

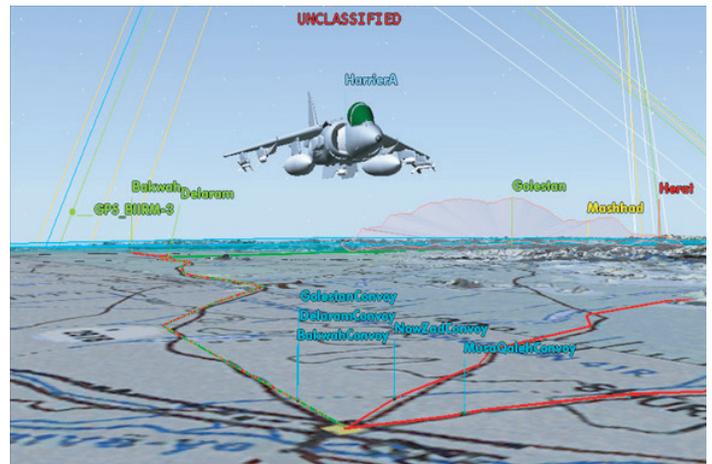
# USMC Combat Development Command Fields STK-Based Unmanned Aircraft Systems Tool in Afghanistan

## STK Facilitates Pre-Mission Planning for Airborne Assets

**THE SITREP:** The U.S. Marine Corps Combat Development Command (MCCDC) develops USMC warfighting capabilities—including doctrine, organization, training, education, materiel, leadership, personnel, and facilities—to field combat-ready forces. MCCDC—with AGI—has built and deployed two ruggedized computers in Afghanistan using Systems tool Kit (STK) to assess Intelligence, Surveillance, and Reconnaissance (ISR) planning and communications. While operations currently require a trained analyst, the USMC works toward deployable applications for untrained users.

**THE DEPLOYMENT:** The USMC in Afghanistan faced high enemy activity and environmental challenges. With thousands of manned and unmanned sorties each week, ISR capabilities were in demand. Having already used AGI products for Unmanned Aircraft Systems (UAS) analysis, they turned to STK for a tool to enable pre-mission planning for ISR, strike, space, and communications assets. This tool would display portions of a 24-hour Air Tasking Order (ATO) related to a specific part of the Area of Responsibility (AOR).

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When MCCDC needed a pre-mission planning tool to optimize combat assets and protect warfighters in challenging terrain, staff-level field Marines used AGI desktop software with reach-back support to analysts in the U.S. With a tool built and fielded in six weeks, STK enhanced data visualization, ISR effectiveness, risk mitigation, and communication effectiveness.

**THE INTEL:** Within weeks, analysts built and deployed the tool to Afghanistan. Now; both command and field Marines obtain data and metrics on ISR coverage, sortie contribution, revisit rate, communications coverage, and communications quality for decision-making support. When the USMC used STK to display the operation plan for the largest offensive since Phantom Fury, the software simulated a “sand table” for immediate visualization and analysis by subordinate unit commanders. In the end, STK helped provide an optimal installation of ground-based ISR systems.