royal Canadian Engineers which corps previously consisted of Nos. 1 and 2 Fortress Companies and Supernumerary Establishment is now composed of 13 detachments, as under, with a total peace establishment of 48 Officers and 360 Other Ranks:—

No. 1	Detachment R.C.E.,	London, Ont.
No. 2	"	Toronto, Ont.
No. 3	"	Kingston, Ont.
No. 4	"	Montreal, P.Q.
No. 5	"	Quebec, P.Q.
No. 6	"	Halifax, N.S.
No. 7	"	St. John, N.B.
No. 8	"	Petawawa.
No. 9	"	Ottawa.
No. 10	"	Winnipeg, Man.
No. 11	"	Esquimalt, B.C.
No. 12	"	Regina, Sask.
No. 13	"	Calgary, Alta.

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A new peace establishment providing for 6 Officers and 57 Other Ranks has been authorized for The Royal Canadian Corps of Signals.

One company in The Royal Canadian Regiment, one company in the Princess Patricia's Canadian Light Infantry, and one platoon in the Royal 22nd Regiment have been organized as machine gun units.

The Canadian Warfare School has been re-designated "The Canadian Small Arms School."

The following table shows the authorized establishments and limited establishments, in personnel, of units of the Permanent Force.

The strengths of the respective units are restricted to the numbers laid down in the Limited Establishments.

## PERMANENT FORCE

Units	Authorized Establishment			Limited Establishment			Actual Strength		
	Officers	Other Ranks	Total	Officers	Other Ranks	Total	Officers	Other Ranks	Total
Royal Canadian Dragoons	28	516	544	20	265	285	18	257	275
Lord Strathcona's Horse (R.C.).....	28	495	523	21	207	228	18	187	205
Royal Canadian Artillery	65	1,000	1,065	65	643	708	59	604	663
Royal Canadian Engineers	48	360	408	38	249	287	33	214	247
Royal Canadian Corps of Signals.....	6	57	63	6	57	63	6	53	59
Royal Canadian Regi- ment.....	36	924	960	36	442	478	29	405	434
Princess Patricia's Can- adian Light Infantry....	29	690	719	29	271	300	28	251	279
Royal 22nd Regiment.....	14	422	436	14	187	201	13	182	195
Royal Canadian Machine Gun Brigade.....	47	480	527	13	.....	13	12	.....	12
Royal Canadian Army Service Corps.....	33	412	445	26	239	265	27	227	254
Royal Canadian Army Medical Corps.....	43	101	144	30	80	110	29	77	106
Royal Canadian Ordnance Corps.....	32	700	732	31	423	454	33	415	448
Royal Canadian Army Veterinary Corps.....	7	23	30	7	7	14	6	7	13
Royal Canadian Army Pay Corps.....	40	100	140	26	71	97	19	67	86
Corps of Military Staff Clerks.....	32	199	231	8	189	197	8	187	195
Canadian Small Arms School.....	3	2	5	3	2	5	2	2	4
Totals.....	491	6,481	6,972	373	3,332	3,705	340	3,135	3,475

NOTE.—Officers seconded from their units and not paid from the Permanent Force Vote are not included in the above table.

*Non-Permanent Active Militia*

The following changes in organization have been effected:—

*Cavalry.*—The 2nd Regiment (13th C.M.R. Bn. C.E.F.) The Alberta Mounted Rifles is now attached to the 5th Mounted Brigade.

*Artillery.*—The organization of the following units, which upon reorganization of the Artillery was held in abeyance, has now been authorized—

Headquarters, 20th Brigade, C.F.A., at Edmonton, Alta.

22nd Battery, C.F.A., at Gleichen, Alta.

The 54th Battery, C.F.A., Brantford, Ont., has been attached to the 8th Brigade C.F.A.

*Engineers.*—The engineer units in Military Districts Nos. 4, 5 and 11, which previously were un-numbered, have now been designated as follows:—

- Military District No. 4—
  - 16th Field Company, C.E.
  - 5th Field Troop, C.E.
- Military District No. 5—
  - 6th Field Troop, C.E.
- Military District No. 11—
  - 17th Fortress Company, C.E.

*Signals.*—The 5th and 6th Signal Battalions, Canadian Corps of Signals, have now been reconstituted as under:—

- 5th Signal Battalion—
  - Headquarters (a), Quebec, P.Q.
  - No. 5 Signal Company, Quebec, P.Q.
  - No. 20 Signal Company (a), Quebec, P.Q.
  - 4th Signal Troop, Quebec, P.Q.
  - (a) Organized only to the extent of posting of Officers.
- 6th Signal Battalion—
  - Headquarters, St. John, N.B.
  - No. 6 Signal Company, St. John, N.B.
  - No. 8 Signal Company, Charlottetown, P.E.I.
  - No. 7 Fortress Signal Company, Halifax, N.S.

The organization of No. 21 Signal Company, C.C. of S., at Vancouver, B.C., has been authorized.

*Infantry.*—Units have been redesignated as follows:—

<i>Old designation</i>	<i>New designation</i>
The Ottawa Regt. (The Duke of Cornwall's Own)	The Ottawa Highlanders.
The Hull Regiment.	Le Regiment de Hull.
The Northumberland (New Brunswick) Regiment.	The North Shore (N.B.) Regiment.

The infantry brigades in Military District No. 6 have been reconstituted as under—

- 16th Infantry Brigade—
  - (Furnished from M.D. No. 7).
- 17th Infantry Brigade—
  - 1st Bn. (219th Bn. C.E.F.) The Lunenburg Regiment.
  - 1st Bn. (112th Bn. C.E.F.) The Annapolis Regiment.
  - 1st Bn. (25th Bn. C.E.F.) The Colchester and Hants Regiment (attached).
  - 1st Bn. (40th Bn. C.E.F.) The Halifax Rifles.
  - 1st Bn. (64th Bn. C.E.F.) The Princess Louise Fusiliers.
- 18th Infantry Brigade—
  - 1st Bn. (17th Bn. C.E.F.) The Pictou Highlanders.
  - 1st Bn. (193rd Bn. C.E.F.) The Cumberland Regiment.
  - 1st Bn. (85th Bn. C.E.F.) The Cape Breton Highlanders.
  - 1st Bn. (105th Bn. C.E.F.) The Prince Edward Island Regiment.

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*Canadian Machine Gun Corps.*—The 5th Machine Gun Brigade with headquarters at Quebec, P.Q., has been reorganized and for the present consists of a headquarters and 2 companies with a total establishment of 28 Officers and 304 Other Ranks.

The provision for a band in the peace establishment of a Machine Gun Brigade has been cancelled.

*Canadian Army Service Corps.*—Reserve divisional trains (one for each corresponding active unit) have been authorized.

*Canadian Army Medical Corps.*—The organization of No. 8 Field Ambulance at Calgary, Alta., which upon the reorganization of the Canadian Army Medical Corps was held in abeyance, has now been authorized.

*Canadian Postal Corps.*—The Canadian Postal Corps has been increased from 11 to 12 Detachments in order to provide a further detachment in Military District No. 2 with an establishment of 1 Officer and 4 Other Ranks.

*Canadian Railway Corps.*—Authority has been given for the Canadian Railway Corps to consist of the following units.

The organization of these units is at present restricted to the posting of officers.

A Headquarters and Train Crew Corps.

Operating Corps.

Construction and Maintenance Corps.

Traffic Sections.

Workshops.

Breakdown Gangs.

Stores Corps.

Railway Survey and Reconnaissance Units.

Amounting in all, if and when authorised to be raised, to 363 Officers and 10,424 Other Ranks.

*Canadian Officers Training Corps.*—The Laval University Contingent, C.O.T.C., Quebec, P.Q., has been reorganized and consists of one company with an establishment of 6 Officers and 120 Other Ranks.

The organization of a Contingent C.O.T.C., consisting of one company, at the University of Bishop's College, Lennoxville, P.Q., has been authorized.

*Alliances.*—The Toronto Scottish Regiment is now allied to the 14th (City of London) Battalion, The London Regiment (London Scottish).

### *Peace Establishments*

The Peace Establishments of the Non-Permanent Active Militia promulgated in General Orders were made effective for the fiscal year 1922-23.

A peace establishment providing for 4 Officers and 71 Other Ranks has been approved for the 17th Fortress Company C.E., at Esquimalt.

### *Localization*

The localization of the respective units of the Non-Permanent Active Militia, upon reorganization, which in each case is published in General Orders, has been completed.

## Recruiting

Four hundred and sixty-nine enlistments for the Permanent Active Militia have been permitted to fill vacancies which have occurred from time to time within the Limited Establishments.

Owing to the reduction in establishments there have been 977 discharges during the year under report.

The following statements are submitted:—

“A”—Strength by Corps of the Permanent Force as of 31-3-23.

“B”—Strength of the Permanent Force by stations as of 31-3-23.

“C”—Statement of Officers.

“D”—Statement of enlistments and discharges in the Permanent Force for the year ending 31st March, 1923.

## “A”—STRENGTH BY CORPS OF THE PERMANENT FORCE AS OF 31-3-23

Corps	Officers	Other Ranks	Total
Permanent Staff Officers on N.D.H.Q. and District Headquarters	26		26
Royal Canadian Dragoons.....	20	257	277
Lord Strathcona's Horse (R.C.).....	18	187	205
Royal Canadian Horse Artillery.....	66	604	670
Royal Canadian Garrison Artillery.....			
Royal Canadian Engineers.....	41	214	255
Royal Canadian Corps of Signals.....	6	53	59
Royal Canadian Regiment.....	38	405	443
P.P.C.L.I.....	34	251	285
Royal 22nd Regiment.....	16	182	198
Royal Canadian Machine Gun Brigade.....	15		15
Royal Canadian Army Service Corps.....	28	227	255
Royal Canadian Army Medical Corps.....	31	77	108
Royal Canadian Ordnance Corps.....	35	415	450
Royal Canadian Army Veterinary Corps.....	6	7	13
Royal Canadian Army Pay Corps.....	21	67	88
Corps of Military Staff Clerks.....	9	187	196
Canadian Small Arms School.....	2	2	4
Cadet Officers (Specially employed).....	7		7
Total.....	* 419	3,135	3,554

\*Includes 79 Officers, Seconded Officers, specially employed, etc., who are *not* paid from Permanent Force Vote.

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"B"—STRENGTH OF THE PERMANENT FORCE BY STATIONS, AS OF 31-3-23

Stations	Officers	Other Ranks	Total
London.....	23	192	215
Toronto.....	46	357	403
Camp Borden.....	2	30	32
Kingston.....	41	322	363
R.M.C. Kingston.....	12	49	61
Ottawa.....	63	266	329
Montreal.....	18	138	156
St. Jean, Que.....	9	113	122
Quebec.....	30	276	306
Halifax.....	48	472	520
St. John, N.B.....	8	45	53
Winnipeg.....	58	444	502
Victoria.....	10	26	36
Esquimalt.....	23	229	252
Regina.....	9	42	51
Calgary.....	19	134	153
Total.....	*419	3,135	3,554

\*Includes 79 Officers, Seconded Officers, specially employed, etc., who are not paid from P. F. Vote.

"C"—OFFICERS

Military District	Strength, 1-4-22	Strength, 31-3-23	Increase	Decrease
N.D.H.Q.....	67	63		4
R.M.C.....	12	12		
1.....	23	23		
2.....	56	48		8
3.....	32	41	9	
4.....	28	27		1
5.....	37	30		7
6.....	52	48		4
7.....	9	8		1
10.....	48	58	10	
11.....	38	33		5
12.....	8	9	1	
13.....	22	19		3
Total.....	432	419	20	33

Net Decrease..... 13

"D"—STATEMENT OF ENLISTMENTS AND DISCHARGES IN THE PERMANENT FORCE FOR THE YEAR ENDING MARCH 31, 1923

Military District No.	Enlistments	Discharges
N.D.H.Q.....	41	43
1.....	14	64
2.....	70	185
3.....	53	77
4.....	38	63
5.....	47	95
6.....	19	105
7.....	1	8
10.....	110	162
11.....	23	83
12.....	5	15
13.....	48	77
Total.....	469	977

*Discipline*

The discipline of the Troops during the year has been good.

*Dress*

Amendments to the Dress Regulations have been passed in Orders, from time to time, for both the Permanent and Non-Permanent Active Militia. Action is now being taken to revise the Dress Regulations.

*Regimental Badges and Crests*

A large number of Badges and Crests has been authorized for Units of the Permanent and Non-Permanent Active Militia.

*Officers' Messes*

Officers' Messes of the Permanent and Non-Permanent Active Militia are in good Standing, and the Reports on such Messes are excellent.

*Ceremonial*

Arrangements for the supply of Guards of Honour and Escorts, were made on the following occasions:—

Prorogation of the First Session of the Fourteenth Parliament of Canada, June 27, 1922.

Opening of the Second Session of the Fourteenth Parliament of Canada, January 31, 1923.

Drawing Room held by His Excellency the Governor General on February 3, 1923.

*Military Funerals*

All matters concerning Military Funerals have been dealt with by this Directorate.

*Dental Services*

Dental treatment has been rendered to members of the Permanent Active Militia under the direction of this Directorate.

Essential urgent treatment has also been given to members of the Non-Permanent Active Militia, whilst attending Annual Training.

*Canadian Expeditionary Force*

Personal questions regarding ex-members of the C.E.F. are still received occasionally, and are dealt with at Defence Headquarters.

Absentees from the C.E.F. report from time to time, chiefly with a view to obtaining gratuity, etc., but as payment of War Service Gratuities in such cases has now been stopped it is anticipated very few further cases will be reported.

## EXTRACTS FROM REPORT ON THE ROYAL MILITARY COLLEGE OF CANADA

## STRENGTH

There was, during the year, an average strength at the College of 150 gentlemen cadets.

One cadet of the 2nd Class was discharged at his parents' request owing to sickness; three cadets of the 3rd Class and four cadets of the 4th Class were

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discharged at their parents' request, whilst three cadets of the 4th Class had to leave on account of ill health. Casualties totalled eleven.

Sixty-seven candidates sent in their names for consideration by the Board of Selection under the new entrance examination regulations. Of these, fifty-five candidates were selected as eligible.

## DISCIPLINE

With one or two exceptions, which were dealt with, the discipline has been excellent during the past year.

The Cadet Battalion Commander, Company and Platoon Officers and Section Commanders and other N.C.O.'s. have carried out the administration and discipline of their Units in a praiseworthy manner.

## HEALTH

During the past year, the health of the gentlemen cadets has been very good. No deaths have occurred.

An outbreak of influenza of unusual severity occurred early in February. In all, 125 cases were treated in the College Hospital. The large messroom and reading rooms were improvized as additional wards and five special nurses were employed. The outbreak lasted about four weeks, and although many of the gentlemen cadets were quite ill, no cases of pneumonia developed.

252 gentlemen cadets were admitted to Hospital during the year; 469 gentlemen cadets attended Hospital for treatment.

## R.M.C. CALENDAR

The R.M.C. Calendar is now an accomplished fact. Copies have been sent to a large number of Schools and Universities. The Calendar contains complete information with regard to the College, together with a number of photographs, which, owing to the quality of the paper used, are not perhaps as clear as they might be. Since, however, it is likely that changes will be made in the Calendar from time to time, it is necessary that economy should be practiced, particularly when it is considered that every parent who thinks of sending his son to the College naturally wishes to peruse a copy of it.

## BUILDINGS

The buildings are in a sanitary condition and in good state of repair, and the kitchen and utensils are clean and well polished.

With the increased facilities of the new buildings, including Chemical and Mechanical Laboratories, Modern Science Hall, Lecture Amphitheatres, etc., it is felt that the civil education obtained here in four years is equal in every respect to three years' education in Science at a University.

The old Naval Gymnasium has been reappropriated as a Draughting Room, and is filling a long felt want at the College.

A new covered way connecting the New Educational Building and the Administrative Building was erected on the top floor, and, being greatly used by classes and individuals passing from one building to the other, saves much time.

At Fort Frederick, the basement and ground floor of which have been utilized for the College Museum, much work has been done. A new galvanized iron roof has been laid on the Tower and extensive pointing to the masonry has been carried out. Much more pointing is necessary, however, to preserve this very interesting old fortification.

A large flagstaff has been erected at the point of the centre battery, Fort Frederick, rising to 110 feet above the ground level, and visible for many miles. It is additionally interesting since it marks the junction of Lake Ontario, the River St. Lawrence, and the Cataraqui River.

The Lunette outside Fort Frederick has been thoroughly overhauled and repaired and will be used as a General Staff Museum, thus filling a useful purpose.

Many improvements have been made in the grounds. Extensive levelling and grading has been carried out at the Riding School, whilst the grounds in the vicinity of Fort Frederick have been beautified by placing shrubs and lawns at advantageous points, and the construction of flower beds, from the Inner Enclosure to the Outer. The grounds at the back of the Educational Building are especially attractive.

The new Science Laboratory was wired in iron conduit for electricity, and a new gasoline plant was also installed for the use of this Department. Electric wiring was installed at No. 2 Officers' Quarters, Barriefield.

A gasoline lawn mower has been purchased for use on the College grounds and it is hoped this will much improve the appearance of the grass surfaces.

Before the close of this year, it is anticipated that the Ex-Cadets Memorial Arch will have been erected at the entrance to the College. The Corner Stone will, it is expected, be laid during the closing Exercises this year.

#### TRAINING

This subject was thoroughly gone into by the Advisory Board during their annual visit, and their general remarks are available in their Report for this year. A detailed report was submitted by the Commandant, which, upon examination, is considered to be adequate and satisfactory.

#### STAFF

The death of Captain H. F. Bray, R.C.H.A., Riding Master, R.M.C., is very much regretted. He was a fine gallant officer with soldierly presence, instincts and training; thoroughly efficient as Riding Master in all its Branches, a strict disciplinarian, yet withal a kindly officer who obtained ready cheerful obedience from his associates. His sudden death came as a great shock and grief to all ranks, by whom he was liked and admired.

Professor H. J. Dawson, M.A., C.M.G., D.S.O., has been appointed Director of Studies, vice Professor Martin, who retired to pension at his own request after over 32 years of efficient service at this Institution.

Major A. V. Tremaine, R.C.A., has been appointed Professor of Artillery, vice Lieut.-Colonel C. F. Constantine, D.S.O., who now commands the R.C.H.A.

Major G. R. Turner, M.C., D.C.M., R.C.E., has been appointed Instructor in Military Engineering, vice Captain G. N. Dickinson, transferred to Halifax.

Captain W. J. Finney, O.B.E., R.C.A., Instructor in Artillery, has taken over the Riding Establishment and the work of Riding Master.

Owing to the necessity for dividing the classes into smaller sections, the Department of French is to be increased by one Instructor.

#### ATTACHED OFFICERS

The second post-bellum Preparatory Course for candidates for the Staff College commenced October 2, 1922, and came to an end February 26, 1923, the day preceding that set for the commencement of the Staff College examinations. In this period of 148 days there were 102 working days. Seven officers

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attended this course and the work was so arranged that that taken up before Christmas was the work most suitable for the officers of the Refresher Course.

The Refresher Course, which was attended by eight officers of the Permanent Force, commenced on the same day as the Preparatory Course and ran concurrently with it until December 21, when it came to an end. In this period of 81 days there were 61 working days.

The Instruction, consisting of lectures, indoor and outdoor exercises and conferences, followed generally along the lines of last year's course. Again this year each student of both courses prepared and delivered a lecture on some subject of military interest, thus getting practice in research work, compilation of notes, and in delivery of a lecture.

Lectures were again delivered by officers from National Defence Headquarters and were again found of value. It is hoped that at each course it will be possible to have similar lectures delivered.

## MILITIA STAFF COURSE

The Militia Staff Course, having been revived during the past year for officers of the Non-Permanent Active Militia, a new scheme was introduced whereby lecture notes for all the lectures of the course were prepared by the General Staff Officer at the College and distributed in bulk to the headquarters of the various Districts for the use of the candidates.

In addition, sample examination papers in Map Reading and Field Sketching, Strategy and Military History, Organization and Administration and Training for War (2 papers) were prepared and distributed. Thus a total of 51 papers, averaging more than five type-written sheets each, were distributed.

The papers for the examinations, held in April, were also prepared under the direction of the General Staff Officer.

Many requests for copies of the prepared lecture notes, for the use of officers other than candidates of the Militia Staff Course, were received and the notes sent out, so that it is felt that this new system of preparation of notes should be of considerable value to the Militia generally.

## CUPS AND TROPHIES

In the 2nd Annual Competition between the Military Colleges in the Empire for the General Lafferty Cup, the Royal Military College of Canada was again unsuccessful, the Institution at Sandhurst winning first place.

To commemorate the first athletic contest between the Royal Military College of Canada and the United States Military Academy, the gentlemen cadets decided to present a silver trophy to the American institution, which will also be used if possible in any future matches between the two Colleges, though it will be retained always at West Point.

## GIFTS

The Royal Military College of Canada was honoured during the year by the receipt of a beautiful statuette from the French Government, entitled "Pax" in bisque de Sevres, in recognition of the record of ex-Cadets during the War. This statuette was unveiled during the visit of the Advisory Board by the Consul General of France.

## BUSINESS AND PROFESSIONAL LECTURES

Through the kindness of several prominent citizens of Kingston, some interesting lectures were given to the gentlemen cadets, following the custom inaugurated last year.

## SPORTS

The past year has been a most successful one with regard to the Cadets' sporting activities.

## II. PERSONAL SERVICES

During the fiscal year under report, much has been accomplished towards the completion of appointments of officer personnel to the various cadres laid down for units of the Active Militia and very few of the authorized establishments now remain without the necessary re-organized personnel. Nearly all Regiments of Cavalry, Brigades of Artillery, Engineer Units, Canadian Officers Training Corps, Machine Gun Brigades, Battalions of Infantry, Cyclist Companies, as well as units of the several Departmental services have now the necessary complement of officers, with the additional supernumeraries allowed in excess of the authorized establishment. Units of the Canadian Corps of Signals are not quite so complete for the reason that it is more difficult to obtain the required number of officers with the necessary technical qualifications and endeavours are being made to have them selected from ex-university students, who have taken the science courses (electric and radio), which, to a great extent, form the foundation for their further military education in this branch of the service.

However, the establishments are gradually being filled by young officers of the desirable type. The officer personnel of units of the Canadian Army Service Corps, Canadian Army Medical Corps, and the Canadian Army Dental Corps are well up to strength, and in addition, carry large reserves of well qualified officers with war service experience.

Appointments to the re-organized Canadian Army Veterinary Corps are well advanced and the necessary officers of this service have been attached for duty to mounted units throughout the Dominion.

The Canadian Corps of School Cadet Instructors has been completely re-organized and carries on its strength some 300 well qualified and efficient officers for this service, all of whom are actively engaged in the instruction of Cadet Corps.

The organization of the Canadian Corps of Chaplains was completed during the past year, and officers of the Corps detailed for attachment to units of the Active Militia, as provided for in the establishments.

*Units of the Non-Permanent Active Militia Organized and Reorganized for the Period 1-4-22 to 31-3-23*

*Cavalry—*

- 3rd The Prince of Wales Canadian Dragoons.
- 2nd Regt. The Alberta Mounted Rifles.

*Artillery—*

- 54th Battery, C.F.A.
- 11th Brigade, Ammunition Column.

*Engineers—*

- Headquarters, 4th Divisional Engineers.
- Headquarters, 11th Divisional Engineers.
- 11th Field Company.
- 1st Field Troop.
- 2nd Field Troop.
- 6th Field Troop.

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*Corps of Guides—*

- No. 2 Cyclist Company.
- No. 7 Cyclist Company.

*C.O.T.C.—*

- Western University Contingent.
- University of Bishop's College Contingent.

*Infantry—*

- The Lincoln Regiment.
- The Lanark and Renfrew Regiment.
- The Annapolis Regiment.
- The Algonquin Rifles.
- The York Rangers.
- The Manitoba Rangers.

*Reserve Battalions—*

- \*2nd, 3rd and 4th Battalions, The Dufferin Rifles of Canada.
- 2nd Battalion, The Argyll Light Infantry.
- 2nd Battalion, The Cape Breton Highlanders.
- \*2nd Battalion, Le Regiment de Quebec.
- 6th Battalion, 1st British Columbia Regiment.
- 2nd Battalion, The Seaforth Highlanders of Canada.
- \*2nd Battalion, The Peel and Dufferin Regiment.
- 2nd Battalion, The Cameron Highlanders of Canada.
- 2nd Battalion, Le Regiment de Beauce.
- 2nd Battalion, Les Chasseurs Canadiens.
- \*Partly organized.

*Medicals—*

- No. 7 Stationary Hospital.
- No. 8 Stationary Hospital.
- No. 11 Stationary Hospital.
- Nos. 1, 3, 4, 5, 6, 8, 9 and 10 Sanitary Sections.
- No. 3 Motor Ambulance Convoy.

*Signals—*

- Headquarters, 5th Signal Battalion.
- Headquarters, 6th Signal Battalion.
- No. 20 Signal Company.
- No. 21 Signal Company.

*C.A.S.C.—*

- Headquarters, 4th Divisional Train.
- Headquarters, 11th Divisional Train.

*Number of Appointments to Non-Permanent Active Militia Units*

The following is a statement showing the number of Officers (including provisional appointments) appointed to the Active Militia (Non-Permanent) during the 12 months ending March 31, 1923.

Cavalry.. . . . .	153
Artillery.. . . . .	73
Engineers.. . . . .	23
Canadian Corps of Signals.. . . . .	46
Corps of Guides.. . . . .	10
Canadian Officers' Training Corps.. . . . .	40
Infantry.. . . . .	611
Canadian Machine Gun Corps.. . . . .	67
Canadian Army Service Corps.. . . . .	9
Canadian Army Medical Corps.. . . . .	78
Nursing Sisters, C.A.M.C.. . . . .	43
Canadian Army Dental Corps.. . . . .	10
Canadian Army Veterinary Corps.. . . . .	10
Canadian Postal Corps.. . . . .	0
Canadian Ordnance Corps (Non-Permanent).. . . . .	1
Corps of School Cadet Instructors.. . . . .	41
Canadian Militia (General List).. . . . .	5
Temporary Appointments (General List).. . . . .	21
Canadian Chaplain Service.. . . . .	21
Reserve of Officers.. . . . .	2,966
Total.. . . . .	<u>4,228</u>

The provision of officer personnel for Reserve units is now receiving attention and in a number of cases, progress has been made towards the appointment of such officers, who are selected chiefly from those formerly carried on the Corps Reserves.

The establishments of officers for Reserve units are equivalent to the Active cadres, and appointments have been made to 23 Reserve Battalions of Infantry as well as to those of the smaller units.

Action is being taken to expedite completion of as many of these units as possible during the current year, and thus absorb all of the former Corps Reserves.

Owing to the large number of officers who held a more senior rank in the Canadian Expeditionary Force than could be provided for them in the existing Peace establishments of re-organized units, it was considered advisable to reduce the tenure of command of officers commanding units from 5 to 3 years, with the possible extension of one year, if recommended to be in the interests of the service, and so afford those with valuable active service experience a more rapid opportunity of succeeding to the command of their respective corps.

It is the opinion that this reduction in the tenure of command will stimulate interest among the more junior officers, who may aspire to become Commanding Officers, and in addition there is the advantage of opening the way for their advancement while well within the age limit for military service.

In the course of the past year, the number of changes in the command of non-permanent formations were as follows:—

Brigade Commanders of Cavalry, Artillery and Infantry Brigades.. . . .	16
Officers Commanding Regiments of Cavalry and Battalions of Infantry	44
Officers Commanding, Divisional Engineers.. . . . .	2
“ “ Signal Battalions.. . . . .	2
“ “ Divisional Trains, C.A.S.C.. . . . .	3
“ “ General and Stationary Hospitals.. . . . .	3
“ “ Reserve Battalions.. . . . .	8
Total.. . . . .	<u>78</u>

Extension to tenures of command for a period of one year were given in 14 cases.