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Royal Canadian Air Force's Managed Readiness Plan

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ROYAL CANADIAN AIR FORCE MANAGED READINESS PLAN

By Major M.A.J.Y. La Haye

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ABSTRACT

With 2022 approaching, the Royal Canadian Air Force (RCAF) will celebrate the 10th year anniversary of its Managed Readiness Plan (MRP). This research paper argues that, although still a work in progress, the MRP and its related activities have been successful and were a direct contributor to the RCAF's success in expeditionary air operations. It first reviews the evolution of the MRP, before looking to allies and other elements. Analyzing the MRP's current situation and its background, and examining what and how other allies and elements have gone through similar changes will give the RCAF insight into avenues of exploration in order to adapt its management of the MRP in a post COVID-19 and post-counter insurgency operations world.

The following recommendations emerge from this paper, for further development and implementation:

- Develop tactics focused on operating in an austere and peer-to-peer environment and implement the findings in the MRP;
- Integrate Canadian Joint Operations Command as the overarching integrator all Canadian Armed Forces MRPs in an effort to maximize synergies amongst elements and components;
- Further investigate the just balance when it comes to collective training in order to maximize the efforts and the safety measures of having in person events;
- Develop a model similar to the Australian Defence Force, where the cost to achieve and maintain operational readiness; and
- RCAF to review its strategy when it comes to adherence and daily usage of monitor mass software.

CHAPTER 1 - INTRODUCTION

The RCAF's transformation into an expeditionary air force makes it more strategically relevant to the Canadian government

- Colonel Luc Girouard, *A Tool of Strategic Relevance: The RCAF's Transformation Into an Expeditionary Air Force*

With the requirement to meet the Chief of the Defence Staff (CDS) Force Posture and Readiness (FP&R), the Royal Canadian Air Force (RCAF) has had to adapt and evolve a credible expeditionary air force capability. Driving the change from the top down through strategic documents like the *RCAF Vectors* and the RCAF Campaign Plan, the RCAF has, in a short amount of time, put forward an expeditionary air force employment construct that has successfully demonstrated what the RCAF can do as a smaller air force.¹ After Operation UNIFIED PROTECTOR, RCAF leaders knew something had to be done in order to get better at expeditionary air operations, keep the balance between the demands of the FP&R, the new expeditionary employment construct, and quality of life for its personnel.² As part of these efforts, according to retired Lieutenant General Parent, the Commander of the 1st Canadian Air Division (1 CAD) at the time of the creation of the first Managed Readiness Plan (MRP), the inability of the different branches of the Air Force to work well together made him implement the “flying in formation” moto. Its goal was for the RCAF to be better than a sum of all parts.³ The MRP has helped enabled the departure of the silo-minded culture and empower the different fleets to work toward this objective.

¹ Sanu Kainikara, "The Future Relevance of Smaller Air Forces." (Royal Australian Air Force Air Power Development Centre, Working Paper 29, 2009), 3-4.

² Richard Mayne, “The Canadian Experience: Operation Mobile”, in *AIR WING: RCAF Commanders' Perspectives During the 2011 Libyan Conflict*, ed. Richard Mayne and William March, 1-26 (Royal Canadian Air Force: RCAF Aerospace Warfare Centre, 2018) 15-16.

³ Lisa Gordon, *Skies Magazine*, “Time to recharge: LGen Alain Parent retires after 39 years in the RCAF”, last modified, 11 June 2018. <https://skiesmag.com/news/time-to-recharge-lgen-alain-parent-retires-after-39-years-in-the-rcaf/>.

The implementation of the RCAF MRP in 2012 would, in theory, enable commanders across the air force to plan their yearly schedule and therefore allow unit members to understand the expectation for them throughout the year in a more unified way. However, the MRP and its value to the RCAF is not as well understood within Canada's professional air force institution as it probably should be. Therefore, with 2022 soon approaching, the MRP will celebrate its 10-year anniversary, and so it is a good time to re-assess this important RCAF program. In particular, the following questions are pertinent: Has the RCAF's MRP fulfilled its initial intent? Has it delivered on its promises? Could it be improved to fit the new 2022 reality? What lessons from the MRP or equivalents of other services and nations can be learned and applied to benefit the RCAF?

This paper will argue that, although still a work in progress, the MRP and its related activities have been successful and were a direct contributor to the RCAF's success in expeditionary air operations. Analyzing the MRP's current situation and its background is vital to understand how it can evolve to address the RCAF's requirements in the future. Examining what and how other allies have gone through similar changes will be a key enabler to save time and stay credible. It will also give the RCAF insight into avenues to further explore in order to adapt its management of the MRP in a post COVID-19 and post Counter-Insurgency (COIN) operations world. To place the questions and analysis in context, it is important to review the available literature on the RCAF MRP.

On the subject of the RCAF MRP, it is unsurprising that the subject has not been explored by the academic world. The exception to this is a few recent Canadian Forces College Joint Command and Staff Program (JCSP) and National Security Program (NSP) student papers, the different CAF journals, and the work of the RCAF

Aerospace Warfare Centre (RAWC) staff. Internationally, most of the relevant literature on military managed readiness is found in a similar way as the Canadian documents: within each nation's doctrine institution system and by exception in an academic format. Because of the lack of published secondary sources on this topic, the author had to rely on primary sources such as primary documents, correspondence with senior RCAF and CA officers, and his own professional experiences to fill the gaps. Having said that, when broadening the research and including air expeditionary operations, one finds more on the matter in a context closely related to the MRP.

A noticeable publication that makes direct reference to the RCAF MRP comes from the RAWC. Lieutenant-Colonel (ret'd) Pux Barnes, in a his fifth article of a series dedicated to Command and Control (C2), references the MRP as key component of the Air Task Force: a construct he identifies as the solution to the C2 issues faced during Operation MOBILE. Underpinning the Air Force Expeditionary Capability (AFEC) concept of operations, the MRP brought a sense of order and enabled the multiple stovepipes of the Air Force to focus on being better at air expeditionary operations.⁴

It is common to compare the CAF with the Australian Defence Force (ADF). This includes capabilities, procurement system, foreign policy and there is a common perspective that the Australians do things better than the Canadians.⁵ In one article written by Jason Begley in the *Australian Defence Force Journal*, it is actually the opposite. The author compares the United States Air Force (USAF) and the RCAF expeditionary model as a reference that the Royal Australian Air Force (RAAF)

⁴ Pux Barnes (Ret'd Lieutenant-Colonel), "Air Doctrine Note 14/01, RCAF Air Task Force Commander: Considerations for the Employment of Air Power in Joint Operations." (Royal Canadian Air Force: RCAF Aerospace Warfare Centre, 2014), 1- 2.

⁵ Matthew Fisher, Global news, "COMMENTARY: Canada should follow Australia's example in defence, foreign policy", last modified 13 July 2020. <https://globalnews.ca/news/7161890/commentary-canada-should-follow-australias-example-in-defence-foreign-policy/>

should consider to adopt a better expeditionary structure. More specifically, he argues, “the RCAF has not only articulated a detailed, measurable implementation plan for generating an expeditionary configuration and readiness but has also acknowledged the need for continuous doctrinal evolution.”⁶

In Canadian academia, Allan English has compiled a series of essays on Canadian expeditionary air forces. Here, he presents the common perception that the Air Force exists to serve the other forces (Army, Navy). This was representative of high-ranking military officials and scholars at its time of publishing. In particular, naval academic Richard Gimblett says, “the navy leads, the army defines, and the air force lends substance.”⁷ This is of importance because, this opinion was potentially true in the early 2000s, but with the acquisition of key systems like the CC-177 Globemaster and the creation of the MRP, the AFEC and the multiple successful deployments led by 2 Wing, the general opinion has shifted in recent history.⁸ Interestingly enough, in a different essay of the same book, author Thierry Gongora goes into detail about how the USAF went about with their initial transformation to an expeditionary air force. This insight on how the USAF went through their process of change is very interesting and demonstrates the change is not something that happens overnight.⁹

⁶ Jason Begley, “Is the RAAF Optimally Configured to Undertake Expeditionary Operations?,” *Australian Defence Force Journal* 191 (2014): 78.

⁷ Richard Gimblett, “The Canadian Way of War: Experience and Principles,” in *Canadian Expeditionary Air Forces – Bison Paper 5*, ed. Allan English, 9-20 (Winnipeg: Centre for Defence and Security Studies, University of Manitoba, 2004), 15.

⁸ Major General Michel St-Louis, Commander of Canadian Army Doctrine and Training Centre, Teams conversation with author, 1st April 2021; Brigadier General Iain Huddleston, Director General Air Force Readiness, teams conversation with author, 6 April 2021; Colonel Luc Girouard, Commander 2 Wing, telephone conversation with author, 15 January 2021. Each member in conversation with author all identified that the results of the implementation of the AFEC and MRP have made the RCAF a more relevant tool for the CAF and the Government of Canada.

⁹ Thierry Gongora, “The Meaning of Expeditionary Operations from an Air Force Perspective” in *Canadian Expeditionary Air Forces – Bison Paper 5* ed. Allan English, 21-34 (Winnipeg: Centre for Defence and Security Studies, University of Manitoba, 2004), 21-32.

A Tool of Strategic Relevance: The RCAF's Transformation Into an Expeditionary Air Force, a Canadian Forces College NSP major research project written by Colonel Luc Girouard, provides the most comprehensive background on this topic. The insights and research within this work is an excellent initial source of pertinent material on the Canadian expeditionary air force concept, and tells the story of how the RCAF got to where it is today. Importantly, Girouard argues that as a result of the changes made by the RCAF leadership in the early in the 2010s, the RCAF became a relevant strategy tool for the CAF and the Government of Canada today. Girouard's conclusion becomes the starting point for the thesis of this research project.

This research project is broken into three chapters following this introductory chapter to support the thesis. Chapter two will look in depth at how the MRP is managed from start to finish within the RCAF. With the Canadian Army (CA) MRP being a key influence on the RCAF MRP, this chapter will also examine the recent changes to the CA MRP and how they could influence the RCAF MRP. It will also look at RCAF Commander level documents and doctrine that drive the requirement for expeditionary operations and try to synchronize efforts to move forward. Then it will examine the result of the MRP's success when it comes to its output; in this case, more specifically, it will discuss what the RAWC and 2 Wing have accomplished when it comes to expeditionary operations. Finally, it will analyze how the readiness management has fared since its inception, leveraging an Associate Deputy Minister (Review Services) (ADM(RS)) report. The additional goal of chapter two is to be an educational reference for newer air force officers and non-commission members that want to understand the process, governance and evolution of the RCAF expeditionary system.

Chapter three will explore how other allied air forces address managing their readiness and expeditionary deployment capabilities. Analyzing Canada's allies, in this case the USAF and the RAAF, reveals both successes and areas for improvements from which the RCAF can learn to ensure its MRP continues to progress. From the USAF perspective the focus will be on their transition from post Gulf War to today and beyond in terms of expeditionary capabilities. From the RAAF perspective, the focus will be on their capability to quantify the cost of readiness for expeditionary operations and how they are jointly structured to face their potential adversaries.

Finally, in Chapter four, this paper will propose some future avenues to explore in order for the RCAF to stay a tool of strategic relevance for the government of Canada. To do so, it will answer four important questions: in a post COVID-19 era, how should collective training be conducted? With the rise of China and the resurgence of Russia, how can the RCAF adapt to stay relevant in a near peer conflict environment? With the constant personnel shortage, how can the current force to stay relevant without asking too much from its people? Finally, with the constant criticism that the CAF is not a joint force, could managing the readiness of the CAF at the joint level improve overall preparedness and delays in assignment of names to task? The objective of these last two questions acknowledges the RCAF's focus on personnel, and therefore introduces possibilities for a better system of human resource management for air expeditionary operations.

With a full chapter on CAF members and their families in *Strong Secure and Engaged* (SSE), it is clear that the well-being personnel is a vital CAF priority.¹⁰ Consequently, this theme is central to the analysis of the MRP. Furthermore, it is relevant when researching other elements within the CAF to understand how they

¹⁰ Department of National Defence, *Strong, Secured, Engaged: Canada's Defence Policy* (Ottawa: Department of National Defence, 2017), 19-31.

have adapted to stay relevant, making it critical in the analysis and recommendations for further study. Keeping that idea in mind, it is the MRP's primary goal to balance the needs of both the operational requirements and people in order to achieve the mission. How the MRP meets these competing needs will therefore be explored next.

CHAPTER 2 - THE MRP FROM STRATEGIC TO TACTICAL

Introduction

While the Air Board recognized in 2006 the requirement to have a more integrated and capable expeditionary force,¹¹ it was not until end of the conflict in Libya in 2011 that this idea started to get some traction. After the conclusion of Operation UNIFIED PROTECTOR (OUP),¹² the RCAF had a lot of soul searching to do. Although the mission was tactically and operationally a success and once again the CAF had “punched above its weight,” it also demonstrated the inability to effectively deploy and support a coherent expeditionary force package for a specific mission.¹³ Further, it left CAF and the RCAF in a precarious condition, unable to operate normally back home.¹⁴

From that point on, the Commander of the RCAF and his staff put a lot of effort into rethinking the way to deploy forces without over-stressing what was left at home. The output that enables the RCAF to globally project air power, while simultaneously being able to continue North American Aerospace Defence Command (NORAD) and Search and Rescue (SAR) operations at home, is the MRP. By putting this high readiness tool in place, the RCAF is able to face the challenges of expeditionary operations without affecting domestic missions and therefore fulfil the FP&R mandates. The MRP is therefore that conductor in the background, enabling all the different Force Generation (FG) pieces of the RCAF to train and prepare to be

¹¹ Department of National Defence. *Air Force Expeditionary Capability Concept of Operations* (Ottawa: Royal Canadian Air Force HQ, 2012), 1.

¹² Operation MOBILE for Canadians.

¹³ Richard Goette, *Preparing the RCAF for the Future: Defining Potential Niches for Expeditionary Operations* (Trenton: Royal Canadian Air Force Aerospace Warfare Centre, 2020), 103-104.

¹⁴ Pux Barnes (Ret'd Lieutenant-Colonel). *The RCAF Air Task Force: Considerations for the Employment of Air Power in Joint Operations*. 1.

Force Employed (FE): allowing the RCAF to be able to fulfil its duties and mandate toward the CDS FP&R.

This chapter will examine how the RCAF arrived at the current MRP, and how the last decade of work on this initiative better positioned the RCAF to meet the expeditionary mission of today. More specifically, the focus of the chapter will be on the formal doctrinal process, the side effects of the implementation of the MRP, and an assessment of effectiveness of the MRP leveraging an analysis of the Air Force Readiness Program produced by the ADM(RS).

MRP Doctrine

The MRP consists of an order that the Commander (Comd) of 1 Canadian Air Division (1 CAD) gives to all personnel under their Command. Additionally, Comd 1 CAD is delegated authority by Commander RCAF to task 2 Canadian Air Division (2 CAD) and the RAWC personnel for the purpose of supporting the tasks of the MRP, understanding that they would only do so if their current battle rhythm allowed.¹⁵ The order is reviewed each year, and tasks are assigned to 1 CAD Staff and Wings to support either FG of Air Task Forces (ATFs) or Air Detachments (AIRDETs) for a set period of vulnerability. Therefore, the outcome of the MRP enables the RCAF to provide: “ATFs and AIRDETs to employ in support of deliberate and contingency operations while maintaining North American Aerospace Defence (NORAD) and Search and Rescue (SAR) capabilities.”¹⁶

In Canada, the MRP construct was first put in place by the Canadian Army (CA). Its purpose was to manage the cycle of training required before deploying, inform the other elements of FG scheduling in order for them to be able to support the

¹⁵ Department of National Defence. *1 Canadian Air Division Managed Readiness Plan (MRP) 2019*. (Winnipeg: 1 Canadian Air Division, 2019), 3.

¹⁶ *Ibid.*, 2.

CA, and to generate synergetic training. This enables associated geographical units training together for their collective mission, which is both efficient and effective. For similar reasons, the RCAF MRP ensures that 1 Wing tasks are aligned with the CA MRP in order to support CAF efforts. Additionally, for joint coordination with the Royal Canadian Navy (RCN), the MRP similarly tasks 12 Wing with generating the proper AIRDETs to support CAF missions.¹⁷

In addition to executing the NORAD and SAR missions, 1 CAD is required to support the government of Canada's other concurrent SSE commitments to "defend Canada ... meet commitments to NATO Allies under Article 5 of the North Atlantic Treaty, and contribute to international peace and stability."¹⁸ In order to accomplish these missions, 1 CAD, via the MRP, can task assets and by extension personnel when the mission is known to the Wings, 2 CAD and the RAWC. This accomplished through the generation of two lines of operations (LoO): LoO 1 for deliberate operations and LoO 2 for contingency operations.¹⁹

As per its description, LoO 1 is when the government of Canada commits forces for a foreseeable future. An example of this is the support to the international coalition against DAESH with Operation IMPACT,²⁰ which has been ongoing since the summer of 2014. As the requirements of the deliberate operation are well described, it is given to the main six Wings across Canada to generate forces on

¹⁷ Tough (Captain), MRP & Resumption of CT (PowerPoint, Ottawa: CA Headquarters, 2020), slide 11.

¹⁸ Department of National Defence, *Strong Secure Engaged: Canada's Defence Policy...*, 81.

¹⁹ Deliberate operations are operations that are known in advance because they are either currently going on or they are on a recurring base, for example the NATO air patrols in Romania are only happening for set period of time but now have been going on for 4 years. On the other end of the spectrum, the contingency operations are the operations that are unknown and therefore cannot be forecasted in the MRP other than having a team identified to answer the call when required. That task is generally given to 2 Wing.; Department of National Defence. *1 Canadian Air Division Managed Readiness Plan (MRP) 2019...*, 1.

²⁰ Department of National Defence, *Operation IMPACT*, last modified, 30 March 2021. <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/operation-impact.html>

rotation in order to evenly spread the task across the RCAF.²¹ In order to further limit the burden of the mission on each Wings, the main six Wings are divided into three geographical areas and assigned a partner Wing.²² On rotation, a lead Wing will be designated with the task to support the mission and it can expect some level of assistance from the supporting Wing in that geographical area, while also in some cases being supported by a 4th group not bound geographically. The 4th group encompasses all the other Wings²³ across Canada which are not otherwise included in the main rotation, and includes 1 CAD staff, 2 CAD and the RAWC. These additional forces have the role to support the generation of the LoO 1 task to the best of their ability without affecting their primary mission. The result is that, in theory, for a six-month rotation, the burden on a Wing to generate an ATF or AIRDET for LoO 1 would only happen every three years.²⁴

In contrast, LoO 2 will be tasked on short notice or, in some cases, when the operation was unknown at the time of the publication of the MRP by Commander 1 CAD. Because of the unknown nature of that LoO, 2 Wing is designated to fulfil that vanguard role year round. This chapter will cover 2 Wing in more detail later, but in short: “2 Wing comprises the core of a permanent deployable force on perpetual high readiness (HR) able to assume LoO 2 responsibilities.”²⁵ It is also important to mention that in some case the deployed LoO 2 effort will become a LoO 1 effort within the current or next MRP. For example in 2017, when Canada committed to support the reassurance measures against Russia by sending CF-188s to Romania, the

²¹ The main Wings are Comox, Cold Lake, Winnipeg, Trenton, Bagotville and Greenwood.

²² Western Comox and Cold Lake, Central Winnipeg and Trenton and Eastern Bagotville and Greenwood.

²³ 1, 2, 5, 9, 12 and 22 Wing.

²⁴ Department of National Defence. *1 Canadian Air Division Managed Readiness Plan (MRP) 2019...*, 2.

²⁵ *Ibid.*

LoO2 was sent to open the theatre and to execute the mission.²⁶ In contrast, the following years, because of the now known requirement to support Operation REASSURANCE ATF-Romania, Comd 1 CAD inserted the task in the MRP order and, with proper planning, enabled the task to be included as a LoO 1.²⁷ Although this transition happened just the following year, this adjustment is dependent on the capabilities available within the RCAF. Most importantly, this reassignment of a mission as LoO1 enables to reset the LoO 2 capacity, thereby making it available for other contingency deployments.

In addition to the two LoOs tasks, the MRP also manages the readiness of the RCAF to support defined contingency plans (CONPLAN) as described by SSE.²⁸ More specifically, the emphasis is put on making sure the proper Wings are tasked with being prepared to support Non-Combatant Evacuation Operation (NEO) under CONPLAN ANGLE or to support a Humanitarian Assistance and Disaster Relief (HADR) mission under CONPLAN RENAISSANCE, of which the Disaster Assistance Relief Team (DART) plays a key role.²⁹ When it comes to execution of both CONPLANs, in most cases the LoO2 will be deployed with support from flying squadrons.

In parallel to the LoO 1 tasks that require the Wings to generate a mounting cell, coordinate and attend collective training, some of the six main Wings are also tasked with providing support to smaller missions with known start and end dates. That support would normally be done in the form of detached element of a Squadron

²⁶ Department of National Defence, *Operation REASSURANCE*, last modified 16 February 2021. <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/operation-reassurance.html>

²⁷ Department of National Defence, *1 Canadian Air Division Managed Readiness Plan (MRP) 2012-2017, 2018, 2019, 2020-2021* (Winnipeg: 1 Canadian Air Division, 2012-2017, 2018, 2019, 2020-2021).

²⁸ Department of National Defence, *Strong Secure Engaged: Canada's Defence Policy...*, 81.

²⁹ Department of National Defence, *1 Canadian Air Division Managed Readiness Plan (MRP) 2012-2017, 2018, 2019, 2020-2021*.

and requires less effort because of the smaller number of personnel and equipment deployed. In addition, once in theatre, that element will have all integral support provided by either an ATF or a JTF, and therefore the role of that element is to strictly operate and not exercise Command and Control (C2) tasks. For example, in Operation PRESENCE in Uganda, 8 Wing is tasked to provide one CC-130J for a short duration of time, the C2 is tasked separately to a specific ATF that manages all the requirements of the CC-130J detachment once on in situ.³⁰

Finally, the MRP management responsibilities and caretaking is nested within the 1 CAD A5/A7 section. On a quarterly basis, the A7³¹ on behalf of the A5/A7 will review the MRP and publish the yearly MRP before the annual posting season.³² It is in this way the MRP ensures that the RCAF fulfils its mandate of SSE, by managing the capabilities committed by the RCAF in support of the CDS FP&R.³³

The Canadian Army adapted MRP

Without a doubt, the CA MRP has influenced CAF readiness as a whole. Since its introduction, with a stated objective to enable the CA to manage its contribution to the war in Afghanistan, the CA MRP only received its first major change in early 2020.³⁴ With the forces currently under its disposition, the CA MRP is built on the four Canadian divisions as opposed to the RCAF MRP that is built on an ATF concept

³⁰ Department of National Defence, *Operation PRESENCE*, last updated 23 April 2021. <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/op-presence.html>

³¹ Department of National Defence, *Terms of accountability A7* (Winnipeg: 1 Canadian Air Division, 2013), 1.

³² Department of National Defence, *1 Canadian Air Division Managed Readiness Plan (MRP) 2019...*, 11.

³³ Brigadier General Iain Huddleston, Director General Air Force Readiness, teams conversation with author, 6 April 2021; Colonel Luc Girouard, Commander 2 Wing, telephone conversation with author, 15 January 2021; Lieutenant-Colonel Scott Ash, Commander Barker college, Teams conversation with author, 11 March 2021.

³⁴ Brigadier General Errington, Zoom conversation with author, 18 March 2021; Brigadier General Errington was Army COS Ops at the time the CA MRP went through the change process.

with geographical, fleet and LoOs.³⁵ Despite the differences, understanding the CA MRP enables an overall understanding of CAF readiness and facilitates force integration.

Initially comprised of a Road to High Readiness (R2HR), High Readiness (HR) and support, each division would see its turn filling the roles. On completion, it would start the rotation over, with the Canadian Army Doctrine and Training Centre (CADTC) and the 5th Canadian Division constantly supporting these efforts. At the time of its inception, the main effort of the CAF was the war in Afghanistan; therefore, other commitments were scarce. With the Canadian departure from Afghanistan in 2014, the readiness strategy did not change, but the commitments did.³⁶

With Canadian parliamentarians committing contingency forces like the battle group in Latvia and the support mission in Ukraine, in addition to increasing prominence in support of domestic operations,³⁷ it became urgent to review the CA MRP. For Brigadier-General Errington, at the time the Canadian Army Chief of Staff Operations at the CA headquarters, it became a matter of being able to “cash the cheque” that the government had written.³⁸ Keeping the Afghan era system meant that there was a possibility of the Commander of the CA would have to walk into the CDS office to tell them that the CAF could not fulfil a commitment. The way the CA MRP

³⁵ Tough (Captain), *MRP & Resumption of CT* (PowerPoint, Ottawa: CA Headquarters, 2020), slide 11.; Colonel Luc Girouard, telephone conversation with author, 15 January 2021.

³⁶ Brigadier General Errington, Zoom conversation with author, 18 March 2021.

³⁷ Department of National Defence, Operation REASSURANCE, last modified 16 February 2021, <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/operation-reassurance.html>; Department of National Defence, Operation UNIFIER, last modified 4 February 2021, <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/operation-unifier.html>; Department of National Defence, Operation LENTUS, last modified January 2020, <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/operation-lentus.html>; Department of National Defence, Operation LASER, last modified 22 April 2021, <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/laser.html>.

³⁸ Brigadier General Errington, Zoom conversation with author, 18 March 2021.

worked prior to the change meant that the troops that were training or on the R2HR, were instantly deployed on operations like REASSURENCE and UNIFIER to replace the currently deployed HR troops, instead of staying home to be ready to deploy as a contingency force. This meant that it left nothing back home for contingency operations other than a force that just came back from a deployment.³⁹

With the new system, the intent is to deliberately maintain a contingency force ready to go at a moment's notice while at the same time fulfilling the commitments. The new structure will now also change its lexicon and instead of R2HR the new term used is "build," HR becomes "deploy" and support becomes "hold" (Figure 1.1).⁴⁰ Following the completion of their appropriate training, the force will be put on hold for a year. This will allow the CA to have that contingency force ready. The following year the hold force will be separated in different groupings and deployed on known missions.⁴¹

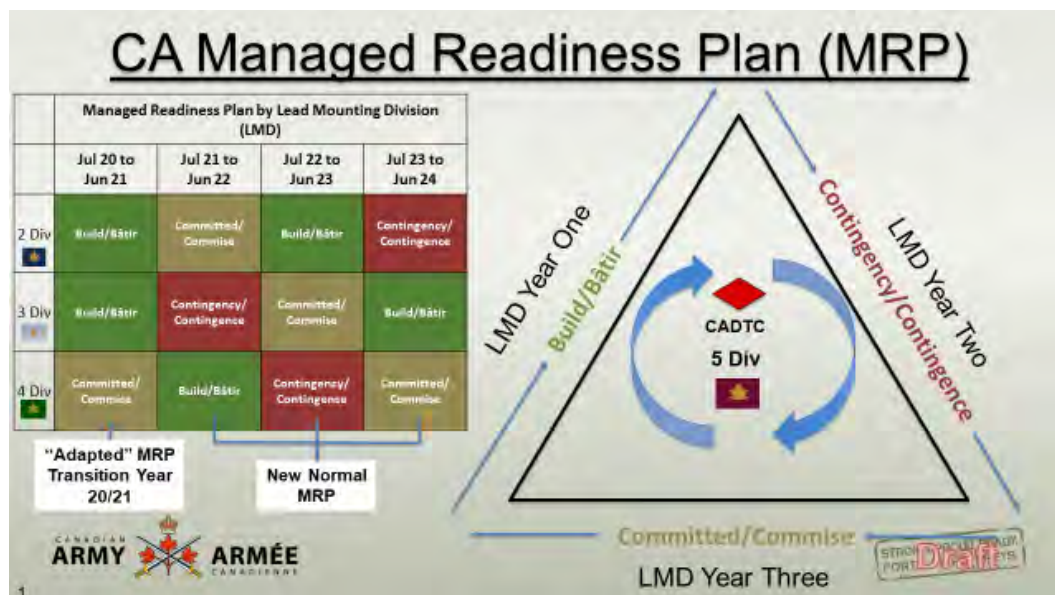


Figure 1.1 – Canadian Army Managed Readiness Plan 2020

Source: CA G35 brief to CTWG

³⁹ Brigadier General Errington, Zoom conversation with author, 18 March 2021.

⁴⁰ Tarrant (Lieutenant Colonel), *G35 brief to CTWG*, (Ottawa, DND, 2020), slide 1.

⁴¹ Brigadier General Errington, Zoom conversation with author, 18 March 2021.

One of the main benefit for the troops is advanced notice of what their task will be, unless the contingency force needs to be deployed. It also informs the incoming soldiers during the annual posting season (APS) of what is expected from the unit and therefore, if well understood, helps manage expectations during the APS. In the case that the contingency would be deployed, it leaves enough time for the CA to generate a follow on surge force to fulfil this commitment. Having said this, the main risk that the Commander CA had to take was to have additional forces being trained for short periods of time and potentially over-tasking one division that will see more build phase than the others.⁴²

Finally, and although the changes that the CA made to its MRP make sense and should help it better position itself in the future, it is unfortunately not something that can be transferred to the RCAF MRP. Unlike the CA, where each division represents a similar operational capability, RCAF Wings and Squadrons have unique functions. It would not be possible to create a one-for-one force rotate between Wings as each is largely centred around a capability (air mobility, fighters, tactical aviation, maritime patrol, etc.).

RCAF Strategic Direction and Doctrine with regards to the MRP

Having explained the MRP purpose and the basic premise behind how it works, this section will focus on the Strategic documents and frameworks that guide the MRP. Understanding why and how the MRP came to be, as well as what influences its inputs and outputs is essential to be able to answer where it needs to go in the future. Two key documents at the strategic level influence the MRP; *RCAF Vectors* and the RCAF Campaign Plan.

⁴² Brigadier General Errington, Zoom conversation with author, 18 March 2021.

RCAF Vectors is a capstone document from the Commander of the RCAF. Normally published early in their tenure as the elemental Commander, it is: “reviewed periodically... with a full update conducted every five years.”⁴³ It not only gives out the Commander’s intentions to the entire element, but also informs the other elements of what to expect from the RCAF during their tenure. As the latest iteration of this document notes, “RCAF Vectors is the most important tool that [Commander] RCAF has to provide strategic direction to the RCAF in the medium (1–5 years) and long term (5 years +) for steering the RCAF as an institution and articulating the context, ends and means.”⁴⁴

From the *RCAF Vectors*, the pertinent components to the MRP are the RCAF Pillars and the guidance of the six strategic LoOs that form the RCAF Campaign Plan (CP). Starting with 1 CAD, followed by 2 CAD and finally the RAWC,⁴⁵ the RCAF pillars represent the present to the future of operations. The key element is that each of the pillars plays an integral part in the outcome of the MRP, but each at different level. In the case of 1 CAD, it generates and delivers the air and space effects, but also collects the information on what went well and not so well in order to feed it back and make it better. 1 CAD is also the entity that puts into application the doctrine developed by the RAWC. 2 CAD prepares the next generation of operators and supporters and is at the forefront of training technologies.⁴⁶ Finally, the RAWC conceives tomorrow’s RCAF, or the future generation, by being the change agenda,

⁴³ Department of National Defence, A-GA-007-000/AF-008, *RCAF Vectors* (Ottawa: Royal Canadian Air Force HQ, 2019), 9.

⁴⁴ Department of National Defence, A-GA-007-000/AF-008, *RCAF Vectors* (Ottawa: Royal Canadian Air Force HQ, 2019), 10.

⁴⁵ *Ibid.*, figure 5.

⁴⁶ Department of National Defence, *RCAF Campaign plan* (Ottawa: Royal Canadian Air Force HQ, 2019), 13.

finding innovative ways to be better and developing the proper training support for operators and supporters.⁴⁷

From a RCAF CP perspective: “the aim of the CP is to provide the Commander RCAF with a tool to manage the readiness of the RCAF for the delivery of air and space power.”⁴⁸ The RCAF CP is reviewed every year, but will only be updated if a major change occurs to the five strategic CAF documents that feed it. The five feeder documents are: SSE, Investment Plan (IP), Defence Plan (DP), Force Capability Plan (FCP) and FP&R. Using all of the strategic documents, the RCAF CP is then able to make the link between the strategic and current RCAF activities using *RCAF Vectors*’ six strategic LoOs.⁴⁹ These are divided in reference to six core RCAF outputs: Air and Space Power Delivery; Air and Space Readiness; Air and Space Training and Professional Development; Air and Space Force Development; RCAF Personnel/Families; and RCAF Support to the Enterprise.⁵⁰

Air and Space Power Delivery, known as the strategic LoO 1, is the main LoO and is supported by all the other strategic LoOs. Each of the other five LoOs are unique in the specific elements they bring to LoO 1’s accomplishment. Of pertinence to the MRP is Air and Space Readiness, strategic LoO 2, where the focus is on readiness and collective training. This LoO additionally ensures that the level of effort put in its development is aligned with the other strategic guidance. As a result, LoO2 “is designed to align with the SSE Core Responsibility READY FORCES and will be measured through the DRF, the FP&R process and the RCAF Managed Readiness Plan.”⁵¹ In other words, each of the RCAF pillars play a key role via tactical effects in

⁴⁷ Department of National Defence, *RCAF Campaign plan* (Ottawa: Royal Canadian Air Force HQ, 2019), 13.

⁴⁸ *Ibid.*, 6.

⁴⁹ *Ibid.*

⁵⁰ *Ibid.*, 10.

⁵¹ *Ibid.*, 25.

enabling the success of the CAF and the RCAF when it comes to projecting Air and Space power around the globe. This requirement to have synergetic effect amongst the different directorate and Divisions is essential for the RCAF to fulfil its mandate and thanks to CP a guidance is provided to accomplish just that.

Tactical and Academic Outcome of the MRP

With the creation of the MRP, each RCAF pillar had to adapt in order to deliver the effects required to be successful. For 1 CAD, an additional major change in the landscape was required to support the MRP which was accomplished by expanding the role given to 2 Wing. In the case of 2 CAD, its major contribution came in the form of the Air Force Officer Development (AFOD) courses to build the required foundational knowledge at the beginning of an officer's career. Finally, in the case of the RAWC, its contribution came with further development and refinement of doctrine and additional expeditionary-focused courses. This section of the chapter will focus on 1 CAD, with the work from 2 Wing and the RAWC and their combined contributions, to the development of the expeditionary capability as a direct outcome of requirements from the implementation of the MRP.

2 Wing has established itself as the cornerstone of the expeditionary effort for the RCAF and its global projection.⁵² In addition to the MRP, 2 Wing is influenced by the AFEC Concept of Operation (CONOPS). With the requirement identified by the Air Board to generate a more robust expeditionary RCAF in 2006, the first official order that laid the groundwork for the future ATFs and AIRDETs was the signature of the AFEC CONOPS in 2009. According to the Air Force Expeditionary Capability Concept of Operations, this “provide[s] the RCAF with a comprehensive expeditionary capability that will enable the rapid and decisive delivery of aerospace

⁵² Department of National Defence, *2 Wing Forces Employment Concept* (Winnipeg, Manitoba: 1 Canadian Air Division, 2020), 10.

power and reach, whether in Canada, North America or abroad.”⁵³ With the official creation in 2009 of 2 Air Expeditionary Support Squadron (AESS), the AFEC CONOPS was able to set in motion the creation of the spearhead of the RCAF expeditionary capability, which would later become 2 Wing in its current format.⁵⁴

Since 2019, similar to the majority of the other Wings in the RCAF, 2 Wing has adhered to the Operational Support Squadron (OSS) and Mission Support Squadron (MSS) organizational construct.⁵⁵ This change, although given as an order by Commander RCAF in the form of an air doctrine note, was a natural evolution demonstrated by successful deployments utilizing the Operational Support Element (OSE) and Mission Support Element (MSE) model structure and the will to “train like you fight.”⁵⁶ Additional to 2 OSS and 2 MSS, 4 Construction Engineering Squadron (4 CES) and 8 Air Communications and Control Squadron (8 ACCS) complete the deployable units. 2 Wing’s mandate requires that it always has a high readiness capability ready to support the main four CONPLANS.⁵⁷ Therefore, 2 OSS, 2 MSS, 4 CES and 8 ACCS become the core enablers of any deployable ATF or AIRDET, making them the main feeder units for the Airfield Activation and Surge Team (AFAST) and other ATFs or AIRDETs under the main CONPLAN’s commitments. In order to be operational ready and able to fulfil those mandates, 2 Wing trains in preparation to support different mission sets.

There are a total of fourteen mission sets, with twelve focused on FE of the ATFs or AIRDETs. Their purpose is to “assist the HHQ’s [Higher Headquarters]

⁵³ Department of National Defence. *Air Force Expeditionary Capability Concept of Operations...*, iii.

⁵⁴ *Ibid.*, 1.

⁵⁵ The change was underway before the author left 2 Wing in 2018.

⁵⁶ Department of National Defence, *Air Doctrine note 19/01, Wing Restructure* (Ottawa: Royal Canadian Air Force HQ, 2019), 3-5.

⁵⁷ The main four CONPLANS are: LENTUS, RENAISSANCE, ANGLE, and JUPITER.

planning process, conduct RECCes [Reconnaissance], coordinate air operations, mount an ATF, beddown an ATF, activate an ATF, command an ATF, provide support to an ATF staff, shield an ATF, sustain an ATF, support air operations and deactivate an ATF.”⁵⁸ Filling the remaining two mission sets, which focus on FG of the ATFs or AIRDETS, 2 Air Expeditionary Training Squadron (2 AETS) is the 5th unit of 2 Wing, with a stated purpose to: “train the ATF and enable the validation of an ATF.”⁵⁹ In order to accomplish those tasks, 2 Wing conducts collective training exercises with the support of 1 CAD and the RAWC.

Inspired by the CA training model, on orders from 1 CAD, 2 AETS brings together at the mounting Wing location, the ATF or AIRDET personnel in order to conduct specific mission training. This training is done above what is required from the individual battle task standards and for Squadron level training. In other words, the collective training content focuses on level 5 to 7 of the RCAF level of training in order to better prepare the ATF or AIRDET to deploy.⁶⁰ While this enables the future ATF or AIRDET members to meet and become familiarized with each other, it also ensures individuals deploying understand the expected way to operate as a collective once in theatre. This level of effort in FG diminishes the ad hoc nature of conducting operations seen during OUP.⁶¹ In addition, it also offers an excellent opportunity for the future deploying Commanders of the ATFs or AIRDETs to meet their future teams before arriving in theatre, giving them a chance to give their direction and guidance prior to the deployment.

⁵⁸ Department of National Defence, *2 Wing Forces Employment Concept...*, 27.

⁵⁹ *Ibid.*; 2 AETS was named 2 Expeditionary readiness Center (ERC) until the change of structure in 2018.

⁶⁰ Department of National Defence, *Interim Air Force Expeditionary Task Standards (AFETS)*. (Winnipeg: 1 Canadian Air Division, 2013), 8-9.

⁶¹ Richard Mayne, “The Canadian Experience: Operation Mobile”, in *AIR WING: RCAF Commanders’ Perspectives During the 2011 Libyan Conflict*, ed. Richard Mayne and William March, 1-26 (Royal Canadian Air Force: RCAF Aerospace Warfare Centre, 2018) 15-16.

This FG arrangement was first put in place for Operation IMPACT rotation two in the fall of 2015. At that time, 2 Wing deployed to 4 Wing Cold Lake to conduct the first collective training exercise in support of a named mission.⁶² Here, the ATF Commander (ATF Comd) actively participated in the collective training and even delivered the lesson on Rules of Engagement (ROE), paving the way for collective training best practices. Experience has shown that when a Commander is in front of their future ATF actually going through the ROEs process, answering questions, and walking through scenarios, the outcome of learning has been better received by the group, suggesting that fewer issues would arise while in theatre since it was clear in their mind what they could and could not do.⁶³ Therefore, leveraging these lessons learned, it is now expected that the deploying Commander will vet the training package and directly contribute during the teaching phase of the training.

In order to accomplish the collective training, 2 AETS creates the training package from a predefined list of task standards. That standard is defined within the Air Force Expeditionary Task Standard (AFETS), which are themselves based on the six RCAF doctrinal operational functions: command, sense, act, shield, sustain and generate.⁶⁴ The collective training schedule is then populated with AFETS based scenarios, which are themselves based on a real life events which either happened on a previous rotation of the same mission or on another mission, and are used as injects during the collective training exercise to train the future deploying ATF or AIRDET. The scenarios range from basic event like a fire in the operations room to test proper emergency procedures, to a more complex event like a crash of an air asset behind

⁶² Department of National Defence, *Evaluation of Air Force Readiness* (Ottawa: ADM(RS), 2017), 39.

⁶³ Based on the feedback from the ATFs or AIRDETs members taken at the end of the training while the author was at 2 Wing 2015-2018.

⁶⁴ Department of National Defence, *B-GA-400-000/FP-001, Royal Canadian Air Force doctrine* (Ottawa: Royal Canadian Air Force HQ, 2016), 19.

enemy lines that would require complex actions to be taken involving multiple allied countries across multiple time zones.⁶⁵ The key outcome of the training is that once in theatre if an event were to happen, it is not the first exposure to such event. More importantly, it demonstrates that individuals can come together and react accordingly using proper procedures in a timely fashion. Finally, the key aspect of this training is that it is used to declare the ATFs or the AIRDETs Operational Ready (OPRED), signifying to Comd 1 CAD and the RCAF that the troops are ready to move from FG to FE.⁶⁶

In order to establish transparency between training and evaluation of the ATFs or the AIRDETS, the task of declaring OPRED is not kept within 2 Wing, but within 1 CAD Air Force Expeditionary Readiness Standards and Evaluation Team (AFERSET).⁶⁷ During the collective training the injects go from a crawl to a walk and finally to a run level of complexity, and during the last phase AFERSET is on location and evaluating the group independently. Following each of the training events, after action reporting is completed in order to make the next training session better. Additionally, on occasion a mixed team from 2 Wing, AFERSET and 1 CAD lessons learned is deployed before the end of the mission's rotation to collect the thoughts of the individuals that attended the training and further enhance the scenarios, training experience and realism. Finally, and to further that idea of closing the OODA loop,⁶⁸ 2 AETS has been at the forefront of applying the newly developed RAWC doctrine as

⁶⁵ Based on author's personnel experience while at 2 Wing and during ATFs Collective Training events from 2015-2018.

⁶⁶ Department of National Defence. *B-GA-402-005/FP-001, RCAF Doctrine: Expeditionary Air Operations* (Ottawa: Royal Canadian Air Force HQ, 2020), 3.

⁶⁷ Department of National Defence. *Evaluation of Air Force Readiness...*, 39.

⁶⁸ John Boyd, was a US Air Force Colonel, developed the Observe-Orient-Decide-Act, OODA Loop, which greatly help shape the process of improvement throughout the CAF. The feedback loop concept was officially first introduced in 1996 work *The Essence of Winning and Losing*. William S. Angerman, *Coming Full Circle with Boyd's OODA Loop Ideas: An Analysis of Innovation Diffusion and Evolution* (Ohio: Air Force Institute of Technology, 2004), Figure 28, 79.

well as sharing and influencing the revisits of that same doctrine in order to make it better.⁶⁹

Since fall 2005, the RAWC has been tasked to lead the efforts when it comes to doctrine and “become the engine of change for Air Force transformation, by acting as a catalyst for air-power development and as a steward for air-power knowledge.”⁷⁰ In order to accomplish this task, the RAWC has been developing concepts and doctrine to match them, in order to instill changes and make the RCAF a better institution. These tie directly to the MRP, with the 2012 release of the first formal C2 doctrine that established the ATF or AIRDET concept. Following two years of refining and testing, it was not until 2014 when the air doctrine note 14/01 was signed and published by the Commander RCAF, that one could feel the energy surrounding the successful implementation of the doctrine percolate.⁷¹ At the time, the RCAF was buzzing with operational activities and that gave plenty of opportunities to expose the new doctrine to the masses as well as to test it early on. For example, these included: Operations IMPACT,⁷² RENAISSANCE 15-01 Nepal,⁷³ REASSURENCE enhance

⁶⁹ 2 Wing participated in the creation of the 2020 expeditionary air operations doctrine as well as participating in the development of the ASPOC course.

⁷⁰ Department of National Defence, Royal Canadian Air Force Aerospace Warfare Centre, last accessed 22 March 2021. <http://www.rcaf-arc.forces.gc.ca/en/cf-aerospace-warfare-centre/index.page>

⁷¹ Pux Barnes (ret'd Lieutenant Colonel), “Air Doctrine Note 14/01, RCAF Air Task Force Commander: Considerations for the Employment of Air Power in Joint Operations.” (2014), 1.

⁷² Department of National Defence, Operation IMPACT, last updated 30 March 2021. <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/operation-impact.html>

⁷³ Department of National Defence, Operation RENAISSANCE 15-1: CAF contribution to humanitarian relief efforts in Nepal, last updated 12 August 2016.

<https://www.canada.ca/en/department-national-defence/services/operations/military-operations/recently-completed/nepal.html>

air policing since 2014⁷⁴ or LENTUS since 2013 on a yearly basis,⁷⁵ often with multiple LENTUS operations occurring simultaneously.

Two main positive outcomes can be identified from these activities, complementing the positive reception and implementation of the new doctrine amongst RCAF members as we will see in the ADM(RS) 2017 report that will be discussed later. First, a continuous OODA loop was being done naturally between the end of tour reports, 2 Wing and the RAWC, enabling adjustments to existing doctrine where it needed to, while also feeding back info to the start the development of other keystone doctrine documents.⁷⁶ Second, the more the RCAF deployed, the more the new doctrine started to be successfully implemented. Although still not perfect, the results coming from these efforts have undoubtedly demonstrated that the RCAF members were starting to understand and adhere to the concept, but also that there was a clear demand for more formal education. Over time, the RAWC via its Air Warfare Education branch, developed different curriculum to enable different ranks to perform better when it came to expeditionary operations and the ATF or AIRDET concept (ASPOC, ASOCC, ASPCC, and SCCC),⁷⁷ leveraging the experience of 2 Wing to develop its courseware. Additionally, courses like ASPRC and the CAOC course were put in place to fix a niche technical requirement such as preparing majors for JCSP or

⁷⁴ Department of National Defence, Operation REASSURANCE, last updated 27 April 2021. <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/operation-reassurance.html>

⁷⁵ Department of National Defence, Operation LENTUS, last modified January 2020. <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/operation-lentus.html>

⁷⁶ Department of National Defence, Royal Canadian Air Force Aerospace Warfare Centre, last accessed 22 March 2021 (DWAN). www.trenton.mil.ca/rawc/en/doctrine/index.asp

⁷⁷ Air and Space Power Operations Course (ASPOC), Air and Space Operational Command Course (ASOCC), Air and Space Power Command Course (ASPCC), Senior Command and Control Course (SCCC); Department of National Defence, Royal Canadian Air Force Aerospace Warfare Centre, last accessed 22 March 2021 (DWAN). www.trenton.mil.ca/rawc/en/branches.asp#details-panel4; Major Petra Smith (Major), 2 Canadian Air Division, "AirPower Operations Course: Building the RCAF leaders of tomorrow" (RCAF News Article, 19 December 2016). <http://www.rcaf-arc.forces.gc.ca/en/article-template-standard.page?doc=airpower-operations-course-building-rcaf-leaders-of-tomorrow/iwuxm2xt>

to prepare members to operate in a combined air operations centre. This contribution to education of the RCAF members over the years has had the impact of developing better well-rounded members. They have then reinjected that knowledge into the system, creating a circle of constant improvement and contributing to the success of the RCAF.

MRP Assessment of Performance

In 2017, the ADM(RS) produced a report focusing on the Air Force Readiness Program performance. According to the report, “The evaluation examined the relevance and performance of the program over a five year period, from fiscal year (FY) 2011/12 to FY 2015/16.”⁷⁸ Although many things changed while that reporting period alone was going on, even more has changed since FY 2015/16. Although the expeditionary concept was still in its infancy throughout the years analyzed by the report, the overall results of this evaluation are still valuable in the sense that they give one a good base metric of performance for future assessment and, more importantly, point out where the future adjustments need to focus. Accordingly, this section of the chapter will focus on key findings from the 2017 ADM(RS) report that pertain to the MRP, elements at large like the AFEC and general air force readiness.⁷⁹

ADM(RS) methodology for this evaluation consisted of “quantitative and qualitative data collection methods ... and included document review, financial data review, key informant interviews and site visits.”⁸⁰ In order to develop the findings and recommendations, they used qualitative information to compare it with quantitative information. This allowed ADM(RS) to validate the overall analysis,

⁷⁸ Department of National Defence, *Evaluation of Air Force Readiness...*, iii.

⁷⁹ The elements of this report were released under an access to information act request, and therefore some of the content was redacted. Where necessary, conclusions are drawn or inferred from the author’s experience.

⁸⁰ Department of National Defence, *Evaluation of Air Force Readiness...*, Annex B-1.

combined with an awareness of their limitations by using a comprehensive mitigation strategy.⁸¹ The key finding of this report that pertains to the subject of this chapter is that from fiscal year (FY) 2011/12 to FY 2015/16 the air force readiness program was able to grow and fill a need within the RCAF. In doing so, the report recognizes that the outcome of the program aligns with the requirements of all key players. In other words, what was done to counter the ad hoc fashion of Operation MOBILE demonstrated a positive trend and respected what was asked by the Government of Canada and the CAF. Some of the key factors are that, throughout those five years, the RCAF was a key contributor in supporting of other federal organization when it came to enabling operations around the world, demonstrating its expeditionary capabilities.⁸² It also assessed that because of those changes made to the air force readiness program the RCAF was able to significantly advance its readiness level.⁸³

Although the report is generally positive, the following key areas were identified for improvements in order to accomplish a better synergetic outcome amongst RCAF divisions, Wing and Squadrons. Regarding the MRP, it recommended that future versions should provide a better framework with details into: “the way a unit will complete readiness activities.”⁸⁴ This would be beneficial, since with guidance from Higher Headquarters (HHQ) the units that are always on high tempo, like the units of 1, 2 and 8 Wing would benefit from the direction of 1 CAD and it would enable them to manage their sub units training in order to meet the required readiness. In the case of the ATF collective training, the report recommends a better alignment between the collective training plan and the RCAF FP&R “to ensure each air force element regularly demonstrates required readiness through a defined

⁸¹ Department of National Defence, *Evaluation of Air Force Readiness...*, Annex B-2.

⁸² *Ibid.*, 8.

⁸³ *Ibid.*, iii.

⁸⁴ *Ibid.*, 16.

validation activity.”⁸⁵ This reflection may no longer be relevant, since today’s collective training is task tailored to each operation’s rotation and only the people who would benefit from the training are present. Additionally, per the explanation in the tactical outcome section of this chapter, collective training exercises are kept at a training level from five to seven in order to not infringe on the individuals, units and Wing training level exercises. From an infrastructure point of view, the report mentions that while the AFEC project has reached initial operational status, it will require the project to come to fruition quickly to maintain momentum.⁸⁶

With a final delivery, date of 2026-2027⁸⁷ the AFEC project is underway with the construction of permanent infrastructure to house the expeditionary Wing in Bagotville. However, the reality is that 2 Wing is affected by the lack of infrastructure while at the same time having new capabilities come online, since they have nowhere to store them. Since being able to keep developing is critical to future successes, the leadership of 2 Wing does not hesitate to look outside the box to find ways to develop the RCAF expeditionary capabilities (i.e., the addition of more construction engineer units located outside Bagotville that will specialize in temporary hangar construction).⁸⁸

Finally, the overall costs to maintain an expeditionary Air Force appear to be on par with what was budgeted and lower in cost than some of Canada’s allies.⁸⁹ The main criticism came from the fact that each event was not kept separately accounted for and for the purpose of looking at a return on investment for each event it is impossible to do. Therefore, ADM(RS) would like to see a change in the format in

⁸⁵ Department of National Defence. *Evaluation of Air Force Readiness...*, 41.

⁸⁶ *Ibid.*

⁸⁷ Department of National Defence, “Air Force Expeditionary Capability”, last modified 9 January 2020. <http://dgpapp.forces.gc.ca/en/defence-capabilities-blueprint/project-details.asp?id=1882>

⁸⁸ Colonel Luc Girouard, Commander 2 Wing, telephone conversation with author, 15 January 2021

⁸⁹ Department of National Defence, *Evaluation of Air Force Readiness...*, 58-59.

order to understand the real cost of collective training. All that being said, the report still mentions that the RCAF air force readiness program enabled the RCAF to become strategically relevant to the Canadian government and should continue in that direction.⁹⁰

Conclusion

This chapter gave perspective and detail on where and how the MRP gains its legitimacy, as an output of *RCAF Vectors* and the RCAF Campaign Plan. It also demonstrated how the MRP enables its legitimacy at the tactical level by explaining the link between all the key references and how it affects the common denominator on the ground. From a results perspective it was shown that the implementation of different expeditionary-focused courses, elaboration of pertinent doctrine and the collective training, support the MRP by enabling the RCAF to elevate itself and professionalize deploying across Canada or the world. This was confirmed by the 2017 ADM(RS) report on the evaluation of air force readiness, which pointed out numerous positive changes, and some elements to correct in future years.

The RCAF has come a long way from the improvisational nature of Operation MOBILE in terms of expeditionary deploying capabilities. This success was not all due to the implementation of the MRP in 2012, but the document was a great enabler for the transformation. This chapter's secondary function was to create and synthesize some of the background story of the MRP, while describing the intricate details, inputs and outputs that affect its daily management in order to benefit and inform future generations of the RCAF.

Finally, reflecting on the changes that the CA made to their MRP in 2020, an element that stands out is the adaptation to a new operational reality in order to fulfil

⁹⁰ Department of National Defence, *Evaluation of Air Force Readiness...*, iii.

their mandate towards the FP&R. Additionally, the CA has achieved a means of offering more predictability to its troops and Commanders; which is a remaining challenge for the RCAF to address. While the RCAF's change to the MRP in 2014 positively responded to the challenges and realities of Operation IMPACT, for the RCAF to remain a strategic enabler for the CAF and government of Canada it must continue to evolve. One of the ways to do so is to study what others allies and elements have done and learn from their good ideas or avoid their bad ones.

CHAPTER 3 – WHAT ARE OTHERS DOING?

Introduction

Although the RCAF process of moving in a more expeditionary direction is well underway, it is still a work in progress as the MRP approaches its ten-year anniversary. There is no doubt that there is value to learn from what Canada's allies have done or are doing to make the RCAF process better adapted to the current situation. After all, it is a similar evolutionary approach that helped build the MRP construct: leveraging the CA's experience and lessons learned to prepare the MRP that we know today.

Having said that, this chapter will focus on what expeditionary systems allies have put in place, how it worked for them and what lessons apply to the RCAF's ability to project its capabilities worldwide. More specifically, this chapter will explore the cases of the United States Air Force (USAF) and the Royal Australian Air Force (RAAF). For the USAF this will consider their recent history, current construct and future challenges. For the RAAF the focus will be on their current construct, emphasizing joint integration and the ability to track cost of maintaining readiness. The analysis of these two institutions will identify which changes are pertinent for the RCAF, forming the backbone of recommendations in the final chapter of this paper.

The USAF

The USAF is traditionally ahead of the RCAF when it comes to major doctrinal change. The case of managed readiness was no different. In fact, the need for a change in the way business was conducted can be seen as far back as the end of the Gulf War.⁹¹ For General Michael E. Ryan, one of the architects behind the Expeditionary Aerospace Force (EAF), this requirement was long overdue because of

⁹¹ Richard G. Davis, *Anatomy of a reform: The expeditionary aerospace force* (Washington, D.C.: Air Force History and Museums Program, 2003), iii.

the high tempo observed since 1991 and the post-Cold War era cutbacks without a reduction of available effects. For the best part of two years, as Chief of Staff of the USAF (CSAF), General Ryan helped develop a new way of doing business that would eventually influence the rest of the world. This came into effect in 1999 with the initial implementation of the EAF concept and the creation of the ten Aerospace Expeditionary Forces (AEF).⁹²

Although the RCAF cannot typically be compared to the USAF because of the sheer size of their capabilities, similarities in the need for change make a comparison relevant.⁹³ Therefore, analyzing why the changes were made and how they mitigated problems could be beneficial to the RCAF. There were two main problems that the USAF attempted to remedy with the implementation of the EAF. The first “revolved around impaired readiness ... which deprived the units of resources and training time needed to maintain their capabilities at the required levels. The second “involved inadequate recruitment and retention.”⁹⁴ Both these reasons are part of a list of initiatives that the RCAF Commander has brought forth to enhance the quality of life and the quality of service of RCAF aviators.⁹⁵ Therefore, much could be learned from the outcome of the USAF efforts.

Unlike Canada in the 1990s, with the close out of all foreign basing in the name of fiscal responsibility,⁹⁶ the USAF maintained some level of forward projection. However, by reducing its foreign military and civilian personnel from 132,500 in FY 1990 to 76,800 in FY 1997 the USAF did lose over two thirds of its

⁹² Richard G. Davis, *Anatomy of a reform: The expeditionary aerospace force ...*, 12.

⁹³ Sanu Kainikara, *The Future Relevance of Smaller Air Forces...*, 3-4.

⁹⁴ Richard G. Davis, *Anatomy of a reform: The expeditionary aerospace force...*, 11.

⁹⁵ Department of National Defence, Royal Canadian Air Force, “Quality of Life – Quality of Service”, last modified 18 February 2021. <https://rcaf-arc.forces.gc.ca/en/services/benefits-military/quality-life-quality-service.page>

⁹⁶ Allan English, and John Westrop, *Canadian Air Force Leadership And Command: Implications For The Human Dimension Of Expeditionary Air Force Operations* (Kingston: KMG Associates, 2006) 60-63.

bases around the world.⁹⁷ These developments meant that instead of deploying to an already operational location, USAF personnel now found themselves having to build and prepare infrastructure in order to be able to operate, something that was not the case before the cuts due to the vast amount of forward locations available. The issue with this was that the USAF was not trained to do such pre-deployment preparation, and had to learn how to do this in order to accomplish the mission.⁹⁸ This task is very much in line with what 2 Wing is expected to do during theatre activation on behalf of the RCAF, demonstrating that, even though larger, the USAF model outcomes are very relevant for the RCAF.⁹⁹

One solution which was implemented in October 1999 reduced the operational tempo of USAF personnel and its impact on their families, and was expected to solve the initial retention and readiness problem.¹⁰⁰ However, the leadership of the USAF knew that what would be implemented only answered 80% of the concerns. As General Ryan explains, “[r]ather than delay implementation for many months in order to arrive at a complete answer, and in the process possibly miss the opportunity to establish EAF at all, the service chose to continue institutionalizing its new reforms.”¹⁰¹ The bombing campaign of Kosovo in 1999 was an early opportunity to employ the new expeditionary capacity of the USAF. In Ryan’s words, “[t]he first campaign to use air power alone to succeed to force a sovereign nation to submit to the diplomatic demands of its foes”¹⁰² demonstrated that the EAF concept was on the proper course.¹⁰³

⁹⁷ Richard G. Davis, *Anatomy of a reform: The expeditionary aerospace force ...*, 15.

⁹⁸ *Ibid.*

⁹⁹ Luc Girouad (Colonel), “A Tool of Strategic Relevance: The RCAF’s Transformation Into an Expeditionary Air Force” (National Security Programme, Directed Research Paper, Canadian Forces College, 2020), 56-57.

¹⁰⁰ Richard G. Davis, *Anatomy of a reform: The expeditionary aerospace force ...*, 48.

¹⁰¹ *Ibid.*, 56.

¹⁰² *Ibid.*, 57.

¹⁰³ *Ibid.*, 58.

The EAF concept would see seventeen lead wings assigned to a fifteen-month rotation. Ten of the wings would become AEFs, grouped into five pairs and mandated to cover the core air combat capabilities for a vulnerability of 90 days. Prior to deploying, they would conduct individual and joint training over a period of ten months with an additional two months for theatre specific training.¹⁰⁴ Following the vulnerability period, they would have a short break before starting over. Two wings were designated for crisis response and fill the gaps as required.¹⁰⁵ The final five wings focused on air mobility, and would be designated as the mobility lead with an additional mission of humanitarian assistance if required.¹⁰⁶ This last addition was intended to make it feel like all wings were changing, not just one area of the USAF. This diminished friction within the HHQ during implementation, as it was seen that everyone had a part to play in the change.¹⁰⁷ The main benefit of this new structure was that it brought order to the training period as well as the expectation for the deployment period.

In 2008, General Schwartz as CSAF, in a memorandum to the Air Force Research Institute (AFRI), highlighted the priority to look deeper at the EAF concept. He asked to come up with recommendations to bring the AEF construct closer to the Army Brigade Combat Team and the Navy Carrier Battle Group, because of apparent confusion the current AEFs caused among other services when it came to capabilities available.¹⁰⁸ Contrary to the CAF, where deployment establishments are task-tailored

¹⁰⁴ Timothy Peppe and Rachel Lea Heide, "Bending but not Broken: The USAF's Expeditionary Air Force Experience in the 21st Century," in *Canadian Expeditionary Air Forces – Bison Paper 5*, ed. Allan English, 35-42 (Winnipeg: Centre for Defence and Security Studies, University of Manitoba, 2004), 36-37.

¹⁰⁵ William L. Dowdy, *Testing the Aerospace Expeditionary Force Concept: An Analysis of AEFs IIV(1995-97) and the WayAhead* (Maxwell Air Force Base Alabama, Air University, 2000), 1.

¹⁰⁶ Richard G. Davis, *Anatomy of a reform: The expeditionary aerospace force...*, 78.

¹⁰⁷ *Ibid.*,

¹⁰⁸ J. Hukill, *et al.*, *The Next-Generation Expeditionary Air Force* (Maxwell Air Force Base Alabama, Air Force Research Institute, 2012), vi.

to fit the approved number of personnel authorized to deploy by the memorandum to cabinet, the US Army and US Navy (USN) had pre-built deployment establishments.¹⁰⁹ However, like the RCAF, the USAF needed to tailor their deployment footprint to the operation, as each AEF was structured differently. This customization created a work overload to the point that combat commanders identified the strain to be too great on the system: despite being satisfied with the AEF output.¹¹⁰

The 2012 study from the AFRI looked at the problem posed by the CSAF and released a study identifying five issues for change. “These included recommendations,” Hukill et al. note, “to provide the framework needed to produce the project’s desired end state of a measurable and sustainable expeditionary process that meets combatant commanders’ requirements.”¹¹¹ There are three recommendations from this study that apply to the CAF and the RCAF. The first is centred on the fact that because of the USAF’s size and the difference between each of the ten AEFs, the deployment system had difficulty adjusting to the different force packages for each operation and from each AEF. The effect of deploying small groups of people from different organizations, multiplied by thousands of people, put a lot of strain on the USAF system. Additionally, this was not as simple to achieve when compared to the CAF system that rarely deploys more than a thousand people, making it a key point for the USAF to adjust in its future iterations of their AEFs concept.¹¹² From the Canadian perspective, this is also not an issue since that task tailored ATF

¹⁰⁹ Canada, Department of National Defence, “The Specific Case of the Crown Prerogative Power to Deploy the CF on Military Operations of Canada”, last modified 6 March 2015. <https://www.canada.ca/en/department-national-defence/corporate/reports-publications/military-law/crown-prerogative/the-specific-case-of-the-crown-prerogative-power-to-deploy-the-cf-on-military-operations-of-canada.html>

¹¹⁰ J. Hukill, et al., *The Next-Generation Expeditionary Air Force ...*, 2

¹¹¹ *Ibid.*, ix.

¹¹² *Ibid.*

aspect is the key to success when it comes to RCAF expeditionary operations in order to keep what is left back home defending Canada running smoothly.¹¹³

The second point focuses on the fact that not everyone was treated the same way in the development of the AEF concept. The initial emphasis of the concept was placed on aircraft, their effects and the retention of pilots, while less attention was paid to the supporting infrastructure, the so-called expeditionary combat support (ECS). With the post-Cold War reduced foreign base footprint, there was a need to activate forward deployed bases to support operations in the Middle East (Iraq, Afghanistan, etc.). Even though kinetic operations slowed down relatively quickly during Operations Enduring Freedom and Iraqi Freedom, and there was a reduced requirement for combat platforms, the need to support the bases remained (Figure 2.1).¹¹⁴ The RCAF development and employment of the Aerodrome Activation Surge Team (AAST) addresses that similar issue of base activation. The AAST is at the heart of the RCAF expeditionary doctrine success and is mainly comprised of supporting troops to enable successful operations.¹¹⁵

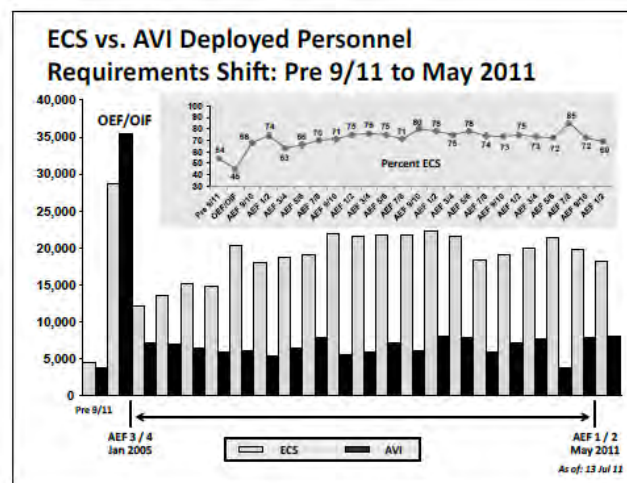


Figure 2.1 – Comparison of Deployed ECS forces to Aviation Forces
Source: J. Hukill, et al., *The Next-Generation Expeditionary Air Force*, 3.

¹¹³ Brigadier General Iain Huddleston, Director General Air Force Readiness, teams conversation with author, 6 April 2021

¹¹⁴ J. Hukill, et al., *The Next-Generation Expeditionary Air Force ...*, 3.

¹¹⁵ Department of National Defence, *B-GA-402-005/FP-001, Royal Canadian Air Force doctrine: Expeditionary Air Operations* (Ottawa: Royal Canadian Air Force HQ, 2020), 15.

The third and final point of the study that can be applied to the RCAF is its recommendation to put emphasis on developing a better training program to enable the desired system to be understood by all and to facilitate adherence to its core requirements. In order to enable a smooth transition to a new system, the AFRI identifies key enablers to that transition and recommends to “develop a strategic communication plan to improve USAF-wide understanding of deployment processes.”¹¹⁶ From a RCAF perspective, and as mentioned in chapter one, the RAWC has been that education catalyzer when it comes to air force expeditionary capabilities, putting Canada’s air force on the right track for success. Having said that, more could be done to raise the overall knowledge within the RCAF as explained in the author’s Joint Command Staff Program 47 (JCSP) service paper “Growth is not Bigger and Bigger; it’s Better is Better.”¹¹⁷

Having said that, and understanding that a change of this magnitude requires time, in an October 2013 a presentation by Brigadier General T. Williams, the USAF Air Combat Command A3-MA, demonstrated that the 2012 recommendations from the AFRI framework study had taken effect on decision-makers and that changes were in progress.¹¹⁸ He identified further changes for implementation in 2014’s post Afghanistan withdrawal: the requirement to “migrate to larger group structure from fewer units, simplify and synchronize battle rhythms, improve scheduling stability, and create better teaming at deployed locations.”¹¹⁹ He also put forward hard decisions that needed to be addressed by the Commander in order to maintain

¹¹⁶ J. Hukill, *et al.*, *The Next-Generation Expeditionary Air Force ...*, x, 27.

¹¹⁷ M.A.J.Y. La Haye, “Growth is not Bigger and Bigger; its Better is Better” (Joint Command and Staff Program, Canadian Forces College, 2021), para 4-8; Richard Goette. “Preparing the RCAF for the Future: Defining Potential Niches for Expeditionary Operations”..., 139-140.

¹¹⁸ Tommy Williams, *Air Combat Command Expeditionary Warfare* (PowerPoint, Joint Base Langley–Eustis, Virginia, Headquarters Air Combat Command, 29 October 2013), slide 15.

¹¹⁹ *Ibid.*

operational success. Notwithstanding the requirement to consolidate forward-based activities and some further adjustment to the battle rhythm to maximize the capabilities during a crisis response, he identified the requirement for the USAF to reassess its range of military operations and focus on Air Force-only missions, while additionally looking at a greater reliance on the Air Reserve.¹²⁰ The last two points have been identified by the RCAF in recent years to be of interest to palliate the expanding demand of assets and personnel. In order to facilitate a greater reliance on the Air Reserve, the RCAF introduced two new trades: Air Operations Support Technician (AOS) and Air Operations Officer (AOO).¹²¹ The idea behind these new occupations created in 2018 is having reservist actively filling the positions and removing non-air operations jobs from air operations trades. This change of course has demonstrated initial success at lowering the pressure on the current precarious manning issue that most air occupations are experiencing while at the same time giving more responsibilities to the reserve component.¹²²

More recently in June 2020, at the USAF Corona meeting, all the top senior USAF leaders and the Secretary of the Air Force met to talk about the future of the service.¹²³ One of the topics discussed was the still elusive matter on how to present forces to the Combat Commanders in a way that they would understand with similarity to the other services. From General Goldfein's outgoing CSAF perspective: "We present global mobility by tail. We present ISR by Cap or line, and we present

¹²⁰ Tommy Williams, *Air Combat Command Expeditionary Warfare ...*, slide 15.

¹²¹ Department of National Defence, Royal Canadian Air Force, "Quality of Life – Quality of Service", last modified 18 February 2021. <https://rcaf-arc.forces.gc.ca/en/services/benefits-military/quality-life-quality-service.page>

¹²² Chris Thatcher, "New programs cut Air Force pilot shortage", last modified 15 March 2021. <https://skiesmag.com/news/new-programs-cut-air-force-pilot-shortage/>

¹²³ Alexa Culbert (Senior Airman), Air Education and Training Command, "CORONA returns to Maxwell", last modified 2 March 2018. <https://www.maxwell.af.mil/News/Display/Article/1456807/corona-returns-to-maxwell/>

fighters by squadron. And so, without a common standard for a force presentation model, it's pretty hard to know and measure against."¹²⁴ He proposed a model for implementation that would "standardize along the lines of presenting forces by squadron, as 'our fundamental fighting formation.'"¹²⁵ This will enable the USAF Chain of Command (CoC) to keep its state of readiness in a more coherent manner, making it "a lot easier to be able to tell the Joint Staff, the J3, Combatant Commanders, and our MAJCOMs what their state of readiness is based on impact to squadrons."¹²⁶

Another outcome of the 2020 Corona meeting was the public recognition by the USAF CoC that conflict was changing. There is a need for a mental shift from a focus on insurgency wars the west has been fighting since 2003, to near peer and peer-to-peer conflicts. General Goldfein and the incoming Air Combat Commander Lieutenant-General Kelly put forward concepts and ideas that should help shape the way the USAF is organized and deploys in the future. General Kelly observed how in the last 20 years enemies have afforded the west the time to prepare to fight; USAF forces were able to deploy and set up in areas that could not be affected by the insurgency fighters. To the contrary, in the USAF leadership's mind, a potential near peer or peer-to-peer conflict between the United States and China or Russia would not see the USAF be afforded this luxury of time. Setting up operations or maintaining forward basing capabilities would not occur without a fight.¹²⁷ General Kelley's solution to that problem is "to present forces that are combat-credible upon arrival,

¹²⁴ John A. Tirpak, "Leaders to Tackle Revamp of Air and Space Expeditionary Force at Corona", last modified 1 June 2020. <https://www.airforcemag.com/leaders-to-tackle-revamp-of-air-and-space-expeditionary-force-at-corona/>.

¹²⁵ John A. Tirpak, "Leaders to Tackle Revamp of Air and Space Expeditionary Force at Corona", last modified 1 June 2020. <https://www.airforcemag.com/leaders-to-tackle-revamp-of-air-and-space-expeditionary-force-at-corona/>

¹²⁶ *Ibid.*

¹²⁷ Air Force magazine, "Q&A: The Future of the Expeditionary Force", last modified 1 June 2020. <https://www.airforcemag.com/article/qa-the-future-of-the-expeditionary-force/>

and that means training together as a team and integrating with other combat teams. And do that together in a high-end exercise like Red Flag before they're required to actually fight in a high-end conflict."¹²⁸ From his point of view, General Goldfein thinks the new model should look like "a spartan force arriv[ing] with its aircraft at an austere location, operat[ing] for some period of time, and mov[ing] again in hours or days to keep adversaries guessing about their location and complicating the enemy's targeting problem."¹²⁹ This change of horizon is also visible from senior CAF leadership with SSE and the recent presentation of the Pan-domain Force Employment Concept (PFEC). This document describes how Canada will fight the next war, from a standpoint of shifting global power dynamics.¹³⁰

To summarize, even if the RCAF and the USAF are different in size, both Canada and the United States face many common issues. Therefore, it is very important for the RCAF to appreciate the time and work the USAF have invested in their expeditionary forces to make it better. A careful analysis of their takeaways will help the RCAF avoid making the same mistakes, while ensuring it retains credibility and compatibility with its closest ally.

Additionally, it is also interesting to see how the small size of the RCAF presents different issues or sometimes non-issues when compared to the USAF. In particular, this is apparent regarding the deployment of force and force packages management. Looking closely at the changes made by the USAF, the current RCAF ATF model is well suited to support the squadron level force since the idea from the

¹²⁸ Air Force magazine, "Q&A: The Future of the Expeditionary Force", last modified 1 June 2020. <https://www.airforcemag.com/article/qa-the-future-of-the-expeditionary-force/>

¹²⁹ John A. Tirpak, "Leaders to Tackle Revamp of Air and Space Expeditionary Force at Corona", last modified 1 June 2020. <https://www.airforcemag.com/leaders-to-tackle-revamp-of-air-and-space-expeditionary-force-at-corona/>

¹³⁰ Department of National Defence, *Strong, Secured, Engaged: Canada's Defence Policy...*, 50; Government of Canada, Department of National Defence, *Pan-Domain Employment Concept Draft* (Ottawa: DND Canada, 2020).

onset from an RCAF perspective was putting the units at the centre of the basic ATF Organization chart.¹³¹ Further, given its success on various operations, little adjustments are required at this time.

The RAAF

A priori, one could think the RAAF and the RCAF would have a lot in common because of the fact that the populations of Canada and Australia are similar in number and the cultural heritage from the Commonwealth would have resulted in common national defence structures. In fact, until the unification of the Canadian military services in 1968, there were few obvious differences between the RCAF and RAAF.¹³² The unification of the RCAF, RCN, and CA into one Canadian Armed Forces was a watershed for Canada. It was also the start of diverging paths when it comes to command and control structure between both countries, although a similar change came later in 1985 for the Australian Defence Force (ADF).¹³³

Looking at open source statistics about each service, both the RCAF and RAAF show about 14000 aviators strong within their ranks. However, it would be incorrect to think that both are the same size. Since 1975, all Canadian aircraft were regrouped under Air Command (now the RCAF).¹³⁴ This is unlike the Australians, where rotary wing assets remain separate to this day under each service (i.e., Navy and Army).¹³⁵ That being said, the RAAF remains responsible for the pilot basic

¹³¹ Department of National Defence. *2 Wing Forces Employment Concept...*, 24.

¹³² Allan English, and John Westrop, *Canadian Air Force Leadership And Command: Implications For The Human Dimension Of Expeditionary Air Force Operations...*, 29-30.

¹³³ *Ibid.*; Government of Australia, Department of Defence, *ADDP 00.1 Command And Control* (Canberra: ADF, 2009), V.

¹³⁴ Allan English, and John Westrop, *Canadian Air Force Leadership And Command: Implications For The Human Dimension Of Expeditionary Air Force Operations...*, 37.

¹³⁵ Eamon Hamilton (Flight Lieutenant), "Fixed wings freed", accessed 26 March 2021. <https://web.archive.org/web/20110317081759/http://www.defence.gov.au/news/armynews/editions/1227/1227.pdf>; Government of Australia, Department of Defence, *AAP 1000-D The Air Power Manual*, (Canberra: ADF, 2013), 9.

training of all services.¹³⁶ Therefore, when comparing both nations' air forces it is important to keep this conceptual difference in mind and the comparatively larger number of Australian aviators, regardless of their service affiliation.

In the application of air power, the RAAF also diverges from the RCAF's organizational structure. Based primarily on the four air power core functions, "control of the air, strike, air mobility and intelligence, surveillance and reconnaissance (ISR),"¹³⁷ the RAAF adds three more enabling air power roles: "command and control, force protection and sustainment."¹³⁸ Instead of using a divisional system, like in Canada where all Wings report to a central entity, each Wing reports to its air power functional Force Element Group (FEG) that in turn answers to the Headquarters Air Command. The FEG, as opposed to the RCAF Wings, is the highest tactical element in the RAAF and is designed to fulfil a unique functional output. A Group Captain or Air Commodore for the bigger FEGs, is assigned command of an FEG.¹³⁹

In order to further divest FEGs from other responsibilities, a Senior ADF Officer (SADFO) is assigned responsibility of each Air Force base.¹⁴⁰ In essence, when it is compared to the CAF system, the commander in charge of the base is different from the person in charge of operations. However, to alleviate conflict and provide a unified response, the SADFO becomes the de facto Commander with the FEG units subordinate at that specific location.¹⁴¹ For RCAF Wing Commanders, the management of the base takes a lot more time in their schedule than Wing operational

¹³⁶ Government of Australia, Department of Defence, Royal Australian Air Force, Air Academy, accessed on 15 March 2021. <https://www.airforce.gov.au/our-people/careers/air-academy#:~:text=Army%20pilots%20will%20be%20posted%20to%20HMAS%20Albatross,the%20C21%20which%20is%20focused%20on%20single-pilot%20training.>

¹³⁷ Government of Australia, Department of Defence, *AAP 1000-D The Air Power Manual...*, 48.

¹³⁸ *Ibid.*

¹³⁹ *Ibid.*, 182.

¹⁴⁰ *Ibid.*

¹⁴¹ *Ibid.*, 183.

matters, thus leaving little time to advance capabilities or processes.¹⁴² The obvious exception to this observation is 1 and 2 Wing who can dedicate 100% of their time to non-base requirements since they are lodgers on existing bases. Finally, the biggest RAAF FEG is the Combat Support Group (CSG), with over 4500 members they are in charge of base support system all around Australia and for air expeditionary operations.¹⁴³ This major difference in how the RAAF manages their bases is a key factor to consider when comparing both systems. However, at the heart of the expeditionary operations, both systems have put the task of opening an air base in the hands of their respective aviators.

From the perspective of how the RAAF manages readiness, or an equivalent of the RCAF MRP, things are again very different from the RCAF for multiple reasons. First, and a key aspect, is geography. With no land connection to the country and by being far from neighbouring nations, the Australian position is, by default, to expect to have time to see the enemy coming and therefore have time to prepare.¹⁴⁴ Additionally, with most of the population in the south of the continent and the main threat path to the continent coming from the north, a defence in depth was developed to further affect the time they would have to ready troops in case of an attack.¹⁴⁵ Finally, there is a lack of competing commitments. Although Australia has participated in many NATO-led operations as a special contributor, it does not owe NATO any troops in case of the declaration of an article 5 situation. Additionally, on the United Nations side, the Australian government has indicated it would only be

¹⁴² Colonel Luc Girouard, Commander 2 Wing, telephone conversation with author, 15 January 2021.

¹⁴³ Robbin Laird, "Providing Support to An Expeditionary Air Force: The Key Role and Challenges for the RAAF's Combat Support Group", last modified 15 April 2018. <https://sldinfo.com/2018/04/providing-support-to-an-expeditionary-air-force-the-key-role-and-challenges-for-the-raafs-combat-support-group/>

¹⁴⁴ Peter McLennan, *Preparedness and the Maintenance Function* (Canberra, Air Power Development Centre, 2005), 11-12.

¹⁴⁵ *Ibid.*, 11.

willing to make available: “one transport squadron, one light and one medium helicopter squadron, or one fixed wing short or medium range air transport flight.”¹⁴⁶ Finally, Australia is not part of a NORAD type alliance and thus does not have to provide for that kind of requirement either. Consequently, the ADF would mostly only need to take care of one commitment at a time.¹⁴⁷ This leads to a more simplified readiness system than what is found in the RCAF, given a variety of potential commitment of forces that Canada would have to provide. This is why in part Canada for example has procured additional CF-188 to be able to support all those potential concomitant efforts.¹⁴⁸

The ADF preparedness is divided into three levels: the Operational Level of Capability (OLOC), Minimum Level of Capability (MLOC), and Present Level of Capability (PLOC). The OLOC is “the level of capability at which units or force elements have the necessary training and resources to conduct specified operational roles and tasks.”¹⁴⁹ The MLOC is “the lowest level of capability from which a unit or force element may achieve OLOC within the assigned readiness notice period.”¹⁵⁰ Finally, the PLOC is “the level of capability of a unit or force element at any given time.”¹⁵¹ This enables one to have a clear picture of the assets available to be employed and a clear understanding of each unit’s readiness at any given time. Additionally, a key enabler for the ADF preparedness system is that each service understands how much time, money and effort it takes for a unit to go from MLOC to OLOC and how much it would in turn cost to keep it at that level. Having access to

¹⁴⁶ Peter McLennan, *Preparedness and the Maintenance Function...*, 15.

¹⁴⁷ *Ibid.*, 14.

¹⁴⁸ David Pugliese, “Deal to buy used Australian fighter jets finalized, with Canadian Forces set to be flying them by summer”, last modified 3 January 2019. <https://nationalpost.com/news/canada/deal-to-buy-used-australian-fighter-jets-finalized-with-canadian-forces-set-to-be-flying-them-by-summer>

¹⁴⁹ Peter McLennan, *Preparedness and the Maintenance Function...*, 20.

¹⁵⁰ *Ibid.*

¹⁵¹ *Ibid.*

this information makes it easy for the Chief of Defence Forces (CDF) to recommend actions to the government, enabling proper response. For example, in a case of intimidation, one could change the preparedness of a fighter squadron and deploy it to a forward operation location or base as they are known in the Australian system, demonstrating the ability to respond.¹⁵²

The CDF Directive on ADF Preparedness (CPD) manages the strategic level of capability. The CPD is a secret document prepared by the joint operations headquarters, but it is jointly prepared by all of the different services headquarters within the ADF and is released annually. Within the directive, one can find the level of preparedness expected of each service. In the case of the RAAF, it “covers most of the aircraft in the RAAF’s order of battle, as well as a number of significant items of ground equipment, and certain command and control organisations.”¹⁵³ Following the issuance of the CPD, Air Command will in turn release Operational Preparedness Directives (OPDs) to the FEG commanders. From there each of the FEG Commanders will validate the OPD’s viability. Once in application, the FEG Commander monitors and advises on their capabilities within the OPD. Finally, the FEG Commander is also responsible to identify the resources that will be required to meet the level of readiness ordered by the OPD. The requirements include the number of aircraft, the number of sorties or the duration of the sorties to name a few of the requirements to accomplish the task.¹⁵⁴

When it comes to managing joint operations, the ADF’s way of employing forces for expeditionary operations is a lot closer to the CAF. With the creation in

¹⁵² This was the case during the East Timor conflict; ADF deployed to Tindal and Darwin in preparation to an intervention and deter the Indonesian military intervention. Bob Breen, “Australian Military Force Projection in the late 1980s and the 1990s: What Happened and Why” (doctorate’s thesis, Australian National University, 2006), 254.

¹⁵³ Peter McLennan, *Preparedness and the Maintenance Function...*, 27.

¹⁵⁴ *Ibid.*, 32

2006 of a CJOC equivalent in the Headquarters Joint Operations Command (HQJOC), forces are apportioned to the force employer from the force generator in a very similar way to what is done in Canada.¹⁵⁵ The key difference between both systems is that HQJOC is managing readiness and therefore can keep the services accountable to their commitments. In terms of applying a similar format to the CAF, it would be beneficial to investigate this avenue as CJOC already possesses a readiness section and this would be a logical extension of their role as the main force employer.¹⁵⁶ Further, it would be beneficial for the CAF to keep the elements accountable to their commitments. This could also speed up and manage the commitments of troops to tasks, while creating a common touch point between environmental silos.

Having explained the FEG concept and some of its benefits, it is important to note that within the RAAF there is a conversation ongoing about the relevancy of the FEG in today's context. Although very good at creating technical mastery and ensuring operational function management, the FEG concept finds itself at a crossroads.¹⁵⁷ In the minds of some, the FEG are not "designed to provide an integrated operational command and control capability."¹⁵⁸ The change in strategic environment, the operational environment in which the ADF is called to operate, and the advancement of technology witnessed in the last decades, are all factors that make the conversation for a change in the structure of the RAAF relevant.¹⁵⁹ Along this line, in a 2013 *Australian Defence Force Journal* article, Jason Begley compared the current RAAF air expeditionary operations configuration to those of the RCAF and

¹⁵⁵ Travis Hallen, *Designing for the Future Force: Informing the Debate on the Future Structure of the Royal Australian Air Force* (Canberra, Air Power Development Centre, 2019), 14.

¹⁵⁶ Author worked at CJOC prior to JCSP47.

¹⁵⁷ Travis Hallen, *Designing for the Future Force: Informing the Debate on the Future Structure of the Royal Australian Air Force...*, 16.

¹⁵⁸ *Ibid.*

¹⁵⁹ *Ibid.*

USAF. He concluded that: “the weaknesses in the RAAF’s capability become apparent, a situation highlighted when compared against the approaches and experiences of the RCAF and USAF.”¹⁶⁰ That weakness expressed by Begley comes in the form of three arguments. First, the RAAF is slow to react and therefore lacks responsiveness to contingency or emerging operations. Secondly, when they are in the planning phase, too much effort is put on deploying specific communities instead of focusing on operational requirements. Finally, just like the USAF realized after the different middle east operations, the RAAF support construct to expeditionary operations has yet to be defined, exposing an area for improvement that as yet to be addressed.¹⁶¹

In summary, although common in terms of size and cultural heritage, the structure and management of RAAF air power is quite different from the RCAF, mainly due to the potential adversarial threat axis and their minimal troop commitment to alliances. Nevertheless, the RCAF could benefit from implementing a more robust preparedness directive like the ADF, quantifying the cost of changing or maintaining a readiness posture, and implementing accountability for environmental readiness at the joint level.

Additionally, it is interesting to see how the RAAF has adhered to the FEG concept to become a very capable air force. The idea of adapting the RCAF structure to fit the FEG concept is certainly interesting and could be deserving of a directed research project on its own. Having said that, it is important to mention that the RAAF itself is looking at departing from this model; therefore this would require a thorough analysis. Consequently, this paper does not recommend the migration towards FEG concept at this time.

¹⁶⁰ Jason Begley, *Is the RAAF Optimally Configured to Undertake Expeditionary Operations?...*, 81.

¹⁶¹ *Ibid.*, 80.

Conclusion

Examination of how allied air force manage readiness reveals important lessons learned for the RCAF MRP. Although the USAF is bigger in size, its model of expeditionary air operation is one that greatly influenced the RCAF when the AFEC and ATF concepts were first developed. Many key trials and errors found and corrected decades before the RCAF migrated to that idea enable the success that the RCAF has currently. Having said that, today many common human issues are present in both air forces, and therefore the RCAF needs to stay abreast of these developments. From the RAAF research, the capability to understand the cost of readiness and sustaining it, combined with making their CJOC equivalent its MRP management authority are ideas that demand further investigation to see if the outcome would benefit the forces at large.

Understanding how Canada's allies are structured and how they managed and sustain their readiness level is a prerequisite for the RCAF if it wants to avoid their mistakes, capitalize on their success and stay strategically relevant to the CAF and the Government of Canada. From this research, key elements have been brought forward and should be further explored. The next chapter of this paper will translate these elements into recommendations for further thorough studies.

CHAPTER 4 – ANALYSIS, RECOMMENDATIONS AND CONCLUSION

Introduction

In order for the RCAF to become a tool of strategic relevance for the government of Canada, the MRP has had to evolve throughout the years. Moreover, the MRP also needs to keep evolving to meet tomorrow's new reality to remain relevant. One of the key aspects demonstrated throughout the MRP's life is the intent of the RCAF leadership to becoming more efficient in executing expeditionary air operations. By being flexible and adapting when needed, they have demonstrated their desire for the RCAF to stay relevant. This openness and willingness to change paves the way for the recommendations below.

With that in mind, and the fact that Commanders have assessed this tailored collective training as successful, there are still plenty of areas for improvement.¹⁶² The focus of this chapter will be on presenting ideas or concepts that with further refinement should enable the RCAF to stay relevant to the CAF and the government of Canada when it comes to supporting expeditionary air operations. Although all related to the MRP, not all of these recommendations are directly for RCAF implementation: several recommendations are proposed as CAF-wide changes. Some of those ideas for improvements are the fruit of the author's research, but some of them will be brought out as a result of conversations with key leaders throughout the author's research for this paper. It is also important to understand that these ideas are merely a starting point for a more extended discussion and research.

The ideas presented throughout the chapter will focus on three main ideas. First, how can the RCAF adapt its way of deploying in order to stay relevant in the context

¹⁶² Major General Michel St-Louis, Commander of Canadian Army Doctrine and Training Centre, Teams conversation with author, 1st April 2021; Brigadier General Iain Huddleston, Director General Air Force Readiness, teams conversation with author, 6 April 2021; Colonel Luc Girouard, Commander 2 Wing, telephone conversation with author, 15 January 2021.

of peer-to-peer conflict? Second, how can it maintain a relevant force with a staffing shortage and in a post COVID-19 environment? Finally, how can the RCAF enable its commanders to give more predictability to the RCAF members when it comes to training, postings or deployments, consequently enabling commanders to take real actions towards taking care of their people and families?

Evolution of the RCAF MRP

Since its creation, the MRP has seen some minor changes from one version to the next. More specifically, whereas during the earlier years of the MRP, the document covered the next five years, today it covers one fiscal year.¹⁶³ Unlike the CA MRP, which maintained the Afghanistan system even after the end of the associated missions of Operations ATHENA and ATTENTION, the RCAF was forced to adjust in 2014-2015, demonstrating the MRP's capability to evolve and stay relevant.¹⁶⁴

With the expansion of Operation IMPACT in October 2014, the mission became a lot more personnel dependant with three different fleets now involved.¹⁶⁵ With limited resources available, the RCAF elected to stop the training of a generic ATF and focus on theatre mission specific training. In the past, those generic ATFs would have been sent to participate in exercise MAPLE RESOLVE and train with the CA in a joint warfighting scenario for validation. They would then be put on standby for the next year in case they were required to be rapidly deployed. This way of training was useful for an unknown mission in order to cover all the possible requirements.

¹⁶³ Department of National Defence. *1 Canadian Air Division Managed Readiness Plan (MRP) 2012-2017, 2018, 2019, 2020-2021*.

¹⁶⁴ Brigadier General Iain Huddleston, Director General Air Force Readiness, teams conversation with author, 6 April 2021; Lieutenant-Colonel Scott Ash, Commander Barker college, Teams conversation with author, 11 March 2021.

¹⁶⁵ Department of National Defence, Operation IMPACT, last modified, 30 March 2021. <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/operation-impact.html>

However, Operation IMPACT was now a known mission with zero requirements to train with the army in order to become operationally ready. Therefore, the RCAF leadership elected to train to theatre mission specific criteria in a “just in time” delivery system, departing from the Afghanistan era format.¹⁶⁶ This decision became even more attractive when 2 Wing developed and ran the first RCAF Collective Training in Cold Lake in preparation to send the second rotation to Operation IMPACT in the Fall of 2015.¹⁶⁷ Following that success, it is now the system used to validate all ATFs and Air Detachments before they deploy on named operations.

One of the key realities that will help Canada’s air force move forward with its MRP is the fact that the RCAF is not considered a big air force in the capability sense.¹⁶⁸ Some might even argue that with its limited resources and personnel shortages, combined with the fact that Canada will very rarely operate without a multinational alliance or coalition, the RCAF should focus its activities in a specific area of expertise in order to become more of a niche air force. In other words, advocates of the niche approach argue that the RCAF should not focus on all air capabilities, but instead select a few key capabilities to maintain currency and operational focus in a way that would be relevant while operating with an alliance or a coalition.¹⁶⁹ The alternative is a balanced capabilities air force, which would consist at keeping a wide spectrum of capability active, but because of the overall manning requirement, each capability would be shallow in depth of actual effect they can bring in a sustain operation.¹⁷⁰

¹⁶⁶ Department of National Defence. *1 Canadian Air Division Managed Readiness Plan (MRP) 2012-2017, 2018, 2019, 2020-2021*.

¹⁶⁷ Author participated in the process while at 2 Wing.

¹⁶⁸ Sanu Kainikara, *The Future Relevance of Smaller Air Forces...*, 4.

¹⁶⁹ Ibid.; Richard Goette, *Preparing the RCAF for the Future: Defining Potential Niches for Expeditionary Operations...*, 2.

¹⁷⁰ Richard Goette, *Preparing the RCAF for the Future: Defining Potential Niches for Expeditionary Operations...*, 2.

This paper's goal is not to argue for or against exploring the RCAF becoming a niche air force, but to argue that that with either a niche or a balanced capabilities approach, having a capable air expeditionary air force is essential to stay strategically pertinent. This idea becomes even more relevant with the rise of China's hard power politics and the resurgence of Russia. As mentioned in chapter 2, USAF Air Combat Commander Lieutenant-General Kelly's recognizes the need to prepare for a peer-to-peer conflict versus an insurgency conflict and Canada recognize this same imperative in the PFEC.¹⁷¹ The RCAF's expeditionary air force needs to be able to operate in this new geopolitical reality.

Recommendations for further analysis to stay relevant

Unfortunately, and until the completion of the AFEC program, the RCAF does not possess the ability to operate an austere airfield or barely a semi-austere airfield.¹⁷² With the AFEC project only coming to conclusion in late 2026-2027,¹⁷³ if the program stays on time, it would mean that the CAF and the RCAF could only deploy such a capability to an austere environment in about eight years from now. If the RCAF wants to stay relevant, it needs to develop the tactics and training plan that enables operations in this type of employment even before the capabilities are available in order to become current with its allies. **Therefore, this paper recommends via the RAWC expertise to explore and develop the tactics behind operating in an austere peer-to-peer environment and recommend ways to implement it in the MRP.** This essential niche expeditionary capability would continue to be able to keep

¹⁷¹ Air Force magazine, "Q&A: The Future of the Expeditionary Force", last modified 1 June 2020. <https://www.airforcemag.com/article/qa-the-future-of-the-expeditionary-force/>; See Chapter 2 for more detail; Government of Canada, Department of National Defence, Pan-Domain Employment Concept Draft (Ottawa: DND Canada, 2020), 4-5.

¹⁷² Department of National Defence, *2 Wing Force Employment Concept...*, 14.

¹⁷³ Department of National Defence, "Air Force Expeditionary Capability", last modified 9 January 2020. <http://dgpapp.forces.gc.ca/en/defence-capabilities-blueprint/project-details.asp?id=1882>

the RCAF flexible and able to support its allies or a coalition, if a peer-to-peer theatre of war would start. Therefore, The RAWC with its concept development and experimentation branch would be a key resource to engage in order to maintain the RCAF as a tool of relevance for the Canadian government.

There is no doubt that emerging components like cyber and space will play a key role in the future success of the CAF. With the PFEC still in draft mode at the time of writing this paper, there are emerging pressures to make sure that those components are well integrated in the CAF readiness program.¹⁷⁴ The ADF is an example for the CAF in this aspect as, at least doctrinally, all of its elements mesh at the joint level. Further, the efforts of all elements are complementary and collectively aimed at achieving preparedness against security threats.¹⁷⁵ This Australian approach contrasts with the CAF one.

With the expansion of the cyber and space domains for example, each service MRPs are not currently well suited to encourage integration amongst themselves or these emerging components. From an army perspective, when speaking with Major General St-Louis, Commander of Canadian Army Doctrine and Training Centre, it is clear in his mind that in order to depart from this “JArmy” idea when the CAF talks jointness, elements will have to come up with ideas to develop synergy amongst themselves.¹⁷⁶ One of his big challenges, and a proposed way forward, is making an exercise like UNIFIED RESOLVE an exercise that elevates and benefits all elements and components. Finding the answer to that question will enable the development of a truly joint capability.¹⁷⁷

¹⁷⁴ Canada, Department of Nation Defence, *Pan-Domain Employment Concept Draft...*, 4-5.

¹⁷⁵ See Chapter 2 for more detail.

¹⁷⁶ Major General Michel St-Louis, Commander of Canadian Army Doctrine and Training Centre, Teams conversation with author, 1st April 2021

¹⁷⁷ EX UNIFIED RESOLVE is a virtual exercise that is currently used by the CA as a stepping stone to EX MAPLE RESOLVE on the road to high readiness (or build phase now); Department of

Another way to enhance jointness and greater service integration, albeit one that is not without its level of potential controversy, would be to have independent oversight of elemental MRPs to ensure the efforts put in its management go toward the fixed goals of the FR&R and SSE. This construct is currently in place within the ADF, where the integration of the force employer in the process of force generation creates a situation where the elements needs to own up to what it is saying it will deliver.¹⁷⁸ **Therefore, this paper recommends further analysis in having the CJOC as the Force Employer, assume a role of validating the elemental MRPs in an effort to maximize synergies amongst elements and components.**¹⁷⁹ This would still enable each elements to keep force generating as they would like, but it would assure a better collaboration, integration, management and discipline of CAF joint readiness in the new pan-domain era where cyber, space, operating in a degraded environment and action below the threshold of war are becoming more prevalent every day.¹⁸⁰

More than a year after the start of COVID-19, the CAF as a whole has evolved how it force generates, employs and sustains forces. Many activities that would normally be done in person or on location had to be reassessed. There was a shift for previously in-person training to move to a distance delivery model, relying heavily on online courses.¹⁸¹ This also had implications for the RCAF MRP.

National Defence, “Ex UNIFIED RESOLVE tests 1 CMBG’s tactical skills”, Last modified, 11 February 2019. <https://www.canada.ca/en/department-national-defence/corporate/news/regional-news/western-sentinel/2020/07/ex-unified-resolve-tests-1-cmbgs-tactical-skills.html>

¹⁷⁸ See Chapter 2 for more detail.

¹⁷⁹ CJOC DG Readiness could fill that role within CJOC since they already oversee joint training and exercises.

¹⁸⁰ Government of Canada, Department of Nation Defence, *Pan-Domain Employment Concept Draft* (Ottawa: DND Canada, 2020), 4-5.

¹⁸¹ Colonel Luc Girouard, Commander 2 Wing, telephone conversation with author, 15 January 2021; The JCSP 47 program for the first time is being delivered in a virtual construct; Canadian Forces College, “cfc300-47-JCSP-Syllabus”, (Joint Command and Staff Programme Residential Course 47 Syllabus, 2020).

One of the key aspects of the MRP is its capability through collective training to bring teams together in a realistic environment and train to become more than the sum of each individual. With social distancing and the restriction on traveling, 2 Wing created a distance learning appropriate training curriculum for deploying ATFs and AIRDETs.¹⁸² However, distance learning experience is not a surrogate to command driven, in-person learning or the ability to have cohesion as a team using developed and tested methods of training.¹⁸³ With the proper preventative measures and quick testing protocol possibilities, maintaining in-person collective training is still the best option to provide adequate theatre mission specific training.¹⁸⁴ **This paper therefore recommends investigating further the proper balance when it comes to in-person or distance training for collective training events, in order to put the efforts into safety measures when the “juice is worth the squeeze”¹⁸⁵ or look at other ways the same outcome could be attained.**

The main argument behind this recommendation is the fact that collective training events have enabled the RCAF personnel deploying to become great ambassadors for the RCAF across the world. This was accomplished by the theatre specific collective training received prior to deploying.¹⁸⁶ Recognizing that deploying personnel have to operate in foreign environment and need to come together at some

¹⁸² Colonel Luc Girouard, Commander 2 Wing, telephone conversation with author, 15 January 2021

¹⁸³ Major General Michel St-Louis, Commander of Canadian Army Doctrine and Training Centre, Teams conversation with author, 1st April 2021; Brigadier General Iain Huddleston, Director General Air Force Readiness, teams conversation with author, 6 April 2021; Colonel Luc Girouard, Commander 2 Wing, telephone conversation with author, 15 January 2021; Lieutenant-Colonel Scott Ash, Commander Barker college, Teams conversation with author, 11 March 2021.

¹⁸⁴ Ibid.

¹⁸⁵ Commonly used expression by Lieutenant General Rouleau to express the tipping point when efforts should or should not be put in an activity.

¹⁸⁶ Pux Barnes (Ret'd Lieutenant-Colonel). *The RCAF Air Task Force: Considerations for the Employment of Air Power in Joint Operations...*, 2.

point why not do so in a safe and controlled environment at home, to alleviate some stress of the deployment itself?

The 2017 ADM(RS) report on air force readiness identified that although the RCAF is currently able to successfully achieve the desired operational effects required by the FP&R, it is becoming a challenge to do so.¹⁸⁷ Currently, RCAF unit readiness levels are not immediately available, easily quantified, or tracked over time.¹⁸⁸ Understanding how much money, time, and personnel is required to achieve the FP&R level of readiness is essential for leaders to make decisions and advise on available capabilities and capacity. This is even more critical to track when squadrons are in readiness transition. **Therefore, this paper recommends developing a model similar to the ADF, where the cost to achieve and maintain operational readiness can be easily quantified in terms of money, time and people required. To this effect, this paper further recommends assigning pre-determined readiness levels on a “continuum of readiness” to all RCAF units.**

These two recommendations would be key enablers for commanders at all levels and would enable the MRP to be more flexible by understanding in near real-time the status of the element. At the tactical level, it would enable the Squadron Commander to prioritize their training activities in order to meet the required level of operational capabilities, but also not overtask their personnel when not required. At the operational level, it would enable the division commander to understand capability status, but more importantly, where units are located on the continuum of readiness in order to prioritize allocation of resources. Additionally, this approach would enable the commander to understand what training is required and not overtask units that do

¹⁸⁷ Department of National Defence, *Evaluation of Air Force Readiness...*, 58.

¹⁸⁸ Brigadier General Iain Huddleston, Director General Air Force Readiness, teams conversation with author, 6 April 2021.

not require the extra training. At the strategic level, it would enable the RCAF Commander to make adequate recommendations to the CDS when it comes to forces available, for how long and what would be the impact of leaving the said force on high readiness. Finally, and most importantly, the suggested approach would enable the government to understand how much it costs in money, time, and people to commit troops to tasks, maintain a capability, or hold units at high readiness.

Building on the justification of the previous recommendation, the MRP management of personnel and its allocation to the CFTPO system has been accused of not being as responsive and flexible as it was made to be.¹⁸⁹ The MRP, as mentioned in chapter 1, is divided in geographical, fleet and Lines of Operations (LoO) categories. The criticism comes mainly when talking about identifying members of an ATF based on the geographical divide construct and the repercussion of not filling its fair share of CFTPO lines as the lead mounting Wing and expecting other Wings, mainly the supporting Wing, to fill these gaps. Although less of an issue today due mainly to education and the understanding of the repercussions of not adhering to the system, the first years of the MRP saw lead mounting Wings unwilling to fill the majority of positions, creating friction among Wing Commanders.¹⁹⁰ Critical to operational effectiveness and providing advanced warning to deploying personnel, this back and forth between the lead mounting Wing, 1 CAD and the other Wings created major delays in completing the CFTPO. The result was little advanced notice to the joint task force (JTF) Commanders overseas of who would be replacing the currently

¹⁸⁹ Major General Michel St-Louis, Commander of Canadian Army Doctrine and Training Centre, Teams conversation with author, 1st April 2021; Brigadier General Iain Huddleston, Director General Air Force Readiness, teams conversation with author, 6 April 2021; Colonel Luc Girouard, Commander 2 Wing, telephone conversation with author, 15 January 2021; Lieutenant-Colonel Scott Ash, Commander Barker college, Teams conversation with author, 11 March 2021.

¹⁹⁰ Brigadier General Iain Huddleston, Director General Air Force Readiness, teams conversation with author, 6 April 2021.

deployed ATF. In addition, some deploying personnel would only have a couple weeks of notice, leading to a situation where the person deploying was not adequately prepared.¹⁹¹

One way to address this situation, according to current Dir General Air Readiness Brigadier General Huddleston, would be to have the RCAF adhere to the concept that monitor mass, a human resource management software, should become even more used than Outlook.¹⁹² Like most software systems, monitor mass requires valid information to provide valid analysis. While it has been in use by the RCAF for some time now, it has not become the tool it was sold to be for a multitude of reasons. However, this is aggravated by the lack of proper data input by units and formations at all levels.¹⁹³ By becoming a more prevalent tool, tailored to air force usage, monitor mass would enable commanders at both the Wings and Divisions to understand the status of their personnel in real time. This would also enable 1 CAD Commander, via the A1 cell, to quickly manage the list of people that would have to be committed on the CFTPO rendering the back and forth between all players a thing of the past.

Therefore, this paper recommends that the RCAF investigate its strategy when it comes to adherence and daily usage of monitor mass software in order to make it a force multiplier tool. This would greatly raise the credibility of the RCAF to put together an ATF in the appropriate amount of time, leaving the members a lot more notice before they would have to deploy enabling good transition time for the members and their families before the deployment.

¹⁹¹ Brigadier General Iain Huddleston, Director General Air Force Readiness, teams conversation with author, 6 April 2021.

¹⁹² *Ibid.*

¹⁹³ *Ibid.*; Royal Canadian Air Force, “DYK? ETARS is now available in Monitor/MASS!”, last modified, 11 January 2021. <http://www.rcaf-arc.forces.gc.ca/en/article-template-magazine.page?doc=dyk-etars-is-now-available-in-monitor-mass/kjk9yn1f>.

In order to stay a tool of strategic relevance, the MRP needs to keep evolving to maintain the operational credibility of the RCAF and meet tomorrow's challenges. Given indications that both the CAF and the RCAF are willing to adapt the MRP, this chapter provided five recommendations for further development and eventual implementation. These changes will ensure relevance in the context of peer-to-peer conflict, create efficiency in the context of COVID-19 and personnel shortages, and provide predictability to the Chain of Command and RCAF personnel. All of these are necessary to maintain the CAF and RCAF on the right track for success in the face of future challenges.

Conclusion

The intent of this research paper was to demonstrate that, although still a work in progress, the RCAF MRP and its related activities have been successful. It is particularly important to mention that thanks in much part to the MRP the RCAF is able to fulfil its core mandate commitments from SSE. Therefore, this makes MRP a direct contributor to the RCAF's success in expeditionary air operations, and enables the RCAF to justify its strategic relevance to the CAF and the government of Canada.

By analyzing the MRP's current situation and its background using available strategic guidance and doctrinal documents, this paper provides an analysis of the RCAF MRP, setting the stage for further detailed analysis. This comprehensive review of all the main references, including the CA MRP which greatly influenced the RCAF MRP, also builds a picture of the current situation, and provides a synopsis for members of the RCAF who want to understand what the MRP is and what it can do for them.

Through analysis of what and how other allies have gone through similar changes within their own organizations, lessons learned were identified that could be

adapted to the CAF or the RCAF. Leveraging this information could save time and serve to enhance the RCAF's credibility among not only the Canadian government, but also Canada's allies. More precisely, understanding how the USAF and the RAAF are managing their readiness enables the CAF and the RCAF to avoid some pitfalls, while replicating, or tailoring, successful changes.

By combining the analysis of the current MRP and similar allied readiness programs, supplemented by insight and guidance from subject matter experts, this paper put forward a list of five recommendations. This list offers the CAF and the RCAF insight into avenues for further exploration in order to adapt its management of the MRP in a post COVID-19 and post COIN operations world.

The first recommendation speaks to the future of the Air Force and the RCAF being ready to fight the future fight. The remainder of the recommendations speak to two types of accountability. The first is accountability of resources in that with the limited amount available, they need to be managed properly and in the most efficient way, making joint integration and readiness cost tracking essential. Second, is the accountability to and for people, in that with personnel being the prized resource of the RCAF, there needs to be an adjustment made in how they are tasked and collectively trained for expeditionary air operations.

In order to successfully evolve the MRP, command buy-in is necessary, as are resources to develop and implement the proposed recommendations. However, such investment is both necessary and worthwhile, as it will improve the efficiency of maintaining and sustaining RCAF readiness, while facilitating flexibility and agility. These changes are necessary for the RCAF to remain a tool of strategic relevance in the pan-domain era.

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