

AIRPORTS SUBCOMMITTEE REPORT

Presented by:
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ACI-NA
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AIRPORTS SUBCOMMITTEE MEETING

- ➔ Met virtually on September 3-4, 2021
- ➔ Reviewed the current Airport Technology Research & Development portfolio and research progress
- ➔ Briefed by the Airport Cooperative Research Program on complementary research areas
- ➔ Had an open discussion of the Airport Innovation RPA with specific focus on airport energy systems, including research needs to support aircraft and ground vehicle electrification
- ➔ Had specific research briefings on:
 - Vertiports
 - Airport firefighting research
 - Sustainable airfield pavements
 - Airport design sustainability and resiliency projects
 - Airfield pavement testing program
 - Noise research

AIRPORT TECHNOLOGY RESEARCH & DEVELOPMENT PROGRAM OVERVIEW

Safety & Planning RPAs	Pavement RPAs	Airport Noise, Environmental, and Innovation RPAs*
S1 Airport Planning & Design S2 Airport Safety Data Mining S3 Aircraft Rescue & Firefighting S4 Wildlife Hazard Mitigation S5 Visual Guidance S6 Runway Surface Safety Technology S7 Airport Safety & Surveillance Sensors S8 UAS Integration at Airports	P1 National Airport Pavement Testing Facility P2 National Airport Pavement Materials Research Center P3 Field Instrumentation & Testing P4 Advanced Materials P5 Pavement Design & Evaluation P6 Non-destructive Testing Technologies P7 Software Program Development and Support P8 Extended Pavement Life	<u>Noise RPA</u> N1 National Noise Survey N2 DNL & Metrics Evaluation N3 Sleep Disturbance N4 Noise Mitigation N5 Operations <u>Environmental RPA</u> E1 Environmental Tools and Guidance <u>Innovation RPA</u>

* The FAA Office of Airports and FAA Office of Energy & Environment co-manage the Airport Noise & Environmental RPAs. The Program formally defines a single RPA each for Noise, Environmental Issues, and Innovation. Items N1-N5 and E1 are defined by Program staff as “sub-RPAs”.

OBSERVATIONS & COMMENDATIONS

- ➔ Appreciate FAA's continuing focus on time-critical research projects. These include evaluation of alternative aircraft fire fighting agents and assessment of uncrewed aircraft system (UAS) detection and mitigation systems, both of which are associated with legislative requirements in the 2018 FAA Reauthorization Act.
- ➔ Pleased to see results of research into new airspace entrants (including continuing work on vertiports and beneficial uses of UAS at airports), the impacts of climate change on airport operational and infrastructure needs, and sustainable airfield pavement research.
- ➔ Interested in how the Program's airport planning and pavement research is helping to enhance airport sustainability and resiliency.
- ➔ Commend the Program's efforts to modernize and enhance FAA pavement design and management tools and evaluate airfield pavement design.

SPRING 2021 FINDINGS & RECOMMENDATIONS

FINDING 1:

As noted in our last two Subcommittee reports, the Program's alternative firefighting agent research project has been of concern to the Subcommittee because:

- The Project's findings were needed to support FAA action regarding Section 332 of the FAA Reauthorization Act of 2018, with an October 4, 2021 deadline
- Airport operators are under considerable pressure from state and local governments and local communities to reduce or eliminate use of PFAS at airports.
- There are significant and growing concerns about the human health impacts and associated liability associated with PFAS contamination on and near airports.

We are now beyond the October 4 deadline and FAA testing has not demonstrated that there are non-fluorinated foams capable of meeting the current DoD foam standards, which FAA incorporates in its own standards.

SPRING 2021 FINDINGS & RECOMMENDATIONS (CONT'D)

RECOMMENDATION 1:

The Subcommittee recommends that the FAA prioritize assistance and support for DoDs research efforts regarding a new performance standard for non-fluorinated/PFAS-free foams.

We also reiterate our recommendation from Spring 2021 that the FAA prioritize research associated with ARFF training, equipment requirements (including equipment cleaning), tactics, and other supporting guidance that will be needed to facilitate the transition from fluorinated to non-fluorinated foams.

SPRING 2021 FINDINGS & RECOMMENDATIONS (CONT'D)

FINDING 2:

The Subcommittee appreciated the categorization of several of the Program's projects in terms of airport sustainability and resiliency. U.S. airport operators are extremely interested in ways they can enhance both sustainability and resiliency through appropriate capital investment and changes in operating and maintenance practices.

SPRING 2021 FINDINGS & RECOMMENDATIONS (CONT'D)

RECOMMENDATION 2:

The Subcommittee recommends that the FAA continue to prioritize research projects that enhance airport sustainability and resiliency particularly within the advanced pavement materials, extended pavement life, airport planning & design, and environmental tools & guidance RPAs.



QUESTIONS?