

# NEWS

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## **Winners Selected for the 2017-2018 TRB Airport Cooperative Research Program University Design Competition for Addressing Airport Needs**

WASHINGTON – The Transportation Research Board’s Airport Cooperative Research Program (ACRP) recently selected winners for its University Design Competition for Addressing Airport Needs. The prestigious competition encourages students to design innovative and practical solutions to challenges at our nation’s airports. Teams of students from the Florida Institute of Technology, University of Rhode Island, and Purdue University took home first place prizes in different technical challenge areas.

### **First Place Winners:**

- A graduate team from the College of Aeronautics at the Florida Institute of Technology designed a system using LIDAR and pressure plates to alert air traffic controllers of impending runway incursions. They took first place in the Runway Safety/Runway Incursions/Runway Excursions challenge area. Deborah Carstens was the faculty adviser.
- A University of Rhode Island undergraduate team from the department of mechanical, industrial, and systems engineering submitted “Eagle Eye,” a drone-based inspection system to automate aspects of daily airfield inspections. The team won first place in the Airport Management and Planning challenge area. Bahram Nassersharif was the faculty adviser.
- A team of Purdue University students in the School of Aviation and Transportation Technology came up with a design for using smart technologies to monitor airport aprons, which are the areas around passenger loading and unloading gates. The group placed first in the Airport Operation and Maintenance challenge area. Mary Johnson was the faculty adviser.

Students were invited to propose innovations in any of four technical challenge areas: Airport Operation and Maintenance, Runway Safety/Runway Incursions/Runway Excursions, Airport Environmental Interactions, and Airport Management and Planning. The competition requires that students work with a faculty adviser and that they reach out to airport operators and industry experts to obtain advice and assess the practicality of their proposed design solutions. The Virginia Space Grant Consortium of Hampton, Virginia, manages the competition on behalf of the ACRP.

Volunteer panels of airport industry and academic practitioners as well as FAA representatives selected the winning submissions from among the proposals submitted by 25 student teams. First place teams will receive their awards and present their work at the National Academies’ Keck Center in Washington, D.C., on July 25, 2018. In addition, they will be given the opportunity to present their winning proposal at an industry professional conference or workshop in late summer or fall 2018. First place winning teams receive \$3,000, second place \$2,000, third place \$1,000, and honorable mentions \$500.

The names of all winners and copies of designs receiving first and second place awards are available at the [competition website](#).

New guidelines for the 2018-2019 academic year competition will be available on the competition website by Aug. 1, 2018.

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