



## AVIATION RULEMAKING ADVISORY COMMITTEE (ARAC)

### FEDERAL AVIATION ADMINISTRATION

June 20, 2019

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#### ARAC MEETING 1:00 p.m.

- Welcome and Introductions
  - Federal Advisory Committee Act (FACA) Statement
  - Ratification of Minutes
  - Status Reports
    - ARAC
      - Updates to Previously Accepted Recommendation Report
        - ❖ Rotorcraft Bird Striking Working Group – Rev. B
      - Airman Certification Systems Working Group – Mr. David Oord
        - ❖ Covering expanded tasks and proposed timelines (Interim Recommendations Due to FAA: 12/2019; ARAC Meeting: 9/2019)
        - ❖ Expanded Tasks to include Sport Pilot and Recreational Pilot certificates (Interim Recommendations Due to FAA: TBD; ARAC Meeting: TBD)
      - Part 145 Working Group – Ms. Sarah McLeod
        - ❖ Preliminary Report (Due to FAA: 12/31/2020; ARAC Meeting: September 2020)
        - ❖ Final Report (Due to FAA: 12/31/2021; ARAC Meeting: September 2021)
    - Transport Airplane and Engine (TAE) Subcommittee – Mr. Keith Morgan
      - Flight Test Harmonization Working Group
        - ❖ Topic 31 Definitions for Vdf/Mdf (Recommendations Due to FAA: 9/2019; ARAC Meeting: 9/19/2019)
        - ❖ Topic 19 Return-to-Land (Recommendations Due to FAA: 12/2019; ARAC Meeting: 12/12/2019)
        - ❖ Transport Airplane Performance and Handling Characteristics, Phase 3 Tasking (Recommendations Due: 5/1/2020; ARAC Meeting: 3/19/2020)
      - Metallic and Composite Structures
        - ❖ Expanded Taskings (Recommendations Due: December 2019; ARAC Meeting: 12/12/2019)
      - Avionics System Harmonization Working Group
      - Ice Crystals Icing Working Group
  - Recommendation Reports
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- Transport Airplane and Engine (TAE) Subcommittee – Mr. Keith Morgan
  - Flight Test Harmonization Working Group – Go-Around Handling Qualities & Performance; Topic 18
- New Taskings
  - Flightdeck Secondary Barrier Working Group
  - Designated Pilot Examiner Working Group
- Any Other Business
  - FAA update on regulatory reform

ARAC agendas, meeting minutes, and reports are available on the FAA's committee website at [https://www.faa.gov/regulations\\_policies/rulemaking/committees/documents/index.cfm/committee/browse/committeeID/1](https://www.faa.gov/regulations_policies/rulemaking/committees/documents/index.cfm/committee/browse/committeeID/1).

**AVIATION RULEMAKING ADVISORY COMMITTEE  
RECORD OF MEETING**

**MEETING DATE:** December 13, 2018

**MEETING TIME:** 1:00 PM EST

**LOCATION:** Federal Aviation Administration  
800 Independence Avenue, SW  
McCracken/Huerta Collaboration Room  
Washington, DC 20591

**PUBLIC ANNOUNCEMENT:** The Federal Aviation Administration provided notice to the public of this Aviation Rulemaking Advisory Committee meeting in a *Federal Register* notice published on November 14, 2018 (84 FR 56895).

**ATTENDEES:** **Committee Members and Alternates**

Yvette A. Rose	Cargo Airline Association (CAA) <i>ARAC Chair</i>
David Oord	Aircraft Owners and Pilots Association (AOPA) <i>ARAC Vice Chair</i>
Lirio Liu	Federal Aviation Administration (FAA) Office of Rulemaking <i>Designated Federal Officer (DFO)</i>
Lorelei Peters	FAA Assistance Chief Counsel, Regulations Division
Andrew Applebaum	FlyersRights.org
Chad Balantine	Air Line Pilots Association (ALPA)
Michelle Betcher	Airline Dispatchers Federation (ADF)
Ambrose Clay*	National Organization to Insure a Sound Controlled Environment (NOISE)

Walter Desrosier	General Aviation Manufacturers Association (GAMA)
Gail Dunham	National Air Disaster Alliance Foundation
Paul Hudson	FlyersRights.org
Robert Ireland	Airlines for America (A4A)
Pascal Joly*	Aerospace and Defence Industries Association (ASD)
Sarah MacLeod	Aeronautical Repair Station Association (ARSA)
Chris Martino	Helicopter Association International (HAI)
Dinkar Mokadam	Association of Flight Attendants (AFA)
Keith Morgan	Pratt & Whitney
George Paul	National Air Carrier Association (NACA)
Ric Peri	Aircraft Electronics Association (AEA)
Melissa Sabatine	American Association of Airport Executives
Jennifer Sunderman	Regional Airline Association (RAA)

**Attendees**

Ricki Gardonio*	Air Line Pilots Association
David Supplee*	International Association of Machinists and Aerospace Workers (IAMAW)
Julie Brightwell	Boeing
Maryanne DeMarco	Coalition of Airline Pilots Associations
Daniel Friedenjohn	Embry-Riddle Aeronautical University
Brianna Gurciullo	Politico
Brian Lee*	Boeing Flight Test Harmonization Working Group Chair
Leslie Riegle	Aerospace Industries Association (AIA)

Beverly Grissom	U.S. Citizen
Ronald Freeman	U.S. Citizen
Jose Castedo	FAA
Thuy Cooper	FAA
Brent Hart	FAA
Daniel Leach	FAA
Amy Lubrano	The Regulatory Group/FAA
Lakisha Pearson	FAA
Todd Steiner	FAA
Paul Takemoto	FAA
Patricia Williams*	FAA
Dan Kearns*	FAA
Alan Strom*	FAA
James Wilborn*	FAA

\*Attended via teleconference.

### ***Welcome and Introduction***

Ms. Yvette Rose, ARAC Chair, called the meeting to order at 1:07 pm. Ms. Rose invited those individuals who attended in person to introduce themselves and took a roll call of those individuals who attended via teleconference.

Ms. Lirio Liu, Designated Federal Officer (DFO), read the required Federal Advisory Committee Act (FACA), Title 5, United States Code (5 U.S.C.); Appendix 2 (2007) statement. Ms. Liu confirmed that the meeting is public and that members of the public may address the ARAC with the permission of the Chair.

### ***Ratification of Minutes***

Ms. Rose asked if there was a motion to approve the minutes from the September 20, 2018, ARAC meeting. Mr. Chris Martino moved to accept the minutes and Mr. Walter Desrosier seconded the motion. The ARAC voted to ratify the minutes.

### ***Status Reports***

\*\* Status reports and recommendation report briefings presented at the December 2018 meeting may be found at [https://www.faa.gov/regulations\\_policies/rulemaking/committees/documents/media/ARAC%20December%202018%20Meeting%20Package%20\(FINAL%2012-13-18\).pdf](https://www.faa.gov/regulations_policies/rulemaking/committees/documents/media/ARAC%20December%202018%20Meeting%20Package%20(FINAL%2012-13-18).pdf).

### **Updates to Previously Accepted Recommendation Reports**

Ms. Rose provided updates on four recommendation reports that the ARAC accepted at previous meetings.

#### ***Rotorcraft Occupant Protection Working Group (ROPWG) Task 6 Recommendation Report***

Ms. Rose first addressed the ROPWG Task 6 Final Recommendation Report, which the ARAC considered and approved during its September 20, 2018 meeting. Ms. Rose noted that the ARAC approved the report with the stipulation that any references to the ARAC lobbying Congress for funding be modified. Ms. Rose stated that the ARAC received changes to that report on September 27, 2018. The report was modified to suggest the FAA “seek authority and funding” through “whatever means available” to perform additional functions the ROPWG recommends. Regarding tax credits or other financial incentives, the report now suggests the FAA make recommendations to Congress that they offer incentives to help improve rotorcraft safety. The wording changes now places the onus on the FAA without the ARAC directly tasking Congress. Ms. Rose noted that, with that change, the report was submitted to and accepted by the FAA on October 3, 2018. Ms. Rose noted that the revised report is available on the ARAC’s website.

Mr. Paul Hudson said it was his understanding that the ARAC agreed at the September meeting to put off the vote on this report until the December meeting because of the objection to the wording. Ms. Rose responded that the minutes reflect that the ARAC voted to approve the report provided that the clarification was made. Mr. Hudson said he had objected to the substance of the report and was expecting to discuss some of the particulars of the report at this meeting. He asked for time to submit a written submission on the report. Ms. Rose responded that the report has already been accepted by FAA, so any comments from ARAC members would need to be submitted directly to the FAA.

Ms. Dunham said she understood the motion to remove, not modify, the language in question. Ms. Rose noted that the ARAC voted to remove language in a different report, and the vote with respect to this report was to modify the language.

#### ***Transport Airplane Crashworthiness and Ditching Evaluation Working Group (TACDWG) Recommendation Report***

Ms. Rose next addressed the TACDWG Recommendation Report, which the ARAC also considered and approved during its September 20, 2018, meeting, leaving the record open for 30 days for the Association of Flight Attendants (AFA) to submit language to be inserted prior to the executive summary and for the removal of pages 2 and 3. Ms. Rose noted that the TACDWG submitted a revised report on October 17, 2018, removing the original second and third pages. Ms. Rose also noted that AFA submitted alternative language for the report on October 19, 2018. Finally, Ms. Rose noted that the revised report was submitted to FAA on October 22, 2018.

Mr. Dinkar Mokadam clarified that AFA submitted an alternate version of the executive summary to the report.

### ***Rotorcraft Bird Striking Working Group (RBSWG) Recommendation Report***

Ms. Rose next addressed the RBSWG Recommendation Report, which the ARAC considered and approved during its December 2017 meeting. Ms. Rose noted that the report needed a technical change, and the revised report now has a Revision A, dated September 20, 2018. Ms. Rose stated ARAC did need to vote on the revised report because the technical change did not alter the content of the report.

### ***Rotorcraft Occupant Protection Working Group (ROPWG) Task 5 Recommendation Report***

Ms. Rose addressed the ROPWG Task 5 Recommendation Report, which the ARAC considered and approved during its March 15, 2018, meeting. Ms. Rose noted that after the FAA received the report, it had some clarification questions. Ms. Rose further noted that FAA submitted those questions to the ARAC in a letter dated September 20, 2018, and the ROPWG Chair, Mr. Dennis Shanahan, submitted a response to the FAA's questions on November 1, 2018.

Ms. Dunham asked about the status of the ROPWG's Task 6 Recommendation Report, and Ms. Rose responded that the FAA accepted the report, and is currently reviewing that report.

### ***Airman Certification Systems Working Group (ACSWG) Interim Recommendation Report***

Mr. David Oord, ACSWG Chair, provided a status report for the ACSWG, including an overview of membership, a summary of tasking, an overview of the ACSWG's schedule, and the status of tasking.

Mr. Oord addressed an area of consideration for the ARAC related to the Instructor Airman Certification Standard (ACS). Mr. Oord noted the draft ACS was reviewed and approved by the ARAC at its September meeting, but the working group decided it wanted to introduce a new revised area on slow flight, stalls, and spins. The new task – Task B – is titled *Demonstration of Flight Characteristics at Various Configurations and*

*Airspeeds*. Mr. Oord noted the new task has the applicant demonstrate that he or she can operate the aircraft between slow flight and stall, in various configurations.

Mr. Oord then next addressed a second area of consideration for the ARAC, which is a testing standard for aviation maintenance inspection authorizations (IA). Mr. Oord stated that the IA testing standard replaces the existing IA test guide and incorporates the information into a test matrix. Mr. Oord noted that the IA information guide will continue intact and will continue to provide an overview of the IA work. He further noted that the testing standard demonstrates the subjects (i.e., inspections, major repairs and major operations, regulations and publications, and waiting ballots), and every subject includes a knowledge element and risk management element, in line with the previous airman certification standards. He stated that an IA will continue to be a FSDO recommended applicant, and he or she will take a 50-question knowledge exam based on the new testing standard.

Mr. Ric Peri said he understands the reorganization of the testing standards, but he questioned the scope of the tasking. He noted the introduction of slow flight and spins is an actual new criteria, which he did not believe is an ACSWG task. Mr. Peri asked whether there is a conflict or expansion of tasking. Mr. Oord responded that some members in the working group felt that as you transition from slow flight to stalls, the transition is quick and abrupt, and the new task will help instructors and applications understand that transition. Mr. Peri expressed concern that the working group was reaching beyond the scope of the ACSWG. He noted the task was to focus on the standards for testing, not the criteria for testing. He said he is uncomfortable with adding criteria under this project. He also said he understood the tasking was to take the existing standards and put them into a more viable testing system but not necessarily to go in and revise the testing criteria in the process.

Mr. Oord disagreed and stated the working group tasked included reviewing the testing standard as it currently exists and incorporating all the knowledge elements the applicant needs to know and all the risk management elements the applicant should consider. Mr. Oord said the working group took a holistic approach. During that process, elements were either combined, eliminated, and added, which he sees as the only way to improve the system. Ms. Rose noted that all of the ACSWG's reports will go to the public for comments.

Ms. Rose called for a vote on whether to accept the ACSWG's interim recommendation report. Mr. Desrosier asked for clarification as to why it is an interim report, and whether it's because the tasking recommended an interim report. Mr. Oord said they are doing an interim report because the FAA cannot act upon that testing standard until the ARAC approves it. Mr. Peri asked whether the public gets an opportunity to submit comments

on interim reports before the Agency acts. It was noted that the FAA will publish the draft standard in the *Federal Register* for public comment.

Mr. Bob Ireland moved to approve the ACSWG's Interim Recommendation Report. Mr. George Paul seconded the motion. The ARAC voted to approve the Interim Report.

### **Part 145 Working Group**

Ms. Sarah MacLeod, Part 145 Working Group Co-Chair provided a status report for the Part 145 Working Group, including an overview of membership, a summary of tasking, an overview of the working group's schedule, and the status of tasking.

Ms. MacLeod stated that the working group's efforts will have three phases: review of the rule; review of related guidance material; and develop recommendations for clarifications.

Ms. Rose asked whether the working group plans to submit a work plan, per the committee manual. Ms. MacLeod said she can do that, but she thought the status report replaced the work plan. Mr. Peri, Part 145 Working Group Co-Chair, echoed Ms. MacLeod, saying that the task is very narrow and focused, and that the summary of tasking page of the status report is the work plan. Ms. Rose said the ARAC will consider that summary to be the work plan.

Mr. Oord asked about balance and representation in the membership of the working group. He noted that several members are from the same organizations and asked whether there was a reason for that. Ms. MacLeod responded that the FAA selected working group members from submissions. She noted that for balance, she and Mr. Peri advised the FAA on people they thought should be represented, and she provided FAA with an exhaustive list of directly impacted part 145 stakeholders (i.e., small, big, engines, airframes, etc.). She stated that future reports will note what element of part 145 the member represents. Mr. Peri clarified that they did not recommend persons, they recommended companies. He noted that a *Federal Register* notice went out that solicited people, and to make sure they had a cross-representation of part 145s, Mr. Peri and Ms. MacLeod then recommended certain categories of companies, which resulted in the FAA selecting companies and then the companies selected the individuals.

### **Transport Aircraft and Engine (TAE) Subcommittee**

Mr. Keith Morgan, TAE Subcommittee Chair, provided an overview of the TAE's schedule and provided status updates for the TAE Subcommittee's working groups – the Flight Test Harmonization Working Group, the Transport Airplane Metallic and

Composite Structures Working Group, the Avionic Systems Harmonization Working Group, and the Ice Crystal Icing Working Group.

***Flight Test Harmonization Working Group (FTHWG)***

Mr. Morgan provided a status report for the FTHWG, including an overview of membership, a summary of tasking, an overview of the working group's Phase 3 schedule, and the status of tasking.

***Transport Airplane Metallic and Composite Structures Working Group***

Mr. Morgan provided a status update for the working group. Mr. Morgan noted that the ARAC accepted the working group's recommendation report at the September 2018 meeting, but the working group received approval for an extension to address three additional topics. Mr. Morgan provided an overview of membership, a summary of the original tasking, a summary of the tasking for the three extended topics, and an overview of deliverables and schedule.

***Avionics System Harmonization Working Group (ASHWG)***

Mr. Morgan noted that the ASHWG is new and developing the work plan and schedule, which it will present at the ARAC's March 2019 meeting.

***Ice Crystals Icing Working Groups (ICIWG)***

Mr. Morgan provided a status update for the ICIWG, including an overview of membership, summary of tasking, overview of schedule, and status of tasking. Mr. Morgan noted this is also a new working group. The ICIWG will develop the work plan, deliverables, and schedule at its first meeting in January 2019.

***Recommendation Reports***

**Flight Test Harmonization Working Group (FTHWG) Topic 30 Controllability During Low Speed OEI RTO Recommendation Report**

Mr. Brian Lee, FTHWG Co-Chair, provided an overview of the FTHWG's recommendation report. The overview included a summary of membership, an overview of the schedule, a summary of the tasking, background of the tasking, a summary of method and deliberations, and a summary of the recommendations. The FTHWG Topic 30 Controllability During Low Speed One Engine Inoperative Rejected Takeoff (OEI RTO) Recommendation Report may be found at [https://www.faa.gov/regulations\\_policies/rulemaking/committees/documents/index.cfm/document/information/documentID/3803](https://www.faa.gov/regulations_policies/rulemaking/committees/documents/index.cfm/document/information/documentID/3803).

Mr. Lee provided the following summary of the FTHWG's recommendations:

- Subpart B Regulations:
  - None necessary.
- Subpart B Guidance:
  - Recommending the introduction of low speed RTO controllability demonstration by flight test or simulation on a dry runway.
- Operations and Procedures:
  - Do not take off on a runway surface that is contaminated with wet ice.
  - Consider using lower thrust if shown to be safe.
  - Consider loading the airplane in mid to forward Center of Gravity (CG) range.
  - Adjust rudder pedal position so that full rudder and full differential brakes can be applied simultaneously in the same sense.
  - Include Update information in Operating and/or Training Manuals.
- Flight Crew Training:
  - Introduce specific ground training for low speed OEI RTO including slippery runways. Objective is to:
    - Raise awareness of flight crews for the potential controllability issue.
    - Emphasize training for quick reactions.
    - Introduce training for use of differential braking.
    - Introduce recommendation for proper pedal adjustment before takeoff.
    - Include/update information in Operating and/or Training Manuals.
  - Introduce dedicated simulator task with low speed OEI RTO on slippery runways. Intent is to:
    - Revise academic syllabus and simulator training sessions to include an event focused on the particular challenges.
    - Revise FAA's AFD (Flight Standards) takeoff safety training aid.
- Cockpit Ergonomics:
  - Include additional guidance for 14 CFR 25.777 to ensure simultaneous full rudder and full differential braking can be achieved by crews of different statures.
  - Mr. Lee noted EASA has already acted on this recommendation; it has already introduced a Notice of Proposed Amendment (NPA).

Mr. Lee stated that the recommendations include specific wording for Subpart B Guidance and specific example text for the other topics.

While the report received no dissents, Mr. Lee noted three working group members made comments. Mr. Lee provided a summary of the comments and the working group's responses, which are addressed in the report.

Mr. Paul asked how the first recommendation in the report lined up with Takeoff and Landing Performance Assessment (TALPA) terminology. Mr. Lee said he believes it is aligned. Ms. Rikki Gardonio responded that the recommendation is in line with the current TALPA wording. Another member confirmed that the language in the recommendation is in line with the TALPA wording

Mr. Peri asked about Alaska Airlines' involvement in the working group. Mr. Paul said they were very involved with TALPA.

Mr. Desrosier said the report updates and aligns the testing criteria for the design and certification of new products more consistently with the best practices that have been occurring in the operating environment. He noted that the proposal is not what has to be done for the operating of these aircraft. It is just the proper criteria for the methodology and testing.

Ms. Rose asked whether the working group recommended regulatory changes or guidance or a combination of both. Mr. Lee noted the working group recommends (1) no changes to subpart B regulations, (2) additional material in subpart B guidance, and (2) making recommendations to individuals outside the working group's purview (operations and procedures and training folks) for additional guidance for the systems world (14 CFR 25.777).

Regarding the need to align regulations with guidance (in performance-based rules), Ms. MacLeod said she understands this to mean that you have to cover all "known operating conditions," and she asked whether she is correct in assuming that this is now a known operating condition that the guidance will suggest be covered in certification. Mr. Lee answered yes. He reiterated that the working group does not see a need to change the regulation (14 CFR 24.143) because it already calls for adequate controllability and maneuverability in each flight condition and in transitions between each flight condition. He further stated that by use of the introduction of new guidance material, the working group is in essence acknowledging this operating condition that may not have been covered before.

Mr. Oord moved to accept the report. Mr. Paul seconded the motion. The ARAC voted to approve the FTHWG's Topic 30 Recommendation Report.

### ***Other Business***

### **FAA Reauthorization**

Ms. Liu provided an overview of the FAA Reauthorization Act of 2018. She noted that FAA has identified 32 regulatory actions. Of the 32 regulatory actions, six relate to

current rulemakings and one is complete because it was a directive to rescind a rule that FAA never moved forward with. As to the 25 remaining regulatory actions, FAA is assessing the safety impacts, scope, resource and complexity of each provision to determine the appropriate time to incorporate them into the FAA rulemaking program. Ms. Liu noted there are just under 60 items on the Spring Agenda, which is high workload program.

Ms. Liu indicated the FAA identified 12 committees in the reauthorization bill, which included both aviation rulemaking committees and FACA committees. The Reauthorization included taskings for ARAC. The FAA will determine the timing of those tasks to ARAC.

### **FAA Update on Regulatory Reform**

In fiscal year (FY) 2018, Ms. Liu stated that the FAA balanced its budget to comply with Executive Order (E.O.) 13771. Ms. Liu said the FAA issued no regulatory items and five deregulatory items, with a \$64 million savings. Ms. Liu noted that the definition of a “regulatory item” is one that adds requirements and has added costs. Ms. Dunham asked where they can see this, and Ms. Liu responded that it is available on the DOT website. Ms. Dunham asked for someone to send the ARAC the link.

For FY 2019, Ms. Liu stated that FAA is on track right now. The FAA anticipates one regulatory and six deregulatory items. She noted that the budget would be balanced but the FAA also has to work with new requirements. Ms. Liu also noted that some safety rules have been designated non-significant (from a cost standpoint), so FAA does not have to count them as a regulatory action for purposes of E.O. 13771 (but some of those non-significant rules have cost savings and can be counted as a deregulatory action).

Mr. Clay asked whether credits carry over from one budget year to the next. Ms. Liu responded that it is OMB’s prerogative. She noted that executive orders apply to Departments, so DOT is balancing its budget as a whole at a departmental level and OMB can also transfer budget across Departments.

Ms. Liu addressed the list of recommended deregulatory items it received from the ARAC and the list it received based on responses to the DOT’s *Federal Register* notice. She noted FAA is working through the combined list and will be requesting new projects based off that list. Ms. Liu said that any new rulemaking projects will come from the deregulatory list or be related to the reauthorization bill. Mr. Hudson noted there is an October 5, 2019, deadline on a Congressional mandate for seat regulations, and he asked what the progress is on that regulation. Ms. Liu said FAA is looking at all requirements and is assessing the timing of them based on safety considerations.

Ms. Dunham asked about a master spreadsheet FAA previously provided the ARAC, which listed working groups and timelines for recommendation reports. Ms. Dunham said the spreadsheet was helpful and she asked whether the ARAC could get another

copy of it. Ms. Liu noted this is a working document for the working group chairs but it can be available to the group as needed.

Ms. Dunham commented that she did not remember seeing the FAA notices about the four new working groups. Ms. Rose said the notices were in the *Federal Register*. Ms. Dunham asked if FAA is anticipating any additional working groups. Ms. Liu responded that FAA has not received any requests for tasking but two new taskings are required in the reauthorization bill. She said the FAA is looking at resources and balancing FAA's current regulatory program with items called out in the legislation along with committee activities to determine sequence and timing for these tasks.

Ms. Dunham asked whether the Air Cargo Load Master Working Group's work is complete. Ms. Rose noted the working group has completed its work and ARAC accepted the Recommendation Report at the June 21, 2018 meeting and the report was then submitted to the FAA. She noted any issues related to the report should be directed to the FAA.

Regarding the list of 2 for 1 recommendations submitted by ARAC on September 12, 2017, Mr. Desrosier noted that many recommendations were very technical (e.g., Transport Airplanes, part 25). ARAC recommended the TAE further evaluate those issues. Mr. Desrosier said there is a lot of interest from members on TAE, and he asked whether there is a mechanism by which the TAE can review them and provide information to the ARAC or whether this requires a tasking or decision from the FAA. Ms. Liu stated the FAA must first task ARAC, then ARAC could assign it to TAE. She noted the FAA is still going through that list and the FAA is trying to only task issues if it has the bandwidth to act on the recommendations from the ARAC. FAA is trying to avoid assigning a task just to have the ARAC's recommendations sit in a holding pattern until FAA has time to address the issue.

Mr. Pascal Joly asked about possible new activities related to supersonics. Ms. Liu noted there are two rulemaking programs (available on DOT website). The first rulemaking addresses part 91 and is essentially a cleanup with publication expected in Spring 2019. The second rulemaking addresses part 36 noise take-off and landing with publication expected in June 2019 (but possibly later in the fiscal year). Ms. Liu noted these are internal agency projects with no taskings to the ARAC.

Mr. Peri raised the issue of how important the availability of regulation preambles is to the process of aligning guidance and policy to the regulatory intent. Unlike a rulemaking preamble, Advisory Circular (AC) does not include the reasoning for performance-based ACs. The public must go through the formal Freedom of Information Act process to obtain detailed information for ACs. Mr. Peri asked whether it is possible for ARAC to help FAA figure out a mechanism for obtaining this information or to figure out what information should be in public domain when FAA is using performance-based rules.

Mr. Peri used the part 145 repair station training program as an example. He noted that all of the data on public comments and on the resolutions on those comments is not in the

docket because it was related to an AC and not the rulemaking. Mr. Peri asked whether there is an opportunity for the ARAC to have a group look at this new generation of performance-based rules and make a recommendation to the FAA on what data should be available for purposes of transparency and of researching in the future. Ms. Liu noted the agency is not intentionally trying to hide how it dispositions comments, but there is a less structured approach in the AC process. This has made it difficult to find the record. Ms. Liu noted this is a workload issue, which is probably why there was not as much structure with the AC process in the past. She said she will seek FAA Counsel's guidance on whether there is something more the agency wants to do. Ms. Lorelei Peters noted that performance standards should be in the regulatory text, which goes through notice-and-comment. The ACs should just contain guidance materials. She noted the FAA tries to publish proposed guidance materials with the associated rulemaking. Mr. Peri noted the regulation for the repair station training programs has five lines with the detail and content contained in the AC. The AC actually contains what is required to receive approval for your training program. Mr. Peri suggested ARAC could assist the FAA with capturing information that is needed to have transparency for ACs.

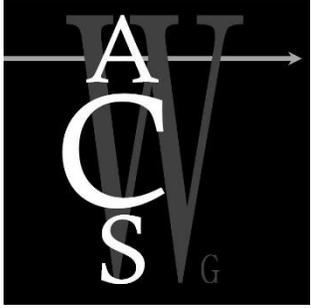
Mr. Desrosier noted there are several examples in the RGL where publicly available ACs and policy statements included the draft and disposition of comments. He noted these are extremely valuable and helpful, and that a tool is readily available. He said FAA should consider whether it can make available through this tool, the draft documents and the disposition or a summary of disposition of comments. Ms. Rose noted the ARAC would have to be tasked by the FAA to make recommendations about this. Ms. MacLeod noted that the working group chairs could ask for those resources if they are not forthcoming. She also noted that the FAA is re-assessing the dynamic regulatory system to help have a 1-stop shop for regulatory compliance.

Ms. Liu provided the ARAC's meeting schedule for 2019: March 21, June 20, September 19, and December 12.

Ms. Dunham asked about the ARAC's charter. Ms. Liu noted that the charter was approved but some memberships are still pending.

### ***Adjournment***

Ms. Rose adjourned the meeting at 2:51 p.m.



# Airman Certification System Working Group Status Report to the Aviation Rulemaking Advisory Committee

**David Oord**  
Working Group Chair

June 3, 2019





# MEMBERS of ACSWG - INDUSTRY

- David Oord, AOPA
- Paul Alp, Jenner & Block
- Cindy Brickner, SSA
- Paul Cairns, ERAU
- Kevin Comstock, ALPA
- Mariellen Couppee, Honeywell
- Eric Crump, Polk State College
- David Dagenais, FSCJ
- Maryanne DeMarco, CAPA
- Anna Dietrich, Terrafugia
- Rick Durden, Independent
- Megan Eisenstein, NATA
- David Earl, Flight Safety
- Tom Gunnarson, KittyHawk
- Lauren Haertlein, GAMA
- John Hazlet Jr., RACCA
- Jens Hennig, GAMA
- Chuck Horning, ERAU
- David Jones, Avotek
- John King, King Schools
- Janeen Kochan, ARTS Inc.
- Kent Lovelace, UND
- Justin Madden, AMFA
- John McGraw, NATA
- John “Mac” McWhinney, King Schools
- Crystal Maguire, ATEC
- Nick Mayhew, L3
- Phillip Poynor, NAFI
- Jimmy Rollison, FedEx
- JR Russell, NBAA
- Mary Schu, Mary Schu Aviation
- Roger Sharp, Independent
- Jackie Spanitz, ASA
- Burt Stevens, Oxford Flying Club, Inc.
- Robert Stewart, Independent
- Tim Tucker, Robinson
- Robert Wright, NBAA
- Donna Wilt, SAFE
- Roger Woods, Leonardo
- Philipp Wynands, Metro Aviation

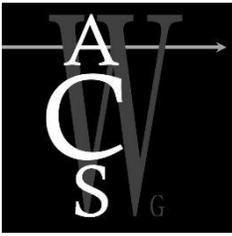




## MEMBERS of ACSWG – FAA SMEs

- Susan Parson
- Barbara Adams
- Bill Anderson
- Brianna Aragon
- Robert Burke
- Dennis Byrne
- James Ciccone
- Bryan Davis
- Joel Dickinson
- Troy Fields
- Ramona Fillmore
- Adam Giraldes
- Shawn Hayes
- Vanessa Jamison
- Laurin J. Kaasa
- Jeffrey Kerr
- Ricky Krietemeyer
- Mike Millard
- Anne Moore
- Kevin Morgan
- Margaret Morrison
- Richard Orentzel
- Katie Patrick
- Andrew Pierce
- Robert Reckert
- Jason Smith
- Shelly Waddell Smith
- Jeff Spangler
- Robert Terry
- Matt Waldrop
- Larry West
- Stephanie Williams
- Jimmy Wynne

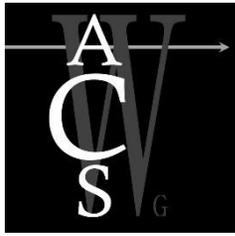




# SUMMARY OF TASKING

- Provide recommendations regarding standards, training guidance, test management, and reference materials for airman certification purposes.
- Continuation of ATP, Instructor, and Aircraft Mechanic certificates.
- Revisions for Private, Commercial, Remote Pilot certificates and the Instrument Rating.
- Added Sport and Recreational Pilot certificates – airplane.
- Added Private, Commercial, ATP, and Instructor certificates and Instrument Rating in additional aircraft categories—
  - Rotorcraft, powered lift, lighter-than-air, glider, etc.





# SCHEDULE

- Interim reports
  - PVT, COM, ATP, Instructor, and AMT certificates and Instrument Rating – no later than June, 2018 - complete
  - Covering expanded tasks and proposed timelines for completion – no later than December, 2019
- Final recommendation reports no later than June 12, 2020



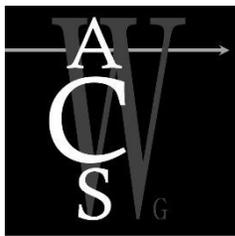
# SCHEDULE

- Future Meetings –
  - June 18 & 19
  - September 25 & 26
  - December 10 & 11



# STATUS OF TASKING

- Overall, with the expanded and new tasks, working group remains on track to meet its schedule.



# AIRMAN CERTIFICATION SYSTEM

Statutes provide for the Administrator to determine qualifications and to use designees to examine/test/issue certificates.

## 49 USC 44703

The Administrator of the Federal Aviation Administration shall issue an airman certificate to an individual ...qualified for...the position to be authorized by the certificate.

## 49 USC 44702

(d) DELEGATION The Administrator may delegate to a qualified private person ...a matter related to—(A) the examination, testing, and inspection necessary to issue a certificate under this chapter; and (B) issuing the certificate

**14 CFR part 61: FAA regulations set forth the requirements and conditions for issuance of pilot/instructor certificates & rating in terms of aeronautical experience and broad subject areas for aeronautical knowledge and flight proficiency (skill).**

## Implementing Guidance

Through the Aviation Rulemaking Advisory Committee (ARAC), the FAA receives essential advice and recommendations from the aviation community on keeping all components of the airman certification system up to date in the context of constant change.

- Specific guidance to designees via the Practical Test Standards or Airman Certification Standards for a given certificate or rating.
- Keeping FAA advisory handbooks up to date
- Best practices for effective testing

Changes: Regulations, Policies, Procedures, Feedback

The diagram illustrates four key components of the Airman Certification System, each with a representative image and a brief description:

- ACS codes Standards:** Represented by the cover of the 'Private Pilot - Airplane Airman Certification Standards' handbook. Description: 'Combined certification standards for knowledge, risk management, and skill'.
- enable Guidance:** Represented by the 'Airplane Flying Handbook'. Description: 'Rules, H-series handbooks, Advisory Circulars, other FAA information sources'.
- continuous alignment Testing:** Represented by a network diagram of satellites. Description: 'Knowledge exam, oral and practical tests for issuance of certificate or rating'.
- Reporting & Statistics Change Management:** Represented by a screenshot of the 'Airman Testing' website. Description: 'Awareness, Desire, Knowledge, Ability, Reinforcement via disciplined change management plan with associated communications strategy'.

Alignment as appropriate with other Certificates / Ratings





# AREAS of ARAC CONSIDERATION

- **Draft Airman Certification Standards**
  - Commercial Pilot – Powered-Lift (FAA-S-ACS-2)
  - Commercial Pilot – Helicopter (FAA-S-ACS-16)
  - Instrument Rating – Helicopter (FAA-S-ACS-14)

**Part 145 Working Group  
Status Report to the  
Aviation Rulemaking Advisory Committee**

**Sarah MacLeod and Ric Peri**

Working Group Chairs

June 2019 Meeting

# Members of the Part 145 Working Group

Paul Cloutier  
Working Group Representative

Brent Hart  
Analyst

Thuy Cooper  
Analyst

Justin Smith  
Director of Operations

Craig Fabian  
Regulatory Compliance Leader

Mark House  
Senior Business Process Manager

Sarah MacLeod  
Executive Director

FAA—Flight Standard Services  
Repair Station Branch

Federal Aviation Administration  
Office of Rulemaking

Federal Aviation Administration  
Office of Rulemaking

Quality Aviation Instruments, Inc.,  
D/B/A QAI

GE Engines

GE Engines

Aeronautical Repair Station Association

# Members of the Part 145 Working Group

Rick Tober

Director of Quality

Tim Miller

Vice President / Safety, Quality & Technical Training

Richard Macklosky

Manager, Regulatory Management Civil Aviation

Jeff Eagle

Senior Regulatory Compliance Specialist

Howard Whyte

Quality Fellow—Regulatory

Eric M. Monte

Principal Quality Assurance Engineer

Triumph Group Operations

Aviation Technical Services

United Technologies Corporation

United Technologies Corporation

Pratt & Whitney

United Technologies Aerospace Systems DBA

Hamilton Sundstrand Worldwide Repair

Rockwell Collins

# Members of the Part 145 Working Group

~~Michael Tharp~~

~~Senior Principal Engineer~~

~~Component Engineering~~

David Fitzsimmons

Program Manager

Rodney Markesbery

Program Manager

Regulatory Compliance

~~Ronald Witkowski~~

~~Director of Quality – Regulatory Compliance~~

Richard (Ric) Peri

Vice President Government & Industry Affairs

Sam Porter

Senior Quality Manager

~~Delta TechOps~~

Delta TechOps

Delta TechOps

~~Gulfstream~~

Aircraft Electronics Association

Sikorsky

A Lockheed Martin Company

# Members of the Part 145 Working Group

Joe Sambiase  
Director Airworthiness & Maintenance

General Aviation Manufacturers Association

Jeremy Bryck  
Senior Director 145 Maintenance

Air Methods Corporation

Justin Madden  
Legislative Affairs Director

Aircraft Mechanics Fraternal Association (AMFA)

Stephanie Branscomb  
Director of Operations  
Quality Manager

Wysong Enterprise

Gary Daniel  
Avionic Certification

Wysong Enterprise

Stephen R. Wysong  
President

Wysong Enterprise

# Members of the Part 145 Working Group

John Fox

Accountable Manager

Senior Manager, Quality Control

Steven Brewer

Manager Structure Engineering

Bill Hanf

Owner

Samuel Edwards

Administrative Manager

Jeffrey Orth

Senior Regulatory & Compliance Specialist

United Airlines, Inc.

Kalitta Air

Green Mountain Avionics

Boeing Commercial Airplanes

Boeing Global Services

# Recognized Observers to the Part 145 Working Group

Brian Koester  
Manager, Flight Operations & Regulation

Carol Giles  
Aircraft Maintenance and Systems  
Technology Committee Liaison

Art Smith  
Vice President-Chief Quality Officer

National Business Aircraft Association

National Air Transportation Association

AAR Corporation

# SUMMARY OF TASKING

- Comprehensive review of internal and external guidance material – relate to laws and regulations – on certificating and overseeing all part 145 repair stations
  - ✓ Orders, notices, advisory circulars, job aids and safety assurance system (SAS) Data Collection Tools (DCTs)
  - ✓ Laws, executive orders
- Recommend improvements to guidance documents to ensure they—
  - ✓ Align with regulations, laws and executive orders
  - ✓ Annotate the applicable regulations, laws or executive orders
    - ✓ Are numbered to establish a relationship between the guidance and the underlying regulation
  - ✓ Communicate agency expectation of compliance to the public and FAA workforce in a comprehensive and consistent manner, with tools to ensure application and evaluation is based on performance-based oversight
  - ✓ Account for oversight of repair stations vis-à-vis amount, type, scope and complexity of the certificate holders' work and its size
- Develop a preliminary and final report containing the recommendations

# SCHEDULE

- Preliminary report within 24 months from the first meeting of the Part 145 Working Group (December 11, 2018 means no later than Friday, December 11, 2020)
- Final report will be submitted no later than 12 months after the preliminary report is forwarded to the FAA by ARAC (earliest week of December 13, 2021).
- Working group meetings to conduct the study
  - ✓ First Thursday of every month starting February 7 (**on hold over summer**)
    - Review laws, regulations, executive orders and guidance material
    - Align guidance to public and FAA workforce with regulation
  - ✓ Twice yearly face-to-face for 2-1/2 days – invite subject matter experts and realign detail work with overall tasks – May 7-8; November 13-14
  - ✓ **Added face to face in September to ensure all SME's could participate.**

# STATUS OF TASKING

- Second meeting May 2019
- Presentations by Subject Matter Experts
  - Department of Transportation Office of Inspector General – review of its reports on repair station oversight and other issues of importance to maintenance and aviation safety
  - Government Accountability Office – review of reports on repair station oversight and other issues of importance to maintenance and aviation safety
  - Flight Standards – AFS 900 – reviewed history of Safety Assurance System (SAS) and its current state and status; how the additions and changes are internally vetted
- Reviewed issue statement(s) and developed template for addressing each section and paragraph of part 145 to explain its scope/meaning and acceptable means of compliance.

# AREAS of ARAC CONSIDERATION

Hopefully always none, otherwise advised.

**Transport Aircraft and Engines  
Subcommittee  
Status Report to the  
Aviation Rulemaking Advisory Committee**

**Keith R. Morgan**  
Committee Co-Chair

20 June 2019

# MEMBERS of the Transport Aircraft and Engines Committee

Pratt & Whitney

ALPA

A4A

ASD

Airbus

Boeing

GAMA

AIA

Bombardier

NADA/F

Embraer

# SCHEDULE

- Last Meetings:
  - Nov. 15, 2018 Seattle, WA
  - Telecom March 20, 2019
  - Face-to-face May 15, 2019 (Washington)
- Next meetings:
  - Telecom July 24, 2019
  - Face-to-face Nov. 6, 2019 (Seattle)

# Flight Test Harmonization Working Group Status Report to the Aviation Rulemaking Advisory Committee

**Brian P. Lee, Boeing**  
**Christine Thibaudat, Airbus**  
Working Group Chairs

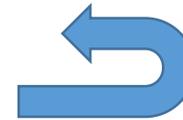
15 May 2019

# MEMBERS of Flight Test Harmonization Working Group

Authorities	OEM's		Operators	Observers
FAA Joe Jacobsen Bob Stoney Paul Giesman	Airbus Laurent Capra + SME's	Embraer Murilo Ribeiro + SME's	ALPA Rikki Gardonio Len Quiat	JCAB (Japan) Takahiro Suzuki Atsushi Fukui
EASA John Matthews Marco Locatelli	Boeing Paul Bolds- Moorehead + SME's	Gulfstream Mike Watson +SME's		CAAI (Israel) Yshmael Bettoun
Transport Canada Lee Fasken	Bombardier Tony Spinelli +SME's	Textron Kurt Laurie +SME's		Norwegian Airlines John Lande
ANAC (Brazil) Pedro Donato	Dassault Philippe Eichel +SME's			

# SUMMARY OF TASKING

- Transport Aircraft Performance and Handling Characteristics, Phase 3
- Long list of topics prioritized in Phase 1 (June, 2013 – June, 2014)
- Phase 2 Complete November, 2017; except
  - Wet Runway Stopping Performance: now complete
- Phase 3:
  - 15 . Pilot Induced Oscillation
  - 16. Handling Qualities Rating Method (+17)
  - 17. ~~Failure Assessment Methodology~~
  - 18. Go-Around Performance
  - 19. ~~Use of Amber Band on Airspeed Tape (Send to ASHWG with help from FTHWG)~~
  - 20. Return-to-Land
  - 30. Directional Control Below Vmc on Slippery Surfaces -
  - 31. Definitions of Vdf/Mdf (esp. for limited airplanes)
- Strategic Considerations
  - Considered to be aggressive
  - FTHWG began work ahead of formal tasking
- ASHWG: Low Energy Alerting
  - FTHWG is participating with ASHWG (B. Lee is Liaison)



# PHASE 3 SCHEDULE

	1	2	3	4	5	6	7	8	9	10	11	12
	Wichita	Cologne	Seattle	Paris	Montreal	Toulouse	Melbourne	Cologne	Washington DC ?	Oslo	Savannah	Bordeaux/Istres?
	June 17	Sept 17	Dec 17	March 18	Jun-18	September 18	December 18	4-8 March 19	10-14 June 19	9-13 Sept 19	2-6 Dec 19	2-6 March 20
15 PIO					H			H	H	H*		
16 HQRM					H	H	H	H	H	H*		
18 GAR		P	P	*p		<del>Report 1 November</del>	Report 20 December					
20 Return to Land					P	P	P	*	Report 30 June			
30 Yaw Control	H	H		H*	Report 1 June							
31 Vdf/Mdf	H		H	H		H	H	*	Report 31 July			

(\*) means voting on requirements and guidance; final report will follow

P = Aircraft Performance  
H = Handling Qualities

30 month clock starts 1 November, 2017  
(so we've had a head-start)  
FTHWG intends to stay on this schedule as best we can  
(as opposed to stretching to 30 months from this date)  
Buffer at end of schedule for contingencies

Tasking End Date  
31 March, 2020  
(We won't use it if we don't need it;  
we are anticipating Phase 4 to follow)



# STATUS OF TASKING

- Phase 3: FTHWG considers activity on-track / on-schedule...with some caution at this point
  - Go-Around Performance (Topic 18) –COMPLETE
    - Present to ARAC 20 June (Report has already been sent)
  - Return to Land
    - Recommendation Report expected 30 June 2019
  - Vdf/Mdffor protected aircraft
    - Recommendation Report expected 31 July 2019
    - WATCH ITEM: As the deadline looms, additional inputs popping up
      - Next telecom is 21 May -we expect a higher quality prognosis at that time
  - HQRM
    - Considered on-track / on-schedule to finish before March, 2020
    - WATCH ITEM: Harmonization of this topic is proving slightly more difficult and multi-faceted than originally envisioned.
      - Schedule (March 2020) is not yet in jeopardy, but may be at risk.
  - Pilot Induced Oscillation
    - 3<sup>rd</sup> face-to-face meeting March 2019
    - Considered on-track / on-schedule to finish before March, 2020

# STATUS OF TASKING

## •Phase 4 Planning

- Begun planning to discuss potential Phase 4 topics at June/September meetings

## •ASHWG: Low Energy Alerting

- FTHWG is participating (B. Lee is the liaison)
- Face-to-Face in early May
  - Questions about 25.143(h) (40 degree bank capability), and Autothrottle use in addition to the proposed new 25.176 (stability).
  - We anticipate this will generate additional work for FTHWG, which was not on the original schedule.
- Next telecom: Early August

# STATUS OF TASKING

- FTHWG-49 : 5 -8 Mar 19 Meeting Cologne (EASA)(Topics 15 PIO-16 HQRM)
- 19 March (RTL)
- 26 March (RTL)
- 2 April (Vdf/Mdf)
- 9 April ( HQRM)
- 16 April PIO
- 23 (RTL)
- 30 (RTL)
- 7 May (HQRM)
- 14 May PIO
- 21 May (Vdf/Mdf)
- 28 May (RTL)
- FTHWG-50: 10-14 Jun 19 Meeting Washington DC (ALPA )(Topics 16 HQRM (first)-15 PIO (second))
- FTHWG-51 : 9-13 Sept 19 Meeting Oslo (Norwegian)(Topics 15 PIO-16 HQRM)
- FTHWG-52 : 2-6 Dec 19 Meeting Savannah (Gulfstream)
- FTHWG-53 : 2-6 Mar 20 Meeting Bordeaux/ Istres? (Dassault ?)

Activity since  
March 2019

# AREAS for ARAC CONSIDERATION

- No additional guidance needed from FAA or ARAC
- EASA's participation has improved (Thank you)
  - Very gracious hosts for our March 2019 meeting (Thank you)

# Transport Airplane Metallic and Composite Structures Working Group

## *Status Report to the Aviation Rulemaking Advisory Committee*

**Doug Jury (Delta Air Lines)**

Working Group Chair

May 15, 2019

# Members of the Working Group

- Industry WG voting members:

1. Michael Gruber (Boeing)
  2. Chantal Fualdes (Airbus)
  3. Salamon Haravan (Bombardier)
  4. Benoit Morlet (Dassault Aviation)
  5. Antonio Fernando Barbosa (Embraer)
  6. Kevin Jones (Gulfstream)
  7. Toshiyasu Fukuoka (Mitsubishi Aircraft)
  8. David Nelson (Textron Aviation)
  9. Phil Ashwell (British Airways)
  10. Doug Jury (Delta Air Lines) –Chairperson
  11. Mark Boudreau (FedEx)
  12. Eric Chesmar (United Airlines)
- NAAs: FAA (Walt Sippel, Larry Ilcewicz, Michael Gorelik, Patrick Safarian; EASA (Richard Minter, Simon Waite); ANAC (Pedro Caldeira, Marco Villaron, Fabiano Hernandes); TCCA (Jackie Yu); JCAB (Tomoaki Higashikawauchi)

# SUMMARY OF ORIGINAL TASKING

With the increased use of composite and hybrid structures recommendations regarding revision of the **fatigue and damage-tolerance requirements** & associated guidance material were previously provided in Final Report, dated 6/27/2018

Tasking was divided up into the following 12 focus areas:

1. Threat Assessment
2. Emerging material technology
3. Inspection Thresholds
4. Structural Damage Capability – Fail-safety
5. Aging, WFD & LOV (including ultimate strength & full-scale fatigue test evidence)
6. Testing (related to composite and hybrid materials including WFD test demonstration)
7. Repairs (bonding / bolting)
8. Modifications
9. EASA aging aircraft rulemaking and harmonization
10. Rotorburst
11. Disposition of cracking during full-scale fatigue testing
12. Accidental damage inspections included in the ALS conflicts w/ MSG-3 program

During final report submission and review by ARAC in September, 2018 three separate topics were raised as needing further evaluation and recommendation from this existing WG.

# SUMMARY OF TASKING – extended topics

Three additional items for rule & guidance recommendation development

1. Structural Damage Capability (SDC) for Single Load Path (SLP) structure:

- Develop requirements and guidance material for single load path (SLP) structure, which by definition has no SDC

2. Structural Bonding and “Weak Bonds”

- FAA requests further clarification from the working group on how to address disbonds and weak bonds as a manufacturing defect

3. Repeat Inspections & Crack Interaction

- Advisory Circular 91-82A provides evaluation considerations for establishing inspection thresholds and repeat intervals, including consideration of crack interaction with little guidance in AC. Based on this, the FAA is requesting information from the working group on how to address crack interaction when establishing inspection programs.

# SUMMARY OF TASKING – extended topics (continued)

Working Group continues to work through each of these three items through smaller tasking groups, consisting of 4-8 WG member teams (aka subteam)

Working Group face-to-face meeting in San Francisco, CA (United Airlines TechOps facility): 4/16-17/2019

All WG members represented: all in person, one remotely

NAAAs present: FAA, EASA, TCCA, JCAB, ANAC

FAA presentation on reminder of ARAC Working Group rules & recent direction for industry driven MoC specifications (ACs to transition to more performance based guidance)

Discussed options on final report delivery scheme (i.e., three separate reports, appendices to earlier report, etc) – options for consideration, final decision pending

Work accomplished both in large Working Group sessions and smaller break out sessions

Overall progress is favorable – some challenges became evident through meeting face-to-face

# SUMMARY OF TASKING – extended topics (continued)

Item 1: Structural Damage Capability (SDC) and Single Load Path (SLP) Structure

Face-to-Face meeting status update

- Break out sessions focused on how to determine what is SLP structure – some consensus reached among the sub-team
- Further documentation by subteam for the consensus position to be shared among larger WG
- Review Part 33 manufacturing quality plan
- Update draft guidance/document to address integral structure
- Re-review and update living document (draft document to eventually evolve into final report/recommendations)

# SUMMARY OF TASKING – extended topics (continued)

Item 2: Structural bonding and “weak” bonds

Face-to-Face meeting status update

- Subteam identified existing guidance materials to be updated: Advisory Circulars 20-107B, 25.571-1D, 21-26, and Bonded Repair Size Limit Policy Statement
- Document rationale for the following topics of consideration deemed relevant to this item
  - Important and extent of Quality Control plan
  - Metal-to-metal bonding practices (input provided by OEM WG representatives with more experience in this)
  - Support of detailed practices addressed by industry standards (CMH-17) and existing forums (CACRC)
  - Inspections (visual or instrumented) for detection of disbonds of fleet leaders

# SUMMARY OF TASKING – extended topics (continued)

Item 3: Crack interaction

Face-to-Face meeting status update

- Discussions highlighted diverse perspectives on the concept of “crack interaction” relative to defining the scope of the task
  - Made significant progress in defining the scope based on the discussion
  - Result of discussion indicates this item may have the most work remaining of the three
  - Reaffirmed a preliminary consensus on keeping WFD out of scope for this task
  - Identified a plan for going forward

# SUMMARY OF TASKING – extended topics (continued)

Item 3: Crack interaction, continued

Face-to-Face meeting status update

- Some members raised a question regarding the benefit of crack interaction discussion relative to the safety case. To address this question, the WG identified two tasks.
  - Task 1. Develop a survey for OEMs to review ADs related to cracking of PSEs in order to identify the likely root cause
    - Was cracking due to the lack of proper consideration of crack interaction? Or,
    - Was cracking due to other drivers, such as unexpected loads, fit-up stresses, or manufacturing deviations?
  - Task 2. Develop a set of criteria / guidance on when the explicit account for crack interaction mechanisms is needed in establishing inspection schedule, and when alternative methods (excluding crack interaction analysis) should be adequate. This element should be in line with “performance-based” guidance approach.
- As with the other two items, the working group will recommend if any guidance should be issued under an industry standard rather than an AC due to how prescriptive it might be

# Deliverable & Schedule

Deliverable: report (either new report or amended existing report) containing:

- Recommendations on appropriate performance-based requirements
- Recommendations on any new guidance or changes to existing guidance
- Qualitative and quantitative costs and benefits of the recommendations

## Milestones:

•TAE Status 2	March 2019
•WG face to face meeting (San Francisco)	April 2019
•TAE Status 3	May 2019
•Provide draft rule & guidance recommendations	Aug 2019 (possibly ambitious target)
•Provide cost and benefit analysis	Aug 2019
•Draft report - <i>Face to Face</i>	Sept 2019
•TAE Status	Nov 2019
•Approve Recommendation Report	Dec 2019

*Objective is to complete the report within 13 months, with 5 months reserve in case of unexpected roadblocks. Current status of Item 3 (crack interaction) will result in draft portion likely extending beyond Aug.*

## *Meeting cadence:*

- *Sub-teams (including NAA representatives) would meet more frequently*
- *Bi-weekly progress meetings (virtual) with FAA*
- *Full WG meetings (virtual) – monthly or as needed*

# AREAS of ARAC CONSIDERATION

- None

# Ice Crystal Icing Working Group Status Report to the Aviation Rulemaking Advisory Committee

**Melissa Bravin**

**Allan van de Wall**

Working Group Co-Chairs

15 May 2019

# MEMBERS of ICI WG

Member Name	Organization	Role
Alan Strom	(FAA-ANE Standards) <a href="#">FAA Representative</a>	FAA Representative
Keith Morgan	Pratt & Whitney	ARAC Representative
Melissa Bravin	Boeing Commercial Airplanes	WG Co-Chair – Airplane – P
Allan van de Wall	GE Aviation	WG Co-Chair – Engine – P
Tom Dwier	Textron Aviation	Airplane – P
Pierre-Emmanuel Arnaud	Airbus	Airplane – P
Bryan Lesko	Air Line Pilots Association	Other – P
Rikki Gardonio	Air Line Pilots Association	Other – B
Jon Saint-Jacques	A4A/Atlas Air	Other – P
David Dischinger	Honeywell	Engine – P
Keith Wegehaupt	Honeywell	Engine – P
Jim Loebig	Rolls-Royce	Engine – P
Roberto Marrano	Pratt & Whitney Canada	Engine – P
Shengfang Liao	Pratt & Whitney East Hartford	Engine – P
Christopher Baczynski	Mitsubishi MITAC	Airplane – P
Kohei Oyabu	Mitsubishi MITAC	Airplane – B
Brian Matheis	UTAS	Other (probe) – P
John Harvell	Rolls-Royce	Engine – P
Roxanne Bochar	Pratt & Whitney	Engine - P

Member Name	Organization	Role
Philip Chow	FAA	Consultant
Jeanne Mason	FAA	Consultant
Walter Strapp	Met Analytics Inc.	Consultant
Dan Fuleki	National Research Council Canada	Consultant
Ashlie Flegel	NASA	Consultant
Tom Ratvasky	NASA	Consultant
Terry Tritz	Boeing	Consultant
Bob Hettman	FAA	Non-voting role
Doug Bryant	FAA	Non-voting role
Eric Duvivier	EASA	Non-voting role
Julien Delanoy	EASA	Non-voting role
Fausto Enokibara	ANAC	Non-voting role
David Johns	TCCA-probes	Non-voting role
Eric Fleurent-Wilson	TCCA-engines	Non-voting role
Masato Fukushi	JCAB	Non-voting role
John Fisher	FAA	Non-voting role
Tom Bond	FAA	Non-voting role

# SUMMARY OF TASKING

- The ICIWG will provide advice and recommendations to the ARAC through the TAE Subcommittee on Appendix D to Part 33, and harmonization of §33.68 *Induction System Icing* requirements as follows:
  1. Evaluate recent ICI environment data obtained from both government and industry to determine whether flight testing data supports the existing Appendix D envelope.
  2. Evaluate the results carried out in Task 1 and recommend changes to the existing Appendix D envelope, as required.
  3. Compare available service data on air data probes from both government and industry probes on Appendix D, including any changes proposed in Task 2. Determine whether engine or aircraft data probe responses warrant the use of a different environmental envelope from those proposed in Task 2, or to the existing Appendix D envelope.
  4. Evaluate the results from Task 3 and recommend ICI boundaries relevant to aircraft and engine air data probes. If the working group proposes a different envelope for aircraft and engine air data probes, recommend if these should be included in the existing Appendix D, or create a new appendix to Part 33.
  5. Identify non-harmonized FAA or EASA ICI regulations or guidance. If the working group finds significant differences that impact safety, propose changes to increase harmonization that may also include icing environments other than Appendix D as a secondary objective.
  6. Recommend changes to the Advisory Circular AC20-147a, *Turbojet, Turboprop, Turboshaft and Turbofan Engine Induction System Icing and Ice Ingestion*, based on Task 1 through 5 results.
  7. Assist the FAA in determining the initial qualitative and quantitative costs, and benefits that may result from the working group's recommendations.
  8. Develop a recommendations report containing the results of tasks 1 through 6. The report should document both majority and dissenting positions on the findings, the rationale for each position, and reasons for disagreement.

# SCHEDULE

- April 30 – May 1 2019 – FAA, Burlington, MA
- July 9-11 2019 – Rolls-Royce, Indianapolis, IN
- September 17-18 2019 – Boeing, Seattle, WA
  - *(subject to change due to SME availability)*
- November 20-21 2019 – General Electric, Munich, Germany
- January 29-30 2020 – Honeywell, Phoenix, AZ
- April 22-23 2020 – San Diego, CA (concurrent with SAE AC-9C)
  - *(backup April 7-8 Washington DC)*
- September 15-16 2020 – Pratt & Whitney, East Hartford, CT
- December 2-3 – EASA, Cologne, Germany
- *(if required)* February 2021 – Honeywell, Phoenix, AZ

# STATUS OF TASKING

- Successful kickoff meeting at FAA in Burlington
- On-track to meet in July for in-depth briefing of FAA report (Task 1)
- Goal of completion by December 2020

# AREAS of ARAC CONSIDERATION

- None

# Avionics Systems Harmonization Working Group

November, 2018

# ASHWG New Task

## New task:

Identify and develop recommendations on low energy alerting requirements to supplement previous work

## Background:

ASHWG previously tasked to develop standards and guidance material for low speed alerting systems, that may complement existing low speed alerting requirements.

## Update:

As a result of the Asiana Flight 214 accident, NTSB recommended to the FAA to “develop design requirements for context-dependent low energy alerting systems for airplanes engaged in commercial operations” (NTSB Safety Recommendation A–14–043)

# ASHWG New Task

- Task Deliverable: Provide advice and recommendations to the ARAC through the TAE Committee in a report that addresses the following questions relative to new airplane designs, along with rationale.
  1. Do you recommend any changes to the existing low speed alerting requirements to provide additional pilot reaction time in cases where the airplane is both slow and close to the ground?
  2. Do you recommend any new or revised guidance material to define an acceptable low energy alert?
  3. After reviewing airworthiness, safety, cost, and other relevant factors, including recent certification and fleet experience, are there any additional considerations that the FAA should take into account regarding avoidance of low energy conditions?
  4. Is coordination necessary with other harmonization working groups (e.g., Human Factors, FlightTest)? If yes, coordinate with that working group and report on that coordination.
  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.

# ASHWG Summary

New task:

Identify and develop recommendations on low energy alerting requirements to supplement previous work

Status:

Meeting held on 27/28 June 2018 (webex)

Meeting held on 5/6 September 2018 (webex)

Meeting held on 13/14 November 2018 (in person)

Meeting held on 13 February 2019 (webex)

Meeting held on 1/2 May 2019 (in person)

# May 2019 Meeting

## Team continued to refine draft report

Proposed change to 14 CFR 25.1303(c), Flight and Navigation Instruments

Add sub paragraph (3), to provide low airspeed (energy) alerting to the flight crew during the approach phase of flight

Proposed change to AC 25-7D, paragraph 32.2 (Flight and Navigation Instruments—§ 25.1303.)

Guidance for compliance/design

Guidance for evaluation/procedures

## List of additional considerations

Potential to address unstable approaches

Other future considerations for AC 25-7D

Alerting in all phases of flight

Primer on alerting timeline

# Next Steps

Now: ASHWG internal circulation and update

- General review

- Specific assignments

Meeting late July – early August 2019

- Completion of open assignments and concurrence on the draft for larger circulation

- Specific request for non-US regulatory authority review (EASA, ANAC)

Face to face meeting in Q4 2019

- Objective to complete the proposal for TAE review by March 2020

# Current Roster

Joe Jacobsen	FAA	<a href="mailto:Joe.Jacobsen@faa.gov">Joe.Jacobsen@faa.gov</a>
Bob Myers	Boeing	<a href="mailto:Robert.j.myers@boeing.com">Robert.j.myers@boeing.com</a>
Dave Leopold	Boeing	<a href="mailto:David.D.Leopold@boeing.com">David.D.Leopold@boeing.com</a>
Brian Lee	Boeing	<a href="mailto:brian.p.lee@boeing.com">brian.p.lee@boeing.com</a>
Karl Minter	ALPA	<a href="mailto:Karl.minter@alpa.org">Karl.minter@alpa.org</a>
Chris Heck	ALPA	<a href="mailto:Chris.heck@alpa.org">Chris.heck@alpa.org</a>
Christine Thibaudat	Airbus	<a href="mailto:christine.thibaudat@airbus.com">christine.thibaudat@airbus.com</a>
Thierry Bourret	Airbus	<a href="mailto:thierry.bourret@airbus.com">thierry.bourret@airbus.com</a>
Tim Buker	Gulfstream	<a href="mailto:Timothy.Buker@gulfstream.com">Timothy.Buker@gulfstream.com</a>
Janiece Lorey	Gulfstream	<a href="mailto:janiece.lorey@gulfstream.com">janiece.lorey@gulfstream.com</a>
Robin Brulotte	Transport Canada	<a href="mailto:Robin.brulotte@tc.gc.ca">Robin.brulotte@tc.gc.ca</a>
Kajetan Litwin	Transport Canada	<a href="mailto:Kajetan.Litwin@tc.gc.ca">Kajetan.Litwin@tc.gc.ca</a>
Marcelo de Lima Camargo	Embraer	<a href="mailto:macamargo@embraer.com.br">macamargo@embraer.com.br</a>
Loran Haworth	NASA	<a href="mailto:loran.a.haworth@nasa.gov">loran.a.haworth@nasa.gov</a>
Bob Stoney	FAA	<a href="mailto:Robert.stoney@faa.gov">Robert.stoney@faa.gov</a>
Clark Badie	Honeywell	<a href="mailto:Clark.badie@Honeywell.com">Clark.badie@Honeywell.com</a>

# AREAS of ARAC CONSIDERATION

- None

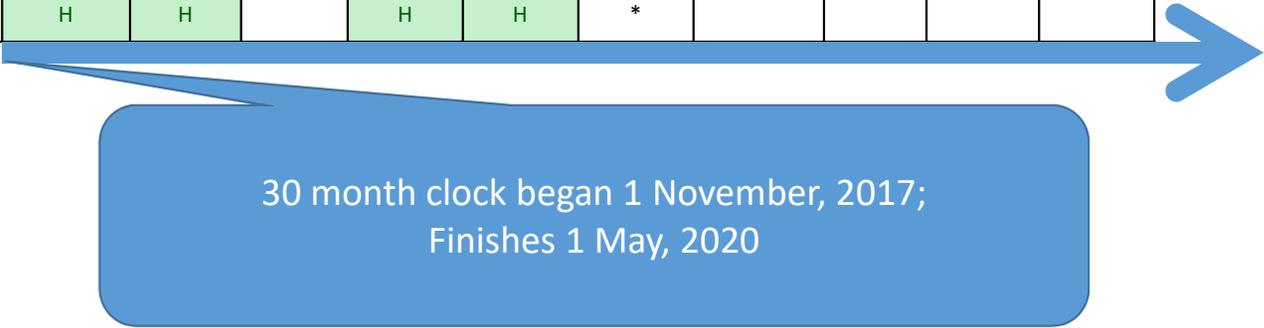
Flight Test Harmonization Working Group  
Topic 18  
Go-Around Handling Qualities & Performance  
Recommendation Report

**Christine Thibaudat**  
EU Co-Chair, FTHWG

20 March, 2019

# SCHEDULE

	1	2	3	4	5	6	7	8	9	10	11	12
	Wichita	Cologne	Seattle	Paris	Montreal	Toulouse	Melbourne	Cologne	Washington DC	Oslo	Savannah	Bordeaux/Istres?
	June 17	Sept 17	Dec 17	March 18	Jun-18	September 18	December 18	5-8 March 19	10-14 June 19	9-13 Sept 19	2-6 Dec 19	2-6 March 20
15 PIO					H			H	H	H*		
16 HQRM					H	H	H	H	H	H*		
18 GAR		P	P	*P		Report 20 Dec 2018 + November						
20 Return to Land					P	P	P	*				
30 Yaw Control	H	H		H*	Report 1 June							
31 Vdf/Mdf	H		H	H		H	H	*				



(\*) means voting on requirements and guidance; final report will follow

P = Aircraft Performance  
H = Handling Qualities

# SUMMARY OF TASKING

- Our task: Recommend Harmonized rule/guidance materials for Go-Around Handling Qualities and Performance, with consideration of EASA recent published materials:
  - OEI : to address ability of an aircraft to conduct a safe go-around at Weight/Altitude/Temperature (WAT) limit condition (new AMC 25.101(g) of CS 25-Amdt 13).
  - AEO : to address mitigation of excessive crew workload and risk of somatogravic illusions\* that may appear in low visibility/high thrust conditions (updated §25.143, 145 and guidance of CS 25- Amdt 21 published March 27,2018).

(\*)somatogravic illusion is a spatial dis-orientation caused by a mismatch between different signals from our senses and the brain. The brain interprets strong longitudinal acceleration as a pitch up which may lead to inappropriate pitch down pilot command.

# Background

## - OEI :

Existing EASA/FAA CS 25.101 (g),(h) require that procedures for the execution of missed approaches associated with conditions prescribed in CS/CFR §25.121 (d) be established and demonstrated to be safe.

Although go-around conducted in OEI WAT limit condition has not been formally identified as the root cause of in-service accidents , there are 2 topics of concern:

- . AMC 25.101 (g) at CS 25- Amdt 13 introduces height loss compliance demonstration to check aircraft ability to go-around from a low decision height down to CAT2 without striking the ground.

AC 25-7C has no equivalent guidance.

- . Safety concern identified during recent certification projects related to excessive OEI go-around horizontal distance ( near the ground while accelerating between the approach speed and go-around speed as defined in §25.121 (d))

# Background cont'd

## - AEO :

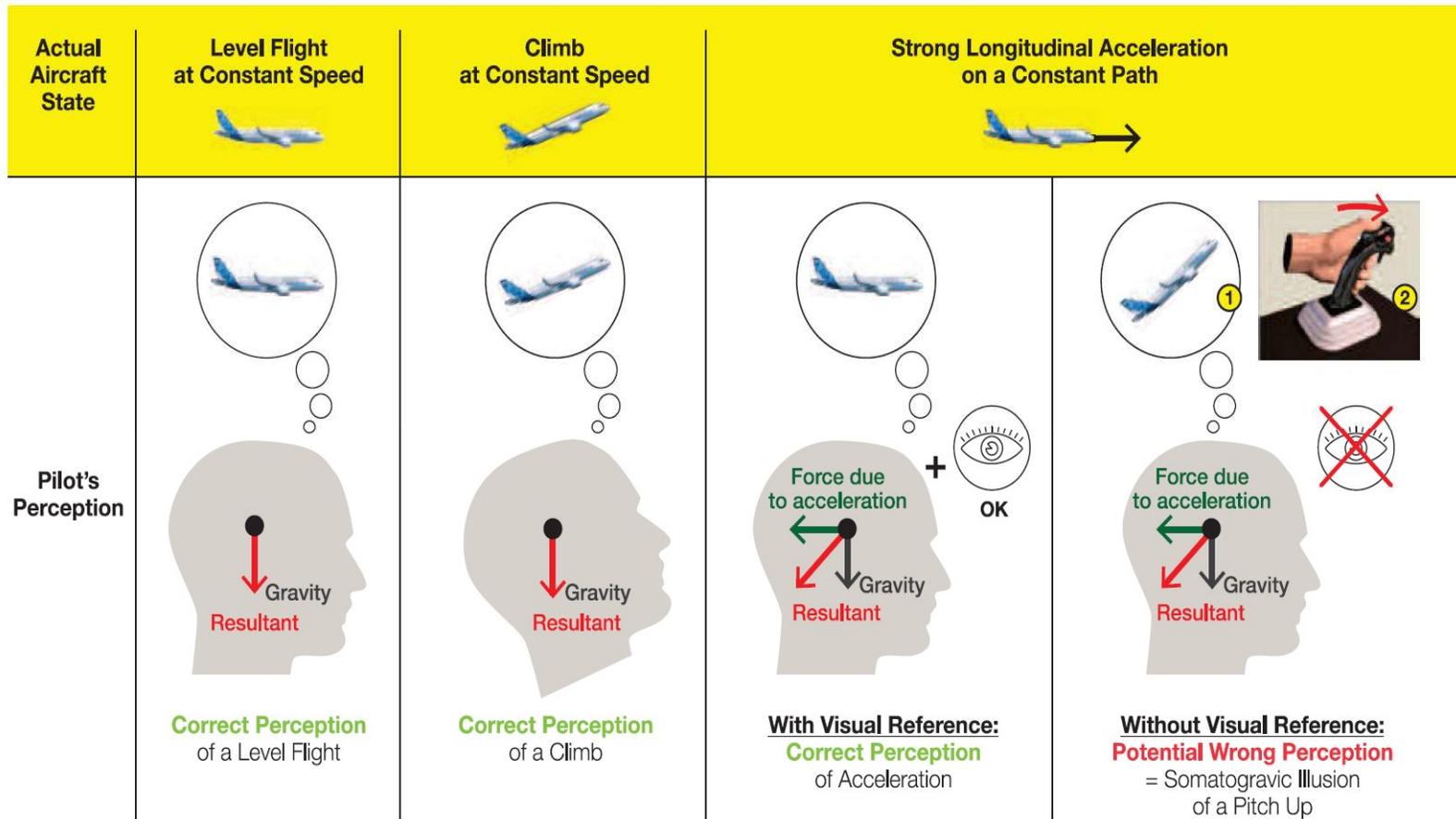
The FTHWG was tasked to review and capitalize on EASA RMT-0647 activities, draft NPA 2017-06 ( 11 May 2017), NPA Comment and Response Document and finally CS 25 – Amdt 21 ( 23 March 2018) to produce our recommendations.

A number of accidents or serious incidents occurred due to high level of airplane performance when conducting an AEO go-around . Loss of normal go-around flight path or loss of control of the airplane has been observed in relation to inadequate flight crew awareness of the airplane's state, or inadequate management by the flight crew of the relationship between pitch attitude and thrust.

This led EASA to include new AEO go-around compliance demonstration in CS-25 and guidance (§25.143 and § 24.145); For which the risk of excessive workload and the risk of somatogravic illusion must be carefully evaluated, and design mitigation measures put in place when the risk is too high.

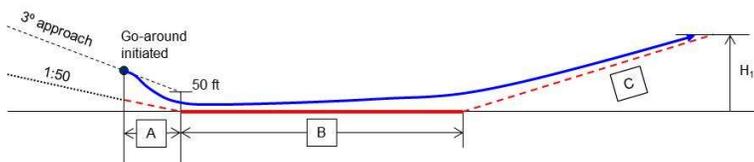
FAR25/AC 25-7C have no equivalent considerations.

# Somatogravic Illusion



# Summary of Method and Deliberations

- 3 face-to-face meetings; 21 dedicated telecons; Many more informal conversations by e-mails
- Progression
- OEI:
  - Height Loss : the group converged rapidly to include additional height loss demonstration ensuring that ground contact prior to runway threshold would not occur if initiated at the decision height /altitude in WAT limit condition ( consistent with AMC 25.101 (g))
  - Minimum go-around trajectory : This ensures that the aircraft will not remain near the ground for an excessive distance from the initiation of go-around at the decision height.  
Addition of following criteria in AC25-7C Material guidance 25.101 (g):



Field Elevation (ft)	Distance (ft)
0-10,000	10,000
> 10,000	= Field Elevation

Several options were scrutinized, but finally a time-based horizontal distance criterion for segment B was elected: *'from the runway threshold plus a distance defined by 40 seconds \* VT\_appr not more than a distance equal to the table---remain above ground height'*

Segment B distance proposal criterion (cap by 10000f for airport field elevation) was considered reasonable by the group and backed by 2 months schedule airlines operations obtained from flightglobal database

# Summary of Method and Deliberations cont'd

- Progression

- AEO:

- Studied all EASA past activities and published materials, including involvement of EASA RMT-0647 & NPA tasks leaders in some AEO go-around FTHWG webexs.
- The recent publication of NPA CRD together with final CS-25 Amdt 21 (published on 23 March 2018) led to additional discussion and re-adjustments since there were some differences with the draft NPA on which we started to discuss.
- This led to request to TAE an additional time delay for final FTHWG Topic 18 report issuance , submitted on 20 Dec 2018.
- The group consensus was to adopt the CS 25 –Amdt 21 updates regarding go-around evaluations in its large majority and to include some updates relative to high Angle of Attack Protected airplanes considerations (from FTHWG Topic 1 Phase2 recommendation report).
- Also some adjustments for consideration of Reduced Go-Around (RGA) if installed on the aircraft have been made in the new §25.101(g) guidance (for OEI go-around WAT limit condition)
- Various Discussions held on : limiting performance criteria for assessing risk for Somatogravic illusion, workload assessment in subpart B or not, thrust recovery ( automatic vs manual) after engine failure when conducting go-around with an RGA system, use of Automatic Takeoff Thrust Control System (ATTCS) as an RGA to mitigate risk of somatogravic illusion, AFM perfo publications for RGA thrust or power.....

# Recommendation Summary

- Subpart B Regulations
  - **§25.143** (controllability and Maneuverability – General) and §25.145 ( Longitudinal Control) updates to include AEO go-around assessment considerations
- Subpart B Guidance – AC 25-7C updates
  - Add a **new §9 for new 25.101g** guidance (OEI go-around assessment height loss and minimal trajectory including RGA consideration)
  - **§16 ( Landing Climb All engines operating- 25.119)** updated to specify that climb requirement in §25.119 are applicable with the RGA system active
  - **§20 (Maneuverability and controllability General -25.143):** includes AEO go-around consideration for workload assessment, Somatogravic Illusion risk assessment (risk identified by high pitch rate/pitch attitude/energy) & provide mitigation means (implementation of an RGA thrust or power function as an acceptable means).  
It also includes Engine failure during GAR with RGA , performance published in the AFM with RGA
  - **§21 (Longitudinal Control -25.145)** includes go-around AEO assessment
  - **§231 (Criteria for Approval of Steep Approach To Landing) :** demonstrate aircraft can safely transition to a go-around AEO following an engine failure

# Consensus

- OEI :

One dissenting opinion from TCCA on the proposed minimum go-around trajectory assessment: TCCA AC 525-009 introduces an additional minimal speed criteria for 25.121 (d) : VGA/Vapp not less than 1.1 VMCL (in approach configuration)

FTHWG position is to recommend TCCA to remove this additional constraint: this is an additional requirement that neither CS 25 nor FAR 25 are requiring,  $V_{REF} \geq V_{MCL}$  has been an acceptable standard . The acceleration from a Vref near or at VMCL will lead to longer go-around distance (at light weight only) , this is counter to the objective of this tasking.

There was one comment from an OEM applying the TCCA AC, recommending TCCA's AC 525-009 be considered as a future FTHWG topic for harmonization .

FTHWG acknowledged

- AEO :

3 OEMs and 2 AAs present a dissenting opinion and recommend to remove crew workload assessment from subpartB 25.143(b)(4) and guidance, because workload is usually addressed by Human Factors . They propose instead to revise FAA AC 25.1523-1.

Requested MOC for 25.143 (b) (4) is Flight test. The FTHWG group majority retains Appendix D reference which provides guidance and explanatory material for the definition and assessment for crew workload . Appendix D is common between FAA and EASA, not AC 25.1523-1.

3 OEMs and 1 AA present a dissenting opinion and recommend removal of quantitative performance limiting criteria used to identify the risk of Somatogravic Illusion , as they contest the scientific legitimacy of this pass/fail criterion.

The FTHWG majority is to retain the proposed performance limiting criteria . FTHWG believes that the Note added address the concern ; *“Note2: The numbers above should not be considered hard limits but a reference only”*

Industry ( only) proposal for use of ATTCS as a mitigation for somatogravic illusion during go-around .Refer to Attachment 18E: recommend appendix I for ATTCS to remove the current 10% cap between AEO and OEI thrust levels

Acknowledged by FTHWG , recommend that this task is assigned to Propulsion Harmonization working group , as Appendix I is outside of FTHWG perimeter



**Aviation Rulemaking Advisory Committee Task Notice**  
(ADD ANNOUNCEMENT DATE)

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

**SUMMARY:** The FAA assigned ARAC a new task to provide recommendations regarding implementation of section 336 of the FAA Reauthorization Act of 2018 (P.L. 115-254). This section requires that the FAA issue an order requiring the installation of a secondary cockpit barrier on each new aircraft that is manufactured for delivery to a passenger air carrier in the United States operating in 14 CFR 121. This notice informs the public of the new ARAC activity and solicits membership for the new Flightdeck Secondary Barrier Working Group.

**BACKGROUND:** ARAC is governed by the Federal Advisory Committee Act (5 U.S.C., Appendix 2). 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.

On October 5, 2018, Congress enacted P.L. 115-254. Section 336 of P.L. 115-254 requires the FAA to issue an order requiring the installation of a secondary cockpit barrier on newly manufactured aircraft operating under 14 CFR part 121. The FAA is seeking advice on effective means to address this mandate. Because P.L. 115-254 requires issuance of this order by October 5, 2019, this tasking has a very short deadline for completion.

On **(DATE)**, the FAA assigned this task to ARAC, which ARAC designated to the Transport Airplane and Engine (TAE) Subcommittee Flightdeck Secondary Barrier Working Group. Participants of the newly established Flightdeck Secondary Barrier Working Group will serve as members of the work group only, reporting to ARAC through the TAE Subcommittee. The working group will provide advice and recommendations on the assigned task. The TAE Subcommittee will review and approve submission of the recommendation report to ARAC for consideration. ARAC must deliberate and discuss the report prior to voting on whether to submit the recommendation report to the FAA.

**THE TASK:** The Flightdeck Secondary Barrier Working Group will provide advice and recommendations to the ARAC on the most effective ways to implement section 336 of P.L. 115-254. The Group should review any relevant materials to assist in achieving their objective.

The Working Group is tasked with making recommendations on the following:

1. Identifying a full range of options to achieve the objectives of section 336 of P.L. 115-254 with key considerations to implement each option. This activity should include but not be limited to a review of existing secondary barrier methods.

2. Determining if the FAA’s order should apply to airplanes produced for operations under parts in addition to 14 CFR part 121 (for example 14 CFR 129).
3. Providing initial qualitative and quantitative costs and benefits for recommended actions and alternative actions.
4. Providing implementation steps for the recommended options.
5. Developing a report containing recommendations on the findings and results of the tasks explained above.
  - a. The recommendation report should document both majority and, if applicable, any dissenting positions on the findings and the rationale for each position.
  - b. The recommendation report should document any disagreements, including the rationale for each position and the reasons for the disagreement.

**SCHEDULE:** The recommendation report should be submitted to the FAA no later than September 20, 2019.

**WORKING GROUP ACTIVITY:** The Flightdeck Secondary Barrier Working Group must comply with the procedures adopted by the ARAC and as follows:

Review and analyze the assigned tasks and any related materials or documents.

1. Draft and submit a work plan for completion of the tasks, including the rationale supporting such a plan, for consideration by the Transport Airplane and Engine Subcommittee.
2. Provide a status report at each Transport Airplane and Engine Subcommittee meeting.
3. Draft and submit the recommendation report based on the review and analysis of the assigned tasks.
4. Present the recommendation report at the Transport Airplane and Engine Subcommittee meeting.

**PARTICIPATION IN THE WORKING GROUP:** The Flightdeck Secondary Barrier 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 TAE Subcommittee. The FAA would like a wide range of stakeholders 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.)

**NOMINATION PROCESS:** Candidates are required to submit, in full, the following materials to be considered for membership. Failure to submit the required information may disqualify a candidate from the review process.

1. A résumé or curriculum vitae.
2. A statement describing the candidate’s interest in the task and the expertise the candidate would bring to the working group.

Nominations must be submitted electronically (by E-mail) to Jeff Gardlin at [jeff.gardlin@faa.gov](mailto:jeff.gardlin@faa.gov). The subject line should state “Flightdeck Secondary Barrier Working Group Nomination.” The FAA must receive all requests by **Friday, July 5, 2019 at 5:00 PM Eastern Standard Time**. The ARAC, through the TAE Subcommittee, and the FAA will review the requests and advise you whether or not your request is approved.

### Roles and Responsibilities

If you are chosen for membership on the working group, you must actively participate in the working group, attend all meetings, and provide written comments when requested. You must devote the resources necessary to support the working group in meeting any assigned deadlines. You must keep your management 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 and the Transport Airplane and Engine Subcommittee Chair, the FAA, including the Designated Federal Officer, and the Working Group Chair.

### Confidential Information

All final work products submitted to the ARAC are public documents. Therefore, it should not contain any nonpublic proprietary, privileged, business, commercial, and other sensitive information (collectively, Confidential Information) that the working group members would not want to be publicly available. With respect to working groups, there may be instances where members will share Commercial Information within the working group for purposes of completing an assigned task. Members must not disclose to any third party, or use for any purposes other than the assigned task, any and all Confidential Information disclosed to one party by the other party, without the prior written consent of the party whose Confidential information is being disclosed. All parties must treat the Confidential Information of the disclosing party as it would treat its own Confidential Information, but in no event shall it use less than a reasonable degree of care. If any Confidential Information is shared with the FAA representative on a working and/or task groups, it must be properly marked in accordance with the Office of Rulemaking Committee Manual, ARM-001-15.

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

The ARAC meetings are open to the public. However, meetings of the Flightdeck Secondary Barrier 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.

**FOR FURTHER INFORMATION CONTACT:** Jeff Gardlin, Federal Aviation Administration, 2200 South 216th Street, Des Moines WA, 98198. Telephone 206-231-3146.



**Aviation Rulemaking Advisory Committee Task Notice**  
**(ADD ANNOUNCEMENT DATE)**

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

**SUMMARY:** The FAA assigned ARAC a new task to review all regulations and policies related to designated pilot examiners appointed under section 183.23 of title 14, Code of Federal Regulations. The FAA seeks advice and recommendations on regulatory and policy changes necessary to ensure an adequate number of designated pilot examiners are deployed and available to perform their duties to meet the growing need of the public. This notice informs the public of the new ARAC activity and solicits membership for the new Designated Pilot Examiner Reforms Working Group.

**BACKGROUND:** ARAC is governed by the Federal Advisory Committee Act (5 U.S.C., Appendix 2). The FAA established ARAC to provide information, advice, and recommendations on aviation related issues that could result in rulemaking to the FAA Administrator, through the Associate Administrator of Aviation Safety.

On October 5, 2018, Congress enacted the FAA Reauthorization Act of 2018 (P.L 115-254). Section 319 (Designated Pilot Examiner Reforms) of P.L. 115-254 requires the following:

*(a) IN GENERAL.—The Administrator shall assign to the Aviation Rulemaking Advisory Committee (in this section referred to as the “Committee”) the task of reviewing all regulations and policies related to designated pilot examiners appointed under section 183.23 of title 14, Code of Federal Regulations. The Committee shall focus on the processes and requirements by which the FAA selects, trains, and deploys individuals as designated pilot examiners, and provide recommendations with respect to the regulatory and policy changes necessary to ensure an adequate number of designated pilot examiners are deployed and available to perform their duties. The Committee also shall make recommendations with respect to the regulatory and policy changes if necessary to allow a designated pilot examiner perform a daily limit of 3 new check rides with no limit for partial check rides and to serve as a designed pilot examiner without regard to any individual managing office.*

*(b) ACTION BASED ON RECOMMENDATIONS.—Not later than 1 year after receiving recommendations under subsection (a), the Administrator shall take such action as the Administrator considers appropriate with respect to those recommendations.*

On June 20, 2019, the FAA assigned this task to ARAC, which ARAC designated to the Designated Pilot Examiner Reforms Working Group. The working group will provide advice and recommendations on the assigned task. ARAC must deliberate and discuss the report prior to voting on whether to submit the recommendation report to the FAA.

**THE TASK:** In response to P.L. 115-254, the Designated Pilot Examiner Reforms Working Group will provide advice and recommendations to the ARAC on the most effective ways to identify areas of needed reform with respect to regulatory and policy changes necessary to ensure an adequate number of designated pilot examiners are deployed and available to perform their duties to meet the growing public need. The Group should review any relevant materials to assist in achieving their objective.

1. The working group will review all regulatory and policies related to designated pilot examiners appointed under 14 CFR 183.23. Specific areas include, but are not limited to, 14 CFR part 183, 14 CFR part 61, FAA Order 8900.1, FAA Order 8900.2, and FAA Order 8000.95.
2. The working group will focus on the processes and requirements by which the FAA selects, trains, and deploys individuals as designated pilot examiners, and provide recommendations with respect to the regulatory and policy changes necessary to ensure an adequate number of designated pilot examiners are deployed and available to perform their duties.
3. In response to P.L. 115-254, the working group will make recommendations with respect to the regulatory and policy changes if necessary to allow a designated pilot examiner perform a daily limit of 3 new check rides with no limit for partial check rides and to serve as a designated pilot examiner without regard to any individual managing office.
4. If the task could result in recommendations with substantive changes to policies and rulemaking, then the working group will consider the role of potential qualitative and quantitative costs and benefits, including impacts to resources, of these recommendations compared to their alternatives. If available, the working group should provide preliminary cost and benefit information in the report.
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.

**SCHEDULE:** The recommendation report should be submitted to the FAA no later than 12 months from the first working group meeting.

**WORKING GROUP ACTIVITY:** The working group must comply with the procedures adopted by the ARAC and as follows:

1. Conduct a review and analysis of the assigned tasks and any other related materials or documents.
2. Draft and submit a work plan for completion of the task, including the rationale supporting such a plan, for consideration by the 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. If the working group was reinstated to answer questions the FAA had regarding the recommendation report, present the findings in response to the FAA’s questions or concerns about the recommendation report at ARAC meeting.

**PARTICIPATION IN THE WORKING GROUP:** The Designated Pilot Examiner Reforms 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 ARAC. The FAA would like a wide range of stakeholders 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.)

**NOMINATION PROCESS:** Candidates are required to submit, in full, the following materials to be considered for membership. Failure to submit the required information may disqualify a candidate from the review process.

1. A résumé or curriculum vitae.
2. A statement describing the candidate’s interest in the task and the expertise the candidate would bring to the working group.

Nominations must be submitted electronically (by E-mail) to the Regulatory Support Division at [AFS-600-General-Correspondence@faa.gov](mailto:AFS-600-General-Correspondence@faa.gov). The subject line should state “Designated Pilot Examiner Reforms Working Group Nomination.” The FAA must receive all requests by

**[day], [date] at [time Eastern Standard Time].** The ARAC and the FAA will review the requests and advise you whether or not your request is approved.

### Roles and Responsibilities

If you are chosen for membership on the working group, you must actively participate in the working group, attend all meetings, and provide written comments when requested. You must devote the resources necessary to support the working group in meeting any assigned deadlines. You must keep your management 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.

### Confidential Information

All final work products submitted to the ARAC are public documents. Therefore, it should not contain any nonpublic proprietary, privileged, business, commercial, and other sensitive information (collectively, Confidential Information) that the working group members would not want to be publicly available. With respect to working groups, there may be instances where members will share Commercial Information within the working group for purposes of completing an assigned task. Members must not disclose to any third party, or use for any purposes other than the assigned task, any and all Confidential Information disclosed to one party by the other party, without the prior written consent of the party whose Confidential information is being disclosed. All parties must treat the Confidential Information of the disclosing party as it would treat its own Confidential Information, but in no event shall it use less than a reasonable degree of care. If any Confidential Information is shared with the FAA representative on a working and/or task groups, it must be properly marked in accordance with the Office of Rulemaking Committee Manual, ARM-001-15.

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

The ARAC meetings are open to the public. However, meetings of the Designated Pilot Examiner Reforms 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.

**FOR FURTHER INFORMATION CONTACT:** Trey McClure, Federal Aviation Administration, DOT/FAA, MMAC ARB BLDG 3<sup>rd</sup> Floor, 6500 S. MacArthur Blvd. Oklahoma City, OK 73169. Telephone (405) 954-9510; [trey.mcclure@faa.gov](mailto:trey.mcclure@faa.gov).