

ATR's AccuTrack Team Maximizes Effectiveness of Telemetry Acquisition Systems with Software Based on AGI's STK Engine

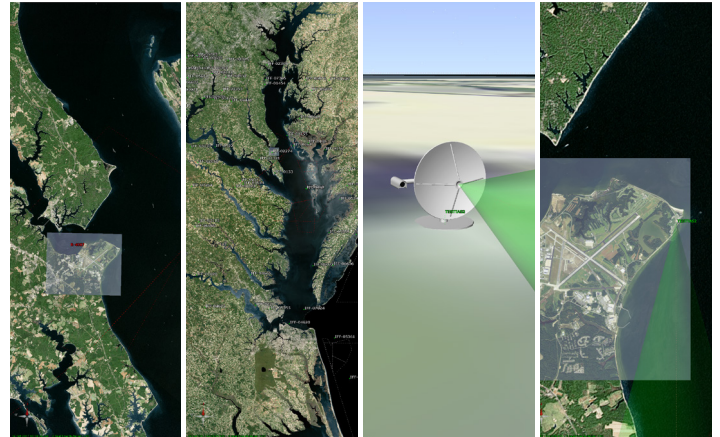
STK Enhances Visualization, Reduces Personnel Requirements

THE SITREP: Naval Air Systems Command's Atlantic Test Range (ATR) provides aircraft and airborne weapon systems with material support throughout their life cycle. This includes research, design, development, engineering, and testing—as well as evaluation, training, repair, and logistics. ATR tests and evaluates new aircraft and related systems before they are released to the fleet. This process includes the use of Telemetry Acquisition System (TAS) antennas to gather information from aircraft while they are in flight.

THE MISSION BRIEF: While TAS operators must maximize coverage, previous procedures required an operator for each antenna. ATR sought to reduce personnel requirements and allow each operator to manage multiple antennas. The AccuTrack team—led by Software Developers Tracey Fritz and Doug Neumann—wrote new software using the Systems Tool Kit (STK) Engine from AGI that allowed for the visualization and directional analysis of antennas and aircraft on the globe. This allows the operator to determine where an aircraft is, what it is doing, and where the antenna is pointing—all of which heighten situational awareness.

"The product we used before we adopted STK was no longer supported. It lacked documentation and had not been updated in many years. When the developer finally did update, the changes were so dramatic that they would require a complete rewrite. At that point, we decided not to stay with the product. When we looked at STK's help and support, the product looked very good."

— TRACEY FRITZ, SOFTWARE DEVELOPER



AccuTrack—built using STK—lets users view, move, align, and manipulate multiple antenna assets from a single location.

When ATR upgraded its TAS antennas for improved visualization and reduced personnel requirements, they used STK Engine to develop a new system capable of both. STK's enhanced tools, comprehensive documentation, and live support helped them create a robust, configurable software platform with new features that allowed operators to manage multiple antennas at once.

THE FLIGHT PLAN: STK integrated with C# without a software bridge. An improved Application Programming Interface (API), enhanced visualization capabilities, extensive help documentation, and live technical support speed the deployment of new features and streamline end-user updates. ATR operators can now access maps, visualize TAS locations, and access antenna controls. They can also now view each other's screens and hand-off control of assets among themselves.

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