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SYNCRHONIZING SECURITY EFFECTS ON OUR AIR BASES: MOVING FROM AN AD HOC APPROACH TO FORCE PROTECTION

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SYNCRHONIZING SECURITY EFFECTS ON OUR AIR BASES: Moving from an ad hoc approach to force protection

AIM

1. The purpose of this paper is to examine the Royal Canadian Air Force (RCAF) approach to security and force protection in light of the importance of our air assets. Previous writers have proposed a radical change in the structure and composition of security forces in line with the United States Air Force (USAF) or Royal Air Force (RAF). This paper will propose something much less drastic, and perhaps realistic given the resource pressures facing the Canadian Armed Forces (CAF).

INTRODUCTION

2. The fragility of airpower to ground attack, along with the criticality of air support during Joint Operation requires special attention to Force Protection (FP) measures designed to limit access to air assets while they are in their most vulnerable state. For Canada, this problem is even more striking. The small scale of our Air Force, compared for example to the United States or our near peer adversaries, means that any loss will be felt more keenly and have a proportionate strategic impact on Joint War-fighting capabilities. Given this special vulnerability, the RCAF has not developed the force protection measures and capabilities to adequately protect its expensive and strategic air assets, belying its doctrinal claims to be able to operate both independently and jointly.¹ When it comes to investing in FP, the RCAF relies on the robust capabilities of allies when deployed, and on the low threat level at home. The ad hoc application of security and force protection measures, lack of redundancies, and resulting failure to synchronize security effects leaves the RCAF exposed to a rapid increase in domestic threat. This paper will examine the RCAF approach to security and force protection; and its limits. The paper will briefly lay out the security forces, procedures, and security infrastructure on RCAF main operating bases (MOB) and forward operating locations (FOL). It will then examine current and future threats, and the impact that acquisition of future capabilities will have on security needs.

DISCUSSION

3. The RCAF relies on risk acceptance, technology, procedures, and collective responsibility to achieve security effects, but these are not coherently synchronized and leave significant vulnerability. While the RCAF employs layered security practices at its main operating bases, these measures, like its approach to security forces, is often ad-hoc. The weakness of an ad hoc approach has been identified as a particular challenge for generating expeditionary defence and security forces, but has not been subject to the same criticism at

¹ Department of National Defence, *Air Force Vectors*, Ottawa: Director General Air Force Development, 2014.

domestic MOBs.² A three element security force provides the main protection for RCAF infrastructure, personnel, and assets. This force is comprised of contracted unarmed guards and an Auxiliary Security Force (ASF) supporting a core military police element. Of the three, only the unarmed security guards are exclusively dedicated to the security mission. These forces however, are generically trained in security guard practice and are not empowered to counter threats to the air base. They receive no additional on-station training in the particular challenges of airfield security. Countering threats falls to the station military police detachment, and an ASF drawn from line personnel. Military police are considered to be “ideal personnel to coordinate and carry out routine security duties at MOBs in Canada.”³ This is because there is synergy between the skills required for domestic policing and airfield security. This synergy, however, is not a perfect match. There is a clear skew towards policing within Canadian Military Police (MP) training commensurate with perishability of specialist law enforcement (LE) skills and importance of the law-enforcement role in protecting the institution. Domestic policing is continuously evolving and becoming more complex. The same can be said for the asymmetric tactics used by adversaries against air installations. With severe manpower pressures, Canadian MP have not been able to maintain a dual expertise in airfield security and LE. The RCAF therefore has a highly competent police force doing its best on a set of security force problems, in spite of ongoing efforts by the Air Forces Military Police Group to increase air-mindedness of its personnel. The third arm of the security force presents an equally difficult problem of focus. Drawn from line personnel, the ASF comes at a significant cost to operations and requires time to activate and get on station, limiting its usefulness in both a sudden crisis and over an extended period. Weapon skills and security tactics are under trained; every hour dedicated to training in security tasks comes at a cost in performing core tasks. These tasks support air functions as vital as security, such as flight safety and airworthiness. Finally, there are rarely sufficient troops available for planned security increases and training events; during an emergency the use of ASF is likely to be too late and insufficient. Without a dedicated professional airfield security force, as our major allies maintain, the RCAF must rely on other options to reduce its risk.⁴

4. Ageing security infrastructure and ad hoc procurement are also realities at RCAF MOBs and FOLs. Security procurement competes poorly with other operational requirements for limited dollars and staff effort, and is usually only initiated in the face of failure: either of an existing system or a failed audit. Most security infrastructure quickly becomes obsolete, has poor integration with existing systems, and is plagued by maintenance neglect. This infrastructure, consisting of physical barriers, alarms, sensors, and cameras is almost entirely conducted through individual local procurements, often at year-end, of off the shelf solutions. The result is a lack of standardization across MOBs, a low interoperability between different infrastructure systems

² Paul Thobo-Carlsen, “A Canadian Perspective on Air Base Ground Defence: Ad Hoc Is Not Good Enough,” in *Defending Air Bases in an Age of Insurgency*, ed. in Col Shannon W. Caudill, (Maxwell AFB: Air University Press, 2014), 43-110.

³ Ibid, 90.

⁴ Ibid, 72-87.

(cameras and alarms for example), and an absence of strategic direction. The RCAF does not track downtime of its CCTV and alarm systems across MOBs, but anecdotally, outages are frequent, repairs and maintenance is slow, and there is no redundancy. Security is also a secondary consideration when assigning existing infrastructure. The zoning of RCAF MOBs is consequently ad-hoc and frequently violates best security practices; allowing more access than necessary to restricted areas/zones.⁵ Given the limited number and type of sensors employed at MOBs, security response also relies on collective responsibility for identifying and reporting threats. Unfortunately, collective responsibility has proven to be ineffective way of achieving security and safety compliance due to the diffusion of responsibility effect: the more people responsible for security, the less likely that anyone will take action to correct deficiencies.⁶ The inconvenience of security measures provides another disincentive for collective policing. The phrase “security is everybody’s responsibility” is a good sentiment, but ineffective at ensuring strong security effects and outcomes. All professional airmen/women need to comply with security rules, but a single organization needs ownership for the detection of threats, enforcement and policing of security measures, and response to incidents.

5. Security effects are truly achieved through the synchronization of detection, delay, and response. True denial is often impossible to achieve, and deterrence is a psychological effect based on the perceived effectiveness of detection and response options. Synchronization is required between the passive and active systems (alarms, sensors, patrols) and the human security forces (counter-measures). The ad-hoc procurement and management of security measures is a significant impediment to such synchronization, as is the C2 situation at most RCAF MOBs. Typically monitoring of security systems is co-located with Military Police dispatch, and often conducted by MP dispatchers in addition to their emergency response dispatch duties, rather than in an integrated security command center.

6. The RCAF faces the greatest threat to its assets when on the ground in a deployed environment. There is a difference in the variety and lethality of threats to our air assets when deployed compared to at our domestic MOBs. The RCAF has, and is likely to continue to, operated out of areas where allied air superiority is assured and those assets are protected from enemy deep fires. What remains is a variety of asymmetric ground threats that have proven to be effective against allied force protection measures. In the recent Syrian conflict, the Russian air force suffered one of its most significant losses to effective rebel mortar fire.⁷ While the attack on Camp Bastion in Afghanistan proves that a small ground force can conduct a penetrating attack against a well-defended airbase that can target Air Power while it is in its most vulnerable

⁵ An example of this is the placement of Wing Supply within the restricted access area of 4 Wing Cold Lake. As all personnel will at some point require access to supply, they must all be given access to the Restricted Access Area regardless of whether their responsibilities require them to access the flight line. This adds unnecessary exposure to our air assets and complicates tight control of movement within operational and restricted areas.

⁶ Linda M. Jones, and Natalie Norman Foshay. “Diffusion of Responsibility in a Nonemergency situation,” *The Journal of Social Psychology*, 123 no.2 (1984), 157-158.

⁷ Gareth Davies, *Seven Russian War Planes ‘are destroyed in attack by “radical islamists” on Syrian Air Base in Biggest single Loss of military hardware for Putin since he began supporting Assad,*” *Daily Mail*, 4 January 2018.

state.⁸ The counter-measures to these low-tech tactics are manpower intensive. It requires dominating the ground around the air approaches beyond the reach of mortar and man-portable weapon system ranges. It requires synchronizing aggressive random patrolling, sensors, QRF, and physical barriers to ensure that the detection and response is effective at stopping the threat away from critical assets.

7. Canadian MOBs do not face the level of threat that these deployed locations do. Threat actors within Canada do not currently have access mortars and MANPADs, nor are they anticipated to obtain them in the near future. They do, however, have access to small arms, improvised explosives, and vehicular attacks. There are several high profile examples in the notes of this paper where these tactics have proven capable of damaging and destroying parked fighter aircraft. The likelihood of such an attack remains low; there are in fact no modern examples of Canadian aircraft being targeted at home. However, it is clear that regardless of how likely such an attack is to take place, RCAF MOB do not have the security effects in place to counter or deter them.

8. Several future threats will not be restrained by the geography of conflict zones, and are becoming easier to develop domestically or import to Canada. UAV for commercial and recreational use are pervasive in Canada, and there are no effective counter-measures. The problems space is further complicated by domestic law and jurisdictional issues. Domestic threat actors are further enabled by technology that increases the ease of doing reconnaissance before an attack. Access to high resolution maps and imagery on open source websites, and exploitation of social media to mine pattern of life and identify military targets is easily and cheaply accessible to a low-tech adversary. The open base policies of nearly all MOB and the free movement of contractors and service providers provides an opening for an insider threat, supported by these technologies and accessible weapon systems to have a strategic effect on Canada's warfighter power. The proliferation of smaller and more effective shoulder fired MANPADs cannot be ruled out as a serious threat to MOB. In this we are reliant on partner LE and intelligence organizations to detect and disrupt the import of these systems before they can be a threat to our aircraft. Still, the security measures needed to counter stand-off weapons – distance and patrolling – is not available in a domestic setting where there are clear jurisdictional boundaries and the MOBs operate within or adjacent to civilian cities. In addition, traditional threats of espionage will continue to threaten.

9. Effective domestic airfield security requires different resources and investment than international Contribution Warfare. The RCAF deploys within a coalition and relies strongly on allied force protection to protect its air assets. Our allies have mature and expert ground security forces, trained and equipped with the mobility and firepower to conduct all aspects of airfield defence. Canada does not. However, given the likelihood that we will continue to contribute air

⁸ Paul Kim, "Camp Bastion: A Force Protection Case Study," *Royal Canadian Air Force Journal* 6 no.1 (2017), 7-13.

power to a coalition where these assets exist, building a similar Canadian capability would be an expensive endeavor of dubious value. Part of the value proposition for our allies in developing strong security forces is their ability to carry out the mission at home and abroad – without an away mission, a dedicated Canadian airfield security force would be twice as expensive. In spite of recent investment in new capabilities in Strong Secure Engaged (SSE), Canada's most recent defence strategy, there remain real fiscal pressures that will inhibit security and force protection spending. There is no proposed increase in personnel for security and force protection tasks at home MOBs on which to build a more specialized force.

10. While security infrastructure considerations are being factored into the procurement projects for future fighters, there is resistance to increasing the number of personnel dedicated to the protection of these assets. USAF will demand a higher standard of security to operate an integrated future fighter fleet. This investment provides an opportunity as well as a challenge; at least at our fighter force MOBs. Debates on the relative cost and appropriateness of retrofitting existing infrastructure versus building new can reopen the issue of intelligently zoning our MOBs to better control movement within restricted access zones. Procuring new integrated security infrastructure in order to meet more stringent standards for future fighters could also afford a more synchronized protection to legacy assets. However, there will be pressure to exploit existing systems and infrastructure to reduce security costs which will lead to a continuation of the ad hoc approach.

11. In order to combat the ad hoc approach, a strategic direction on the procurement and synchronization of security infrastructure should be pursued that synchronizes land use, future construction, and equipment upgrades. Security effects should be synchronized at MOB through a security operation center, along the lines of USAF Base Defense Operation Centers (BDOC), separate from but in communication with the flying operation center, and not as an adjunct to the Military Police detachment dispatch. The creation of active security operation centers would allow the effective integration and synchronization of new technology, such as perimeter sensors and extreme high resolution cameras. It would better be able to define emerging threats and prioritize the dispatch of limited Military Police and other security forces.

12. An inescapable fact is that there will be a requirement to invest limited personnel to increase the capability of countering ground threats – the retired security guard is not going to cut it. Military Police remain a valid asset in responding to breaches, but preventing breaches will require an armed force on station between our air assets and the public. The use of RCAF reservists in a force protection role can relieve pressure on flying units to provide their personnel for the ASF, but there should be no illusion that this new capability will be more available or responsive to a rapid increase in threat or crisis. With sufficient funding these forces could maintain better levels of training, and have less impact during longer activations.

CONCLUSION

13. Issues of scale and heavy competition for manpower preclude the option of Canada developing an effective integral airfield defence force capability. Continued reliance on allied secured airbases makes sense in the context of Canada's contribution approach to multi-national operations, what is needed at home is a better synchronization of current security measures and a coherent strategic vision to procurement and management of security infrastructure. A hard look at additional armed forces dedicated to security and defence at our MOBs will need to be balanced against the likelihood and consequence of low-tech domestic threats. It is an enduring characteristic of air power that air assets are most vulnerable on the ground, and a fact that the scale of Canada's airpower makes it especially vulnerable to loss. The ad-hoc application of security measures will not suffice to prevent such a loss; the RCAF should move quickly to better synchronize its security effects in a rapidly changing threat environment.

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