THE NEED FOR AN ADVANCE INFORMATION COLLECTO PLANNERS COURS by Major Ryan McGraw, Major Michael Heim,

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Personnel provide command and control information at the 612th Air and Space Operations Center, supporting U.S. Southern Command, February 2010.

Introduction

The vignette to the right describes a typical scenario that a collection manager will face in a future conflict against a peer or near-peer enemy. It also represents a scenario that the Army's current collection management training programs do not fully address. Although the Army hosts or has access to several information collec-

tion-related courses, these courses provide

only a basic understanding of information collection doctrine and platform capabilities because they focus on either the brigade or the combatant command level, creating a gap at the echelons in between.

The Army needs a more advanced course that addresses the challenges of collection management in large-scale combat operations. While the Army Intelligence Development Program-Intelligence, Surveillance, and Reconnaissance (AIDP–ISR) currently meets most of these requirements, it is a yearlong program and only certifies a handful of officers and warrant officers each year. The Army needs an advanced Information Collection Planners Course (ICPC), tailored to the Army's doctrinal processes, that provides the necessary training for collection management teams at a division or higher, to request, task, and direct collection assets during large-scale combat operations.

Current Training

The Army's primary course for training collection managers is the ICPC at Fort Huachuca, Arizona. The ICPC is designed for intelligence leaders. It trains the development of information requirements, the specific application of information collection

in the enemy's support zone. To confirm this report, the collection manager quickly reviews the intelligence collection matrix for available assets and identifies a signals intelligence (SIGINT)-equipped U-2 that could potentially verify the HPT. However, after reviewing the reconnaissance, surveillance, and target acquisition annex, he realizes the equipped SIGINT sensor cannot collect the target's specific radio frequency signature. He considers national SIGINT collection, but based on the sensors' locations, he realizes that between the periodicity and information dissemination time, the target will likely be gone. Finally, the collection manager considers redirecting the division MQ-1C Gray Eagle to verify the report. Although the target is inside the enemy's air defense range, the collection manager considers the air defense system's probability of kill as low risk at current altitude. He also reviews the enemy's electronic warfare order of battle and current battle damage assessment and determines the risk level is acceptable. After receiving approval from his commander, the collection manager, in coordination with G-3 current operations, directs the MQ-1C to confirm the presence of

Confirming a

High-Payoff Target

During a future conflict, human intelligenc

the HPT for destruction by fires.

tasks, and the intelligence architecture and capabilities necessary to support information collection. Students learn to employ organic and attached intelligence collection assets at the brigade combat team (BCT). They also learn to request information and support from higher headquarters and intelligence agencies to provide the commander effective intelligence support.

The Army's other major training program is the AIDP–ISR program. It provides students the resources to attend a variety of Army, joint, and interagency intelli-

gence courses to build expertise in intelligence disciplines, collection management, and supported staff functions such as targeting. Graduates of this program serve a 1-year utilization tour as a collection manager on a division or corps-level staff. While this program largely meets the requirements for collection management, the significant resources required limit enrollment to 14 to 16 students per year. This creates a considerable gap in training between the collection management staff at divisions and corps. This program is also unavailable to National Guard and Reserve Soldiers, creating a significant educational gap in their formations.

In addition to ICPC and AIDP–ISR, the Army also provides a variety of other courses that are of value to collection managers, even though collection managers are not the primary training audience. These courses include the Cavalry Leaders Course, Joint Firepower Course, Digital Intelligence Systems Master Gunner Course, and other intelligence discipline-focused courses. The joint community and the Defense Intelligence Agency also offer collection management-related courses, but these courses focus on the operational and strategic level. Although these classes are valuable, they are both intellectually disparate and geographically separate, requiring a significant investment for training collection management teams.

A Proposed Course Design

The proposed course design for an advanced ICPC covers four broad topic areas:

- Collection management and intelligence preparation of the battlefield (IPB).
- Army collection management.
- Integrating the intelligence community.
- Intelligence architecture.

An advanced ICPC would centralize these topics under one curriculum and enable instructors to tailor course material for collection management through an Army lens.

Collection Management and Intelligence Preparation of the Battlefield. This area would cover three focus areas:

- Terrain and weather impacts on collection.
- ◆ Specific information requirement (SIR) development.
- ✤ Threats to Army intelligence collection assets.

Terrain and weather impacts on collection would cover the effects of terrain on signals and on SIGINT collection; RQ-7 Shadow and MQ-1C weather limitations; and the way in which other weather, terrain, or civil considerations hinder or enhance collection capabilities.

SIR development would cover resources and information required to build SIRs from threat characteristics and threat models.¹ This covers topics such as developing an electronic order of battle, unique measurement and signature intelligence (MASINT) signatures of equipment, and resources available to help research these unique signatures. Threats to Army intelligence collection assets would focus on the specific abilities of various air defense platforms to destroy Army intelligence collection assets, electronic warfare systems and their impacts on collection, and current adversary deception capabilities. The overall objective is to provide collection management teams with the ability to articulate opportunities for and limitations of collection during the IPB process.

Army Collection Management. This area would cover the employment of Army intelligence collection assets. Of all the Army intelligence community assets, air and ground cavalry squadrons would receive the most attention in order to help bridge the knowledge gap between collection managers and cavalry leaders.² This would focus on rates of march, coverage areas, and planning considerations for both air and ground cavalry squadrons. For SIGINT and HUMINT employment, classes would educate students on task organization, disposition, and employment of teams during large-scale ground combat operations. Students would learn the advantages and disadvantages of weighting teams in the close fight versus the consolidation/secure area and of centralizing control versus distributing teams. They would also learn about the effectiveness of these platforms against various targets. Training in unmanned aircraft systems would focus on airspace management through airspace control measures and fire support control measures and on risk mitigation measures for operating these platforms in contested airspace. The objective of this topic is to provide collection management teams with the knowledge to conduct collection operations management during combat.

Integrating the Intelligence Community. This area would broaden collection managers' education outside the Army through a focus on Joint Force Air Component Command (JFACC) operations, orbital mechanics for space-based



Soldiers practice direction finding and triangulating signals while attending the Tactical Signals Intelligence Course at the U.S. Army Intelligence Center of Excellence at Fort Huachuca, AZ.

collection, and detailed capabilities briefs on select theater and national-level collection platforms. JFACC operations would educate students on the Air and Space Operations Center's organization and processes. Students would learn the air tasking order cycle and the role of the Air and Space Operations Center in its development. During orbital mechanics, students would learn the orbits of space-based capabilities and the way in which they affect their collection opportunities. Finally, a more in-depth capabilities brief on the common theater and national-level collection platforms would cover the sensors and processors on board these platforms and the specific signatures they collect. Overall, this topic enables collection management teams to conduct effective collection requirements management when requesting theater and national-level assets.

Intelligence Architecture. This area would cover Army and national intelligence architecture to help collection management teams understand how intelligence travels from the sensor to their command post. This topic would also cover collection management during competition. The Army intelligence architecture instruction would pull heavily from the Digital Intelligence Systems Master Gunner program and cover the sensors, processors, output, and transport layers required for providing intelligence at the tactical level. National intelligence architecture classes would expand upon this by highlighting the unique requirements for ingesting intelligence collected from theater and national-level intelligence platforms. Specifically, this topic should explain the architecture required for collection requirements and intelligence to flow between national intelligence nodes, such as the National Reconnaissance Office, Air Force Distributed Common Ground System The Tactical Intelligence Targeting Access Node's (TITAN) modular systems mounted on a Joint ground stations, the 116th Light Tactical Vehicle contribute to its deep sens-Military Intelligence Brigade, ing intelligence gathering capabilities. and tactical command posts.

use to research existing requirements and submit new ones. Examples of national repositories are-

- Community On-Line Intelligence System for End-Users and Managers (COLISEUM).
- Collection Requirements Analysis Tool for the Enterprise (CRATE).
- Geospatial Intelligence Information Management Services (GIMS).
- National SIGINT Requirements Process (NSRP).
- Cross Domain Intelligence Release (CDIR).
- National MASINT Requirements System (NMRS).

The training objective of collection management during competition is to enable collection management teams to either leverage existing national requirements or submit new requirements to support their commander's intelligence requirements in garrison and exercises.

> In addition to understanding the national to tactical architecture, this topic would cover the roles and responsibilities of collection managers in designing the output requirements of collection platforms. This would cover concepts like message formats and dissemination mechanisms. This would help ensure that the collection management architecture from sensor to shooter enables rapid information dissemination and target prosecution by minimizing the analysis required. Ensuring collection management teams conduct the proper planning and coordination can result in supporting assets generating intelligence in a structured data for-

mat that results in information passed within minutes or even seconds.

Course Implementation

Photo courtesy of Program Executive Office Intelliger Electronic Warfare & Sensors

This class should also highlight existing friction points between Army and national-level architecture and current and emerging capabilities that address them. Finally, collection management during competition would provide a brief overview of the national intelligence support plan as well as the Global Force Management Allocation Plan and its effect on intelligence, surveillance, and reconnaissance (ISR) apportionment at the strategic level. Collection management during competition would also include an overview of national repositories and other repositories that collection managers

In order to implement this course, we recommend replacing one or two iterations of the current ICPC calendar with the advanced ICPC. This has the added benefit of bringing advanced ICPC knowledge into the basic ICPC classroom through shared instructors. Additionally, while the advanced ICPC is designed for division and corps-level collection management teams, senior BCT-level collection managers could also benefit. We envision advanced ICPC students as staff sergeants, chief warrant officer 2s, captains who have attended the Military Intelligence Captain's Career Course, and above.

To ensure students have the required level of knowledge prior to attendance, students must either graduate from basic ICPC or complete an online prerequisite course and pretest. This ensures that students have a basic understanding of collection management doctrine and ISR capabilities before arrival and enables more advanced-level discussions. This course would last 4 weeks.

Finally, the course should leverage sister courses and their instructors in order to synchronize instruction and reduce the intellectual burden on ICPC instructors. For example, instructors from the ground and air cavalry leaders' courses could teach the cavalry squadron employment classes using virtual instruction. Additionally, the Aviation Mission Survivability Office could assist with the development of the threats to Army intelligence community platforms, and instructors from the U.S. Air Force ISR Operations Course could teach JFACC operations. Sharing this course load would require substantial coordination but would have the benefit of ensuring students receive training nested with their sister courses. In addition, the course manager position for the ICPC should receive the "3F" additional skill identifier in order to leverage the experience of AIDP-ISR warrant officer graduates when teaching this course.

Conclusion

When the Army studied its ability to conduct large-scale ground combat operations, it identified deep sensing as one of 17 capability gaps. While the Army and Military Intelligence Branch have given considerable attention to the material and organizational solutions needed to eliminate this gap, the effectiveness of its reorganizations and new technology will be lessened if not paired with equal attention on training and education. The AIDP-ISR program has taken a step in the right direction with the creation of baseline requirements for students assigned as future division and corps chiefs of collection management, but more investment is needed in other members of the collection management team. An advanced ICPC will significantly increase the ability of divisions and corps to conduct information collection during large-scale combat operations by providing well-trained collection management team members capable of rapidly and effectively directing or requesting intelligence community assets to answer their commander's priority intelligence requirement or locate HPTs. In summary, the Army needs a course tailored for the Army's unique requirements to teach division and corps collection management teams how to win against a peer or near-peer threat during multidomain operations.

Endnotes

1. ATP 2-01, *Collection Management*, indicates that specific information requirements (SIRs) facilitate matching requirements to capabilities. This means collection managers must have an in-depth understanding of specific characteristics for each piece of enemy equipment in order to fully develop SIRs. Department of the Army, Army Techniques Publication 2-01, *Collection Management* (Washington, DC: U.S. Government Publishing Office, 17 August 2021).

2. Current best practices recommend providing a member of the cavalry squadron to help integrate the cavalry squadron into reconnaissance and security efforts. This course strives to eliminate that requirement.

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