Enabling Success of Brigade Combat Team's Collection Management in the Era of Multi-Domain Operations

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U.S. Army photo by SSG True Thao

U.S. Army cavalry scouts with the 1st Battalion, 16th Infantry Regiment, 1st Armored Brigade Combat Team, 1st Infantry Division, maneuver toward cover after an air assault during exercise Platinum Lion 19 at Novo Selo Training Area, Bulgaria, July 9, 2019.

Introduction

The Army's operating concept for multi-domain operations (MDO) has generated much discussion on how Army formations will conduct warfare into 2040. The core idea of MDO is that the Army must maneuver at echelon and leverage all organic capabilities across all domains to achieve periods of overmatch. By successfully employing maneuver, MDO enables the joint force to create multiple dilemmas and mass effects on enemy forces, creating conditions to achieve commander's desired effects at decisive points. For brigade combat teams (BCTs) and collection managers specifically, achieving information collection success at the commander's desired decisive point will require increased synchronization across all domains and echelons. Combat training center trends indicate that the current BCT modified table of organization and equipment structure does not adequately enable detailed synchronization of collection assets organic to the BCT or at echelons above brigade. Within the MDO construct and the envisioned future operational environment, this gap in collection management capability at the BCT diminishes lethality and leaves an opportunity for overmatch unexploited.

> ### Doctrine versus Concepts
>
> A key to developing concepts is to understand their relationship with doctrine and the inherent differences between concepts and doctrine.
>
> Doctrine provides fundamental principles by which the military forces or elements thereof guide actions in support of national objectives. It is authoritative, requiring judgment in application.[1] Doctrine describes the current (and near-term) force, current and programmed force capabilities, and the current (and near-term) force's ability to apply those capabilities to accomplish missions in support of national security objectives. In addition, doctrine serves the following purposes:
>
> ✦ Provides a common language to facilitate shared understanding during military operations.
>
> ✦ Drives how the Army is organized and equipped.
>
> ✦ Serves as the basis for all Soldiers and leader training and education.
>
> Concepts, in contrast, describe future operational requirements that the Army will likely have to meet. Restated, doctrine guides today's force and influences near-term change; concepts stand years in the future and pull today's force forward to anticipate operations in the future operational environment.[2]
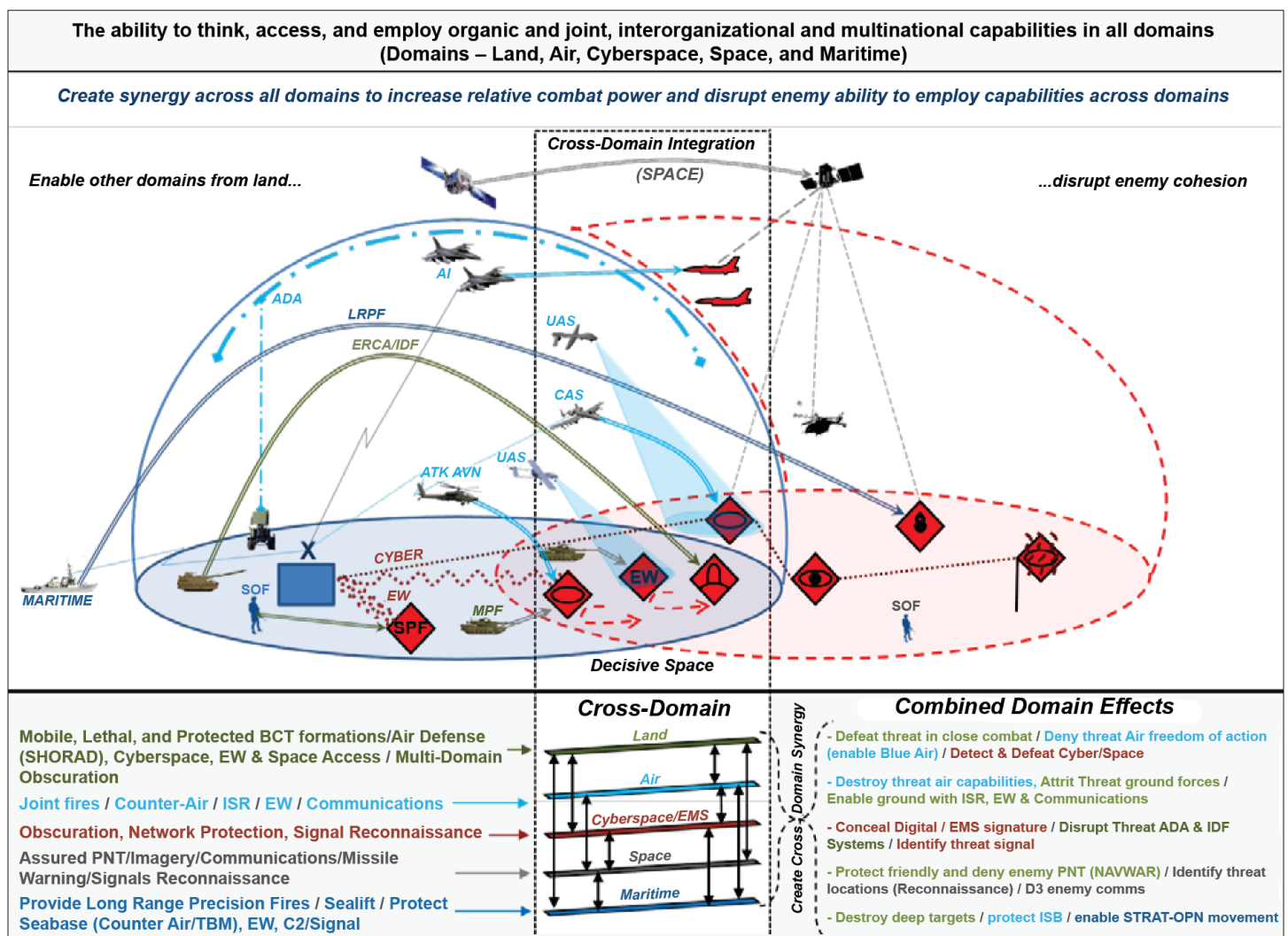
Planning for and managing collection assets in the envisioned operational environment will be a challenging task. At division and higher echelons, there are dedicated cells responsible for information collection planning. Currently at the BCT, there are no designated cells for information collection planning. The collection management function is typically assigned to a military intelligence officer in the BCT S-2 section who is supported by the operations and in-

telligence staffs as one of their many other functions.[4] The cross-domain maneuver concept coupled with the tenets of MDO adds complexity to how collection management is planned to support BCT commanders and should include a dedicated collection management element. The Army is in the process of validating an adjustment to the structure of the BCT military intelligence company and BCT S-2 section to create a collection management element from existing billets. However, this concept is still in the approval process and it will require time for all necessary adjustments to be implemented.

While the Army decides how to staff and organize collection management elements in the future, BCT collection managers must build their capabilities *now*—not only within the BCT but also through increased involvement with higher headquarters. To prepare for collection management during large-scale ground combat operations, individuals currently assigned as collection managers can immediately

The ability to think, access, and employ organic and joint, interorganizational and multinational capabilities in all domains (Domains – Land, Air, Cyberspace, Space, and Maritime)

Create synergy across all domains to increase relative combat power and disrupt enemy ability to employ capabilities across domains

Brigade Combat Team Conducting Cross-Domain Maneuver[5]

increase their value to commanders if they develop an in-depth understanding of a few key areas. Specifically—

✦ Collection capabilities and how to employ them.

✦ Linkage of collection to targeting.

✦ Functions of a Joint Air Ground Integration Center (JAGIC), air defense airspace management/brigade aviation element (ADAM/BAE), tactical air control party, and fires cell.

✦ Role of information collection personnel at echelons above brigade.

BCT collection managers who focus on these processes can prepare now to successfully execute information collection operations.

How Does Multi-Domain Operations Change the Role of the Brigade Combat Team?

The envisioned future operational environment is complex, chaotic, and unforgiving. Within MDO, Army divisions are specifically organized, equipped, and trained to dominate the close fight against a near-peer adversary in large-scale combat operations.[6] Within the last few years, BCTs have begun to transition to operating within the construct of the future operational environments and large-scale combat operations. The MDO concept fully solidifies the need for BCTs to train with and develop skills required to conduct cross-domain maneuver as part of the joint force. In MDO, defeating the enemy at the decisive point requires Army forces to operate at echelon. Army forces execute MDO with echeloned formations that conduct intelligence, maneuver, and strike activities across all five domains.[7] Division reconnaissance and security forces gain and maintain enemy contact to locate points of penetration while providing reaction time and maneuver space to the flanks of attacking BCTs. In support of the divisions, BCTs maneuver in the close area to destroy enemy maneuver forces and seize objectives. Division fires and aviation will shape the deep maneuver area to enable further BCT exploitation or pursuit to complete the defeat of the enemy's forces.[8]

How Does Multi-Domain Operations Change the Role of Collection Management?

During large-scale combat operations, divisions will array forces within the tactical support and close areas of the MDO concept's framework. The division shapes deep maneuver and close areas while executing collection activities in support of deep maneuver. Based on operational conditions, the division employs BCTs and enabling units to defeat enemy forces in the close area, simultaneously consolidating gains achieved.[9] To accomplish these tasks, BCTs will maintain the ability within MDO to converge organic information collection, maneuver, and fires capabilities with limited amounts of available aviation, maneuver support, electronic warfare, joint fires, and offensive space capabilities. According to the Army MDO operating concept, BCTs will habitually access intelligence, electronic warfare, cyberspace, and space capabilities through the division, corps, and field army.[10]

Multi-Domain Operations Framework[11]
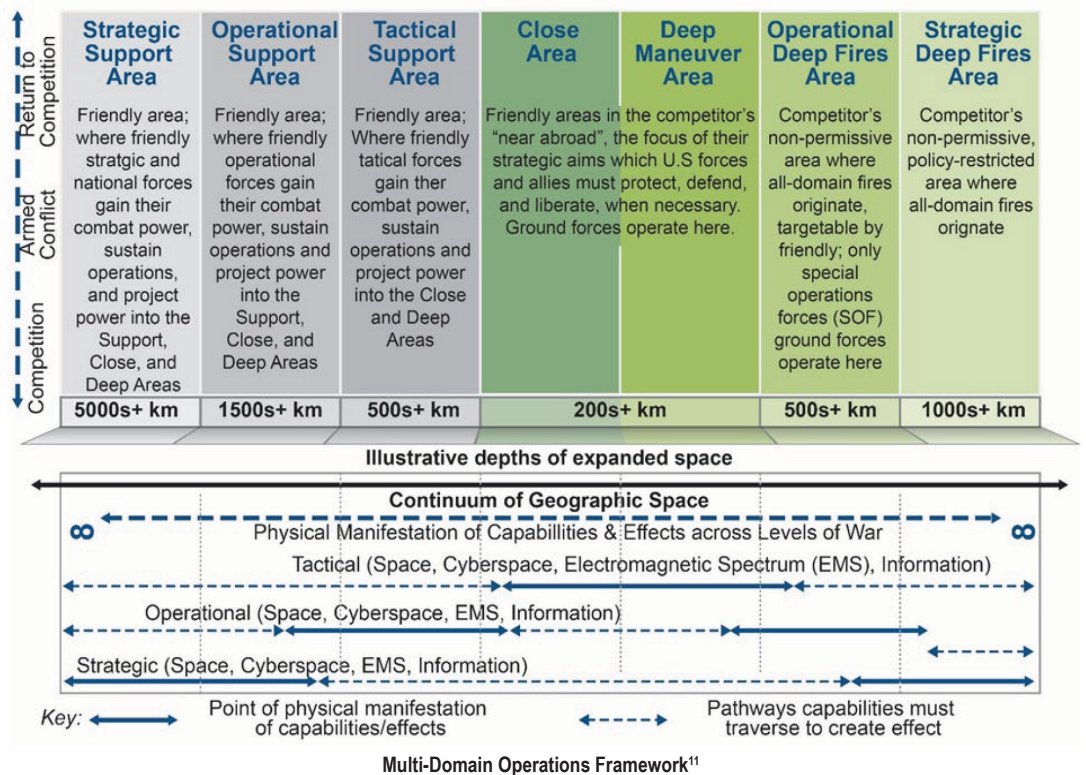
In MDO, information collection should still be an activity that synchronizes and integrates the planning and employment of sensors and assets as well as processing, exploiting, and disseminating systems in direct support of current and future operations.[12] What MDO has changed is the degree of synchronization required by a BCT collection manager. At the tactical level, commanders use reconnaissance, surveillance, security, and intelligence operations to plan, organize, and execute shaping operations that answer their commander's critical information requirements (CCIR) and

support decisive operations.[13] The commander's choice of CCIR is the launching point for successful collection planning. The challenge for collection managers has been and will continue to be developing effective collection plans that answer the commander's requirements with timely, relevant, and accurate intelligence that enables sound decisions.[14]

In addition to a properly developed CCIR, the foundation of an effective information collection plan is based on the initial threat assessment that is regularly modified as the intelligence running estimate changes. In the operational environment envisioned in MDO, if the threat assessment is not updated and shared with the collection manager, information collection efforts will fall behind the operational conditions and opportunities of combat. The information collection plan must synchronize with the scheme of maneuver and be updated as that scheme of maneuver changes. The collection manager should work closely with the BCT S-2 in order to have an understanding of the threat characteristics, enemy templates, enemy course of action statements, and enemy event template. This understanding will help shape the collection manager's understanding of the enemy in time and space and aids in aligning asset capabilities.[15]

MDO will require brigade and division intelligence staffs to request collection support from theater, joint, and national assets.[16] Corps, divisions, and BCTs will require information from the same assets. The requirement for layering information collection capabilities and processing, exploitation, and dissemination of those assets to support MDO will require management and synchronization between brigades and echelons above brigade.[17] In MDO, forward-postured divisions and brigades employ their organic ground reconnaissance and unmanned aircraft systems to develop the immediate tactical situation, while the field army supports lower echelons with organic high-altitude surveillance and joint intelligence, surveillance, and reconnaissance (ISR) capabilities deployed from the forward edge of the tactical support area. Low-observable manned and unmanned aircraft, space surveillance, and cyberspace intelligence supplement these organic capabilities. Currently, the Army's structure supports collection management at the operational level through regionally focused joint information centers, theater intelligence brigades, Army aerial exploitation battalions, and joint aerial assets. At the tactical level, assets include the expeditionary-military intelligence brigades, target acquisition radars, reconnaissance and cavalry squadrons, attack reconnaissance aviation units, and unmanned aircraft systems.

How Can Brigade Combat Teams Enhance Collection Management Success?

Regardless of how the Army decides to staff and organize collection management elements in the future, as former Secretary of Defense Donald Rumsfeld said, "You go to war with the army you have, not the army you might want or wish to have at a later time."[18] Individuals currently assigned as collection managers can immediately increase their value to commanders if they can accomplish a few critical tasks. Mastering the skills and developing the knowledge essential to completing these tasks require selecting the right personnel and promoting the right balance of operational, institutional, and self-developmental preparation. In a resource-constrained environment, BCTs must train in a way that utilizes and incorporates the use of all collection functions at every opportunity. Collection management goes beyond layering unmanned aircraft systems on an information collection synchronization matrix. The current trends from combat training centers indicate that when incorporation of all assets is not properly planned and resourced, the plan does not achieve the results commanders need. The selection of collection management personnel needs to be for their potential to apply information collection principles and gain the repetitions required to develop functional experience while leveraging the systems and processes that are unique to each formation.

To prepare for collection management within large-scale combat operations, collection managers should develop an in-depth understanding of the following areas:

Understand Collection Capabilities and Their Employment. Information collection requires a continuous, collaborative, and parallel planning process involving the BCT, its higher headquarters, and subordinate battalions. The commander at each echelon must be closely involved in the information collection planning process and must quickly and clearly articulate CCIRs to the staff. Staff officers must develop, prepare, and disseminate the information collection plan. As opportunities become available, modifications to the information collection plan must be identified by the staff and executed by the unit.[19] Personnel assigned in a collection management role must know and address the practical capabilities and limitations of all BCT information collection assets and the capability of any BCT unit to provide information.[20] They must review all available collection assets and create an inventory of capabilities to apply against collection requirements.[21]

While reviewing the available collection assets, the collection manager should evaluate the assets according to their capability and availability. To best measure the capabilities

of the collection assets, collection managers must know and address the practical capabilities and limitations of all unit organic assets.[22] Capabilities include—

✦ Range.

✦ Day and night effectiveness.

✦ Technical characteristics.

✦ Reporting timeliness.

✦ Geolocation accuracy.

✦ Durability.

✦ Threat activity.

✦ Sustainability.

✦ Vulnerability.

✦ Performance history.

Collection managers should also consider resource requirements not only for the current CCIR but also for the transition to the next operation. Transitions require planning and preparation before their execution to maintain the momentum and tempo of operations.[23] The key to mastering transitions as a collection manager is to continuously refine the list of potential information requirements, understand the current available assets for immediate or future tasking, and refine the threat array. By maintaining an understanding of these three critical collection management areas, collection managers will be able to plan and posture capabilities to answer the CCIR and enable the commander to make decisions.

Understand the Linkage of Collection to Targeting. With a firm understanding of collection asset capabilities, the collection manager can have an immediate impact in informing the targeting process. The BCT staff uses the targeting products of the division to coordinate and integrate targeting actions of the brigade. BCT targeting addresses targets assigned to the brigade by division and the employment of assets under brigade control. Collection managers should recommend the sensor or observer that will answer the specific information requirement/task to the unit and validate the weapon system required to detect, track, and perform battle damage assessments of the high-payoff targets.[24] To best accomplish this critical process, the timing of the targeting working group sessions should be carefully planned. While the planning focus for a BCT is normally 24 to 36 hours out, the BCT target nominations and air support requests must be planned in advance and in conjunction with the division, corps, theater Army, and joint air tasking cycle. For these reasons, the BCT targeting focus is 24, 48, and 72 hours out. Within MDO, commanders must under-

stand that the planning and targeting cycle should provide flexibility to seize opportunities presented based on the pace of operations.[25]

Understand the Functions of the JAGIC and the Tactical Air Control Party. BCT collection managers should understand the process for targeting within the division JAGIC and fires cell. The JAGIC controls the division airspace. It also enforces the division commander's distribution decision, priority of fires and air support, and priority for airspace use by managing the fire missions and supporting aircraft airspace requirements for subordinate units.[26] The JAGIC ensures that BCT fires cells have current fire support coordination measures and air coordination measures and that all BCT fires are executed within BCT airspace parameters.[27]
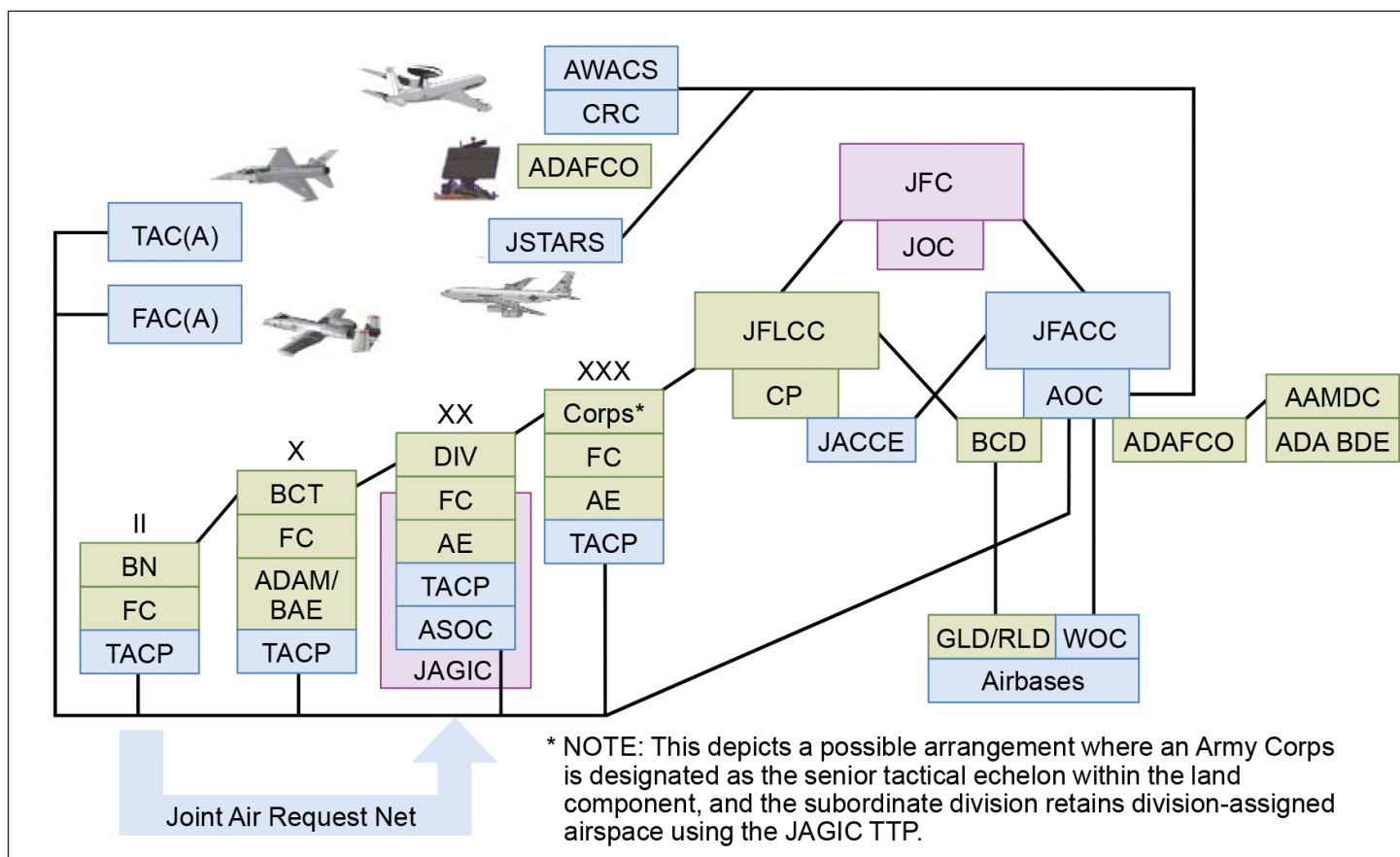
Collection managers should also understand the functions of the tactical air control party and how collection facilitates successful tactical air control party operations. The air liaison officer is typically the expeditionary air support operations squadron commander overseeing not only the division tactical air control party but also the air support operations center. At echelons below division, an air liaison officer is a tactical air control party member attached to the unit to advise the ground commander on air operations. At each echelon, the air liaison officer plans and facilitates the execution of airpower in accordance with both the ground commander's and joint force air component commander's guidance and intent.[28] BCT tactical air control parties provide liaisons to joint command and control nodes that control joint fires assets, provide assistance with planning for and integrating airpower into ground operations, and provide primary terminal attack control of close air support.[29] The BCT tactical air control party is a vital capability because they provide critical understanding of collection capabilities and recommend targeting solutions. BCT collection managers should work alongside the tactical air control party and BCT fire support officer to better synchronize their plans to that of the air tasking order because the air operations center normally establishes a 72-to-96-hour air tasking planning cycle.[30]

Understand How BCTs Coordinate Airspace Management. BCT collection managers should understand that the JAGIC coordinates airspace for division aerial assets conducting information collection and target acquisition as well as airspace for joint aerial information collection assets operating in and above the division's area of operations. As the division airspace control element in the command operations and information center, the JAGIC is a potential source of information for division and BCT collection and assessment efforts.[31]

BCTs have something similar in the ADAM/BAE responsible for integrating brigade airspace, including air and missile defense and aviation functions. The ADAM/BAE develops, coordinates, and executes requirements at brigade level and below by coordinating with higher, subordinate, and adjacent elements. The ADAM/BAE receives air coordination measures requirements from subordinate units or develops airspace requirements during the military decision-making process. It then submits them in the form of a unit airspace plan to the division airspace element for inclusion in the airspace control order. During mission execution, the ADAM/BAE coordinates directly with the JAGIC for all dynamic airspace requirements. The ADAM/BAE works closely with the BCT fire support, tactical air control party, and collection personnel to ensure all airspace requirements are in accordance with the commander's priorities.[32]

Understand the Role of Information Collection Personnel at Echelons above Brigade. Within the MDO construct, collection managers will be required to interact with division and higher elements at a much higher frequency. As a result, BCT collection managers must understand the role they play within the joint fight. Developing the functional understanding and relationships at the division will better prepare collection managers to meet the challenges of synchronizing collection efforts in that environment. Aside from interacting with the information collection cell within

* NOTE: This depicts a possible arrangement where an Army Corps is designated as the senior tactical echelon within the land component, and the subordinate division retains division-assigned airspace using the JAGIC TTP.

Legend

AAMDC	Army air and missile defense commander		FC	fires cell
ADA BDE	air defense artillery brigade		GLD	ground liaison detachment
ADAFCO	air defense artillery fire control operations		JACCE	joint air component coordination element
ADAM/BAE	air defense airspace management/brigade aviation element		JAGIC	joint air ground integration center
AE	airspace element		JFACC	joint force air component commander
AOC	air operations center		JFC	joint force commander
ASOC	air support operations center		JFLCC	joint force land component commander
AWACS	Airborne Warning and Control System		JOC	joint operations center
BCD	battlefield coordination detachment		JSTARS	Joint Surveillance Target Attack Radar System
BCT	brigade combat team		RLD	reconnaissance liaison detachment
BN	battalion		TAC(A)	tactical air coordinator (airborne)
CP	command post		TACP	tactical air control party
CRC	control and reporting center		TPP	tactics, techniques, and procedures
DIV	division		WOC	wing operations center
FAC(A)	forward air controller (airborne)			

Theater Air Control System/Army Air Ground System[33]

the division G-2, BCT collection managers should also become familiar with the role of the current operations integration cell collection manager and Air Force liaison officers.

The current operations integration cell collection manager is assigned at tactical levels in the Army. The Air Force ISR liaison officer advises the division on use of ISR capabilities, including national and theater assets and processing, exploitation, and dissemination cells. At the operational level, the ISR liaison officer may be located within the joint air operations center.[34] The information collection current operations manager acts as a liaison to the various information collection stakeholders and is incorporated with the command post fires cell, intelligence current operations, and air liaison officer. The role is vital because they are responsible for managing the current collection plan and maintaining situational understanding of all collection assets operating in the assigned airspace.[35] The Air Force ISR liaison officer is assigned to a supported ground unit, often with the air liaison officer or tactical air control party, to assist with collection planning functions and advise on optimizing information collection capabilities. At a division, the Air Force ISR liaison officer works in the JAGIC and complements the knowledge of the division collection manager and intelligence officer.[36]

Conclusion

The collection manager assignment is critical to the success of a BCT conducting cross-domain maneuver in MDO. As the Army continues to develop a solution for the collection management element, commanders, with input from the BCT S-2, should focus on selecting the right personnel to assign as collection managers. Personnel assigned as collection managers must take steps now to better prepare for the future operational environment and the more complex roles required of them. BCT collection managers direct, plan, and manage the efforts to answer information requirements that allow commanders to make informed decisions. As the right people fill the role of collection manager and apply the foundational concepts discussed above, BCTs will see an increase in successful collection planning and greater support during operations.[37]

BCTs should select collection managers with organizational experience and reinforce this experience with both institutional and operational training. Examples of institutional training for collection managers are the Information Collection Planners Course (ASI Q7) and the Joint Firepower Course (ASI 5U). An important consideration for operational training is ensuring it incorporates brigade and division staffs. This will empower those BCT collection managers with the skills necessary to synchronize assets in a way that allows the commander to make informed decisions. Officers who performed best in this role during a rotation at the National Training Center were senior military intelligence captains who completed key developmental assignments in the cavalry squadron or a maneuver battalion and were assisted by a key developmental complete military intelligence lieutenant from the military intelligence company who was familiar with the organic intelligence systems. This pairing provides the understanding and experience needed as the foundation for developing collection managers who can quickly develop and synchronize collection needs in a rapidly changing environment. Collection managers who are developed in this way will be capable of understanding and developing collection management tasks with higher echelons. The challenge has been, and will continue to be, for collection managers to generate collection plans that answer the commander's requirements with timely, relevant, and accurate intelligence that enables commanders to make sound decisions.[38] BCT commanders, staffs, and collection managers who focus on the steps outlined in this article can prepare today to successfully exploit the operational conditions and opportunities of MDO. ✵

Endnotes

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