

NASA's Wallops Launch Facility Wins New Business with AGI Software Tools

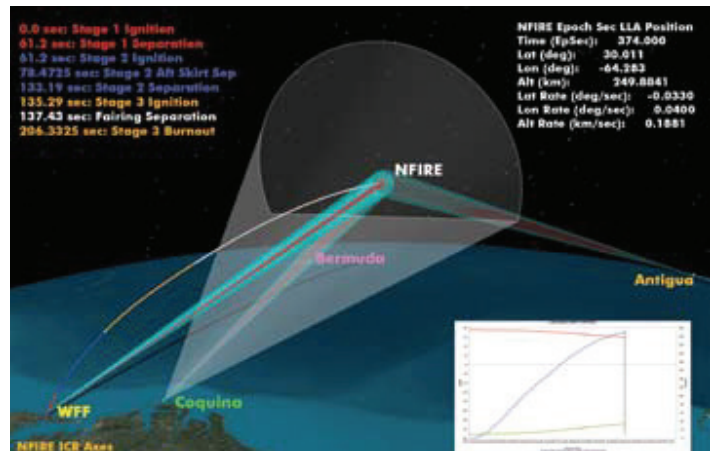
Test-Bed Facility Builds Feasibility Lab Around AGI Software

ADDRESSING THE NEED: NASA's Wallops Research Range on Virginia's Eastern Shore serves as the agency's principal facility for sub-orbital and small-orbital research programs. An operational range and test bed, Wallops launches proven systems for some government and commercial customers—all while enabling the exploration of new vehicles, flight components, ground support systems, and instrument functionality for others. Its customers include major NASA directorates—as well as the DoD, DHS, NOAA, DARPA, and private commercial companies.

BUILDING THE LAB: To help its customers quickly assess technical feasibility, safety, and cost drivers; the Research Range established its Mission Planning Lab (MPL). Based on AGI's core analysis software STK; the MPL integrates and analyzes detailed information regarding vehicle characteristics, range setup, flight profiles, and mission-specific objectives. The software then provides mathematically correct, dynamic 3-D simulations that assist Wallops analysts and their customers in evaluating choices about platform selection, flight profiles, and range-asset placement.

"We met with a DoD customer prepared to fund a study on the feasibility of launching their mission from Wallops. Using the MPL, we showed them their operational scenario, data links, participating assets, and key cost drivers for our range support—all before their departure that day. They were astonished—and funded the multi-million-dollar project on the spot."

— JAY PITTMAN, CHIEF OF THE RANGE AND MISSION MANAGEMENT, WALLOPS RESEARCH RANGE



In April 2007, the Near Field Infrared Experiment (N FIRE) satellite will launch from Wallops Research Range



When NASA's Wallops Research Range needed to win business, they built a mission-planning lab using AGI's Commercial-Off-The-Shelf (COTS) STK software. The lab simulates each mission to quickly and accurately assess both feasibility and cost. As a result, Wallops personnel can advise customers and assure range safety. In turn, customers can make fast decisions that allow the range to capture business quickly.

CAPTURING BUSINESS: AGI's software tools let analysts see success on-screen long before it takes place in-flight. Being able to evaluate the essential requirements for a mission in advance has directly led to the range capturing new business. In fact, customers have funded extensions to the Mission Planning Lab after they saw mission feasibility and realized the potential cost savings. While STK helps to provide safe flexibility for Wallops customers, its extensibility also allows the range to spread out its capital investment over time.