Federal Aviation Administration – Regulations and Policies
Aviation Rulemaking Advisory Committee

Transport Airplane and Engine Issue Area
Ice Protection Harmonization Working Group

Task 5 – Effects of Icing Requirement Changes

Task Assignment

[Federal Register: December 8, 1997 (Volume 62, Number 235)]
[Notices]
[Page **64621**-64623]
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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Aviation Rulemaking Advisory Committee; Transport Airplane and Engine Issues; New Tasks

AGENCY: Federal Aviation Administration (**FAA**), DOT.

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

SUMMARY: Notice is given of new tasks assigned to and accepted by the Aviation Rulemaking Advisory Committee (ARAC). This notice informs the public of the activities of ARAC.

FOR FURTHER INFORMATION CONTACT:
Stewart R. Miller, Manager, Transport Standards Staff, ANM-110, **FAA**, Transport Airplane Directorate, Aircraft Certification Service, 1601 Lind Ave. SW., Renton, WA 98055-4056, telephone (425) 227-2190, fax (425) 227-1320.

SUPPLEMENTARY INFORMATION:

Background

The **FAA** has established an Aviation Rulemaking Advisory Committee to provide advice and recommendations to the **FAA** Administrator, through the Associate Administrator for Regulation and Certification, on the full range of the **FAA**'s rulemaking activities with respect to aviation-related issues. This includes obtaining advice and recommendations on the **FAA**'s commitment to harmonize its Federal Aviation Regulations (FAR) and practices with its trading partners in Europe and Canada.

One area ARAC deals with is Transport Airplane and Engine issues. These issues involve the airworthiness standards for transport category airplanes in 14 CFR parts 25, 33, and 35 and parallel provisions in 14 CFR parts 121 and 135. The corresponding European airworthiness standards for transport category airplanes are contained in Joint Aviation Requirements (JAR)-25, JAR-E, and JAR-P, respectively. The corresponding Canadian Standards are contained in Chapters 525, 533, and 535 respectively.

The Tasks

This notice is to inform the public that the **FAA** has asked ARAC to provide advice and recommendation on the following harmonization tasks:

Task 1. As a short-term project, consider the need for a regulation that requires installation of ice detectors, aerodynamic performance monitors, or another acceptable means to warn

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flightcrews of ice accumulation on critical surfaces requiring crew action (regardless of whether the icing conditions are inside or outside of Appendix C of 14 CFR Part 25). Also consider the need for a Technical Standard Order for design and/or minimum performance specifications for an ice detector and aerodynamic performance monitors. Develop the appropriate regulation and applicable standards and advisory material if a consensus on the need for such devices is reached. (Schedule: September 1998, Reach agreement on proposed rule; January 1999, NPRM package delivered to **FAA** from ARAC; March 1999, Publish NPRM; March 2000, Publish Final Rule.)

As long-term projects:

Task 2. Review National Transportation Safety Board recommendations A-96-54, A-96-56, and A-96-58, and advances in ice protection state-of-the-art. In light of this review, define an icing environment that includes supercooled large droplets (SLD), and devise requirements to assess the ability of aircraft to safely operate either for the period of time to exit or to operate without restriction in SLD aloft, in SLD at or near the surface, and in mixed phase conditions if such conditions are determined to be more hazardous than the liquid phase icing environment containing supercooled water droplets. Consider the effects of icing requirement changes on 14 CFR part 23 and part 25 and revise the regulations if necessary. In addition, consider the need for a regulation that requires installation of a means to discriminate between conditions within and outside the certification envelope. (Schedule: September 1999, Reach technical agreement; January 2000, NPRM package delivered to **FAA** from ARAC; March 2000, Publish NPRM; March 2001, Publish Final Rule.)

Task 3. Propose changes to make the requirements of 14 CFR 23.1419 and 25.1419 the same (Schedule: September 1999, Reach technical agreement; January 2000, NPRM package delivered to **FAA** from ARAC; March 2000, Publish NPRM; March 2001, Publish Final Rule)

Task 4. Harmonize 14 CFR Secs. 23.1419, 25.1419, 25.929, and 25.1093 and JAR 23.1419, 25.1419, 25.929, and 25.1093. (Schedule: September 1999, Reach technical agreement; January 2000, NPRM package delivered to **FAA** from ARAC; March 2000, Publish NPRM; March 2001, Publish Final Rule)

Task 5. Consider the effects icing requirement changes may have on 14 CFR Secs. 25.773(b)(1)(ii), 25.1323(e), 25.1325(b) and revise the regulations if necessary. (Schedule: September 1999, Reach technical agreement; January 2000, NPRM Package delivered to **FAA** from ARAC; March 2000, Publish NPRM; March 2001, Publish Final Rule (if necessary)).

Task 6. Consider the need for a regulation on ice protection of angle of attack probes (Schedule: September 1999, Reach technical agreement; January 2000, NPRM package delivered to **FAA** from ARAC; March 2000, Publish NPRM; March 2001, Publish Final Rule (if necessary)).

Task 7. Develop or update advisory material pertinent to items 2 through 6 above. (Schedule: October 2000, Advisory material package delivered to **FAA** from ARAC; March 2001, Publish advisory material).

If ARAC determines rulemaking action (e.g., NPRM, supplemental NPRM, final rule, withdrawal) should be taken, or advisory material should be issued or revised, it has been asked to prepare the necessary

documents, including economic analysis, to justify and carry out its recommendation(s).

ARAC Acceptance of Tasks

ARAC has accepted these tasks and has chosen to assign them to a new Ice Protection Harmonization Working Group (IPHWG) under the Transport Airplane and Engine issue. The new working group will serve as staff to ARAC to assist ARAC in the analysis of the assigned tasks. Working group recommendations must be reviewed and approved by ARAC. If ARAC accepts the working group's recommendations, it forwards them to the **FAA** as ARAC recommendations.

The IPHWG will coordinate with the Flight Test Harmonization Working Group, other harmonization working groups, organizations, and specialists as appropriate. Other affected groups, organizations, and specialists may include but not be limited to the Powerplant Installation Harmonization Working Group, Engine Harmonization Working Group, General Aviation Manufacturers Association (GAMA), human factors specialists, and meteorologists. Coordination with the Flight Test Harmonization Working Group will be necessary to ensure that the IPHWG does not initiate work on issues already being addressed by the Flight Test group. Coordination with GAMA will be necessary to ensure that the proposed NASA Advanced General Aviation Transport Experiment project is considered throughout the process of accomplishing the short and long term projects. The IPHWG will request ARAC assignment of tasks to existing working groups if necessary. The IPHWG will identify to ARAC the need for additional new working groups when existing groups do not have the appropriate expertise to address certain tasks.

Working Group Activity

The Ice Protection Harmonization Working Group is expected to comply with the procedures adopted by ARAC. As part of the procedures, the working group is expected to:

1. Recommend a work plan for completion of the tasks, including the rationale supporting such a plan, for consideration at the meeting of ARAC to consider Transport Airplane and Engine Issues held following publication of this notice.
2. Give a detailed conceptual presentation of the proposed recommendations, prior to proceeding with the work stated in item 3 below.
3. For each task, draft appropriate regulatory documents with supporting economic and other required analyses, and/or any other related guidance material or collateral documents the working group determines to be appropriate; or, if new or revised requirements or compliance methods are not recommended, a draft report stating the rationale for not making such recommendations.
4. Provide a status report at each meeting of ARAC held to consider Transport Airplane and Engine Issues.

Participation in the Working Group

The Ice Protection Harmonization Working Group will be composed of experts having an interest in the assigned tasks. A working group member need not be a representative of a member of the full committee.

An individual who has expertise in the subject matter and wishes to become a member of the working group should write to the person listed

under the caption FOR FURTHER INFORMATION CONTACT expressing that desire, describing his or her interest in the tasks, and stating the expertise he or she would bring to the working group. The request will be reviewed by the assistant chair, the assistant executive director, and the working group chair, and the individual will be advised whether or not the request can be accommodated.

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

Meetings of ARAC will be open to the public. Meetings of the Ice Protection Harmonization Working Group will not

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be open to the public, except to the extent that individuals with an interest and expertise are selected to participate. No public announcement of working group meetings will be made.

Issued in Washington, DC, on November 24, 1997.

Joseph A. Hawkins,

Executive Director, Aviation Rulemaking Advisory Committee.

[FR Doc. 97-32034 Filed 12-5-97; 8:45 am]

BILLING CODE 4910-13-M

U.S. Department
of Transportation

**Federal Aviation
Administration**

800 Independence Ave. S.W.
Washington, D.C. 20591

SEP 13 1999

Mr. Craig R. Bolt
Assistant Chair, Advisory Committee on
Transport Aircraft Engines Issues
440 Main Street
East Hartford, CT 06108

Dear Mr. Bolt:

Please accept my apology for the delay in responding to your September 8, 1998, and May 18, 1999, letters addressing revisions to tasks assigned to the Ice Protection Harmonization Working Group (IPHWG). After reviewing your letters, the attachments, and the Federal Aviation Administration (FAA) JAA Harmonization Work Program, the following responses are provided.

Task 3. We agree with your assessment that the task proposing changes to make the requirements of 14 CFR 23.1419 and 25.1419 the same should be returned to the FAA for further action.

Task 4. We agree with your assessment that the portion of the task addressing harmonization of 14 CFR 25.929 and 25.1093 and JAR 25.929 and 25.1093 should be reassigned to the Powerplant Installation Harmonization Working Group. Further, based on the actions taken on task 3 above, reference to harmonization of 14 CFR 23.1419 and JAR 23.1419 should be removed from the task.

IPHWG Schedules. The proposed schedules for completion of tasks 1, 2, 4, 6 and 7 are acceptable to the FAA.

Task 5. The FAA is continuing to review your assessment of task 5 including the proposed schedule and will respond to that request as quickly as possible in a separate letter.

I would like to express my appreciation to the IPHWG for the work involved thus far and bringing the need to reevaluate its tasks to our attention early in the process.

Sincerely,

Anthony F. Fazio
Executive Director, Aviation Rulemaking
Advisory Committee

TASK 5

ANM-11

NOV 10 1999

Mr. Craig R. Bolt
Assistant Chair, Advisory Committee on
Transport Aircraft Engines Issues
440 Main Street
East Hartford, CT 06108

Dear Mr. Bolt:

This letter responds to your August 25 letter requesting further modification to task 4 assigned to the Ice Protection Harmonization Working Group (IPHWG). By now, you more than likely have received our September 13 response to your earlier letters addressing the IPHWG taskings. In that response, we addressed the task 4 modification, and it should now simply state—

> Harmonize 14 CFR § 25.1419 and JAR 25.1419.

We also expressed our intent to follow up with additional information addressing your September 8, 1998, request to modify task 5 and to concur with the modified schedule for task 5. The Federal Aviation Administration (FAA) concurs that Task 5 should include the harmonization of any 14 CFR section changes with the Joint Aviation Regulations (JAR). Therefore, Task 5 should state—

> Consider the effects icing requirement changes may have on 14 CFR 25.773(b)(1(ii), 25.1323(e), 25.1325(b) and JAR 25.773(b)(1)(ii), 25.1325(b) 23(e), 25.1325(b). Revise and harmonize the regulations if necessary.

With regard to the schedule change, we note that the IPHWG did not meet the schedule identified in tasking statement 1 or the working group's proposed schedule. We expect the working group to submit the draft operational rule and associated advisory material for preliminary legal and technical writing reviews to the FAA by June 30, 2000. Further, should the IPHWG determine a need for an associated certification rulemaking and advisory material, the working group should have those document completed by November 30, 2000, for FAA preliminary legal review.

Please have the IPHWG develop a schedule to meet these completion dates. Please note that if the IPHWG is unable to meet this schedule, the FAA will consider withdrawing task 1 from the ARAC process and working the task in-house, or retasking the working group to provide specific information necessary for the FAA to complete the task. We request that

the IPHWG submit at the December 7 - 8 TAE issues meeting an updated schedule for completion of Task 1 and all other tasks assigned to the working group.

Once again I would like to express my appreciation to the IPHWG for the work involved thus far and bringing the need to reevaluate its tasks to our attention early.

Sincerely,

Original Signed By

Anthony F. Fazio
Executive Director, Aviation Rulemaking
Advisory Committee

ARM-209:EUpshaw:fs:9/1/99:PC Docs #9650
Task 4-ANM-98-076-A; Task 5-ANM-98-077-A; and Task 1 ANM-98-073-A
Retyped per ARM-1:fs:11/9/99

cc: ARM-1/25/200/209; ANM-112/114

TASK 3

400 Main Street
East Hartford, Connecticut 06108

Pratt & Whitney
A United Technologies Company

September 8, 1998

Department of Transportation
Federal Aviation Administration
800 Independence Avenue
Washington, DC 20591

Attn: Mr. Joseph Hawkins, ARM-1

Subject: Revisions to Ice Protection Harmonization Tasks

Dear Joe:

The Ice Protection Harmonization Working Group, following deliberations at the first and second Working Group meetings and agreement by the Transport Airplane and Engine Issues Group at the June 1998 meeting, requests that the Ice Protection Harmonization task (reference FAA notice Federal Register December 8, 1997, pages 64621-64623) be revised as follows:

TASK 3

Existing TOR Task Statement - Propose changes to make the requirements of 14 CFR 23.1419 and 25.1419 the same.

TAEIG and the IPHWG requests modification of this task statement to:

"Standardize, where appropriate, the requirements of 14 CFR 23.1419 and 14 CFR 25.1419 for certification for flight in icing conditions. Take into account the pending changes to FAR 25 from the Flight Test Harmonization Working Group. Consider the possible implications of differences in scale, operational envelopes, airplane and ice protection system configurations."

Justifications

- Changes to 14 CFR 25.1419 are in work in the Flight Test HWG. These changes will likely result in removal of the permissive phrase "if certification...is desired". This would not be acceptable for part 23.

- The legal input to the Flight Test HWG has resulted in the changes to Part 25 being far more extensive than 25.1419, but as yet unspecified. They will, however, include changes to Appendix C and many paragraphs in Subpart B. Therefore, the request states "where appropriate", as this will have to be determined after the flight test group has reached technical agreement. TAEIG and the IPHWG requests that ARAC task the FTHWG or other appropriate working groups with resolution of these Subpart B differences as they develop.

Proposed Completion Dates for Ice Protection Harmonization Working Group

Schedule - TASK 1

The following is a work schedule for Task 1 to support the Work Plan.

Activity	Date(s)
Work Plan to TAEIG	Mar. 9, 1998
TAEIG Approve Work Plan	Apr. 9, 1998
TAEIG Approve Concept	Dec. 9, 1998
IPHWG Technical Agreement	Feb. 8, 1999
Final Draft	Feb. 12, 1999
Final Draft to TAEIG	May 21, 1999
Legal / Economic Review	Aug. 30, 1999
Working Group Approve Final Draft	Oct. 30, 1999
TAEIG Approval	Nov. 11, 1999

Schedule - TASK 2

Activity	Date(s)
Work Plan to TAEIG	Mar. 9, 1998
TAEIG Approve Work Plan	Apr. 9, 1998
TAEIG Approve Concept	April, 2000
IPHWG Technical Agreement	May 8, 2000
Final Draft	May 12, 2000
Final Draft to TAEIG	Sep. 19, 2000
Legal / Economic Review	Dec. 21, 2000
Working Group Approve Final Draft	Feb. 2, 2001
TAEIG Approval	March 2001

Schedule - TASK 5

Activity	Date(s)
Work Plan to TAEIG	Mar. 9, 1998
TAEIG Approve Work Plan	Apr. 9, 1998
Coordinate with Systems D&A HWG	June 1998
Sub-group material on Lotus Notes	Jan. 1999
IPHWG review complete	Feb. 2000
TAEIG Approve Concept	April, 2000
IPHWG Technical Agreement	May 8, 2000
Final Draft	May 12, 2000
Final Draft to TAEIG	Sep. 19, 2000
Legal / Economic Review	Dec. 21, 2000
Working Group Approve Final Draft	Feb. 2, 2001
TAEIG Approval	March 2001

Schedule - TASK 6

Activity	Date(s)
Work Plan to TAEIG	Mar. 9, 1998
TAEIG Approve Work Plan	Apr. 9, 1998
FAA/JAA Address ~~completes~~ Task 6.1	May 4, 1998
t.b.d. (See Task statement)	

Schedule - TASK 7

Note: This schedule parallels each Task, will vary if a specific Task schedule varies.

Activity	Date(s)
Work Plan to TAEIG	Mar. 9, 1998
TAEIG Approve Work Plan	Apr. 9, 1998
Material posted on Lotus Notes	Jan. 1999
TAEIG Approve Concept	Feb. 7, 2000
IPHWG Technical Agreement	May 8, 2000
Final Draft	May 12, 2000
Final Draft to TAEIG	Sep. 19, 2000
Legal / Economic Review	Dec. 21, 2000
Working Group Approve Final Draft	Feb. 2, 2001
TAEIG Approval	March 2001

Recommendation – Not Available

FAA Action – Not Available