INTELLIGENCE WITHOUT TACTICAL INTERNET

by Major Alex Dowds and Chief Warrant Officer 3 Maegan Heinicke

Editor's Note: Because of the sensitive nature of the systems discussed in this article, it was necessary for the author to omit details of their full functionality, leading to a generalized, but still valuable, discussion.

Introduction

As we train for tomorrow's fight, battalions, brigades, and divisions conduct collective training events that enable unit commanders' familiarity with the ways their formations fight and win. Units draft, refine, and validate standard operating procedures (SOPs) for the intelligence warfighting function to serve as a guide for the commander and intelligence staff. Currently, the U.S. Army is employing lessons learned from the battlefields of Ukraine, Syria, and Nagorno-Karabakh to adapt our way of fighting to where survivability relies on mobility and a communications architecture that provides maximum intelligence for the commander's decision making. Our ability to maintain momentum and survive in conflict with a peer threat will require versatile PACE[1] plans that incorporate redundant mechanisms to assimilate information and enable the commander's decision space in an environment where "first to know" becomes "first to act."

One option units should consider for their PACE plans is the Integrated Broadcast Service (IBS). Units can incorporate the IBS into their PACE plans without additional equipment requirements. This service delivers near real time intelligence to the warfighter, nearly anywhere on the globe, from an ultra-high frequency (UHF) broadcast that is timely, relevant, and targetable without an upper tactical internet connection. IBS has been delivering this type of intelligence support to the joint service for decades. The Army, through its focus on upper tactical internet and its intelligence programs of record, has eroded the knowledge base required to use this fundamental capability at the brigade and division level. Our current training and materiel prevent an otherwise well-trained and equipped force from harnessing this capability. This article seeks to convey, at an unclassified level, some of these deficiencies. It also explores opportunities for military intelligence leaders to stimulate discussion as they develop training plans in preparation for a combat training center or Mission Command Training Program rotation.

What is the Integrated Broadcast System?

The IBS is a worldwide Department of Defense standard network for transmitting time-sensitive tactical and strategic intelligence and targeting data from multiple sources, including ground-, air-, and space-based sensors, into a common feed. The broadcast feed is available to authorized consumers at all echelons around the globe in near real time. Additionally, the IBS feed replicates over networks for processing by compatible internet protocol-based platforms to feed digital systems across the warfighting functions.

Is My Unit Equipped to Use the Integrated Broadcast System?

At brigade and division echelons, the system that receives the IBS broadcast is the Tactical Intelligence Ground Station (TGS). Depending on hardware version, the brigade S-2 and the military intelligence company have at least two organic receivers that can accept and process the IBS broadcast. At the corps level, the system is the Operational Ground Station. Currently, there is a capability to receive and process the IBS feed at the battalion level through the Global Broadcast Service. All echelons can receive the IBS feed through digital networks on the upper tactical internet.

Imagery Analysts from the Geospatial Intelligence Integration Support Test and Training Detachment travel to a training site with the Army's DCGS-A Tactical Ground Station on Fort Huachuca, AZ, July 19, 2013. (U.S. Army photo by SFC Kristine Smedley)

The ownership of the TGS causes tension at some units. The TGS is a multi-function target acquisition system, equipped with an array of antennas and processors to receive full motion video, imagery, and ground moving target indicators in addition to the IBS broadcast. Many of its capabilities are geospatial intelligence (GEOINT) related, and the system falls under the GEOINT section of the Intelligence Processing Team within the modified table of organization and equipment (MTOE). However, the primary consumers of the IBS feed are signals intelligence (SIGINT) analysts. SIGINT Soldiers have their own property and systems to manage and maintain in the form of the Prophet Enhanced and the Tactical Dismounted Electronic Warfare and SIGINT (better known as TDEWS), which does not receive the IBS UHF broadcast. Since the TGS belongs to the GEOINT team, and the SIGINT team has their own property to manage, the IBS capability is often overlooked.

GEOINT teams do not train on methods for receiving the IBS broadcast feed because they do not have a requirement to use that data feed. Without the need for it, GEOINT teams deprioritize training and maintenance of the TGS's IBS capabilities. SIGINT Soldiers focus their training time on their section's architecture, versus time spent on SIGINT analysis tools. Since their MTOE systems do not receive the IBS broadcast, they do not train on it. Instead, SIGINT sections train on their tasks by accessing data over internet protocol and never have to deconflict training time on the TGS with their GEOINT counterparts. They do not train on the TGS at all, as it is out of sight, out of mind. The IBS functions of the TGS are also not a consideration for the SIGINT team during the Military Intelligence Training Strategy (MITS) certification. Therefore, when it is time for a collective training event, both the SIGINT and the GEOINT section lack the knowledge required to set up and incorporate the IBS broadcast.

Integrated Broadcast Service and Unit Training

Tier 1 and Tier 2 MITS events are the certification events that give brigade commanders confidence in the readiness of their intelligence warfighting function. However, units currently complete this certification without evaluating what intelligence obtained though the IBS broadcast can do for them. MITS does not reinforce the planning, resourcing, or training of the IBS broadcast through the brigade combat team's organic receivers, and it does not currently evaluate a unit's ability to set up and use those receivers. Instead, MITS focuses on message traffic simulation through the Intelligence and Electronic Warfare Tactical Proficiency Trainer.

The National Training Center produces a feed for the IBS broadcast in its scenarios, but it has not been widely adopted by home station training MITS enablers, the Joint Readiness Training Center, or the Mission Command Training Program. To use this broadcast capability in an exercise, there is a cumbersome process to incorporate exercise data over broadcast while using existing simulation programs of record. The process relies on expertise that is not present at every installation. It is worth noting that anecdotal evidence from the National Training Center suggests that the primary means of receiving IBS has either not functioned or rotational units have not brought it to the exercise *in the last 2 years*. The process to convert exercise traffic into the proper format (Common Message Format vs. United States Message Text Format) is time intensive using current Army simulation programs of record. If a unit intends to use the IBS broadcast, it is recommended that they start the process six months before their training rotation. To overcome this, units are encouraged to leverage their home station Foundry site and enable IBS integration using the Automated Scriptor Simulator Exercise Trainer (known as ASSET), which is funded by the National Reconnaissance Office. This significantly reduces the lead-time and personnel required to convert message traffic for seamless use of IBS.

If we want to stay true to, "train how you fight," then we need to do a much better job of making training available to units that are preparing for deployments. Units need the ability to use the IBS broadcast in training, because that is

where we validate our SOPs. The inability of units to train with the IBS broadcast during their training cycles leads to units not knowing about the functionality or lacking an adequate proficiency with it.

Conclusion

The materiel solution to enable tactical formations to receive targetable, near real time intelligence already exists. Formations need to understand and train on all the capabilities that exist within their current equipment. We are not encouraging units to train with the IBS broadcast in our culminating exercises, resulting in SOPs that lack the incorporation of IBS broadcasts, and commanders that do not know the capabilities they possess. Military intelligence leaders at all echelons must embrace the capabilities of the IBS and train for its use and purpose. The IBS capability provides added flexibility and survivability that we need to harness to succeed in our next fight.

Endnote

1. A PACE plan establishes primary, alternate, contingency, and emergency methods of communications for each warfighting function, typically from higher to lower echelons. Department of the Army, Field Manual 6-0, *Commander and Staff Organization and Operations* (Washington, DC: Government Publishing Office, 16 May 2022), 6-8.

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