Goodrich and AGI Collaborate on Development of DB-110 Tactical Reconnaissance Mission Planning System
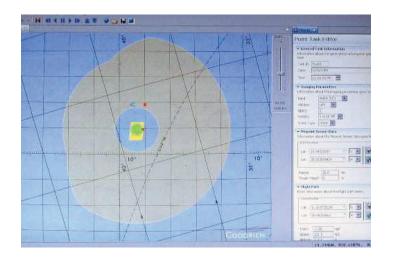
Aerospace Defense Supplier Advances Imaging System Tasks

THE SCENARIO: Goodrich is a worldwide aerospace and defense supplier with the industry's broadest portfolio of systems and products. The company's proprietary, flight-critical systems and products represent an operating history of over 135 years and annual sales of approximately $6.4 Billion. Goodrich's DB-110 Reconnaissance System is a dual-band Recce system for tactical aircraft based on a Long-Range Oblique Photography (LOROP) system.

THE CHALLENGE: The company's Reconnaissance Mission Planning System—a PC-based software application—supports planning of DB-110 imaging tasks and creates plans for airborne and ground segments utilizing a simple Graphical User Interface (GUI). Users create imaging tasks based upon Air Tasking Orders, create a route plan for aircraft flight planning systems, and output mission plans via PCMCIA card for the DB-110 system.

The platform features plug-in architecture that allows for greater variability, a rich user experience, and a customizable look and feel. It supports editing, preference, and job workflows with cross-platform components for Windows, Linux, and Mac. Featured plug-ins—drop-in components that conform to a defined software interface—allow users to contribute new functions, define new sensor models, extend or modify existing functionality, and parameterize sensor models.

Promising developments in progress will heighten situational awareness and allow for advanced dynamic tasking. The system has shown the ability to interact with the globe. It can identify map and DTED data, create an imaging path, create pinpoint and area tasks, modify tasking parameters, and display full sensor coverage information.

The Goodrich DB-110 Tactical Reconnaissance Mission Planning System—currently fielded or scheduled to be fielded to four nations—has proven compatible with desired Java implementation and shows a very clear growth path for the addition of future features. In the end, UAV development currently in progress will provide heightened situational awareness and advanced dynamic tasking.

THE OUTCOME: Demonstrations returned promising results. The system was able to interact with the globe, identify map and DTED data, create both pinpoint and area tasks, modify tasking parameters, create an imaging path, and display sensor coverage information. The product has also proven compatible with desired Java implementation. UAV development currently in progress will provide heightened situational awareness and advanced dynamic tasking. There is also a very clear growth path for the addition of future features. The system is currently fielded or will be fielded to four nations.

AGI delivers mission-proven software for timely and cost-effective development and deployment of advanced space, defense and intelligence applications. AGI products are used for modeling, engineering and operations in the areas of space, cyberspace, aircraft, missile defense, C4ISR and electronic systems. They can be purchased as ready-to-use applications, development tools or turnkey solutions.