

AIRPORTS SUBCOMMITTEE REPORT

Presented by:
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ACI-NA
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AIRPORTS SUBCOMMITTEE MEETING

- ➔ Met virtually on March 2-3, 2021
- ➔ Reviewed the current Airport Technology Research & Development portfolio and research progress
- ➔ Briefed by NASA on complementary research areas
 - Urban/advanced air mobility systems
 - Commercial hypersonic and supersonic aircraft
 - Airside surface management/airport collaborative decision making
- ➔ Discussed COVID-19 impacts on research priorities as well as emerging airport research areas
- ➔ Had specific research briefings on:
 - UAS research
 - Aircraft fire fighting agent testing program
 - Vertiport design standards
 - Solar lighting systems
 - Airport environmental research
 - Airfield pavement management software the pavement fatigue models it incorporates

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	N1 National Noise Survey N2 DNL & Metrics Evaluation N3 Sleep Disturbance N4 Noise Mitigation N5 Operations E1 Environmental Tools and Guidance

* 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

- ➔ Pleased to see that the Program's on-site research substantially resumed in the latter half of CY2020.
- ➔ Appreciate FAA's continuing focus on time-critical research projects. These include evaluation of alternative aircraft fire fighting agents and assessment of unmanned aircraft detection and mitigation systems, both of which are associated with legislative requirements in the 2018 FAA Reauthorization Act.
- ➔ Understand that in spite of best efforts, there will be delay completing these time-sensitive research projects. This is of greatest concern for alternative firefighting agent research, where there is a legislative deadline for research findings this year.
- ➔ Pleased to learn that the FAA has selected the four pilot testing sites for UAS detection and mitigation systems: Huntsville International Airport, Rickenbacker International Airport, Seattle-Tacoma International Airport, and Syracuse Hancock International Airport. These four airports join Atlantic City International Airport in the program, where preliminary work began in Fall 2020.
- ➔ Acknowledge the successful conclusion of the FAA's Neighborhood Environmental Survey research effort, which culminated with publication of survey results in January 2021 (DOT/FAA/TC-21/4). This research has substantial implications for U.S. airports and noise mitigation programs.

SPRING 2021 FINDINGS & RECOMMENDATIONS

FINDING 1: The Subcommittee recognizes that disruptions caused by the COVID-19 pandemic have delayed time-critical research activities, including those associated with provisions in the FAA Reauthorization Act of 2018.

It will be very challenging to complete necessary testing and analysis this year despite best efforts on the part of Program staff to do so, principally because of COVID-19 research disruptions during the first half of 2020.

SPRING 2021 FINDINGS & RECOMMENDATIONS (CONT'D)

RECOMMENDATION 1: The Subcommittee encourages the FAA to assess whether additional time will be needed to complete its alternative firefighting agent research and coordinate this research with the U.S. DoD.

The Subcommittee would support FAA requests for deadline extensions to address these issues should FAA seek them from Congress.

SPRING 2021 FINDINGS & RECOMMENDATIONS (CONT'D)

FINDING 2: UAS research remains a high priority for the Subcommittee. Actions that the FAA has taken in the last six months to facilitate UAS operations (e.g., over people, beyond visual line of sight) and facilitate UAS tracking in the National Airspace System via remote identification systems coupled with increasing UAS capabilities make these aircraft very attractive for a variety of beneficial uses at airports.

SPRING 2021 FINDINGS & RECOMMENDATIONS (CONT'D)

RECOMMENDATION 2: We encourage the FAA prioritize its research into beneficial UAS use cases and implementation hurdles at airports, expediting this work if possible.

An aerial photograph of a vast airport tarmac, showing multiple runways and taxiways. Numerous bright, starburst-like lights are visible along the edges of the paved areas, receding into the distance under a clear sky.

QUESTIONS?