

Aviation Rulemaking Advisory Committee Task Notice July 20, 2023

ACTION: Notice of a new task assignment for the Aviation Rulemaking Advisory Committee (ARAC) and solicitation of members.

SUMMARY: The Federal Aviation Administration (FAA) assigned ARAC a new task to address a range of engine and powerplant interface regulatory and guidance issues. The task will address several gaps, conflicts, and discrepancies between 14 CFR part 33 and part 25 regulations and guidance that have accumulated over time. This notice informs the public of the new ARAC activity and solicits membership for the new Engine and Powerplant Interface Working Group (EPIWG).

BACKGROUND: ARAC is governed by the Federal Advisory Committee Act (5 U.S.C., Appendix 2). The FAA established the ARAC to provide information, advice, and recommendations on aviation related issues that could result in rulemaking to the FAA Administrator, through the Associate Administrator of Aviation Safety.

An ARAC working group is proposed to address a range of engine and powerplant interface regulatory and guidance issues. The initial working group tasks will come from the FAA and European Union Aviation Safety Agency (EASA) Engine Airplane Certification Working Group (EACWG) recommendation list. There is a backlog of technical, regulatory and guidance issues associated with the interface between part 33, Airworthiness Standards: Aircraft Engines, and part 25, Airworthiness Standards: Transport Category Airplanes, subpart E, Powerplant. The EPIWG will report to the ARAC Transport Aircraft and Engines (TAE) Subcommittee. The TAE Subcommittee has substantial experience working with engine regulations and guidance and overseeing working groups in this area. All initial tasks relate to engines to be installed in part 25 transport category airplanes. Once the ARAC accepts the task, the working group chairperson will propose priorities and a schedule for completion.

The EPIWG may also consider similar engine and powerplant interface tasks that affect parts 23, 27, and 29 aircraft.

On July 20, 2023, the FAA assigned this task to ARAC, which ARAC designated to the TAE Subcommittee EPIWG. Participants of the newly established EPIWG will serve as members of the working group only, reporting to ARAC through the TAE Subcommittee. The working group will provide advice and recommendations on the assigned task. The TAE Subcommittee will review and approve submission of the recommendation report to ARAC for consideration. ARAC must deliberate and discuss the report prior to voting on whether to submit the recommendation report to the FAA.

THE TASK: The EPIWG will provide advice and recommendations to the ARAC on the most effective ways to resolve regulatory and guidance gaps and conflicts between part 33 and part 25. EPIWG recommendations should maximize harmonization of airworthiness authority regulations

and guidance to the extent practicable. The working group should review any relevant materials to assist in achieving their objective.

- Background Information: The FAA and EASA EACWG report on improving engine/aircraft interface certification practices, issued in June 2017, provides background information on the planned Working Group tasks. See: (<u>https://www.easa.europa.eu/en/document-library/general-publications/engine-andaircraft-certification-working-group-eacwg-report</u>).
- 2. Specific Tasks:
 - a. Rotor Blade Fragments: Propose revisions and new data reporting requirements under a) §§ 33.19 and 33.94 and b) guidance for compliance with part 25 to ensure that engine containment test data can be properly evaluated at the aircraft level. This task would include both airplane and engine recommendations to completely address the current policy gaps regarding rotor burst.
 - b. Function & Reliability Testing: Review 14 CFR part 33 to determine how it supports the engine function and reliability flight test requirements of 14 CFR § 21.35(b)(2) and (f). If needed, propose amendments to the relevant regulations or guidance.
 - c. Engine Restart/Relight: Provide recommendations to resolve part 33 and part 25 regulatory or guidance gaps, or conflicts with respect to rapid restart/high power fuel cuts and quick windmill relight requirements.
 - d. Inhibition of engine protection systems used to comply with part 33: Address if and when part 25 aircraft systems should be able to deliberately inhibit the operation of engine systems used to meet part 33 safety requirements (e.g., software used as a means of compliance to prevent hazardous engine conditions resulting from shaft failure under §33.27(a) and (c)). As a minimum, recommend whether additional allowance for aircraft inhibition of engine protection systems should go beyond the conditions described in FAA Policy Statement PS-AIR-33.27-02, "Turbine, Compressor, Fan, and Turbosupercharger Rotor Overspeed Engine Control Systems, 14 CFR § 33.27(c) & (e)," Dated February 2, 2023.
 - e. Electrical Wiring Interconnection Systems (EWIS): Propose changes to part 33 to ensure the engine would meet the part 25 subpart H and Appendix H25.5 EWIS requirements at the time of engine certification, without additional FAA certification findings at the part 25 level.
 - f. Thrust Reverser Aircraft Requirement Guidance: Recommend changes to AC 20-18B, "Qualification Testing of Turbojet and Turbofan Engine Thrust Reversers," dated July 7, 2015, to include additional part 25-specific thrust reverser requirements.
 - g. Where applicable, for any changes to FAA regulations proposed under

each sub-task, provide quantitative and qualitative estimates of the resulting costs and benefits.

- 3. Develop a report containing recommendations on the findings and results of the tasks explained above.
 - a. The recommendation report should document both majority and dissenting positions on the findings and the rationale for each position.
 - b. Any disagreements should be documented, including the rationale for each position and the reasons for the disagreement.
 - c. The working group may submit incremental reports covering individual subtasks to the TAE for consideration by the ARAC.
- 4. The FAA may assign additional tasks to this working group intended to resolve regulatory and guidance gaps and conflicts between part 33 and part 25 in the future, using the normal ARAC processes.

SCHEDULE: This tasking notice requires multiple recommendation reports:

- 1. The initial recommendation report for the first sub-task must be submitted to the TAE for review and presentation to the ARAC not later than 24 months after the first working group meeting.
- 2. After the initial recommendation report is submitted, recommendation reports must be submitted to the TAE for review and acceptance in accordance with a schedule to be proposed to the ARAC by the TAE, in coordination with the working group chairperson.

WORKING GROUP ACTIVITY: The working group must comply with the procedures adopted by the ARAC and as follows:

- 1. Conduct a review and analysis of the assigned tasks and any other related materials or documents.
- 2. Draft and submit a work plan for completion of the task, including the rationale supporting such a plan, for consideration by the TAE.
- 3. Provide a status report at each TAE Subcommittee meeting.
- 4. Draft and submit recommendation reports based on the review and analysis of the assigned tasks.
- 5. Present recommendation reports at the TAE Subcommittee meeting.
- 6. Present the findings from the additional tasks at the TAE Subcommittee meeting.

PARTICIPATION IN THE WORKING GROUP: The EPIWG will be comprised of technical experts having an interest in the assigned task. A working group member need not be a member representative of ARAC. The FAA would like a wide range of stakeholders to ensure all aspects of the tasks are considered in development of the recommendations.

The provisions of the Office of Management and Budget publication, "Revised Guidance on Appointment of Lobbyists to Federal Advisory Committees, Boards, and Commissions" (79 FR 47482, August 13, 2014), continues the ban on registered lobbyists participating on Agency

Boards and Commissions if participating in their individual capacity. The guidance allows registered lobbyists to participate on agency boards and commissions in a "representative capacity," meaning that they are appointed for the "express purpose of providing a committee with the views of a nongovernmental entity, a recognizable group of persons or nongovernmental entities (an industry, sector, labor unions, or environmental groups, etc.) or state or local government." (For further information see Lobbying Disclosure Act of 1995 (LDA) as amended, 2 U.S.C 1603, 1604, and 1605.)

NOMINATION PROCESS: Candidates are required to submit, in full, the following materials to be considered for membership. Failure to submit the required information may disqualify a candidate from the review process.

- 1. A resume or curriculum vitae. The candidate must provide full name (first, middle, and last).
- 2. A brief biography.
- 3. A statement describing the candidate's interest in the task and the expertise the candidate would bring to the working group.

Nominations must be submitted electronically (by E-mail) to Alan Strom, AIR-62A at alan.strom@faa.gov. The subject line should state "Engine & Powerplant Interface Working Group Nomination." The FAA must receive all requests by **Friday, August 11, 2023, at 5:00 pm Eastern Time**. The ARAC, through the TAE Subcommittee, and the FAA will review the requests and advise you whether your request is approved.

Roles and Responsibilities

If you are chosen for membership on the working group, you must actively participate in the working group, attend all meetings, and provide written comments when requested. You must devote the resources necessary to support the working group in meeting any assigned deadlines. You must keep your management and those you may represent advised of working group activities and decisions to ensure the proposed technical solutions do not conflict with the position of those you represent. Once the working group has begun deliberations, members will not be added or substituted without the approval of the ARAC Chair and the Transport Airplane and Engine Subcommittee Chair, the FAA, including the Designated Federal Officer, and the Working Group Chair.

Confidential Information

All final work products submitted to the ARAC are public documents. Therefore, it should not contain any nonpublic proprietary, privileged, business, commercial, and other sensitive information (collectively, confidential information) that the working group members would not want to be publicly available. With respect to working groups, there may be instances where members will share commercial information within the working group for purposes of completing an assigned tasked.

Members must not disclose to any third party or use for any purposes other than the assigned task, all confidential information disclosed to one party by the other party, without the prior written consent of the party whose confidential information is being disclosed. All parties must treat the confidential information of the disclosing party as it would treat its own confidential information, but in no event shall it use less than a reasonable degree of care. If any confidential information is shared with the FAA representative on a working or task group, it must be properly marked in accordance with the Office of Rulemaking Committee Manual, ARM-001-15 (https://www.faa.gov/regulations_policies/rulemaking/media/Committee_Manual.pdf).

The Secretary of Transportation determined the formation and use of the ARAC is necessary and in the public interest in connection with the performance of duties imposed on the FAA by law.

The ARAC meetings are open to the public. However, working group meetings are not open to the public, except to the extent individuals with an interest and expertise are selected to participate. The FAA will make no public announcement of working group meetings.

FOR FURTHER INFORMATION CONTACT: Alan Strom, Senior Product Policy Advisor for Propulsion, AIR-62A, Federal Aviation Administration, 1200 District Avenue, Burlington, MA 01803. Telephone (781) 238-7142; Email alan.strom@faa.gov.