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EQUAL CAPABILITIES: A CASE FOR A SYMMETRICAL ROYAL CANADIAN ARMoured CORPS

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SERVICE PAPER - ÉTUDE MILITAIRE

**EQUAL CAPABILITIES: A CASE FOR A SYMMETRICAL
ROYAL CANADIAN ARMoured CORPS**

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EQUAL CAPABILITIES: A CASE FOR A SYMMETRICAL ROYAL CANADIAN ARMoured CORPS

AIM

1. The asymmetrical design of the current Royal Canadian Armoured Corps' (RCAC) establishment poorly enables the efficient and reliable delivery of armoured capabilities to the Canadian Mechanized Brigade Groups (CMBG) of the Canadian Army (CA) and hinders the ability of the CA to force generate and force employ armoured capabilities. This RCAC asymmetry creates difficulty in all Reg F Regiments to provide expected core capabilities uniformly across the CA, specifically mounted direct fire in support of doctrinal combat team and battle group operations. Dissimilar armoured capabilities within the CMBGs has also created difficulties in the control of the CA's Managed Readiness Plan (MRP) and has resulted in the diminishment of armour supporting capabilities in the Service Battalions and Combat Engineer Regiments across the CMBGs. This service paper aims to provide Chief of Staff Army Strategy (COS Army Strat) with a recommendation for improving the symmetry of the RCAC establishment, and in turn the RCAC's three Armoured Regiments, in order ensure the similar delivery of armoured capabilities within the CA's three CMBGs.

INTRODUCTION

2. In support of the Government of Canada's national policy interests, the CA "makes a vital contribution by projecting land power and providing a highly professional, scalable, agile, and responsive land force, ready for the challenges of the contemporary operating environment" and as such the "Army must be organized, equipped and trained to conduct and sustain Full Spectrum

Operations in the future security environment (FSE)." In order to meet these needs the CA developed the Force Employment Model, which is in turn synchronized by way of the MRP.¹

3. Within the Force Employment Model, the Reg F component of the RCAC has been designated the following tasks in support of Canada First Defence Strategy (CFDS) missions:²

a. CFDS Mission 5 (Sustained Expeditionary):

- (1) Be prepared to Force Generate a Battle Group Headquarters;
- (2) 1 x Armour Squadron (Tank); and
- (3) 1 x Armour Reconnaissance Squadron.

b. CFDS Mission 6 (Surge 1x Rotation Managed Risk):

- (1) Be prepared to Force Generate a Battle Group Headquarters;
- (2) Be prepared to FG one Reconnaissance Squadron; and
- (3) Be prepared to FG force protection for the Logistic Support Group/Service Battalion.

4. Maintaining readiness is a top priority of the Commander CA, as the credibility of the CA relies on its ability to generate land forces for any commitments asked of it by the Government of Canada.³ The asymmetrical structure of the RCAC does not easily enable this priority and a review leading to the realignment of the structures, personnel and equipment allocations amongst the three Reg F Regiments needs to be conducted. This paper will explore the current structure

¹ Department of National Defence, *Army Operating Plan 2017/2018 V*, (Ottawa: DND Canada, 2017), 1-6-7.

² Department of National Defence, *Master Implementation Plan Force 2018 Alignment Towards Land Operations 2021 (DRAFT)*, (Ottawa: DND Canada, 2017), C2 1-2

³ Department of National Defence, *Army Operating Plan 2017/2018 V*, (Ottawa: DND Canada, 2017), 1-5.

of the RCAC and identify its shortfalls. In order to understand the constraints and limitations imposed on any realignment, the personnel and more importantly the equipment constraints will be examined. Once this is understood, a proposed new RCAC establishment will be introduced, within the scope of this discussion, the ability of the new establishment to better meet the needs outlined in the CA Force Employment Model and MRP will be examined. A final but important area of consideration is the second order effects that any realignment of the RCAC establishment would have on supporting Corps and Branches, specifically Combat Service Support (CSS) and Engineers.

DISCUSSION

5. Under the current RCAC establishment, all three Reg F Regiments have dissimilar organizational structures and personnel allocations. As outlined in Annex A, the Regiments are structured with a mix of Armoured Reconnaissance Squadrons (Armd Recce Sqn) and Armoured (Tank) Squadrons (Armd Sqn). All Regiments are structured with Armd Recce Sqns, with both the Royal Canadian Dragoons (RCD) and 12e Régiment blindé du Canada (12e RBC) being primarily structured with three of these squadrons and Lord Strathcona's Horse (Royal Canadians) (LdSH(RC)) having one. In regards to Armd Sqns, 12e RBC does not have one in its structure, but shares manning responsibilities for the lone Armd Sqn within the RCD structure, this lone RCD squadron also shares force generation and force employment responsibilities to both 4th Canadian Division (4 Cdn Div) and 5 Canadian Division (5 Cdn Div) in the MRP. The LdSH(RC) are structured with two Armd Sqns and possess the majority of this capability in the CA. Personnel allocations range from 487 in 12e RBC, 534 in LdSH(RC) and 631 in the RCD.⁴

⁴ Department of National Defence, *Master Implementation Plan Force 2018 Alignment Towards Land Operations 2021 (DRAFT)*, (Ottawa: DND Canada, 2017), C2 1-2

6. The critical capability that is not present in all Regiments in the current establishment is the Armd Sqn, which is absent in 12e RBC. Though 12e RBC maintains a manning responsibility for the Armd Sqn in the RCD and provides approximately 50 percent of the personnel positions, it does not possess an integral Armd Sqn capability. As such, the RCD squadron is required to provide force generation and force employment responsibilities to two Cdn Divs. The resulting tempo on both personnel and equipment is exceptionally high and difficult to maintain. Additionally, this results in an Armd Sqn not being available to the non-supported Cdn Div for routine individual and collective training when that Cdn Div is not in the high readiness window of the MRP. This represents the current establishment being challenged to meet its required generation and employment requirements.

7. Under the current establishment, an argument can be made that the Armd Recce Sqn capability is overrepresented. Amongst the three Regiments, a total of seven Armd Recce Sqns exist in the structures compared to three Armd Sqns, with the overwhelming majority within the 12e RBC and RCD. This imbalance between the Regiments has two impacts. Firstly, the 12e RBC and RCD are structured to produce a capability for their respective CMBGs in excess. The Armd Recce Sqns are identified to be employed as formation level (Brigade) reconnaissance manoeuvre elements and in both the Force Employment Model and in armoured Doctrine, only one squadron sized element is ever needed to be force generated and employed.⁵ Secondly, the imbalance of Armd Sqns amongst the CMBGs does not enable the Force Employment model and

⁵ Department of National Defence, *B-GL-305-002/FT-001, The Reconnaissance Squadron in Battle*. (Ottawa: DND Canada, 1979), 10.

does not enable the Commander CA's stated vital ground of proficiency in combat team operations, as not all CMBGs have access to tank manoeuvre sub-units.⁶

8. Critical to understanding the reasoning for this imbalance in capabilities, is having an appreciation for the limited number of vehicle platforms available to the RCAC. The structure of the Corps is currently based primarily upon the limited fleet of Leopard 2 Main Battle Tanks (Leo 2 MBT) that stands at 82 available platforms, of which approximately 20 are dedicated to individual training for both the RCAC and the Corps of Royal Canadian Electrical and Mechanical Engineers (RCEME). As such, this allows for approximately 60 Leo 2 MBTs being available for operational units, the equivalent of three Armd Sqns. The number of platforms more suitable for reconnaissance operations is more robust, and by 2020 all of these vehicles will be newly fielded Light Armoured Vehicle 6.0 (LAV 6.0) and Tactical Patrol Armoured Vehicles (TAPV). The combined number of these vehicle is 176. This is adequate numbers to equip six Armd Recce Sqns, plus fighting vehicles for Battle Group Headquarters. As such, the number of available platforms is the hard constraint for growing the Armd Sqn capability. With this conclusion, the most viable option is for a more symmetrical distribution of available Leo 2 MBTs. In regards to personnel, Crewmembers and Armoured Officers are trained to be proficient across the spectrum of armoured operations and the Individual Training system for both cohorts enables employment in either an Armd Recce Sqn or Armd Sqn. As such, personnel are not a limiting factor in any realignment proposal.⁷

⁶ Department of National Defence, *Army Operating Plan 2017/2018 V*, (Ottawa: DND Canada, 2017), 1-8.

⁷ Department of National Defence, *Canadian Army Doctrine Note 2017/01: Armour in Operations (DRAFT)*, (Ottawa: DND Canada, 2017), 6.

9. Based upon these factors and constraints, it is apparent that the current establishment does not easily enable the RCAC's Force Employment responsibilities for either CFDS Mission 5 or 6, but with a proposed restructure of the establishment, specifically in regards to equipment (vehicles) amongst the RCACs, a more suitable establishment is achievable. The key is near symmetrical Regiments in regards to vehicles and the balancing of personnel within the RCAC.

10. An important consideration is that within the RCAC, a doctrine realignment is currently under way. The central theme of this doctrine realignment is that in the future individual squadrons are not to be constrained to a limited number of tasks along the spectrum of armour operations based upon their historic fielded equipment. The proposed doctrine articulates that any armoured capability can be tasked along the spectrum of fix, find, strike, and exploit regardless of the equipment fielded.⁸ The limiting factor for the use of armoured resources along the spectrum should be threat and capability based, not vehicle platform specific. As an example, based upon an increased threat of enemy direct fire platforms Leo 2 MBTs could be tasked to conduct reconnaissance tasks and in a low armour threat environment TAPVs could be tasked to conduct manoeuvre to strike tasks. As such, further discussion of the structure of the proposed squadrons will be equipment focused and not task focused.

11. The proposed symmetrical Regiments would be composed of three F Echelon (F Ech) Squadrons and one CSS Squadrons (HQ Sqn). All three Regiments would have identical Regimental Headquarters (RHQ) and HQ Sqns. Additionally, the F Ech Squadrons would be comprised of three distinctly equipped squadrons. One squadron equipped with Leo 2 MBTs, a

⁸ Department of National Defence, *Canadian Army Doctrine Note 2017/01: Armour in Operations (DRAFT)*, (Ottawa: DND Canada, 2017), 10.

second squadron equipped with LAV 6.0s and a third squadron equipped with TAPVs. This structure would enable each Regiment to provide and meet its force generation requirements and with the equipping of the third squadron with TAPVs, each Regiment would be well suited to fulfil the Force Protection task with CFDS Mission 5, that is currently not designated to any other Reg F element. The specifics for the respective squadrons are outlined further below:

a. Leo 2 MBT Squadron: This squadron would be composed of 19 Leo 2 MBTs, in the doctrinal configuration of four Troops equipped with four MBTs and a Squadron Headquarters (SHQ) equipped with 3 MBTs. This squadron would enable the Regiment to force generate the required MBT capability required to satisfy both the Commander CA's vital ground of proficiency in doctrinal Combat Team operations and in the force generation of a MBT sub-unit for employment as part of CFDS Mission 5. Full squadron ORBAT outlined in Annex C.

b. LAV 6.0 Squadron: This squadron would be composed of a limited number of six TAPVs and 22 LAV 6.0. The LAV 6.0s will be mix of variants with four general purpose and 18 Recce variants in the doctrinal configuration of three Troops equipped with eight fighting vehicles and a Squadron Headquarters (SHQ) equipped with two LAV 6.0s. This squadron would enable the Regiment to force generate the required medium reconnaissance capability required to satisfy the force generation of a Brigade reconnaissance sub-unit for employment as part of CFDS Mission 5 or CFDS Mission 6. Full squadron ORBAT outlined in Annex C.

c. TAPV Squadron: This squadron would be composed of a limited number of six LAV 6.0s and 22 TAPVs. The TAPVs will all be Recce variants in the doctrinal configuration of three Troops equipped with one LAV 6.0, more capable communications suite, and 7 TAPVs and a Squadron Headquarters (SHQ) equipped with one LAV 6.0 and one TAPV. Based upon the threat, this squadron would enable the Regiment to force generate a light reconnaissance capability required to satisfy the force generation of a Brigade reconnaissance sub-unit for employment as part of CFDS Mission 5 or CFDS Mission 6. Additionally, this squadron would be ideally suited for employment as the Force Protection sub-unit as part of CFDS Mission 5. Full squadron ORBAT outlined in Annex C.

12. Any discussion of RCAC symmetry that includes the allocation of MBTs in each of the CMBGs also needs to include a conversation of the symmetry of the elements that support MBTs. Under the current establishment MBTs are only found in two locations, 3rd Canadian Division Support Base Edmonton and 5th Canadian Division Support Base Gagetown. As such, the CSS and Combat Engineer assets required to support MBTs are also only allocated to those two locations.⁹ For symmetry to be effective, these two support elements will need to be involved in any discussions to ensure that symmetry also exists in Armoured Recovery Vehicles and Armoured Engineering Vehicles and complimentary capabilities.

⁹ Department of National Defence, *Master Implementation Plan Force 2018 Alignment Towards Land Operations 2021 (DRAFT)*, (Ottawa: DND Canada, 2017), C3 1-2.

CONCLUSION

13. The current establishment of the RCAC does not effectively enable two of the three Reg F Armoured Regiments to capably support either the Commander CA's vital ground of proficiency in Combat Team operations within their respective CMBG or to easily meet the force generation requirements as outlined in the CA's Force Employment Model. The main contributing factor limiting some Regiments ability to meet these demands is the asymmetrical allocation of vehicle platforms and personnel amongst the Regiments.

14. The solution to this issue is to realign the establishment of the RCAC and strive for symmetry among the Regiments in terms of equipment, personnel and in turn capabilities. Based upon the allocations of resources outlined in the current Force Employment concept, the resources exist to achieve this, but due to the disproportionate allocation of Armd Recce Sqns and Armd Sqn within this concept it will not be achievable without subsequent review and realignment. Any further review must not be conducted myopically, constrained to the RCAC. Any discussion of the reallocation of certain armoured platforms, specifically MBTs, requires input and buy in from critical supporting stakeholders such as the RCEME and the Engineer Corps.

RECOMMENDATION

15. It is recommended that the establishment of the RCAC be reviewed with a view to achieving symmetry across the CA's three Regiments in not only platform availability but in ability to meet the capabilities expected of the Commander CA. In the review, Director Land

Force Development should also explore the impacts of armoured vehicle platform symmetry on supporting RCEME and Engineer Corps.

Annexes:

- A. Current RCAC Establishment
- B. Proposed RCAC Establishment
- C. F Echelons ORBAT

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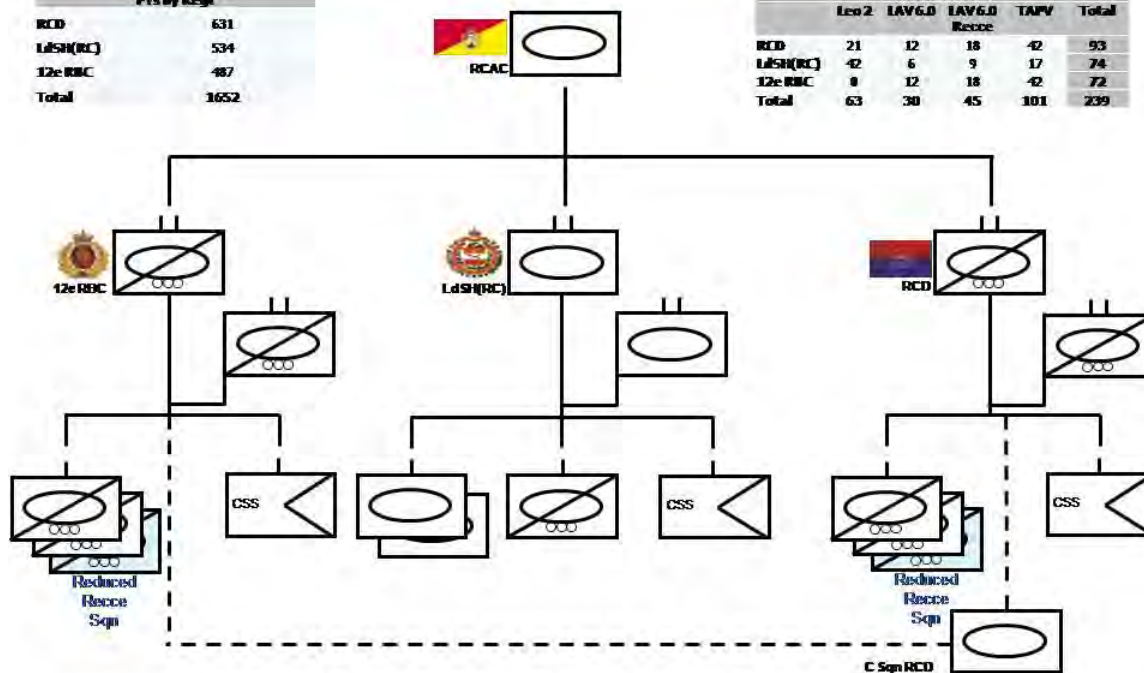
Annex A
 Current RCAC Establishment
 5 February 2018

Current RCAC Establishment



PI's by Regt	
RCD	631
LdSH(RC)	534
12e RBC	487
Total	1652

TOTAL A WEBS				
Leo 2	LAV 6.0	LAV 6.0	TAPV	Total
Rece				
RCD	21	12	18	42
LdSH(RC)	42	6	9	17
12e RBC	8	12	18	42
Total	63	30	45	101



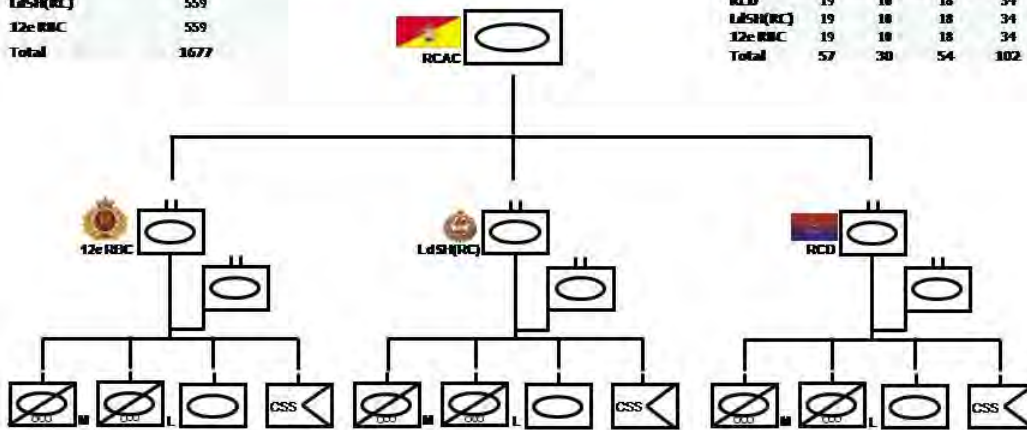
Annex B
 Proposed RCAC Establishment
 5 February 2018

Proposed RCAC Establishment



PYs by Regt	
RCD	559
LdSH(RC)	559
12e RBC	559
Total	1677

	TOTAL A VENS				Total
	Lev 2	LAV 6.0	LAV 6.0 Recoe	TAPV	
RCD	19	18	18	34	61
LdSH(RC)	19	18	18	34	61
12e RBC	19	18	18	34	61
Total	57	30	54	102	243

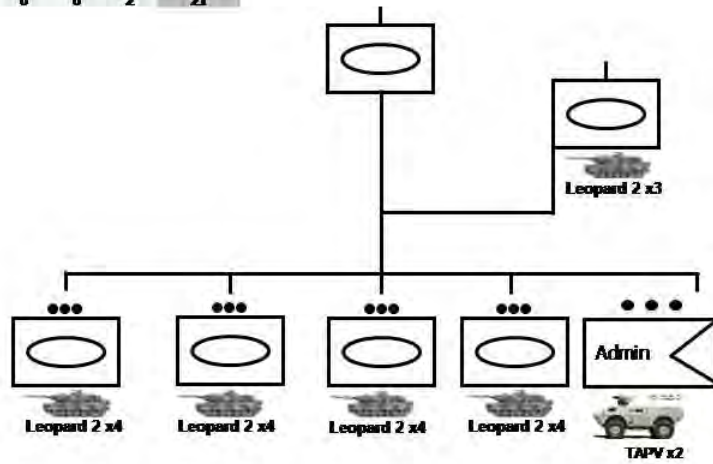


Annex C
F Echelons ORBAT
 5 February 2018

Leo 2 MBT Squadron



	AVehicles				Total
	Leo 2	LAV 6.0	LAV 6.0	TAPV	
				Recco	
SHQ	3	0	0	0	3
1TP	4	0	0	0	4
2TP	4	0	0	0	4
3TP	4	0	0	0	4
4TP	4	0	0	0	0
ADMIN	0	0	0	2	2
Total	19	0	0	2	21

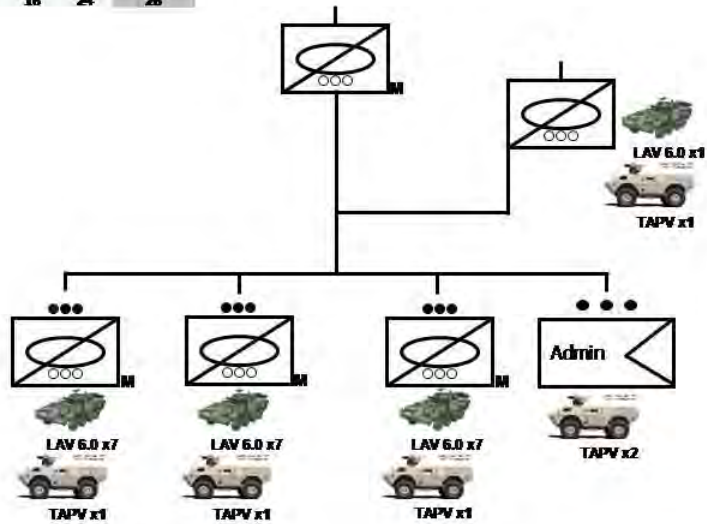


Annex C
F Echelons ORBAT
 5 February 2018

LAV 6.0 Squadron



	AVehicles				Total
	Leo 2	LAV 6.0	LAV 6.0	TAPV	
			Recco		
SHQ	0	1	0	1	2
1TP	0	1	6	1	8
2TP	0	1	6	1	8
3TP	0	1	6	1	8
4TP	0	0	0	0	0
ADMIN	0	0	0	2	2
Total	0	4	18	24	28



Annex C
F Echelons ORBAT
 5 February 2018

TAPV Squadron



	AVehicles				Total
	Leo 2	LAV 6.0	LAV 6.0	TAPV	
			Recco		
SHQ	0	1	0	1	2
1TP	0	1	0	7	8
2TP	0	1	0	7	8
3TP	0	1	0	7	8
4TP	0	0	0	0	0
ADMIN	0	0	0	2	2
Total	0	4	0	24	28

