

# Enabling Battalion S-2 Sections for the Pace of Large-Scale Ground Combat Operations



by TRADOC Capability Manager-Foundation and Program Manager DCGS–A Team

## Introduction

The seismic shift from counterinsurgency operations to fighting a near-peer competitor in large-scale ground combat operations dictates the need to evolve and innovate to ensure the Military Intelligence Corps can provide analysis with enhanced speed, precision, and accuracy for the tactical commander. At the battalion S-2 level, this is clearly evidenced by the 480-pound server that requires a 35T (Military Intelligence System Maintainer/Integrator) to employ and will greatly reduce mobility during the speed of large-scale ground combat operations.

## The Capability Drop 1 Program

A little over 2 years ago, U.S. Army Forces Command (FORSCOM) laid out their priorities necessary to outpace a near-peer threat and fix their battalion S-2 analytic challenges. FORSCOM requested an expeditionary system that could build intelligence preparation of the battlefield (IPB) and mission planning products and operate in a disconnected, intermittent, and limited (DIL) bandwidth environment. The system also needed to be simple and intuitive to use, display graphics, and provide a common intelligence and operational picture with interoperability between mission command systems.

The Military Intelligence Corps teammates at Aberdeen Proving Ground, Maryland, took on this task, Capability Drop 1 of the Distributed Common Ground System-Army. Capability Drop 1 is the first iteration in improving intelligence to meet the needs of the Mission Command Intelligence framework and preparing a tactical force to fight during large-scale ground combat operations.

This effort is the culmination of a year's worth of competition between two potential vendors, including multiple tests with Soldiers, participation in the Network Integration Evaluation (18.2), and Army Interoperability Certification testing. The Capability Drop 1 program has been a cooperative effort across the entire Army, including FORSCOM, Army Test and Evaluation Command, Communications-Electronics Command, Training and Doctrine Command, Army Futures Command, Army Special Operations Command, Department of the Army Headquarters Staff, and industry partners.

Both potential vendors delivered an initial Capability Drop 1 package to support multiple iterations of testing with intelligence Soldiers from across the Army. Soldiers provided direct feedback, enabling the vendors to determine fixes and product improvements while enabling the Army to evaluate the best solution for fielding to its tactical units. Testing focused on Soldier priorities, including intelligence planning tools, usability, interoperability, cybersecurity, and reliability. After extensive testing and Soldier involvement, a contract award was made in March 2019.

## Capabilities of the System

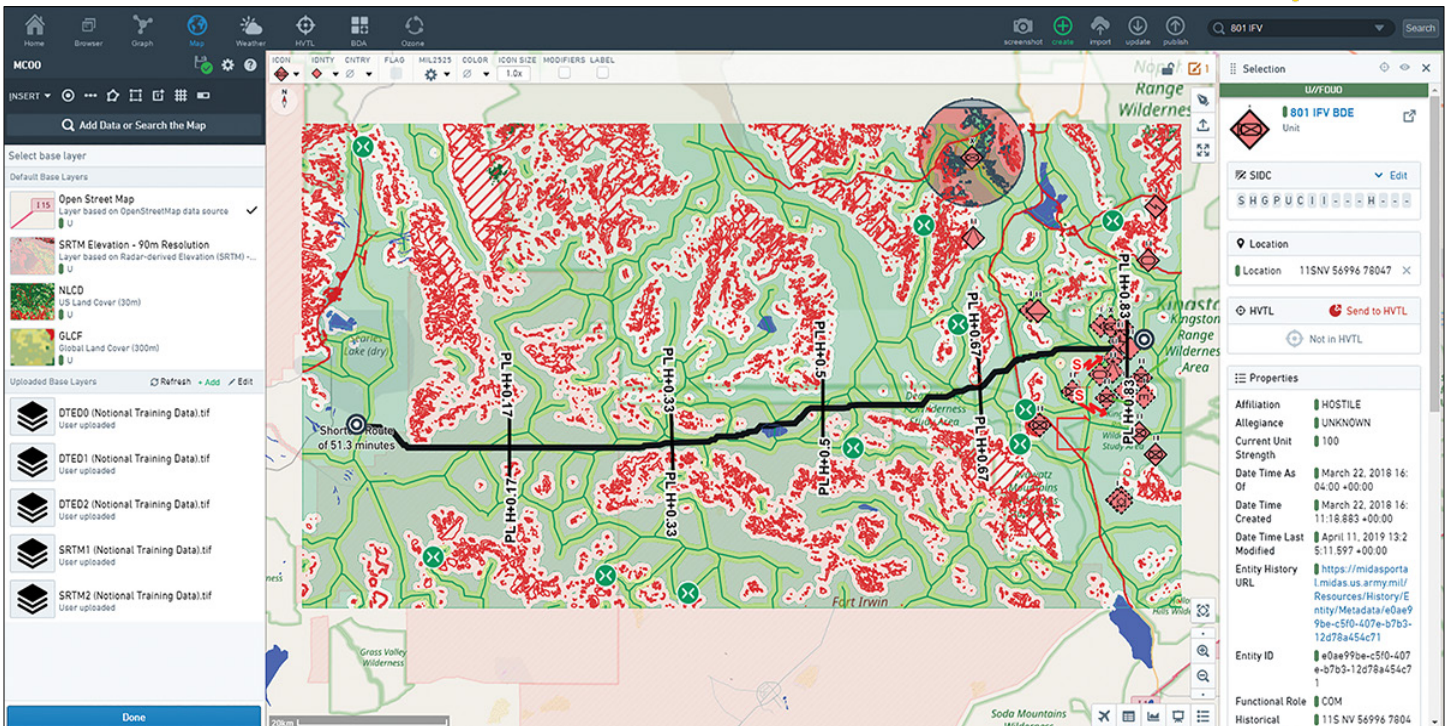
Capability Drop 1 consists of a commercial hardware and software solution to support intelligence analyst operations at the tactical echelon. Hardware solutions comprise ruggedized laptops and a displacement of the current Intelligence Fusion Server at the battalion echelon to improve expeditionary operations. Software will enable operations in a DIL bandwidth environment, enhance ease of use, and provide improved tools for IPB and processing, exploitation, and dissemination.

Capability Drop 1 enables the production of IPB and mission planning products in a DIL bandwidth environment by locally storing the digital terrain elevation data for the area of operations. This data is a uniform matrix of terrain elevation values that provides basic quantitative data for systems and applications requiring terrain elevation, slope, and/or surface roughness information. This allows the software using built-in algorithms to auto-generate IPB products. It also allows the analyst to overlay the Worldwide Equipment Guide that is contained in the software, aiding mission planning through battle tracking as well as link and nodal analysis. Analysts can use collection management applications to determine named areas of interest, build their reconnaissance and surveillance matrix, and then open a graphical display of the collection plan to determine any gaps in collection for their operation. Weather impacts to the mission readily display by equipment type and provide a forecast for the operation ahead. Once in place, the system can interface with generated reports and provide alerts to tip and queue analysts to items of interest in their area of operations. As the operation continues, another interface allows battle tracking in a very intuitive manner that links directly by system type from the Worldwide Equipment Guide.

Starting in May 2019, the U.S. Army began to field the Capability Drop 1 system to 409 maneuver battalions across the Army's Active, Reserve, and National Guard components. Initial training to battalions began in April 2019, prioritizing units based on their mission and upcoming deployments, with fielding starting in May. The training plan for FORSCOM units provides a 2-week training platform at Fort Hood, Texas, to train Soldiers as subject matter experts who will then return to train the Soldiers at battalion level. The Army plans to complete fielding and training to all battalions in less than a year.

### Conclusion

This capability is designed to enhance our analysts' efficiency and effectiveness to support the tactical commander's decision making during fast-paced combat operations. Capability Drop 1 enables a pivot to next-generation intelligence capabilities to increase speed, precision, and accuracy in all functions within the intelligence cycle. Capability Drop 1 is fully aligned within the Army's overarching Mission Command Intelligence framework—to field a ready Army intelligence team supporting mission command against all threats in multi-domain operations by 2028. 🌟



Map screenshot from DCGS-A

The Program Manager DCGS-A mission is to field and sustain modernized intelligence systems through an exceptional workforce of dedicated and professional acquisition specialists and integrate best of breed solutions for the battlefield of tomorrow.