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JOINT TERMINAL ATTACK CONTROLLER CAPABILITY MANAGEMENT AS A FORMED UNIT

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CAPABILITY MANAGEMENT AS A FORMED UNIT**

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JOINT TERMINAL ATTACK CONTROLLER CAPABILITY MANAGEMENT AS A FORMED UNIT

AIM

1. Recent conflicts involving the Canadian Armed Forces (CAF) have highlighted the enduring need for air-land integration (ALI) on operations. More specifically, these conflicts have reinforced that the enablers linked ALI require significant resources to sustain, and a high degree of proficiency to employ. Adequately resourced during Operation ATHENA, ALI capabilities are at risk from numerous pressures since 2011¹. This service paper will recommend that centralizing the most critical and fragile of these ALI capabilities, specifically, conventional force Joint Terminal Attack Controllers (JTAC), under a formed unit will best provide the CAF an effective ALI capability in the face of resource constraints. Numbers of these critical personnel have dwindled to 53 percent of established strength; the trend is downward.²

2. Areas of further study could include allocating resources appropriate to the CAF's current ALI structure, or creation of JTAC as a managed occupation. The ideal solution would be the current JTAC capability structure, with JTACs at Artillery Regiments, and Tactical Air Control Parties (TACP) at each Canadian Mechanized Brigade Group (CMBG) headquarters. Neither are feasible, in the long term, under the current resourcing paradigm.

3. Put simply, the CAF struggles to sustain sufficient numbers of JTACs.³ Critically, the Fighter Force Get Well Program means fewer flying hours are available for JTAC force generation (FG).⁴ In order to maintain the JTAC capability, centralized command and control of the JTACs that remain is the most feasible means of providing the CAF a robust ALI capability. Doing so requires the authorities, responsibilities and accountabilities that only a commander provides.

INTRODUCTION

4. CAS is defined⁵ as those air-to-ground attacks taking place in close proximity to friendly forces, such that each attack requires detailed integration with the ground force's fire and maneuver. Control of CAS attacks, is defined as terminal attack control (TAC).⁶

¹ K.F. Haire, *Briefing Note to Director of Artillery, Joint Terminal Air Controller (JTAC)* (Gagetown: Royal Regiment of Canadian Artillery School, 26 June 2019), para. 8.

² Price, S. *JTAC Manning Levels*. Kingston: Canadian Army Doctrine and Training Center, 5 June 19.

³ K.F. Haire, *Briefing Note to Director of Artillery, Joint Terminal Air Controller (JTAC)* (Gagetown: Royal Regiment of Canadian Artillery School, 26 June 2019), para. 3(a).

⁴ R. Kastrukoff, *Fighter Force Get Well Spiral 2, Précis 1.0*. (Winnipeg: 1 Canadian Air Division, 2 August 2019).

⁵ D. Goldfein, *Joint Publication 3-09.3, Close Air Support*. (Washington: Joint Chiefs of Staff, 25 November 2014), pg. xi.

⁶ Ibid.

There are three functional agencies involved in the provision of TAC. First, a JTAC is an individual qualified to control CAS attacks from a forward position on the ground, attached to a ground maneuver element. Second, a Forward Air Controller Airborne (FAC(A)) is an aircrew member qualified to conduct TAC from an airborne platform specifically equipped to conduct that mission⁷. Third, a Tactical Air Control Party⁸ is located at a CA unit or formation-level headquarters. This allows a unit or formation to have multiple JTACs and FAC(A)s conducting simultaneous TAC in its battlespace.

5. The ALI contribution to land warfare is substantial. Threats from the air can induce enemy ground forces to disperse and hide, to the point that they are unable to function effectively against massed friendly ground power. Ground menace, in turn, can be so threatening that enemy ground power has no option but to concentrate, and probably move, exposing itself to airpower.⁹

6. ALI failures proved costly during initial CAF operations in Kandahar in 2006. On 8 July 2006, during Operation ZAHAR in the Zhari District, a laser guided bomb, dropped by an A-10 aircraft under the control of a Canadian JTAC, impacted within four meters of 1 Platoon, Alpha Company, Task Force 1-06. No Canadians were killed in the incident.¹⁰ On 9 July 2006, as part of the same operation, an American AH-64 helicopter fired a missile at a Taliban fighting position, at the direction of a Canadian Forward Observation Officer. The missile impact caused secondary explosions that injured friendly troops of Charlie Company, Task Force 1-06.¹¹ On 4 September 2006, an A-10 aircraft, under control of a Canadian JTAC, fired its thirty-millimetre cannon at elements of Charles Company, Task Force 3-06, killing one soldier and injuring nearly thirty others.¹² The CAF rectified these institutional failures to prepare for mission success by creating governance structure for TAC, delineating responsibilities between the RCAF and Canadian Army (CA), and formalizing interoperability with Allied nations.¹³

7. Since 2006, the CAF have integrated JTACs into all tables of organization and equipment. In 2009, the CAF created the ALI Cell (ALIC) at the Canadian Army Doctrine and Training Center (CADTC). This body provides oversight of all CAF JTAC capabilities. Staffed by six personnel, commanded by a Major, ALIC chairs an ALI working group. ALIC also coordinates staff efforts amongst the CAF's comparatively few JTAC subject matter experts. This working group builds portfolios for the ALI Executive Board, chaired by Commander CADTC and Commander 1 Canadian Air Division (1 CAD).

⁷ D. Goldfein, *Joint Publication 3-09.3, Close Air Support*. (Washington: Joint Chiefs of Staff, 25 November 2014), pg. II-8, para (c).

⁸ M.J. Ward, *Canadian Forces Joint Doctrine Note 03/08 Close Air Support*. (Ottawa: Chief Force Development, June 2008), pg. 3, para. 0207.

⁹ C.S. Gray, J.A. Olsen (ed.), *Airpower Reborn*. (Annapolis: Naval Institute Press, 2015), pg. 169.

¹⁰ C. Blatchford, *Fifteen Days*. (Toronto: Anchor Publishing, 2008), pg. 84.

¹¹ C. Wattie, *Contact Charlie*. (Toronto: Key Porter Books Ltd, 2008), pg. 227.

¹² D. Fraser and B. Hanington, *Operation Medusa*. (Toronto: McLelland & Stewart, 2018), pg. 165.

¹³ R.J. Hillier, *Force Generation Responsibilities For The Air Support Capability*. (Ottawa: Chief of the Defence Staff, 9 October 2007), pg. 1, para 2.

DISCUSSION

8. The ALI governance framework, that is, the people and command relationships which manage this fragile capability, faces challenges. Commander CADTC is non-operational, being responsible for doctrine and training. In stark contrast, Commander 1 CAD has no fewer than five distinct operational remits.¹⁴ Commander 1 CAD is responsible to the Commander of the RCAF for Operational and Technical Airworthiness, implementation of the Flight Safety program, aircrew standards, and aircrew operational training. Further, Commander 1 CAD is also Commander of the Canadian NORAD Region, and is also the Commander of the Trenton Search and Rescue Region. The breadth of roles and responsibilities challenges the staff of 1 CAD to the fullest.

9. Commander 1 CAD has no direct equivalent in the CA. The closest equivalent to Commander CADTC in the RCAF would be the Commander of 2 Canadian Air Division (2 CAD). That said, Commander 2 CAD is responsible for RCAF training up to the Operationally Functional Point, meaning when RCAF members are deemed ready to begin operational training.¹⁵ From an organizational point of view, the RCAF differentiates between occupational and operational training; the CA does not. Commander CADTC is responsible to the Commander of the CA for both. This affects the CAF JTAC capability. Both Commanders CADTC and 1 CAD share functionally aligned JTAC and CAS touchpoints. Each has competent staff, empowered units, and robust authorities. But the scope and scale of the commanders' roles has a diluting effect on their shared responsibilities. Where multiple commanders sharing responsibility for a given capability is identified as a cause of dysfunction, it stands to reason that a unified chain of command would ameliorate the situation.

10. JTAC-qualified personnel currently reside in three locations; within the Close Support Artillery Regiments, the CMBG headquarters, and the JTAC Schoolhouse. Manning establishments mandate a total of sixty four JTACs.¹⁶ This structure provides best capability to maneuver formations, being collocated and embedded in existing force structure.¹⁷ It institutionalizes the intimate relationship that makes CAS effective on operations. However, it does not allow for centralized control, increasingly necessary in the face of resource constraints.

11. The Canadian Army's Managed Readiness Plan (MRP) means that nearly all CAF JTACs are required to support any training event involving CAS assets; including collective training, JTAC currency, and initial training. Support has been largely

¹⁴ Commander RCAF, *B-GA-402-001/FP-001, Command and Control*. (Ottawa: RCAF Staff, July 2018), pg. 9.

¹⁵ Royal Canadian Air Force. "Overview, 2 Canadian Air Division." <http://www.rcaf-arc.forces.gc.ca/en/2-cdn-air-div/index.page> (accessed 23 Oct 2019).

¹⁶ Price, S. *JTAC Manning Levels*. (Kingston: Canadian Army Doctrine and Training Center, 5 June 19).

¹⁷ Each Artillery Regiment contains sixteen JTACs, the JTAC School contains fourteen, and the ALI Cell contain two.

contingent on ability of individual JTACs and TACPs to sustain their personal tempo, with high cost. Anecdotally, the people have been effective; the structure has most decidedly not. The strains have not caused catastrophic failure as of yet due to a lack of, in the absence of CAF sustained combat operations, as faced in Kandahar. Arguably, ALI issues stem from sustaining a wartime structure in the face of the more diverse priorities of peacetime.

12. The RCAF CF188 Hornet fleet faces significant challenges. Lack of a replacement aircraft has caused the RCAF to implement a Fighter Force Get Well Program, entailing proposals for radical alterations to fighter force unit structure and flying hour reductions.¹⁸ Current reductions have disproportionately affected JTAC training. The CAF has sent JTACs to Romania in order to conduct training. This is because the CF188 Hornets there, supporting the NATO air policing mission under Operation REASSURANCE, were the only RCAF assets available to conduct mandated live weapons training.¹⁹ The situation is so dire that the organization must send JTACs to operational theaters to train them. The CAF leverages contracted air support in order to conduct JTAC FG in the absence of CF188s. Notably, even the United States armed forces are currently leveraging commercial air training services in order to train JTACs, and plan to increase the percentage of training sorties furnished by contracted aircraft.²⁰ The CAF experience similar pressures earlier, in 2014, from Operation IMPACT, where the CAF committed its fighter resources to air operations over Iraq and Syria.²¹ However, contracted aircraft can not meet all mandated training requirements, such as employment of live ordnance.

13. A JTAC occupation ultimately provides the same effect at the tactical level as the status quo capability structure, but with greater overhead in human resources and administrative effort. The challenges of their training and employment would persist in the face of resource shortfalls. This is because the same people would remain responsible for management of qualified personnel. A new qualification code on a Military Personnel Record Resume, or a new JTAC insignia on a uniform would not change where, and for whom, these individuals work; something more fundamental must change in today's resource challenged environment.

14. A JTAC unit, in the model of a United States Air Force Air Operations Squadron, or United States Marine Corps Air and Naval Gunfire Liaison Company, would put the JTAC capability under a commander. This individual, and their staff, would be best sited to hold vested authorities and responsibilities to address the issues. The unit would

¹⁸ R. Kastrukoff, *Fighter Force Get Well Spiral 2, Précis 1.0*. (Winnipeg: 1 Canadian Air Division, 2 August 2019).

¹⁹ S.M. Cadden, *Briefing Note to Commander CADTC, JTAC*. (Kingston: Canadian Army Doctrine and Training Center, 11 April 2019), para. 4(a).

²⁰ J. Trevethick, "Air Force Hires Seven Companies In Long-Awaited Mega Adversary Air Support Contract." <https://www.thedrive.com/the-war-zone/30557/air-force-hires-seven-companies-in-long-awaited-mega-adversary-air-support-contract> (accessed 21 October 2019).

²¹ J.M.M. Hainse, *Briefing for Comd Canadian Army, Forward Air Controller Status Due to Op IMPACT*. (Kingston: Canadian Army Doctrine and Training Center, 23 October 2014) para. 9.

incorporate both the JTAC and TACP functionalities. Specifically, the unit must be capable of managing CAS sorties allocated to the senior maneuver echelon of a joint task force's land component headquarters, and at each echelon down to the subunit level, in accordance with the required capabilities outlined in ADO.²² This would provide a capability modular and scalable to a given need.

15. The unit would need to be located near a CAS-capable training area in Canada. Ideally, the unit would be in close proximity to CA MRP collective events, and near an international airport to travel to foreign training events. Increasingly, CF188s deploy abroad for their own collective training, in order to take advantage of weather and suitable training areas. Given the significant requirement for training coordination, the unit would best be home to the JTAC schoolhouse. Doing so would allow for greater integration of aircrew perspectives into JTAC training, an identified shortcoming in recent coalition accreditation evaluations.²³

16. This unit would serve as the ALI champion, whose commander held responsibility and authority to coordinate training, align the JTAC National Training Calendar with the RCAF training schedule, and initiate long term JTAC management initiatives. JTAC individuals would rotate through this unit, returning to their parent occupations for key development phases of their careers. While difficult, this is more feasible under a unified chain of command than at present. Only centralized command can effectively prioritize the competing demands made of the CAF JTAC capability. Only centralized control can ensure that the most important priorities are met with so few JTACs (fifty three percent of established strength),²⁴ and so few available CAS sorties to sustain them.

CONCLUSION

17. All academic and operational assessments of contemporary operations point to an increased requirement for ALI in the future. The JTAC capability is the means by which land forces will integrate air effects into their fires and maneuver. The Canadian JTAC capability was not sustainable, as structured. The CA has yet to fully implement the tenants of ADO in accordance with the plans outlined in Army 2021.²⁵ This means that the total number of required JTACs needs to increase from current levels. The CA appears willing to accept this shortcoming, in the absence of sustained combat operations. Resources for JTAC FG have been substantially reduced. Given the need to increase total numbers, the CAF would benefit from altering the JTAC capability structure in order to effect centralized resource management and employment. Functional collocation of

²² A.B. Godefroy (ed.), *Land Operations 2021*. (Kingston: Canadian Army Doctrine and Training Center, 2007), pg. 16.

²³ J.L. Sullivan and J.H. Krischke, *Combined Standardization Team Assessment of Canadian Armed Forces Joint Terminal Attack Controller Course*. (Washington: Joint Fire Support Executive Steering Committee, 9 August 2017), para. 5(b).

²⁴ Price, S. *JTAC Manning Levels*. Kingston: Canadian Army Doctrine and Training Center, 5 June 19.

²⁵ A.B. Godefroy (ed.), *Land Operations 2021*. (Kingston: Canadian Army Doctrine and Training Center, 2007), pg. 31.

JTACs, training areas, and CAS aircraft, under a single unit structure and focussing support to the Army's MRP, promises the best return on investment.

18. Such a solution may not represent the perfect ideal. The loss of intimate relationships within CMBGs is significant. CAS is a mission based on relationships and trust. Dislocated specialists whom the Brigade Commander and Staff see only during road to high readiness training face significant obstacles. However, given current and projected resource shortfalls, to have competent JTACs at all is a success. Their force structure must best account for the unprecedented difficulty of creating and sustaining them.

RECOMMENDATION

19. ALI Executive Board should engage with Commanders CA and RCAF in order to assess the resource efficiencies to be gained by a formed JTAC unit as a means to manage the critical yet fragile JTAC capability. The suggested geographic location of such a unit would be in 3rd Canadian Division's Area of Operations.

Annexes:

A. *JTAC Manning Levels*. Kingston: Canadian Army Doctrine and Training Center, 5 June 19. (Not included)

B. *Fighter Force Get Well Spiral 2*, Précis 1.0, 2 August 2019. (Not included)

C. *Briefing Note to Commander CADTC*, JTAC. Kingston: Canadian Army Doctrine and Training Center, 11 April 2019. (Not included)