

Aging Transport Systems Rulemaking Advisory Committee (ATSRAC) Meeting Minutes

Date: April 28-29, 2004
Place: Radisson Hotel
Hampton, Virginia

Administrative

Mr. Kent Hollinger (the ATSRAC Chair) called the meeting to order at 9:00 AM. Mr. Charles Huber (the ATSRAC Executive Director) read the advisory committee briefing statement. Mr. Hollinger then invited Ms. Luci Crittenden (the NASA representative) to make administrative and housekeeping remarks. Mr. Hollinger thanked Ms. Crittenden for hosting the meeting. He then commented on changes to the membership of the Committee. Mr. Kirk Thornburg is no longer with Northwest Airlines, and is now with AirTran, and is thus no longer on the ATSRAC committee though he may serve as the alternate AirTran representative. Mr. Nick Drivas has left Air Tran and is no longer an alternate on the Committee. Also, Mr. Franz Frank will replace Mr. Chris Davies as the Aircraft European Contractors Manufacturer's Association representative. Mr. Hollinger then began the introductions of the meeting attendees.

After the introductions, Mr. Hollinger read through the agenda for the meeting. Mr. Hollinger commented that the AIA representative wasn't present, and would not be able to confirm plans for the July 2004 meeting. He commented that the second day of the July 2004 meeting will be at the DOT building in Washington, DC.

Approval of January 2004 Meeting Minutes (Handout #1)

Mr. Hollinger opened the floor for comments on the meeting minutes from the January 2004 meeting of the ATSRAC committee. There were comments from the Committee related to typographical corrections. The Committee then voted unanimously to accept the meeting minutes with the agreed-upon changes.

Electrical Wiring in Relation to the MMEL: Aircraft Manufacturer's Viewpoints (Handout #2)

Mr. Don Andersen (Boeing) presented a report from Airbus, Boeing and Dassault on the use of the MMEL. Mr. Andersen stated that the presentation is a response to Mr. Vic Card's request from the last meeting. He started his presentation with a discussion of the background and use of the Master Minimum Equipment List (MMEL) and the involvement of the Aircraft Evaluation Group (AEG). He then addressed the following issues: (1) Should dispatch with a known wiring fault be deemed to be outside the normal MEL dispatch allowance, (2) Should the MMEL/MEL requirements be modified to clarify this point, and (3) Should physical failures of wiring be considered in the dispatch instructions in support of the MMEL/MEL. Mr. Andersen commented that users of an MMEL are not required to consider the failure modes for a deferred item. Mr. Andersen addressed the MMEL Dispatch Procedures Document, and commented on the use of this document and the interconnections between the deferral of a specific item and its impact on other components of the aircraft. Mr. Andersen told the Committee that Original

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Equipment Manufacturers (OEMs) believe that dispatch with a known wiring fault is not outside the normal MEL dispatch allowance, because wiring must be considered when deferring a component.

Mr. Andersen said that, since dispatch with a known wiring fault is not outside the MEL dispatch allowance, the MMEL requirements do not need to be modified to clarify whether wiring is involved in the component failure. He also said that physical failures of wiring should be considered in the dispatch instructions in support of the MMEL.

Discussion

During Mr. Andersen's comments about the MMEL Dispatch Procedures Document, the Committee discussed the use of Dispatch Procedures Document in the development of the MMEL. Mr. Huber asked Mr. Andersen to address the difference between high-current and low-current circuits. Ms. Christine Negroni (NADA) asked Mr. Andersen to clarify how the component is deactivated individually without deactivating an entire system. Mr. Card (JAA/EASA) commented on Mr. Andersen's conclusion regarding dispatch allowance and known wiring faults. Mr. Andersen addressed some Committee members' concerns on how Boeing considers known wiring faults when they construct a Dispatch Procedures Document. Mr. Jon Haag (Altria Corporate Services) said that the FAA addresses the issue of MMELs in an Advisory Circular (A/C), and Mr. Ken Elias (ALPA) addressed the FAR reference for using an MEL. Mr. Haag asked if the FAA would accept an action item to review A/C 91-67, and he said that he would accept an action item to provide recommendations on how A/C 91-67 should be changed. Ms. Negroni asked if there was a conclusion about whether the electrical fault was diagnosed before the aircraft was dispatched with the component deferred. Mr. Elias suggested having a discussion about whether the MMEL was being applied incorrectly, or when the document itself is wrong. Mr. Elias asked Mr. Andersen why a hydraulic pump on a B-757 can be deferred without pulling a circuit breaker, and Mr. Andersen said that the issue was addressed in the Dispatch Deviation Guide. Mr. Hollinger asked if it should be covered in the MMEL instead, and Mr. Andersen said that the way Boeing approaches the issue (using the Dispatch Deviation Guide) seemed to be working. Mr. Hollinger asked if the ASTRAC committee should address changing this procedure. Mr. Haag commented on a specific case where the MMEL is very specific about deferring certain components.

HWG 12 Recommendation-Cycling of Circuit Breakers

Mr. Andersen continued his discussion by addressing the issue of cycling of circuit breakers, which was a recommendation of HWG 12 from the January 2004 ATSRAC meeting. Mr. Andersen said there may be a benefit to cycling of circuit breakers, but that the issue can't be specifically required by the manufacturers such as Airbus, Boeing and Dassault because they don't have data on the exact benefits of the practice. He said that there was extensive guidance that has been published as to the appropriate cycling interval. He said that Boeing may issue a Service Letter stating that there has been undefined advantages to cycling the circuit breakers, and that operators could consider requiring cycling of circuit breakers at an appropriate interval. Mr. Andersen said that

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Boeing would address the different cycling intervals, but wouldn't recommend a specific interval. Mr. Andersen said that Airbus, Boeing and Dassault would issue "Service Information Letters" (SILs), and through those letters recommend that operators consider adopting procedures to cycle circuit breakers.

Discussion

Mr. Ken Elias asked Mr. Andersen if he was representing Airbus and Dassault, as well as Boeing. Mr. Andersen said that he was representing Boeing, and that Airbus and Dassault shared his recommendation. There was extensive discussion among the Committee members on the cycling intervals for circuit breakers, and also the issue of whether the cycling practice should be recommended by the manufacturer. Mr. Andersen asserted that the costs and benefits are undefined, and the manufacturer won't address the interval without background data. Mr. Frank Keefer (Raytheon) suggested that there were some problems with actually pulling old circuit breakers, that it takes more resources to actually do it than may be economically feasible. Mr. Kirincich asked why the recommendations from circuit breaker manufacturers regarding periodic cycling was being ignored. Mr. Huber asserted that the issue is to quantify the benefit of periodic cycling of the circuit breakers. He said that the group realizes there is a benefit, and but this issue is cost of cycling the breakers to the benefits of circuit breaker reliability. Mr. Huber said that a recommendation for cycling circuit breakers without backup data is unlikely to be adopted by operators.

Mr. Huber addressed the Committee by thanking Airbus, Boeing and Dassault for taking the step of issuing the SILs addressing cycling of the circuit breakers. He said that the economic and practical feasibility issues ought to be addressed separately. Mr. Elias asked if there were any other circuit breaker safety issues that aren't addressed by Boeing. Mr. Andersen said that if there's a clear indication of a safety problem, then Boeing will always address the issue. Mr. Elias asked if there was any other component of an aircraft that was never checked after installation. Mr. Andersen said that if the problem was quantifiable, it would be easier to require inspection. Mr. Peri indicated that the safety issues are required to be addressed by the FAA. Mr. Hollinger said that the issue ought to be addressed fully because it is a safety issue.

Mr. Hollinger asked the Committee for a recommendation. He asked if the proposal of HWG 12 regarding cycling of circuit breakers ought to be adopted, or if the OEM's issuance of SILs will comply with the HWG 12 recommendation. He also asked if tabling the issue is appropriate. Mr. Card asked if the other manufacturers ought to recommend the same thing as Airbus, Boeing and Dassault. Mr. Huber said that the FAA would accept the task of contacting other manufacturers to inform them of the issuance of the SILs by Airbus, Boeing and Dassault .

Mr. Hollinger asked for a vote on the proposal of Mr. Card to have Airbus, Boeing and Dassault issue SILs, and that the Committee would track the issuance of those letters. The proposal also included a requirement that the FAA will coordinate with JAA and

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other organizations to notify other aircraft and component manufacturers and encourage them to adopt similar letters. The decision of the Committee was unanimous.

HWG 12: Electrical Wiring Interconnection Systems (EWIS) Research and Development (R&D) Technology Transfer HWG (Handout #3)

Mr. Hollinger made a presentation detailing the progress of HWG 12. He commented on the HWG membership and said that the HWG now has a European co-chair (Mr. David Tudor). Mr. Hollinger commented that the HWG had a successful meeting in March 2004, and the next meeting will be in June 2004. Mr. Hollinger addressed individually the status of each of HWG 12's sub-tasks, and answered specific questions from the ATSRAC committee about those sub-tasks. He commented that the FAA is no longer considering the Wire Performance Specification a TSO project, and Mr. Huber commented that the SAE committee on wiring and cable is discussing this specific issue. Mr. Hollinger said that since no milestones were due, there were no recommendations to report. Mr. Hollinger concluded his presentation by inviting comments from the other HWG 12 members.

HWG 11 Work Plan (Handout #4)

Mr. Randy Pope (Federal Express) presented a report from HWG 11. He said that Mr. Johan Kala was scheduled to give the presentation but Mr. Kala wasn't able to attend the meeting. Mr. Pope commented on the individual status of each of the HWG 11 tasks and made comments on the membership of the HWG. Mr. Hollinger asked if the ATSRAC committee could get an interim report from HWG 11 at the July 2004 ATSRAC meeting. Mr. Pope said that he would be able to provide a report at that meeting.

Mr. Pope commented on the STC EZAP issue plan, and said that HWG 11 was discussing how the FAA gains voluntary compliance with existing STCs. He said the process of reviewing STCs has already been accomplished by SFAR 88. Mr. Pope discussed the process for EZAP analysis during the modification of an aircraft using an STC, and demonstrated a flow chart for the EZAP process. Mr. Pope presented options on how the FAA can motivate operators to voluntarily comply with the requirements. Mr. Pope said that future sale of an aircraft that has been through the EZAP compliance process will be more marketable. Mr. Huber commented that the proposed EAPAS NPRM has not included a requirement for STC holders to perform EZAP. He also commented that upon the effective date of the final rule, STCs applied for after that date will require an EZAP analysis. He commented that the context of the present discussion was only related to operators with existing STCs.

Mr. Pope concluded his remarks with a schedule of future meetings of HWG 11. Mr. Huber and Mr. Hollinger asked the HWG for emphasis on ways in which ATSRAC can help HWG 11 with participation.

Informal discussion of ASTM Light Aircraft Certification (Part 23) (No Handout)

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Mr. Ric Peri (Aircraft Electronics Association) announced a meeting for wiring standards for part 23 aircraft. Mr. Hollinger prompted a discussion of whether the wiring standards should stay under Part 23 only. Mr. Hollinger asked if there was a crossover plan for the committees, and Mr. Massoud Sadeghi responded by saying that the hope is that the FAA will be able to coordinate with other authorities.

HWG 13 Status Report (Handout #5)

Mr. Jon Haag began the HWG 13 presentation by discussing the status of the tasks assigned to the working group. He commented that Mr. Peri has been very assertive with outreach programs to educate technicians about wiring issues. Mr. Huber asked how wiring failures are reported, and Mr. Haag responded that wiring failures are only reported to the OEM. Mr. Elias suggested that there ought to be enhanced reporting requirements for these wiring faults and failures. Mr. Peri suggested that under part 145, there is a method for reporting these faults similar to the Service Difficulty Report (SDR) process. Mr. Huber suggested that there ought to be a reporting system that records trends in the failures and faults of wiring. Mr. Ric Anderson suggested that with increased awareness of reporting, there will be a surge in reports of wiring failures. Mr. Haag concluded his remarks by giving a timeline for completion of the remaining tasks assigned to HWG 13.

Adjourn for tour of the NASA Langley facility at 1:50 PM

Day Two: 9:00 AM

European Aging Systems Coordination Group (EASCG)(Handout #6)

Mr. Vic Card gave a presentation prepared by Mr. Tony Heather (CAA) from the European Aging Systems Coordination Group. He began by describing the composition of the European Community and the jurisdictions of the transport ministries of European Community members. He then described the European rulemaking structure and the tasks of the Management Board and the Executive Director. Mr. Card then outlined the European Safety Agency's regulatory structure and described their codified regulations. He described the method of other European member states' transition into the EASA. He described the airworthiness functions of the EASA. He asserted that EASA is not yet responsible for Air Traffic, Aerodrome Standards, and operations. He outlined the persons who are members of the EASCG and described the group's work plan for the next year. He commented on the similarities of the FAA rules and the JAA equivalent rules and listed the future goals of that EASCG.

Discussion

Mr. Hollinger suggested that the progress of the EASCG's goals could be a standing agenda item for future ATSRAC meetings, and asked Mr. Card if he could give a progress report at each ATSRAC meeting. Mr. Card said that Mr. Heather would be willing to do that. Mr. Huber asked if the agency will release advisory material and new

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regulations in coordination with the release of similar FAA material, and Mr. Card said that hasn't yet been decided.

Mr. Hollinger then invited Mr. Cliff Neudorf (Transport Canada) to comment on the process with Transport Canada's harmonization of their rules to the FAA rules. Mr. Neudorf suggested that Transport Canada will issue aging aircraft guidance in coordination with FAA issuance of that guidance. They will maintain a close liaison with the FAA and with NASA on the aging aircraft issues. Mr. Mike Sevigny (Bombardier) asked if members of the industry will be on TC's committee for aging aircraft issues, and Mr. Neudorf indicated that it is a coordination committee and industry representatives haven't yet been invited to join, but that it might be a good idea. Mr. Neudorf indicated that the coordination committee will make its own decisions about timelines and for procedures and processes that will be used by the committee. Mr. David Harper asked what the name of the committee is, and Mr. Neudorf said the name of the committee is "Aging Aircraft Rulemaking and Harmonization Commission's Working Group."

Tiger Team Status Report (Handout #7)

Mr. Massoud Sadeghi presented a report on the status of the Tiger Team. He described the composition, goals, and progress of HWGs 6 through 10. He described the method and construction of the NPRM and indicated that it would be made up of five different sections (Background, General Discussion of the Proposals, Overview of the Proposals, Section By Section Discussion of the Proposals, and the Appendixes). He then commented on the FAA plan for compliance and the approval process for ICAWs, and addressed the issue of the schedule for the rulemaking, with the final rulemaking date of mid-2006. Mr. Huber said that he would be able to provide a flow chart on this issue for the July 2004 ATSRAC meeting.

Discussion

Mr. Cotti asked Mr. Sadeghi if the AC will be available when the NPRM is published, and Mr. Sadeghi said that they would be published simultaneously. Mr. Sadeghi said that on May 4, 2004, the FAA will publish a summary in the Federal Register which will be similar to today's presentation on the progress. Mr. Sadeghi commented that one of the functions of the Tiger Team is to measure the potential impacts on other safety initiatives. He then listed the individual tasks that the Tiger Team is working on. He commented that only the SFAR 88-related Operational Rules and the EAPAS specifically deal with electrical wiring on transport aircraft. Mr. Sevigny asked if the Tiger team has studied the impact on manufacturers, and Mr. Sadeghi said that they had. Mr. Ric Anderson asked if the flow chart from today's meeting will be included in the Federal Register notice for May 4, and Mr. Sadeghi responded that it will not. Mr. Hollinger suggested that manufacturers and operators should expect to receive questions from the media and other sources after the May 4 publication of the Federal Register document and may want to brief their corporate communications staff on preparing a response. There were numerous questions regarding the availability of a timeline for the issuance of the new rule and Mr. Sadeghi and Mr. Huber indicated that a time line is not available yet.

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[Meeting Agenda: Handout #8]

[Sign-In Sheet: Handout #9]

Future Meeting Dates and Locations

Mr. Hollinger suggested that at the next ATSRAC meeting the group should expect to spend the second day working with Tiger Team issues. Mr. Hollinger said that he will work with AIA to confirm the next meeting at the AIA facility in Rosslyn, VA. He said the second day of the July 2004 meeting will be held at the DOT building near L'Enfant Plaza in Washington, DC.

The Committee discussed and agreed to the following schedule for future ATSRAC meetings:

Date	Location
July 7-8, 2004	Rosslyn, VA and Washington, D.C. (AIA/FAA)
October 20-21, 2004	Augusta, GA (Garrett)
January 12-13, 2005	TBD
April 13-14, 2005	TBD
June 29-30, 2005	TBD
October 12-13, 2005	TBD

New Business

Mr. Hollinger asked if there were any "new business" issues that Committee member wanted to propose. Mr. Dave Allen (SAE Aerospace) asked for comments about the continuation of the ATSRAC charter. Mr. Hollinger said that he would assume that the FAA will continue the charter, and Mr. Huber commented on the advantages, goals, and accomplishments of the ATSRAC committee. He said that he would like the Committee to continue and would advocate re-chartering the Committee, and that maybe the Committee meetings would not need to take place so frequently (changing the number of meetings to three times a year instead of four). Mr. Allen asked for as much notice as possible if there were any changes, since most companies need to plan on budget requests for the next year in advance. Mr. Hollinger commented on the progress of the working groups and that they represent a good reason for sustaining the ATSRAC charter. Mr. Hollinger suggested that ATSRAC could meet in May 2005 instead of in April and July, and Mr. Huber expressed concern that HWG 13 still needs to meet more frequently. Finally, there was some discussion of HWG 13's tasking and the timetable for finishing the HWG 13 tasks. Mr. Hollinger asked if the members of HWG 13 could present an interim report at the July 2004 ATSRAC meeting, and the members of that working group indicated that they could.

Mr. Hollinger suggested agreeing on a date in May of 2005 that ATSRAC could meet if the Committee decides against having an April and July meeting. Ms. Negroni suggested timing the May 2005 meeting so that it more closely coincides with the issuance of the NPRM anticipated for early in 2005, and the comments that will be submitted on the NPRM. Ms. Negroni suggested that it might be long after the comment period ends

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before the FAA decides whether or not ATSRAC should review the comments from the NPRM. Mr. Hollinger proposed May 11-12, 2005 if the April and July ATSRAC meetings were cancelled. Mr. Harper asked if those meetings would be in Washington, DC, and Mr. Hollinger responded that it would be more important for the October meeting to be held in Washington, DC.

Review of Open and New Action Items

All of the open action items from previous ATSRAC meetings were discussed. Mr. Hollinger announced that two agenda items for the July 2004 ATSRAC meeting will be made to address two action items from the January meeting.

Action Items Pending from January 2004

- Mr. Ric **Anderson** and Mr. Larry Stevick will provide information on whether ATA should add the recommendation of HWG 12 (concerning cycling of circuit breakers) to ATA spec 117.

Action Items Pending from October 2003

- None

Action Item Pending from April 2003

- None

Action Item Pending from January 2003

- The Committee concluded that the assignment to advise the Committee how the FAA will harmonize the various aging rules on compliance times, (i.e., Tiger Team results), which had been tasked to Mr. Sadeghi, could not be completed at this time, since the Tiger Team had not finished its analysis.

Adjourn: 10:50 AM (April 29, 2004)

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Action Items

- 1) Present a report from Boeing on Boeing's guidance for development of a Dispatch Deviation Guide (Mr. Andersen).
- 2) Present a report on ways in which the MMEL A/C can be updated (Mr. Haag).
- 3) AFS-200 will coordinate a presentation on how the FAA approves MMELs, and will comment on Mr. Card's MMEL presentation from January (Mr. Huber).
- 4) The FAA will contact other manufacturers and the FAA field offices and inform them of the issuance of the SILs by Airbus, Boeing and Dassault (Mr. Huber).
- 5) Presentation of an interim report from HWG 11 (Mr. Pope).
- 6) Provide a Tiger Team flow chart of the team's timelines for the next ATSRAC meeting (Mr. Huber).
- 7) Presentation of the manufacturer's process for operators' compliance with certification requirements of Part 25 aircraft under 30 seats (Mr. Cotti/HWG 13).
- 8) Process a waiver to hold the ATSRAC meeting in a non-government location for the July meeting which will be located at the AIA facility in Rosslyn, VA (FAA).

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Key Decisions and Conclusions

- The Committee voted unanimously to adopt the meeting minutes from the January 2004 ATSRAC meeting with several minor changes.
- The Committee decided unanimously to resolve the circuit breaker recycling issue by the issuance from Airbus, Boeing and Dassault of Service Information Letters regarding cycling of circuit breakers, and that the Committee will track the issuance of the Service Information Letters. The FAA will coordinate with JAA and other organizations with notification to other aircraft and component manufacturers of the Service Information Letters from Airbus, Boeing and Dassault and encourage them to adopt similar same letters.
- The Committee voted unanimously on the following dates for future meetings:

Date	Location
July 7-8, 2004	Rosslyn, VA and Washington, D.C. (AIA/FAA)

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October 20-21, 2004	Augusta, GA (Garrett)
January 12-13, 2005	TBD
April 13-14, 2005	TBD
May 11-12, 2005 (tentative)	TBD
June 29-30, 2005	TBD
October 12-13, 2005	TBD