

FAA Fact Sheet

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FAA Names 'Excellence in Aviation Research Award' Winners

The Federal Aviation is presenting its 2008 Excellence in Aviation Research Awards to Professor Edwin Herricks, Ph.D., University of Illinois, Urbana Champaign, and the MITRE Corporation's Center for Advanced Aviation System Development Universal Access Transceiver (UAT) Technology Design Team.

"The aviation community must find innovative ways to enhance safety and capacity, as our skies and airports get more crowded" said Robert A. Sturgell, FAA acting administrator. "This award goes to people who are making that happen. Dr. Herricks and the MITRE CAASD team are taking the steps to improve aviation now and far into the future."

Dr. Herricks has led the University of Illinois' Center of Excellence in Airport Technology Safety program, supporting the FAA airport technology research and development team's many high-profile programs, for more than a decade. His research and development of foreign object debris detection (FOD) systems, wildlife hazard mitigation systems and other critical new technologies are revolutionizing airport safety. Dr. Herricks has devised effective protocols that introduce experimental radar systems into the broad operational landscapes of the complex airport environment.

His top-caliber scientific expertise, blended with strong project management skills, have secured successful cooperation among scientists, the FAA, local airport authorities, governments and other interested groups to ensure that sufficient airport test data is collected and analyzed. These exhaustive efforts provide airport authorities with the key technologies they need to manage and control hazardous wildlife activity and FOD, improving airport safety for the nation's flying public by reducing the risk of catastrophic aircraft accidents.

The UAT technology enables advanced aviation applications by using these technologies: Automatic Dependent Surveillance-Broadcast (ADS-B) and related broadcast services: Flight Information Service-Broadcast and Traffic Information

Service-Broadcast. MITRE's UAT Technology Design Team invented and prototyped the UAT, then accomplished initial implementation, standardization and user community acceptance of the technology.

The team's research enabled UPS Aviation Technologies to develop certified avionics for the FAA's Capstone Program in Alaska. The UAT Beacon Radio, a product of this research, has shown significant potential benefits to emergency management operations and search and rescue missions. The team's research to reduce the size, weight, power and cost of the UAT design may enable use of the technology to enhance cooperative surveillance among non-traditional airspace users, such as small unmanned aircraft systems, aircraft without electrical systems, reusable space vehicles and airport surface vehicles.

This is the 11th year that the prestigious Excellence in Aviation Research Award has been presented. The awards are given annually to individuals and/or institutions outside the FAA whose research contributions have resulted in a significantly safer, more efficient national airspace system.

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