

**AGING TRANSPORT SYSTEMS RULEMAKING
ADVISORY COMMITTEE
MEETING MINUTES**

Date: January 22-23, 2003
Place: Hyatt Regency
Savannah, Georgia

DAY ONE: 9:00 AM

Administrative

Mr. Kent Hollinger, the Aging Transport Systems Rulemaking Advisory Committee (ATSRAC) Chair, called the meeting to order at 9:00 a.m., after which Mr. Charles Huber, the ATSRAC Executive Director, read the advisory committee briefing statement. Following Mr. Huber's statement, Mr. Hollinger welcomed the group, thanked NBAA and its member organizations for hosting the meeting, and reviewed the agenda (Handout 1).

Approval of October 2002 Minutes (Handout 2)

Mr. Hollinger opened the floor for comments on the October 2002 minutes. Following requests for minor changes, the Committee unanimously agreed to accept the minutes with the approved changes.

Working Group 10 Final Report (Handout 3)

Mr. Jon Haag (Working Group 10 Co-chair) presented the Working Group 10 final report and gave an outline of the WG's findings and recommendations as shown in Handout 3: "HWG-10 Final Report Presentation to ATSRAC." Throughout Mr. Haag's report, participants asked many questions and made many comments about the contents of the presentation. The highlights of those questions and comments are indicated below.

Discussion

Mr. Fred Sobeck (FAA) asked if operators typically used repair stations to do their maintenance- and STC-related tasks. Mr. Haag responded "yes." Mr. Sobeck questioned whether operators supervised such work. Mr. Haag said in his personal observation, operator personnel supervised major alterations from start to finish. However, they did not normally supervise maintenance-related work.

In Mr. Haag's discussion of the WG's airplane evaluations, he noted there was one significant item involving circuit breaker panels that was of concern and remained an open item for the manufacturers to review. In response, Mr. Huber asked if this might require a follow-on Airworthiness Directive, after which Mr. Haag responded, "no."

Mr. Tony Heather (JAA/CAA-UK) asked if the wiring the WG examined during their intrusive inspections was the originally installed wire or if it was wiring installed by STC. Mr. Haag referred the question to Mr. Pappas, who responded saying the WG could not make this determination.

In a discussion of the WG's conclusions, Mr. Haag pointed out that enhanced maintenance procedures and enhanced inspection criteria were among the ways to address wiring problems. Following this discussion, Mr. Sobeck asked who was responsible for developing maintenance and inspection programs. Mr. Haag responded saying it was the OEMs' responsibility. Development of such programs would be carried out through changes to the maintenance program for each OEM's particular product.

About the WG's conclusion that wiring problems could be addressed by enforcement of current regulations, Mr. Sobeck asked if Mr. Haag believed wiring was included in 43.13 as related to cleaning, maintenance, and inspections. Mr. Ric Peri (AEA) responded to Mr. Sobeck's question, saying "yes" he believed wiring was inherent in 43.13. Mr. Peri also said from reviewing various

**AGING TRANSPORT SYSTEMS RULEMAKING
ADVISORY COMMITTEE
MEETING MINUTES**

ATSRAC reports it appeared that the hypotheses from ATSRAC were that (1) the OEM did not have adequate wiring inspection requirements and (2) the technicians did not possess the requisite skills to properly inspect wiring systems. He pointed out the evaluations of WG-10 aircraft challenged both of these hypotheses, that 5 of the 6 aircraft types have published wiring inspections, and that there has been no effort to correlate the identified discrepancies to omissions in the OEM inspection program. Mr. Peri further remarked that in a review of the caliber of discrepancies found in the 39 inspections, the majority of discrepancies were already covered by FAA Advisory Circular 43-13.1b. While the manufacturer's maintenance and inspection manual provides "what" must be inspected, AC 43-13.1b provides "how" the inspection should be conducted. He concluded that in his opinion, existing regulations in parts 25, 43 and 121, and associated ACs, if enforced, could correct wiring problems.

Mr. Haag followed with a comment saying, since wiring was not a point of focus in the past, emphasis should now be placed on raising awareness. Mr. Ken Elias (ALPA) then asked what would stop industry from slipping back into their current state of unawareness without regulatory action. Mr. Haag answered saying the WG was not against new rulemaking but believed using current 25.1300 series rules, with some modifications to include EWIS, would help to raise industry awareness. Mr. Ric Anderson (ATA) said he believed the WG's main focus was on enhanced awareness and training. He then directed the following remarks to Mr. Elias in response to Mr. Elias's prior comments:

"Ken, in using your same logic, if we as the operators have fallen back and are ignoring existing rules that are out there, or are unaware (of these rules) or (the rules) are inadequate to the maintenance programs--the definition of adequate is quite different between the 515 independent FAAs that exist out there PMI to PMI--what makes you think that adding more rules would make somebody comply with rules? It doesn't make sense if they're ignoring existing ones unless we can get this awareness and training out there. I'm all against adding more rules that people may not be aware of or lose track of over time. It's the awareness and training where this becomes visible to people."

Mr. Haag followed with a comment saying the WG had found much of the problem areas they discovered were related to unawareness. A participant stated he believed the FAA has highlighted areas of concern such as wiring and has done "an excellent job in raising awareness in this area without any regulatory changes."

Mr. Sobeck questioned whether the small airplane manufacturers and operators could use the analytical logic procedure from WG 9 to develop and enhance their maintenance programs. A WG 10 member responded saying the manufacturer could use a procedure equivalent to the procedure from WG 9, which would be an analytical logic process but not necessarily an enhanced zonal analysis process. The term "zone" implies it is an MSG-3 derived product. However, the small transports are not necessarily MSG-3 derived products. These airplanes use service history derived maintenance programs, so the analytical logic process could be applied to them.

NOTE: As a point of clarification, the WG 9 recommendation was meant to be applied to all programs whether MSG-3 or not.

**AGING TRANSPORT SYSTEMS RULEMAKING
ADVISORY COMMITTEE
MEETING MINUTES**

Mr. Haag discussed WG 10's proactive approach to heighten industry's awareness of wiring issues by presentations scheduled through industry organizations. Mr. Elias questioned the effectiveness of this effort saying, given the voluntary nature of these presentations, coupled with current budgetary constraints, industry's participation in and funding for the presentations would be limited. Mr. Haag responded saying the WG's ultimate goal was to get the information to the EWIS end users.

Following additional remarks, Mr. Hollinger asked participants to hold further comments for the discussion of WG 10's formal final report.

Working Group 10 Final Report (Handout 3)--Continued

Following Mr. Haag's presentation of Handout 3, in which he gave a broad overview of WG 10's activities and recommendations, participants discussed WG 10's formal final report ("Aging Transport Systems Rulemaking Advisory Committee Harmonization Working Group 10 Small Transport Category Aircraft Final Report and Recommendations"), which the WG had previously submitted for the Committee's review. Committee members presented comments to the report that included editorial items and some substantive remarks that resulted in revisions to the report.

The group discussed Mr. Spencer Bennett's (FedEX) concern that initially focusing training on part 147 aviation maintenance schools would delay training for mechanics, who are the ones that work on the airplanes. In response, Mr. Haag said WG 10 had concerns that the groups identified by WG 8 as requiring training may not meet the needs of the small transport environment. After more discussion, agreement was reached to add a ninth training group to the WG 8 training appendix to address training needs specific to small transports.

Another discussion centered on the importance of zonal inspections and the need to accomplish the inspections during normal maintenance intervals. In response, Mr. Sadeghi noted, unlike large transports that have multiple zones, small transports represent a single zone, which covers the entire airplane, from nose to tail. He also said enhanced wiring analysis focuses on how critical the wire is to the zone as opposed to emphasizing the importance of the individual wire.

Participants discussed at length the difficulty of performing EZAP on STCs. Mr. Haag indicated WG 10 had recommended an exemption from performing the EZAP on STCs installed on small transports. In a 16 to 1 vote, the Committee agreed with a proposal to modify the WG's recommendation to clarify the basis for granting such an exemption.

Following additional discussions, the Committee agreed not to support the WG's recommendation to revise the 25.1300 series rules to include EWIS rather than adding the 25.1700 series rules as previously recommended by WG 6.

Vote on WG 10's Product

In a majority vote, with 1 abstention, the Committee agreed to accept WG 10's report with approved revisions.

Administrative

Mr. Huber said his presentation, "FAA Response to ATSRAC Letter on EAPAS Implementation," scheduled for January 22nd would be combined with his presentation entitled "Future of ATSRAC" scheduled for the January 23rd session. In addition, Mr. Pappas's presentation on FAA research and development was moved to the first presentation of the January 23rd session.

NOTE: The presentation was delayed until the April 24, 2003 ATSRAC meeting.

Lubricant Effectiveness Study for Corrosion Protection and Improved Reliability of Avionics (Handout 4)

January 2003 Minutes approved at
4/24/03 meeting
Docs #18517

**AGING TRANSPORT SYSTEMS RULEMAKING
ADVISORY COMMITTEE
MEETING MINUTES**

Mr. Hector Hernandez (Robbins Air Force Base) provided the group with an overview of the lubricant effectiveness study as indicated in Handout 4: "Effects of Corrosion Inhibiting Lubricants on Electronics Reliability."

Intrusive Inspection Comments (Handout 5)

Mr. Massoud Sadeghi (FAA) presented the FAA's final report on the disposition of the intrusive inspection recommendations and addressed Committee members' comments to the draft report. See Handout 5: "Disposition of Recommendations Published in the 'Transport Aircraft Intrusive Inspection Project (An Analysis of the Wire Installations of Six Decommissioned Aircraft) Final Report' Dated December 29, 2000."

Tour of Gulfstream Facility

Following the end of the day's session, Committee members toured Gulfstream.

DAY TWO: 8:00 a.m.

FAA Research and Development (Handout 6)

Mr. Rob Pappas (FAA) gave the research and development presentation as indicated in Handout 6: "FAA Aging Electrical Systems Research Program Update."

Future of ATSRAC (Handout 7)

Mr. Huber discussed a proposal to retask ATSRAC, after which the Committee voted 16 in favor, with 3 abstaining, to accept the following four additional tasks:

- 1) Provide technical/economic information in support of proposed rulemaking.
- 2) Assist in development of alternatives to rulemaking.
- 3) Assist as needed in response to comments of issued NPRMs.
- 4) Assist in implementing EAPAS R&D products.

In a follow-on vote, the Committee unanimously agreed to form two new working groups (WG 11 for tasks 1-2 and possibly 3, and WG 12 for task 4) to carry out the four additional tasks. The Committee further agreed that Chuck Huber and Rob Pappas would lead ad hoc groups of volunteers to draft the tasking statements for WGs 11 and 12, respectively. In a call for volunteers for the tasking statement development for WGs 11 and 12, the following individuals/organizations agreed to participate:

Working Group 11

Spencer Bennett
Don Anderson
Jon Haag
Cliff Neudorf
Dominique Chevart
Nick Drivas

Working Group 12

Dave Allen
Eli Cotti
Luci Crittenden
ALPA (possibly Ken Elias)
ATA
Boeing (possibly Gil Palafox)
Airbus
Transport Canada

Comments from the Floor

After Mr. Huber briefly introduced his presentations, Ms. Sarah Knife (GEAE) stated her opinion as follows and asked that her remarks be included in the minutes: "There is a significant constituency in industry, which did not have the opportunity to participate in the activities of ATSRAC or to influence the outcome, either from lack of awareness, from a miscommunication that they would have an opportunity to review ATSRAC material before it was finalized, or a miscommunication that they would not be affected. That constituency does not support all of the recommendations of ATSRAC. The ATSRAC recommendations should, therefore, not be

**AGING TRANSPORT SYSTEMS RULEMAKING
ADVISORY COMMITTEE
MEETING MINUTES**

considered a consensus industry position." Mr. Hollinger responded saying the ATSRAC activities had been done in a public forum with all ATSRAC taskings, including working group formations and their assigned tasks being published in the "Federal Register," as well as in other publications (e.g., "Aviation Weekly") and at various conferences (e.g., Aging Aircraft Conference). In addition, all ATSRAC meetings have been announced in the "Federal Register" and have been opened to the public. Therefore, industry has had a full opportunity for participation in the Committee's activities. Following these remarks, Mr. Huber completed his presentation as summarized above.

Future Meeting Dates and Locations

The Committee discussed and agreed on the following 2003 schedule for future meetings:

April 23-24	Although no meeting is planned for April, Committee members should keep these dates opened until further notice in the event an emergency meeting is necessary.
June 11-12	Pending approval, the meeting will be in Long Beach at the Boeing facility.
July 9-10	No Meeting.
October 22-23	Meeting confirmation and location TBD.

In response to a participant's question about future updates on wire specifications, Mr. Hollinger indicated that Mr. Pappas could provide such an update at the next meeting.

Other Business: None

Review of Open and New Action Items

All prior action items are closed, except items number 11 and 12 from the October 2002 list. Mr. Pappas said the FAA Technical Center was gathering the requested information to complete action 11. In response to action 12, Ms. Luci Crittenden (NASA) indicated she had received the Space Shuttle Wire Inspection Report and would forward it to Mr. Hollinger by January 31, 2003.

Adjourn: 11:30 a.m.

Attendees: (Handout 8)

**AGING TRANSPORT SYSTEMS RULEMAKING
ADVISORY COMMITTEE
MEETING MINUTES**

Action Items

1. Working Group 10 will complete revisions to their final report by January 31, 2003. (WG chairs and members).
2. Committee members who want a copy of Hector Hernandez' presentation (*Lubricant Effectiveness Study for Corrosion Protection*) should e-mail their request to Kent Hollinger by January 31, 2003.
3. Provide Committee members with FAA's response to the Committee's letter outlining alternative compliance approaches to EZAP implementation. (Chuck Huber)
4. Advise Committee how the FAA will harmonize the various aging rules with regard to compliance times. (Chuck Huber)
5. Confirm that Boeing will host the June 11-12, 2003 ATSRAC meeting at their Long Beach facility. (Don Andersen)
6. Complete review of four new tasks by 2/14/2003. (Volunteers for subgroups to draft tasking statements for WGs 11 and 12)
7. Draft Federal Register notice for new ATSRAC working groups and tasks. (Chuck Huber, Shirley Stroman).
8. Provide pictures and actual test materials of damage to wiring WG 8 could use to better meet its requirements (Dr. Chris Smith)—item 5 from October 2002 AIs.
9. Forward Space Shuttle Wire Inspection Report to Kent Hollinger for distribution. (Luci Crittenden)—item 6 from October 2002 AIs.

KEY DECISIONS AND CONCLUSIONS

- After discussion about the need for WG 10 to clarify their recommendation (page 29, "HWG 9" heading of draft final report) to exempt previously installed STCs on small transport category airplanes from WG 9's tasking products, the Committee, in a 16 to 1 vote, agreed to the following resolution:
 - WG 10 should reverse the order of recommendations 2 and 3 on page 29 of the draft final report under the "HWG 9" heading so current number 2, which discusses the exemption, becomes number 3. With this change, the basis for granting the exemption would be listed first followed by the recommendation to grant the exemption.
- The Committee discussed WG 10's recommendation (page 30 of draft final report) that the part 25.1700 series rules should not be revised as recommended by WG 6 because WG 10 believes the current 25.1300 series, with revisions, can best ensure visibility of the EWIS. In a majority vote, with 1 opposing, the Committee agreed to have WG 10 change their recommendations to a conclusion, and add a statement to their final report saying the Committee did not agree with this conclusion.
- In a majority vote, with 1 abstention, the Committee accepted WG 10's draft final report with agreed-upon revisions.
- The Committee voted 16 in favor, with 3 abstaining, to accept the following four additional tasks, which were outlined in Chuck Huber's presentation on the future of ATSRAC:
 1. Provide technical/economic information in support of proposed rulemaking.
 2. Assist in development of alternatives to rulemaking.
 3. Assist as needed in response to comments of issued NPRMs.
 4. Assist in Implementing EAPAS R&D products.
- In a follow-on vote, the Committee unanimously agreed to form two new working groups (WG 11 for tasks 1-2 and possibly 3, and WG 12 for task 4) to carry out the four additional tasks.

**AGING TRANSPORT SYSTEMS RULEMAKING
ADVISORY COMMITTEE
MEETING MINUTES**

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- In a call for volunteers to draft the tasking statements for WGs 11 and 12, the following individuals/organizations agreed to participate:

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