

[4910-13]

DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration

Aviation Rulemaking Advisory Committee; Meeting

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of Aviation Rulemaking Advisory Committee (ARAC) meeting.

SUMMARY: The FAA is issuing this notice to advise the public of a meeting of the ARAC.

DATES: The meeting will be held on March 20, 2014, starting at 1:00 p.m. Eastern Standard Time. Arrange oral presentations by March 13, 2014.

ADDRESS: The meeting will take place at the Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591, 7th floor, Conference Room 7B.

FOR FURTHER INFORMATION CONTACT: Renee Butner, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591, telephone (202) 267- 5093; fax (202) 267-5075; e-mail Renee.Butner@faa.gov.

SUPPLEMENTARY INFORMATION: Pursuant to Section 10(a)(2) of the Federal Advisory Committee Act (5 U.S.C. App. 2), we are giving notice of a meeting of the ARAC taking place on March 20, 2014, at the Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591.

The Agenda includes:

1. Recommendation Report
 - a. Flight Test Harmonization Working Group (Transport Airplane and Engine Subcommittee [TAE])
2. Status Reports From Active Working Groups
 - a. AC 120-17A Maintenance Control by Reliability Methods (ARAC)
 - b. Airman Certification System Working Group (ARAC)
 - c. Airworthiness Assurance Working Group (TAE)
 - d. Engine Harmonization Working Group (TAE)

3. New Task
 - a. Transport Airplane Performance and Handling Characteristics – Phase 2
4. Status Report from the FAA
 - a. Commercial Air Tours Maintenance (CATM) Working Group

Attendance is open to the interested public but limited to the space available. Please confirm your attendance with the person listed in the “FOR FURTHER INFORMATION CONTACT” section no later than March 13, 2014. Please provide the following information: full legal name, country of citizenship, and name of your industry association, or applicable affiliation. If you are attending as a public citizen please indicate so.

For persons participating by telephone, please contact the person listed in the “FOR FURTHER INFORMATION CONTACT” section by email or phone for the teleconference call-in number and passcode. Callers outside the Washington metropolitan area are responsible for paying long-distance charges.

The public must arrange by March 13, 2014 to present oral statements at the meeting. The public may present written statements to the Aviation Rulemaking Advisory Committee by providing 25 copies to the Designated Federal Officer, or by bringing the copies to the meeting.

If you are in need of assistance or require a reasonable accommodation for this meeting, please contact the person listed under the heading “FOR FURTHER INFORMATION CONTACT.” Sign and oral interpretation, as well as a listening device, can be made available if requested 10 calendar days before the meeting.

Issued in Washington, DC, on February 27, 2014

Lirio Liu
Designated Federal Officer
Aviation Rulemaking Advisory Committee

AVIATION RULEMAKING ADVISORY COMMITTEE

RECORD OF MEETING

MEETING DATE: March 20, 2014

MEETING TIME: 1:05 p.m.

LOCATION: Federal Aviation Administration
800 Independence Avenue, SW.
10th Floor
MacCracken Room
Washington, DC 20591

PUBLIC ANNOUNCEMENT: The Federal Aviation Administration (FAA) told the public of this Aviation Rulemaking Advisory Committee (ARAC) meeting in a Federal Register notice published March 5, 2014 (79 FR 12564).

ATTENDEES: **Committee Members**

| | |
|------------------|---|
| Dan Elwell | Airlines for America (A4A), <i>ARAC Chair</i> |
| Todd Sigler | The Boeing Company, <i>ARAC Vice Chair</i> |
| Chris Baum | Air Line Pilots Association, International (ALPA) |
| Craig Bolt* | Pratt & Whitney <i>Transport Airplane and Engine (TAE) Subcommittee, Chair</i> |
| Dr. Tim Brady | Embry-Riddle Aeronautical University (ERAU) |
| Tom Charpentier* | Experimental Aviation Association (EAA) |
| Ambrose Clay | National Organization to Insure a Sound Controlled Environment (NOISE) |
| Damon Cox | Airline Dispatchers Federation (ADF) |
| Stéphane Flori* | AeroSpace and Defence Industries Association of Europe (ASD) |
| Julian Hall | European Aviation Safety Agency (EASA) |

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|-----------------|--|
| Paul Hudson* | Aviation Consumer Action Project (ACAP) |
| Mark Larsen | National Business Aviation Association (NBAA) |
| Lirio Liu | Federal Aviation Administration (FAA) <i>Office of Rulemaking, ARM-1</i> <i>Designated Federal Officer (DFO)</i> |
| David Oord | Aircraft Owners and Pilots Association (AOPA) |
| Ric Peri | Aircraft Electronics Association (AEA) |
| Phil Poynor | National Association of Flight Instructors (NAFI) |
| Leslie Riegle | Aerospace Industries Association (AIA) |
| Bob Robeson | Federal Aviation Administration (FAA) <i>Office of Aviation Policy and Plans,</i> <i>APO-300</i> |
| Yvette Rose | Cargo Airline Association (CAA) |
| Chris Witkowski | Association of Flight Attendants Communications Workers of America (AFA-CWA) |

Attendees

| | |
|------------------|---|
| Ryan Aggergaard | Modification and Replacement Parts Association (MARPA) |
| Thuy Cooper | Federal Aviation Administration (FAA) <i>Office of Rulemaking, ARM-100</i> |
| Brenda Courtney | Federal Aviation Administration (FAA) <i>Office of Rulemaking, ARM-200</i> |
| Maryanne DeMarco | Coalition of Airline Pilots Associations (CAPA) |
| Robert Duffer* | Federal Aviation Administration (FAA) <i>Northwest Mountain Region—Transport Airplane Directorate, ANM-111</i> |

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|--------------------|---|
| Katie Haley | Federal Aviation Administration (FAA) <i>Office of Rulemaking, ARM–203</i> |
| Matthew Hallett | PAI Consulting |
| Johnathan Harger* | Experimental Aviation Association (EAA) |
| Mel Johnson* | Federal Aviation Administration (FAA) <i>Northwest Mountain Region–Transport Airplane Directorate, ANM–100</i> |
| Matt Kent | Aircraft Mechanics Fraternal Association (AMFA) |
| Ken Knopp | Federal Aviation Administration (FAA) <i>Aviation Research Division, Structures and Propulsion Branch Manager, ANG–E28</i> |
| Eric Lesage | AeroSpace and Defence Industries Association of Europe (ASD) |
| Suzanne Masterson* | Federal Aviation Administration (FAA) <i>Northwest Mountain Region–Transport Airplane Directorate, ANM–115</i> |
| Dorina Mihail* | Federal Aviation Administration (FAA) <i>New England Region–Aircraft Certification Service Engine and Propeller Directorate, ANE–142</i> |
| Craig Mueller | AAC Engineering |
| Robert Park* | The Boeing Company |
| Susan Parson* | Federal Aviation Administration (FAA) <i>Flight Standards Service, AFS–300</i> |
| Lorelei Peter | Federal Aviation Administration (FAA) <i>Manager (Acting), Air Traffic and Airman/Airport Certification Law Branch, International Law, Legislation, and Regulations Division</i> |
| Paul Pitts | Federal Aviation Administration (FAA) <i>Flight Standards Service, AFS–330</i> |

| | |
|------------------|---|
| Renee Pocius | Federal Aviation Administration (FAA) <i>Office of Rulemaking, ARM-020</i> |
| Mary Schooley* | Federal Aviation Administration (FAA) <i>Northwest Mountain Region—Transport Airplane Directorate, ANM-111</i> |
| Alan Strom* | Federal Aviation Administration (FAA) <i>New England Region—Aircraft Certification Service Engine and Propeller Directorate, ANE-142</i> |
| Daniel Tibuni* | Federal Aviation Administration (FAA) <i>New England Region—Aircraft Certification Service Engine and Propeller Directorate, ANE-142</i> |
| James Wilborn* | Federal Aviation Administration (FAA) <i>Northwest Mountain Region—Transport Airplane Directorate, ANM-117</i> |
| John Yakubowsky* | The Boeing Company |

*Attended via teleconference.

WELCOME AND INTRODUCTION

Mr. Dan Elwell, ARAC Chair, called the meeting to order at 1:05 p.m. and thanked the ARAC members and the public for attending. He introduced the new ARAC Vice Chair, Mr. Todd Sigler from The Boeing Company, and invited the attendees to introduce themselves. Mr. Elwell then asked Ms. Lirio Liu, DFO, to read the required Federal Advisory Committee Act, Title 5, United States Code Appendix 2 (2007) statement.

Ratification of Minutes

Mr. Elwell stated the first item on the agenda is ratification of the minutes from the December 19, 2013, meeting. He asked for any revisions or amendments to the draft minutes circulated before the meeting. Without revisions or questions, the ARAC ratified the minutes.

RECOMMENDATION REPORT

Flight Test Harmonization Working Group (FTHWG) (TAE): Transport Airplane Performance and Handling Characteristics—Phase 1

Mr. Elwell introduced Mr. Craig Bolt, TAE Subcommittee Chair. Mr. Bolt stated the recommendation report is the result of a tasking to the FTHWG to consider several areas within the airplane performance and handling qualities requirements of the Title 14, Code of Federal Regulations (14 CFR) part 25 airworthiness standards and guidance for possible revision. He explained the task includes prioritizing the list of topic areas and developing work plans and schedules for topics identified as high priorities for airworthiness standards

development relative to new airplane designs. Mr. Bolt stated the recommendation report details the task's results.

Mr. Bolt asked the ARAC members for their questions regarding the recommendation report. Without questions, the ARAC accepted the recommendation report.

STATUS REPORTS FROM ACTIVE WORKING GROUPS

AC 120-17A, Maintenance Control by Reliability Methods

Mr. Elwell introduced Mr. Paul Pitts to provide the working group's status report. Mr. Pitts noted the working group selected a Vice Chairperson, Ms. Amy Oonk of Southwest Airlines. He stated the working group met in Phoenix, Arizona, for its second face-to-face meeting, and focused on the draft advisory circular (AC), particularly the introduction and definition sections. Mr. Pitts added the working group is advancing in data collection and analysis methods. He stated its next face-to-face meeting will be in Dallas, Texas, where it will set out fundamentals for the updated reliability program.

Mr. Pitts asked if any attendees had questions regarding the status report, but none were raised.

Airman Certification Systems Working Group (ACSWG)

Mr. Elwell introduced Mr. David Oord to provide the ACSWG's status report. Mr. Oord stated the FAA published a notice soliciting membership for the ACSWG on January 29, 2014, and noted the ACSWG represents a Government and industry partnership to improve both airman testing and training. He explained AOPA will chair the ACSWG, and the FAA is finalizing the membership, which will represent many facets of the aviation industry.

Mr. Oord stated the ACSWG's tasks are to improve general aviation safety and create, develop, modify, and continue the alignment of major components of the airman certification system, including standards for certification, guidance and reference material, and test management. He added he is drafting a work plan based on phases of implementation. Mr. Oord noted the ACSWG intends to test a prototype of the system before it is officially launched. Mr. Oord stated the ACSWG's initial teleconference will be March 27, 2014, and the date of the first face-to-face meeting is to be determined.

Dr. Tim Brady asked if the FAA tasked the ACSWG with issues related to the new airline transport pilot (ATP) license. Mr. Oord replied it did not. He added the Airmen Testing Standards and Training Working Group (ATSTWG) developed a draft ATP certification standard and eventually the ATP will be aligned with the private pilot, instrument rating, and flight instructor certification standards. Ms. Susan Parson stated the FAA is considering an ACSWG task group devoted to refining the baseline ATP license. She added the task group would include representatives from the 14 CFR part 121 and part 135 operator communities.

Mr. Ric Peri noted 14 CFR part 147 schools that provide training for a mechanic's certificate with airframe and powerplant ratings are prohibited from exceeding minimum standards. He asked if the ACSWG is looking into parallel instances affecting 14 CFR part 141 training schools. Mr. Oord replied it is not, and added parallel instances have not been noted in part 141 training schools.

Mr. Elwell asked if the ACSWG will address the FAA's 2013 final rule requiring first officers to hold an ATP license or obtain a restricted ATP license. Mr. Oord responded it will not for the immediate term, but added the ACSWG hopes to draft standards for the full ATP, multi-engine, and restricted ATP license. Mr. Chris Baum asked if the ACSWG solicited nominations for a position dealing with ATP issues. Ms. Parson responded the ACSWG did solicit nominations and has received positive responses from part 121 and part 135 operators. She added the ACSWG will have open communication and cross membership with the Air Carrier Training (ACT) Aviation Rulemaking Committee (ARC) to ensure common goals and methods.

Dr. Brady asked if the ARAC received an ATP tasking and, if so, whether educators will be represented on any working group. Ms. Parson stated the ARAC did not have an ATP tasking, and clarified there is a tasking for the ACSWG which will look at ATP. She added educators will be represented on the ACSWG. Ms. Parson went on to state that if the testing standards work as the FAA anticipates, the FAA will apply the standards to maintenance.

Airworthiness Assurance Working Group (AAWG) (TAE)

Mr. Elwell introduced Mr. Bolt to provide the AAWG's status report (Attachment 1). Mr. Bolt stated the AAWG has not met since the December 2013 ARAC meeting. He added their next meeting is scheduled for June 2014.

Engine Harmonization Working Group (EHWG) (TAE): Bird Ingestion Regulation Assessment Tasking

Mr. Bolt stated the FAA tasked the EHWG with a bird ingestion regulation assessment to evaluate whether the FAA should revise the requirements for small and medium bird core ingestion and the large flocking bird requirements for class D engines. He explained the tasking is broken into four specific tasks:

1. Evaluate the core ingestion element for small and medium birds, and consider the large flocking bird threat in this assessment.
2. Evaluate large flocking bird requirements for Class D engines.
3. Consider the NTSB's two bird-ingestion-related safety recommendations from the US Airways Flight 1549 investigation.
4. Define an industry process for periodic update and review of engine bird ingestion data.

Mr. Bolt reported the EHWG held a meeting March 4-6, 2014, in Phoenix, Arizona, during which it addressed several issues, reaching consensus on the following:

- Current medium flocking bird (MFB) core ingestion test criteria do not adequately challenge modern turbofan engines relative to the amount of bird material entering the core.
- Existing MFB test criteria should be retained as is, with the core element expanded to address the increased amount of core ingestion expected during the climb phase.
- Any additional core ingestion capability requirements should include flexibility for compliance finding by similarity, test, or analysis.

Mr. Bolt also reported the EHWG is working to determine the most appropriate means of establishing engine test conditions for verification of MFB core ingestion capability. He stated the EHWG did not reach consensus on the need to adjust large flocking bird ingestion regulations, but it did reach an agreement on parameters to be included in the engine original equipment manufacturer bird ingestion database going forward with the application of an appropriate update period.

Mr. Bolt noted the EHWG continue to hold monthly web conferencing meetings and will hold its next face-to-face meeting June 10-12, 2014, in Cologne, Germany.

***Engine Harmonization Working Group (EHWG) (TAE):
Engine Endurance Test Requirements Tasking***

Mr. Bolt stated the FAA published the EHWG engine endurance tasking in the Federal Register on January 22, 2014. He added the FAA has identified working group members and is in the process of notifying them. He noted Mr. Peter Thompson of General Electric will serve as AAWG Chair. He stated the first AAWG meeting will be April 8-9, 2014, in Burlington, MA, during which they will develop a work plan.

NEW TASKS

Transport Airplane Performance and Handling Characteristics—Phase 2

Mr. Elwell stated a revised tasking notice was circulated to the ARAC members on the morning of March 20, 2014, and offered to delay a vote on the revised notice if any members needed additional time for review. No objections were raised to proceeding directly to a vote on the revised notice.

Mr. Elwell invited Ms. Liu to provide additional input regarding the tasking. Ms. Liu stated the notice signifies the second phase of the FTHWG tasking after completing the recommendation report that was accepted earlier in the meeting.

Without objection, the ARAC accepted the tasking.

STATUS REPORT FROM THE FAA

Ms. Liu stated the FAA's work on the rulemaking prioritization tool is ongoing and the FAA is revising it as the agency reaches the 1-year mark of its usage. She added the ARAC will discuss the rulemaking prioritization tool in greater detail at its next meeting.

Ms. Liu introduced Ms. Katie Haley to provide an update for the Commercial Air Tour Maintenance Working Group. Ms. Haley stated AC 136-2, Recommended Aircraft Maintenance Practices for Commercial Air Tour Providers, was developed based on the CATM WG's November 2010 recommendations and is now available.

Ms. Liu noted the FAA must renew the ARAC charter in 2014. She stated the supporting documents are moving forward at the FAA, ultimately to the Administrator for signature. Ms. Liu explained she does not anticipate major changes to the charter.

Ms. Liu also noted email correspondence among ARAC members should include the FAA's ARAC email inbox as a recipient (9-awa-arac@faa.gov).

OFF AGENDA REMARKS

Mr. Paul Hudson asked if the EHWG engine endurance tasking includes aircraft tracking, as related to the Malaysia Airlines Flight 370 (MH370) incident. Mr. Bolt replied it does not. Mr. Hudson stated a tasking should include issues related to the MH370 incident, specifically pilots' ability to avoid tracking by turning off transponders. He explained current black box technology is dated, and the industry should implement new data streaming capabilities in black boxes to avoid negative repercussions. Mr. Hudson noted the MH370 aircraft did not have a black box with the data streaming technology. Mr. Elwell pointed out the search for MH370 is ongoing and the investigation into the cause has not begun. Therefore, any discussion of possible solutions is premature.

Mr. Hudson stated ACAP delivered a petition regarding Extended Operations (ETOPS) for the Boeing 787 aircraft a year ago, and asked Ms. Liu for an update on the petition's progress. He also asked for a link to the report indicating the Boeing 787 aircraft is safe. Ms. Liu confirmed the FAA has the petition and Mr. Hudson's concerns will be directed to the appropriate persons at the FAA. Mr. Todd Sigler stated there is a [link to the report](#) in the [FAA press release](#).

Mr. Peri stated the next ARAC meeting is scheduled for June 19, 2014, which conflicts with the FAA/EASA International Aviation Safety Conference in Bethesda, Maryland. Mr. Peri suggested holding the next ARAC meeting at the conference site after the FAA/EASA Conference concludes, if possible. Ms. Liu asked Ms. Renee Pocius to provide members with alternate dates.

Mr. Elwell asked attendees to fill out and return feedback forms at the conclusion of ARAC meetings to aid in planning future meetings. Ms. Liu responded to issues raised via feedback forms submitted to the December 19, 2013, ARAC meeting. She stated the FAA is always searching for facilities and methods to improve the meeting experience and address concerns such as sound system quality. Ms. Liu added the FAA researched whether WebEx technology would benefit the ARAC and determined the FAA's Web meeting resources are not advanced enough to facilitate the public meetings at this time.

ADJOURNMENT

Mr. Elwell adjourned the meeting at 1:55 p.m.

ACTION ITEMS

| Action Item | Responsible Party |
|--|-------------------|
| Send ARAC mailbox to ARAC members | Renee Pocius |
| Provide ARAC members with a few alternate meeting date options for the next ARAC meeting for feedback. | Renee Pocius |

Approved by:

Dan Elwell, Chair

Dated: 5/7/2014

Ratified on: 6/19/2014

TAE Update for ARAC

March 20, 2014

TAE Engine Harmonization Working Group

Task: Bird Ingestion Regulation Assessment

The objective of this ARAC task is to evaluate whether the requirements for small and medium bird core ingestion and the large flocking bird requirements for Class “D” engines (1.35m^2 - 2.5m^2 inlet areas) should be revised. Identify any deficiencies in the current rule, and provide the FAA with recommendations for changes, as appropriate, by March 31, 2015.

Specific Tasks:

- 1) Evaluate the core ingestion element for small and medium birds, and consider the large flocking bird threat in this assessment.
- 2) Evaluate large flocking bird requirements for Class “D” engines.
- 3) Consider the NTSB’s two bird ingestion related safety recommendations from the USAir 1549 investigation.
- 4) Define an industry process for periodic update and review of engine bird ingestion data.

TAE Engine Harmonization Working Group

Task: Bird Ingestion Regulation Assessment

4th Meeting March 4 - 6, 2014 in Phoenix hosted by Honeywell

Consensus achieved that current Medium Flocking Bird core ingestion test criteria does not adequately challenge modern turbofan engines relative to amount of bird material entering the core.

Consensus that existing MFB test criteria should be retained as-is, with the core element expanded to address the increased amount of core ingestion expected during the climb phase.

Consensus that any additional core ingestion capability requirements include flexibility for compliance finding by similarity, test or analysis.

EHWG currently working to determine most appropriate means of establishing engine test conditions for verification of MFB core ingestion capability.

No consensus on need for adjustment to Large Flocking Bird ingestion regulations. Discussions will continue.

Agreement on parameters to be included in engine OEM bird ingestion database going forward and appropriate update period. Working on formal ownership of database management.

Continuing to hold monthly webex/telcon to address action items from meetings and keep work progressing. Next meeting June 10-12 in Cologne

ARAC TAE EHWG Engine Bird Ingestion

Working Group Members:

Alan Strom (FAA-ANE Standards) FAA Representative

Les McVey (General Electric Aviation) WG Co-Chair

Chris Demers (Pratt & Whitney) WG Co-Chair

Angus Abrams (EASA)

Amy Anderson (FAA-Airports)

John Barton (SNECMA)

Mark Beauregard (Pratt & Whitney Canada)

Walter Drew (Airbus Industries)

Tom Dwier (Cessna)

Ken Knopp (FAA)

Brian Lesko (Air Line Pilots Association)

Dr. Julian Reed (Rolls Royce)

Russ Repp (Honeywell)

Terry Tritz (Boeing)

DC Yuh (Transport Canada)

TAE Engine Harmonization Working Group

Task: Engine Endurance Test Requirements

Tasking Published Jan 22, 2014

Working Group Members Identified and Being Notified of Selection

Peter Thompson (GE Aircraft Engines) selected as Chair

Initial WG Meeting April 8/9, 2014 at FAA-NER Burlington, Ma

Airworthiness Assurance Working Group (AAWG)

Next Meeting June 2014

AAWG Members

| Manufacturers |
|-------------------|
| Airbus |
| Boeing (Co-Chair) |
| Embraer |
| Lockheed-Martin |
| Bombardier |
| |
| Regulators |
| FAA |
| TC |
| EASA |
| ANAC |

| Operators |
|----------------|
| AAL |
| ABX |
| ANA |
| BAB |
| CAL |
| DAL |
| FDX (Co-Chair) |
| JAL |
| LYC |
| UAL |
| UPS |
| USA |
| SWA |
| KLM* |
| DLH* |

*observers