

# Airborne MASINT Mission Planning (AMMP) Creates New Mission Workflow with STK

## STK Decreases Planning Time While Increasing Performance

**THE MISSION:** The Space Systems Division (SSD) of ITT—a very large national defense contractor—specializes in overhead sensors. These include GPS monitoring for every payload launched, compression, analytics, and Image Chain Analysis (ICA). Within the SSD, the small group known as the Airborne MASINT Mission Planning (AMMP) Team provides specialized expertise in project management, software development, and airborne intelligence operations.

**THE PLAN:** The AMMP team faced a particular challenge—to deliver two “initial capability” systems within 90 days of receiving a contract award. At a minimum, these systems would need to allow the operator to select airborne sensors; select swath widths, overlaps, and sidelaps parameters; and select an area on the ground to scan. In addition, these initial capability systems also needed to allow the operator to automatically create a flight plan on a Commercial Off-the-Shelf (COTS) GPS receiver, provide real-time aircraft location on a laptop device during the mission, and print out detailed maps of the mission flight plan.

“March 10, 2008 was the first flight that used AMMP for all the mission planning. We are planning to fly back-to-back flights. This would not be possible using the legacy system. Even with this developmental CLAW input file, the work is down to about an hour, if that. That is a six-to-seven hour reduction in one step of the process alone. That is a HUGE operational impact. STK has made our lives so much easier.”

— MAJOR ALAN BLANCHARD, DIA COR



Using STK from AGI, the Airborne MASINT Mission Planning (AMMP) team has decreased their overall workload while increasing system performance. As a result, they have decreased total mission planning times from several days to a matter of minutes.

**THE RESULTS:** Using Systems Tool Kit (STK) from AGI, the AMMP team created an advanced User Interface. The new mission workflow addressed mission parameters and layers—including naming the mission, establishing a region of interest, and setting both entry and exit points. The new workflow also allowed operators to select an aircraft and attach Sensors. Once operators have created line, point, or area targets; they can create and analyze a route.