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Aerospace Operations Training Centre

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Service Paper

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Service Paper – Étude militaire

AEROSPACE OPERATIONS TRAINING CENTRE

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AIM

1. This service paper aims to review the current Royal Canadian Air Force (RCAF) structure for air operations and aircrew training of common qualifications and look for commonalities. This paper will provide observations and suggest that common qualifications exist among air operations trades. The primary focus is on Pilots, Air Combat Systems Officers (ACSO), and Aerospace controllers (AEC) but could be expanded into other aerospace trades and possibly non-aircrew trades in the RCAF. The emphasis will be that an Aerospace Operations Training Centre could amalgamate specific qualifications and requirements into a centralized course and provide efficiency in the RCAF training system.

INTRODUCTION

2. As the Canadian Armed Forces (CAF) continues along a path of reconstitution, a need to find efficiencies in training remains a crucial step forward. The CDS has directed all Level 1 Commanders (L1s) to "Identify inefficiencies and opportunities to reduce or streamline processes…"[1] as well, "L1s should be aggressive in this task and consider all activities irrespective of their scope, significance, and history.[2] In addition to this, as it pertains to training and force generation, CDS has also directed L1s to "Review and modernize the training processes…to minimize unproductive delays between foundational and career courses."[3]

3. As 2 Canadian Air Division (2 CAD) is responsible for all RCAF training, particularly all air operations training, the CDS directive regarding the need to find efficiencies in training would fall within the 2 CAD purview. Current wait times and management of the Basic Training list (BTL) are listed as 2 CAD Commander priorities, and exploring a new way of conducting initial air operations training may bring opportunities to reduce wait times, deal with BTL concerns, and meet the CDS directive of aggressive, streamlined processes to minimize production delays.

DISCUSSION

4. For purposes of this paper, the focus of trades and common training qualifications will be on Pilots, ACSOs, and AECs. Capacity exists to also look at the commonality within the Airborne Electronic Sensor Operator (AES Op) trade however, the Officer and Non-Commissioned Member (NCM) training differences may add difficulties and complexity due to

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[1] Department of National Defence, 'CDS/DM Directive for CAF Reconstitution', 11 August 2022, https://www.canada.ca/en/department-national-defence/corporate/policies-standards/dm-cds-directives/cds-dm-directive-caf-reconstitution.html.
[2] *Ibid*. Para 13.a.4.
[3] *Ibid*. Para 13.a.11.

specific NCM training requirements outside of just the trade qualifications. Future opportunities could be explored and trialled to see if the incorporation of NCM trades would be of value and added efficiencies.

5. Upon completing Basic Military Officer Qualification (BMOQ), new members streaming into the Pilot, ACSO, or AEC trades are placed on the BTL to await future course loading for their respective trade training. During this BTL waiting time, most members are sent to locations and Units that may or may not be related to the occupation they will be training and eventually qualified for. This possibly provides valued exposure for the members and offers Units some general duty tasking they can have the BTL members perform. However, in many cases, the On-Job-Training (OJT) provided does not directly contribute to learning their occupation or the opportunity to begin understanding what they will be doing in the future. This may or may not contribute to value learning for the new members.

6. Besides being sent for OJT postings, current BTL members are not being challenged or given the opportunity to better understand the basic training requirements for their respective occupations. The need for Developmental Period 1 (DP1) training is also not consistently addressed as this falls on the Unit they are working for and the BTL managers to encourage. Commander 2 CAD Directive and Guidance addresses the need to focus on DP1 requirements and their importance[4]. As will be introduced in this paper, by having a common training centre/school to train and baseline these aerospace operations trades, there would exist the opportunity to provide all the DP1 training concurrently under a managed structure.

7. Concerning the specific trade requirements, a good portion of common training points are shared between Pilots, ACSOs, and AECs. For instance, all of these trades have a need to understand: Meteorology, Communications, RADAR, Airspace, and Air Regulations. For Pilots and ACSOs: Aerodynamics, Navigation, GPS, and associated electronic instruments are all trained during their respective trade qualifications but not commonly, or in other words, together. The training in these topics requires a duplication of effort, as each trade similarly provides courses on said topics and likely is duplicated amongst the various schools. Many of the topics do not pertain more to one particular trade than another and are taught at a general level of knowledge and understanding. As well, the standard to which they are taught is left for the respective school to determine, and so trades are given similar topics but trained to a different standard.

[4] Department of National Defence, 'COMMANDER 2 CANADIAN AIR DIVISION (2 CAD) FORCE GENERATION DIRECTIVE AND GUIDANCE – FY 22/23' (Commander 2 Canadian Air Division, 5 May 2022), https://rcaf.mil.ca/en/2-cad/2-cad-commander/comd-dg.page.

8. By reviewing the current Training Plans (TPs)[5] and requirements for training from the Qualification Standards (QS)[6], the commonality of the specific courses or objectives could be combined into a more wholesome single course or, for that matter, a qualification. This qualification, upon completion, would allow the members to progress to their subsequent specific occupation training with a common baseline. Each trade could look at supplemental training as required if a particular need exists outside the common training. This would, in theory, shorten occupation training at the school level but not necessarily for the students overall. The advantage to this is the reduced time spent by students at training schools and the ability for those schools to focus on trade-specific training. This may lead to options of increasing course loading or serials as the actual overall course will be shortened. As well, if a student is struggling with core concepts (common training as identified), this would be identified early at the Aerospace Operations Training Centre, and extra attention or removal from the course could be managed much easier than at an occupational school where the student slots are limited and valued.

9. Common training examples previously identified are not unique to the military, and in the case of many of them, for example, meteorology, they do not change much over time. This brings the advantage of creating a specific training plan or course that various military and civilian instructors can easily provide. Including civilians in the training system, particularly for generic topics, would provide much-needed replacement of military instructors, or the lack of them. This also creates an excellent opportunity for using the Reserve Force for instruction. Other military instructors could be focused at occupational training schools, while contracted civilian instructors and Reserves could provide the common training. As a side note, many schools already have civilian instructors teaching specific courses already, and this could be leveraged and reallocated as needed.

10. By providing common training, students would not only be exposed to a baseline training requirement for their occupation but have the added value of socialization, networking, and knowledge of each other's occupations. The current training system does not allow for this opportunity as BTL have very few common training opportunities early in their careers. The first time they collectively work together is when they are posted to a Unit upon trade qualification. With a common school, fundamental tenets of aerospace power as well as a better understanding of what each occupation does and how they fit into the bigger RCAF and CAF system could be provided. This also has the advantage of DP1[7] requirements and would reinforce the purpose of the Air Force Officer Development (AFOD) program. Programming could be created to not only

[5] Department of National Defence. 'ACSO, AEC, Pilot Training Plans Held at Respective Schools.' 2 Canadian Air Division. Accessed 24 February 2023. https://res-wpg-avsabr2.forces.mil.ca/Catalog/app/search.
[6] Department of National Defence. 'ACSO, AEC, Pilot Qualification Standards'. 2 Canadian Air Division. Accessed 24 February 2023. https://res-wpg-avsabr2.forces.mil.ca/Catalog/app/search.
[7] Department of National Defence, 'RCAF Officer Professional Developmental Periods' (2 CAD Director Professional Development), accessed 24 February 2023, https://rcaf.mil.ca/en/2-cad/2-cad-commander/.

train the common aerospace operations qualifications but also incorporate the AFOD and other DP1 programs providing better oversight and focused completion.

11. Before commencing aircrew training for Pilots and ACSOs, there is a requirement for the BTL members to partake in Aeromedical Training, Survival Training, and Sea Survival Training as pre-requisite courses prior to the commencement of flying training. These courses are held at the Canadian Forces School of Survival and Aeromedical Training (CFSSAT) and the Canadian Forces School of Search and Rescue (CFSSAR) in Winnipeg, MB, and Comox, BC, respectively. By creating an Aerospace Operations Training Centre in Winnipeg at 17 Wing, the immediate location would provide a significant cost reduction for Temporary Duty (TD) travel from Units outside Winnipeg, requiring members to travel back and forth for each course. Students loaded on an Aerospace Operations Course could be concurrently loaded onto CFSSAT courses scheduled to occur back to back or possibly within the courses allocated schedule. CFSSAR Sea Survival Training would have to remain a travel requirement given the proximity and need for the ocean but it would only be one travel trip versus the many that exist currently.

12. Another benefit to a common aerospace operations qualification is that once a student has completed the qualification if they run into significant concerns at the occupational level of training, they still have the common qualification and could transfer to another occupation without the need to repeat all the common training. For example, a BTL student joins as a Pilot in the current system, completes all their training, and, for instance, if they fail out of Phase 3 (PHIII) in Moose Jaw and are determined to be Ceased from Training (CT), they may have opportunity to transfer to a new occupation within another RCAF trade, like ACSO, AEC, etc. If accepted, they would have to redo all the common training previously identified. In the case of a common aerospace operations qualification, as suggested, this student could be quickly loaded into another trade and that training system without the need for repetition. This does not exist currently as the common courses are not trained to the same standard, and although there is the option for a Prior Learning Assessment and Recognition (PLAR) to occur, the variance in course standards typically negates the granting of these courses as well so as not to inject a student part way through the training of other students and the cohesion built within the course.

13. A factor and trade not yet discussed is the newly formed Air Operations Officer (AOO) occupation. As the author only has limited experience with this trade and it is still in its infancy, the points made will be generic and may lack definition. Much of the training and common courses identified are tied to the AOO occupation, although not as many as for the aircrew and AEC trades. This is brought to attention as there is a potential with a more thorough review to have all RCAF air officer trades do a common aerospace operations qualification but incorporate much (maybe all) of the AOO training. This would provide valuable insight to all students into what the AOO trade provides. Still, as noted in the previous paragraph, a student that has concerns or difficulties in another trade could have the potential to transfer into the AOO occupation quickly and with little need for follow-on training. In addition, this would provide the

AOO occupation with a larger pool of candidates should they have other issues or wish to switch occupations at a future date.

14. Within the 'Report of the Independent External Comprehensive Review of the Department of National Defence and the Canadian Armed Forces'[8] commonly referred to as the Arbour Report, a section in Part II – Leadership focuses on Military Training and Professional Military Education, as well as Recruitment. The recommendations from within that section highlight Onboarding and early training and make recommendations related to the concept proposed here. Specifically, paragraph 2 raises concerns about "the length of time new members need to wait before, and in between, training courses."[9] Using a common training centre, new members within RCAF aerospace operations trades can be quickly integrated into a training program and provided valuable qualifications and professional development without waiting for occupational courses, which tend to be backlogged at present. The members can then be streamlined into their respective training with a programmed course date. All the qualifications and pre-requisite training could be front-loaded so students can be easily scheduled for occupational training or quickly changed to another trade without re-scheduling and adjusting course loading as is occurring now. The goal is that members' time between courses is reduced.

CONCLUSION

15. As the CAF and RCAF struggle to fill positions, an emphasis on recruitment and training has been placed forefront of reconstitution efforts. A need to find efficiency in training and reduce wait times for new members has been identified. As 2 CAD only plays a proportional role in recruitment but a pivotal role in training, a review of how training is conducted for the RCAF operational occupations was looked at through the lens of aerospace operation trades and from the perspective this author provides as a previous ACSO instructor and 2 CAD Standards and Evaluation Team member.

16. With the creation of an Aerospace Operations Training Centre that provides a common air operations qualification, a standardized approach to training could be provided to three (possibly four) of the largest air operations officer trades. This qualification would set a baseline of instruction and knowledge that is required for the next phase of occupation training and would provide students with an opportunity to work together early in their careers. Within the structure of the training, a focus on DP1 requirements could be incorporated and better managed through a directed approach. Ultimately, this provides the students with common DP1 and training requirements, all standardized.

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[8] Department of Department of National Defence, 'Report of the Independent External Comprehensive Review', navigation page, 10 June 2022, https://www.canada.ca/en/department-national-defence/corporate/reports-publications/report-of-the-independent-external-comprehensive-review.html.
[9] *Ibid*. Part II-Leadership

17. As the CDS directive requires, creating an Aerospace Operations Training Centre could satisfy "…methods of delivery where possible, to minimize unproductive delays between foundational and career courses."[10] The training centre may not reduce overall training time, which in the opinion of the author, should not be the end goal as this typically requires the reduction of standards; however, the training centre would provide a common set of qualifications that will have the effect of shortening the occupation training schools, reduce wait times, and providing a standardized approach to common training and DP1 requirements

18. Identifying students' potential or possible concerns early in the training system is beneficial and efficient to the training system; having a common training centre for multiple trades would provide a means of that identification and be able to address it more effectively than separate schools. It also would permit the quick and efficient transition to an alternate occupation with minimal delay, which in the end may keep the member engaged and not frustrated at waiting for a new plan and time delay for new coursing of a different occupation.

RECOMMENDATION

19. Create an Aerospace Operations Training Centre focused on providing common training courses across aerospace operations trades. Along with the training centre, the creation of a common aerospace operations qualification along with a comprehensive plan for DP1 completion as part of the training package.

[10] Department of National Defence, 'CDS/DM Directive for CAF Reconstitution', 11 August 2022, https://www.canada.ca/en/department-national-defence/corporate/policies-standards/dm-cds-directives/cds-dm-directive-caf-reconstitution.html.

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