

FAA REDAC Subcommittee on Environment and Energy

Findings and Recommendations
September 2019

E&E REDAC Subcommittee

- September 10 – 11, 2019 Meeting
- Accomplishments of the E&E Portfolio
- Overview: Review R&D portfolio; Noise threat; FAA's global impact at ICAO CAEP; Importance of Alternative Jet Fuels; Public Private Partnerships
 - Noise possibly biggest threat to growth of U.S. Aviation
 - U.S. must maintain its Global Leadership position at ICAO CAEP
 - Selected deep dives and special topics
 - Increased growth in Commercial Subsonic, UAM/UAS; Supersonic Civil and Commercial space vehicles
 - Importance of Public Private Partnership programs
 - Collaboration between FAA and NASA
 - Additional environmental research key to establishment of sound policy to support new entrants

E&E Findings & Recommendations (1)

- Noise is an ongoing issue and possibly the biggest threat to NexGen, Modernization of the NAS and constraint to growth of U.S. Aviation industry
- Growth will come from the Commercial Subsonic aviation, UAM/UAS, Supersonic civil and Commercial Space vehicles and the FAA will need to be able to address the noise, emissions and health impacts of these new entrants
- Recommend FAA with its research and strengthen its relationship with NASA as it moves forward to establish regulatory guidance and sound policy.

E&E Findings & Recommendations (2)

- Maintaining the U.S. Global leadership position at ICAO CAEP is essential to protecting U.S. aviation interests
- The subcommittee recommends the prioritization of all research efforts/programs that will allow the FAA and the U.S. to maintain its current global leadership at ICAO CAEP.

E&E Findings and Recommendations (3)

- A lot of progress has been made in the development of alternative fuels and any reduction of funding for the Alternative Jet Fuel (AJF) program (including efforts in CAAFI, CLEEN and ASCENT) will have a catastrophic effect on the maturation of this fledgling industry
- Since the maturation of the Alternative Jet Fuel program will be a major environmental benefit for the public, will create a new industry within the U.S. and will benefit the U.S. aviation industry. We strongly support funding for the continuation of research on AJF.

E&E Findings and Recommendations (4)

- AEE provided updates on successes that have been realized as a direct result of the collaborate work done with private industry, major universities through Centers of Excellence, other Federal Departments and Foreign Governments. Also noted was improvements have been made to the grant approval process.
- The Subcommittee continues to endorse the robust funding Public Private Partnerships like CLEEN, CAAFI and ASCENT that leverage scarce resources. The Subcommittee is pleased with the close collaboration between NASA and the FAA. We support the new research plan presented by AEE and encourage the FAA to further streamline the process to reduce the time required to go from idea development to grant execution.

E&E Findings and Recommendations (5)

- Proposed improvements in Aviation Environmental Design Tool (AEDT) will enable enhanced usability and improved airspace and airport design.
- The subcommittee recommends the FAA continue the simultaneous balanced development of usability improvements and enhanced features in the near term. Work with airports to get additional emissions data to support modeling efforts.

E&E Findings and Recommendations (6)

- Staff vacancies within the FAA organization is a big concern. The subcommittee that the workload within AEE has increased and they do not have the full complement of staff required to maintain research and provide the solutions that the FAA need in order to achieve its core mission.
- The subcommittee recommends the FAA place a high priority on filling staff vacancies to manage the AEE portfolio and support the expanding workload.