

Deployable Space Analysis Tool Enables Rapid System Training for U.S. Army's FA 40 Officers

AGI's STK Engine Accelerates Analysis for Space-Capable Warfighters

SPECIALIZED NEEDS: Functional Area (FA) 40 Officers are the Army's primary "space smart" soldiers. Over 170 officers serve in 30 joint commands and DoD organizations. Their mission is to integrate space capabilities for warfighting and national intelligence.

Given a standard three-to-six-month job rotation, rapid training and simple software are vital to job continuity. FA 40 officers need simple tools—so they can focus on crucial decision-making.

COMMON COMPONENTS: The Deployable Space Analysis Tool (DSAT) provides the functionality FA 40s need without time spent learning software. Building on C/JMTK STK EUC Option components in AGI's STK Engine has simplified and accelerated space analyses. Employing common components, DSAT met the short timeframe required and allowed officers to quickly move up the learning curve.

With this software tool; officers perform satellite overflight, GPS navigation, and aircraft fly-through visualizations while gaining situational awareness through imagery, maps, and GIS features.

Using the STK Engine from AGI, the U.S. Army has reduced training requirements on the Deployable Space Analysis Tool (DSAT) system from one week to one hour. As a result, the loss of "institutional knowledge" due to work transfers among FA 40 officers has essentially become a non-issue.



AGI's STK Engine capabilities enabled quick development of DSAT. This helped the U.S. Army meet the short timeframe of the project and leveling the playing field for FA 40 officers who—while they might be unfamiliar with STK—need solid analytical data at their fingertips. With the STK Engine application, AGI has created an easy-to-use tool that will greatly enhance Army space operations and initiatives.

REMARKABLE RESULTS: DSAT contains wizard-like workflows that walk the user through every step of an analysis, prompting them for required data. Additionally, one of the primary goals of DSAT was to simplify loading customer data. On startup, DSAT automatically finds all maps and terrain, SBMCS satellite position, and health information. Imagery is imported into DSAT graphically through the 3D window. Should data conversion be required, the software does the work automatically, so that the process is seamless for the user.