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COMMAND AND CONTROL IN THE CANADIAN ARMED FORCES SAR SYSTEM

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Exercise Solo Flight

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EXERCISE *SOLO FLIGHT* – EXERCICE *SOLO FLIGHT*

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SAR SYSTEM**

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COMMAND AND CONTROL IN THE CANADIAN ARMED FORCES SAR SYSTEM

Unity of Command. The decisive application of full combat power requires unity of command. Unity of command results in unity of effort by coordinated action of all forces toward a common goal.....It is best achieved by vesting a single commander with requisite authority.

- U.S. Department of the Army, Field Service Regulations—
Operations, Field Manual, 1954.

INTRODUCTION

Command and control (C2) of Search and Rescue (SAR) forces within the Canadian Armed Forces (CAF) “enables the needed assets and personnel to be coordinated, tasked and directed to conduct SAR operations effectively.”¹ For those at the coalface of SAR, the C2 structure is clear and effective because all direction for force employment (FE) comes via a tactical control (TACON) relationship with the Joint Rescue Coordination Centers (JRCC) and all direction for force generation (FG) comes through the existing Royal Canadian Air Force (RCAF) chain of command at the Wing and Squadron levels. Beyond this first level up view offered by experience as a SAR operator, the picture becomes blurry and unclear. Most SAR operators do not interface with the structures at the operational and strategic levels nor do they understand how each level functions with respect to the SAR system. SAR crews know that it all just works, but they are not aware of the challenges faced by others to make it work.

¹ Evaluation of the CF/DND Component of the National Search and Rescue Program. Ottawa: Chief of Review Services, 2008. p.ii/iii

A common view in the SAR community is that SAR as a function lacks “strategic oversight and direction, most likely due to the resounding tactical success we see day in and day out.”² Staff officers at the operational level share this view because they are often required to take on the strategic function and cross out of their lane to handle various issues. This understanding is unanimous at SAR senior staff levels on the FG and FE sides. The 1 Canadian Air Division (1 CAD) Senior Staff Officer SAR (SSOSAR) notes, “in the context of transformation making SAR more relevant, responsive, and effective, I think the current SAR system and C2 structure requires change. The C2 arrangement is complex and unwieldy.”³ The primary gap is in the long-term planning for the military component of the national SAR system and we have trouble “in the aspects of ensuring procurement, personnel management, policy and messaging.”⁴ Compounding the strategic planning gap is that SAR is unique in military culture. It does not fit in well with all other military tasks and can be seen as secondary to the CAF security mission. SAR units embedded within larger formations such as 8 Wing and 14 Wing experience this issue on a regular basis as Wing policies often require exceptions for SAR due to a poor fit for what is perceived as a non-military mission.

The purpose of this paper is to demonstrate that changes at the operational and strategic levels will serve to bring the SAR system into line with a post-transformation CAF structure while adding depth to our SAR strategic planning capability and increasing the effectiveness of our SAR capabilities by enhancing unity of command. At the strategic level, changes are required to establish long-term SAR planning tools to

² Weir, Craig, interview by Phil Marcus. LCol, CJOC HQ J3 SAR (April 15, 2015).

³ Elliott, B, interview by Phil Marcus. LCol, 1 CAD HQ SSOSAR (April 10, 2015).

⁴ Ibid.

guide force development and to place interdepartmental coordination at the appropriate level. Within the FE sphere, changes are necessary to shorten chains of command to achieve an enhanced level of centralized control and decentralized execution. These changes will also harmonize FE decisions to promote unity of effort and reduce or eliminate inconsistencies between SAR regions. Within FG, change is required to support the unique nature of SAR. A functional Wing will bring unity of effort and command to SAR FG and give SAR a voice within direct C2 channels instead of having only an advisory voice.

Current C2 Construct

Tactical

The tactical level for CAF SAR is comprised of individual Wings and Units that provide primary SAR aircraft and personnel to respond to FE taskings from the JRCCs. The individual aircraft and crews assigned to primary SAR duty have a TACON relationship with the JRCCs while local commanders retain command for FG purposes. From a SAR crew's perspective, the chain of command is short and flexible. Mission commanders have the flexibility required to react to the tactical situation at hand and provide the rescue service needed. Unit Commanding Officers and Wing Commanders have the requisite authorities and resources to generate aircraft and personnel to meet SAR capability requirements. It is acknowledged by many that perhaps resources are somewhat thin on the FG side of the equation, but that is common to all endeavours in the

CAF and not particularly relevant to the issue at hand. Further, some resource management for FG is moving to the operational level in an effort to provide better resource allocation to level four SAR units.

Operational

Commander (Comd) Canadian Joint Operations Command (CJOC) “exercises OPCOM of all SAR operations in the Canadian SAR Region.”⁵ To exercise that command, Comd CJOC works through three separate Search and Rescue Region Commanders (SRR Comd) and each of them has a JRCC to task assets and liaise with local SAR partners such as the Canadian Coast Guard (CCG). Command of SAR forces from CJOC is evolving since the recent stand up of the Command and continual improvements are underway to provide national direction.

Comd RCAF is the force generator and has command over all RCAF personnel for FG. For the SAR function specifically, he/she is responsible to “provide National SAR capabilities to support Government of Canada assigned SAR tasks.”⁶ In short, Comd CJOC employs SAR forces and Comd RCAF provides trained personnel and suitable equipment to execute the SAR mission. In effect, command of tactical resources shifts back and forth between the two commanders depending on the nature of particular missions (FE or FG).

⁵ CDS Directive on Canadian Forces Command and Control and the Delegation of Authority for Force Employment." Ottawa, October 2012., p.C(E)-4/9

⁶ Ibid. p.C(E)-8/9

Strategic

The CDS has full command of the CAF and exercises that command in part through the Strategic Joint Staff (SJS). While there is no dedicated SJS J5 or SJS J3 position for SAR, it is one of a number of files assigned to SJS J35-4 Domestic Plans, a civilian position. There are no other strategic level staff positions employed directly in the C2 of SAR in the CAF but there are other supporting positions within organizations such as ADM (Mat).

The National SAR Secretariat (NSS) is a Department of National Defense (DND) organization that exists outside the normal chain of command in the CAF. The purpose of the NSS is to “establish operating frameworks to guide and influence a horizontal approach to the National SAR Program.”⁷ Serving as a focal point for SAR capabilities from multiple government departments, the NSS is the strategic voice for SAR at the level of government and it is part of DND because the Minister of National Defense is the lead minister for SAR.

The Command Function

Central to understanding the need for change in SAR C2, it is necessary to understand the principle of *unity of command* and the concept of *unity of effort*. Any changes made to the current nature of C2 for SAR must improve unity of command and effort while increasing the overall efficiency and effectiveness of C2. RCAF doctrine

⁷ Evaluation of the CF/DND Component of the National Search and Rescue Program. Ottawa: Chief of Review Services, 2008., p.2

provides other principles for the command function but the scope of this paper requires only an examination of unity of command.

The principle of unity of command holds that “a single, clearly identified commander must be appointed for each operation. The commander has the authority to plan and direct operations and will be held responsible for an operation’s success or failure.”⁸ CAF Transformation has offered a twist on this concept in that Comd RCAF is the single commander for SAR FG activities while Comd CJOC is the single commander for SAR FE missions.

Unity of effort is essential in SAR operations due to the multijurisdictional nature of SAR and the split between FE and FG commanders. To achieve unity of effort, an interdepartmental coordination effort is required to harmonize all available capabilities at the local, provincial and federal levels. Within the CAF, unity of effort speaks to making the most efficient use of available resources while undertaking robust long-term planning efforts needed to maintain and improve the CAF’s ability to meet its commitments. This can only occur if unity of command is in place.

⁸ B-GA-401-000/FP-001 Canadian Forces Aerospace Command Doctrine. Trenton: Canadian Forces Aerospace Warfare Centre, 2012., p.3.

Strategic Planning

Problem

The NSS has faced challenges meeting its mandate. “At its inception in 1986, the NSS was given the objective of developing a SAR prevention framework and strategy for regulation, enforcement, and education. We found that the NSS has not accomplished this objective.”⁹ The NSS has also encountered additional challenges where it “has made efforts over the years to establish a policy and governance framework, but it has not been successful.”¹⁰ Overall, the NSS has not been able to achieve any meaningful degree of unity of effort in SAR. “Without a policy to articulate federal priorities and performance expectations for search and rescue, the Canadian Forces and the Canadian Coast Guard each set their own priorities and make their own resource allocation, delivery, and procurement decisions. Each department sets reaction or readiness standards based on the availability and capability of its resources rather than on needs analyses.”¹¹ The NSS is not designed to assist the CAF at the strategic level; C2 within the CAF needs to address strategic SAR issues.

Strategic planning within the CAF C2 structure for operations occurs primarily within the SJS. The SJS advises the CDS and operates as the C2 node for CDS direction and guidance. For the military component of the national SAR system, the SJS is the

⁹ Report of the Auditor General of Canada, Chapter 7, Search and Rescue Activities. Ottawa: Her Majesty the Queen in Right of Canada, 2013., Chapter 7, p. 20.

¹⁰ Ibid. Chapter 7, p. 23.

¹¹ Ibid. Chapter 7, p. 24.

body that should formulate SAR related plans for CDS approval. There is however, a problem. Discussions between CJOC J3 SAR and SJS J35-4 Domestic Plans reveal that SAR planning is not occurring as SJS because the message from staff at SJS was that “nothing long term ever happens in SAR.”¹² In fact, national guidance for SAR such as the Canadian Aeronautical and Maritime Search and Rescue Manual (CAMSAR) and the Federal Search and Rescue Operational Governance Committee Annual Report are researched and published based on efforts at the operational (CJOC) level, even though they require collaboration with external government departments.

CJOC J3 SAR noted that a SJS J5 SAR position is required “to task the appropriate level 1 organization or to wade in and break the tie if there is a disagreement on a SAR issue”¹³ between the force generator and the force employer. With the current structure, unity of command for SAR does not occur until we get to the CDS. The absence of a SJS J5 SAR position means that the underlying staff framework supporting Comd CJOC and Comd RCAF does not have strategic level staff in place in order to unify effort between the FG and the FE functions. This is the genesis point of all inefficiencies and lack of synergistic effects between FE and FG. 1 CAD SSOSAR remarked, “In my time as SSOSAR, I have not seen any coordination from SJS with respect to SAR.”¹⁴

The Evaluation of the CF/DND Component of the National Search and Rescue Program (2008) noted that “the Chief of the Air Staff and the Commander Canada

¹² Weir, Craig, interview by Phil Marcus. LCol, CJOC HQ J3 SAR (April 15, 2015).

¹³ Ibid.

¹⁴ Elliott, B, interview by Phil Marcus. LCol, 1 CAD HQ SSOSAR (April 10, 2015).

Command need to determine their strategic-level performance measurement information requirements for SAR within the CF”, but to date, this has not been completed. This is an example where the operational level actors with sometimes-divergent interests are asked to fulfill a strategic function. This causes notable friction and inefficiencies in the mixing zone where senior FG and FE staff must work to resolve competing interests.

Another example of deficient strategic oversight is the issue of SAR performance measures. In this matter, strategic attention remains limited to the tactical response time from the point of tasking from a JRCC to the military asset becoming airborne. There is no consideration for the total time from the incident to the rescue asset arriving on scene with the requisite capabilities. We should consider that this lack of valid performance measures is symptomatic and indicative of an inadequate representation of SAR within the Strategic Joint Staff. Only the SJS is well positioned to bring together all of the interests and variables within the military chain of command to provide strategic direction and guidance in the form of policy recommendations to the CDS. This is necessary because only the CDS can act as the single point for unity of command and effort because the principles diverge at the operational level between the FE commander and the FG commander. Another example on stalled progress is the fact that Canadian SAR crews search primarily by eyesight. Despite the wide availability of technology, we search just as we did in the 1960s. Strategic focus and a SAR seat at the strategic table could raise awareness and lead to action.

Recommendation

The SJS is responsible for long term planning and SAR should have a dedicated representative at the Colonel rank within the SJS J5 team. Having a SJS J3 SAR team member would be less important because CJOC J3 SAR, a Lieutenant Colonel position, can handle the management of the FE system and 1 CAD SSOSAR, also a Lieutenant Colonel position, can handle the management of the FG system. The SJS J5 Colonel position would achieve unity of command and effort in the staff structure that supports the existing C2 structure in a post-transformation environment. In addition, having a Colonel dedicated to SAR would fold in an executive position that can focus on SAR and champion the capability at the strategic level. SAR does not have a strategic champion for its critical national mandate and a single dedicated executive in the SJS would serve to unify the command function.

Force Employment

Problem

SAR Staff at CJOC have encountered inefficiencies and challenges in executing Comd CJOC's direction and guidance for SAR. The current lines of communication require CJOC staff to work through Comd 1 CAD to action guidance to the JRCCs because the JRCCs all work for Comd 1 CAD, even though they also work for individual Search and Rescue Region (SRR) commanders. This often leads to debates regarding

which commander's direction applies. Discussions between staff can lead to compromises and a softening of FE guidance in order to reach a solution that others will follow. There are too many cross-linked responsibilities between FG and FE staff.

As an example, CJOC staff have difficulty coordinating on administrative matters that are clearly within the FE lane because the JRCCs fall under the FG chain of command. "Recent examples include multiple MNDO RFIs. The RCAF (1 CAD) took a hands off approach, leaving CJOC to do the heavy lifting, however, when the final answer was sent forward, the RCAF pulled it back because they were uncomfortable with some of the language. They suggested a watered down response which we did not feel adequately expressed the capability gap."¹⁵ The issue at hand was a clear FE question but having to route through the RCAF to communicate with the tactical FE organizations (the JRCCs) is highly problematic and very inefficient. Adding complexity to the equation is that the JRCCs also work for the SRR commanders as well as Comd 1 CAD. Having to weave the SRR commanders into the equation adds additional complex layers that prove difficult to manage. "Getting rid of 2 SRR commanders would help in terms of efficiency and consistent application of SAR direction."¹⁶ This is highlighted when adding the regional Airlift Control Elements into the equation.

¹⁵ Weir, Craig, interview by Phil Marcus. LCol, CJOC HQ J3 SAR (April 15, 2015).

¹⁶ Elliott, B, interview by Phil Marcus. LCol, 1 CAD HQ SSOSAR (April 10, 2015).

Recommendation

The three SRR command positions are not required and should be eliminated. Further, the JRCCs do not have a FG function and exist only for the purpose of employing SAR assets on operational missions so the JRCCs should become part of CJOC and report to Comd CJOC through the Canadian Forces Integrated Command Centre (CFICC) for operational matters and through CJOC J3 SAR for administrative issues. This solution would shorten the chain of command for a time sensitive mission, empower Comd CJOC to have meaningful OPCOM of SAR FE, and deliver unity of command and effort. Consistent leadership delivered to all three SAR regions will enhance interoperability between the regions and lead to a more consistent delivery of SAR operational effects.

Force Generation

Problem

1 CAD SAR resources include nine units with four airframe types along with three JRCCs and the Canadian Mission Control Centre (CMCC). These are dispersed across many Wings with varying mandates. 1 CAD SSOSAR “in a staff position with no organization command or control, effectively commands most of the SAR organization.”¹⁷ Funding has been centralized for many SAR activities, fleet management

¹⁷ Frosty Frost, Scott, interview by Phil Marcus. Maj, 1 CAD HQ SSOSAR Readiness (May 13, 2015).

has been centralized, and FG policy flow through 1 CAD SSO SAR and the SAR Capability Advisory Group (SAR CAG) chair. The building blocks of a SAR functional Wing are already in place and gaining momentum but it currently exists outside the chain of command. This leads to a lack of unity and purpose and it decreases the efficiency and effect of command direction and guidance.

Recommendation

The establishment of a functional Wing for SAR will greatly enhance unity of command and effort for FG. Policies will be applied consistently across Canada, uniformity in equipment and practices will be enhanced, and SAR would have a Wing Commander in the direct C2 line. A statement from the commanding officer of 424 Squadron summarizes the benefits of a functional Wing for SAR. “In my opinion, the main improvement of the proposed structure is the creation of a functional Wing. While the current structure provides a coordination element amongst the Wings/Units through the SAR CAG and SSO SAR, it has significant limitations. Funding is a great example where a lot of discrepancies are observed between Wings/units which doesn't necessarily reflect SAR priorities. Larger units on bigger Wings are often more pressured than smaller units, which is inconsistent with their contribution to the SAR mandate. Other admin functions such as succession planning, procurements prioritization, centralized training coordination, etc. would benefit from a functional Wing concept. The concept of

functional Wing has been proven very effective through 1 Wing when you have dispersed units holding the same mandate.”¹⁸

Conclusion

The issues raised in this paper are complex and require additional research to articulate total solutions to problems with C2 for SAR in the CAF. Despite the limitations offered by the scope of this project, it is possible for this work to serve as an outline to a larger staff effort that could provide the basis for meaningful change.

As noted earlier, SAR simply works so SAR is its own worst enemy when making a case for reform. SAR is a no fail mission and tactical units do everything they can to ensure successful mission outcomes, so perception at the institutional level is that everything is fine. Why would a senior executive see a need for change when problems do not make it to his or her desk? Commanders have many pressing matters to deal with and SAR works so well at the tactical level that it does not create the noise necessary to receive attention in the moment. To counter this argument, we must consider that important and urgent are not always the same thing. A failing mission can be urgent, but SAR is always important.

Unity of command and effort are critical to long-term success and SAR requires an improvement on both fronts. At the strategic level, SAR requires an executive and a long term planning function. At the operational level, SAR requires simpler and shorter

¹⁸ Poitras, Dany, interview by Phil Marcus. LCol, CO 424 Sqn (April 29, 2015).

chains of command to include the dissolution of the SRR commander positions, the transfer of the JRCCs (with their existing regions) to CJOC, and the establishment of a functional Wing. At the tactical level, units and JRCCs should continue operating as they do now. These changes will position the CAF very well to offer national leadership in the multi-jurisdictional and inter departmental SAR system.

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