The Army Lessons Learned Centre

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LESSONS LEARNED FOR SOLDIERS

The Royal Canadian Armoured Corps in Afghanistan

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LESSONS LEARNED FOR SOLDIERS

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in Afghanistan

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Disclosure Statement

Dispatches are targeted at disseminating information and increasing the knowledge of the soldiers and leaders across the Canadian Army and the Canadian Armed Forces. The discussion is a snapshot of relatively current issues or procedures in a specific operating environment. *Dispatch* articles may not reflect doctrine, but articulate evolving ideas based on the recent operational experiences of our deployed forces. The information contained within this *Dispatch* is UNCLASSIFIED but sensitive in nature and distribution should be controlled. Understanding the potential sensitivity of anyone being omitted, RCACS will not take responsibility for anyone being forgotten as each Regiment was consulted to ensure accuracy for their own members.

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DIRECTOR ROYAL CANADIAN ARMOURED CORPS

The Afghanistan experience of the past decade was clearly significant for the Canadian Army (CA). It will serve as a basis of experience for a generation and will define an era. The Royal Canadian Armoured Corps (RCAC) contributed but one part of the overall effort and, like all others, saw that contribution adapt, evolve and mature over time. The Afghanistan experience challenged almost every aspect of our approach to organizing, training and conducting operations and in doing so tested the very foundations of doctrine. As the Army ponders the future and continues to *Advance with Purpose*, our efforts to discover where the CA has just come from will play a key role in setting conditions for the journey forward.

This edition follows other corps-based reflections to focus on the RCAC experiences in Afghanistan. While examining lessons uniquely through a corps lens does pose challenges, not the least of which is institutional bias, this approach does however consolidate in one place the countless observations relating to structure, training, conduct and the broader sustainment of operations. Like the other *Dispatches* editions of the same theme, these lessons are all-arms team, not just RCAC, lessons. Equally, these reflections do not represent an end but rather a beginning.

The purpose of this document is not to tout RCAC successes or to critique the decisions of the day. It strives to honour the memory of those who gave their lives and those who are continuing to suffer by critically examining the fundamentals of RCAC Force Generation, while challenging the assumptions of RCAC Force Employment and everything in between. Only through a careful and objective consideration of the Afghanistan experience will the foundation be laid for future all-arms team success.

Worthy,

S.R. Kelsey
Colonel
Director

DIRECTOR ARMY LESSONS LEARNED CENTRE

The Commander of the Army and the Commander of the Canadian Army Doctrine and Training Centre recognized the critical need to capture the main lessons identified and the lessons learned from the Army's participation in full spectrum operations in Afghanistan before our collective memory fades. They directed that a series of *Dispatches* be dedicated to capturing the major lessons from our Afghanistan operations by Corps and Capability. Thus far, three have been produced: The Royal Canadian Artillery (2011), Combat Service Support (2014) and The Royal Canadian Infantry Corps (2014).

This edition of *Dispatches* is the fourth in the series and is dedicated to capturing the main lessons learned from the operations of the Royal Canadian Armoured Corps (RCAC) in Afghanistan. The RCAC contributed a variety of capabilities throughout their mission in Afghanistan. The insights offered in this review capture some of that experience and are crucial to ensuring that the Army moves forward with purpose based on the lessons we have learned from operations.

R.A. Puddister
Lieutenant-Colonel
Director

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: Combat Camera IS2006-1151

CHAPTER 1 – GENERAL

This edition follows other corps-based *Dispatches* and focuses on the experiences of the Royal Canadian Armoured Corps (RCAC) in Afghanistan. It also offers important perspectives that complement previous *Dispatches* editions with the same focus. Considered together, the four *Dispatches* editions serve not only as a significant record of soldier lessons, but also as yet one more means of sustaining academic reflection and perhaps debate. There is little doubt that many of these lessons will continue to shape Army training and inform the process of capability development.

From the commencement of operations in January 2002 to the end of the combat mission in July 2011, the Corps contributed over two-dozen tank and reconnaissance squadrons and convoy escort troops, as well as intelligence, surveillance, target acquisition and reconnaissance (ISTAR) and coordination centre (CC) expertise. It also provided hundreds of officers, non-commissioned officers (NCO) and soldiers for task forces (TF), brigades (bde), and regional headquarters (RHQ), provincial reconstruction teams (PRT) and operational mentor and liaison teams (OMLT), plus a cadre of mentors for the Afghan National Security Forces (ANSF) throughout the transitional period leading up to mission closure. Corps personnel, both Regular and Reserve, and the capabilities they generated made an integral contribution to the all-arms effort so crucial to tactical success. That road to success, however, was not always smooth or direct. This merely amplifies the importance of honest reflection on the Afghanistan experience and the need to continue moving forward with purpose.

1.1 The Role of Armour and Armoured Reconnaissance

The **role of armour** is to defeat the enemy through the aggressive use of firepower and battlefield mobility. The **role of reconnaissance** (recce) is to obtain accurate tactical information on the enemy and the ground in all phases of war and pass it quickly to the higher command.

The RCAC generates distinct capabilities to successfully perform these roles: a direct-fire manoeuvre capability (tanks), an armoured recce capability, and a manoeuvre command capability. Through superior battlefield mobility and shock action, the armour capability (tank) contributes highly lethal, manoeuvrable direct fire platforms designed to defeat the enemy at range with extreme accuracy. This includes intimate support to infantry and engineers in close combat. Armoured recce contributes superior mobility, aggressive action and logistics economy to obtain, synthesize, and fuse timely, accurate information that leads to the pre-emption or defeat of an adversary. Mounted manoeuvre command is an expertise-shared with mechanized infantry and remains a unique but critical expertise that harmonizes time and space with a refined expertise of armour, mechanized and manoeuvre capabilities.

1.2 Fundamentals of Armour

Fundamental considerations in the employment of armour:

- **Aggressiveness.** Armour operations must be executed with speed, resolution and boldness. It is only when firepower, protection, mobility and flexibility are exploited aggressively that the full fighting potential of armour is realized. Armour should not be tied to static positions.

- **Concentration.** Every opportunity must be taken to mass the firepower of armour to produce shock effect. Concentration may be achieved by fire, physical presence or a combination of both. Concentration depends on how closely engaged the opposing forces are, enemy target acquisition capabilities and the air situation, including the enemy anti-armour helicopter threat.

- **Fire and Movement.** The movement of one element supported by the fire of another is a basic tactic of armour. The basic manoeuvre unit in an armoured regiment is an armoured squadron. The basic fire unit is the armoured troop; however, crews move in fire teams or as a whole troop.

- **Use of Ground.** Armour requires space for manoeuvre in order to best exploit the characteristics of firepower and mobility. Tactical manoeuvre and the optimum use of ground enhances protection and concealment. Armour makes best use of firepower and mobility and is the dominant force in open terrain.

- **Combined Arms Operations.** Understanding the capabilities, characteristics and limitations of artillery, armour, infantry and engineers is essential at all levels of command. While armour is a critical combat arm, it does not operate alone but fights with infantry and supports all members of the combined arms team.

- **Sustainment.** Sustainment must be planned for armour in such a manner that the tactical plan is not adversely affected by a lack of logistical support. Adequate and timely resupply for all elements must be arranged prior to and during operations.

1.3 Fundamentals of Reconnaissance

Fundamental considerations in the employment of reconnaissance:

- **Mobility.** Recce elements can move by roads or cross-country on any terrain that is passable by the bde. The high-speed and agility of the F echelon vehicles permits wider-ranging operations and fast shifts in groupings and direction of effort. Personnel are capable of foot patrolling; however, such operations separate the crews from their vehicles and hinder subsequent mobility.

- **Flexibility.** Mobility, coupled with extensive communications, is key to operational flexibility. It permits the reassignment of tasks, quick deployments, and the rapid execution of diverse taskings. Flexibility is enhanced by sound drills, standard operating procedures (SOP) and battle procedure, which enables redeployments without detailed orders or centralized regroupings.

- **Logistic Economy.** With its inherent administrative echelon and variety of vehicles, the reconnaissance force is capable of extended operations with a minimum of logistic support.

Most of the lessons learned in this *Dispatches* relate back to the fundamentals discussed above.

1.4 Evolution of the Armour Capability in Afghanistan

At the commencement of operations in Afghanistan, Canada's armour capability consisted of an armoured recce sub-unit. This initial capability gave the deployed battalion group a mounted surveillance capacity that was used to provide perimeter security at Kandahar Airfield as part of Operation (Op) APOLLO.

As the mission evolved into Op ATHENA in Kabul, the armoured recce sub-unit was expanded to offer a broader range of tasks to the bde (Kabul Multi-National Brigade), including more conventional recce tasks such as surveillance, framework patrolling and convoy escort. The recce squadron HQ formed the basis of an ISTAR fusion cell for the bde HQs. The result was an eventual permanent re-grouping under the recce squadron of a variety of bde troops, including unmanned aerial vehicle (UAV) personnel, counter-mortar radar troops, and sniper detachments. By the third rotation in Kabul, the armoured recce sub-unit also had an all-arms surveillance capability whose structure permanently included two armoured recce surveillance troops, an infantry close recce platoon, an infantry sniper detachment and an international (Slovenian) long range recce capability.

As operations shifted south to Kandahar, the need for heavy direct fire assets (tanks) became evident, and the armour capability evolved to provide both armoured recce and tank sub-units to match these new requirements. Deployment of a tank sub-unit provided the TF with a heavily armoured, highly manoeuvrable, direct fire capability.

Over the course of the mission in Afghanistan, the armour capability grew from a single armoured recce sub-unit (minus) providing airfield security, to tank and recce sub-units conducting quick reaction force (QRF), observation post (OP), convoy escort and surveillance missions. As the RCAC, indeed the Army, looks to the future, the central question has been: 'what was the foundation on which the conditions for success in Afghanistan were established?' The consistent themes of post operations reporting and the collective wisdom of corps leadership suggest that the answer is a combination of three crucial elements: people, culture and training.

1.5 Aim

The aim of this issue of *Dispatches* is to consolidate key observations and apply the lessons learned from RCAC personnel deployed in Afghanistan from 2002 to 2011. The lessons from the advisory mission forming part of CCTM-A / Op ATTENTION (2011–2014) are not reflected in this consolidation.

Source: Combat Camera IS2005-2070a

CHAPTER 2 – FORCE EMPLOYMENT LESSONS

The RCAC experience during the conduct of operations generally showed that, overall, armoured doctrine remains largely extant. There are of course aspects of the Afghanistan experience, including tactics, techniques and procedures (TTP) and the current Canadian Army (CA) force employment (FE) structures, that will likely endure in future full spectrum operations (FSO). A select doctrinal review to ensure alignment with the Army Strategy and Warfare Centre Concept development would be worthwhile. It is noted in this review that the ground manoeuvre reconnaissance (GMR) doctrine has maintained currency through recent revisions.

This section discusses the key FE lessons including:

- Armour Doctrine;
- Direct Fire Capability;
- Armoured Recce Capability; and
- Echelon Capability.

2.1 Armour Doctrine

Observation 1 – Self Sufficiency

The ability of armour sub-units to operate in a dispersed environment and function self-sufficiently for prolonged periods away from central sustainment was a key capability and gave commanders substantial flexibility.

Discussion

Armour sub-units, specifically armoured recce squadrons, consistently conduct dispersed operations over long distances and across the range of doctrinal reconnaissance tasks. The command and control (C2) capacity of the squadron HQ was more than capable of exercising effective C2 during these dynamic missions, which reinforces the agility of the reconnaissance capability in adapting, re-tasking, surging, assessing risk and exploiting opportunity.

The armour echelon in itself represented a key capability for supporting the armoured sub-units. When fully manned and equipped, it is capable of sustaining armour operations for prolonged periods of time. Equally important was the contribution of the armoured echelon to the broader BG sustainment capacity.

Applying the Lesson

The doctrinal structure of an armoured sub-unit, with a robust C2 element and an integral echelon with built-in redundancy, proved effective. The adaptive dispersed operations (ADO) concept underscores the importance of echelon capacity for all arms sub-units.

Observation 2 – Defence Doctrine

Armour sub-units employed defensive tactics that did not necessarily follow defensive doctrine in its conventional sense.

Discussion

Armour sub-units were often tied to tactical infrastructure (ie, forward operating bases (FOB), patrol bases/houses), which contradicted conventional doctrine. Doctrinal defensive tactics, however, were still used as the basis for operations, with aspects being modified to fit the specific mission and tactical considerations on the ground.

Applying the Lesson

While defensive doctrinal skill sets may have suffered over the past decade, doctrinal defensive tactics still apply to operations in the contemporary operating environment (COE). Defensive doctrinal skill sets are now being reinforced by all combat arms elements during collective training at every level to ensure that these basic skills are maintained.

Observation 3 – Tactical Manoeuvre Drills

Armour squadrons conducted frequent dismounted tactical drills. In particular, short and long defiles drills were executed often.

Discussion

For experts in mounted warfare, the ability to move tactically with the requisite security is absolutely vital. Basic tactical considerations/drills play a fundamental role in the training of armour crew commanders. These drills served as the basis for secure movement and need to be highlighted during both individual and collective training.

Applying the Lesson

The requirement for expertise in dismounted contact drills was validated through the Afghanistan experience. It must be maintained within the armour TTP and has now been reinforced across crewman, NCO and officer training.

Observation 4 – Convoy Escort TTP

Non-permissive, adaptive and dispersed environments require additional resources for convoy operations.

Discussion

The demands of convoy escort operations were significant and perhaps initially underestimated. The implications for grouping and force apportionment were unavoidable and significant.

The effective passage of lessons from rotation to rotation assisted in the development of effective drills, especially with regard to Improvise Explosive Devices (IED) TTP, aimed at mitigating these threats. Few of these now crucial TTP are formally reflected across armour and perhaps wider CA doctrine.

Applying the Lesson

Convoy escort remains a doctrinal tactical sub-task of armour recce as reflected in B-GL-394-002/FP-001, *Ground Manoeuvre Reconnaissance*. A review and formalization of convoy escort TTP will proceed as part of a broader and ongoing

doctrinal review of the *Ground Manoeuvre Reconnaissance* publication to ensure consistency with *Land Operations 2021, Adaptive Dispersed Operations (ADO): The Force Employment Concept for Canada's Army of Tomorrow.*

Observation 5 – Recce Troop Structure

In the Afghanistan environment, particularly during later rotations, recce sub-units effectively employed three-car patrols rather than the conventional two-car patrol construct.

Discussion

The additional car increased operational stamina, ensured better local security, permitted dismounted patrolling and boosted manpower on the ground to handle IED/mine strikes, searches, cordons, etc.

When operating in an OP, three car patrols offered greater security, enabling the patrol to establish all around defence with three platforms and improving flexibility by increasing the number of personnel available to man the OP.

It also enabled patrols to deploy with more specialized equipment or personnel, such as additional surveillance gear, medics or interpreters.

Applying the Lesson

Before any structural changes are made, our analysis of the Afghanistan operating environment and possible parallels with the conceptualization of ADO must be completed. This review is ongoing by both Chief of Staff (COS) Army Strategy (Strat) and RCAC.

Irrespective of any formal structural adaptations, the use of three car patrols remains a mission specific employment option available to the Armoured Reconnaissance Squadron Officer Commanding (OC) in the appropriate circumstances. This adaptive and agile thinking must continue to be reinforced in RCAC professional and developmental training.

2.2 Direct Fire Capability

Observation 6 – Employment of Direct Fire Capabilities

Limited combined arms team experience in the employment of direct fire (tanks) assets, particularly in the counter-insurgency (COIN) environment, led to the employment of armour for non-standard tasks. This approach limited the opportunities to achieve full potential on other armour tasks.

Discussion

This observation is not intended to challenge the judgement of the commanders of the day. Sound rationale and informed trade-offs for the employment of armour in theatre were consistently applied. Indeed, there were numerous examples where tanks were effectively employed in conventional roles and exploited to great effect.

However, there was no consistently defined concept for the employment of tanks; their use varied significantly from rotation to rotation and only rarely were their capabilities leveraged to their full extent. While there was much positive experimentation, the absence of doctrine on the employment of tank squadrons in COIN was evident.

Applying the Lesson

The unconventional employment of tanks in Afghanistan did in fact take optimum advantage of the tactical circumstances and operational constraints. Now, however, this limited spectrum of employment forms the basis of experience for a generation of soldiers and leaders (all-arms, including armoured) who have a narrower understanding of the employment of armour, its capabilities and limitations. Widely recognized within our individual and collective training institutions, a pan-army understanding of the full capabilities of armour must continue to be a focus of education and combined arms training at all levels.

The responsibility for offering sound tactical advice to all-arms commanders on the optimal employment of the armour capability remains a core competency of RCAC leaders at all levels.

Observation 7 – Tank / Infantry Cooperation

Operational co-operation between infantry and tank sub-units varied significantly between rotations.

Discussion

A recurring theme from post operations reporting concerned the limited experience or even understanding of tank sub-unit capabilities displayed by the majority of rotations, especially those generated from bdes without integral tanks. The quantitative result was limited tank infantry cooperation where tactical circumstances would have normally dictated such cooperation. The successes of the units that did integrate tank and infantry capability were notable.

The post operation commanders' assessments mainly attributed this to a lack of familiarity with the platform and collective capacity owing to their limited exposure to tanks outside of road to high readiness (RTHR) training and theatre.

This analysis acknowledges that in some instances the operating context of some rotations did not lend itself to optimal tank—infantry cooperation.

Applying the Lesson

The army individual, collective and professional development training institutions continue to champion the imperative for cross-arm competency in employment principles and capacity, particularly at the development period (DP) 2 and 3 levels.

Collective training events in particular must continue to be leveraged in order to reinforce pan-army competency of combined arms synergy in both conventional and full spectrum environments.

Source: Combat Camera AR2007-A072-0216

The India Company (I Coy) Combat Team moves on to the next objective of Operation REAR ENTRANCE, a disruptive patrol through the Ashoqah area of the Panjwayi District conducted with the Afghanistan National Army and Canadian Operational Mentor and Liaison Team (OMLT).

Observation 8 – Re-Grouping of Direct-Fire Capability

The re-grouping of the direct fire capability to the lowest level was pursued but proved unsuitable for Canadian operations.

Discussion

On several rotations, the commander's intent was to decentralize tank sub sub-units to the lowest level groupings. In all cases, there was broad discussion and analysis surrounding the risks and opportunities associated with groupings of this nature. The United States (US) has shown that such decentralized use can be effective for COIN Ops (smaller groupings in complex terrain).

The concept of smaller all-arms groupings, particularly in a COIN environment, has merit in specific circumstances. Conventionally, armour capabilities can be grouped and re-grouped with purpose, but this is usually for short durations and with the retention of a specific C2 arrangement. In CA experience, any regroupings beyond temporary have proved untenable owing to a lack of service support and the increased logistical demands over such a dispersed area of operations (AO).

Applying the Lesson

The CA ADO FE concept emphasizes the requirement to rapidly 'aggregate' and 'de-aggregate' as an integral characteristic of an agile and adaptive force. In this context, additional consideration of the capacity or structures necessary to enable this concept is merited.

On the issue of a specific armoured direct-fire sub-unit capability, sustainment capacity for de-aggregated (decentralized) execution in a dispersed environment will continue to be the critical issue. In order to ensure alignment with the ADO concept, the RCAC will continue to champion echelon capability in any deliberations on force development (FD). This lesson should also be considered in concert with Section 2.4 – Echelon capability.

Observation 9 – Command and Control in ADO

Tank squadrons were consistently employed in unconventional static tasks and FOB leadership duties, which required squadron restructuring. This unconventional role implied a recurring requirement for the establishment of a permanent and static command post (CP).

Discussion

This observation is not intended to challenge the judgement of the commanders of the day. Sound reasoning concerning troops to task and informed trade-offs for the employment of armour was consistently given consideration.

The conventional employment of concentrated Armour for land manoeuvre will continue to call for the use of a mobile platform (a command tank) for C2. The Afghanistan mission required a CP (mobile or not) to exercise effective C2 across the spectrum of unconventional tasks. This lesson will likely still be applicable in the ADO full spectrum environment of the future.

The tank squadron structure (table of organization and equipment (TO&E) nor doctrine) does not provide the flexibility to properly address these new imperatives without seriously compromising other capabilities.

Applying the Lesson

In order to enable success in an ADO setting, tank sub-unit HQ must continue evolving to keep pace with the demands of the environment and match the current capacity of the other combat arms elements.

CA and RCAC FD have been considering this capability gap, and some experimentation has taken place with specific missions and tasks. The new normal for many of these missions and tasks would suggest a tank squadron requirement for multiple radios and the ability to incorporate modern Land Command Support System (LCSS) equipment and other joint systems for tanks that are currently beyond engineering and power management. A CP / fusion capacity is required for specific missions.

Whether to make this a permanent structural adaptation or a mission specific (TO&E) requirement will require careful consideration. Any permanent structural adaptation would require a manning increase for squadron HQ. Given the current strategic and fiscal environment, any new personnel years (PY) requests for a permanent solution would obviously need to be generated internally. Such a request represents an important RCAC consideration for the Force Employment Concept 2018 capability development, for which the alignment of capabilities essential for success in ADO is key.

2.3 Armour Reconnaissance Capability

Observation 10 – Recce Sub-Unit Employment

Recurring post-deployment reporting indicated that recce sub-units were generally under-employed in conventional, doctrinal roles.

Discussion

This observation is not intended to challenge the judgement of the commanders of the day nor to suggest that recce squadron personnel were not gainfully employed. Sound reasoning and informed trade-offs for the employment of recce sub-units were consistently applied in theatre. Indeed, every armour commander understood the context of the operating environment and embraced the unconventional employment of armour.

Doctrinally, recce squadrons are a Brigade asset that were not originally conceived or structured to permanently hold tactical infrastructure or permanently assume conventional responsibility for a fixed AO. As a capability, it was conceived, structured and equipped as a bde 'Definition,' and 'Shaping' asset with some 'Act' capacity. The recce sub-unit is a self-contained capability with extensive tactical reach across a wide spectrum of mission sets. Threat dependent, a recce sub-unit can also conduct robust offensive operations, particularly when grouped with additional resources.

The Afghanistan BG responsibility and indeed AO expanse actually reflected that of a conventional division responsibility. The doctrinal implication might have suggested a greater utility for the employment of a recce sub-unit across such distances. The constraints and reality of the Afghanistan environment were that the recce sub-units were not regularly employed as part of deliberate operations nor were their full capabilities consistently exploited. They functioned largely as QRF, a reserve or convoy escort for other elements such as the National Support Element (NSE). As above, the employment decisions of the BG were carefully considered and the trade-offs accepted as part of a broader risk assessment.

Applying the Lesson

Although recce sub-units were under-employed in traditional recce tasks, they were fully exploited across a range of unconventional tasks. The utility of the recce sub-units across a spectrum of mission further validated the fundamental recce characteristic of flexibility. As demonstrated in Afghanistan, this capability was an ideal economy of force asset and provided commanders with a vital capability that could rapidly react to a myriad of tactical tasks across the AO.

Continued emphasis on education concerning the capacities and capabilities of recce sub-units will contribute to informed employment decisions and understanding of trade-offs.

Observation 11 – Dismounted Competency

The RCAC prides itself on expertise in all facets of mounted land manoeuvre. The Afghanistan experience reinforced the importance of also retaining expertise in dismounted tactical tasks.

Discussion

Doctrinally, armoured crewmen are to be capable of conducting both mounted and dismounted recce. Since the introduction of the Coyote with its sophisticated surveillance systems, the emphasis has transitioned over time from expertise in dismounted recce to systems based surveillance.

The Afghanistan experience only served to re-emphasize the crucial importance of dismounted recce expertise at the section (-) level.

Applying the Lesson

Emphasis on dismounted recce expertise has been retained in all crewman and officer individual training. Basic soldier skills, patrolling expertise and fitness form the cornerstones of this capability and are emphasized and developed throughout a crewman's career profile.

In terms of collective training, exercise design will continue to incorporate tests of these competencies, and competitive participation in training events such as the CA Patrol Concentration and Worthington Challenge will be pursued aggressively to this end.

Observation 12 – Integral Mobility, Counter-Mobility and Security Capacity

Recce sub-units were largely reliant on infantry and engineer assets for mobility, counter-mobility and miscellaneous area security tasks.

Discussion

Engineers were critical to assuring mobility and counter-mobility across the BG AO. Engineers, however, are low-density, high demand assets that were consistently stretched thin to undertake the multitude of tasks across the BG AO, especially when one considers breaching and IED related tasks. It was true as well in the Afghanistan experience that the spectrum of tasks performed by the engineers ranged from high technical expertise to general expertise.

The ADO environment suggests that the dispersed nature of future operating environments will ensure a continued high demand for these scarce resources. The Infantry Corps previously came to similar conclusions with respect to integral pioneers. Rather than undertaking a structured re-generation of the capability, the infantry have worked to retain the pioneer qualification / technical capacity but dispersed that competency across the line companies.

Historically, recce sub-units have maintained the integral capacity to conduct limited mobility/survivability tasks within support (assault) troops. Although the assault troop capability remains part of extant doctrine, current recce sub-units are no longer structured with this capability so that PYs can be realigned elsewhere (as part of Force 2013).

Applying the Lesson

The RCAC assessment is that an Assault Troop capability is valid. However, formal substantiation and validation of the requirement must be pursued through the Army Capability Development Board (ACDB) process including the initiation of a Capability Development Record (CDR).

If the requirement is upheld as valid, the pursuit of new PYs in the current strategic environment will remain untenable. This applies as well to the internal sourcing of PYs from within the RCAC field force. Consideration is being given to closer integration of Regular and Reserve missions and tasks, where the generation of discrete capabilities by the Reserves may present opportunities. The generation of assault troops from the Primary Reserve should be examined in closer detail through existing CA FD mechanisms.

Observation 13 – Integral Intelligence

'Sense' centric organizations such as the recce sub-unit, when appropriately structured and properly employed, can adequately assure the optimal use of intelligence operators to facilitate BG/bde planning, information collection, intelligence analysis and decision support.

Discussion

Experience in COIN operations proved the utility of intelligence operators working at the sub-unit level. Due to ongoing operational constraints and nature of recce sub-unit primary tasks, the intelligence function was not always allocated the necessary manpower. When personnel were allocated internally, it was often a crewman who was assigned a secondary task for (frequently without the tactical intelligence operator's course) and was then habitually subject to re-tasking.

Applying the Lesson

The Afghanistan experience called for an intelligence capacity at the sub-unit level, and the conceptualization of ADO suggests that this will continue to be the case in the future. A permanent adaptation of the recce sub-unit structure will be explored to include two intelligence operators. This would allow squadron HQ to sustain an integral 24/7 intelligence cell capability that would allow for the rapid collation and dissemination of intelligence.

2.4 Echelon Capability

Observation 14 – Echelon as a Capability

The Task Force centralization of A Echelon sustainment capacity proved an ineffective way to support armour sub-units operations.

Discussion

The TO&E restrictions in theatre are a recognized key factor in the structure and hybrid concept for sub-unit sustainment operations. Fundamental differences in support concepts did persist, however, and as a result TF sustainment concepts varied from rotation to rotation.

Early rotations in particular saw armour sub-units deployed on operations with incomplete echelons that either limited their employment or, more frequently, adversely impacted BG and forward security element (FSE) sustainment capacity. Op MEDUSA was a more poignant example: A Squadron (a reconnaissance squadron) Royal Canadian Dragoons (RCD) was forced to create an ad hoc echelon that siphoned

Source: Combat Camera AR2009-Z100-5

A heavy armoured recovery vehicle within the confines of a strongpoint near Panjwayi preparing to move as part of a convoy. This vehicle type is designed for recovering the new Leopard 2 tanks.

off precious FSE and BG resources. Over multiple rotations, the constrained echelon and the resulting limitations in the recce sub-unit's employment led directly to the armour and recce sub-unit's employment in unconventional roles.

The distinctions between FSE, infantry and armoured preferences for the conduct of F and A1 echelon sustainment were an enduring source of tension throughout the Afghanistan experience. This friction was mentioned in virtually every armoured sub-unit post operations report, with often specific examples of operational impact or lost opportunities cited. The fundamental distinctions in the purpose and function of the armoured echelon were not always understood across the TF or appreciated when prioritizing TO&E apportionment. It is widely understood that this distinction between approaches is in fact entrenched in infantry and armoured doctrine and is indicative of dramatically different roles, functions and employment.

For its part, the armoured echelon is based on the demands for unique equipment and the imperatives of self-sufficiency across likely BG or TF groupings. More than simply a means of commodity delivery, the A Echelon is a capability unto itself, capable of anticipating, planning and coordinating broader F echelon support. The echelon is fundamental to the enabling capacity that assures the grouping agility

and employment adaptability of the F echelon across a spectrum of tasks and the broad distances of the non-linear and non-contiguous environment. Indeed the concept of employment of the armoured echelon is ideally suited to tactical operations in ADO. Structured with both technical and crewman competencies, the echelon is the armoured sub-unit's most crucial enabling capacity. It is for this reason that it remains a key sub-unit command reserved for its most seasoned and experienced non-commissioned officer (NCO), the squadron sergeant-major.

Applying the Lesson

Afghanistan experience validated the armoured echelon system for sustainment as a critical capability.

Observation 15 – Enabling Sustainment for ADO

The expertise and capacity of armour in echelon operations was consistently leveraged by BG admin companies and manifested in regular tasks to resupply other BG sub-units, including artillery, engineer and indeed infantry elements. This proved an agile and effective option but suggested a gap in broader BG or TF capacity.

Discussion

The armoured A1 echelons' effort to resupply other BG elements was part of an overall admin company plan. Recurring post operations reporting suggested that admin company capacity was constrained and not optimal to sustain the diverse and dispersed attachments in the Afghanistan environment. This is equally true of the attached elements themselves, whose respectively constrained TO&E did not allow for the desired integral sustainment capacity.

Drawing parallels between the Afghanistan experience and the conceptualization of ADO, the need for greater tactical freedom of action must include an emphasis on sustainment considerations. Whereas in the past the sub-unit support demands between arms may have been significantly different, the employment imperatives and commodity/technical demands of contemporary infantry, armoured, engineer, artillery and other capabilities in ADO suggests a re-validation of sustainment structures.

Applying the Lesson

Echelons and the broader issue of sustainment capacity in full spectrum environments is under review by all corps as part of Force 2018 efforts to align capabilities essential for success in ADO.

The observation also corroborates the need to continue developing expertise and proficiency in tactical echelon operations. Formal training objectives are being integrated into readiness collective training. The Armoured NCM DP 4 course remains the cornerstone for combat arms and, more specifically, crewman echelon competency.

Observation 16 – Integral Protection

The echelons operated in non-permissive and non-contiguous environments but were only structured with limited integral force protection elements.

Discussion

The echelon's ability to move independently through the battle space is essential to sub-unit sustainment operations. Lacking integral force protection, the requisite security elements had to be allocated from the BG or TF. Reliance on the TF or BG proved inefficient for widely dispersed forces and also required reprioritization of already scarce resources.

Doctrinal and current Force 2013 Armed echelon structures do not include integral force protection. It was envisioned that regrouping within the sub-unit or unit would be a means of addressing unforeseen force protection requirements. In the Afghanistan experience, the force protection groupings that enabled echelon operations varied from one rotation to the next. The operating norm was to allocate three 'A' vehicles. When the A1 echelon commander operated from an 'A' vehicle (ie, a LAV), a patrol of two additional fighting vehicles proved effective.

Applying the Lesson

ADO and non-permissive environments of the future will demand that A1 echelons of all-arms have an integral force protection capacity. The Afghanistan solution was an internal re-grouping but it came at the expense of operational effectiveness in other BG areas. As sustainment capacity is reviewed as part of Force 2016 (align capabilities essential for success in ADO), consideration for force protection will remain an important theme.

2.5 Primary Reserve Capability

Observation 17 – Reserve Integration

Throughout the Afghanistan experience, Reserve soldiers and officers were employed in a spectrum of traditional and non-traditional crewman, staff, advisor and command roles.

Discussion

In the conventional armoured roles, Reserve augmentation was extensive throughout the armoured organizations, particularly the recce sub-units. The only limit to the nature of Reserve employment was qualification and experience. As time passed and shared experience and competency grew, fewer and fewer limitations were placed on the nature of the Reserve integration. This proved critical to sustaining operational capacity and served to validate the FG concept that included Reserve augmentation after Rotation 1.

Armoured Reserve contributions also came in the shape of formed units, specifically the convoy escort capability. This contribution of formed sub-sub units was integral to the CA FG concept for Line of Operation 3. The generation of this capability from the Reserve, although not done consistently (see section 3.5), proved a realistic and achievable competency as demonstrated by success in operations. The implementation of tactical armoured patrol vehicles (TAPV), which envisions an allocation to the Reserves, will narrow training gaps between the Regular and Reserve Force and further enable the development and sustainment of convoy escort expertise.

Source: Combat Camera 82011-2005-07

Members of 12e Régiment blindé du Canada (12 RBC) patrol Route Hyena with Leopard C2 tanks providing security for locals, members of the Afghan National Security Forces (ANSF) and soldiers from the International Security Assistance Force (ISAF) during road construction.

Armoured Reserve contributions to other BG capabilities (such as civilian/military cooperation and influence activities capabilities) and, in particular, staff augmentation to TF, RC, US and International Security Assistance Force HQ, was also significant. Altogether, these non-conventional armoured appointments represented the largest category of contribution made by crewman and officers. What proved particularly valuable was the ability to leverage civilian work experience into a variety of diverse appointments in theatre, which enabled some extremely valuable contributions.

Applying the Lesson

The Afghanistan experience reinforced the remarkable capabilities and unique competencies of the Reserves during demanding and sustained FE. The FG concept of Reserve integration into the employment structure is sound, but must be grounded in the specific articulation of tasks, enabled by training (individual and collective) and resourced with equipment. The review of the Reserve armoured mission and tasks and closer integration with the Regular force FG is the current focus of priority for RCAC FD analysis.

This lesson should be considered in concert with Section 3.5 – Reserve Force Generation

CHAPTER 3 – FORCE GENERATION (FG)

Soldiers, NCOs and Officers, Regular and Reserve alike, gained valuable combat experience in Afghanistan. In evaluating the lessons of this recent experience, the challenge remains the same: assessing their applicability to the next war and integrating the correct elements into FG design. ADO and the future employment concept for the CA offer the best assessment of the future operating environment. Indeed, it would seem that an abundance of conclusions can be drawn from the Afghanistan experience.

Unit post operations reporting showed a major focus on FG, including: training support; training philosophy; individual and combined arms training deficiencies; and the Reserve. This section reviews the most common lessons and is divided into the following categories:

- Evolving Security Environment;
- Core Competencies;
- RTHR;
- Replacements; and
- Primary Reserve FG.

3.1 Evolving Security Environment

Observation 18 – Warfighting Foundation

Afghanistan training necessarily focused on competency in COIN operations. The expected consequence was a reduction in basic and conventional armoured skill and competency. As reflected in other *Dispatches* editions on this topic, this conventional diminishment is a consistent theme across all arms.

Discussion

As noted earlier, the key issue examined by the RCAC was: 'what was the foundation upon which the conditions for success in Afghanistan were established?' The conviction is that conventional all-arms combat team training was one of the crucial foundations which made adaptation to a COIN based operating framework easier.

All-arms warfighting competencies reinforce mission command, agile thinking, initiative and aggressive will to win. Importantly, the all-arms understanding of capabilities and the relationships it spawns also proved crucial to success in many of the most difficult Afghanistan operations, including kinetic and non-kinetic operations.

The CA, and the RCAC in particular, are now populated with a generation of soldiers and leaders that have a COIN-based foundation and only limited exposure to all-arms conventional operations. Given how armour was employed unconventionally in Afghanistan, this would suggest that a generation of armoured leaders is missing the fundamentals of concentration, firepower, aggressiveness, shock action, and manoeuvre during all-arms operations.

COIN operations are unquestionably difficult to prosecute. Indeed, this represents perhaps the most challenging intellectual shift. While further study is needed, the current assessment endures that all-arms warfighting remains the cornerstone of tactical competency for transition to all other conflict frameworks of the future, including COIN.

Applying the Lesson
Individual, collective and professional development training have returned to a foundational focus on conventional all-arms operations in all phases of war. This firm footing will foster tactical competency.

Given the imperatives of the probable FSE, a competency in stability operations, a theoretical awareness of the need to influence populations and a specific focus on COIN operations will also be integral components of progressive collective training and PD.

At minimum, all-arms sub-units should achieve level five (live) each year.

3.2 Core Armoured Competencies

Observation 19 – Experiential Gap
The recurring assessment of Corps leadership is that an experiential gap currently exists within the RCAC.

Discussion
The speed at which the Afghanistan mission evolved and the quick expansion/transformation of the CA resulted in the rapid advancement of crewman and officers. The tempo of operations further contributed to a higher than usual turnover of personnel which in turn also accelerated promotions.

Consequently, this generation of NCMs, NCOs and Officers possesses impressive combat experience, and an operations-focused culture has been created. This is viewed as a singularly positive by-product of a decade at war. In many cases, however, this rapid progression meant that personnel did not acquire any of the conventional institutional skills or even gain experience functioning under resource constraints, which is now very much the new reality. The corps progression model continues to view institutional appointments as key developmental positions for rounding out teaching, technical and staff competencies.

As noted above, it is also true that this relatively rapid progression was coupled with an exclusive focus on operations in Afghanistan. This narrow experience now poses an institutional challenge in that these same leaders are returning the CA to a conventional warfighting focus despite their own limited experience. It is expected that these same conditions are also found in other corps.

Applying the Lesson
The progression models, including breadth of employment experience and time in rank requirements, remain valid and key to both tactical success and corps health.

The current identified experiential gap is mitigated by the exceptional level of operational experience across the RCAC at key rank levels. Close mentoring, aggressive unit-led professional development and deliberate and careful succession management are cornerstones of proper leader development.

Observation 20 – Technical Communications Competency

The proficiency of crewmen and, most notably, officers with the various in-service radio systems was deficient.

Discussion

Knowledge of the operation of the various in-service radio sets has decreased. In training, there were problems doing troubleshooting on high frequency sets owing to limited equipment and serviceability. A significant degree of skill fade was also observed when crews were not accustomed to operating these unique radio sets on a regular basis.

While some of the deficiencies in this skill can be attributed to the sheer volume and variety of communications systems on the modern battlefield, it is vital that armoured soldiers be skilled in maintaining effective communications, particularly in recce sub-units that operate over large distances and challenging terrain that complicate effective communications. This observation most likely applies to other arms as well.

Post operations reporting made it clear that, in the past, technical communications competency was also reinforced through advance communications training, a specialist advanced course previously delivered by the RCAC School.

Applying the Lesson

An increased focus on communications has been introduced through individual training, collective training, and unit continuation training.

Before any consideration is given to recreating the advanced comms specialist course, a training needs assessment should be carried out to determine whether the existing comms individual training is capable of addressing this identified competency gap.

3.3 Road to High Readiness Training (RTHR)

Observation 21 – Detainee Handling

Detainee handling procedures as a whole were not fully understood or sufficiently practiced during pre-deployment training.

Discussion

While given a basic acquaintance with the process, deploying soldiers were unable to observe or practice the entire process from time of capture to hand over.

Virtually every early rotation conducted its own training in-theatre with the assistance of military police (MP) and legal advisor (LEGAD) experts to assure that

responsibilities were clearly understood. As the theatre matured, more extensive detainee training was provided as part of RTHR. Post operational reporting also points to the need for armour based individual and professional training to better integrate such training at all DP levels.

Applying the Lesson

Detainee handling is formally taught and integrated within RTHR training cycles. Soldiers and leaders are now given every opportunity to practice and carry out the full process.

During reviews of armour individual training, higher DP qualification standards and training plans, detainee handling procedures should be considered for greater inclusion in training curriculums.

Observation 22 – Casualty Care

Casualty training, including tactical combat casualty care (TCCC) and casualty extraction, proved to be absolutely critical in the Afghanistan environment.

Discussion

As part of casualty care training, soldiers were required at minimum to study basic and combat first-aid. A select number of soldiers also completed advanced training known as TCCC. There were an inadequate number of medics to provide every patrol with an integrated medical professional, and the dispersed nature of employment posed further challenges. As a result, TCCC qualified personnel fulfilled most of the integral medical capability in the majority of recce patrols and troops. This additional training and capability unquestionably saved lives.

In addition to first aid, soldiers were required to practice casualty extraction drills. In training it was difficult to replicate real life scenarios for casualty extraction. In theatre, armoured vehicles were rarely upright or fully intact following an attack, yet this is how most of the training was conducted in Canada.

Applying the Lesson

TCCC is a proven capability which should remain as part of training for all future operations. It is recommended that at minimum there should be one TCCC qualified soldier per vehicle to allow for immediate response to any major medical emergency.

Casualty extraction is an essential skill for crew based personnel. The injection of greater training realism through the use of overturned vehicles or damaged platforms is viewed as critical to extraction expertise.

Observation 23 – All-Arms Calls for Fire

Expertise in calls for fire, both Close Air Support (CAS) and indirect fire (IDF), was essential in an asymmetrical threat environment.

Discussion

The Afghanistan experience re-emphasized the critical importance of all-arms call for fire expertise. More than once, it had the decisive effect on the ground that

enabled the success of the mission and saved lives. Leaders at all levels succeeded because they clearly understood the capabilities, limitations, types of tasks and effects of fire that CAS and IDF provided.

Applying the Lesson

At minimum, crew commanders need to be competent in IDF and exposed to CAS calls for fire. Joint tactical air controller (JTAC) or forward air controller (FAC) qualifications would be beneficial at the troop leader level, particularly in the recce sub-units. All crewmen, especially those in recce sub-units, must be capable of directing IDF.

Observation 24 – C-IED Training

C-IED training was critical to effective operations in Afghanistan and formal C-IED training should be maintained for future operations.

Discussion

C-IED training proved critical to saving lives on operations. Given their relative ease of production and employment, IEDs are seen to be a feature of future warfare. The key elements of C-IED training were flexibility and adaptability, based on the immediate theatre experience and enemy TTP evolution. This training responsiveness was the key to tactical pre-emption and saving lives.

Applying the Lesson

C-IED should continue to be trained and practiced during IT, CT and PD.

Event and scene management should be considered a specific Battle Task Standard.

Observation 25 – Employment of Tactical Mobility Implements

Conventional breeching operations using tactical mobility implements (TMI) proved an important capability for the Afghan theatre.

Discussion

Tanks with TMI were employed for both route clearance and conventional breaching operations. Tanks with greater belly armour and mine-rollers were found to be better suited for route clearance than LAV III based vehicles. As enemy TTP quickly adapted from pressure plate to command detonated IEDs, the utility of the rollers for route clearance became limited. Various rotations continued to use tanks with rollers for route clearance.

Post operational reporting, particularly on later rotations, confirmed that, depending on the threat assessments, engineers with full route clearance capability were best suited for the route clearance tasks. From time to time, the threat demanded that tanks (without rollers) continue to be used for convoy escort given their increased stand-off, direct fire, and optics capability.

The most significant contribution made by tanks with TMI was during hasty and deliberate breeching operations.

Applying the Lesson
Combined arms training will continue to emphasize the capabilities and limitations of TMI.

Hasty and deliberate breaching competency will continue to be a critical tactical capability of armoured and engineer elements.

Observation 26 – Complex Recovery
The Afghanistan experience reinforced hard lessons about complex recovery, the recovery of battle damaged vehicles and recovery under contact.

Discussion
During readiness training, recovery is typically practiced in non-tactical settings on vehicles that have sustained no actual 'major' damage. Low stress scenarios of this type proved inadequate in preparing soldiers and leaders for the real complexity of conducting these operations in combat, under fire.

Applying the Lesson
More challenging recovery scenarios have been integrated into high readiness collective training. Realistic recovery scenarios will be integrated more deliberately into corps individual training and DP training with a view to institutionalizing training and expertise.

Observation 27 – Foreign Weapons Training
Foreign weapon and vehicle recognition was largely disregarded during RTHR training.

Discussion
The Afghanistan experience demonstrated an ongoing need to quickly and accurately identify friendly, enemy and host nation forces vehicles and weapons and have a clear understanding of their effects and operating characteristics. This helps to minimize the occurrence of 'blue-on-blue' and 'green-on-blue' incidents.

Applying the Lesson
Although foreign weapon and vehicle recognition is a basic crewman skill taught during DP 1 training, this skill should continue to be developed throughout their careers. Continuation training at the unit level must be ongoing in order to sustain this important competency.

Observation 28 – Interpreters
The ability to working with and communicate through interpreters needs to be both taught and practiced.

Discussion
Interpreters are invaluable tools not only for translation but also for understanding cultural distinctions and identifying potential threats. As with any other tool, soldiers need to have opportunities to train with interpreters to learn how to communicate effectively through them to their target audience.

Applying the Lesson
As part of RTHR training, soldiers should at minimum receive classroom training on communicating effectively through an interpreter. If resources are available, soldiers should also be given the opportunity to practice this skill in realistic scenarios.

3.4 Replacements

Observation 29 – Replacement Pool
The maintenance of a trained replacement pool proved essential to seamlessly sustaining operations.

Discussion
Deploying tank squadrons maintained a third troop (over and above the theatre TO&E structure) until the final confirmatory exercise of high readiness training. This comprised the first line replacement pool, and all other arms used a similar approach. Once the armoured sub-unit deployed, the main task of this replacement pool was maintaining mission currency and continuation training.

Early on in the Afghanistan experience, the replacement pool practiced some low-level risk management in that individuals who were deemed unsuitable for deployment were kept in the replacement pool for reporting purposes. This quickly changed as replacements were consistently requested.

Armoured sub-unit command teams in-theatre retained the authority to decide who from the replacement pool would be selected to deploy.

Applying the Lesson
A detailed replacement pool continuation training plan must be prepared early in the high readiness training cycle in order to ensure seamless transition into the deployed sub-unit.

Sub-unit command teams should retain the authority to select who from the replacement pool will deploy.

Observation 30 – HLTA Management
The imperatives of the home leave travel allowance (HLTA), in sub-units not conventionally structured and resourced, had a significant impact on operational capacity.

Discussion
Doctrinally, armour sub-units are structured to be self-sufficient, with replacement crews and personnel positioned as part of the echelon. This structure allows for both tank and recce squadrons to deal with the majority of personnel issues internally and accommodate HLTA reductions.

Because the armoured sub units, notably the echelon, were unconventionally structured in the TO&E, the implications for operational capacity during HLTA were significant. From time to time, for specialists, short term technical assistance visits (TAV) were used to bridge capability gaps.

Applying the Lesson
Early capability decisions about structure must also include consideration of the implications of current HLTA policies. While this applies specifically to Afghanistan, where TO&E constraints drove risk-based compromise, this issue nonetheless merits consideration in future planning.

3.5 Primary Reserve Capability

Observation 31 – Reserve Integration
The Reserves were vital in sustaining armour capability.

Discussion
Operations on a mission of this length could not have been sustained without augmentation from Primary Reserve Units. Post operations reporting consistently highlighted the success of the integration of Reserve personnel into deploying sub-units. Early integration was absolutely essential in order to foster relationships, close any training gaps, address administrative issues and build team cohesion.

Reservists also fulfilled an important role through institutional backfill. Virtually every organization was affected in some way, key appointments being left unfilled owing to the scale and draw of operations. The Reserve Force provided a crucial institutional backfill that sustained training and staff capacity. The RCAC relied on Reserve backfill to deliver Regular and Reserve armoured individual training that would not have occurred otherwise.

The reliance on Reserve augmentation was an important characteristic of the RCAC and CA FG writ large.

Applying the Lesson
Armoured concepts will continue to integrate Reserve capacity as a critical enabler of successful FG.

Observation 32 – Reserve FG Discipline
Though mandated to generate convoy escort troops as their sole formed contribution to Line of Operation 3, armoured Reserve units were only infrequently directed to generate this capability.

Discussion
The RCAC FG concept is based on the integration of both Reserve augmentation and the contribution of formed Reserve sub-sub-units to convoy escort capacity. The responsibility of Reserve units to generate this convoy escort capability is reflected in their mission and tasks, which forms the basis of their collective training resourcing.

In practice, the FG of formed armoured Reserve capabilities was inconsistent between rotations. Quite often, the convoy escort troops FG was assumed by the Regular Force so as to provide greater in-theatre rotation capacity (ie, rotation opportunity for light infantry with static camp security responsibilities). In at least one case, it was demonstrated that the armoured Reserve units were unable to generate the formed troops required. However, rather than augment the Reserve units with backfill, the practice became FG of this capability out of the Regular Force.

While the methodology for generating the convoy escort capability did change from rotation to rotation, it is clear that the Reserve armoured regiments were never fully given the opportunity to play the specific role that they had been mandated to generate and optimized to perform. It is largely for this reason that the majority of Reserve armoured personnel deployed to Afghanistan were assigned to non-crewman specific positions.

The RG 31 was the mission platform. On those occasions where convoy escort was generated from a Reserve armoured regiment, the training demands of this unique equipment were quickly mastered and tactical competency quickly demonstrated in training and on operations.

Applying the Lesson

The rotations where the convoy escort troops were generated from the Reserve demonstrated that convoy escort remains a viable and appropriate mission for the armoured Reserve. The competency and professionalism displayed by these formed Reserve units further demonstrated within the Corps that additional capabilities such as chemical, biological, radiological and nuclear and perhaps recce sub-unit support troops should also be considered as additional Reserve generated capabilities.

The decision not to use the armoured Reserves in their mandated role was undoubtedly based on sound logic and consideration of a variety of factors not necessarily captured here. Nonetheless, the untapped potential across the armoured Reserve regiments could have made a valuable contribution to operations and diminished the FG pressures that became prevalent as the mission continued. Looking forward, FG discipline and adherence to the designed FG concept will not only best leverage investment and expertise but also help mitigate FG pressures.

Source: Combat Camera APD02 5000-134

CHAPTER 4 – COMMAND AND CONTROL

Commanders in Afghanistan noted several challenges related to the C2 of deployed sub-units. Lesson areas to be explored include:

- Armour C2 Capability;
- TF/BG Armour Advisor; and
- ISTAR.

4.1 Armour Command and Control Capabilities

Observation 33 – Recce C2 Capability

Armoured recce sub-unit HQ contributed a unique C2 capability to the BG and TF that enabled innovative options and greater flexibility for commanders.

Discussion

Doctrinally, and in contrast to other arms, the division of responsibility within the armoured recce sub-unit HQ between the second-in-command (2IC) and Battle Captain (BC), the functions of the Ops WO, and the structure and manning of a skilled pool of HQ soldiers all combine to ensure that the sub-unit HQ can effectively synchronize complex, dispersed operations. The recce sub-unit is also doctrinally structured and practiced in executing C2 on the move or from a series of unprepared positions. These factors combined to make the recce sub-unit HQ a unique and valuable capability, and in Afghanistan it proved to be a force multiplier for numerous operations and diverse mission sets.

TO&E restrictions unique to the Afghanistan theatre diminished the command post's technical capacity. Insufficient signals operators were provided to operate on a 24/7 basis.

With the advent of technology and the integration of additional systems, more signals operators will be required to enable the full potential of this C2 capability.

Applying the Lesson

Recce sub-unit HQs must continue to be employed in tactical roles where their full capability can be exploited. Armoured individual training, collective training and PD must continue to reinforce these competencies.

The structural implications for additional signals operators will be considered carefully as part of the ongoing *Force 2018* 'alignment of capabilities.' Given the strategic realities and existing PY demands across the CA, should the RCAC assess the additional requirement as vital the investment will likely have to be internally resourced in the Corps.

Observation 34 – Tank Sub-Unit C2

Tank sub-units were directed to conduct static, unconventional tasks, including overall FOB responsibility. These static responsibilities demanded a CP structure that is not inherent to the tank squadron sub-unit structure.

Discussion

The Afghanistan mission and the tasks demanded of the tank sub-unit necessitated the generation of a CP in order to provide effective C2. However, a tank sub-unit HQ is not doctrinally structured to man a typical CP nor does it have suitable vehicles (as tank troops are commanded on the move from a tank). As a platform, the tank is poorly set up to act as a CP vehicle owing to space constraints and power limitations. The tank sub-units adapted to the operational requirements and temporary TO&E adjustments were made to enable success.

What remains unclear is whether this lesson is valid for future considerations. RCAC and CA FD deliberations have focused on trends in technology and the level of command support being integrated into the infantry company and recce squadron HQ. Clearly a modern sub-unit C2 element of the future requires a robust C2 capacity that includes at minimum three separate radios and the ability to incorporate modern LCSS and joint systems.

Applying the Lesson

Tank squadron HQ must continue to evolve to keep pace with the level of command support to become available across the TF. While conventional means of C2 from tanks will remain unchanged when aggressively leading land manoeuvres, there is a clear need to integrate greater command support capacity.

The current tank squadron's structure was adapted to integrate a more robust CP capacity, including an Ops WO, crewman and specialists to meet the demands of the additional responsibilities.

4.2 Employment of Armour Advisor

Observation 35 – Tactical Advice

Owing to a reduced institutional understanding of armour capabilities, several rotations created an armour advisor position within the BG HQ to assist in planning at the higher level.

Discussion

A decade in Bosnia, the centralization of tanks in Canada and limited exposure during training over many years has resulted generally in a field force with inadequate experience in the employment of armour capabilities.

The most experienced practitioner in the employment of armour capabilities, and indeed the individual charged with these authorities and responsibilities, is the armoured OC, not a staff appointment.

The advisor approach frames the armour capability as an enabler, which is folly. As a combat arm optimized for acting, sensing and, most notably, command functions during land manoeuvres, it is equal to all other arms in the prosecution of its missions. The best advice on the employment of armour must derive from the most experienced individual selected to command them – the armoured OC.

Applying the Lesson

The need to close the experiential gap across all-arms on the fundamentals of employment of Armour capabilities is legitimate. This must continue to be the focus of individual training, collective training and professional development.

There is no requirement for the creation of a staff armour advisor position at the TF/BG level as this function is already performed by the armoured OC.

4.3 ISTAR

Observation 36 – ISTAR

On most occasions, ground-based 'Sense' assets were never included as part of the TF ISTAR matrix. Post operational reporting concluded that this was due to an emerging preoccupation with air sensors.

Discussion

In the Afghanistan experience, there was a distinct affinity for the use of UAVs at all command levels. It became a default if not expedient bias for gaining intelligence and supporting the ISTAR matrix. While incredibly valuable, it also illustrated that the UAV technology could be routinely defeated by the simple use of a tarp or other means of camouflage. Also, despite the robust capabilities of air based surveillance, it cannot replace the detail and human dimension that ground collectors (highly trained recce soldier) can provide.

Post operations reporting highlighted the fact that most rotations rarely integrated both ground and air-based sensors or sensing platforms to ensure named area of interest (NAI) coverage overlap in their ISTAR matrix. The NAIs at higher levels were often 'standing' and failed to evolve to meet the demands of current operations or future planning.

Fundamentally, the ISTAR CC must aim to integrate overlapping and redundant sensors systems to get a clearer picture and mitigate tactical risk. ISTAR CC must also guard against reliance on a single system and practice leveraging all sensors at BG/TF's disposal.

Applying the Lesson

OC recce or the BG ISTAR CC must be fully prepared and proactive in educating any BG on 'sense' capabilities and how best to exploit them. Doctrine is clear and broader all-arms experience continues to mature. ISTAR fundamentals must continue to be taught throughout the CA.

Source: Combat Camera AR2011-0470-205

CHAPTER 5 – SOLDIER SUPPORT

Operations in Afghanistan presented new challenges and opportunities relating to support to deployed troops and their families. This chapter focuses on casualty care and soldier support.

Source: Combat Camera KX2005-R105-0194d

Aboard a Bison armoured ambulance, the Health Services Support Company (HSS Coy) is parked close by and ready to leave on short notice for Task Force Kabul.

5.1 Casualty Care and Soldier Support

Observation 37 – Communications

Understanding how the sub-unit command team intended to approach and handle death and serious injury before they happened in theatre proved to be a vital lesson.

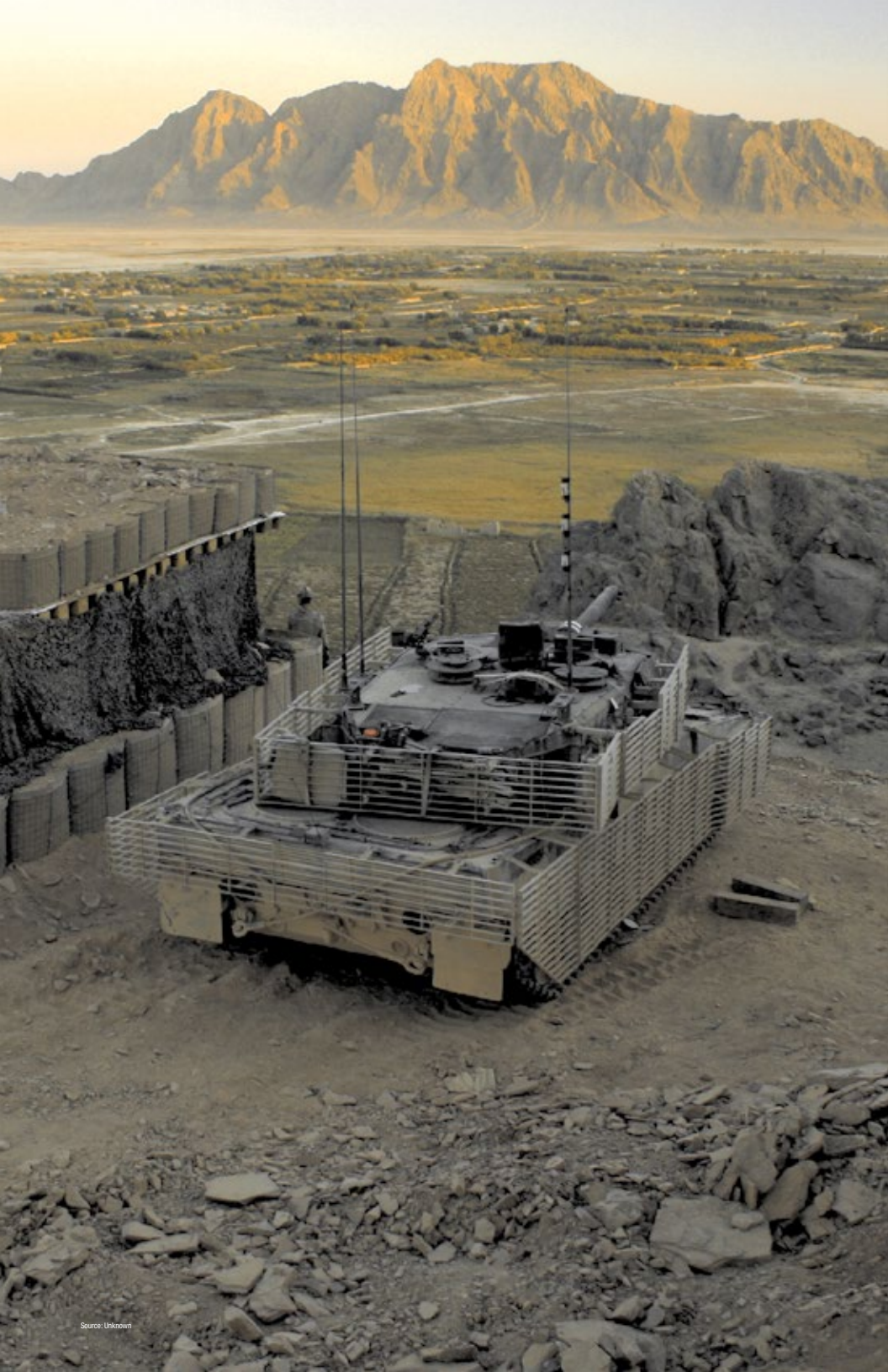
Discussion

Early dialogue between command teams and their soldiers about casualties and their expectations proved very effective. This included information on processing the injured or killed and on the family care process. In theatre, there was little knowledge or training about the process once soldiers were delivered to medical care (Role 3), specifically amongst the squadron 2IC, squadron quartermaster and clerks.

It was important to emphasize during this education process that operations always take precedence over ramp ceremonies and why. It was found that this understanding helped reduce, as much as possible, the adverse impact of deaths and injuries on morale. Command teams must be proactive in communicating losses to the troops such that they do not find out through the rumour mill or the news. This includes the loss of troops integral to the unit or within the BG/TF.

Applying the Lesson

Throughout all stages of deployment, command teams need to be proactive and communicate regularly to their soldiers their expectations and the procedures related to death and/or serious injury. As much as possible, training or, at minimum, professional development discussions must continue to be a priority.



Source: Unknown

CHAPTER 6 – IN THE FIGHT

RCAC experiences in Afghanistan reinforced numerous long-held practices regarding the employment of armour in combat but also highlighted capability gaps worthy of further study. Areas to be examined include:

- Tank Capabilities;
- Recce & Surveillance Capability;
- Night Capability;
- Working with Coalition and Host Nation Security Forces; and
- Application of Lessons Learned (from rotation to rotation).

6.1 Tank Capabilities

Observation 38 – Ammunition

Based on the nature of the tasks carried out in Afghanistan, the 105-mm HESH round was seen as the preferred multi-purpose round because of its explosive effects on the target.

Discussion

The HEAT round, the HESH 120 mm equivalent, was not as effective on buildings and infrastructure like grape huts and bunkers. This is understandable given its primary purpose as an anti-tank weapon. HEAT is of course optimized for penetration power but lacks the explosive effects.

Owing to its specific nature, APFSDS (Sabot) ammunition did not see significant use during operations as it is optimised for hard targets or other armoured vehicles which, as a threat, were generally not encountered.

Canister was available but its use was highly problematic due to dispersion. Any use of canister in built up areas would significantly boost the risk of unintended collateral damage.

With the divestment of the Leopard C1 and its 105-mm HESH ammo, a multi-purpose tank round with both penetration capability and explosive effects is considered a key requirement for future ADO environments.

Applying the Lesson

The newly acquired 120-mm HE round will offer capabilities similar to the 105-mm HESH.

Observation 39 – Tank Recovery in ADO

Tank troops regularly operated away from the squadron and the echelon. This established the requirement for tank troops to be more self-reliant, particularly with recovery.

Discussion

Tank troops that operate in an ADO environment need to have the ability to conduct recovery and may even be required to move disabled vehicles over significant distances. Tow cables are effective in minor recovery (recovery from a ditch or a stuck vehicle), however, as demonstrated in Afghanistan, tank troops should have the capacity to recover and transport a disabled vehicle over a significant distance.

Applying the Lesson

The inclusion of one or two A-frames in each troop would allow for a modest but independent recovery capability. This would decrease reliance on armored recovery vehicles (ARV) and improve the armoured capability to conduct ADO in the future.

This lesson is not specific to tanks and should be considered for permanent implementation across all armoured squadrons and indeed all-arms using A vehicles.

6.2 Recce & Surveillance Capability

Observation 40 – Surveillance Suite Capability

Current recce surveillance suites lacked the capabilities necessary on the modern battlefield.

Discussion

The current surveillance suite has no Image Intensifier (II) night vision capability and is based on thermal. Since all identification friend or foe (IFF) markings (glint tape, IR strobes and beacons) and UAV target designators are visible only in the II spectrum, not the thermal spectrum, surveillance operators have no reliable means of seeing these markings from their crew position.

The surveillance suite, by lasing a target, is also able to determine only a six figure grid reference. The technology has evolved; at the present time, the hand-held Vector binoculars carried by dismounted sniper detachments have the capability to determine eight figure grids, a more accurate measurement than the surveillance suite.

Applying the Lesson

The capability deficiencies have been monitored closely by the Directorate of Land Requirements and integrated into project identification and definition for the long range surveillance system (LRSS) project. LRSS is the replacement for the Coyote surveillance suite and will more than adequately address this gap. LRSS is currently in the implementation phase.

6.3 Night Capability

Observation 41 – Night Operations

One of our greatest available technical advantages over our adversary was our ability to conduct night operations through the use of advanced night vision equipment. However, our ability to maximize this technical superiority was not always leveraged.

Source: Combat Camera AR2006-T022 0042

A Canadian Leopard 2 tank from C Squadron, Lord Strathcona's Horse (LdSH), fires during a firing-range exercise to adjust the 120-mm guns, near an advanced operations base in the Panjwai District of Afghanistan.

Discussion

The RCAC's inability to gain a clear tactical advantage over the enemy at night should be considered one of the RCAC's more significant lessons. Owing to the lack of access to surveillance target acquisition and night observation (STANO) equipment during RTHR, sub-units were poorly trained for night operations and therefore more reluctant to use this method of operation in theatre.

Equally important, all A vehicles should have the capability to illuminate targets by laser. This allows better identification of targets, particularly when conducting combined night operations where laser "sparkle" on target is the most effective and safest way to vector CAS, aviation, armed UAV or other direct fire platforms. This is not a requirement for laser target designators of the type used by FAC teams to terminally guide munitions; rather, this is a suggestion that we require marking lasers that can be viewed through night vision equipment.

Applying the Lesson
This deficiency stemmed from lack of emphasis on night operations during foundation training and the RTHR. Soldiers and leaders must be proficient in conducting operations at night; individual training and collective must continue to emphasize this competency at all levels.

6.4 Working with Coalition & Host Nation Security Forces

Observation 42 – Combined Operations
Units fighting in the COE must master the coalition environment. This implies having knowledge of the equipment and doctrine used by coalition partners, and understanding how to communicate and fight with coalition partners.

Discussion
AFV and weapons recognition is an important skill set that needs to be reinforced with every soldier. A soldier's ability to quickly and correctly identify enemy and friendly vehicles and weapons is paramount, especially when operating in a complex multinational environment. A solid understanding of both enemy and friendly force equipment was key in minimizing the occurrence of fratricide incidents.

Other nations' forces frequently moved through our sub-unit AO. Advanced notification was essential to ensure responsiveness to their requirements if requested or to provide threat briefings based on the most current situational awareness.

Applying the Lesson
As stated earlier in this document, foreign weapon and vehicle recognition is a basic crewman skill that should see ongoing development throughout their career.

The inclusion of a sub-unit liaison officer (LO) was not part of the TO&E for all rotations. Where this was included in rotations, we see a significant improvement in the ability to coordinate with other nations. The LO is integral to the armoured sub-unit structure and should be deemed a critical enabler on future deployments.

Observation 43 – Partnering Operations
Partnering operations with Host Nation Security Forces (HNSF) brings with it new challenges and planning considerations that were not taught during RTHR training.

Discussion
Besides working with coalition partners, many operations in Afghanistan required partnering with HNSF, primarily the Afghan National Army (ANA) and the Afghan National Police (ANP).

As was learned through hard lessons, Canadian soldiers must have a sound understanding of HNSF training and employment procedures, which proved crucial when gaining their support during the planning and execution of combined operations. It proved important for commanders at all levels to recognize that

operations with HNSF, particularly fledgling organizations, will always proceed slower than planned owing to variations in culture, training and experience levels. Patience proved to be a paramount consideration for both sides.

Applying the Lesson

Future operations is similar environments will undoubtedly include partner operations. Leaders at all levels must be prepared to partner with either host nation forces or coalition allies.

Partnering should be doctrinally defined and integrated into individual training, collective training and professional development.

6.5 Applying Tactical Lessons Learned (from rotation to rotation)

Observation 44 – Sharing Lessons Learned

The timely dissemination and integration of past lessons learned from rotation to rotation proved crucial to seamless transition and early tactical success; surprisingly however, this proved to be a constant struggle.

Discussion

A challenge facing the effective implementation of lessons learned was the ever changing vision and tactical employment of forces that came with successive commanders. Many of the low level lessons learned (troop (-) level) remained relevant, consistent in their applicability and generally accepted between rotations. At higher levels, (sub-unit +) it proved considerably more difficult to implement the lessons learned, as the situation and operating concepts often changed between commanders.

Applying the Lesson

The timely and effective implementation of lessons learned was abetted by having personnel from the previous rotations assist in the organization and supervision of training for deploying units on the RTHR through reverse tactical assistance visits, an approach more recently employed at the Canadian Manoeuvre Training Centre.

The lessons learning culture across the RCAC improved significantly as a result of the Afghanistan experience and must remain a paramount characteristic of the RCAC training culture.

Source: Combat Camera IS2008-9182

CHAPTER 7 – THE WAY FORWARD

Having consolidated this select but nonetheless extensive list of lessons and their application, the real work begins as we must ensure that they are institutionalized or studied with greater focus. This is the responsibility of the institution but also that of every member of the RCAC. The key themes for the RCAC going forward are reflected in this chapter.

7.1 Lessons Learned Culture

The task of preparing this *Dispatches* edition underscored the challenges in maintaining momentum for the collection, analysis and dissemination of lessons, even following events as great as our experience in Afghanistan. The RCAC, indeed the CA, has made great strides in integrating lessons learned into its training culture, but it must remain vigilant, as our interest and indeed our skill sets will quickly atrophy.

7.2 Doctrinal Foundations and Fundamentals

The RCAC now has the time and capacity to collaborate in the long overdue review and validation of armour doctrine. This need has long been recognized, as attested to by the adoption of *Force 2021; Adaptive Dispersed Operations* and the implementation of the Army Managed Readiness Plan and the implied FE concepts. The Afghanistan experience offers a sound footing for doctrinal deliberations, which will probably uphold many aspects of current doctrine but cast serious doubt on others. The RCAC contribution to Directorate of Army Doctrine efforts in this regard will play an important role in institutionalizing these lessons.

7.3 Combined Arms Training

The CA reinvigoration of combined arms training is fundamental to Army Strategy and, as noted in this edition, crucial to a sound and agile posture for the RCAC going forward.

7.4 People

The RCAC recognizes that our people are our core capability. The Afghanistan war has left in its wake casualties, both physical and mental. Valuable lessons on how to deliver the appropriate level of support and dignity to those who have fallen or were seriously injured is perhaps one of the most important lessons of all. The RCAC continues to draw inspiration from those who did not return.

7.5 Imperatives for the RCAC

The requirements for the RCAC in the future should be:

- Remain true to our doctrine, agile in our TTP, and innovative in our structure.
- Reconstitute our core competencies in both recce and tank; work to close the conventional warfighting experiential gap.
- Retain the lessons captured here and continue to cultivate a culture of learning.
- Work tirelessly as part of the all-arms team to deliver world class land manoeuvre, reconnaissance and command competency to the CA.

Source: Combat Camera IS2014-8020-008

They shall grow not old, as we that are left grow old: Age shall not weary them, nor the years condemn. At the going down of the sun and in the morning, We will remember them.

—LAURENCE BINYON

Sergeant Craig Paul Gillam
Trooper Robert Thomas James Mitchell
Trooper Mark Andrew Wilson
Trooper Patrick James Pentland
Master Corporal Allan Stewart
Trooper Darryl Caswell
Major Raymond Mark Ruckpaul
Corporal Nathan Hornburg
Corporal Richard Renaud
Trooper Michael Yuki Hayakaze
Trooper Brian Richard Good
Trooper Marc Diab
Trooper Corey Joseph Hayes
Trooper Jack Bouthillier
Corporal Karine Blais
Trooper Larry Rudd

ANNEX A – CHRONOLOGY OF THE RCAC CONTRIBUTION

January 2002: Recce Squadron Lord Strathcona's Horse (Royal Canadians), (LdSH(RC)), under the command of Maj T. Bradley and MWO D. Lee, deployed as part of Op APOLLO. These were tasked with ensuring the security of the Kandahar Airfield. LdSH(RC)

July 2002: Recce Sqn LdSH(RC) redeploys to Canada.

August 2003: This date marked the beginning of the first phase of Op ATHENA in Kabul, Afghanistan. The deployed Roto 0 elements based on 3 RCR BG included D Squadron, Royal Canadian Dragoons (RCD), under the command of Maj D. Cross and MWO D. Head.

Concurrent with this deployment was the stand-up of Canada's first Embedded Training Team (ETT) as part of Combined Joint Task Force Phoenix. Maj J.L. Andrews and Capt R.D. Cameron were members of the team which covered down on 1st Kandak, 1st Bde ANA, which provided internal security for the Constitutional Loya Jirga from Nov 03-Jan 04.

February 2004: OP ATHENA Roto 1, D Squadron, 12e Régiment Blindé du Canada (12 RBC) deployed to Kabul under the command of Maj A.J. Zdunich and MWO J.R.D. Cossette.

During this period, LGen R. Hillier commanded ISAF and BGen J.P.P.J. Lacroix commanded the Kabul Multinational Brigade.

August 2004: Op ATHENA Roto 2, Recce Squadron LdSH(RC) deployed to Kabul under the command of Maj D.A. Macaulay and MWO B. Talty.

During this period, Col J, Ellis, LdSH(RC) Commander Task Force Afghanistan and National Commander. CWO C.J.E. Kitching was the Task Force Sergeant-Major, Task Force Afghanistan Op ATHENA.

February 2005: Op ATHENA Roto 3, B Squadron RCD deployed to Kabul under the command of Maj R.W. Ermel and MWO C. Cox.

July–December 2005: The RCD BG command team of LCol Thomas and CWO Levesque took command of Task Force Kabul. During this time, they oversaw the transition of Canadian operations from Kabul to Kandahar. D Squadron RCD, under the command of Maj A.J. Atherton and MWO C. Chouinard, provided the major recce elements for the southward transition of TFK elements to Kandahar.

August 2005: As the first phase of Op ATHENA in Kabul was winding down, the Government of Canada formed the Kandahar Provincial Reconstruction Team (KPRT). Under the command of a black hatter, Col S. Bowes, the KPRT's mission was to help the democratically-elected government of Afghanistan extend its authority and ability to govern, rebuild the nation, and provide services to its citizens. Over the five year mission of the KPRT, hundreds of officers and senior NCOs from all Regiments of the RCAC served with the KPRT, and in February 2009 the command team of LCol C.J. Turenne and CWO Poirier commanded one of the last rotations of the KPRT.

January 2006: Op ATHENA phase 2 stood up, this time in Kandahar. Roto 0 operated briefly in theatre without an armoured recce presence following the redeployment of D Squadron RCD in December 2005.

February 2006: Op ATHENA Roto 1 deployed with only one troop of armoured recce from 12 RBC under the command of Capt B. Fleming and WO D. Dubé.

Col T.E. Putt was the Deputy Commander of the Joint Task Force Afghanistan / TFK, until August 2006.

CWO J. Ramsay, NCE RSM of Op ARCHER Roto 1 from February to November 2006.

August 2006: The first Canadian Operational Mentor and Liaison Team (OMLT), under the command of LCol J.M. Lanthier, deployed to Kandahar Province to work with the 1st Brigade, 205 Corps, Afghan National Army (ANA). Members of the OMLT were embedded with a specific unit of the ANA to provide training, mentorship and liaison services. In 2007, a similar effort was launched for the Afghan National Police (ANP), known as Police-OMLT or POMLT. Over the 5 year mission, hundreds of officers and senior NCOs from all Regiments of the RCAC served with the OMLT and POMLT.

During this period, LCol M. Frank was the Deputy Commanding Officer with OMLT for Task Force 1-10 and the RSM was CWO D. Head.

Op ATHENA Roto 2 deployed with A Squadron RCD, under the command of Maj A.J. Lussier and MWO S. Lehman.

September 2–17 2006: A Squadron took part in the Canadian-led offensive, Op MEDUSA, as part of 1 RCR BG. The aim was to clear Taliban insurgents from a fortified position in Panjwaii. Op MEDUSA led the way to the second and most fierce Battle of Panjwaii, during which 12 Canadians were killed, including three dragoons. After weeks of fighting, the Taliban had been cleared from the Panjwaii area, which facilitated reconstruction efforts in the region. For their efforts the BG earned a Commander-in Chief Unit Commendation. The citation states that the BG had succeeded "where larger forces had failed, they prevented the enemy from realizing their goals of capturing the city and weakening international resolve and cohesion." [1]

September 2006: The Government of Canada commits a squadron of Leopard C2 tanks and an additional 300 troops to Afghanistan. This marked the first time since the Korean War that Canadian tanks were engaged in combat.

October 2006: B Squadron LdSH(RC) arrives in theatre under the command of Maj T.J. Cadieu and MWO W.A. Laughlin, Canada's first tank squadron in Afghanistan.

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1. Commander-in-Chief Unit Commendation Announcement, http://news.gc.ca/web/article-en.do?m=/index&nid=562039, September 23, 2010.

November 2006: BGen T.J. Grant Commanded the Joint Task Force in Afghanistan / TFK from November 2006 to August 2007.

During this period, Maj P.J. Peyton was the CO Canadian contribution to the Afghanistan Army National Training Center, Op ENDURING FREEDOM.

February 2007: Op ATHENA Roto 3 deploys with a recce squadron, B Squadron RCD, under the command of Maj S.G. Graham and MWO W.A. Richards, and a tank squadron, A Squadron LdSH(RC), under the command of Maj D.J. Broomfield and MWO W.J. Crabb. They contributed to Op ACHILLES, the operation to clear Taliban fighters from Helmand province.

During this period, then BGen J. Ferron deployed to Kabul as NATO's International Security Assistance Force (ISAF) HQ G2.

August 2007: A Squadron 12 RBC provided the recce squadron for Op ATHENA Roto 4 under the command of Maj P. Huet and MWO J.R.D. Mageau. C Squadron LdSH(RC) provided the tank squadron, with a troop force generated by 12 RBC, under the command of Maj T.P. Gosselin and MWO G. Bamford.

Roto 4 saw the introduction of the Leopard 2 into theatre and as well as the first RCAC unit combined tank squadron. The BG was awarded a Commander-in Chief Unit Commendation. The citation states the BG was "instrumental in dismantling improvised explosive device networks, re-capturing checkpoints and returning them to Afghan control, enhancing the capacity of Afghan forces and providing guidance on community building and local governance."[2]

January 2008: Col C.M. Hazleton was the Deputy Chief of Staff Operations for RC(S) until October 2008.

February 2008: D Squadron 12 RBC provided the recce squadron under the command of Maj J.R.S. Boivin and MWO J.M.C. Rodrigue, and B Squadron LdSH(RC) provided the tank squadron, under the command of Maj C.R. Adams and MWO A.S. Batty, for Op ATHENA Roto 5.

May 2008: Col J. Cade was the Deputy Commander of the Joint Task Force in Afghanistan / TFK until February 2009.

August 2008: Op ATHENA Roto 6, D Squadron RCD provided the recce squadron under the command of Maj D. Tremblay and MWO S. Mercer. A Squadron LdSH(RC) provided the tank squadron under the command of Maj I. McDonnell and MWO D.W. Hall.

2. Commander-in-Chief Unit Commendation Announcement, http://news.gc.ca/web/article-en.do?m=/index&nid=562039, September 23, 2010.

February 2009: Op ATHENA Roto 7, B Squadron 12 RBC provided the recce squadron under the command of Maj J.F. Cauden and MWO L.P. Pelletier. C Squadron LdSH(RC) provided the tank squadron under the command of Maj J.L. Cochrane and MWO Stacey. C Squadron faced significant challenges based on their TO&E as they deployed with only 2 troops.

August 2009: Op ATHENA Roto 8 included a recce squadron, B Squadron RCD under the command of Maj M.N. Popov and MWO Mathers. The tank squadron, B Squadron LdSH(RC), was deployed under the command of Maj R. Hume and MWO T.C. Holland.

During this period MGen M. Ward was the Deputy Commanding General – Police at the US led Coalition Security and Transition Command – Afghanistan and later NATO Training Mission – Afghanistan.

February 2010: A Squadron RCD provided the recce squadron under the command of Maj C.D. Lillington and MWO Picher, and A Squadron LdSH(RC) provided the tank squadron, under the command of Maj R.D. McKenzie and MWO Jones, for Op ATHENA Roto 9.

During this period BGen S. Bowes was Deputy Chief of Staff Plans and Projects at the ISAF Integrated Joint Command.

October 2010: Op ATHENA Roto 10 included a recce squadron, A Squadron 12 RBC under command of Maj C. Caron and MWO S. Daigle, and a tank squadron, C Squadron 12 RBC under the command of Maj E. Landry and MWO Champagne. Roto 10 was the first time a non LdSH(RC)-led tank squadron had been deployed to Afghanistan.

November 2010: Col S.M. Lacroix, then LCol and his RSM, CWO D. Tofts were deployed to TF 404 MAYWAND where they commanded the POMLT.

2011: During this period, then BGen D. Milner commanded Joint Task Force Afghanistan 5-10. He was the last commander of combat operations before the mission transition. In July 2011 Op ATHENA Roto 10 redeploys to Canada marking the end of the Canadian combat mission in Afghanistan. Members of the RCAC continued to serve in Afghanistan as mentors, as part of Canada's new training mission, Op ATTENTION.

March 2011: Prior to an during Op ATTENTION, in March 2011, BGen K.L. Woiden deployed to Kabul as the Assistant Commanding General of the Afghanistan National Army Development for NATO Training Mission. He was responsible for the Coalition efforts in developing the Afgan Ministry of Defence and the General Staff.

July 2011: MGen J.M. Lanthier was the Director of the Afghan National Security Operations at IJC.

2012–2013: MGen J. Ferron commanded both the Canadian mission (Operation ATTENTION) and the Operations Formation of the NATO Training Mission in Afghanistan (NTM-A), responsible for developing combat capability within the Afghan National Security Forces.

BGen T.E. Putt, was the Deputy Commanding General V Corps and ISAF Joint Commands Director of Afghan Security Forces from 2012 to 2013, in support of Op ENDURING FREEDOM.

2013–2014: MGen D. Milner succeeded MGen J. Ferron to command both the Canadian mission (Operation ATTENTION) and the Operations Formation of the NATO Training Mission in Afghanistan (NTM-A). MGen Milner was also responsible for the final close out of the Canadian contribution to the Afghanistan mission.

During this period CWO W.J. Crabb was the NATO Training Mission Sergeant-Major from April 2013 to March 2014.

NOTES