

AFAC POSITION PAPER 04/2007

Issue: The Role of the Air Force in Space

Background

- Space-based capabilities have become the norm for the support of everyday military activities, whether recognized or not. For example, satellites enable communications, provide surveillance, assist in weather reporting and forecasting, detect significant events such as ballistic missile launches, and support intelligence activities. Access to these capabilities has become common-place and is considered essential to meet the demands of modern military operations.
- The Canadian Forces have been active in space capabilities for some time. Satellites are currently used to assist in the location of emergency locator transmitter signals for search and rescue. Radarsat, a Canadian owned and operated satellite, has provided imagery to the CF from time to time. INMARSAT and other systems have been used extensively for communications. Participation with the US has allowed the CF to leverage an affordable investment to gain access to satellite communications and other services available to American forces. Other, uniquely Canadian, projects are being planned or implemented to address surveillance of objects in space, surveillance of the North, and the establishment of a capability to receive and exploit satellite information.
- In recent years, a directorate under the former Deputy Chief of the Defence Staff, was established to champion space-related issues and projects. Their efforts were focused on developing a space policy, establishing and coordinating requirements, seeking funding for implementation, etc. With CF transformation, most of these responsibilities have been assigned to the Chief of Force Development (CFD). However capable CFD staff might be, they are not well-suited to force generation responsibilities.
- CF personnel have maintained a liaison with the Canadian Space Agency for many years. In the past, NORAD positions in Colorado Springs have been filled by army and navy personnel, although the vast majority of CF representation continues to be from the air force.

AFAC Position

- In earlier years, the air force has been the environment most interested, and involved, in space-related capabilities. The relationship of air and space capabilities is more closely linked than that for either the navy or



army. This follows the pattern which has evolved in the US as well, where Air Force Space Command is an order of magnitude larger than the US Navy and US Army counterparts. Even so, in Canada and the US, the applicability of space-based capabilities to the operational effectiveness of land and maritime forces has evolved to be just as critical as elsewhere.

- With the clearer separation of force employment (operational use of capabilities) and force generation (organizing, training and equipping) responsibilities during CF transformation over the past two years, and the concomitant reassignment of the former responsibilities of the Director of Space Development, consideration should be given to the role of the air force regarding space issues.
- The force generation of personnel to fill operational positions related to NORAD operations, and potential exchange positions elsewhere, should be properly coordinated to ensure that the CF has the expertise and experience to exploit space capabilities. Currently, individuals involved in space-related activities are seen to be employed outside the parameters of their core trade or occupation. This puts them at risk of advancing less quickly or being disadvantaged in career opportunity due to a lack of understanding of their real capability.
- There is no doubt that space-related capabilities are here to stay and will likely become even more important in the future, with a demand for instant communications and real-time intelligence, surveillance and reconnaissance support. Having a cadre of recognized experts who can advise on the appropriate policy, operational concepts, areas in which resources should be focused, and actual employment of the services provided will be invaluable to future commanders.
- With its traditional involvement in space-related activities, the air force is best placed to develop and grow a contingent of personnel with these qualifications. The air force has included space-related studies in its professional development curricula and has a cadre of personnel with NORAD experience. Recognition of the force generation needs for space capabilities for the CF, and assignment of the responsibility to the air force, would facilitate the full exploitation of the capabilities inherent in space operations.

Messages

- The recent reorganization of the CF does not adequately address the force generation aspects of space-based capabilities. The Chief of Force Development organization is not staffed to perform this function, which should be provided for if these force enablers are to be fully exploited.



- The air force has traditionally been closest to overall space activity and it would be a natural extension for them to be given force generation responsibilities. These would position the CF for long term involvement in the advantages presented by space operations.
- Any incremental resources needed for this force generation capability should be provided to the air force over and above current resources. Ideally, army and navy representation would be provided to best serve the overall force generation needs of the CF.

Developed by: Aviation Affairs Committee

Point of Contact: George Macdonald, gmacdonald@cfncon.com, 613-232-2576

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