FINDINGS & RECOMMENDATIONS: SUBCOMMITTEE ON AIRPORTS
SPRING 2015 MEETING
ATLANTIC CITY, NJ | MARCH 31-APRIL 1, 2015

The Subcommittee met on March 31 and April 1 in the Director's Conference Room at the FAA William J. Hughes Technical Center (the Tech Center) in Atlantic City with representatives from the Airport Technologies Research Branch as well as select representatives from the FAA Office of Airports. During the meeting the Subcommittee reviewed the ongoing progress Branch staff have made on the varied airport safety, planning, design, and pavement projects within the Branch's research portfolio and reviewed the Branch's proposed FY2017 budget.

The following section summarizes the Subcommittee's major findings, and recommendations.

FINDINGS & RECOMMENDATIONS

Finding 1: The Subcommittee generally accepts and supports the Airport Technologies Program's FY2017 budget. However, research needs identified by FAA staff in the field of Airport Planning (RPD 132) appear to exceed the amount allocated to this research project area. These identified needs include modernizing the FAA's runway exit design interactive model (REDIM), research to support improved FAA guidance regarding critical design aircraft designations, and developing training and guidance materials to support the FAA's new runway simulator model.

Recommendation 1: The Subcommittee recommends that the FAA review the RPD 132 budget and determine if sufficient funding exists to meet FY2017 needs as well as if ongoing planning projects need to be reprioritized in light of new planning research needs.

Finding 2: Although the Subcommittee supports many of the proposals for new environmental research projects that will be funded within the Airport Technologies Research Program (RPD 157), we note that both safety and capacity must be considered included when assessing new types of noise mitigation techniques that can be applied to flight procedures, particularly higher glide slope approaches, delayed deceleration approaches, and the use of displaced arrival thresholds for noise abatement. Safety and operational risk assessments should be integral to the assessment of all of these techniques. Such assessments should involve subject matter experts from the pilot, air traffic, flight standards, and airport operator perspectives.

Recommendation 2: The Subcommittee recommends that the FAA take steps to incorporate safety and capacity assessments into the RPD 157 research program as well as better define how the aforementioned perspectives from the pilot, air traffic, flight standards and airport operator communities will be incorporated onto its research plan.

Finding 3: The Subcommittee appreciates that the proof of concept work associated with the low cost ground surveillance systems (LCGSS), particularly the optical surveillance system that has been pilot tested at Seattle-Tacoma International Airport. However, given the ongoing development of alternative surface surveillance systems, continuing reductions in the costs associated with automated dependent surveillance-broadcast (ADS-B) transponders, and the oncoming 2020 ADS-B equipage deadline, the Subcommittee is interested in understanding the role LCGSS are likely to play at airports if and when they are available for implementation before significant additional research into these systems is conducted.

Recommendation 3: The Subcommittee recommends that Branch staff develop a concept of operations that defines the roles and applications of the LCGSS in the National Air Transportation System given other surface surveillance programs and technology deployments that are underway, particularly surface surveillance systems that rely on ADS-B technology. The concept of operations should consider what unique capabilities or deployment opportunities would exist for LCGSS as well as those capabilities that are likely be duplicated by ADS-B based surface surveillance systems.

Finding 4. The Subcommittee continues to be pleased by the progress Branch staff are making to manage risks and reduce uncertainties associated with RPD 147, Aircraft Braking Friction. These efforts include addressing safety issues associated with the test aircraft, enhancing the test aircraft's braking systems to better represent those currently in use, and securing the services of a highly qualified test pilot. Branch staff have responded positively to Subcommittee concerns about the project and the Subcommittee believes that the Branch be in a good position to collect high quality data in early FY2016.