

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

**Date:** October 24-25, 2001  
**Time:** 9:00 a.m.  
**Place:** Bessie Coleman Conference Center  
Washington, DC

**DAY ONE**

**Administrative**

Mr. Kent Hollinger, the Aging Transport Systems Rulemaking Advisory Committee (ATSRAC) Chair, called the meeting to order at 9:05 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 and made some remarks about the September 11<sup>th</sup> terrorists attacks. He continued with remarks about new federal security requirements for attendees as a result of those attacks and asked Ms. Stroman (FAA) to provide the group with the specific requirements. Following Ms. Stroman's remarks, Mr. Hollinger asked for introductions, then reviewed the agenda (Handout 1). He advised the group that there would be some adjustments to the agenda, including a postponement of the engine manufacturer's presentation.

Approval of July 2001 Minutes (Handout 2)

Mr. Hollinger opened the floor for comments on the July 2001 minutes. Following a brief discussion of the minutes and requests for minor changes, the Committee unanimously approved the minutes with noted changes.

Guest Speaker

Mr. Hollinger advised the group that a special guest speaker was in attendance and would make remarks, whereupon he introduced Mr. John Hickey (FAA), Director, Aircraft Certification Services. Mr. Hickey welcomed the group and expressed his appreciation for the level of attendance, which, he stated, nearly equaled pre-September 11<sup>th</sup> attendance. He told the group that "it is very important for us in the United States, and for the FAA in particular, to continue working the safety agenda and the safety mission we had previous to September 11<sup>th</sup>." He also spoke about the continued importance of the FAA's EAPAS Plan as a "key element" of the FAA's safety program. He affirmed to the group that this Plan continues to be "a significant, very high priority safety program" within the FAA, and, as such, the agency will continue to carry it out. He expressed sensitivity to the affects of the economy on the aviation industry following September 11<sup>th</sup>. However, he expressed hope that the attendees would talk to their organization heads to help them understand that in the post-September 11<sup>th</sup> reordering of priorities, EAPAS and the work of the ATSRAC remain a high priority for their organizations.

**FAA Plan for Small Aircraft (Handout 3)**

Mr. Massoud Sadeghi (FAA) provided a presentation on the "Aging Small Transport Airplanes Study Plan." He discussed background information about the plan, the schedule for implementation, and the participants involved in the effort. He noted that as part of the EAPAS Plan, the FAA intends to conduct studies on small transport airplane wiring to determine how EAPAS enhancements may apply to those airplanes and to identify and address any unique aging issues. According to the schedule, the wiring component of the plan is scheduled for completion by December 2002 and the mechanical systems portions by December 2004.

Plan for Small Aircraft Discussion

During Mr. Sadeghi's discussion, Mr. Edward Block (Global Air Safety Institute) asked what types of tests would be conducted. Mr. Sadeghi responded that tests would include visual inspections, nondestructive examinations, and laboratory inspections of wire bundles. Mr. Block followed with additional comments and a question about whether specific wire performance testing was a part of the small transport airplane study. Dr. Chris Smith (FAA Technical Center) responded that

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there is no plan to do performance testing in areas such as flammability on small transport airplanes since there was no evidence of degradation in such performance characteristics in the original intrusive inspections. Mr. Huber added that the intent of the small transport airplane study is to be able to develop a comparison between what we see with regard to the small transports and the larger airplanes.

At the end of the presentation, the Committee agreed that the status reports on the "Aging Small Transport Airplanes Study Plan" should be retained as a standing agenda item for future meetings.

EAPAS Update

Mr. Sadeghi continued with an update on the EAPAS initiatives. He indicated that the near-term activities are moving at a good pace and would be completed by the end of 2001. He also said that the FAA had provided wire-related training to 50 percent of its engineers and is beginning to train its inspectors. Mr. Fred Sobeck (FAA) interjected that the first training session is scheduled for November 29 and 30, 2001 for the inspectors. He added that over 600 instructors have already been signed on for the initial effort. Mr. Sadeghi continued by noting that the FAA has published the wire installation drawing policy and has received some comments. The FAA will address these comments, and the policy will be republished. He added that the final rules related to the Airworthiness Directives (ADs) that resulted from the aging systems activities will be published by the end of November 2001.

Aging Small Transport Airplanes Study Plan Discussion

Mr. Bill Schultz (GAMA) asked Mr. Sadeghi to return to slide 6 of handout 3 as he wanted to know what scheduling activities would take place between now and the next ATSRAC meeting. He noted that, according to slide 6, the activities of forming the study teams, preparing the plan, and identifying airplanes, would all be underway prior to the next ATSRAC meeting. Given this, he asked Mr. Sadeghi to address what he envisioned happening with the project as manufacturers' and operators' support was gained. Mr. Sadeghi answered that he was hoping to hold a meeting very soon to determine how best to meet the timeline for the first three activities.

Mr. Robert Pappas (FAA) said that when the project teams are established, they should use the same protocol, as the starting point, that was used for the intrusive inspections even though there will be some differences. In addition, the teams should use the lessons learned from the intrusive inspections.

Mr. Schultz commented on the NTSB recommendation, A-00-119, discussed in slide 3 of handout 3. He discussed the importance of the Committee and working groups reviewing the relevant statutes (e.g., those that direct the FAA Administrator to write regulations) as they develop their recommendations. After further discussion, Mr. Schultz volunteered to give a presentation at the next ATSRAC meeting on what NTSB says needs to be the focus with regard to small transport airplanes.

**Status of ATSRAC Recommendations to the FAA (Handout 4)**

Mr. Huber provided an update on the status of the Committee's recommendations to the FAA. He indicated that handout 4 was a compilation of all the ATSRAC Phase I recommendations, which include those from Working Groups 1 to 5. The "Response" line item indicates the current disposition of the corresponding recommendation. He indicated that the FAA is addressing all the recommendations, except Task 3 recommendation 7. He then asked for clarification of this recommendation from any Working Group 3 member in attendance.

Discussion of Task 3 Recommendation 7

Mr. Randy Boren (Northwest Airlines) addressed Mr. Huber's question. He indicated that the recommendation was made in the context of discussions about items like Mylar insulation blankets that were certified as acceptable materials to use in aircraft, but problems were later identified and action taken via an Airworthiness Directives (AD) to remove this material. What

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recommendation 7 says is that in the development of maintenance and inspection criteria, the working group (WG) needs to be able to make an assumption that the material that was certified is good until proven otherwise. In addition WG 3 didn't want to address certification requirements as part of the maintenance criteria. Mr. Huber responded that he understood Mr. Boren's explanation and added that the FAA has developed ADs against the use of Mylar insulation blankets and would be doing rulemaking that defines new flammability standards for that type of equipment. In addition, he said that if recommendation 7 was saying that every piece of equipment involved in a fire or smoke incident needed a flammability test, then the recommendation is "a lot bigger than ATSRAC." Mr. Boren indicated that the recommendation was actually much simpler. He reiterated that in the development of maintenance criteria, WG 3 felt that it could make the assumption that once the material was certified, the WG did not need to address its properties as part of the development of maintenance criteria. And, should those properties be deemed unacceptable later, the WG would expect the manufacturer and the FAA to address that. Given Mr. Boren's explanation, Mr. Huber indicated that he did not currently see where, under EAPAS, the FAA was completely addressing the aspect of flammability within the maintenance program unless WG 9 was addressing it. Mr. Boren responded that WG 9 was not currently addressing this issue.

This discussion continued at length, focusing on the need to identify flammable materials. Mr. Huber suggested tasking either WG 6 or 9 with identifying these materials. Mr. Wayne Maxey (Boeing) commented that the Committee should seek outside expertise to develop the list. One participant suggested consulting with the National Fire Protection Association. Dr. Smith (FAA) indicated that he would verify if the FAA Technical Center had such a list and if it did, would provide it to the Committee. Mr. Huber added that the list would be distributed to the Committee for review and comment. Additional comments noted that consideration should be given to whether such a list should be generic or zone specific. The discussion then moved to comments about how to distribute such a list. The suggestions included putting it in an Advisory Circular (AC) or including it as an appendix to MSG-3.

At the end of this discussion, Mr. Hollinger summarized an earlier proposal of how to handle the issue of flammable materials and asked the Committee to vote on the proposal. The proposal was to table discussion on the issue and have Dr. Smith coordinate a presentation on the issue by Mr. Gus Sarkos and Dick Hill of the FAA Technical Center. The Committee voted in favor of the proposal.

**Status of ATSRAC Recommendations to the FAA (Continued)**

Mr. Huber concluded his discussion by asking the Committee membership to review the list of recommendations and provide him with comments before the list is finalized. In addition, he noted that when he compiled the list of recommendations, he did not have a response to recommendation 12. However, he has since learned from Mr. Fred Sobeck (FAA) that an AC will be published in response to this recommendation, and he will update the list accordingly. Mr. Sobeck added that the AC addresses the contamination of wiring by, for example, caustic chemicals and waste products. However, it will not give a specific procedure for cleaning wiring. These procedures, Mr. Sobeck noted, should come from either the manufacturer or the Airlines.

**Aging Systems R&D Status (Handout 5)**

Mr. Robert Pappas (FAA) provided a presentation on the FAA's Aging Electrical Systems Research Program. His presentation included an update on arc fault circuit breakers research (Phase I) and the FAA's aging electrical systems research projects (Phase II). In terms of the research related to arc fault circuit breakers, Mr. Pappas stated that the Eaton breakers had no in-flight nuisance trips during the test period. However, there were some tripping problems on initial start-up of the aircraft. Eaton has identified the problem, has corrected it, and is constructing a new set of breakers for the program, which will be flight-tested at some point in the future. Mr. Pappas added that the purpose of doing the arc fault testing was to ensure that nuisance tripping would not be prevalent in these breakers. Following additional discussion of the slides in handout 5, a participant asked if the FAA planned to change the circuit breaker reset

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policy. Mr. Pappas indicated that he did not believe this policy would be changed, and Mr. Huber verified that Mr. Pappas' statement was correct. Mr. Pappas discussed that in the future the program would look at items like circuit breaker communication, built-in testing, and coordination. In response to a question from a participant, Mr. Pappas noted that first-generation arc fault circuit breakers would not be coordinated in the "arc fault sense." However, thermally, they will be coordinated the same way as they currently are. Therefore, he suggested using these breakers on the lowest possible part of the circuit.

In regard to Phase II of the program, Mr. Pappas noted that the wire degradation research is well underway. The start-up meeting, tasking, and scheduling have been completed, and the working partners have been established. Mr. Pappas discussed aging circuit breaker testing, noting that this year the FAA Technical Center had begun a major program in this area. The final report from the program is due March 2002. In addition, he discussed the advance risk assessment methods for aircraft electrical systems. The product from this program, Mr. Pappas noted, would be a software-based tool that will require significant input from all stakeholders. Next, Mr. Pappas discussed other fiscal-year 2002 projects, including the evaluation of mixed wire types, maintenance effects on electrical interconnect systems, and wire separation and segregation requirements.

Aging Systems R&D Status Discussion

A participant asked if the bulk of the research Mr. Pappas had discussed would be completed by the end of 2002. Mr. Pappas responded that since there is a large mix of programs, many of which are 3-year programs, and many of which may reveal new requirements for research, it is difficult to answer the question definitively. All the projects discussed, however, have fixed ending dates. Dr. Smith added that the Technical Center's research efforts have two objectives. First, they enable rulemaking. Second, they facilitate compliance with regulations. In addition, he said, to the extent that research efforts are designed to facilitate rulemaking, the Technical Center must meet a very tight schedule. However, to the extent that they facilitate compliance, there is a longer timeframe to complete a project.

Following this discussion, Mr. Block raised the issue of wire performance and expressed a need to do more up-front in terms of "not allowing any further defective wire types on aircraft." He indicated that it would "go a long way towards not needing so much fix-up when you stop putting in the bad stuff." He then discussed the "Fire Safety Materials Handbook" issued in June 2000 and asked if anyone had evaluated the test results in that document. He also asked if any consideration had been given to using the document. Mr. Pappas responded that his presentation at the last ATSRAC meeting included a discussion about wire performance. He explained that the FAA does have a program for wire performance and is currently establishing the requirements and scope of the project. He added that while he did not currently have a status of the project, he could confirm that a wire performance project is in progress. Mr. Block asked if the project would take 3 years to complete, whereupon Mr. Pappas responded that he believed it was a 2-year program.

Administrative

Following the break, Mr. Hollinger indicated that to keep the flow to the working groups' reports, Working Group 6's update would be moved to tomorrow morning and today's session would end with the working group coordination presentation.

**Harmonization Working Group Coordination Process (Handout 6)**

In follow-up to the discussion at the July 2001 ATSRAC meeting, Mr. Mike Nancarrow, the working groups' Integration Leader, provided the group with an overview of the working group coordination process. He indicated that the purpose of the process was to ensure coordination of all activities and issues related to tasks 6, 7, 8, and 9. He went on to discuss areas that included the objectives of the coordination process, the integration process, the integration team, the report format, and the overall plan of approach. He indicated that a number of issues had already been identified, including the current issue explained in slide 6 of his presentation. This issue

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involves chapter 7 of the *Intrusive Inspection Report* and outstanding recommendations that require closure. Mr. Nancarrow indicated that the plan to address this issue is to have each working group review the detailed recommendations and assign “owners” to the pending recommendations. Then, he would track the status of the recommendations at an integration-team level to identify any problem areas in terms of what is being incorporated into the various working groups and what is not. Mr. Nancarrow added that in discussion with Mr. Hollinger and Mr. Huber, he reformatted the chapter 7 tables of specific recommendations in the *Intrusive Inspection Report* to accommodate the tracking process. For each recommendation, there is a task number, an owner, the ECD or estimated completion date, and “stop lights” to show the level of progress.

Following the end of Mr. Nancarrow’s presentation, Mr. Hollinger reminded the group that at the July 2001 meeting they had decided to table approval of the coordination plan until after Mr. Nancarrow’s presentation. He then asked for comments on the plan, whereby Mr. Huber expressed support for the process. Following a call for a vote, the Committee unanimously accepted the working group coordination process.

**DAY TWO**

Administrative

Mr. Hollinger shared with the group a copy of an October 2001 article (Handout 7) from an aviation publication called “Overhaul & Maintenance.” The article entitled “New Rules on Wiring; Broken Rules at Emery,” he noted, covered EAPAS and ATSRAC activities.

**Task 6 Update (Handout 8)**

Mr. Vid Variakojis (Boeing) gave attendees an overview of the status of Task 6. He began by announcing a new WG 6 member from Transport Canada, Mr. Jean Cartier. In terms of the taskings, he noted that several subtasks were in the yellow category, which indicates a delay. The delays resulted from members being busy with other priorities. However, progress, mostly via the use of e-mails, has been made in those subtasks showing a yellow-to-green status. He indicated that the WG needed the Committee’s approval of its definition of wire systems. After lengthy discussions about whether wires in galleys and lavatories are included in the definition, and the response that they are, in fact, included, the Committee voted unanimously to accept WG 6’s definition of “wire systems.” During additional discussions, it was recommended that this definition be included in the related AC and in the preamble of the regulation. Mr. Jim Shaw (Vice Chair) stated his very strong desire that wire separation issues be thoroughly addressed as the present regulations, SWPMs (Standard Wiring Practice Manuals), and ACs have not prevented serious deficiencies in present design.

**Task 7 Update (Handout 9)**

Ms. Tracey Johnson (Boeing) presented the update on Task 7. Ms. Johnson indicated that WG 7 has a number of airline participants, and because of September 11<sup>th</sup> events, there was no airline participation in the WG’s October meeting. The next WG meeting, which may be moved from Long Beach to Vancouver to facilitate Air Canada’s participation, is scheduled for the first part of December. Ms. Johnson discussed the status per handout 9 of each subtask, indicating the need for ATA participation in Task 7.1. Following, Ms. Johnson’s presentation, a participant asked if WG 7 had representation from the JAA, whereupon Mr. Hollinger asked Mr. Vic Card (JAA) to discuss his role as the coordinator between the WG and the JAA. Mr. Card explained that his role included having WG 7 forward its products to him for coordination with and feedback from the JAA. In regard to ATA’s participation, Mr. Ric Anderson (ATA) indicated that he would continue to work on obtaining representation from ATA. In terms of scheduling, Ms. Johnson said that the WG was still attempting to have a draft report ready by January 2002.

**Task 8 Update (Handout 10)**

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Mr. Spencer Bennett (FedEx) provided the update on Task 8 as specified in handout 10. In addition, he discussed the assistance the WG required from the Committee, which included how training should be measured and the requirements for recurrent training. After Mr. Bennett's presentation, Mr. Hollinger asked the group for comments, and a lengthy discussion ensued about how best to measure training and how best to describe the requirements for recurrent training.

In terms of measuring training, the discussion centered around the pros and cons of a time-based versus a performance-based measurement. Mr. Sobeck indicated that the FAA has moved towards performance-based rules as much as possible. Also, the FAA's training of its inspectors is mostly performance-based. Therefore, it would make sense to have industry use the same type of measurement. He also commented that in some cases there may be a need to do both performance- and time-based measurements, depending on the type of training in question. These comments were followed by discussion on the need for industry to have flexibility in determining how to measure training. The AC from WG 8, Mr. Sobeck noted, would be based on the existing regulations in part 121, which is fairly broad and does not address a method of compliance. If the FAA mandated a performance-based measurement, it would have to be done via a change in the rule. Mr. Jim Shaw (ALPA) indicated that the issue appears to be whether the Committee wants to mandate a particular compliance method or make a particular method the most prominent one that is referenced in the AC. After additional discussion that ended with a recommendation to use a performance-based example in the AC as a means of suggesting how industry might comply with the training requirement, Mr. Hollinger asked for a vote, and the Committee unanimously agreed to adopt the recommendation.

The group moved to a discussion of the delivery methodology with the primary focus of whether the instructions on the methodology should be prescriptive (e.g., Hands-on training "should" be used.) or formatted as a recommendation (e.g., Hands-on training "could" be used.) The WG indicated that their recommendation would be to use "could" so that each carrier and their local PMI could make a decision on which method to use based on their particular circumstance. After additional discussion on the topic, Mr. Hollinger proposed having WG 8 use the following criteria: 1) If there is more than one way to properly do a task, use the term "could." 2) If there is only one way to properly do a task, use the term "should." Following his proposal, he asked for comments. In response, Mr. Shaw expressed agreement with the recommendation. Mr. Hollinger then asked the Committee to vote on his proposal, whereupon the Committee unanimously accepted the proposal.

Following the vote, the Committee began discussion of the assistance the WG required in determining if the training should be recurrent (e.g., conduct the same training each year) or refresher (e.g., target training to problem areas). Mr. Bennett indicated that the WG would recommend refresher training. After some discussion, Mr. Hollinger presented for a vote a proposal from a participant that the WG should decide for each training event what items should be covered each time as a base, and what items should be covered on an as-required basis. The Committee voted unanimously in favor of the proposal.

The next topic of discussion was pre-testing as a way to identify knowledge gaps. After some discussion, Mr. Hollinger summarized a proposal from a participant that an individual could avoid the standard type recurrent training by taking and passing a test but would still have to take refresher training on the "normal schedule." The Committee voted unanimously in favor of the proposal.

Discussion then moved to the frequency of training (e.g., annually, bi-annually, as-needed). After considerable discussion, some participants proposed a training

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schedule “not to exceed” two years, whereas others proposed a schedule “not to exceed” one year. Following these proposals, Mr. Hollinger asked the Committee to vote on each, whereby the majority (9 vs. 4) of members voted in favor of the “not to exceed two years” proposal.

The Committee next discussed and dispensed with questions posed by WG 8 on the following topics: course drivers, HIRF and lightning, and enhanced zonal inspection procedures.

**Task 9 Update (Handout 11)**

Mr. Randy Boren (Northwest Airlines) updated the group about the progress on Task 9 as detailed in handout 10. The areas showing red, he noted, represent a change in status from the last ATSRAC meeting. Mr. Boren announced that, in the wake of September 11<sup>th</sup>, Mr. Martin Cheshire (Virgin Atlantic Airways) had resigned as the European Co-chair. In addition, it appears that Mr. Alex Brytak (Bombardier) is no longer with Bombardier. Mr. Boren said that he would follow-up to verify this. Also as a result of September 11<sup>th</sup>, the October WG meeting scheduled for Vermont was cancelled. Participation had dropped by half. The WG tried to reschedule the meeting in Atlanta, which did not improve the participation rate, so it was rescheduled in Atlanta for November. Eleven members have committed to attending. The only change in status of the WG activities are delays to subtasks, 9.3, 9.4, and 9.5, which are also as a result of the September events. Each of these subtasks has been moved to the yellow category to denote the delays. However, the WG hopes to meet the agreed-upon completion date for its final report. Regarding WG 9’s AC, it has been drafted and circulated twice for comments. Another draft is scheduled for release this week and will be a primary topic of discussion at the November WG meeting.

EZAP Prototype Status (Handout 12)

Following his update on Task 9, Mr. Boren provided the group with a status of the EZAP Prototype Project at Northwest Airlines. He indicated that the associated slides were the same as those from his July 2001 presentation. The project team’s September meeting was cancelled, so they have not met since the last update to the Committee. However, team members have continued their in-house activities. Another meeting has been scheduled following the November WG 9 meeting in Atlanta.

Discussion of EZAP Prototype and Combustibles

Following his presentation, the Committee discussed identifying combustibles during zonal inspections. The discussion included comments by Mr. Boren where he noted that it should not be part of the maintenance program development logic to determine if clean wires in a zone are combustible. Instead, maintenance inspections should consider if wires are subject to contamination. If a clean wire is later found to be combustible, the FAA and/or the manufacturer should address the problem. The Committee then discussed the EZAP logic and whether it should be changed to incorporate the list of combustible materials discussed yesterday. The response was that since the idea of the list just came up, the logic does not now consider the list. Mr. Hollinger commented that he does not see the need to change the logic. The only change, he said, would be that while there will still be four end-states, a person may choose, for example, end-state three over end-state two because of the information at their disposal. Mr. Kirk Thronburg (Northwest Airlines) recommended that the project team review this issue further and report back to the Committee.

Discussion of the Products of WG 8 and WG 9

Mr. Boren indicated that WG 9 wanted clarification on whether the Task 9 AC should include the training requirements being developed by WG 8. Mr. Sobeck indicated that the current draft of the AC includes appendices that discuss maintenance training. Both Mr. Huber and Mr. Hollinger expressed that they believed that there would be two

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ACs—one covering the maintenance program from WG 9 and one covering maintenance training from WG 8. Mr. Sobeck responded that if that is the understanding, the training portion of WG 9's AC could be removed. Mr. Hollinger then read from the April 2001 minutes, which indicated that there would be separate ACs from the two WGs. Mr. Hollinger asked that this be discussed during the weekly coordination tele-con to ensure that the chairpersons from both working groups are aware of this decision.

Other Business

After completion of the agenda items, Mr. Hollinger asked the attendees if there was other business to discuss before ending the meeting. Following a question by Mr. Patrick Glapa (Airbus) about participation by AEA in ATSRAC, Mr. Hollinger asked Mr. Huber to contact AEA on this topic.

Review of Action Items

Mr. Hollinger reviewed the July 2001 list of action items. He noted that the item to have an engine manufacturer do a presentation should be carried over to October's list and that the action should be expanded to solicit additional manufacturers to do the presentation. All other items on the list were recorded as having been completed. Ms. Stroman then read the list of action items from the current meeting.

Change in Future Meeting Dates

Mr. Hollinger discussed future meeting dates and noted that Mr. Glapa had requested a change in dates for the July 24-25, 2002 meeting to two weeks earlier. He noted concerns by some of the membership that this change would give the working groups two weeks less time to prepare their final reports. The working group Chairs were asked for their input as to whether this change would adversely impact their completion of their tasks. The Chairs in attendance all agreed that the impact on their groups would be minimal. The Committee then voted unanimously to accept Mr. Glapa's recommendation to change the dates of the July 2002 ATSRAC meeting. It was suggested and agreed-upon that the meeting be held over three days—July 9, 10, and 11—to ensure enough time to cover all the reports and discuss any outstanding issues. Mr. Hollinger then discussed moving the January 2002 meeting, given the current federal security restrictions, to an alternative location. After further discussions and suggestions for holding the meeting at another location, Mr. Thronburg, indicated that Northwest Airlines would host the next meeting to give the Committee the opportunity to tour the Northwest facility and observe some zonal inspections. After further discussion, the Committee voted unanimously to seek a waiver to hold the January 2002 meeting in Atlanta, Georgia at the Northwest Airlines facility.

Adjournment: The meeting adjourned at 3:15 p.m.

Attendees: (Handout 13)

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**ACTION ITEMS**

1. Given that Mike Romanowski was not able to do the scheduled engine manufacturer presentation for the October 2001 meeting, extend invitation to other engine manufacturers to do presentation. (Bob Robeson)
2. Follow-up on request to ATA for participation in Working Group 7. (Ric Anderson)
3. Maintain a standing item on meeting agenda for a presentation on "Aging Small Transport Airplanes Study Plan" at future ATSRAC meetings. (Huber)
4. Provide a presentation at the January 2002 ATSRAC meeting on what NTSB believes the working groups should focus on in terms of small transport airplanes. (Bill Schultz)
5. Gus Sarkos and Dick Hill of the Technical Center will give a presentation at the January 2002 ATSRAC meeting on flammable materials. (Chris Smith, Rob Pappas)
6. Review and comment on the "Summary of ATSRAC Recommendations" that Chuck Huber presented at the October 2001 ATSRAC meeting. (ATSRAC membership)
7. Contact AEA to participate in the January 2002 ATSRAC meeting. (Huber)
8. Obtain information from TSB on list of flammable items as a part of the Tech. Center's presentation on flammable materials (see item 5 above). (Bohdan Goyaniuk)
9. Contact AECMA to solicit participation in the Small Transport Airplanes Inspection Program. (Chris Davies)
10. Process waiver to hold January 2002 meeting in Atlanta. (Huber, Stroman)
11. Check on availability of hotels in the Atlanta area around the January 23-24, 2002 meeting dates and inform Kent Hollinger. (Kirk Thronburg)

**KEY DECISIONS AND CONCLUSIONS**

- The Committee voted unanimously to accept the definition of "wire systems" presented by Working Group 6 and indicated that the definition should be included in the related Advisory Circular and rule.
- As previously approved by the Committee, Vic Card will be the JAA's liaison to Working Group 7 and will provide the group's draft documents to the JAA for review and comment.
- In relation to initial maintenance-related training, the Committee voted unanimously in favor of Working Group 8's providing a performance-based example in the AC language as opposed to a time-based example.
- Working Group 8 asked for guidance from the Committee on how to frame their recommendations. That is, they wanted to know if it was appropriate to use "could," in terms of industry's carrying out a recommendation, or is the use of "should" more appropriate? The group's thinking was that "could" would provide flexibility of application, whereas "should" would be more restrictive. The Committee voted unanimously to direct the Working Group as follows:
  - If a task could be performed in only one way, use "should."
  - If a task can be performed in more than one way, use "could."
- Working Group 8 indicated that they had identified recurrent training as "refresher" training and asked the Committee for guidance. The Committee voted unanimously in favor of directing the group to decide module by module if the required training is to be identified as "refresher" or "recurrent."
- The Committee voted 9 to 4 in favor of directing Working Group 8 to use the timeframe of "not to exceed 2 years" for recurrent training.
- The Committee voted unanimously to seek a waiver to change venue of the January 2002 ATSRAC meeting to the Northwest Airlines facility in Atlanta, Georgia.
- The Committee voted unanimously to accept Patrick Glapa's recommendation to change the dates of the July 24-25, 2002 ATSRAC meeting, noting that the change is not likely to significantly impact the Working Groups' completion of their final reports. Therefore, the new July 2002 meeting dates are July 9, 10, and 11. The Committee determined that since the

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Working Groups will have two weeks less time to complete their work, an extra half-day is needed to ensure enough time to discuss any outstanding issues.