

**Aviation Rulemaking Advisory Committee (ARAC)
Transport Airplane and Engine (TAE) Subcommittee**

Meeting Minutes

Date: February 24, 2015
Time: 10:30 a.m. (EST)
Location: N/A

Call to Order /Administrative Reporting

Mr. John Piccola opened the meeting at 10:35 a.m.

Item	November 2014 Meeting Action Items	Status
1	N/a	
2		

Following the reading of the Opening Statement, Mr. Craig Bolt shared the agenda (Handout 1).

Engine Harmonization Working Group – Bird Ingestion Report Vote (see Handout 2)

Mr. Chris Demers and Mr. Les McVey presented this report.

The report received unanimous support from all working group members.

Mr. Keith Barnett stated he appreciated the executive summary very much.

Mr. Bolt had a question regarding Appendix B—that the report referenced other reports, but contains no information on where to find those report. He suggested that the working group insert a link to these referenced reports. Mr. Demers agreed.

There are no further questions for the report.

Mr. Bolt called for a vote to move this report to ARAC for review. All members of TAE votes to move this report to ARAC for review.

This report is accepted.

Mr. Bolt thanks the EHWG for a thoroughly-written and timely report from the working group.

Avionics System Harmonization Working Group – Phase 2 Low Speed Alerting Response to FAA Request For Information (see Handout 3)

Mr. Clark Badie presented this report.

The working group presented potential guidance materials and standards for low speed alerting in early 2014. The last quarter of 2014, the FAA used the working group's submission to develop a report with two low-speed alerting design mitigation options, then requested feedback from the working group.

The feedback comments were mainly on the technical challenges the manufacturers may face in implementing a feasible solution, the associated costs, and also proposed a third design mitigation.

Mr. Doug Khim asks what is the next step for this project? Mr. Badie states that all final edits will be incorporated to the report. Mr. Bolt states that, after that, if TAE is OK with the report, it would move to ARAC for approval, and with ARAC approval, it would be submitted to the FAA.

Mr. Bolt called for a vote to move this report to ARAC for review.

All members of TAE votes to move this report to ARAC for review.

Proposed Tasking on Transport Airplane Crashworthiness and Ditching Evaluation

Mr. Ian Won presents this presentation.

This rulemaking intends to address new technology, while maintaining the current level of safety. This is not only to address use of composite materials in airplanes, but all new technology.

Mr. Khim presents Boeing's comments to the proposed tasking. (See Handout 4.) Boeing does not see a specific, high-priority need for this rulemaking. If the FAA intends to pursue this, Boeing supports this rulemaking, and wants to ensure that the new requirements are par with the level of safety already maintained by current certification procedures, and that we do not introduce additional requirements that would make the certification process more difficult without leading to significant safety increase. Boeing also believes 18-months tasking is not sufficient time, but a 24-months tasking would ensure a more thorough exploration of the topic, as well as work with EASA. Boeing suggests that rather than establish "new" safety level as the tasking current states, but more accurately to "maintain current level of safety. Also, what constitutes "unconventional design" would differ according to different manufacturers, and is therefore unclear.

Mr. Won states that while the FAA believes that is a good scope to maintain the current level of safety, the team did not write that detail because it does not want to limit ARAC to that scope. Further, while less so for larger airplanes like Boeing, smaller airplanes have a wide range of crashworthiness performance level that are well-documented for the FAA. There are configuration differences that can affect airplane crashworthiness. While a blended-wing might be far-off in the future, these other configurations are not. The FAA does not intend to add requirements that would not help safety, but is looking for requirements that cover large parts of the airplane and larger groups of people. Regarding the level of safety, the standard would maintain that level in consideration of the current and future design and construction methods.

Mr. Rolf Grenier states that Airbus does not currently see the need for, or safety benefit in this tasking.

Mr. Barnett asks a question regarding scope, that it would be difficult to complete this tasking even in 24-months, if it requires the consideration of all “conventional” or “unconventional” designs. What kind of designs would this apply to—if all current designs are “conventional”, what is unconventional? Mr. Won states that the FAA will consider this and return with a more specific definition.

Mr. Piccola states that the safety benefit for the issues explored in this tasking will be determined during FAA rulemaking process later-on.

Mr. Won states that the FAA will change the length of tasking to 24 months.

Someone states taskings benefit from being more-specifically written. If it is defined too broadly, historically working groups have found it difficult to provide answers or come to agreements.

Mr. Grenier states that, if this tasking goes forward, it should be closely coordinated with EASA. Mr. Won agrees that the FAA will coordinate closely with EASA.

Mr. Khim states that this tasking looks like two taskings in one, and may require two subject-matter experts per organization to fully consider both crashworthiness and ditching issues. Mr. Won states that the two subject matters were kept together in one tasking because of the people working on it, timing for publication, and convenience. Mr. Grenier states that splitting the tasking and assign it to two working groups may be more streamlined and effective.

Mr. Piccola states that the FAA will consider the comments received today, re-send the tasking to TAE for consideration, then move it onwards to ARAC consideration at its March 2015 meeting.

New Tasking: Materials Flammability

Mr. Bolt states that Material Flammability working group will have a new tasking.

New Tasking: Transport Airplane Metallic and Composite Structures

Mr. Bolt states this tasking requires TAE to form a new working group. Interested organizations must submit their application by Feb 25, 2015.

Action Item Review/ Any Other Business

Mr. Barnett states that, at one point, TAE had a list of which working group were working on which tasking, and is this still being tracked. Mr. Bolt states that this is not currently tracked, but he will draw up a list.

Item	February 24, 2015 Meeting Action Items	Status
1.		

Future Transport Airplane and Engine Subcommittee Meetings:

The next subcommittee meeting will be held on June 3, 2015 at the Boeing Building in Arlington, VA.

Public Notification

The *Federal Register* published a notice of this meeting on February 6, 2015.

Approval

I certify the minutes are accurate.



Craig R. Bolt
Assistant Chair, ARAC

MEETING ATTENDEES

NAME	ORGANIZATION
John Piccola	FAA
Craig Bolt	
James Wilborn	FAA
Mary Schooley	FAA
John Gross	
Doug Khim	Boeing
Terry Trip	
Steve Chism	
Guizman	
Jill DiMarco	
Walter Dirogio	GAMA
Ralen Gao	FAA
Rolf Grenier	Airbus
Tom Peters	Embraer
Michel Provencher	TCCA
Dorina	FAA
Alan Strom	FAA