FAA REDAC Subcommittee on Environment and Energy

Findings and Recommendations
March 2020

E&E REDAC Subcommittee

- March 17 18, 2020 Virtual Meeting because of COVID-19 pandemic
- Updates on major research components of the AEE's R&D Portfolio
- Successes realized locally and on the international front, directly linked to research that was completed by AEE
- Overview: AEE is doing a good job and maintaining a balanced portfolio; Noise threat to Aviation; 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
 - Public Private Partnership programs are one key element to U.S. maintaining its Global Leadership position at ICAO CAEP
 - Of note:
 - Concerns over increased growth in Commercial Subsonic, UAM/UAS; Supersonic Civil
 and Commercial space vehicles and environmental research necessary to guide the
 establishment of sound policies and procedures needed to support all new entrants
 - Collaboration between FAA and NASA is critical for success
 - Concerns of the impacts of the COVID-19 pandemic on future research

E&E Findings & Recommendations (1)

- AEE provided updates on successes that have been realized as a direct result of the collaborative work done with private industry, major universities through Centers of Excellence, other Federal Departments and Foreign Governments. Results from these efforts have enhanced the U.S. leadership position at ICAO CAEP.
- The Subcommittee continues to endorse the robust funding of Public Private Partnerships like CLEEN, CAAFI and ASCENT that leverage scares resources. The Subcommittee believes that the close collaboration between NASA and the FAA is invaluable.

E&E Findings & Recommendations (2)

- The elimination of funding for the Alternative Jet Fuel (AJF) program (including efforts in CAAFI, CLEEN and ASCENT) in previous years would have significantly slowed down the maturation of this industry sector. The Subcommittee is very pleased to see that funding has been restored in the FAA AEE budget and we applaud FAA leadership.
- Work on Sustainable Aviation Fuels (SAFs) is critical to the U.S. industry and the FAA must maintain a leadership role in the development of SAFs to ensure that the rules to be considered will be beneficial to the U.S. 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 recommend that the FAA support funding for the continuation of this research.

E&E Findings and Recommendations (3)

- Much research is still necessary to address the ongoing topic of Aviation Noise, which is possibly the biggest threat to NexGen, Modernization of the NAS and constraint to growth of U.S. Aviation industry
- AEE is looking at the certification requirements for Supersonic aircraft as well as large UAM/UAS vehicles.
 The FAA will need to be able to address the noise, emissions and health impacts of all new entrants
- The Subcommittee strongly supports the prioritization of the noise research and encourages continued collaboration with NASA as it moves forward to establish regulatory guidance and sound policy.

E&E Findings and Recommendations (4)

- Maintaining the U.S. Global leadership position and influencing policy 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 position at ICAO CAEP. Work done in Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is a good example of how sound research influences policy/rulemaking.