



Aviation Rulemaking Advisory Committee Task Notice

December 11, 2020

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

SUMMARY: The FAA assigned ARAC a new task for transport category airplane designs. The task is to provide recommendations regarding new or updated standards and guidance material for transport airplane performance and handling characteristics. This notice informs the public of the new ARAC activity for the Flight Test Harmonization Working Group.

BACKGROUND: The Federal Advisory Committee Act (5 U.S.C., Appendix 2) governs ARAC activities. The FAA established 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.

In March 2013, the FAA tasked ARAC to provide recommendations regarding new or updated standards and guidance material related to the performance and handling characteristics of transport category airplanes. Due to the number and complexity of topic areas under consideration, ARAC divided the tasking into phases. In phase 1, the Flight Test Harmonization Working Group prioritized 30 potential topic areas for further consideration in 3 follow-on phases. Follow-on taskings for phases 2 and 3 addressed the following topics:

- Fly-by-wire flight controls
- Wet runway stopping performance
- Runway excursion hazard classification
- Stall speed in ground effect
- Steep approach
- Flight test methods used to determine maximum tailwind and crosswind capability
- Susceptibility to pilot-induced oscillations/airplane-pilot-coupling (PIO/APC)
- Assessing handling qualities
- High speed flight envelope protection

At the end of phase 3, the Flight Test Harmonization Working Group developed recommendations for the next highest priority topic areas from phase 1—yaw control below velocity minimum control on the ground (V_{mcg}), return to land, go-around performance, and follow-on work on high-speed flight envelope protection.

On December 10, 2020, the FAA assigned this task to ARAC, which ARAC designated to the Transport Airplane and Engine (TAE) Subcommittee Flight Test Harmonization Working Group. Participants of the existing Flight Test Harmonization Working Group will serve as members of the work group, 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 Flight Test Harmonization Working Group will provide advice and recommendations to the ARAC, through the TAE Subcommittee, on the most effective guidance or standards as specified in the following topic areas.

1. Handling Characteristics

Advisory Circular (AC) 25-7D, *Flight Test Guide for Certification of Transport Category Airplanes*, dated May 4, 2018, contains a handling-quality rating method for systematically determining appropriate minimum handling-quality requirements and evaluating those handling qualities for conditions affecting an airplane's flying qualities. The handling-quality rating method in the AC is not universally accepted within industry nor is it accepted by the European Union Aviation Safety Agency (EASA). The Flight Test Harmonization Working Group will review and recommend a universally acceptable method to supplement or replace the handling-quality rating method currently in the AC. This is a follow-on to the work on this topic in the phase 3 task, with the addition of subject matter experts from system safety to ensure cross-discipline harmonization.

2. Takeoff and Landing Performance

The Flight Test Harmonization Working Group will recommend regulatory requirements and/or associated guidance material for the following areas in order to standardize as much as possible.

- a. Evaluate the Takeoff and Landing Performance Assessment (TALPA) methodology for determining takeoff and time of arrival landing performance on runways degraded by excess water or other frozen contamination, in an effort to harmonize with recent changes by other regulatory authorities and International Civil Aviation Organization (ICAO).
- b. Assess landing distance on dry runways in order to provide consistency with the new wet runway recommendation methodology, proposed in phase 2, and TALPA implementation.
- c. Assess narrow runway certification requirements for takeoff and landing. The FAA methodology for assessing the effects of narrow runways on determination of minimum control speeds and crosswind guidelines differs from that of other authorities. This task seeks to harmonize methodologies.

- d. Assess de-rated thrust procedures and performance in the areas where the FAA has different requirements from other regulatory authorities, especially as related to operations on contaminated runways.
 - e. Assess landing performance in abnormal configurations where EASA has additional requirements for performance information in airplane flight manuals.
3. Develop a report containing recommendations on the findings and results of the task as outlined previously.
 - a. The recommendation report should document both majority and dissenting positions on the findings and the rationale for each position.
 - b. The report should document any disagreements, including the rationale for each position and the reasons for the disagreement.

SCHEDULE: ARAC will submit recommendations to the FAA in phases, according to the following schedule.

This tasking notice requires three recommendation reports.

- The initial recommendation report for items 2a and 2b is due to the FAA for review and acceptance no later than 18 months from the date that ARAC accepted the tasking.
- The recommendation report for item 2c is due to the FAA for review and acceptance no later than 24 months from the date that ARAC accepted the tasking.
- The recommendation report for all other items is due to the FAA for review and acceptance no later than 36 months from the date that ARAC accepted the tasking.

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 Subcommittee.
3. Provide a status report at each TAE Subcommittee meeting.
4. Draft and submit the recommendation report based on the review and analysis of the assigned tasks.
5. Present the recommendation report at the TAE Subcommittee meeting.

6. Subcommittees and working groups should not provide advice or work products directly to the FAA. They should report all of their recommendations and advice to the full ARAC for deliberation and discussion. The FAA only accepts recommendation reports from ARAC.

PARTICIPATION IN THE WORKING GROUP: The Flight Test Harmonization Working Group is composed of technical experts having an interest in the assigned task. A working group member need not be a member representative of ARAC. The FAA favors a wide range of stakeholders to ensure all aspects of the tasks inform development of the recommendations.

The provisions of the August 13, 2014, Office of Management and Budget guidance, “Revised Guidance on Appointment of Lobbyists to Federal Advisory Committees, Boards, and Commissions” (79 FR 47482), continues the ban on registered lobbyists participating on Agency Boards and Commissions if participating in their “individual capacity.” The revised guidance now allows registered lobbyists to participate on Agency Boards and Commissions in a “representative capacity” 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.)

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 task. Members must not disclose to any third party, or use for any purposes other than the assigned task, any and 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. Any Confidential Information shared with the FAA representative on a working and/or task groups must be properly marked in accordance with the Office of Rulemaking Committee Manual, ARM-001-15.

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.

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: Joe Jacobsen, Federal Aviation Administration, 2200 South 216th Street, Des Moines, Washington, 98198; telephone (206) 231-3158; email joe.jacobsen@faa.gov.