

## **CONSORTIUM OF SEVEN COMPANIES WORKING WITH EARTH DATA ANALYSIS CENTER (EDAC) ON AIRSTEP PROGRAM**

Airport Safety and Security Program Focuses on Identifying Glide-Path Obstructions Around U.S. Airfields

**Albuquerque, NM** – December 19, 2002 – The Earth Data Analysis Center (EDAC) at the University of New Mexico said today that it is making significant progress, in conjunction with a consortium of seven private companies, on the Airfield Initiative Remote Sensing Technologies Evaluation Project (AIRSTEP). AIRSTEP is examining the potential of remote sensing technologies to meet the needs of airport safety, security and management. EDAC and its partners are working in cooperation with the U.S. Department of Transportation and NASA in developing this program.

The private partners include Solid Terrain Modeling (3-D solid terrain models), BAE Systems (ClearFlite software), Bohannon Huston, Inc. (quality assessment/quality control), Airborne 1 (LiDAR technology), I.K. Curtis Services (aerial photography), the Keith Companies (ground control for LiDAR and aerial photography), and Bergstalh-Shaw-Newman, Inc. (AIRSTEP training materials for airport managers). This dynamic partnership is evaluating and implementing remote sensing applications to improve the safety and security of American airports.

Rick Watson, EDAC senior research scientist, said, "We initiated a case study on the Santa Barbara Airport to analyze and evaluate remote sensing applications. We introduced the use of solid terrain models of the airport and vicinity to illustrate airport runway approaches and their relationship to the local terrain. Using transparent 3-D model overlays, we can illustrate, in a realistic and easily understood way, the relationship of air traffic routes to terrain, buildings, and other objects that may pose a threat to approaching aircraft."

"This case study had an interesting challenge for STM: a requirement to display the limits of two different airspace surfaces just above the surface of the solid terrain model," commented Mark Fisher, executive vice president of STM. "We used CAD data files which described the surfaces and then created molds with our existing equipment. Our process enabled us to render the surface representations in a transparent material. The surfaces are interchangeable and placed on top of the terrain model, so the viewer can clearly understand the relationship of different complex airspaces in the context of surrounding terrain."

### **ABOUT AIRSTEP**

EDAC established the AIRSTEP program to give airfields accurate and up-to-date mapping data for airport facilities, surrounding terrain and environment for security, safety, airspace obstruction identification, and facilities planning. This program was initiated to evaluate the utility of remote sensing technologies to meet these requirements. Included in the program are digital photogrammetry from aerial photography and Light Detection and Ranging (LiDAR) technologies, both of which contribute cost-effective and accurate solutions to data acquisition, for obstruction identification and airfield management.

These efforts are motivated by the National Imaging and Mapping Agency: Airfield Initiative (formerly the Ron Brown Airfield Initiative) which mandates that all U.S. airports and all international airports serving U.S. aircraft have a specifically defined obstruction analysis performed.

### **ABOUT THE PARTNERS**

Please see the websites below for each of the partners listed.

EDAC: [www.edac.unm.edu](http://www.edac.unm.edu)

STM: [www.stm-usa.com](http://www.stm-usa.com)

BAE SYSTEMS, Inc.: [www.talysin.com/products/clearflite/](http://www.talysin.com/products/clearflite/)

Bohannon Huston Inc.: [www.bhinc.com](http://www.bhinc.com)

Airborne1: [www.airborne1.com](http://www.airborne1.com)

I.K. Curtis Services: [www.ikcurtis.com/](http://www.ikcurtis.com/)

Keith Companies: [www.keithco.com/](http://www.keithco.com/)

BSN: [www.bsnconsult.com](http://www.bsnconsult.com)

### **PRESS CONTACTS:**

Note to Editors:

To see a photo gallery of STM models, go to “Press Release” section, in the “Press Room,” at [www.stm-usa.com](http://www.stm-usa.com). Gallery is in upper left-hand corner. Press releases and links to photos are just below.

Darryl Lloyd, Darryl Lloyd, Inc.

805-499-0562 or [darryl@dlloyd.com](mailto:darryl@dlloyd.com)

Rick Watson, EDAC

505-277-3622 ext. 232 or [rwatson@edac.unm.edu](mailto:rwatson@edac.unm.edu)

Gary James, Solid Terrain Modeling

661-821-9040 or [gjames@stm-usa.com](mailto:gjames@stm-usa.com)

John Trunkwalter, BAE SYSTEMS ADR

800-257-7960 or [jtrunkwalter@adrinc.com](mailto:jtrunkwalter@adrinc.com)