

Canadian
Forces
College

Collège
des
Forces
Canadiennes



RESHAPING AIR FORCE INTELLIGENCE FOR INFORMATION AGE WARFARE

Maj Levon Bond

JCSP 44

PCEMI 44

SERVICE PAPER

ÉTUDE MILITAIRE

Disclaimer

Avertissement

Opinions expressed remain those of the author and do not represent Department of National Defence or Canadian Forces policy. This paper may not be used without written permission.

Les opinions exprimées n'engagent que leurs auteurs et ne reflètent aucunement des politiques du Ministère de la Défense nationale ou des Forces canadiennes. Ce papier ne peut être reproduit sans autorisation écrite.

© Her Majesty the Queen in Right of Canada, as represented by the Minister of National Defence, 2018.

© Sa Majesté la Reine du Chef du Canada, représentée par le ministre de la Défense nationale, 2018.

CANADIAN FORCES COLLEGE – COLLÈGE DES FORCES CANADIENNES
JCSP 44 – PCEMI 44
2017 – 2018
SERVICE PAPER - ÉTUDE MILITAIRE

**RESHAPING AIR FORCE INTELLIGENCE FOR
INFORMATION AGE WARFARE**

Maj Levon Bond

“This paper was written by a student attending the Canadian Forces College in fulfilment of one of the requirements of the Course of Studies. The paper is a scholastic document, and thus contains facts and opinions, which the author alone considered appropriate and correct for the subject. It does not necessarily reflect the policy or the opinion of any agency, including the Government of Canada and the Canadian Department of National Defence. This paper may not be released, quoted or copied, except with the express permission of the Canadian Department of National Defence.”

Word Count: 2460

“La présente étude a été rédigée par un stagiaire du Collège des Forces canadiennes pour satisfaire à l'une des exigences du cours. L'étude est un document qui se rapporte au cours et contient donc des faits et des opinions que seul l'auteur considère appropriés et convenables au sujet. Elle ne reflète pas nécessairement la politique ou l'opinion d'un organisme quelconque, y compris le gouvernement du Canada et le ministère de la Défense nationale du Canada. Il est défendu de diffuser, de citer ou de reproduire cette étude sans la permission expresse du ministère de la Défense nationale.”

Compte de mots: 2460

RESHAPING AIR FORCE INTELLIGENCE FOR INFORMATION AGE WARFARE

AIM

1. The aim of this service paper is to examine the way in which the Air Force Intelligence sub-occupation¹ is managed and employed in the Royal Canadian Air Force (RCAF) and to propose an alternative structure that would provide a more effective and efficient means of managing, training and generating Air Force Intelligence personnel.

INTRODUCTION

2. One of the notable features of the 2017 Canadian Defence Policy, “Strong Secure Engaged (SSE)”, is the emphasis it places on enhancing the functional areas that make up the core responsibilities of Air Force Intelligence, namely targeting, intelligence, surveillance and reconnaissance (ISR).² It states, “This targeted investment in [ISR] equipment will be accompanied by a significant new investment in the defence intelligence experts who collect, analyze and disseminate information,”³ which will largely be comprised of Air Intelligence personnel. The Canadian Armed Forces Intelligence Branch has already undergone extensive growth over the last decade and a half, principally due to experiences from Afghanistan, but is poised to undergo further growth under the auspices of SSE.⁴ However, the structure of the trade,

¹ Air Force Intelligence has been a Royal Canadian Air Force managed sub-occupation since 2014.

² Government of Canada, Department of National Defence, “Strong Secure Engaged: Canada’s Defence Policy,” (June 2017).

³ Strong Secure Engaged, 15.

⁴ Strong Secure Engaged sets out an increased manning goal of 3,500 regular force personnel, 1,500 reserve force personnel and 1,150 civilians. The top five priority areas for growth as articulated in SSE are cyber, space, intelligence, targeting and personnel support. Strong Secure Engaged, 19.

most notably the Air Force Intelligence sub-occupation, reflects the old manning patterns and is not well poised to transition to information age warfare.

3. The Air Force Intelligence sub-occupation is currently dispersed throughout the operational wings and other force generating units under varying command and control relationships. As indicated in Annex A, there are currently 164 Air Intelligence positions within RCAF units at 15 different geographical locations in 23 different organizations. This legacy occupational structure has resulted in three interrelated occupational shortfalls: lack of balanced command; inefficiencies in force generation; and, absence of unit level training.

DISCUSSION

4. One of the defining features of the profession of military officers is the opportunity and responsibility to command. Non-commissioned officers are characteristically exceptional leaders, but they are not typically granted command authority. The *raison d'être* of the officer corps, however, is command. The Air Force Intelligence sub-occupation is one of the only Air Force managed trades without either any organic command positions or command appointments.⁵ Air Intelligence personnel occupy staff positions in their respective organizations, often times with little to no responsibility for the Intelligence personnel employed in subordinate

⁵ In the Military Employment Structure Implementation Plan for Intelligence Officers the jobs listed for Air Intelligence Officers at the rank of Maj include subunit command; however, as indicated in the positions by RCAF units in Annex A, there are no subunit command positions in the RCAF. Wing A2 positions are listed as subunit command, but lack the authority and responsibility normally associated with subunit command. Military Personnel Generation Headquarters, Military Employment Structure Implementation Plan For the Development of a Job Based Specification for the Intelligence Occupation, MOS ID 00213 (30 Nov, 2015).

squadrons. As such, an Air Intelligence Officer can reach the rank of LCol with no experience of subunit command and without having supervised more than a few subordinates.⁶

5. In most occupations staff positions are interspersed between sub-unit and unit command to build experience and expertise working in line and staff positions from the tactical to the operational levels. The staff roles themselves are divided between those that are the purview of specialists and those that are better suited for those generalists who are developing toward unit, formation and institutional leadership. The intelligence staff position of staff -2, (A2, G2, N2, J2 etc.) is a hybrid position that can be suitable for both a specialist and a generalist. The complexities of the Five Eyes intelligence enterprise requires a degree of specialist knowledge; however, intelligence as an operational function is a command responsibility, and it behooves operational level commanders to have some experience working in the intelligence domain in order to lead it effectively. At the tactical level, operators with more training and experience in the tactics particular to their domain are often better suited to analyze adversary capabilities because they are more familiar with the equipment and how to employ it than staff trained officers with only theoretical training in tactics. It has not always been the case that A2 or squadron S2 positions were occupied by intelligence specialists and to this day not all advanced air forces employ intelligence specialists in the intelligence staff roles. It is not evident, therefore, why there need be a separate Air Intelligence Officer sub-occupation, and whether that role could be filled by operators akin to staff positions in the operations, plans or training branches, with much of the intelligence production work being done by non-commissioned specially trained Intelligence Operators (Int Ops).

⁶ As per Annex A, the Wing Int O at 1 Wing has one regular force subordinate, the Wing Int O at 3 Wing has three subordinates and the Wing Int O at 4 Wing has five subordinates. The largest section belongs to 8 Wing, where the Wing Int O has 15 regular force subordinates.

6. The main reason, it would seem, that intelligence specialist are required in the Air Force is to provide intelligence advice at the more senior levels of leadership, where decision quality intelligence across the spectrum of operations is required, and to lead the Canadian contribution to the Five Eyes intelligence enterprise. In order to be effective at the higher levels of command, however, Air Force Intelligence Officers need command authorities that include effective succession management within the sub-occupation, the responsibility and resources to train personnel and the flexibility to efficiently force generate personnel for operations.

7. Even though there are no integral command positions for Air Intelligence Officers, they have been competing for either out of trade positions within the RCAF, or for command positions open to any Intelligence Branch Officers. The Air Intelligence sub-occupation has had some recent success in the former category as an Intelligence Officer was given command of the Air Expeditionary Squadron (AES) in 2 Wing in 2016, and an Intelligence Officer was given command of the Joint Meteorological Centre (JMC) in 2017. The Air Intelligence sub-occupation has had less success in the latter category, having never occupied the position of Commandant of CFSMI, and having only once held command of the CF Joint Imagery Centre (CFJIC) and the Joint Task Force X (JTFX) units respectively.⁷

8. The latter opportunities for command positions will become increasingly more difficult for Air Int Officers to compete for since the Army Intelligence sub-occupation has restructured to create sub-unit and unit command positions under the auspices of the Canadian Army Intelligence Regiment.⁸ The Army Intelligence Regiment has sub-unit command at three All Source Intelligence Centres (ASIC), the Joint All Source Intelligence Centre (JASIC) and the

⁷ Lieutenant Colonel Paul Johnston, Former 1 Canadian Air Division A2 and Chief of ISR Operations, Telephone interview with the author 30 Jan 18.

⁸ The Canadian Army Intelligence Regiment was established in 2015. Ministerial Organisation Order 2015008 (28 June 2015).

Land Force Intelligence Fusion Centre (LFIC), all under the commander of the Army Intelligence Regiment.⁹ With the establishment of the Canadian Army Intelligence Regiment, the Army Int sub-occupation has created a balanced command model that ensures progressive levels of leadership responsibilities commensurate with rank and experience.

9. Ross Pigeau and Carol McCann describe a balanced command envelope as one in which the level of experience and competence increases in direct proportion to levels of authority and responsibility granted to a commander.¹⁰ They warn that “the level of competency should match, or be well-balanced with, levels of authority and responsibility. A large imbalance in any one of the dimensions will lead to compromised command capability.”¹¹ The current structure for Air Intelligence career progression does not facilitate a balanced command progression as outlined in Pigeau–McCann, but trends toward what they refer to as dangerous command, where one’s level of experience is not commensurate with the level of responsibility bestowed upon members employed in out of trade command positions.¹² Even with persistent growth of the Intelligence function within the RCAF, barriers to unit and sub-unit command remain inherent within the structure of the Air Force, thereby relegating the Air Intelligence Officer sub-occupation to staff positions.

10. One of the secondary effects of the dispersed occupational structure of Air Force Intelligence is that it has strained the succession planning process insofar as the dispersion of personnel has made it difficult for occupational advisors to have first-hand knowledge of the potential of the personnel under his or her own management. The structure of the Army

⁹ Commander of the Canadian Army, Master Implementation Directive Canadian Army Intelligence Regiment, 1901-1 (DFLD 2-2) (06 Feb 2014): 3.

¹⁰ Pigeau, Ross and Carol McCann. Re-Conceptualizing Command and Control. *Canadian Military Journal* (Spring 2002): 61.

¹¹ *Ibid.*

¹² *Ibid.*, 60.

Intelligence Regiment, by contrast, allows the senior leadership to more effectively rank and succession plan both officers and NCO through a system of key positions at the sub-unit level.¹³

They are better able to determine potential due to the fact that members can rotate positions within the organization, thereby allowing people to work together at different levels over time.

11. The second significant shortfall of the current employment structure of Air Force Intelligence pertains to the ability of units to force generate personnel for deployment tasks. Force generation of Air Force Intelligence personnel to fill positions on a deployed Air Task Force (ATF) is often conducted in an ad hoc fashion through a lengthy series of staff checks followed by official tasking messages. As indicated in Annex A, a staff check for a qualified Intelligence Operator at the rank of Aviator or Corporal to deploy would conceivably have to be distributed to 21 separate organizations, through multiple levels of unit and sub-unit command structures. Most of the larger force generating air force units – 1 Wing, 3, Wing and 4 Wing – have their personnel dispersed throughout their squadrons, which prohibits the Wing A2 from being able to directly manage the tasking of Intelligence personnel at the wings.

12. This structure also lacks redundancy and depth as many squadrons contain few Intelligence personnel, thereby making it difficult for the Wing A2 to reorganize his or her organization to cover gaps and fulfill both force generation and force employment requirements. The manning structure at present is postured only to support its own fleet, so when an ATF is established in a theatre of operations with an Operational Support Element (OSE), the Intelligence personnel to fill those positions have to be generated from the units that are

¹³ Lieutenant Colonel Lisa Elliott, Commanding Officer Canadian Army Intelligence Regiment, telephone conversation with author, 18 Jan 2018.

simultaneously responsible for manning their mission detachments.¹⁴ It has resulted in a situation in which the squadrons are chronically undermanned during multi-rotation deployments, which results in a command dilemma of how to employ the intelligence function within their units when the Intelligence personnel are rarely available at anything close to full strength.¹⁵

13. The third consequence of the current structure of the Air Force Intelligence sub-occupation is that there is no unit level training as part of a progressive training model, nor is there any standardization of training across the Air Force for Intelligence personnel. As a result, the training of Air Intelligence personnel is either conducted at the individual level or at the formation level. The individual training largely consists of courses of various length, intensity and relevance with an assortment of individual training packages run at the section level. Formation level training such as exercises like JOINTEX, Maple Flag, Maple Resolve and Vigilant Shield are focused on pilot or operation/planning staff training and often consist of scenarios that are logically inconsistent or sparse on details pertaining to the adversary and the operating environment. During these exercises the Intelligence personnel who participate are a secondary training audiences at best. The utility of these exercises for Intelligence professionals lies primarily at the level of staff integration, and contains little to no training in advanced analysis.

14. By contrast, the Army Intelligence Regiment is able to run annual unit level exercises in which one of the subunits is trained as the primary training audience in a unit level exercise.¹⁶ Exercise Vigilant Star is an annual exercise for the ASIC on high readiness training in which a

¹⁴ Master Warrant Officer Julien Boisvert, Former 1 Canadian Air Division A2 Readiness Intelligence Tasker, telephone interview with author, 31 Jan 18.

¹⁵ As an example, during my three years at 1 Wing from 2014 to 2017, nearly every Int O and Int Op in the Wing organization deployed on Op IMPACT over the course of a three year span. We usually deployed three or four per rotation. At one point in early 2017, 430 Sqn had no Intelligence personnel at the unit.

¹⁶ Teleconference with LCol Lisa Elliott.

robust training exercise is developed and executed using real world data in order to simulate the amount of intelligence traffic one can expect in a theatre of operations. The ASIC is able to exercise its all source fusion capability by integrating multiple intelligence modalities into a single coherent intelligence picture for contracted command and planning staff who are hired to for the exercise. This allows the Officer in Command (OC) of the ASIC to assess the strengths and weakness of his or her personnel and make the necessary modifications to his or her team prior to official pre-deployment training. By contrast, for Air Force sections that are generated for an ATF OSE, deficiencies in training or personnel performance are not often identified until the units area already in theatre.

CONCLUSION

15. Under the auspices of SSE the intelligence function in the Canadian Armed Forces is on the precipice of massive growth and restructuring. Four main capability investment areas – targeting, space, cyber and ISR – are intelligence heavy processes that will require investment in personnel, training, and infrastructure. The 300 personnel earmarked in SSE are a clear indication of the recognition of the need for personnel by the Minister of Defence.¹⁷ In order to facilitate the growth, a substantial restructuring and re-organization are also required. The Canadian Army Intelligence Regiment has already undergone the necessary restructuring to facilitate a more effective and coherent force generation, training and balanced command envelop process. The Air Force Intelligence sub-occupation needs to follow suit and establish a structure more in line with current and future challenges in force management and training. The

¹⁷ Strong Secure Engaged, 63.

establishment of an Air Intelligence Squadron would alleviate some of the current shortfalls in the generation, employment and training of Air Intelligence personnel. It would also allow both officers and NCO the opportunity to develop command competency in a balanced and progressive manner, while better managing and monitoring the health of the sub-occupation.

16. The risk associated with not changing the structure of the Air Intelligence occupation is that as the intelligence enterprise continues to grow both in the CAF and in Five Eyes community, the Air Intelligence sub-occupation will struggle to remain relevant and responsive as their counterparts in other nations and services restructure to occupational structures that facilitate a more effective career progression. This risk will become more acute as intelligence continues to play a progressively greater role in information era warfare.

RECOMMENDATION

17. A more centralized approach, akin to the one used by the Army Intelligence Regiment, would alleviate a number of the current deficiencies in the decentralized management of the Air Intelligence sub-occupation. Using traditional Air Force organizational structure, such an intelligence unit could be an RCAF Intelligence Squadron, with an LCol and a CWO as the command team, with three operational readiness flights, a training flight, an Analysis, Correlation and Fusion (ACF)¹⁸ flight and a support flight. The readiness flights would train as a unit to be deployed as an OSE Intelligence section and associated detachments. The training flight would be responsible for managing individual training as well as developing and executing

¹⁸ The ACF is an existing unit within the ISRD at 1 CAD. They could be organized under the Air Int Sqn to provide all the analytic products for force employment requirements, including treat briefings, threat assessments and intelligence assessments.

annual unit training. Akin to the Army's intelligence support team (IST) concept, the Air Intelligence Squadron would detach IST to support platforms either on exercise or on deployment.

18. The majority of the personnel used to form this new Intelligence Squadron would be re-organized from existing established positions. A comprehensive study would be required to determine existing unit requirements for force employment functions under the North American Air Defence (NORAD) mandate. Those personnel that are to fill a force generation function would be placed within one of the readiness flights and undergo unit training work up towards employment in an expeditionary operation. The remainder of the personnel used to stand up the new unit would come from the 5,000 military personnel and 1,050 civilian personnel outlined in SSE. Priority position establishment has been clearly granted to those functions fulfilled by Air Intelligence personnel, with 300 military and civilian personnel specifically earmarked for Intelligence positions.¹⁹ Of these 300, at least 20-40 could be created for the Intelligence Squadron, containing a mix of Regular, Reserve and civilian positions.

Annex A: Table of Organization for Air Intelligence Officers and NCMs

¹⁹ Strong Secure Engaged, 63.

BIBLIOGRAPHY

- Commander of the Canadian Army. Master Implementation Directive Canadian Army Intelligence Regiment, 1901-1 (DFLD 2-2) (06 Feb 2014).
- Government of Canada. Department of National Defence. “Strong Secure Engaged: Canada’s Defence Policy.” (Ottawa: DND, June 2017).
- Military Personnel Generation Headquarters, Military Employment Structure Implementation Plan for the Development of a Job Based Specification for the Intelligence Occupation, MOS ID 00213 (30 Nov, 2015).
- Pigeau, Ross and Carol McCann. “Re-Conceptualizing Command and Control.” *Canadian Military Journal* (Spring 2002): 53-63.

Annex A: Table of Organization for Air Intelligence Officers and NCMs

Organization	NCM/NCO	Officer	Total
C Air Force (Ottawa)	5	5	10
1 CAD (Winnipeg)	36	12	48
1 Wing HQ (Kingston)	1	1	2
408 Sqn (Edmonton)	4	1	5
430 Sqn (Valcartier)	4	1	5
438 Sqn (Montreal)	1	0	1
450 sqn (Petawawa)	7	1	8
2 AES (Bagotville)	5	5	10
3 Wing (Bagotville)	3	1	4
433 Sqn (Bagotville)	2	1	3
425 Sqn (Bagotville)	3	1	4
4 Wing HQ (Cold Lake)	5	1	6
401 Sqn (Cold Lake)	3	1	4
409 Sqn (Cold Lake)	3	1	4
410 Sqn (Cold Lake)	2	-	2
8 Wing (Trenton)	12	4	16
12 Wing (Halifax)	2	1	3
443 Sqn (Esquimalt)	1	-	1
14 Wing (Greenwood)	9	2	11
19 Wing (Comox)	5	2	7
22 Wing (North Bay)	2	1	3
CFAWC (Trenton/Ottawa)	2	4	6
CFSAS (Winnipeg)	-	1	1
Total	117	47	164

Table 1: Air Intelligence positions by organization as of January 2018²⁰

²⁰ These numbers do not include military manning overcapacity (MMO) or reserve force members, which make up a significant part of the overall strength. It also does not account for vacancies. According to MWO Johansen, there are currently 44 vacancies in Air Force units. Master Warrant Officer Mike Johansen, Strat A2 Readiness, e-mail correspondence with the author, 18 Jan 2018.