Accordingly, pursuant to Section 19(b)(2)(A)(ii)(I) of the Act[7] and for the reasons stated above, the Commission designates January 2, 2015, as the date by which the Commission should either approve or disapprove, or institute proceedings to determine whether to disapprove, the proposed rule change (File No. SR–ISE–2014–43).

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[8]

Kevin M. O'Neill,

Deputy Secretary.

[FR Doc. 2014–27571 Filed 11–20–14; 8:45 am]

BILLING CODE 8011–01–P

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 December 18, 2014, starting at 1:00 p.m. Eastern Standard Time. Arrange oral presentations by December 11, 2014.

ADDRESSES: The meeting will take place at the Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591, 5th floor, 5A/B/C Conference Rooms.

FOR FURTHER INFORMATION CONTACT: Renee Pocius, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591, telephone (202) 267–5093; fax (202) 267–5075; email *Renee.Pocius@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 December 18, 2014, at the Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591.

The Agenda includes:

1. Request for Clarification:

a. Avionics Systems Harmonization Working Group (TAE)—Phase 2 Low Airspeed Alerting.

2. Status Reports From Active Working Groups:

a. AC 120–17A Maintenance Control by Reliability Methods (ARAC).

b. Airman Certification Systems Working Group (ARAC).

c. Airworthiness Assurance Working Group (TAE).

d. Engine Harmonization Working Group (TAE).

i. Engine Bird Ingestion.

ii. Engine Endurance Testing Requirements—Revision of Section 33.87.

e. Flight Test Harmonization Working Group (TAE)—Phase 2 Tasking.

3. New Tasks:

a. Transport Airplane Damage-Tolerance and Fatigue Evaluation (TAE).

b. Transport Airplane Crashworthiness and Ditching Evaluation (TAE).

c. Materials Flammability Working Group (TAE).

d. Aircraft Systems Information Security Protection (ASISP) Working Group.

4. ARAC Bylaws:

5. Status Report From the FAA:

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 December 11, 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 December 11, 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 November 18, 2014.

Lirio Liu,

Designated Federal Officer, Aviation Rulemaking Advisory Committee.

[FR Doc. 2014–27602 Filed 11–20–14; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Twenty-Ninth Meeting: RTCA Special Committee 224, Airport Security Access Control Systems

AGENCY: Federal Aviation Administration (FAA), U.S. Department of Transportation (DOT).

ACTION: Meeting notice of RTCA Special Committee 224, Airport Security Access Control Systems.

SUMMARY: The FAA is issuing this notice to advise the public of the twenty-ninth meeting of the RTCA Special Committee 224, Airport Security Access Control Systems.

DATES: The meeting will be held on December 10th, 2014 from 10:00 a.m.–2:00 p.m.

ADDRESSES: The meeting will be held at RTCA, Inc., 1150 18th Street NW., Suite 910, Washington, DC 20036.

FOR FURTHER INFORMATION CONTACT: The RTCA Secretariat, 1150 18th Street NW., Suite 910, Washington, DC 20036, or by telephone at (202) 833–9339, fax at (202) 833–9434, or Web site at *http://www.rtca.org.*

SUPPLEMENTARY INFORMATION: Pursuant to section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92–463, 5 U.S.C., App.), notice is hereby given for a meeting of Special Committee 224. The agenda will include the following:

December 10th, 2014

- Welcome/Introductions/Administrative Remarks
- Review/Approve Previous Meeting Summary
- Report from the TSA
- Report on Safe Skies Document Distribution
- Request to RTCA Program Management Committee for Consideration of Operational Guidance Section Status
- Individual Document Section Reports
- Action Items for Next Meeting
- Time and Place of Next Meeting
- Any Other Business
- Adjourn

Attendance is open to the interested public but limited to space availability.

[7] 15 U.S.C. 78s(b)(2)(A)(ii)(I).

[8] 17 CFR 200.30–3(a)(31).

AVIATION RULEMAKING ADVISORY COMMITTEE

RECORD OF MEETING

MEETING DATE: December 18, 2014

MEETING TIME: 1:25 p.m.

LOCATION: Federal Aviation Administration
800 Independence Avenue, SW.
5th Floor
Conference Room 5ABC
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 November 21, 2014 (79 FR 69548).

ATTENDEES: **Committee Members**

Todd Sigler	The Boeing Company, *ARAC Chair*
Dr. Tim Brady	Embry-Riddle Aeronautical University (ERAU), *ARAC Vice Chair*
Chris Baum*	Air Line Pilots Association, International (ALPA)
Stacey Bechdolt*	Regional Airline Association (RAA)
Michelle Betcher	Airline Dispatch Federation (ADF)
Craig Bolt*	Pratt & Whitney *Transport Airplane and Engine (TAE) Subcommittee, Chair*
Mark Bury	Federal Aviation Administration (FAA) *Office of the Chief Counsel, AGC−200*
Doug Carr	National Business Aviation Association (NBAA)
Tom Charpentier	Experimental Aviation Association (EAA)

Ambrose Clay	National Organization to Insure a Sound Controlled Environment (NOISE)
Brenda Courtney	Federal Aviation Administration (FAA) *Office of Rulemaking, ARM–2* *Designated Federal Officer (DFO)*
Marie-Anne Dromoguet*	Transport Canada – Civil Aviation (TCCA)
Gail Dunham	National Air Disaster Alliance/Foundation (NADA/F)
Dan Elwell	Airlines for America (A4A)
Stéphane Flori*	AeroSpace and Defence Industries Association of Europe (ASD)
Jens Hennig*	General Aviation Manufacturers Association (GAMA)
George Novak	Aerospace Industries Association (AIA)
David Oord	Aircraft Owners and Pilots Association (AOPA)
Chris Oswald*	Airport Council International – North America (ACI−NA)
George Paul	National Air Carrier Association (NACA)
Phil Poynor	National Association of Flight Instructors (NAFI)
Bob Robeson	Federal Aviation Administration (FAA) *Office of Aviation Policy and Plans, APO–300*
Yvette Rose	Cargo Airline Association (CAA)
David Supplee*	International Association of Machinists and Aerospace Workers (IAMAW)
Chris Witkowski	Association of Flight Attendants Communications Workers of America (AFA−CWA)

Attendees

Doug Anderson*	Federal Aviation Administration (FAA) *Transport Airplane Directorate, ANM–7*
Clark Badie*	Honeywell Aerospace (Honeywell)
Matt Brackman*	Federal Aviation Administration (FAA) *Airworthiness Division, AIR–134*
Jim Crotty	Federal Aviation Administration (FAA) *Office of Rulemaking, ARM–200*
Sean Elliott	Experimental Aircraft Association (EAA)
Jeff Gardlin*	Federal Aviation Administration (FAA) *Transport Airplane Directorate, ANM−115*
Katherine Haley	Federal Aviation Administration (FAA) *Office of Rulemaking, ARM–203*
Matthew Hallett	PAI Consulting
Katrina Holiday	Federal Aviation Administration (FAA) *Office of Rulemaking, ARM–109*
Sean Howe*	Federal Aviation Administration (FAA) *Transport Airplane Directorate, ANM–7*
Joe Jacobsen*	Federal Aviation Administration (FAA) *Transport Airplane Directorate, ANM−111*
Ken Kerzner	Federal Aviation Administration (FAA) *Aircraft Maintenance Division, AFS–300*
Mark Larsen*	National Business Aviation Association (NBAA)
Ron Little	Delta Air Lines (Delta)
Sharon Lyda*	Federal Aviation Administration (FAA) *Transport Airplane Directorate, ANM−115*

Suzanne Masterson*	Federal Aviation Administration (FAA) *Northwest Mountain Region−Transport Airplane Directorate, ANM–115*
Doug Macnair	Experimental Aircraft Association (EAA)
Dorina Mihail*	Federal Aviation Administration (FAA) *New England Region–Aircraft Certification Service Engine and Propeller Directorate, ANE–142*
Dave Mikkelson*	Allegiant Travel Company (Allegiant)
Ed Nixon*	Gulfstream Aerospace Corporation (Gulfstream)
Alexander Olah	NetJets Association of Shared Aircraft Pilots (NJASAP)
Michael O'Donnell	Federal Aviation Administration (FAA) *Airport Engineering Division, AAS−1*
Steve Paasch*	Federal Aviation Administration (FAA) *Aircraft Engineering Division, AIR–130*
Renee Pocius	Federal Aviation Administration (FAA) *Office of Rulemaking, ARM–024*
Brenda Robeson	Federal Aviation Administration (FAA) *Office of Rulemaking, ARM–210*
Mary Schooley*	Federal Aviation Administration (FAA) *Northwest Mountain Region–Transport Airplane Directorate, ANM–111*
Walt Sippel*	Federal Aviation Administration (FAA) *Transport Airplane Directorate, ANM−115*
Peter Skaves*	Federal Aviation Administration (FAA) *Design, Manufacturing, and Airworthiness Division, AIR-100*
Alan Strom*	Federal Aviation Administration (FAA) *New England Region–Aircraft Certification Service Engine and Propeller Directorate, ANE–142*

James Wilborn*	Federal Aviation Administration (FAA) *Northwest Mountain Region−Transport Airplane Directorate, ANM–117*
Ian Won*	Federal Aviation Administration (FAA) *Transport Airplane Directorate, ANM−115*

*Attended via teleconference.

WELCOME AND INTRODUCTION

Mr. Dan Elwell, A4A, called the meeting to order at 1:25 p.m. and thanked the ARAC members and the public for attending. He invited the attendees to introduce themselves.

Ms. Brenda Courtney, DFO, introduced Mr. Todd Sigler, Boeing, as the new ARAC Chair and Dr. Tim Brady, ERAU, as the new Vice Chair. Ms. Courtney expressed gratitude to Mr. Elwell for serving as ARAC Chair since August 2012.

Mr. Sigler asked Ms. Courtney to read the required Federal Advisory Committee Act, Title 5, United States Code Appendix 2 (2007) statement.

Ratification of Minutes

Mr. Sigler stated the first item on the agenda is ratification of the minutes from the September 18, 2014, 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.

NEW TASKS

Aircraft Systems Information Security/Protection (ASIS/P) Working Group

Ms. Courtney introduced Mr. Steve Paasch, FAA, to give a briefing on the ASIS/P Working Group tasking.

Mr. Paasch stated the ASISP is equivalent terminology for "cyber security." He noted aircraft systems have become more integrated and technologically advanced. Mr. Paasch stated the FAA has issued special conditions addressing information security, most of which centered on standards under Title 14 Code of Federal Regulations (14 CFR) parts 23 and 25. In addition, he added the FAA published a policy statement (PS−AIR−21.16−02, *Establishment of Special Conditions for Cyber Security*) that describes when the issuance of special conditions is required for certain aircraft designs.

Mr. Paasch indicated the FAA has been working with Radio Technical Commission for Aeronautics (RTCA), who has issued documents on the information security elements of maintenance and continued airworthiness, design issues, and methods and technologies.

Mr. Paasch stated the tasking represents an effort to consolidate and refine recommendations across various types of aircraft under 14 CFR parts 23, 25, 27, and 29, in order to develop and modify policy. In addition, he noted the goal is to harmonize FAA policy with that of the European Aviation Safety Administration (EASA) and consolidate information to serve as a foundation for future advancements.

Mr. Paasch stated the tasking is composed of six individual tasks. The tasks are for the ASISP Working Group to—

1. Provide recommendations on whether ASISP-related rulemaking, policy, and/or guidance on best practices are needed for parts 23, 25, 27, and 29.
2. Provide the rationale as to why or why not ASISP-related rulemaking, policy, and/or guidance on best practices are required for parts 23, 25, 27, and 29.
3. If it is recommended that ASISP-related policy and/or guidance on best practices are needed, recommend whether such policy and/or guidance should be 14 CFR part--specific or applicable to all or several of parts 23, 25, 27, and 29.
4. If it is recommended that all ASISP-related policy and/or guidance on best practices is needed, recommend whether security-related industry standards from Aeronautical Radio Incorporated , Federal Information Processing Standards, International Standards Organization, National Institute of Standards and Technology, Society of Automotive Engineers (SAE) Aerospace Recommend Practices (ARP) 4754a and/or SAE ARP 4761 would be appropriate for use in such ASISP-related policy and/or guidance.
5. Develop a report containing recommendations on the findings and results of tasks 1 through 4.
    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.
6. The working group may be reinstated to assist the ARAC by responding to the FAA's questions or concerns after the recommendation report has been submitted.

Mr. Paasch noted a seventh task may be in order based on comments received. The seventh tasking would be to harmonize language with EASA and other civil aviation bodies.

Mr. Ambrose Clay, NOISE, stated the background information included in the tasking notice suggest the scope of the tasking is related to preventing intrusion and corruption of the flight systems. He expressed his concern that a vulnerability of the Next Generation Air Transportation System (NextGen), from a Global Positioning System (GPS) navigation standpoint, provides the opportunity for a "spoof" and subsequent jamming. Mr. Clay added it should be a priority to ensure a robust flight management system that can detect if an aircraft is misdirected or if a GPS signal is lost.

Mr. Paasch replied the immediate tasking does look at signals to and on the aircraft, but does not ask for study of requirements on signals in space. He noted the tasking focuses on requirements within the aircraft design for protection from cyber security risks and attacks.

Mr. Clay stated if the aircraft systems are not robust, then danger exists in the event of spoofing or jamming. Mr. Paasch replied the tasking includes robust design of systems on the aircraft.

Mr. Peter Skaves, FAA, stated another group addresses concerns on interaction with NextGen technology. He added Mr. Clay's concerns are covered, even to a point of redundancy, just not by the ASIS/P Working Group.

Mr. Chris Baum, ALPA, referenced the ongoing RTCA information security work and stated the RTCA Program Management Committee recently started an activity focused on the effect on aircraft systems from use of personal electronic devices in the passenger cabin. He added the finding may be a resource for the ASIS/P Working Group to consider.

Ms. Yvette Rose, CAA, asked if the tasking schedule of 14 months is enough to complete analyses and produce a recommendation report. Mr. Paasch responded the ASIS/P Working Group would be divided into teams working concurrently, allowing the work to be completed in a timely manner. Mr. Sigler noted the ASIS/P Working Group is allowed to request an extension if necessary. Mr. Jens Hennig, GAMA, stated much work necessary to satisfy the tasking is already complete and the 14-month period would build upon this existing work. He explained the existence of this work makes the 14-month timeline reasonable. Mr. Paasch agreed with Mr. Hennig.

Mr. Paasch stated Boeing submitted three comments (Attachments 1 and 2). He first addressed comments two and three, noting the two share a common point. He explained the language in comment two, "Boeing recommends adding a new task item to consider EASA requirement(s) for harmonization to avoid unnecessary regulatory differences" mirrors the FAA's goal of regulatory harmonization with foreign civil aviation bodies.

Mr. Chris Witkowski, AFA–CWA, asked if the tasking will set forth new requirements not shared by EASA or if it seeks harmonization with existing EASA requirements. Mr. Paasch responded the scope of work will not be limited by existing EASA requirements, although harmonization with those requirements is a key concern. In addition, he stated the ASIS/P Working Group will seek harmonization with other foreign civil aviation bodies.

Mr. Paasch addressed Boeing's first comment, which suggested the TAE Subcommittee manage the task. Mr. Paasch stated he disagrees with the comment because the tasking, as written, is to be addressed by representatives of several sectors of the aviation industry. He explained this range of representation would not be achieved if the TAE managed the task. Mr. Sigler stated Boeing made the comment with an understanding of TAE's structure but not considering that working groups can report directly to the ARAC. He agreed with Mr. Paasch.

Ms. Gail Dunham, NADA/F, asked if ASISP merited a subcommittee or a working group because of the breadth of the material. She also expressed her support for detailed documentation of minority and dissenting opinions in the completed recommendation report. Mr. Sigler explained the ARAC's bylaws allow for the creation of subcommittees if there are several taskings on the same topic, but it is the FAA's decision. Ms. Courtney added the decision to create a new subcommittee would be based on ARAC recommendations, but this usually occurs when numerous tasks exist, and that is not the current scenario with ASIS/P.

Ms. Rose asked if consideration of EASA regulations and guidance would best fit between task four and five or combined with task four because task 4's language already includes a list of industry standards to consult. Mr. Paasch responded that making the EASA harmonization tasking separate would be better because it is a unique undertaking beyond industry standards. He agreed to move it after task four.

Mr. Elwell asked if the title of the tasking could be amended for clarification and readability. Specifically, he advocated the addition of a backslash between "security" and "protection" in the title and acronym (ASIS/P). Mr. Paasch stated much work and compromise went into the finalization of the title, but the addition of the backslash was acceptable.

Without objection, the ARAC accepted the tasking**,** with the changes as noted above.

Transport Airplane Metallic and Composite Structures Working Group (TAE): Transport Airplane Damage−Tolerance and Fatigue Evaluation (Attachments 3, 4 and 5)

Mr. James Wilborn, FAA, introduced the tasking. Mr. Walt Sippel, FAA, stated the tasking builds upon previous work and is based on three elements:

- Evaluate recommendations from the 2003 General Structures Harmonization Working Group (GSHWG) in regards to language in § 25.571.
- Evaluate comments received in 2009 regarding increased use of composites by the aviation industry.
- Provide a costs and benefits estimate of recommendations.

Mr. Sippel stated the tasking authorizes 2 years for evaluation activity. He added the tasking supports and runs parallel to the FAA Aviation Safety Strategic Composite Plan. Mr. Sippel stated the tasking will necessitate consideration of existing language in parts 23, 27, and 29 on composite structures, in an effort to ensure consistency amongst the parts. He indicated, based on this reasoning, the FAA does not agree with Boeing's comment to limit the scope to part 25.

Mr. Sippel stated the GSHWG, in response to the 1995 ARAC taskings, made recommendations to add or revise requirements and guidance material for § 25.571. He noted FAA adopted one of these recommendations, the establishment of a limit of validity, in amendment 25−132. Mr. Sippel added two other recommendations remain open: setting inspection thresholds, including EASA harmonization, and creating requirements for demonstrating structural damage capability.

Mr. Sippel stated in June 2009 the FAA sought public comments on whether future rulemaking is needed to address extensive use of composite materials in transport category airplane construction. He stated the feedback indicated a need for improved regulatory guidance material and possible rulemaking.

Mr. Sippel addressed comments received from Boeing, Airbus, and Bombardier. Mr. Sippel stated, in response to a Boeing comment, an "or" will be added to the first tasking statement in order to clarify the tasking is not seeking rule amendments unless the Transport Airplane Metallic and Composite Structures Working Group determines a new or amended regulation is needed. He added this amendment will also address the comment from Bombardier. Mr. Sippel addressed another comment from Boeing, which recommended adding a new task item to consider EASA aging aircraft regulations and promoting harmonization. He stated he believes the FAA may revise the tasking to capture the proposed harmonization task.

Mr. Sippel stated he agrees with the Airbus comment regarding limits of validity as established under § 25.571, changing the phrase "up to the LOV" to "throughout the operational life of the airplane." Mr. Sippel voiced disagreement with the second Airbus comment, in which Airbus stated references to bonding or bolting of repairs were too specific. He noted it is within the scope of the rule to include the language regarding bonding or bolting of repairs.

Mr. Sigler asked if the Transport Airplane Metallic and Composite Structures Working Group, in its proposal to include consideration of parts 23, 27, and 29, had communicated with other respective directorates overseeing those regulated persons and if the Transport Airplane Metallic and Composite Structures Working Group envisions part 23, 27, and 29 industry participating on the working group. Mr. Sippel and Ms. Suzanne Masterson, FAA, noted communication with other directorates would exist, but only to determine the rationale in constructing existing language in parts 23, 27, and 29. Ms. Masterson noted part 23, 27, and 29 industry would not be included on the Transport Airplane Metallic and Composite Structures Working Group. Mr. Sigler asked the FAA consider membership from those industry groups if they request to participate.

Ms. Dunham asked how long the tasking will take, the anticipated frequency of meetings, and the location of meetings. Mr. Sippel responded the tasking runs for a period of 2 years and he anticipates the working group meeting in person three times a year, based on availability, and by phone, as needed. He noted meeting locations likely would vary between the U.S. east and west coast to allow equivalent travel time and expenses.

Ms. Rose asked if the TAE or the FAA developed the taskings. Mr. Sippel stated the FAA developed all the taskings. Ms. Rose asked if the cost/benefit analyses included in the taskings can be achieved with the Transport Airplane Metallic and Composite Structures Working Group or if additional subject matter experts were necessary. Ms. Masterson responded the expectation is for working group members to consult their respective companies for additional information to best complete the cost/benefit analyses.

Mr. Bob Robeson, FAA, asked how much support the Transport Airplane Metallic and Composite Structures Working Group expects from the FAA Office of Aviation Policy and Plans (APO) . Mr. Sippel responded the plan is for APO to contribute to the discussions as much as possible. Mr. Robeson stated APO needs to discuss availability of resources as each of the proposed tasks on the agenda requires work from APO. Ms. Courtney stated the FAA would seek input from APO, particularly to explain to the Transport Airplane Metallic and Composite Structures Working Group what data they need to provide so the FAA can complete a cost/benefit analysis.

Mr. Sigler noted the importance of having subject matter experts provide realistic cost/benefit information for a working group product, because the FAA does not want to encounter hurdles from internal analysis if a subsequent rulemaking occurs. Mr. Robeson agreed, although he maintained he is concerned resources may be overburdened.

Ms. Dunham asked if TAE Subcommittee meetings are open to the public. Ms. Courtney replied in the affirmative. Ms. Renee Pocius, FAA, clarified TAE meetings are open to the public but working group meetings are not. Ms. Dunham stated she is concerned participants may hesitate to share confidential data if the meetings are open to the public, and this may mean the best information is not available.

Without objection, the ARAC accepted the tasking, with the changes as noted above.

Transport Airplane Crashworthiness and Ditching Working Group (TAE)

Mr. Ian Won, FAA, stated the tasking is to develop recommendations for airframe-level crashworthiness and ditching standards and advisory material for part 25. Mr. Won noted there are three elements to the tasking:

- Evaluation and recommendation of updates to existing regulations and associated regulatory guidance;
- Provision of recommendations for new standards and advisory material; and
- Estimation of costs and benefits.

Mr. Won stated the goal is uniform crashworthiness and ditching standards. He added the proposal calls for the Transport Airplane Crashworthiness and Ditching Working Group to submit a recommendation report to the FAA in 18 months. Mr. Won stated the FAA believes the Transport Airplane Crashworthiness and Ditching Working Group can work on many of the tasks concurrently to meet the 18-month deadline.

Mr. Won provided background about why crashworthiness regulations require updating. He stated good crashworthiness performance is not inherent in an airframe designed only to meet airworthiness standards. In addition, he noted existing regulations based on metal airframes with skin-stringer-frame architecture do not address novel designs.

Mr. Won stated special conditions have historically been used to ensure the crashworthiness protection is equivalent to that provided by traditionally configured airplanes. However, he added the special conditions are comparative in nature, are linked to metallic airframe performance which is highly variable, and do not establish airplane level performance standards.

Mr. Won stated current ditching regulations assumed aircraft performance with inconsistent levels of validation, adding current practices may not provide an adequate level of safety for the most likely ditching scenarios. He stated existing ditching rules are obsolete based on FAA, TCCA, and United Kingdom Civil Aviation Authority research findings over the past 30 years. He noted factors influencing crashworthiness also influence airframe ditching performance. In addition, he explained flightcrew procedures, airplane configuration, safety equipment, and passenger preparedness have a significant influence on survivability and should be addressed.

Mr. Won stated Boeing and Airbus submitted comments on the tasking (Attachment 6). He stated the comments from Boeing and first comment from Airbus regard the prioritization of the crashworthiness and ditching evaluation effort. Mr. Won noted special conditions are comparative in nature and codifying the special conditions would fail to produce a uniform standard for all transport category aircraft. He stated the inception of the evaluation effort spanned 5 years, with the FAA reaching out to industry for input in a 2009 Federal Register notice and industry agreeing a priority existed for crashworthiness and ditching standards across all transport aircraft. Mr. Won stated an additional reason for immediately advancing the effort is the availability of personnel with technological expertise at the Transport Airplane Crashworthiness and Ditching Working Group's disposal that, with time, are leaving the industry. Mr. George Novak, AIA, asked if there was an urgency to the tasking. He stated the tasking is a major undertaking and requires additional time to deliberate on the task. Ms. Masterson responded the FAA has been working on the crashworthiness and ditching standard issue for several years and is prepared to move forward. Mr. Novak stated the scope of the tasking requires additional time for the ARAC to study the tasking.

Mr. Elwell asked if the task was presented because of a specific safety concern or if it was elevated because it had "been in the pipeline" for years. Further, he asked how addressing composites fits into the tasking and what information the FAA hopes to gain from the tasking. Mr. Won responded the focus would not be solely on composites. He added the FAA understands the design configuration of each type of aircraft makes its crashworthiness and ditching capabilities different. Mr. Won stated the continued use of special conditions, which are comparative, might exacerbate poor performance while the construction of a uniform standard sets a quality standard across all transport category aircraft. Mr. Novak stated he is not hearing a specific safety concern and asked for more time to consider the tasking.

Mr. Witkowski stated the tasking is overdue. He emphasized the importance of crashworthiness and ditching standards for cabin crewmembers in regards to training and safety. Mr. Witkowski added some transport category aircraft are not safe in certain scenarios. He stated he supports moving forward on the tasking immediately, as it is a point of concern for cabin crewmembers.

Dr. Brady asked if the tasking was a product of the FAA's prioritization effort and, if so, if that determination justifies its current priority level. Ms. Rose asked if tasks go through the FAA prioritization process or if only rulemakings are subject to the process. Ms. Katherine Haley, FAA, stated the FAA asks program offices to list potential ARAC taskings, but these taskings are not prioritized in the same manner as rulemakings. Ms. Masterson stated ANM develops a 4-year rulemaking plan and prioritizes ARAC taskings to support their rulemaking plan.

Mr. Sigler stated the Boeing comments resulted, in part, from surprise that the tasking was moving forward and a proposed rulemaking could be occurring in the near term. He added while the FAA has been planning the creation and support of this tasking, industry has not had similar time to adequately plan and prepare. Mr. Sigler asked if the TAE Subcommittee may review the tasking and report to the ARAC on its perception of the task's undertaking and its foreseeable benefit.

Mr. Craig Bolt, TAE Subcommittee Chair, stated the TAE could organize a call before the next ARAC meeting to study and discuss the tasking. Mr. Sigler asked Mr. Bolt to ensure parties in full support of the tasking, such as AFA-CWA, are in contact with the TAE.

Ms. Rose expressed her concern regarding resource availability, particularly if the ARAC is going to address a couple of taskings concurrently that require the same subject matter experts.

ARAC accepted the proposal for the TAE Subcommittee to review the tasking and provide feedback at the March 2015 ARAC meeting.

Materials Flammability Working Group (TAE)

Mr. Jeff Gardlin, FAA, introduced the proposed ARAC tasking for the Materials Flammability Working Group. He stated the Materials Flammability Working Group provided recommendations to the FAA on the methods of updating the regulations. Mr. Gardlin explained the FAA moved forward with a rulemaking but found there was insufficient information regarding costs and benefits to proceed with a notice of proposed rulemaking (NPRM). Mr. Gardlin stated detailed advisory material would be produced with the NPRM. He noted the FAA would like to reconvene the Materials Flammability Working Group to gather cost and benefit information. He noted the FAA is requesting a report 8 months after publication of the notice.

Mr. Gardlin stated the FAA would provide the Materials Flammability Working Group with as much information as possible, mainly through assumptions on which to base the cost and benefit assessments.

Mr. Gardlin addressed a comment (Attachment 7) that the tasking should be postponed until a current FAA/United Kingdom Civil Aviation Authority study on smoke/fire/fume incidents is completed. He stated it is not feasible to wait until the completion of that study to move forward on the tasking.

Mr. Sigler asked if the proposed 8-month deadline was feasible given the maturity of materials available to the FAA. Ms. Masterson stated the FAA is not permitted to share the draft regulatory or advisory language with the ARAC, which makes it difficult to convey the maturity of the resources at the Materials Flammability Working Group's disposal. She stated the FAA would provide assumptions on which to build cost and benefit assessments.

Ms. Rose asked who is in the Materials Flammability Working Group. Mr. Gardlin responded the working group consisted of airframe manufacturers, operators, regulatory authorities, and subject matter experts. Ms. Rose asked how data provided to the FAA would be protected. Mr. Gardlin replied all submitted information would be de-identified.

In response to a question from Ms. Dunham, Mr. Gardlin clarified the current tasking is a new task to an existing working group and no new members will be added.

Mr. Sigler sought a motion to accept the tasking. The ARAC agreed to accept the tasking.

REQUEST FOR CLARIFICATION

Avionics Systems Harmonization Working Group (ASHWG) (TAE) – Phase 2 Low Airspeed Alerting (Attachment 8)

Mr. Clark Badie, Honeywell, stated the item is a request for clarification of the ASHWG Phase 2 task performed and completed approximately 2 years ago. He stated the Phase 2 task asked the ASHWG to provide information that could lead to standards for low speed alerting that could be satisfied with practical design approaches in existing aircraft. He noted the ASHWG completed the report in August 2012 and ARAC approved it in 2013.

Mr. Badie stated the ASHWG held a meeting on November 24, 2014, at which the ASHWG considered FAA-proposed design mitigations and cost and benefits estimates. Mr. Badie noted the ASHWG determined actions required to complete the assessment, which the ASHWG hopes to complete by the end of 2014 with a follow-up meeting in January 2015.

Mr. Badie detailed the considerations and actions required to help complete the analysis:

- The analysis should consider a third design mitigation, or at the very least clarify that existing aircraft with flight envelope protection provide an equivalent level of safety to "Option 2," compliance with § 25.1329(h);
- The FAA will provide a table of the fleet projection used in the cost-benefit analysis;
- The FAA will provide a clarification if freighters are in or out of the scope of the retrofit proposal according to the cost benefit analysis for this type of aircraft; and
- The ASHWG will provide specific feedback to recurring and non-recurring costs used in the analysis.

Mr. Badie noted the costs would likely differ between the United States and Europe. Mr. Sigler asked if the ASHWG would provide the ARAC with any new materials after the ASHWG's January 2015 meeting. Mr. Badie stated the ASHWG would submit a report describing what the ASHWG reviewed and their recommendations. He added the FAA would determine any additional work from that point.

STATUS REPORTS FROM ACTIVE WORKING GROUPS

Mr. Sigler introduced Mr. Bolt, TAE Subcommittee Chair.

Engine Harmonization Working Group (EHWG) (TAE): Bird Ingestion Regulation Assessment Tasking (Attachment 9)

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 (LFB) requirements for Class D engines.

3. Consider the National Transportation Safety Board'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 September 23−24, 2014, hosted by the FAA. He stated during the meeting, the EHWG reached a consensus on all the tasks:

- Core ingestion demonstration point—Using the current rule heaviest medium bird for engine throat diameter, one bird, at either—
  - Climb power setting, 250 kias (at 3,000 feet altitude, International Standard Atmosphere (ISA) standard day), perform a 20 minute run-on as defined in Large Flocking Bird paragraph; or if no core ingestion at climb setting,
  - Approach idle setting, 200 kias (at 3,000 feet altitude, ISA standard day), perform the last 6 minutes of LFB run-on after initial 1 minute without throttle movement post-ingestion.
- LFB for engines with inlets $<2.5m^2$ — no changes to the current rule. The EHWG recommends an additional tasking on new technology engines such as Open Rotor.
- Ingestion Database—establish a committee under AIA with an annual data update and a meeting to review that data.

Mr. Bolt noted the EHWG combined task 3 with tasks 1 and 2.

He stated the EHWG's plan is to work on its final report draft for delivery to TAE in early February 2015 and discussion at the February 25, 2015 TAE meeting. He stated the EHWG is on target to provide its final report to the ARAC in March 2015.

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

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

Mr. Bolt stated the EHWG reached agreement, in principle, for alternate test requiring red line runs, which represents a different methodology than that used for the current rule. He stated it is a variation on current cycle or new cycle, similar to ASD/AIA "IMI" type cycle under evaluation. He noted demonstration of compliance would continue to be test-based and augmented with analysis. He stated the current direction of the EHWG provides an option for the current test or the proposed variation.

Mr. Bolt stated the EHWG continues to meet with regular WebEx and face-to-face meetings. He indicated the EHWG is concerned about the complexity of the rule and the technical challenges as well as its schedule, which has the EHWG completing its tasks and ARAC submitting the report to the FAA by December 2015. He also noted a harmonized approach should be considered.

Airworthiness Assurance Working Group (AAWG) (TAE)

Mr. Bolt stated the AAWG's last face-to-face meeting was June 10−11, 2014 and they continue to meet by teleconference. He stated the focus of the AAWG has been removable structural components (RSC) and type requirements for such components. He added this includes tracking methods as components are removed during maintenance, repair, and overhaul (MRO).

Mr. Bolt stated the AAWG is developing industry guidelines that it will submit to A4A, who will manage the document. He stated once A4A approves the document, they will distribute the guidelines to original equipment manufacturers, operators, and MROs. Mr. Bolt noted subsequent revisions to the document will be routed through A4A.

Flight Test Harmonization Working Group (FTHWG) (TAE) – Phase 2 Tasking

Mr. Bolt stated the FTHWG held a meeting October 20−24, 2014. He stated the first 2 days of the meeting centered on the FTHWG's tasking on adaptation for flight in icing conditions. Mr. Bolt explained the focus was on developing a work plan and building a common understanding of certification review items and FAA inspection paper differences toward harmonization.

Mr. Bolt stated the FTHWG also focused on its envelope-limiting task, including presentations of proposals for different limit types, including attitude limiting, load factor limiting, high air operations area, low energy, high aerospeed limiting, and sideslip landing. He added the FTHWG established task groups to address the limit types. He noted the FTHWG will next discuss how the proposals fit together and determine the best method for advancement.

Mr. Bolt stated the FTHWG spent 2 days addressing its steep approach landing tasking, which included introductory presentations and a discussion on regulatory differences. He added the FTHWG identified issues needing resolution and task group leaders and members. In addition, he noted the FTHWG defined action items and the schedule. Mr. Bolt added the FTHWG debated top harmonization issues. He noted the FTHWG developed a detailed schedule of future meetings and topics.

Maintenance Reliability Program Working Group – Advisory Circular (AC) 120−17A Maintenance Control and Reliability Methods (Attachment 10)

Mr. Ron Little, Delta, stated the Maintenance Reliability Program Working Group has developed a list of key findings that will comprise the foundation of a draft AC 120−17B and the working group's recommendation report. He stressed the importance of clarifying operator approval authority under Operations Specifications paragraph D074 as a major point. Mr. Little noted the current list of key findings is not comprehensive and is subject to change before the creation of the final products.

Mr. Little expressed the Maintenance Reliability Program Working Group's appreciation for the efforts of Mr. John Yakubowsky, Boeing, who is retiring in January 2015.

Mr. Little stated the Maintenance Reliability Program Working Group's most recent meeting was held December 9−12, 2014, in Washington, DC. He noted the working group will continue

to develop the recommendation report and draft AC in advance of its next meeting in January 2015. Mr. Little stated the Maintenance Reliability Program Working Group will submit the recommendation report and draft AC to the ARAC on March 3, 2015, with presentation to the ARAC on March 19, 2015.

Ms. Dunham asked about the composition of the Maintenance Reliability Program Working Group. Mr. Little responded the working group consists of 15 members representing operators, manufacturers, industry experts, and regulatory authority representatives. He added the diverse membership may result in not achieving unanimous support on every recommendation, but the Maintenance Reliability Program Working Group is encouraged to record dissent, and it is reaching good compromises on language construction.

Airman Certification Systems Working Group (ACSWG) (Attachment 11)

Mr. David Oord, AOPA, provided the update for the ACSWG. He recounted the ACSWG's progress, including creating prototypes for new standards, finalizing and publishing commercial and instructor airman certification standards (ACS), reviewing the FAA handbook, and reviewing test questions.

Mr. Oord noted the ACSWG validated and coded the new test to the standards. He stated if a student answers a question incorrectly on the test, the student and instructor receive a report indicating which portion(s) of the standard the student missed so the instructor can retrain and retest the student.

Mr. Oord stated the ACSWG developed the ACS Exam Board, which is comprised of FAA and one industry participant. The ACS Exam Board reviews test questions and develop new ones, as appropriate.

Mr. Oord stated the next step for the ACSWG is to transition into Phase 3 of its work plan. He explained the ACSWG will draft the air transport pilot (ATP) ACS, expand its testing prototypes, and amend and finalize the instructor ACS. He noted the testing prototypes are expanding to include 14 CFR part 61 and 141 subject matter. Mr. Oord stated the ACSWG is developing prototype guidance so each facility has implementation guidance.

Mr. Oord stated the next ACSWG meeting will take place January 6−7, 2015, in Washington, DC.

Ms. Michelle Betcher, ADF, asked if questions for the ATP test are available. Mr. Oord responded the FAA will not make the questions public, but a sample test is available on the Internet.

Ms. Dunham asked how much time elapsed since the last update to the FAA handbooks. Mr. Oord responded updates are generally occur on a continual basis, but likely 3 years have passed since the last update.

ARAC BYLAWS (Attachment 12)

Ms. Courtney stated ARAC members did not submit proposed changes to the bylaws and, therefore, she moved to adopt the amendments.

Mr. Witkowski questioned the use of the phrase "public's interest" and expressed his preference for "public interest." The ARAC agreed to change the language to "public interest."

A motion to accept the bylaws were approved by the ARAC.

FAA UPDATE

Ms. Courtney stated the FAA initiated rulemaking on 14 CFR part 147. She added a schedule for the project can be found on the U.S. Department of Transportation Web site.

ADJOURNMENT

Mr. Sigler adjourned the meeting at 3:50 p.m.

ACTION ITEMS

Action Item	Responsible Party
Update the Aircraft Systems Information Security/ Protection (ASIS/P) Working Group tasking	FAA
Update the Transport Airplane Metallic and Composite Structures Working Group (TAE): Transport Airplane Damage–Tolerance and Fatigue Evaluation tasking	FAA
TAE discuss the proposed Transport Airplane Crashworthiness and Ditching Working Group tasking and report back to ARAC at the March 2015 meeting	TAE

Approv

Todd Sigler, Chair

Dated: _____

Ratified on: 3/19/15

Aircraft Systems Information Security Protection Working Group- proposed changes:
Boeing Comments:

1. If appropriate Boeing suggests this task be managed by ARAC TAE (for additional visibility and oversight).
2. Boeing recommends adding a new task item to consider EASA requirement(s) for harmonization to avoid unnecessary regulatory differences.
3. See redline file.

[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Aviation Rulemaking Advisory Committee - New Task

AGENCY: Federal Aviation Administration (FAA), DOT.

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

SUMMARY: The FAA assigned the Aviation Rulemaking Advisory Committee (ARAC) a new task to provide recommendations regarding Aircraft Systems Information Security Protection (ASISP) rulemaking, policy, and guidance on best practices for Title 14 Code of Federal Regulations (14 CFR) parts 23, 25, 27, and 29, including both certification and continued airworthiness. The issue is that without updates to regulations, policy, and guidance to address ASISP, aircraft vulnerabilities may not be identified and mitigated, thus increasing exposure times to security threats. In addition, a lack of ASISP-specific regulations, policy, and guidance could result in security related certification criteria that are not standardized and harmonized between domestic and international regulatory authorities.

This notice informs the public of the new ARAC activity and solicits membership for the new ASISP Working Group.

FOR FURTHER INFORMATION CONTACT: Steven C. Paasch, Federal Aviation Administration, 1601 Lind Ave. S.W., Renton, WA 98057-3356,

Email: steven.c.paasch@faa.gov, Phone: (425) 227-2549, Fax (425) 227-1100.

SUPPLEMENTARY INFORMATION:

ARAC Acceptance of Task

As a result of the December 18, 2014, ARAC meeting, the FAA assigned and ARAC accepted this task establishing the ASISP Working Group. The working group will serve as staff to the ARAC and provide advice and recommendations on the assigned task. The ARAC will review and approve the recommendation report and will submit it to the FAA.

Background

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.

The ASISP Working Group will provide advice and recommendations to the ARAC on ASISP-related rulemaking, policy, and guidance, including both initial certification and continued airworthiness. Without updates to regulations, policy, and guidance to address ASISP, aircraft vulnerabilities may not be identified and mitigated, thus increasing exposure times to security threats. Unauthorized access to aircraft systems and networks could result in the malicious use of networks, and loss or corruption of data (e.g., software applications, databases, and configuration files) brought about by software worms, viruses, or other malicious entities. In addition, a lack of ASISP-specific regulations, policy, and guidance could result in security related certification criteria that are not standardized and harmonized between domestic and international regulatory authorities.

There are many different types of aircraft operating in the United States National Air Space (NAS), including transport category airplanes, small airplanes, and rotorcraft. The regulations, system architectures, and security vulnerabilities are different across these aircraft types. The current regulations do not specifically address ASISP for any aircraft operating in the NAS. To address this issue, the FAA has published special conditions for particular make and

model aircraft designs. The FAA issues Special Conditions when the current airworthiness regulations for an aircraft do not contain adequate or appropriate safety standards for certain novel or unusual design features including ASISP. Even though the FAA published special conditions for ASISP, an update to the current regulations should be considered. International civil aviation authorities are also considering rulemaking for ASISP and the ASISP Working Group could be used as input into harmonization of these activities.

The FAA has issued policy statement, PS-AIR-21.16-02, *Establishment of Special Conditions for Cyber Security*, which describes when the issuance of special conditions is required for certain aircraft designs. This policy statement provides general guidance and requires an update to address the ever evolving security threat environment. The basis for ASISP FAA Special Condition and a companion FAA issue paper provides the means of compliance. The issue paper provides guidance for specific aircrafts and models and contains proprietary industry information which is not publically available. These issue papers, with industry input, could provide additional guidance and best practices recommendations and could be used as input into the development of national policy and guidance (e.g., advisory circular). The FAA has not published guidance on the use of security controls and best practices for ASISP, thus ARAC recommendations in this area are highly desirable.

There are many industry standards addressing various security topics, such as Aeronautical Radio Incorporated (ARINC), Federal Information Processing Standards (FIPS), International Standards Organization (ISO), and National Institute of Standards and Technology (NIST) standards. There are also industry standards addressing processes for requirements development, validation, and verification, such as Society of Automotive Engineers (SAE) Aerospace Recommended Practices (ARP) 4754a and SAE ARP 4761. In addition, there are

standards from RTCA such as RTCA DO-355, *Information Security Guidance for Continued Airworthiness.* The ASISP Working Group recommendations as to the usability of these standards in ASISP policy and/or guidance are highly desirable.

The Task

The ASISP Working Group is tasked to:

1. Provide recommendations on whether ASISP-related rulemaking, policy, and/or guidance on best practices are needed for 14 CFR parts 23, 25, 27, and 29.
2. Provide the rationale as to why or why not ASISP-related rulemaking, policy, and/or guidance on best practices are required for 14 CFR parts 23, 25, 27, and 29.
3. If it is recommended that ASISP-related policy and/or guidance on best practices are needed, recommend whether such policy and/or guidance should be 14 CFR part-specific or applicable to all or several of 14 CFR parts 23, 25, 27, and 29.
4. If it is recommended that ASISP-related policy and/or guidance on best practices is needed, recommend whether security-related industry standards from ARINC, FIPS, International Standards Organization (ISO), NIST, SAE ARP 4754a and/or SAE ARP 4761 would be appropriate for use in such ASISP-related policy and/or guidance.
5. 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.

6. The working group may be reinstated to assist the ARAC by responding to the FAA's questions or concerns after the recommendation report has been submitted.

~~6.~~7. Consider EASA requirements and guidance material for regulatory harmonization.[Boeing recommends to add to the tasking a statement to consider EASA requirements and guidance material(s) for regulatory harmonization and eliminate or avoid an unnecessary regulatory differences.]

Schedule

The recommendation report must be submitted to the FAA for review and acceptance no later than fourteen months from the date of the first working group meeting.

Working Group Activity

The ASISP Working Group must comply with the procedures adopted by the ARAC. As part of the procedures, the working group must:

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 ARAC.
3. Provide a status report at each ARAC 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 ARAC meeting.
6. Present the findings in response to the FAA's questions or concerns (if any) about the recommendation report at the ARAC meeting.

Participation in the Working Group

The ASISP Working Group will be comprised of technical experts having an interest in the assigned task. A working group member need not be a member representative of the ARAC. The FAA would like a wide range of members to ensure all aspects of the tasks are considered in 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.)

If you wish to become a member of the ASISP Working Group, write the person listed under the caption FOR FURTHER INFORMATION CONTACT expressing that desire. Describe your interest in the task and state the expertise you would bring to the working group. The FAA must receive all requests by **[insert date 30 days after publication of this notice]**. The ARAC and the FAA will review the requests and advise you whether or not your request is approved.

If you are chosen for membership on the working group, you must actively participate in the working group by attending all meetings, and providing written comments when requested to do so. You must devote the resources necessary to support the working group in meeting any assigned deadlines. You must keep your management chain 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, the FAA, including the Designated Federal Officer, and the Working Group Chair.

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, meetings of the ASISP Working Group 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.

Issued in Washington, DC, on

Lirio Liu

Designated Federal Officer

Aviation Rulemaking Advisory Committee

Proposed Aviation Advisory Rulemaking Committee (ARAC) Tasking Actions

Federal Aviation Administration

Presented to: ARAC

By: FAA – Transport Airplane Directorate

Date: December 18, 2014

Proposed ARAC Tasking

- **Damage Tolerance and Update to § 25.571**
- **Crashworthiness Standards / Ditching Requirements**
- **Materials Flammability – Cost and Benefit Evaluation**

Proposed ARAC Tasking
Damage Tolerance and Update to § 25.571

- **Requires working group to address and provide recommendations on the following:**
  - Remaining 2003 GSHWG rulemaking recommendations
  - Increased use of composites by industry
  - Costs and benefits estimates
- **Authorizes two years for activity**
- **Supports AVS Strategic Composite Plan**

Damage Tolerance and Update to § 25.571
General Structures Harmonization Working Group

- **In response to the 1995 ARAC tasking, the General Structures Harmonization Working Group (GSHWG) made recommendations to add or revise requirements and guidance material for § 25.571**
  - Setting inspection thresholds (open)
  - Establishing a limit of validity (LOV) (closed, Amdt. 25-132)
  - Demonstrating structural damage capability (open)

Damage Tolerance and Update to § 25.571
Composite Structures

- **In June of 2009, FAA sought public comments on whether future rulemaking is needed to address extensive use of composite materials in transport category airplane construction**
  - Response indicated need for improved regulatory guidance material and possible rulemaking
- **Small Airplane and Rotorcraft Directorates revised parts 23, 27, and 29 and related guidance material**

Proposed ARAC Tasking
Crashworthiness and Ditching

Develop recommendations for **Airframe-level crashworthiness and ditching standards and advisory material** for Title 14, Code of Federal Regulations (14 CFR) part 25

- Evaluate and recommend updates to existing regulations and associated regulatory guidance
- Provide recommendations for new standards and advisory material
- Estimate costs/benefits

Recommendation report to the FAA in **18 months**

Crashworthiness
Update to the Regulations

Crashworthiness: Good crashworthiness performance is not inherent in an airframe designed only to meet airworthiness standards

- Existing regulations based on metal airframes with skin-stringer-frame architecture do not address novel designs
- Special conditions used to ensure the crashworthiness protection is equivalent to that provided by traditionally-configured airplanes
  - Comparative in nature
  - Linked to metallic airframe performance which is highly variable
  - Do not establish airplane level performance standards

Ditching
Update to the Regulations

Ditching: Assumed airframe performance with inconsistent levels of validation

- Current practices may not provide an adequate level of safety for the most likely ditching scenarios
- Existing ditching rules are obsolete based on FAA, TCCA, UK CAA research findings over the past 30 years
  - Factors that influence crashworthiness also influence airframe ditching performance
  - Flight crew procedures, airplane configuration, safety equipment, and passenger preparedness have a significant influence on survivability
- Assumed ditching conditions should be consistent with airplane performance

Proposed ARAC Tasking
Materials Flammability Working Group

- **Insufficient information regarding costs/benefits to proceed with NPRM**
- **FAA seeks quantitative cost and benefit data for each working group recommendation, if applicable**
- **FAA will provide assumptions on which to base these cost/benefit assessments**
- **Report due 8 months from publication of notice**

Transport Airplane Damage-Tolerance and Fatigue Evaluation- proposed changes:

Boeing Comments:

1. Boeing recommends adding an "or" to the first tasking statement. This is a minor change but is intended clarify that the tasking is not asking for the airworthiness standards to be rewritten unless the ARAC working group's assessment determines new/amended regulation is needed.
2. Boeing also recommends a change to the first tasking. The recommendation is to limit the tasking to Part 25. Part 23 is being completely re-structured and rewritten and while it would be useful to review the Part 23 ARC draft it wouldn't be known for some time whether the ARC proposal will be adopted into regulation. Also, the re-structured Part 23 is expected to go into the rulemaking process in the near future which under the current FAA policy means it will be considered ex parte and therefore makes coordination more difficult. Consistency with Parts 27 and 29 helicopters is considered a significant undertaking given the existing airworthiness standards and design philosophies. Boeing recommends the evaluation to the other Parts (23, 27 and 29) to be addressed in a separate tasking.
3. Boeing recommends adding a new task item to consider work from EASA regarding aging aircraft rulemaking for regulatory harmonization to avoid unnecessary regulatory differences.
4. See redline file.

Airbus Comments:

1. LOVs established under 25.571:
   "Among other things, § 25.571 requires applicants to establish an LOV based on WFD considerations, and identify in the structural-maintenance program all maintenance actions required to address fatigue, environmental damage, and accidental damage up to the LOV."
   The wording that has underscore is actually not required directly by the 25.571. LoV definition is only linked to WFD and maintenance actions required to prevent WFD occurrence. => Airbus requests to clarify this with FAA and refine this tasking before publication.

2. The task in §2(f) and 2(g) is referring to bonding or bolting of repairs and to certification of large structural modifications. One can think this is going beyond a task to review the basic requirement 25.571, and is more a detailed application of the 25.571.
   => Therefore, Airbus requests to clarify with FAA that repairs and modifications should not be focused on, but 25.571 considered as general requirement.

[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Aviation Rulemaking Advisory Committee - New Task

AGENCY: Federal Aviation Administration (FAA), DOT.

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

SUMMARY: The FAA assigned the Aviation Rulemaking Advisory Committee (ARAC) a new task to provide recommendations regarding revision of the damage-tolerance and fatigue requirements of Title 14, Code of Federal Regulations (14 CFR), part 25, including subparts C and E of 14 CFR part 26, and development of associated advisory material for metallic, composite, and hybrid structures. Past changes to the damage-tolerance and fatigue airworthiness standards and advisory material have been more specific to transport airplanes constructed predominantly of metal, using skin-stringer-frame architecture. Today, the trend in industry is to use more composite and hybrid structures (i.e., structure that includes a combination of composite and metallic parts and assemblies) to improve the performance of transport airplanes. As a result, the damage-tolerance and fatigue airworthiness standards and advisory material may not be adequate to address this trend. This notice informs the public of the new ARAC activity and solicits membership for the new Transport Airplane Metallic and Composite Structures Working Group.

FOR FURTHER INFORMATION CONTACT: Walt Sippel, Federal Aviation Administration, 1601 Lind Avenue SW, Renton, WA 98057-3356, walter.sippel@faa.gov, phone

number 425-227-2774, facsimile number 425-227-1232.

SUPPLEMENTARY INFORMATION:

ARAC Acceptance of Task

As a result of the [date of the ARAC meeting] ARAC meeting, the FAA has assigned and ARAC has accepted this task establishing the Transport Airplane Metallic and Composite Structures Working Group, under the Transport Airplane and Engine (TAE) Subcommittee. The working group will serve as staff to the ARAC and provide advice and recommendations on the assigned task. The ARAC will review and approve the recommendation report and will submit it to the FAA.

Background

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.

The Transport Airplane Metallic and Composite Structures Working Group will provide advice and recommendations to the ARAC on the damage-tolerance and fatigue requirements of part 25 and any associated advisory material for metallic, composite, and hybrid structures. This includes the requirements of and regulatory guidance material for subparts C and E of part 26 and any associated advisory material.

The requirements of § 25.571 apply equally to structure constructed from either metallic or nonmetallic materials. Guidance material is contained in the Federal Aviation Administration (FAA) Advisory Circulars (AC) 25.571-1D and 20-107B for metallic and composite structures, respectively. The changes to § 25.571 that the FAA has adopted over the years have been more specific to the technical issues primarily associated with metallic structure. In Amendment 25-

132 to § 25.571, the FAA added requirements for applicants to establish a limit of validity of the engineering data that supports the structural maintenance program (hereafter referred to as LOV) and to demonstrate that widespread fatigue damage (WFD) will not occur in the airplane prior to reaching the LOV. The objective of this change, along with the development of the related guidance material, was focused on addressing the normal fatigue wear-out of metallic structure. Among other things, § 25.571 requires applicants to establish an LOV based on WFD considerations, and identify in the structural-maintenance program all maintenance actions required to address fatigue, environmental damage, and accidental damage up to the LOV. In a similar way, subpart C requires certain actions to prevent catastrophic failure due to WFD throughout the operational life of certain existing transport category airplanes. The FAA also adopted subpart E of part 26 to require holders of design approvals to make available to operators damage tolerance data for repairs and alterations to fatigue critical airplane structure. In addition to AC 25.571-1D, guidance material for subparts C and E of part 26 are contained in ACs 120-104 and 120-93, respectively. Because the adoption of those requirements and § 25.571 were primarily focused on metallic structure, the FAA needs to evaluate those rules and advisory material to determine whether further changes are required to address composite structures.

Remaining Rulemaking Recommendations

In 1995 the FAA tasked the ARAC to recommend appropriate revisions for harmonization of § 25.571, supporting policy and guidance material, and corresponding paragraph 25.571 of the Joint Aviation Requirements (JAR), which is now Certification Specification (CS) 25.571 under the European Aviation Safety Agency (EASA). The ARAC formed the General Structures Harmonization Working Group (GSHWG) to carry out that task. In 2003, the GSHWG submitted the Working Group Report on § 25.571 and JAR 25.571 [CS

25.571] to ARAC. That report described proposed changes to harmonize the rules and related guidance material. The GSHWG recommended revising or adding requirements for inspection thresholds, LOV, and structural damage capability.

Subpart C of part 26 and § 25.571, Amendment 25-132, incorporated the recommendation to add requirements for establishing an LOV. The FAA has not yet addressed the GSHWG recommendations related to inspection thresholds and structural damage capability, and would request these be considered in the context of this rulemaking, which include:

- Replacing the prescriptive requirement of § 25.571(a)(3) for setting damage-tolerance inspection thresholds with a performance-based requirement.
- Adding a requirement for showing structural capability in the presence of damage, so that even if the structure fails partially, there will still be enough structure remaining to be safe.

Increased Use of Composites

Today, the trend in industry is to use more composite structure than in the past. The Small Airplane and Rotorcraft Directorates addressed this trend by creating separate rules for parts 23, 27 and 29 for composite structures (§ 2X.573). This tasking will consider the changes to those rules as part of the evaluation of the damage-tolerance and fatigue airworthiness standards and associated advisory material.

In June of 2009, the FAA Transport Airplane Directorate sought comments through the Federal Register on a need for future rulemaking to address extensive use of composite materials in transport category airplane construction. Several candidate technical areas were noted in the request, including fire safety, crashworthiness, lightning protection, fuel tank safety and damage-tolerance. The response by industry indicated that each area needs improved guidance and

possible rulemaking. We believe the damage-tolerance requirements would require relatively small changes versus some of the updates desired in other areas.

Composite considerations the working group will need to address include:

- Composite analyses and test protocols as related to evolving industry practices and the development of regulatory standards.
- Composite damage threats (e.g., environmental and accidental damage) and associated maintenance practices.
- Large-scale test demonstration of repeated-load reliability and a need to use load enhancement factors for composite structure.
- Thermal stresses generated between metal-composite interfaces, which are difficult to replicate in structural repeated-load testing but are required by § 25.571 to be considered.

Future Applicability

Any future change to § 25.571 should be performance-based to the extent possible, allowing application to not only current aerospace materials and material systems, but those yet to be developed (emerging technology). Guidance material, including changes to AC 25.571-1D, or AC 20-107B, should provide complete guidance for traditional metal structure, composite structure, and hybrid structure (i.e., structures that include a combination of composite and metallic parts and assemblies).

There are other FAA initiatives in the area of transport crashworthiness, fuel tank lightning protection, and composite flammability testing, which will lead to further standardization of requirements related to composite airframes. These initiatives would not affect § 25.571.

The Task

The Transport Airplane Metallic and Composite Structures Working Group is tasked to:

1. Evaluate § 25.571, subparts C and E of part 26, and associated regulatory guidance material (e.g., advisory circulars and policy statements) to determine whether any changes to the airworthiness standards and/or guidance material are required to address transport airplanes being constructed of composite and hybrid structures. [The proposed change is intended clarify that the tasking is not asking for the airworthiness standards to be rewritten unless the ARAC working group's assessment determines new/amended regulation is needed.] ~~The working group is also tasked to evaluate whether any changes to part 25 and the associated regulatory guidance material are required to provide consistency with the damage-tolerance and fatigue airworthiness standards and associated guidance material for parts 23, 27, and 29.~~ [Boeing recommends limiting this tasking to Part 25. Part 23 is being completely re-structured and rewritten and while it would be useful to review the Part 23 ARC draft it wouldn't be known for some time whether the ARC proposal will be adopted into regulation. Also, the re-structured Part 23 is expected to go into the rulemaking process in the near future which under the current policy means it will be considered ex parte and therefore makes coordination more difficult. Consistency with parts 27 and 29 helicopters is considered a significant undertaking given the existing airworthiness standards and design philosophies.

Boeing recommends the evaluation to the other Parts (23, 27 and 29) to be addressed in a separate tasking.]

The working group is requested to include in its evaluation a review of the following advisory circulars (AC) and policy statements (PS):

a. Advisory Circulars: AC 25.571-1, Damage Tolerance and Fatigue Evaluation of Structure; AC 20-107, Composite Airframe Structure; AC 120-93, Damage Tolerance Inspections for Repairs and Alterations; AC 120-104, Establishing and Implementing Limit of Validity to Prevent Widespread Fatigue Damage.~~; AC 27-1, Certification of Normal Category Rotorcraft (specifically, Subpart C – Strength Requirements); and AC 29-2, Certification of Transport Category Rotorcraft (specifically, Subpart C – Strength Requirements).~~ [Boeing recommends limiting tasking to Part 25 only.]

b. Policy Statements: PS-ANM100-1989-00048, Policy Regarding Impact of Modifications and Repairs on the Damage Tolerance Characteristics of Transport Category Airplanes; PS-ACE100-2001-006, Static Strength Substantiation of Composite Airplane Structure; PS-AIR-100-120-07, Guidance for Component Contractor Generated Composite Design Values for Composite Structure; PS-ACE100-2002-006, Material Qualification and Equivalency for Polymer Matrix Composite Material Systems; PS-ANM-100-1991-00049, Policy Regarding Material Strength Properties and Design Values, § 25.613; PS-ANM100-1993, Compliance with § 25.571(e) Discrete Source Damage (Uncontained Engine Failure).

2. Advise and make written recommendations on whether to change 14 CFR part 25, subparts C and E of 14 CFR part 26, and related regulatory guidance material, such as ACs 25.571-1, 20-107, 120-93, and 120-104, to address the use of metallic, composite, and hybrid structures in transport airplanes. In developing the recommendations, the working group is requested to consider:

a. The threats associated with fatigue, environmental exposure, and accidental damage that must be addressed per § 25.571.

b. Applicability to emerging technology materials.

c. The recommendations contained in the 2003 General Structures Harmonization Working Group (GSHWG) report entitled, "Damage Tolerance and Fatigue Evaluation of Structures, FAR/JAR § 25.571." You can find the GSHWG report at http://www.faa.gov/regulations_policies/rulemaking/committees/documents/index.cfm/document/information/documentID/384. The working group recommendations should include whether it is appropriate to:

i. Require applicants to assume the structure contains an initial flaw of the maximum probable size that could exist as a result of manufacturing or service-induced damage.

ii. Add a requirement for showing structural capability in the presence of damage, so that even if the structure fails partially, there will still be enough structure remaining to be safe.

d. The continued operational safety of composite and hybrid structures as they age, including any airworthiness limitations in the structural maintenance program.

e. The testing of hybrid structure, including, but not limited to, addressing thermal effects, test duration, load enhancement factors, and crack-growth retardation.

f. The bonding or bolting of repairs to metallic, composite, and hybrid structures.

g. The certification of large structural modifications on transport airplanes constructed of composite or hybrid structures.

h. The EASA work regarding aging aircraft rulemaking for regulatory harmonization.[Boeing recommends to add to the tasking a statement to consider the work that EASA is currently doing regarding aging aircraft rulemaking regulatory harmonization and eliminate or avoid an unnecessary regulatory differences.]

3. Provide recommendations on appropriate performance-based requirements to address the results of the evaluations above, with consideration of applicability not only to metals and known composites, but also other emerging technology materials.

4. Provide recommendations on any new guidance or changes to existing guidance, including AC 25.571-1D, and AC 20-107B to address the results of the evaluations above.

5. Provide initial qualitative and quantitative costs and benefits. Based on the recommendations, perform the following:

a. Estimate the costs to implement the recommendations;

b. Estimate the benefits of the recommendations in terms of potential fatalities averted;

c. Estimate any other benefits (e.g., reduced administrative burden) that would result from implementation of the recommendations.

6. 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.

7. The working group may be reinstated to assist the ARAC by responding to the FAA's questions or concerns after the recommendation report has been submitted.

Schedule

The recommendation report must be submitted to the FAA for review and acceptance no later than 24 months after publication of this notice.

Working Group Activity

The Transport Airplane Metallic and Composite Structures Working Group must comply with the procedures adopted by the ARAC. As part of the procedures, the working group must:

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 ARAC meeting on Transport Airplane and Engine issues.

3. Provide a status report at each ARAC meeting on Transport Airplane and Engine issues.

4. Draft and submit the recommendation report based on the review and analysis of the assigned tasks.

5. Present the recommendation report at the ARAC meeting on Transport Airplane and Engine issues.

6. Present the findings from the additional tasks at the ARAC meeting on Transport Airplane and Engine issues.

7. Present the findings in response to the FAA's questions or concerns about the recommendation report at the ARAC meeting on Transport Airplane and Engine issues.

Participation in the Working Group

The Transport Airplane Metallic and Composite Structures Working Group will be comprised of technical experts having an interest in the assigned task. A working group member need not be a member representative of the ARAC. The FAA would like a wide range of members to ensure all aspects of the tasks are considered in 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.)

If you wish to become a member of the Transport Airplane Metallic and Composite Structures Working Group, write the person listed under the caption FOR FURTHER INFORMATION CONTACT expressing that desire. Describe your interest in the task and state the expertise you would bring to the working group. The FAA must receive all requests by **[insert date 30 days after publication of this notice]**. The ARAC and the FAA will review the requests and advise you whether or not your request is approved.

If you are chosen for membership on the working group, you must actively participate in the working group by attending all meetings, and providing written comments when requested to do so. You must devote the resources necessary to support the working group in meeting any assigned deadlines. You must keep your management chain 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, the FAA, including the Designated Federal Officer, and the Working Group Chair.

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, meetings of the Transport Airplane Metallic and Composite Structures Working Group 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.

Issued in Washington, DC, on

Lirio Liu
Designated Federal Officer
Aviation Rulemaking Advisory Committee

Transport Airplane Crashworthiness and Ditching Evaluation- proposed changes:

Boeing Comments:

1. General comment regarding the prioritization of this effort; the tasking appears to be a general rulemaking activity intended to convert special conditions to general airworthiness standards, in which case it may be reasonable to allow industry more time to evaluate the tasking.
2. Boeing is also trying to better understand the priority of this proposed tasking. Recognizing the limited rulemaking capacity of the FAA we want to better understand the priority of this tasking versus other potential taskings.

Airbus Comments:

1. Time Schedule and need for rulemaking:
   Using informal contacts, Airbus became aware on Boeing concerns related to this tasking. Airbus concurs with the Boeing concerns on giving priority to this tasking and on the assigned urgency resulting in the time schedule of only 24 Months to finalize this task. Like the Boeing Company Airbus has not identified safety issues in service. We consider composite and hybrid structure are well covered by the special conditions, and therefore we see no need to urgently initiate a heavy rulemaking activity that will be very demanding for both authorities and Industry.
2. Airbus is concerned by this new tasking because the Special Conditions applied on A380 and A350, plus the usual assessment done for ditching, did not reveal any indication that there would be a need for a new or changed rule, except if the SC would be integrated as is. We consider it difficult in getting some form of regulation / acceptance criteria that could reasonably be applied to all large transport aircraft and that in turn did not rely on the new aircraft having to demonstrate equivalence with a CLTA of the same airframe manufacturer.
3. There is also some concern about having – in future- to perform an analysis just because we have now the analysis capabilities, but without any additional safety benefit.
   - ⇨ Airbus would prefer to be able to continue in accordance to the A380 and A350 SC text that has successfully been applied and has shown to give an equivalent level of safety.
4. §§ 25.562: Airbus is worrying that FAA, by using the wording “airframe-level crashworthiness and ditching standards”, may intend including seat standards and occupant survivability in an integrated crashworthiness assessment.
   - ⇨ Before publication, the tasking should be clarified that dynamic seat demonstration should not be integrated in whatever aircraft level crashworthiness rule. However, the WG may be tasked to verify if existing assumptions that have constructed 25.562 are still relevant for composite or hybrid fuselages.

Materials Flammability Working Group- proposed changes:

Boeing Comments:

1. Boeing recommends 18 months instead of 8 month for the tasking. Boeing highly support the FAA proposal but considering: the complexity of the tasking, information not yet available, time it takes to assemble the industry SMEs, coordinating and writing a clear and unambiguous report, 8 months is not sufficient time to complete the tasking.
2. The full benefit analysis of the rulemaking requires an understanding of the proposed rule, AC guidance and means of compliance. The following items are needed for the MFWG to successfully complete a full benefit analysis within the 18 month timeframe:
    a. A full understanding of the proposed regulation including any changes to Appendix F, and any proposed acceptable means of compliance guidance material.
    b. Development of the guidance material will need to be worked actively through the FAATC FTWG in parallel with the MFWG.
    c. The in-service incident data report that is in-work by Ray Cherry and Associates needs to be completed and provided to the MFWG 6 - 9 months following the tasking notice.

ASHWG – December 2014

- Background - Phase 2 Task
  - Provide information that could lead to standards for low speed alerting that can be satisfied with practical design approaches in existing aircraft
  - This includes possible retrofit standards and guidance material for low speed alert systems
  - Report completed August 2012
    - Responses to 10 low airspeed speed alerting technical questions, relative to existing aircraft designs
    - Additional key findings and recommendations
  - Approved in early 2013

ASHWG – December 2014

- FAA proposing design mitigations based on
  - Findings from ASHWG report
  - FAA Evaluation of CAST Airplane State Awareness Study
  - FAA Research Activity
- FAA seeking ARAC input and support for a recommendation
  - Proposed design mitigations
  - Cost and benefit estimates
  - Requested ASWHG review and feedback
- ASHWG meeting on 24 November, 2014
  - No significant objections to the FAA proposal
  - Actions required to complete the assessment, targeted to be complete end of 2014, follow up meeting January 2015

ASHWG – December 2014

- Considerations and actions required to help complete the analysis:
  - The Analysis should consider a third design mitigation, or at the very least clarify that existing aircraft with flight envelope protection provide an equivalent level of safety to “Option 2,” Compliance with the latest 25.1329(h).
  - The FAA will provide a table of the fleet projection used in the cost benefit analysis (completed)
  - The FAA will provide a clarification if freighters are in or out of the scope of this retrofit proposal according to the cost benefit analysis for this type of aircraft (in the table)
  - The ASHWG will provide specific feedback to recurring and non-recurring costs used in the analysis. Note that the EASA representative believes the costs used in the analysis will likely be different in Europe.

TAE Update for ARAC

Dec 18, 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 (LFB)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

Last meeting 23-24th Sept., 2014 in Burlington hosted by FAA

Consensus reached on all tasks:

1. Core ingestion demonstration point
   a. Using the current rule heaviest medium bird for engine throat diameter, one bird, at either:
      i. Climb power setting, 250kias (at 3,000ft altitude, ISA std. day), perform a 20 minute run-on as defined in Large Flocking Bird paragraph.

      or, if no core ingestion at climb setting,

      ii. Approach Idle setting, 200kias (at 3,000ft altitude, ISA std. day), perform the last 6 minutes of Large Flocking Bird run-on after initial 1 minute without throttle movement post-ingestion.
2. LFB for engines with inlets <2.5m^2 – no changes to current rule
   a. Recommend additional tasking for new-technology engines such as Open Rotor
4. Ingestion Database – establish committee under AIA with annual data update and meeting to review.

(Note – Task 3, NTSB recommendations, combined into 1. & 2. above)

TAE Engine Harmonization Working Group

Task: Bird Ingestion Regulation Assessment

Go forward plan:

Work on final report draft for delivery to TAE early Feb 2015

Continue with regular WebEx/telecoms to address action items and keep work progressing – next telecom Nov 24th.

Next meeting December 9-10th hosted by P&W in East Hartford, CT.

On target to provide final report to ARAC for March 2015

ARAC TAE EHWG Engine Bird Ingestion

Working Group Members:

Chris Demers (Pratt & Whitney) WG Co-Chair
Les McVey (General Electric Aviation) WG Co-Chair
Alan Strom (FAA-ANE Standards) FAA Representative
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)

Engine Harmonization WG Report
Engine Endurance Testing

Peter Thompson - ARAC Chair

Progress & Agreements To Date

Intensive discussion on intent of current test - team has reached agreement in principle for alternate test

- R/L runs required, time at R/L to be determined

Variation on current cycle or new cycle, similar to ASD/AIA “IMI” type cycle under evaluation

- Variation on current test easier to reach consensus within team

Demonstration principally test based, augmented by analysis

Red Line demonstration methodology will most likely be changed

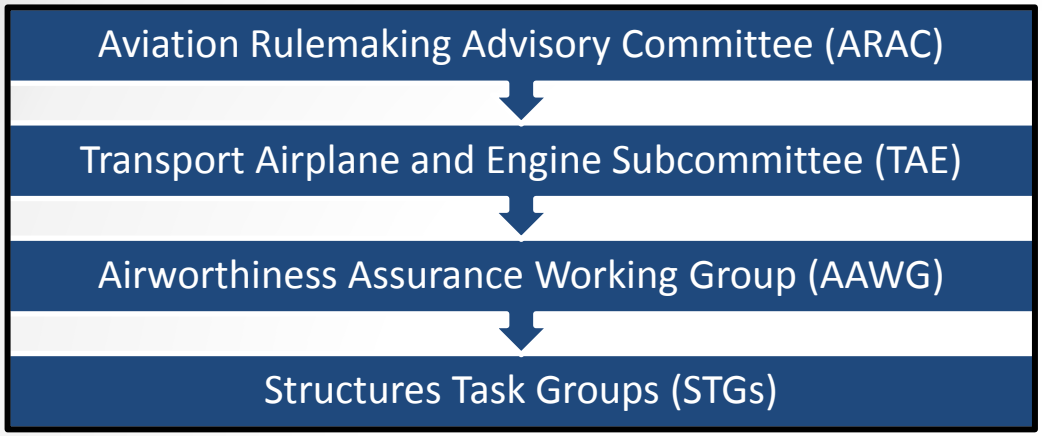
Alternate Endurance Test ARAC

- **Plans**
- Work details of possible approaches to alternate endurance test – identify feasibility by end 4Q14
- Continue WebEx and face-to-face meetings
  - Expand face-to-face meetings to 3 days
- Involve technical expertise as required
- **Concerns**
- Complexity of rule and technical challenges details drive pace of action item closure
- Aggressive schedule to complete tasks for ARAC report submittal to FAA by December 2015
- Harmonized approach needs to be considered

Team Roster

Name	Organization
Peter Thompson (Chair)	GE Aviation
Neill Forrest (Co Chair)	Rolls-Royce (Derby)
Carlos Oncina	Boeing
Walter Drew	Airbus
Pat O'Connell	Rolls-Royce (Indy)
Greg Mias	Pratt & Whitney
Mark Beauregard	Pratt & Whitney Canada
Jim Niessink	Honeywell
Dorina Mihail	FAA
Tony Boud	EASA
Pat Markham	HEICO
Dominique Bouvier	Snecma
Yves Cousineau	TCCA

AAWG Update



The last AAWG meeting was held June 10-11, 2014 in Chicago, Illinois

- 35 Attendees
- 4 regulatory authorities
- 5 manufacturers
- 13 operators

Next Meeting: 1st Quarter 2015

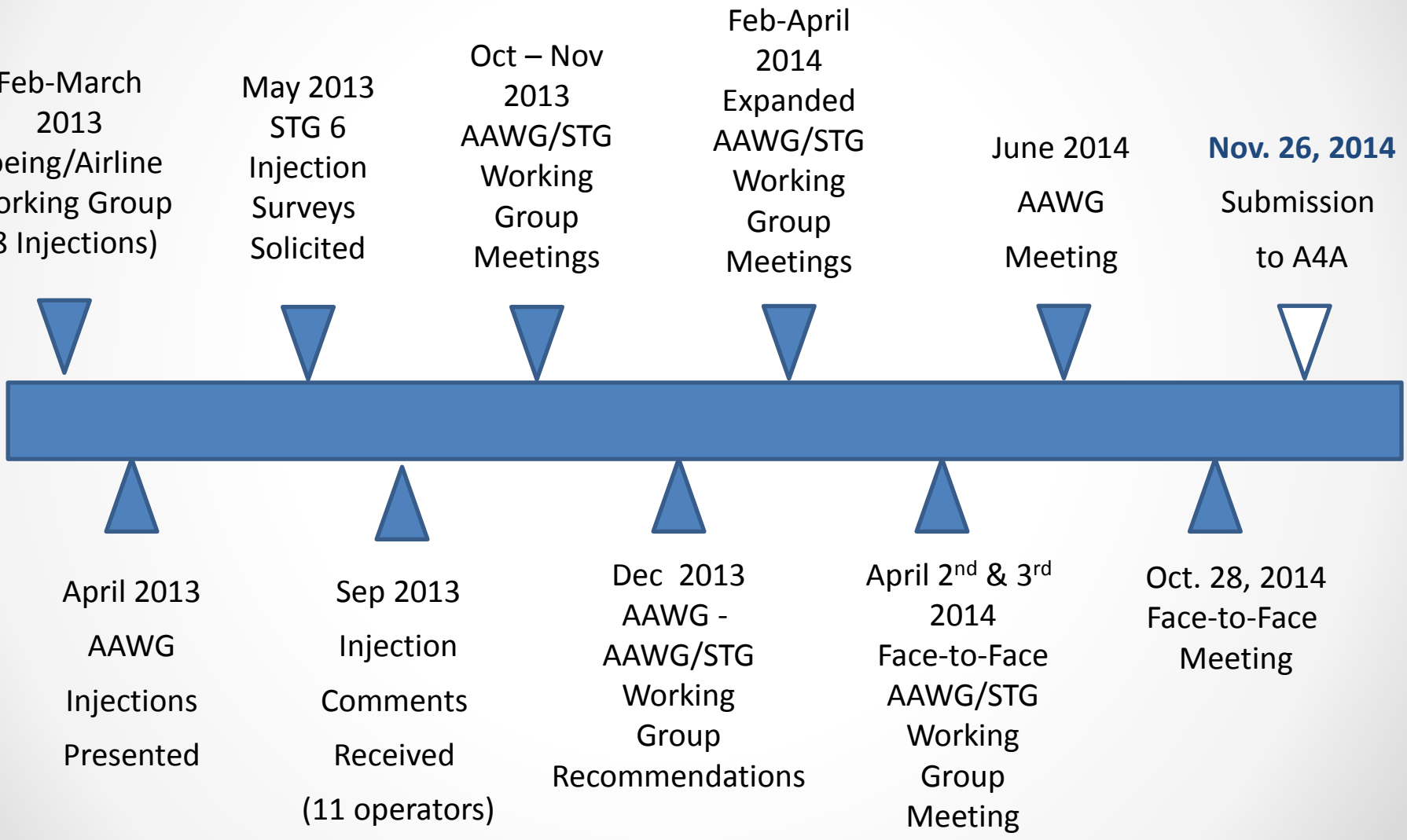
Removable Structural Components

- An AAWG Subteam is developing Industry guidelines that will be submitted to Airlines for America (A4A)
- Their objective was to develop the basis of an ATA document providing common guidance to the industry on identifying and controlling RSCs

Airlines for America (A4A) Document Development:

- Several operators and an MRO shared RSC case studies on how they identify and control RSCs
- A4A presented document format and expectations for draft from the working group
- Decision was made to create a new Air Transport Association (ATA) document
- After discussion of case studies, two subgroups initiated drafting the two main sections of the document

RSC Timeline



Removable Structural Components

- Once the document is approved by A4A, the guidelines will be distributed to OEMs, Operators and MROs.
- Subsequent revisions will be routed through A4A

AAWG Membership

Airbus
- Alain Santgerma
- Marc Bozzolo

Boeing
- Steve Chisholm (Co-Chair)
- Maria Cardwell
- Kevin Donahue
- Sean Harper
- Don Jensen

Bombardier
- Claude Boucher
- Alex Vinitsky

Embraer
- Thomaz Yokoyama
- Luiz Perin
- Carlos Chaves

Lockheed-Martin
- Ralph Sykes

ANAC – Brazil Aviation Safety
- Fabiano Hernandes
- Pedro Caldeira

European Aviation Safety Agency
- Richard Minter

Federal Aviation Administration
- Walt Sippel
- Dale Hawkins
- Michael Gorelik

Transport Canada
- Chuck Lanning
- Hin Tsang

ABX
- Joe Freese

American Airlines
- Phil Yanaconne

All Nippon Airways
- Shinichi Yoshizaki

British Airways
- Phil Ashwell

Delta Air Lines
- Mike Matthews

Deutsche Lufthansa
- Thorsten Koch

FedEx
- Mark Yerger (Co-Chair)
- Steven Rife

Japan Airlines
- Hideaki Morisaki

KLM Royal Dutch Airlines
- Peter Dol

Lynden Air Cargo
- Ethan Bradford

Southwest Airlines
- Vinnie Ploubis

US Airways
- Mike Tallarico
- Lam Nguyen

United Airlines
- Joe Moses

UPS
- Andrew Gallagher
- Bruce Nord

This page contains no technical data subject to EAR or ITAR

Report to ARAC

ARAC-Transport Airplane Performance and Handling Characteristics—Phase 2 Status

Flight Test Harmonization Working Group

Christine Thibaudat – European Co-chair
Robert Park – US Co-chair
November 13, 2014

FTHWG Status Introduction

- **Reminder: In early 2014 the FAA assigned the ARAC Flight Test Harmonization Working Group (FTHWG) a new Phase 2 task to provide recommendations regarding new or updated standards in the highest priority topic areas for airplane performance and handling characteristics.**

- **Phase 2 kickoff meeting (FTHWG-31) took place in Cologne June 2-6, 2014. Topics: Fly by wire Envelope Protection and Lateral/Directional/Longitudinal Stability.**

FTHWG-32 Meeting Agenda

- **October 20/21 (Adaptation for Flight in Icing)**
  - Kick-off discussion on Flight in icing for high incidence protected airplanes (C. Thibaudat, Airbus)
  - Organization presentations regarding their thoughts and general philosophy
  - Build a common understanding on CRIs/IPs differences towards harmonization

Meeting Agenda, Continued

- **October 22 (Envelope Limiting)**
  - Resumption of Envelope Limiting Topic (Brian Lee, Boeing)
  - Presentations of Proposals for Different Limit Types:
    - Attitude Limiting: Boeing
    - Load Factor Limiting: Dassault/Airbus
    - High AOA: Bombardier/Gulfstream
    - Low Energy: TCCA
    - High Airspeed Limiting: Boeing
    - Sideslip Limiting: Textron
  - Discuss how the above proposals fit together and next steps

Meeting Agenda, Continued

- **October 23/24 (Steep Approach Landing)**
  - Introduction to Steep Approach Landing Topic by Claude Duchesne of Bombardier
  - SAL Regulatory Differences Discussion
  - Team Member Presentations
  - Issues Needing Resolution:
    - Identify Issues
    - Identify Subtask Leaders and Members
    - Define Action Items and Schedule
  - Debate Top Harmonization Issues

FTHWG Meeting Schedule/Venue/Topics 1/2

Meeting	Venue	Topics	Dates
FTHWG-33	Airbus/Toulouse	T1 (Envelope Limiting) T2 (Adaptation for flight in icing) T6 (Lateral / directional / longitudinal stability)	9-10 March 2015 11 March 2015 12-13 March 2015
FTHWG-34	Gulfstream/Savannah	T6 (Lateral / directional / longitudinal stability) T13 (Out of trim characteristics) T7 (Side stick controls)	15-16 June 2015 17 June 2015 18-19 June 2015
FTHWG-35	Dassault/TBD	T9 (Wet runway stopping performance) T10 (Runway excursion hazard classification)	21-23 Sept. 2015 24-25 Sept. 2015
FTHWG-36	Embraer/Melbourne FL	T1 (Envelope limiting) T2 (Flight in icing) T11 (Stall speed in ground effect)	7-8 Dec. 2015 9 Dec. 2015 10-11 Dec. 2015

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FTHWG Meeting Schedule/Venue/Topics 2/2

Meeting	Venue	Topics	Dates
FTHWG-37	EASA/Cologne	T16 (HQ Compliance Finding) T9 (Wet runway stopping performance)	7-9 March 2016 10-11 March 2016
FTHWG-38	Bombardier/Montreal	T16 (HQ Compliance Finding) T9 (Wet runway stopping performance)	13-14 June 2016 15-17 June 2016
FTHWG-39	EASA/Cologne	T14 (Tailwind / Crosswind) T11 (Stall speed in ground effect) T15 (PIO/APC)	19-20 Sept. 2016 21 Sept. 2016 22-23 Sept. 2016
FTHWG-40	FAA/TBD	T10 (Runway excursion hazard classification) T16 (HQ Compliance Finding)	5-6 Dec. 2016 7-9 Dec. 2016
FTHWG-41	Airbus/Toulouse	T15 (PIO/APC) T14 (Tailwind / Crosswind)	6-8 March 2017 9 March 2017

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AC 120-17A Maintenance Control by Reliability Methods ARAC Working Group Status Update

Presented to: ARAC

By: Ron Little, Working Group Chair

Date: December 18, 2014

Key Findings – Reliability Program Advisory Circular

- Clarify operator approval authority with a D074
- Reliability program operator applicability
- Remove all references to a specific MSG revision level (ie MSG-2)
- Remove outdated/confusing references (ex. condition monitoring)
- Expand AC Definitions
- The AC should contain flow charts to demonstrate the processes
- Define Operator manual requirements
- Clearly define Data sources and types
- Define Data selection and data sampling criteria
- Define Data display and reporting methods

Key Findings – Reliability Program Advisory Circular (con't)

- Define the use of or a combination of the following control systems:
  - Alert systems
  - Trend monitoring
  - Event-based methodologies
- Define Data collection and analysis methods
- Define approval processes / responsible members within operator's org
- Define operator actions to unacceptable level of performance
- Define the process for determining task effectiveness and optimization
- Define training and experience requirements for Reliability personnel
- Incorporate SMS principles
- Recommend a regular Reliability program auditing requirement

Key Findings – Additional Recommendations

- **Identify and revise conflicting guidance documents**
- **Revise supporting guidance documents**
  - Related to the draft AC
  - Operation Specifications
  - Facilitate 91K application of reliability program
- **Communicate AC changes to the FAA field inspectors**
  - Through new or revised training, FAA Order, memo, etc.
- **Require the operators to report findings from FEC 8 (Hidden Safety) scheduled maintenance tasks**
- **Consider future relevancy based on technological advances**

Going Forward Plan

- **Working Group met Dec. 9 – 12,2014 in Washington, DC at NBAA**
  - Conducted further review and revision of the recommendation report and Advisory Circular
- **Continue to draft recommendation report and Advisory Circular**
  - December thru February – Resolve differences and identify dissenting positions
  - February thru March – Finalize recommendation report and draft Advisory Circular
- **Final Recommendation Report and Advisory Circular**
  - Mar. 3, 2015 – Submit to ARAC
  - Mar. 19, 2015 – Present to ARAC

Aviation Rulemaking Advisory Committee

Airman Certification Work Group Update

- **Work Complete to Date**
  - **Prototype new standards**
    - Initial prototype plan drafted and approved
    - Phase 1 prototype project complete – Nine students
      - New private pilot form tests – developed to new Private Pilot Airman Certification Standard
      - Coded questions and report
    - Surveyed students, instructors and evaluators
  - **Finalize and Publish Commercial and Instructor ACS**
    - Published in Federal Register for public review and comment
    - Comments largely positive
  - **FAA handbook review**
    - Subgroup reviewed both Pilot's Handbook of Aeronautical Knowledge and Airplane Flying Handbook
      - Compiled and submitted suggested revisions to FAA
        - Integrate risk management throughout
        - Ensure harmonization with Airman Certification Standard
      - Drafting enhanced AFH Chapter 4 – Slow Flight, Stalls, and Maintaining Aircraft Control
        - Better address the risks of Loss of Control – inflight
    - Draft Practical Exam Plan of Action review and comments
    - Draft Order – Designee Handbook review and comments
  - **Test Question review**
    - ACS Exam Board (AEB) - FAA and one industry participant reviewing test questions
      - Map to ACS and ensure accuracy, relevancy, and guidance
- **Next Steps – Transition into Phase 3 of work plan**
  - **Draft ATP ACS**

- **Expand Prototyping**
  - Orlando FSDO region
  - Include independent flight instructors, university/college programs, academies, and traditional flight schools
    - Part 61 and 141
    - Designated Pilot Examiners (DPEs)
  - Continued feedback collection – not limited to applicants, instructors, and examiners
- **Amend and Finalize Instructor ACS**
  - Incorporate public comments
  - Refine format
    - Incorporation by reference to foundational ACS
  - Working with Orlando FSDO to refine
    - Table-top exercise planned
- **Next F2F Meeting**
  - January 6-7, Washington, DC

Submitted on behalf of the ACS working group

December 2, 2014

By

David Oord

ACSWG Chair

Aviation Rulemaking Advisory Committee (ARAC) Bylaws

Effective Date

Section I: Purpose

The Federal Aviation Administration (FAA) Aviation Rulemaking Advisory Committee (ARAC) provides advice and recommendations to the FAA on a broad range of rulemaking activity.

The ARAC will undertake only FAA-assigned tasks and manage administrative issues, including the review and approval of recommendation reports. The ARAC, in coordination with the FAA, may establish subcommittees and/or working groups to support completion of the ARAC's tasks. A subcommittee does not work independently of the ARAC. All subcommittee recommendation reports are submitted to the ARAC for deliberation, discussion and approval. Working groups are *ad hoc* and therefore temporary in nature. Working groups address a specific task and dissolve upon completion of the assignment.

Section II: Authority

The FAA Administrator determined the establishment of the ARAC is in the public's interest. The ARAC is subject to the Federal Advisory Committee Act (FACA), as outlined in its Charter (FAA Order 1110.119P), filed with the Congress on September 17, 2014. All activities of the ARAC, including its technical support groups, will comply with FACA, (Title 5 of the United States Code (5 U.S.C.) App. 2) (Pub. L. 92-463; 86 Stat. 770), and the requirements in 41 Code of Federal Regulations (CFR) parts 101-6 and 102-3, Federal Advisory Committee Management; Final rule. (66 F.R. 37728, July 19, 2001).

The FAA Administrator is the ARAC's sponsor; the ARAC reports to the Administrator, through the Associate Administrator for Aviation Safety (AVS-1); .and the Office of Rulemaking (ARM) provides support services.

Section III: Membership Selection and Appointment

A. ARAC

The ARAC currently consists of 25 voting member organizations, selected by the FAA Administrator, through the AVS-1. The member organizations represent parties of the aviation community directly and indirectly impacted by FAA regulations.

Member organizations nominate, and AVS-1 designates, ARAC member representatives who (1) hold appropriate authority in the designated organization to speak for it and the community or industry represented; (2) are not registered lobbyists participating on ARAC if participating in their "individual capacity" (registered lobbyists are allowed to participate on ARAC 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"); (3) provide a balance in points of view regarding the functions and tasks to be performed by the ARAC.

AVS-1 also designates the Chairperson and the Vice Chairperson, who serve two-year terms. Normally, the Vice Chairperson will succeed the Chairperson.

The ARAC voting member associations and organizations are:

1. Aerospace & Defense Industries Association of Europe (ASD)
2. Aerospace Industries Association (AIA)
3. Aeronautical Repair Station Association (ARSA)
4. Air Line Pilots Association, International (ALPA)
5. Airlines for America (A4A)
6. Aircraft Electronics Association (AEA)
7. Aircraft Owners and Pilots Association (AOPA)
8. Airline Dispatchers Federation (ADF)
9. Airports Council International, N.A. (ACI)
10. Association of Flight Attendants (AFA)
11. Aviation Consumer Action Project (ACAP)
12. Boeing Commercial Airplane Group
13. Cargo Airline Association (CAA)
14. Experimental Aircraft Association (EAA)
15. Embry-Riddle Aeronautical University (ERAU)
16. General Aviation Manufacturers Association (GAMA)
17. Helicopter Association International (HAI)
18. International Association of Machinists and Aerospace Workers (IAMAW)
19. National Air Carrier Association, Inc. (NACA)
20. National Air Disaster Alliance Foundation (NADA)
21. National Association of Flight Instructors (NAFI)
22. National Business Aviation Association, Inc. (NBAA)
23. National Organization to Insure a Sound-control Environment (N.O.I.S.E)
24. Pratt & Whitney (P&W)
25. Regional Airline Association (RAA)

At the FAA's discretion, additional organizations may be added to the ARAC.

The European Aviation Safety Agency and Transports Canada participate as non-voting members of ARAC. The FAA may consider other Civil Aviation Authorities for non-voting status upon request.

B. Subcommittee

ARAC, in consultation with the DFO, may establish subcommittees to address a specific technology or segment of the aviation industry. The FAA will consider establishing a subcommittee when the FAA determines that multiple tasks with the same technical or industry expertise will be assigned to the ARAC.

The DFO confirms subcommittee member organizations to ensure the membership is fairly balanced in terms of knowledge, expertise, and points of view of those represented, and functions to be performed by the subcommittee. Subcommittee member representatives (1)

hold appropriate authority in the designated organization to speak for it and the community or industry represented; (2) provide a balance in points of view regarding the functions and tasks to be performed by the subcommittee; and (3) are not registered lobbyists participating on ARAC if participating in their "individual capacity" (registered lobbyists are allowed to participate on ARAC 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").

Currently, the Transport Airplane and Engine (TAE) Subcommittee addresses tasks related to design and production issues specific to the large aircraft and engine segments of the regulations and industry.

The TAE Subcommittee voting member associations and organizations are:

1. Pratt & Whitney
2. ALPA
3. A4A
4. ASD
5. Airbus
6. Boeing
7. GAMA
8. AIA
9. ANAC
10. Bombardier
11. NADA/F

At the FAA's discretion, additional organizations may be added to the subcommittee.

The European Aviation Safety Agency and Transports Canada participate as non-voting members of the subcommittee. The FAA may consider other Civil Aviation Authorities for non-voting status upon request.

C. Working Groups

A working group should include a diverse and balanced representation of the aviation industry capable of providing a thorough examination of the issues that will need to be addressed in order to complete the assigned task. A working group may include, but is not limited to, representatives of any of the ARAC member organizations.

The FAA Representative reviews the list of individuals who responded to the *Federal Register* notice. Each working group member should be selected based on his or her: (1) technical expertise in the task area; (2) range of perspective; (3) ability to effectively represent their constituent group and to participate fully; and (4) are not registered lobbyists participating on ARAC if participating in their "individual capacity" (registered lobbyists are allowed to participate on ARAC 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").

Section IV: Meeting Procedures

The ARAC will meet approximately four times a year, to manage administrative issues, address subcommittee and working group assignments, provide final advice, and approve recommendation reports. Currently, the TAE Subcommittee meets approximately two times a year to manage administrative issues, address subcommittee and working group assignments, provide final advice, and approve recommendation reports

All ARAC and subcommittees meetings are open to the public, unless otherwise determined in advance, and the minutes are prepared, maintained and made publicly available as set forth in this Section. Working group meetings are not be open to the public nor are official minutes prepared or made publically available.

For each ARAC or subcommittee meeting, the Designated Federal Officer (DFO) or FAA Subcommittee Lead, in consultation with the Chairperson, will:

A. **Prepare an Agenda**: Any ARAC member or member of the public may submit items for the agenda to the DFO, FAA Subcommittee Lead, or the Chairperson. Agendas are outlined in the *Federal Register* and distributed to the ARAC or subcommittee members before each meeting.

B. **Keep Minutes and Records**: Minutes of all ARAC and subcommittee meetings must be prepared and include:

   1. The time, date, and place of the meeting.
   2. A list of the attendees at the meeting, including members of the public.
   3. A complete and accurate description of matters discussed and conclusions reached with a description of public participation, including the members of the public who presented oral or written statements.
   4. Copies of all materials received, issued, or approved.

   The Chairperson of the ARAC or the subcommittee approves the accuracy of the minutes. Once approved, ARM will publish minutes on the FAA committee website and will be available to the public upon request. Working groups are not required to prepare meeting minutes.

C. **Meetings**: All ARAC and subcommittee meetings are open to the public, except as provided under Section 10(d) of FACA, as implemented by 41 CFR § 101-6.10, the Government in the Sunshine Act (5 U.S.C. § 522b(c)), 41 CFR Part 102-3, and Department of Transportation (DOT) Order 1120.3B.

   The FAA will consider public participation in determining when and where an ARAC or subcommittee meeting will take place.

   Members of the public may attend any meeting or portion of a meeting and may, at the determination of the Chairperson, offer oral comment. The Chairperson may decide in advance to exclude oral public comment during a meeting, in which case the meeting

announcement published in the *Federal Register* will note that oral comment from the public is excluded and will invite written comment as an alternative. Members of the public may submit written statements to ARAC through the DFO at any time.

All materials brought before, or presented to, the ARAC during the conduct of a meeting, including the minutes of the proceedings of a meeting, will be available to the public for review or copying at the time of the scheduled meeting.

Working group meetings are not open to the public, but non-working group members may attend by invitation.

Section V: Role of ARAC Officials

Chairperson: The Chairperson works with the DFO to establish priorities, identify issues to be addressed, determine the level and types of staff required, and serves as the focal point for the ARAC's membership. In addition, the Chairperson (1) presides over ARAC meetings; (2) is responsible for approving the accuracy of minutes; (3) designate working groups, determine the issues they are to address, and determine the length of their existence; and (4) submits the working group recommendation report to the FAA.

Vice Chairperson: The Vice Chairperson works with the Chairperson. If the Chairperson is unavailable, the Vice Chairperson will serve in his or her place.

Designated Federal Officer (DFO): The Director of the Office of Rulemaking, ARM-1, serves as the FACA-required DFO for ARAC and serves as the government's representative for all matters related to the ARAC's activities. If ARM-1 is unavailable, an alternate DFO will serve in his or her place. The law requires the DFO to: (1) approve or call ARAC meetings; (2) approve agendas; and (3) ensure that a full-time salaried FAA official authorized to adjourn the meeting whenever doing so would be in the public interest is present at all ARAC meetings.

In addition, the DFO is responsible for providing adequate staff support for ARAC administrative functions, namely: (1) notifying members of the time and place for each meeting; (2) publishing meeting agendas in the *Federal Register*; (3) maintaining meeting records; (4) maintaining accurate membership records; (5) preparing the meeting minutes; (6) attending to official correspondence; (7) maintaining official records and filing all papers and submissions prepared for or by the ARAC; and (8) preparing and handling all reports, including the annual report as required by FACA.

Subcommittee Chairperson: The Subcommittee Chairperson may establish working groups to address subcommittee tasks. The Subcommittee Chairperson will (1) set the agenda for subcommittee meetings in coordination with the FAA Subcommittee Lead; (2) preside subcommittee meetings; (3) assume responsibility for tasks assigned to the subcommittee,; (4) oversee the subcommittee working groups; (5) approve the accuracy of the meeting minutes; (6) communicate subcommittee activities to ARAC during public meetings; and (7) submit accepted recommendation reports to ARAC for approval.

FAA Subcommittee Lead: The FAA Subcommittee Lead (1) serves as the FAA's spokesperson for all activity within the subcommittee; (2) approves each agenda and attends each subcommittee public meeting; (3) adjourns each subcommittee public meeting when he or

she deems it to be in the public interest; and (4) serves as the focal point for all communications between the ARAC and the FAA when an issue in the subcommittee is addressed.

Working Group Chairperson: The Working Group Chairperson, who is selected by the FAA and works with the FAA Representative throughout the duration of the working group (1) calls all meetings of the working group and determines where they are to be held; (2) notifies all working group members of the time, place, and agenda for any meeting; (3) assumes responsibility for tasks assigned to the working group; (4) reports updates to the ARAC or the subcommittee, as appropriate; and (5) submits the final recommendation report.

FAA Representative: The FAA Representative is selected from the sponsoring office to serve on ARAC and subcommittee working groups. The FAA Representative: (1) develops the tasking; (2) selects and notifies the working group members and the Working Group Chair; (3) briefs the working group about the tasking; (4) assists the Chairman in calling meetings and developing meeting agendas; (5) provides the FAA's position; (6) attends all meetings and is authorized to adjourn the meeting whenever doing so would be in the public interest; and (7) reports progress to FAA management.

Section VI: Role of ARAC and Subcommittee Member Representatives

ARAC and subcommittee member representatives, or alternates, are expected to:

1. Attend ARAC meetings in person or by the alternative means provided.
2. Represent the member organization in a manner that ensures its position is incorporated in the advice and recommendations made by the ARAC.
3. Use available resources to seek information, opinions and data from members of the community, public or industry represented, so it may represent the interests of their segment of the aviation industry as well as the industry in general.
4. Join or otherwise actively support one or more of the subcommittees and/or working groups.
5. Review and approve ARAC and subcommittee working group recommendation reports.
6. Inform the ARAC Chairperson or Subcommittee Chairperson and the DFO when he or she can no longer represent his or her organization/association on ARAC or the subcommittee.

Section VII: Reimbursement

Members of the ARAC serve without compensation. Transportation and per diem expenses may be paid when necessary and appropriate.

Section VIII: Registered Lobbyist

All persons participating with ARAC at any level will be vetted through the U.S. House and Senate registered lobbyist database to determine whether the person is a federally registered lobbyist subject to the registration and reporting requirements of the Lobbying Disclosure Act of 1995 (LDA) as amended, 2 U.S.C 1603, 1604, and 1605, at the time of appointment or reappointment to the ARAC.

The Office of Management and Budget (OMB) issued guidance on August 13, 2014 revising a June 18, 2010 Presidential memorandum "Lobbyists on Agency Boards and Commissions." The revised guidance continues the ban on registered lobbyists participating on Agency Boards and Commissions if participating in their "individual capacity." The policy applies to all persons who are serving in an individual capacity as members of ARAC and any of its subcommittees or other work groups that performs preparatory work for ARAC. Committee members do not include individuals who are invited to attend meetings of committees on an ad hoc basis. Lobbyists may also appear or otherwise communicate with a committee to provide testimony, information, or input in the same manner as non-lobbyists who are not members of or appointees to ARAC.

However, 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."

An individual who has previously served as a federal registered lobbyist may be appointed or re-appointed in an individual capacity only if he or she has either filed a bona fide de-registration or has been de-listed by his or her employer as an active lobbyist reflecting the actual cessation of lobbying activities or it they have not appeared on a quarterly lobbying report for three consecutive quarters as a result of their actual cessation of lobbying activities.

FAA staff will consult with ARM-1 and AGC-200 if there are any questions regarding whether a person being considered for an appointment to ARAC falls within the prohibitions on participation. For further information, see OMB "Revised Guidance on Appointment of Lobbyists to Federal Advisory Committees, Boards, and Commissions." (79 FR 47482, August 13, 2014.)

Section IX: Additional Information

The General Services Administration's Committee Management Secretariat is responsible for government-wide oversight of advisory committees. The Secretariat will provide advice as needed to ensure compliance with all federal advisory committee statutes and regulations.