

FAA REDAC Subcommittee on Environment and Energy

Findings and Recommendations
Fall 2024 Meeting

E&E REDAC Subcommittee

- July 25 - 26, 2024 Hybrid Meeting held at FAA Headquarters
- 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: Julie Marks, Dr. Anna Oldani and the AEE team are doing a good job. The AEE team once again did an excellent job with their updates/presentations. They are doing a very good job maintaining a balanced portfolio; Sustainable Aviation Fuels; Public Private Partnerships; FAA's global impact at ICAO CAEP; Noise threat;
 - There have been an increase in the number of companies that are approved to produce SAF and an increase in the amount of SAF that is being produced which is critical in being able to meet the goals for the administration and the needs of the airlines.
 - Maintaining Global Leadership position at ICAO CAEP very important to U.S. mission.
 - Public Private Partnership programs are very important to achieving new U.S. goals.
 - Noise an ongoing threat to growth of U.S. Aviation.
 - Of note:
 - Good update provided by the EPA.
 - Collaboration between FAA and NASA is critical for success.
 - The timely approval and awarding of grants is still an issue.

E&E Findings & Recommendations (1)

- The increase in productivity and deployment of Sustainable Aviation fuels (SAFs) has been identified as a critical component of the Administrations industry's emissions reduction strategy and must be developed if we are to get to their carbon neutral growth goals after 2020 and their emissions reduction goals in 2050. The creation of the SAF Credit and Grant Program has contributed to an increase in the number of companies that are approved to produce SAF and thus an increase in the amount of SAF that is produced annually. There is some concern that this production will not continue once the Tax Credit Program expires.
- The Subcommittee agrees with the mandate proposed by the current administration that the work on Sustainable Aviation Fuels is a critical component for the reduction of aviation sector emissions. The FAA should maintain a leadership role in the development of SAFs to ensure that the rules to be considered will be accepted on a global level and adopted by ICAO. 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. that benefits rural America, and will benefit the U.S. aviation industry. We strongly recommend that the FAA AEE continues its research efforts in order to meet the 2030 goal and it advocates for continued funding from the US Government.

E&E Findings & Recommendations (2)

- In order to accomplish the goals of this current administration, there will be an increased need to rely on the Public Private Partnerships that currently exist and the establishment of new partnerships. The leadership team at AEE has used their budgeted funds to conduct and coordinate the research necessary to produce informed, data driven policies, facilitate technological advances in the aviation industry and to produce models and data that have positioned the U.S. as both a State leader at ICAO CAEP and on the global aviation stage. The execution of this research portfolio has been accomplished by working collaboratively with private industry, major universities through the ASCENT Center of Excellence, other Federal Departments and Foreign Governments. The benefits of these partnerships has clearly been proven over time and is very apparent in most of the current projects. These partnerships have benefited universities, students and local economies through the creation of new industries.
- The Subcommittee continues to endorse Public Private Partnerships like the CLEEN, CAAFI and ASCENT programs to leverage resources and recommends that FAA continue to allocate robust funding for these programs.

E&E Findings and Recommendations (3)

- This Administration had indicated its plan to maintain its leadership role at ICAO CAEP. The FAA AEE currently enjoys a leadership role in ICAO CAEP and has been the driving force behind the push for data driven rule making. Maintaining the U.S. global leadership position at ICAO CAEP is essential and advantageous to the U.S. aviation industry. Anything that jeopardizes ongoing research at AEE will impact the FAA/U.S. global leadership position at ICAO CAEP.
- The Subcommittee recommends the continuing strong support of all research efforts/programs that will allow the FAA and the U.S. to maintain its current global leadership position at ICAO CAEP. It is our belief that if the FAA/U.S. does not maintain its leadership position at ICAO CAEP it will not be able to influence policy/rulemaking, and this could have a significant negative impact on the U.S. aviation industry. The Subcommittee continues to endorse the robust funding of Public Private Partnerships like CLEEN, CAAFI and ASCENT that leverage scarce resources. The Subcommittee believes that the close collaboration between NASA and the FAA is invaluable.

E&E Findings and Recommendations (4)

- Aviation noise continues to be an issue that requires ongoing research. The Subcommittee realizes that there have been many improvements in technology that have resulted in more fuel efficient and quieter aircraft. We have learned a lot from the results of many research projects and there are a number of new research projects that have been added to address issues related to new entrants into the aviation system such as UAS and AAM. There also have been significant upgrades made to the Aviation Environmental Design Tool (AEDT).
- The Subcommittee strongly supports the prioritization of the noise research that will support informed rule-making and the certification of the new entrants to the national air space.

E&E Findings and Recommendations (5)

- There still exist challenges associated with the timely award of funding for approved research projects. These projects are the key to address the priorities ahead and the ability to accomplish our goals.
- The FAA needs to remove the obstacles that are delaying the approval and awarding of these projects that are necessary to the success of its mission.