

SAS Chair Opening & Report on REDAC Meeting

2020 Spring REDAC SAS Meeting
Washington, DC
February 25, 2020



REDAC Meeting Report

- October 10, 2019
- FAA Headquarters, Washington DC
- Agenda
 - Opening/Closing Remarks
 - FAA R&D Landscapes
 - FAA UAS Update
 - Subcommittee Reports



FAA R&D Landscapes – SC Inputs

- Airports: a workbook for highest impact drivers
- Aircraft Safety: multiple workbooks collectively addressing all drivers + recommendation for additional drivers
- Human Factors: recommended HF emerging issues list
- Environment & Energy: workbooks for 4 select drivers
- NAS Operations: feedback captured from subcommittee discussion



FAA R&D Landscapes

- 25 Industry Focused Drivers in 4 Categories
 - Advances in New Vehicles and New Missions
 - Advances in Technology and Materials
 - Advances in Data and Processing Power
 - System Wide Advancement and Improvements – late addition
- Challenges Identified
- Drivers Marked by Expected Time to Maturity (near-term, mid-term, and far-term)



FAA R&D Landscapes – Next Steps

- Landscape will be used to
 - Identify the aviation industry's evolving research areas
 - Inform FAA research priorities, discussions, and decisions
 - Provide alignment with strategic research plans
- Landscapes will be regularly updated with continued REDAC input and FAA expert review
 - Ensure consistency with latest industry efforts



FAA UAS Update

- UAS Integration Strategy
 - Low-Risk, isolated operations (VLOS) to full UAS integration (BVLOS)
- Remote ID Implementation
- IPP/PSP Waivers and Exemptions
- FAA UAS Integration Research Planning
 - Research informs operational capabilities
 - Research partners
- Research Gaps
 - Ground collision and airborne collision severity



Subcommittee Reports

- Safety
 - Review of August meeting – 3 F&Rs (1 modification)
- Airports
 - 3 F&Rs
 - Further discussion of landscapes
 - Further research into airport UAS use cases & UAS detection
 - Further research into alternatives to PFAS based fire fighting agents



Subcommittee Reports

- NAS Operations
 - 4 F&Rs
 - Establish a cross cutting airspace services capability utilization monitoring program that collects data on deployed automation systems and procedures
 - Benefits of wake hazard research program being applied to GA and business aviation
 - End to end strategic plan for WTIC program



Subcommittee Reports

● Human Factors

- 3 F&Rs
 - Opportunities for research benefits from integrated studies within constraints of current funding and available resources
 - Further strategic inputs to the research prioritization process
 - FAA investment in HF research to address associated UAM issues



Subcommittee Reports

● Environment and Energy

- 6 F&Rs
 - Prioritization of noise research for NextGen deployment
 - Prioritization of research that allows FAA and U.S. to maintain its global leadership (CAEP, ASCENT)
 - Support continued funding of research on alternative jet fuels
 - Continued support of PPPs (CLEEN, CAAFI, & ASCENT) to bolster FAA's position in international settings
 - Emissions – compliance with air quality standards
 - Staffing – high priority on filling staff vacancies to manage the Office of Environment and Energy (AEE)



- Next REDAC Meeting Date: May 28, 2020, Washington, DC
- Questions?