

RCAF Air Doctrine Governance: Considerations for the Employment of Air Power in Joint Operations

Article #7 in a series on command and control and the Royal Canadian Air Force¹

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Since the standing up of the Canadian Forces Aerospace Warfare Centre (CFAWC) in 2005, there has been a gradual development of air doctrine that serves the capstone (strategic), keystone (operational) and tactical levels. Known by its nomenclature as the “Operational/Tactical Publication, Operations (Air) 400” or the better-known name, the “B-GA-400” series, this body of doctrine provides fundamental and enduring principles that guide the proper application of air power. In order to be relevant to a Royal Canadian Air Force (RCAF) operating within an ever-changing and evolving battlespace, air doctrine must reflect what is tried and true, while at the same time being receptive to change and exhibiting a degree of agility. There are risks, however, should doctrine lean too far either way. Doctrine that holds too rigidly to enduring and proven principles can be perceived by the air force at large as outdated and irrelevant. If doctrine undergoes too much change (or change is applied too quickly), the result can be radically new and untested doctrine that does not serve commanders well when they seek options for the employment of air power.

The RCAF’s air doctrine fulfills another important role in that it represents the officially sanctioned beliefs and principles approved by the Commander RCAF (Comd RCAF) in performing the role of Air Doctrine Authority (ADA). This leaves no doubt that approved doctrine is both authoritative and inclusive and that all members of the RCAF are subject to it. Although doctrine is authoritative, it requires judgment in its application. How doctrine is interpreted and employed by commanders has been the general theme of this series of articles.

In this article, we will discuss how air doctrine is governed, developed, and approved. Understanding how the RCAF’s air doctrine is developed and managed can aid commanders at all levels by helping them appreciate how they fit into the process. All RCAF personnel should see themselves as part of the air-doctrine development process and not simply as recipients and users of doctrine.

Air doctrine governance

In order to modernize the RCAF’s air-doctrine process, Air Force Order (AFO) 8000-0, “Air Doctrine Governance,” was developed from two previous Air Command Orders (ACOs) that provided direction for air-doctrine development management. The

new AFO has both streamlined and simplified these processes, while making the governance structure more inclusive of RCAF and joint stakeholders. The AFO provides guidance in several key areas to include policy, relationships, and doctrine integration, while identifying key positions in the development and governance of air doctrine. Each of these positions possesses certain authorities and responsibilities in the governance structure. These roles include the following:

Air Doctrine Authority. The ADA is the RCAF officer with authority over all aspects of the development, production, and dissemination of Canadian Forces air doctrine.² Because air doctrine is one of the RCAF’s residual authorities, as shown in Figure 1, the authority of ADA is fulfilled by the Comd RCAF.

Air Doctrine	Aircrew Training and Standards	Flight Safety	Operational Airworthiness	Technical Airworthiness
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Figure 1: RCAF Residual Authorities³

Air Doctrine Programme Authority (ADPA). The RCAF officer with authority to oversee the Air Doctrine Programme on behalf of the ADA is the ADPA. The ADPA fulfills the responsibilities of the Air Doctrine Committee (ADC) Chair and is the designated coordinating authority for Canadian Armed Forces (CAF) joint and combined doctrine that includes Air Force functions. The Comd RCAF has appointed the Deputy Commander (DComd) RCAF as the ADPA.

Air Doctrine Technical Authority (ADTA). The ADTA is the RCAF officer with authority to manage the air-doctrine development process on behalf of the ADPA. The ADTA also fulfills the responsibilities of the ADC Secretary. The Comd RCAF has appointed the Commanding Officer (CO) CFAWC as the ADTA.

Commanding Officer CFAWC. According to AFO 8000-0, the CO CFAWC shall provide doctrinal advice, as required, on the application of air doctrine in all Air Force individual training and education, including air environmental, operational, and collective training. The CO CFAWC will coordinate air-doctrine input for joint doctrine development and provide doctrinal support for all Air Force projects.

CFAWC Air Doctrine Development Branch Head. The Branch Head is responsible to the CO CFAWC for all aspects of air-doctrine development policy, management, coordination, and execution. The Branch Head also ensures appropriate Air Force representation on other CAF and allied doctrine development panels and provides expert advice and recommendations related to the Air Force to the Joint Doctrine Working Group (JDWG).

Capability advisory group (CAG) chairs. To provide the ADC with the appropriate capability expertise to execute assigned responsibilities, the chairs of the CAGs are appointed as members of the ADC. CAG chairs are responsible for overseeing the development of specific tactical air doctrine (through the identification of the requirement

for new tactics, techniques and procedures [TTP]) and other forms of tactical doctrine as well as for revising existing tactical doctrine.

The Air Doctrine Committee. AFO 8000-0 has also updated the structure and functions of the body at the centre of the RCAF's air-doctrine governance process, the ADC. Responsible to the ADPA for the development of all doctrine, the ADC is comprised of members from across the RCAF whose job it is to shape capstone-, keystone-, and tactical-level doctrine. ADC membership is structured to include all CAGs and air-doctrine stakeholders throughout the CAF, including CFAWC, the Canadian Forces Warfare Centre (CFWC), Land and Maritime warfare centres as well as key members of the Air Staff and 1 and 2 Canadian Air Division (Cdn Air Div) Headquarters. The overarching concept behind ADC membership is to be as inclusive as possible of all entities needed to help develop effective and forward-thinking air doctrine. All members of the RCAF access ADC activities through the committee member in their chain of command.

The ADPA acts as the ADC Chair and ensures oversight of the RCAF air-doctrine programme. Assisted by the ADC Secretary (the CO CFAWC), the ADPA is responsible to convene the ADC at least once a year unless otherwise directed by the ADA.

Air doctrine development

AFO 8000-0 also guides the air-doctrine development process. It is the responsibility of the ADPA to ensure that doctrine is effectively developed to ensure its operational relevance for the present and the future. Managing the development of air doctrine at different levels are the ADTA (capstone and keystone levels) and the commanders of both 1 and 2 Cdn Air Divs (tactical level). Air doctrine at all levels (see Figure 2) should reflect both current capabilities and those capabilities that will develop within the next two to four years. It is important that the doctrine-development battle rhythm reflects the relatively short cycle of air-power evolution so that doctrine is not overtaken by recent developments in the field.



Figure 2. Examples of doctrine (left to right): the capstone-level B-GA-400-000/FP-000, *Canadian Forces Aerospace Doctrine*; keystone-level B-GA-401-000/FP-001, *Canadian Forces Command Doctrine*; and tactical-level B-GA-442-001/FP-001, *Tactical Aviation Tactics, Techniques and Procedures*.

Timeframe for development. Developing a doctrine manual is a 15-month process from inception through drafting, endorsement, approval, translation, production, distribution, and socializing. AFO 8000-0 also stipulates it is critical that air doctrine be updated at regular intervals, with a formal review to occur no later than every four years or as directed by the ADA or ADPA.

Capstone doctrine development. RCAF capstone air doctrine⁴ expresses fundamental and enduring principles that describe and guide the proper application of air power. Capstone doctrine is the foundation for all other levels of air doctrine and establishes the framework for the effective use of air power. Capstone air doctrine is developed by CFAWC and endorsed by the ADC and senior RCAF leadership before being approved by the Comd RCAF.

Keystone doctrine development. RCAF keystone air doctrine⁵ applies the principles of capstone doctrine to the organization and employment of air forces. It defines air-power capabilities within the context of the Air Force functions. Keystone doctrine is the foundation for the development of tactical doctrine. Keystone air doctrine is developed by CFAWC and endorsed by the ADC as well as senior RCAF leadership before being approved by the Comd 1 Cdn Air Div.

Tactical doctrine development. RCAF tactical doctrine⁶ applies the principles of keystone doctrine to explain how to employ air power capabilities to accomplish desired effects. Tactical doctrine is codified in the body of TTPs, system manoeuvre manuals (SMMs), and other publications. Tactical air doctrine is developed by the appropriate CAG, endorsed by all CAG chairs and either the 1 Cdn Air Div DComd Force

Generation (FG) or 2 Cdn Air Div Chief of Staff (COS), as applicable, before being approved by the Comd 1 or 2 Cdn Air Div, as applicable.

Air doctrine note (ADN). When important doctrinal concepts arise and are needed by commanders for immediate use in exercises and operations, they may be developed in the form of an ADN. The development of an ADN is limited to capstone- and keystone-level doctrine and is managed by the ADTA. Once the ADPA is satisfied that the ADN addresses the pressing air-doctrine need, it is approved by the ADA. ADNs should be incorporated into the appropriate doctrine during the normal development cycle. To date, only two ADNs have been released (one in 2010 and another in 2014), both addressing pressing command and control issues.

Air doctrine development steps

As air doctrine is developed during its 15-month process from inception to socialization, it passes through several steps, each serving an important function. All stages of air-doctrine development are overseen by the appropriate authority—either the ADTA (for capstone and keystone doctrine) or the Comd 1 or 2 Cdn Air Div (for tactical doctrine). AFO 8000-0 has greatly simplified this process into five stages, as shown in Table 1:

Doctrine Level	Development Responsibility	Initial Endorsement Level	Final Endorsement Level	Approval Authority	Production and Distribution
Capstone	CO CFAWC (ADTA)	ADC Membership	CC3 gen offrs	Comd RCAF (ADA)	CO CFAWC (ADTA)
Keystone	CO CFAWC (ADTA)	ADC Membership	CC3 gen offrs	Comd 1 Cdn Air Div	CO CFAWC (ADTA)
Tactical	CAG(s)	CAG Chair(s)	DComd FG 1 Cdn Air Div or COS 2 Cdn Air Div	Comd 1 Cdn Air Div or Comd 2 Cdn Air Div	Comd 1 Cdn Air Div or Comd 2 Cdn Air Div

Table 1. Air Doctrine Development Process⁷

- a. **Development.** Air doctrine (at any level) is developed by its authors in a series of study drafts until ready for review by the ADC. The final study draft is submitted to the ADC in the form of an initial endorsement draft.
- b. **Initial endorsement.** The ADC membership reviews the initial endorsement draft and provides feedback to the authors in an effort to clarify or improve the doctrine. Once the initial endorsement draft has been finalized and all ADC feedback has been dealt with by the authors, the doctrine is then submitted to RCAF senior leadership in the form of a final endorsement draft.

- c. **Final endorsement.** The final endorsement draft is submitted to a specified group of RCAF general officers (known as the capability component 3 [CC3] general officers) for the final stage of review. Once all concerns have been satisfied, the final endorsement draft is submitted to the appropriate authority for approval.
- d. **Approval.** Once approved, air doctrine is called “interim doctrine,” defined as approved doctrine that is awaiting translation and may be employed for urgent operational requirements or training development purposes only.⁸
- e. **Production and distribution.** After interim doctrine has been translated and formally finalized by production staff, it is distributed in electronic format and hard copy.

Air doctrine and you

By now, you may be wondering what role you might play in this new air-doctrine governance structure. The answer is simple: an important one. Every member of the RCAF uses doctrine on a daily basis to accomplish their unit’s missions and tasks. Undoubtedly, in the past, you have identified instances where the established doctrine was either out of date or might have been superseded by other practices or procedures. This is where you have a responsibility to take note where improvements can or should be made and pass them along through the chain of command to the attention of the doctrine’s author. In this way, you can be an active participant in the doctrine-development process.

Take it from me; doctrine writers at all levels appreciate unsolicited feedback from the field. It gives us an appreciation of how effectively doctrine is contributing to the delivery of air power, and where potential deficiencies exist. Feedback on doctrine is of tremendous value and is something you should never be afraid to provide.

If the RCAF’s air-power doctrine is to remain relevant for personnel at all levels, it must continue to be developed and managed in a forward-thinking and responsible manner. By ensuring that commanders across the Air Force are represented in the development and approval process, AFO 8000-0 represents the best approach to the governance of Canada’s air doctrine. Ultimately, this process translates into doctrine that fulfills the needs of a versatile and agile RCAF.

Abbreviations

ACO	Air Command Order
ADA	Air Doctrine Authority
ADC	Air Doctrine Committee
ADDC	Air Doctrine Development Centre
ADN	air doctrine note
ADPA	Air Doctrine Programme Authority

ADTA	Air Doctrine Technical Authority
AFO	Air Force Order
CAF	Canadian Armed Forces
CAG	capability advisory group
CC3	capability component 3
Cdn Air Div	Canadian Air Division
CFAWC	Canadian Forces Aerospace Warfare Centre
CO	commanding officer
comd	commander
COS	Chief of Staff
DComd	deputy commander
<i>DTB</i>	<i>Defence Terminology Bank</i>
FG	force generation
gen offrs	general officers
RCAF	Royal Canadian Air Force
SMM	system manoeuvre manual
TTP	tactics, techniques and procedures

Notes

1. This is the seventh in a series of short papers on the subject of command and control in the Royal Canadian Air Force (RCAF). For more detailed information, consult B-GA-401-000/FP-000, *Canadian Forces Aerospace Command Doctrine*, found on the internet at <http://www.rcaf-arc.forces.gc.ca/en/cf-aerospace-warfare-centre/aerospace-doctrine.page>, and on the Defence Wide Area Network at http://trenton.mil.ca/lodger/CFAWC/CDD/Doctrine/Pubs/Operational/401_Series/B-GA-401-000-FP-001 (both sites accessed October 30, 2014).

2. *Defence Terminology Bank (DTB)* record 34072, modified.

3. For further discussion on RCAF residual authorities, see the B-GA-401-000/FP-000.

4. B-GA-400-000/FP-000, *Canadian Forces Aerospace Doctrine*.

5. B-GA-401-000/FP-000 (Command) through B-GA-407-000/FP-000 (Generate) doctrine manuals.

6. An example of tactical doctrine is the B-GA-442-001/FP-001, *Tactical Aviation Tactics, Techniques and Procedures*.

7. Royal Canadian Air Force Internal - Orders and Directives. AFO 8000-0 “Air Doctrine Governance,” accessed October 30, 2014, <http://airforce.mil.ca/caf/cafstaff/page-eng.asp?cid=398>.

8. *DTB* record 43726.