Aviation Rulemaking Advisory Committee (ARAC)
Transport Airplane and Engine (TAE) Issues Area

Meeting Minutes

Date: February 6, 2008
Time: 9:00 a.m. EST
Location: Boeing Facility
Arlington, VA

Call to Order/Administrative Reporting

Mr. Craig Bolt (TAE Assistant Chair) called the meeting to order at 9:00 a.m. Mr. Mike Kaszycki (TAE Assistant Executive Director) read the Federal Advisory Committee Act statement. Mr. Bolt began the introductions (see sign-in sheet **[handout #1]**).

A review of the agenda **[handout #2]** and the action items from the last regularly scheduled TAE meeting was completed:

Item	October 17, 2007 TAEIG Meeting Action Items	Status
1.	FAA to prepare letter to Avionics HWG clarifying work remaining under current tasking. Draft letter to be circulated amongst TAEIG before transmittal to Avionics HWG- Mike Kaszycki	Open
2.	Doug Kihm to provide Craig Bolt with Boeing concerns about the DSHWG report to include in TAEIG transmittal letter of the report to the FAA. - Complete	Completed
3.	Craig Bolt to follow up with engine companies that have been approached by NASA to gain support for NASA funding High Ice Water Content (HIWC) work - Complete	Completed
4.	FAA representatives and AAWG representatives to meet in order to clarify the intent of the task 3 report that was TAEIG approved in April 2007	Completed

Mr. Bolt presented the minutes from the previous TAEIG meeting. The minutes had been previously distributed via email to members of the group for comment. Mr. Kaszycki presented some edits for the minutes and Mr. Bolt asked if there were any edits or comments to the minutes. As there were no additional comments or edits to be made, the minutes were then approved by the TAEIG.

FAA Report

Ms. Suzanne Masterson (FAA) reviewed the FAA report **[handout #3]** and commented on current FAA rulemaking projects. She began with an overview of part 25/26 rules stating that the EAPAS rule (Enhanced Airworthiness Programs for Aging Systems), had been issued as a final rule on October 22, 2007 and also that the Aging Aircraft Safety Rule (Damage Tolerance Data for Repairs and Alterations), had been issued on December 7, 2007. She

highlighted that the EAPAS rule was a very large rule and that it was the first to include the new part 26. Under part 33/35, Engine Bird Ingestion had been issued as a final rule on October 5, 2007. Ms. Masterson added that no new NPRM's had been issued since October of 2007.

Continuing with the status of other rulemakings in the Transport Aircraft Directorate (TAD), Northwest Mountain Region, Ms. Masterson stated that the part 25 Fuel Tank Flammability Reduction rule had received "C-1" approval and was pending OST clearance. She stated that were two final rules, a part 33 and a part 25, in Headquarters for coordination, and also that there were three part 33/35 final rules in coordination at the TAD and three part 25 final rules in development. Mr. Kasszycki extended the FAA's thanks to Rolf Greiner (Airbus) and Doug Kihm (Boeing) for help they provided to the FAA in addressing comments received on the WFD rule, thereby greatly helping the agency to complete a cost benefits analysis that was acceptable to all concerned. Regarding Notices of Proposed Rulemakings (NPRM's) Ms. Masterson said there were not any in OST/OMB coordination, there were two in Headquarters and one each part 25 and part 33 rulemakings in the TAD for coordination.

Mr. Kaszycki reviewed a new task under consideration--to revise sections 25.954 and 25.981 for structural lightning considerations--due to industry's concern about the specific relationships of 25.954 and 25.981 and the structural aspect of lightning. Mr. Kaszycki stated that he did not know if the tasking would be in the form of an ARAC or an Aviation Rulemaking Committee (ARC). He added that regardless of the forum, the FAA intends to involve industry in this tasking. Mr. Walt Derosier, General Aviation Manufacturers Association, stated that this was in fact a big concern for industry, and that he was hopeful the FAA would "move rather quickly" on this tasking. Mr. Kaszycki stated that the FAA agreed, and was trying to determine the most expeditious course to reach resolution in this matter. Mr. Derosier added that industry was expressing growing concerns about the Exemptions process, and was more interested in seeing permanent solutions to such matters.

When asked by Mr. Derosier as to a timetable for this tasking, Mr. Kaszycki stated that the tasking was planned to have been written by the end of October, 2007, but that the subsequent months would help present a clearer picture for the development of a timeline. Mr. Derosier further added that industry was considering writing a letter to the FAA to request rulemaking, and asked Mr. Kaszycki if it would be helpful (to FAA) to do so. Mr. Kaszycki stated that there was already much emphasis from within the FAA to move forward quickly with this effort.

Mr. Kaszycki clarified to Mr. Rolf Greiner that the FAA intended to have drafted a tasking by the end of October, 2007 even though it not had yet determined what the task implementation method would be. He added that SAE lightning Committee and other groups had offered to assist in developing the tasking.

For the non-rulemaking project status since October 2007, Ms. Masterson stated that 12AC's had been issued with the EAPAS rule, to include a part 26 AC. Also two part 25/26 Final Policy Statements were issued in November 2007. Draft AC's and Policies issued consisted of one part 25 AC and one each part 25 and part 33/35 policies, all of which had gone out for public comment.

Mr. Kaszycki briefed the TAEIG on upcoming Certification Management Team (CMT) Actions. He said that a meeting is tentatively planned in Cologne, Germany April 1-4, 2008, and that this meeting will be the first meeting under EASA, of what is somewhat equivalent to the previous Harmonization Management Team under JAA. The goal of this meeting is to advance rulemaking alignment issues. Mr. Kaszycki further stated that there was going to be another meeting in Kansas City in mid March 2008, to discuss rulemaking alignment issues, and that the meeting would involve among others, the Directors, Office of Rulemaking and Flight Standards.

Mr. Kaszycki stated that the FAA plans to produce a Human Factors NPRM that will be much aligned with the already published EASA Human Factors final rule. He further stated that the Human Factors Working Group had asked for a Phase 4 review as a part of the development process, but in light of the planned use of the EASA final rule as guidance, he wished to request a waiver from the Phase 4 requirement. Mr. Kaszycki stated that he saw no added benefit to the review and that a waiver could permit issuance of the rule at an earlier point. Mr. Derosier stated that he would agree to the waiver question if there were to be total alignment with between the FAA's NPRM and the EASA final rule. However, he felt some in industry would still want the phase 4 review due to the possible existence of some subtle differences between the products that could have some larger consequences.

Mr. Doug Kihm (Boeing) asked Mr. Kaszycki if the FAA intended to publish the Human Factors rule and the associated advisory material (AC) simultaneously, and Mr. Kaszycki responded that in general, it is always the goal to do so. And in response to Ms. Ranee Carr, Aerospace Industries Associates (AIA) regarding the comment period for the NPRM, he said that it would be 30 days given that it is not a very complex rule. In response to another question from Mr. Derosier, Mr. Kaszycki explained that the EASA final rule is much in line with the ARAC recommendation, and that regulatory text in the FAA NPRM is almost identical to the language in the EASA final rule. Mr. Derosier said he felt it was possible to agree on the waiver, but recommended that TAEIG take an action to share the request with others in industry and. then provide an answer to the FAA with one week from the date of this meeting. Mr. Derosier remarked that it would be much easier to review the NPRM during the comment period if the advisory period was not included at the same time. Mr. Kaszycki stressed to all that it was highly possible that the NPRM and advisory material could be published for comment at the same time, and he used the Design for Security rulemaking as an example of a rulemaking in which comments on the NPRM resulted in changes to the advisory material as well. The TAEIG then decided to provide an answer concerning the waiver for a Phase 4 review of the Human factors NPRM to the FAA within the week following this TAEIG meeting.

Mr. Derosier asked about plans to postpone the effective date of the ETOPS rule, and Mr. Kaszycki said that he was unaware of anything to that effect.

EASA Report

There was no formal EASA Report, nor was there a representative from that agency.

ARAC Executive Committee Report

Mr. Bolt delivered the Executive Committee (EXCOM) Report [**handout#4**]. Mr. Bolt said that EXCOM meeting was held in Washington, DC on December 5, 2007. He said that there was one tasking managed directly by the EXCOM, the first report of the tasking which had been issued in June of 2007. He stated that the Chair of the group was from Dubai and was present at the Dec 5, 2007 meeting via teleconference. Mr. Bolt said that the group appeared to be making good progress, and that the group had a "pretty big task" in approaching a complete overhaul of the regulations, and advisory material related to this subject. He said that there has been a big change over the years from a maintenance standpoint in the way that this subject is approached. He continued, saying there was a need to better align the components of this large system, and that his group would try to maintain a very aggressive schedule in accomplishing its tasking. Mr. Greiner asked if there was a representative from the Airbus Technical Center in Miami assigned to the group. Mr. Bolt replied that he did not recall anyone from Airbus being assigned to the working group, but he would soon send a list of all members on that working group to the TAEIG.

Mr. Bolt stated that the ARAC Charter was soon to be updated as is done every two years, and that of the 66 member groups listed on the current charter, only 38 had responded by letter as of the December 5, 2007 EXCOM meeting. Mr. Bolt said that it appeared that the new charter would reflect approximately 40 member organizations. He continued with a discussion regarding the restructuring of EXCOM and the "sunsetting" of certain inactive issues group. Since the number of taskings given to EXCOM has decreased over time, it has resulted in a corresponding decrease in the number of issue groups with taskings. He stated that forthcoming changes will reflect that the Assistant Chair of a particular group will remain on the EXCOM as a subject matter expert (SME), and thus permit a fast reconstitution of that group if a tasking need was to arise.

Mr. Derosier asked Mr. Bolt if the term "closing out" was to be used in the case on an inactive working group, even though that group's Assistant Chair/SME was to remain on the EXCOM. Mr. Bolt said that terminology was still being worked on, but a group would still be considered as having been closed out.

Transport Canada (TC) Report

Mr. Eric Lucas (Transport Canada) gave the Transport Canada Report [**handout#5**] via teleconference. His briefing consisted of a review of the four items that encompassed the restructuring of the Transport Canada Civil Aviation (TCCA) organization, and which were initially covered during the TAEIG meeting of November 29, 2006. The rewrite of procedural regulations on aeronautical product certification was the first item covered by Mr. Lucas, and he said this was equivalent to (FAA) part 21 or EASA IR 21. Current TCCA structure requires one set of regulations for Type Certificate (TC) holders and a different set of regulations for Supplemental Type Certificate (STC) holders. The rewrite he said, will align the new system more closely with the FAA and EASA (more so) procedures. This process is currently under legal review and the proposed regulation is expected to be published as Notice of Proposed Amendment (NPA) by late 2008.

The second item--the New Accountability Framework-Aircraft Certification--will basically recognize design organizations as being capable of granting approvals as well. TCCA has

been working with Canadian industry, which has produced a final report that will form the basis for the new regulation. This NPA is expected to be issued by late 2009.

The "Implementation of Safety Management Systems" has been in place since 2005 and is currently mandatory for all large air carriers, and the repair stations that provide services to large carriers. This requirement is intended to also migrate to small air carriers and the repair stations that they utilize.

The Reorganization of TCCA, the final item briefed, has downsized the organization from 13 branches to 7 branches. Mr. Lucas stated that the former aircraft certification branch possessed its own rulemaking policy group, however, with the reorganization, all rulemaking efforts have been consolidated under the aircraft standards branch. The underlying organizational setup beneath the 7 branches will be decided and implemented between the present time and 2010. Mr. Lucas added that under the new structure, there is emphasis on a different approach to rulemaking with the intent of formulating one national plan with respect to the civil aviation system. Mr. Lucas also added that the SMS implementation is receiving much public reaction, and that has translated into some difficulties in proceeding with that implementation.

Mr. Kaszycki asked if the reorganization of Transport Canada Civil Aviation would result in any growth in personnel to that organization. Mr. Lucas responded that a hiring freeze has been in effect for the previous three years, and in spite of being understaffed, that he did not expect to see any changes in personnel numbers in the near future.

Mr. Greiner asked Mr. Lucas how the SMS system being implemented in TCCA compared to that in EASA. Mr. Lucas said that he believed the structures of the two organizations were very similar, and that to summarize the concept, he said that TCCA was moving towards "accreditation" and that the SMS would provide the necessary oversight within a particular design organization. Mr. Kihm asked Mr. Lucas if a validating authority was expected to rely on the certifying authority and that certifying authority's SMS. Mr. Lucas stated that presently SMS is not being required of foreign applicants, and also that much of the validations are done through reliance on those design states with which bilateral agreements currently exist.

<u>Airplane-level Safety Analysis WG (ASAWG) Report</u>

Mr. Ed Wineman (Gulfstream) co-chair of the ASAWG presented his briefing **[handout #6].** He indicated that the ASAWG had completed a total of six formal group meetings and 14 "webex" meetings and task 3 was currently the task being worked. Mr. Wineman reviewed the Statement of issue and the specific risk tasking per his briefing. Within the group membership, he stated that there had been some personnel changes had been made within the regulatory group and a new subject matter expert from the FAA, Robert Grant, had joined the working group. Regarding the work schedule, Mr. Wineman indicated that that much of the work on Task 3 had been finalized in March 2007 and that the task was to be completed by March 2008.

Mr. Wineman explained that Tasks 1 and 2 had been completed and respectively reported to TAEIG in March and October 2007. Mr. Wineman stated that specific risk was when we

dropped below the criteria specified in 25.1309. He further stated that it was decided to not go below a "hazardous condition"; therefore the parameters established are consistent with the description of average risk criteria published in the arsenals (25.1309). He added that there had been a total of four task groups and that they had been organized as a part of Task 2. Further, the purpose of Task 3 was to review current regulations, guidance and practices and make a determination of the adequacy, appropriateness and applicabilities, and then to make recommendations as necessary.

Mr. Kaszycki noted that it appeared that industry now has a "documented catalog" of the different ways that the manufactures accomplish these actions Mr. Wineman acknowledged to Mr. Kaszycki that this was correct. He further stated that there presently existed much documentation of all of the methodologies of the various OEM's or suppliers. Mr. Kaszycki noted that he had learned of concerns about the working group possibly focusing in on what they (ASAWG) thought to be the most conservative methodology. Mr. Wineman acknowledged that such a practice would be the simplest method with regard to safety, but that it would not necessarily be the correct method due to established guidelines which highlight the differences in systems and which consequently, would not allow such a practice to work uniformly.

Mr. Derosier asked if the working group had considered whether or not the guidance is consistent with rule or if the guidance may have evolved over time and the rule had not been changed. Mr. Wineman stated that the working group had taken this issue under consideration, but had found instances in industry practice where there existed neither rule nor guidance relative to those practices. Mr. Derosier remarked that in general, the rule should reflect the minimum standard. He pointed out that most in industry go beyond the minimum standard, and that "we would not want a rule that is based on the practices of one particular company".

Mr. Kaszycki stated that he wished to compliment the group for its Task 3 efforts thus far. He further stated that it was known that Task 3 would be very difficult, and added that Task 4 was expected to be more difficult. He also echoed Mr. Derosier's concern that the methodology selected as the standard, should not be the "highest nor lowest common denominator." Mr. Wineman indicated that there were some areas in which the group saw no need to make any recommendations, as the practices already in place for those areas were deemed acceptable.

Mr. Wineman stated that there existed a detailed 30 plus page presentation that included pros and cons, and that ASAWG members would be presenting that document to industry to gather feedback. He stated that this document would also be presented as part of the Task 3 report.

He then discussed the four task groups and some of their Task 3 work, and added that he had participated in most of the groups. The four groups he said; Active failure task group, Flight time task group, Latent failure task group, and the MMEL task group, were each asked to summarize nine initial items into more fundamental issues for the group to respectively focus on. The Active Failure Task Group's fundamental issue was to "identify and quantify" a method of controlling the residual risk after the first active failure. He stated that if an airplane was in flight and it encountered some sort of failure, there existed no consistent guidance across systems in 25.1309 for example. He said there would be differences in the

way this would be addressed by different groups, and he used flight controls versus thrust reversers as examples. Mr. Wineman in discussing the slide bullet "not lead to negative consequences for maintenance" stated that this was an item that was focused on by the Latent Failure Task group as it had been determined by the "Active" group that this was an appropriate action for the "Latent" group. Mr. Derosier asked Mr. Wineman for an example of what would be considered a "negative consequence for maintenance"--Mr. Wineman stated that an active failure would be something apparent to the crew, and in the case of dispatching an aircraft, would involve maintenance, therefore, it was decided that this subject should actually be addressed by the MEL and Latency groups. It was felt that since the since for the most part same regulations and guidance materials was listed by both the Active and Latent groups, it would enable the groups to better work together and produce the necessary guidance.

Mr. Kihm inquired as to how the adequacy of Task 3 was being determined. Mr. Wineman clarified that it was the adequacy of the regulations and not Task 3 that was being determined. He explained that once a crew became aware of an active failure--for example during an ETOPS operation, to continue on could present the crew with a "significant exposure point"--the question would then be how to regulate such an exposure point. Mr. Wineman further stated that there would be a difference in how flight controls and thrust reversers are addressed in this situation.

Mr. Wineman added that most of the regulations that the group was working with, had each been the result of some safety event. The issue he stated was due to technology in newer airplanes being contrasted against older regulations, and therefore trying to determine what the proper approach to regulations would be. He said that the recommendation was to carry this fundamental issue forward to task #4

Another fundamental issue for this group was to "assure compliance when considering the effects of aging and wear". Mr. Wineman stated that there was not enough "solid data" on this during the Task 2 work, but further work showed that good methodologies and appropriate guidance presently exist on this issue, therefore the recommendation was to close this issue with Task #3.

In discussing the flight time task group, Mr. Wineman discussed the first fundamental issue which was to " assess risk based on max diversion time instead of average time," he stated that there would be some overlapping issues--for example a decision to divert or not after an active failure. Mr. Wineman also noted that there are differences in the way part 121 and part 135 operators deal with ETOPS. He said that possibly as a precursor to Task 4, that the ASAWG along with industry should work to determine the right approach to this subject, but the goal was to harmonize this issue with the EASA ETOPS NPA and FAA advisory materials.

Mr. Wineman stated another issue for the flight time task group was to "assess risk during actual at-risk time vs. normalizing by flight length". The group in general felt that a revision in AC25.1309 was necessary to better capture all issues by including total exposure and not just issues related to per flight hour criteria.

Regarding the Latent failure task group, Mr. Wineman briefed that the fundamental issue was Residual Probability. He said there remained some inconsistencies that needed further review; therefore the recommendation was to carry this issue forward to Task 4. He said another fundamental issue for this group was to address when the crew became just one failure away from a catastrophe (SRC Latent +1). There were some in the group that felt for example--a takeoff under an MEL condition--would have already placed an aircraft into a latent failure condition. This question and others, as well as the lack of a definition regarding systems boundaries have raised issues about the methodology, and the group determined further review was necessary. This is also to be carried forward to Task 4. Mr. Wineman further stated that another issue for the Latent Group was that Specific Risk as defined does not consider the probability of any particular condition, which creates an applicability that is "too broad" for Task 4. This too will be carried forward to Task 4.

Regarding the MMEL Task Group, Mr. Wineman stated that this was a very emotional issue particularly among the European members, and this was seen from both the regulatory side as well as the original equipment manufacturers (OEM's). Mr. Wineman said that many of the European manufacturers felt that they needed help. He observed that there is more independence on the part of FAA flight standards compared to the European flight standards. The European flight standards he said were part of the OEM's, therefore this was not representative of a necessarily "independent body" as a part of this process.

Mr. Kihm stated that since EASA has a different regulatory structure: for example there is no "flight standards" and consequently there is no operational authority, caution must be exercised so that regulations are not designed so that they are only consistent with the FAA regulatory structure. Mr. Wineman said the group's charter was specific to state that the group's purpose was not to resolve regulatory certification and operational differences.

Mr. Derosier added that not only were there different regulatory structures in EASA relative to FAA, but there were also some major legal differences as well, and these would always pose some challenges to the objectives of the ASAWG.

Mr. Wineman stated that the Task 3 work should be completed by end of March 2008 and ASAWG wishes to brief individual companies and receive feedback before report is released. He said that the ASAWG expects that the report will be ready to be briefed to TAEIG by mid April 2008. It was then determined by the TAEIG that an Ad hoc meeting would be scheduled to accommodate this briefing.

Propeller Harmonization Working Group (PHWG) Report

Mr. Jay Turnberg (FAA, Engine/Propeller Directorate) presented the PHWG report [**handout #7**]. He began with a summary of the tasking and stated that there had been no changes in the working group's membership. Mr. Turnberg stated that work was progressing very well and that as of November 2007, the team had drafted and reviewed the Critical Parts rule and had completed a first review of the proposed advisory material. The PHWG he said, was expected to be able to submit a recommendation to ARAC by the end of 2008. Mr. Turnberg then reviewed the accomplishments of the second PHWG meeting. He said that EASA and Dowty had each been provided with a copy of the draft rule and advisory material and that feedback received from them would be discussed from the agenda at the third meeting, which was

scheduled for February 27-28, 2008. Mr. Turnberg added that one action item from the second meeting was to have the "companies" go back and give thought to their individual compliance methods for Critical Parts. He further stated that one concern is that the definition and control of critical parts could be very simple or very complex depending on the perspective from which the subject is viewed. Mr. Turnberg stated that is has been very important to the outcome of the product to have Dowty involved as a part of EASA. He said this is because despite the EASA rule having been out for five years, no manufacturer has produced a brand new certificate as yet, and Dowty would be the first to comply with the Critical Parts rule. Mr. Derosier asked if there were any propeller OEM's that were not a part of the working group, and Mr. Turnberg stated that some "minor companies" were not involved, but due to their relatively small size it was of no real consequence. Mr. Bolt remarked that it appeared all was going well with the PHWG, and Mr. Turnberg replied that it was.

Ice Protection Harmonization Working Group (IPHWG) Report

Mr. Jim Hoppins (Cessna Aircraft Company) reviewed the IPHWG presentation **[handout #8]** via teleconference. In his presentation to the TAEIG Mr. Hoppins stated that all IPHWG Tasks were closed except for the phase four review of Task 2 and Task 2 compliance Mr. Hoppins also indicated that the priority on this rulemaking within the FAA had been elevated, but the funding for research of large droplet simulation was still uncertain. Therefore the current plan is to look for an interim method of compliance using existing methods, and such is being reviewed in a present drafting of an FAA white paper. Additionally, Mr. Hoppins stated that the IPHWG will hold a minimum of one meeting in 2008, and a follow on meeting if necessary, to discuss an interim means of compliance on Supercooled Liquid Droplets (SLD) and to provide information for the economic analysis of this rulemaking. Mr. Hoppins stated that the draft NPRM is expected by February 2009 and a meeting in early 2009 for completion of the Phase 4 review. Mr. Kasyzcki inquired as to when the working group would have to submit its Phase 4 recommendation if the FAA wanted to have a TAEIG recommendation delivered by May of 2009. Mr. Bolt suggested that there could be some flexibility in the date for the TAEIG meeting for this purpose, and suggested March 2009 for the TAEIG meeting. Mr. Turnberg said that March would be better. Mr. Kaszycki asked about the time frame required by the group for the Phase IV review. Mr. Turnberg stated there still remained some challenges and that he did not yet have the exact answer.

Bob Park (FAA, Flight Test Group) suggested that consideration be given to a meeting with manufacturers to assist with reaching consensus on the phase 4 review. It was agreed upon by Mr. Hoppins that a teleconference should be arranged between FAA representatives and the appropriate IPHWG membership and industry. Mr. Kaszycki reminded Mr. Hoppins that the FAA "is being held firm" to rulemaking dates, so if the economic analysis is completed by January 2009, then the Phase 4 review should be completed on schedule by May 2009. Mr. Kaszycki stated that, historically, issues surrounding economic analyses tend to become "sensitive" with manufacturers, and thus could adversely impact the rulemaking schedule. Mr. Kaszycki clarified to Mr. Kihm that since this rule had been elevated to a priority 'A' status, it meant that a published schedule would need to be adhered to. He also mentioned that the schedule would be available on the DOT website with a proposed publishing date.

Mr. Kaszycki added that since this rule will require an OMB review, it does present some concern about possible delays in the schedule.

Engine Harmonization Working Group (EHWG) Report

Continuing with the EHWG report [**handout #9**], Mr. Hoppins stated that there had been no change since the Task 2, Phase IV review. He continued saying that the group is continuing to research a means of compliance for high ice water environments (HIWC), the improved instrumentation to measure atmosphere, the necessary flight trials for atmospheric characterizations, the physics for ice accretion and the necessary methods and facilities for testing. Regarding the development of certification testing and modeling of engine in the specified ice environments, Mr. Hoppins said that much of the research was geared toward basic science in the characterization of the environment. He pointed out that NASA, Environment Canada (EC), FAA, and the National Resource Council (NRC- Canada) were all working sponsors in the associated research of HIWC environment and development of the related instrumentation. He further stated that the joint NASA, EC, and FAA sponsored flight program was fully funded through 2008, and that beyond that "collaborative funding" might be necessary. Mr. Hoppins said that discussions with the Ohio Aerospace Institute (OAI) regarding their lead of an industry consortium have been initiated. He also said that information reported at the Reno Icing Conference indicated that the aerial platform used for the testing is being modified to further the research, and that further testing related to engine related ice crystals was planned for summertime 2008.

Mr. Park interjected that some members of the group had recently met with Boeing and that much work was being accomplished by Boeing with respect to establishing means of compliance. Additionally, an outcome of that meeting was a request that FAA and industry continue to advocate continued research and funding in this area on the part of NASA. He also said Mr. Frank Narelli, previous European Co-chair of the Flight Test Harmonization Working Group had recently retired, and that the position was now going to be filled by Ms. Christine Thibaudat (Airbus). In reviewing some FAA budget information for 2010, Mr. Kaszycki said it appeared that there would be some FAA funding appropriated for this research. Mr. Derosier asked if this was an additional increase in funding on the part of the FAA for this issue. Mr. Kasyzcki answered that this was all done initially by NASA, but now it has become a priority for the FAA.

Airworthiness Assurance Working Group Report

Dr. Rao Varanasi (Boeing), Co-chair of the AAWG presented the report **[handout #10]**. He stated that there had been no changes in membership. The group had most recently met in Memphis in November 2007 to discuss STG, implementations, and again in January 2008, via webex and teleconference, to discuss Part 26 Delegation Issues. The next scheduled meeting of the AAWG was for February 27, 2008 at the Airbus facility in Miami. Mr. Varanasi said that AASFR taskings were on schedule and the completion of Phase 2 Task 4 is on schedule for December 2009. Mr. Varanasi recapped that under the AASFR tasking , phase 1 referred to repairs, alterations and modifications (RAM's) and phase 2 which deals with model specific activities, is to be accomplished under the broader scope of the Structures Task Group (STG) was what Task 4 was most related too. All Phase 1 taskings had been accepted by the TAEIG, with the last final report for Phase 1 having been accepted in April 2007. Mr.

Varanasi clarified that the purpose of Task 4 is to ensure that each of the airplane models has its own structures task group and their own compliance documents and all associated elements in order to meet compliance alignment requirements.

He said the role of the AAWG was to provide oversight and help to resolve any issues that may develop in any of the STG's. Another role of the AAWG is to help the FAA to convene an STG for any airplane model that would need one. He said that since the operational rule becomes effective in 2010, it is imperative that the AAWG complete its work as scheduled by December 2009. By design, this action will give operators one year to prepare for compliance with the rule. Mr. Varanasi stated that the November 14, 2007 meeting served to further clarify the role of the AAWG relative to STG formation. He said that certain details were outlined in a 1996 document which he said is still applicable to the current task. He added that the AAWG would only become involved in STG activities if asked, and would not take a role in any dispute resolution related to proprietary specific design issues.

Mr. Varanasi added that on November 13, 2007, the AAWG had met with numerous Type Certificate Holders (TCH's), including those who were not part of the AAWG, and also regulators. That particular meeting included a discussion of what should be the fatigue critical baseline structure (FCBS) for each airplane model. Mr. Varanasi continued with a review of STG Formation and Representation, STG Responsibilities, and a description of how the of FCBS would be accomplished. Mr. Kaszycki advised Mr. Varanasi that despite Greg Schneider's (FAA SME) attendance at some of the early AAWG STG meetings, he should not be expected to attend every meeting in the future. Mr. Kaszycki, however, stated that any issues involving requiring FAA representation should be directed to him (Mr. Kaszycki). Mr. Varanasi clarified that the "Certifying regulatory authority" presence at the STG meeting was intended to mean an "ACO" (Aircraft Certification Office) type person. He stated that the reason for this requirement was essentially to ensure that the ACO persons would be informed on some of the particular terminologies and techniques to be used within the STG's. Mr. Varanasi also acknowledged that such information sharing and training was presently underway in the Transport Aircraft Directorate.

Mr. Varanasi then discussed the method for determining FCBS. He said that metallic compression structures were going to be eliminated from the scope of the already large amount of work because cracks are not initiated in a total compression environment. Also well he said that "secondarily loaded or unloaded stiffening elements" were also to be eliminated because they do not cause catastrophic failure of primary structures. Additionally he said that landing gear and safe life structures would be eliminated because their certification is based on the initiation of cracking and specific wear so there is no damage tolerance basis requirement. He said that there was a decision to retain composite structures after discussions with technical members--Airbus, Boeing, Embraer and others--suggested it was a good idea.

Mr. Varanasi added that in consideration of alterations and modifications that could conceivably be made by a TCH or another to a baseline structure, it was necessary to make that a different type of total structure. Therefore, certain "caveats" were presented in the briefing to allow reclassification of these structures.

Mr. Varanasi said that the January 4, 2008 AAWG teleconference was to discuss the fact that industry had discovered three issues in the final rule that had not been presented in the NPRM. He further said that there had been two subsequent STG meetings, and that these issues were the major points of discussion during those meetings. These meetings had been held respectively on January 15 and Jan 25, 2008. Mr. Varanasi said that the first issue was the relocation of part 25, subpart I to the new part 26, which had created some major administrative issues for TCH's. The second issue involved language around the release of unpublished repair data and release of published data--structures repair manuals, revisions, service bulletins after the publishing date of the rule (January 2010)--needing to show compliance with part 26. He said this change presented a challenge with regard to new repairs. The third issue he said dealt with the difference in description of FCBS in the NPRM versus the definition in the final rule. He said that these issues had been major distractions in the January STG meetings.

Mr. Kaszycki once again thanked Mr. Varanasi for the help that had been provided through the AAWG by Boeing and Airbus in the cost analysis benefits for the WFD rule.

Avionics Harmonization Working Group (AHWG)

Mr. Clark Badie (Honeywell) began his discussion on behalf of the AHWG. He said that he did not have much to present to the TAEIG because the group had no new activities in progress. He said that the draft of 25.1322, a report that had been issued some time in the past, had been move up in priority. He said that he was expecting comments from within the AHWG by the end of February 2008 and he did not foresee any problems with that schedule, and also that he expected a draft NPRM to be issued soon. Mr. Badie said that there were no plans for the group to meet for any discussions or dispositions but feedback comments would be provided to the FAA.

Mr. Badie said that he agreed with Mr. Kaszycki's earlier comments about sensitivities related to economic impact of some rulemakings. He said that he felt some manufacturers were going to be more willing that others to share this information. Mrs. Suzanne Masterson (FAA) asked Mr. Badie if he had a copy of the draft NPRM. Mr. Badie replied that he did have a copy, and would soon be distributing it to the group. Mr. Kaszycki added that the document had taken a bit longer in the legal review than had been anticipated. Mr. Derosier asked for clarification of the review work of the AHWG that was to be provided to the FAA. He wished to confirm whether AAWG feedback to the FAA would be on an individual basis rather than a group consolidated effort that would then be seen by all in the TAEIG before submission to the FAA. Mr. Badie agreed that all comments would be collected, consolidated and then made available to the TAEIG before submission to the FAA. Mr. Kaszycki added that this would be the preferred method. It was decided that the AHWG membership would review all the feedback comments and then provide those comments to the FAA by the end of February 2008.

Mr. Badie asked if there was any new information on the status of AC 25-11 and Mr. Kaszycki stated that there had been some earlier setbacks, but that they were now being corrected. He further stated that there had been some misunderstanding as to whether or not Enhanced Vision Systems and Synthetic Visions Systems were to be included in that material. Mr. Kaszycki said he believed that Heads-Up Displays and Weather Radar systems were now

all to be included, and he said that a letter would soon be issued to clarify the exact scope of the work.

Other Business

Mr. Bolt said that the TAEIG needed to plan an Ad-hoc TAEIG teleconference in mid May 2008 for acceptance of the ASAWG Task 3 report that will be provided to ARAC in April 2008. That meeting (teleconference) is tentatively scheduled for May 20, 2008, with details to be published in the Federal Register.

Item	February 6, 2008 TAEIG Meeting Action Items
1.	TAEIG members to indicate if they concur with FAA proposal to forego a Phase 4 review of the Human factors proposed rulemaking language. (FAA proposal is based on plan to "envelope" the recently issued EASA rule/advisory material) Response to FAA requested by Feb 15th.
2.	Craig Bolt to send to TAEIG, the Aviation Mechanics Part 147 WG membership list. (This task is being worked directly through the EXCOM) – Complete
3.	FAA to provide guidance to Avionics WG on scope of Phase 2 activities.

Future TAEIG Meetings

An Ad-hoc TAEIG meeting (teleconference) is scheduled for May 20, 2008.
The next regularly scheduled TAEIG meeting is planned for September 24, 2008 in Seattle, Washington.

Adjourned at 1:50 p.m.

Public Notification

The *Federal Register* published a notice of this meeting on December 27, 2007 **[handout #11]**.

Approval

I certify the minutes are accurate.

Craig R. Bolt

Craig R. Bolt
Assistant Chair, ARAC

AVIATION RULEMAKING ADVISORY COMMITTEE

TRANSPORT AIRPLANES AND ENGINE ISSUES
Sign-In Sheet

February 6, 2008

NAME	MEMBER	NONMEMBER	ORGANIZATION/AFFILIATION	E-Mail Address	Telephone No.
CRAIG BOLT	X		PRATT + WHITNEY	craig.bolt@pw.utc.com	860-565-9348
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Doug Kihm	X		Boeing	douglas.J.Kihm@boeing.com	425 717-2356
Ranee Carr	X		AIA	ranee.carr@aia-aerospace.org	703.358.1086
WALTER DESROSIER	X		GAMA	WDESROSIER@GAMA.AERO	202-393-1500
NIC DAVIDSON			FAA	nicanor.davidson@faa.gov	202-267-5174

AVIATION RULEMAKING ADVISORY COMMITTEE

TRANSPORT AIRPLANES AND ENGINE ISSUES
Sign-In Sheet

February 6, 2008

TELEPHONE PARTICIPANTS

NAME	*MEMBER*	*NONMEMBER*	*ORGANIZATION/AFFILIATION*	*E-Mail Address*	*Telephone No.*
ERIC LUCAS	X		TRANSPORT CANADA		
ROLF GREINER	X		AIRBUS		
RAY HOLANDA	X		NADA		
TOM PETERS	X		EMBRAER		
JOE BRACKEN	X		ALPA		
BOB PARK	X		BOEING		
RAO VARANASI	X		BOEING		
JIM HOPPINS	X		CESSNA		
PAUL MAY	X		GE		

Transport Airplane and Engine Issues Group Meeting
Boeing
1200 Wilson Blvd., Conference Room 234
Arlington, VA 22209

DRAFT Agenda

DRESS: BUSINESS CASUAL

Wednesday, February 6, 2008 – ***Call in number: 202-366-3920 Pass code 6039***

9:00	Call to Order, Reading of the Procedures Statement, Review of Agenda, Meeting Logistics, Review of Action Items, Items of Interest, Review of Minutes from previous meeting	C. Bolt/M. Kaszycki
9:15	FAA Report	M. Kaszycki
9:45	EASA Report	TBD
10:00	Excom Report	C. Bolt
10:15	Transport Canada Report	E. Lucas
10:30	Airplane-level Safety Analysis WG Report • Closure of Task 2 and Status of Task 3	R. Knepper
11:00	Propeller Harmonization WG	R. Edinger
11:30	***-- LUNCH --***	
12:30	Ice Protection HWG Report	J. Hoppins
1:00	Airworthiness Assurance HWG Report	R. Varanasi
1:30	Avionics HWG	C. Badie
2:00	Any Other Business	All
2:15	Action Item Review	C. Bolt
2:30	***-- ADJOURN --***	

February 2008
FAA Status Update

Transport Airplane and Engine Issues Group

Federal Aviation Administration

Presented to: TAEIG

By: Mike Kaszycki, Manager, Transport Standards Staff

Date: February 6, 2008

February 2008 TAEIG Meeting

Topics:

- Rulemaking Project Status
- Non-Rulemaking Project Status

February 2008 TAEIG Meeting

Rulemaking Project Status: (since October 2007)

- Part 25/26 related Final Rules
  - Enhanced Airworthiness Program for Airplane Systems/Fuel Tank Safety (EAPAS)
    - Final Rule issued on 10/22/2007
  - Damage Tolerance Data for Repairs and Alterations (AASR)
    - Final Rule issued on 12/7/2007
- Part 33/35 related Final Rules
  - Engine Bird Ingestion
    - Final Rule issued 10/5/2007
- Part 25/26/33/35 related Notices of Proposed Rule Making
  - None since October 2007

February 2008 TAEIG Meeting

Rulemaking Project Status: (since October 2007)

continued

- FRs in OMB/OST:
  - 1 part 25 project
- FRs in Headquarters (HQ) for coordination:
  - 1 part 33 project
  - 1 part 25 project
- FRs in directorate coordination:
  - 3 part 33/35
- FRs in development:
  - 3 part 25 projects

February 2008 TAEIG Meeting

Rulemaking Project Status: (since October 2007) *continued*

- NPRMs in OST/OMB for coordination:
  - None
- NPRMs in HQ for coordination:
  - 2 Part 33 projects
- NPRMs in Directorate for coordination:
  - 1 Part 25 project
  - 1 Part 33 project
- New Tasking under development:
  - The FAA is considering a task to revise §§ 25.954 and 25.981 for structural lightning considerations

February 2008 TAEIG Meeting

Non-Rulemaking Project Status: (since October 2007) *continued*

- Part 25/26 Final Advisory Circulars (AC) issued:
  - ACs to support new EAPAS rule
    - AC 25.869-1A, Fire Protection: Systems
    - AC 25.899-1, Electrical Bonding and Protection Against Static Electricity
    - AC 25.1353-1A, Electrical Equipment and Installations
    - AC 25.1357-1A, Circuit Protective Devices
    - AC 25.1360-1, Protection Against Injury
    - AC 25.1362-1, Electrical Supplies for Emergency Conditions
    - AC 25-26, Development of Standard Wiring Practices Document
    - AC 25-27, Development of Transport Category Airplane Electrical Wiring Interconnection Systems Instructions for Continued Airworthiness Procedure
    - AC 25.1365-1 Electrical Appliances, Motors, and Transformers
    - AC 25.1701-1, Certification of Electrical Wiring Interconnection Systems on Transport Category Airplanes
    - Issued between 10/22/07 and 12/4/07

February 2008 TAEIG Meeting

Part 25/26 Final Advisory Circulars issued: *continued*

- AC 25.1529-1A, Instructions for Continued Airworthiness of Structural Repairs on Transport Airplanes
  - Issued 11/20/07

- AC 26-1, Part 26 Continued Airworthiness and Safety Improvements
  - Issued 12/3/07

February 2008 TAEIG Meeting

Non-Rulemaking Project Status: (since October 2007)
continued

- Part 25/26 Final Policy issued:
  - Policy statement ANM-05-115-019, Unbalanced and Mass-Balanced Control Surfaces
    - Issued 11/16/07
  - Policy statement PS-ANM-04-115-28, Seat Belt Attachment Fittings on Passengers' Seats
    - Issued 11/23/07

- Part 33/35 Final Policy and ACs issued:
  - None

February 2008 TAEIG Meeting

Non-Rulemaking Project Status: (since October 2007)
continued

- Part 25 Draft ACs issued:
  - AC 25.1535-1X, Certification of Transport Category Airplanes for Extended Operations (ETOPS)
    - Comments due 3/4/08

- Part 25 Draft Policy issued:
  - ANM-112-05-011, Fire Extinguisher Size, Quantity, and Location for Class B Cargo/Baggage Compartments no Greater than 200 Cubic Feet
    - Comment period closed 11/9/2007

February 2008 TAEIG Meeting

Non-Rulemaking Project Status: (since October 2007)
continued

- Part 33/35 Draft ACs issued:
  - None

- Part 33/35 Draft Policy issued:
  - Policy Statement for Charpy Impact Testing of High-Stressed Reciprocating Engine Forged Steel Alloy Parts
    - Comments period closed 1/4/07

February 2008 TAEIG Meeting

Certification Management Team (CMT) Actions:

- **April 1-4 meeting**
  - FAA/EASA rulemaking plans and priorities
  - FAA/EASA working methods discussion

EXCOM Update For TAEIG

February 6, 2008

EXCOM Meeting – Dec 5, 2007

- **AVIATION MAINTENANCE TECHNICIAN SCHOOLS CURRICULUM AND OPERATION REQUIREMENTS WORKING GROUP REPORT**
  - **Group membership agreed**
  - **Work plan defined (Task Completion Targeted For June 2008)**
    - Generate basic, consistent, requirements for implementation and oversight of part 147 programs.
    - Recommend easier means to keep current training curriculums, training criteria, and hours of training.
    - Clarify specific operating rules for attendance and enrollment, tests, and credit for prior instructions or experience.
    - Make recommendations regarding the appropriateness of adjusting § 65.75(a) to allow students enrolled in part 147 aviation maintenance technician schools to take the aviation maintenance written tests after completing the corresponding portion of the curriculum, but before meeting the experience requirements of § 65.77.

EXCOM Meeting – Dec 5, 2007

- **AVIATION MAINTENANCE TECHNICIAN SCHOOLS CURRICULUM AND OPERATION REQUIREMENTS WORKING GROUP REPORT**
  - **Work plan (continued)**
    - Study the four appendixes to identify core and desired content considering the instructional level and hours for each. Subject and content delivery methods will be considered with an emphasis on identifying content suitable for alternate methods of delivery.
    - Examine the specific operating rules for attendance and enrollment, tests, and credit for prior instruction or experience that could be applicable to meeting the requirements of §§ 147.21 and 147.31.
    - Review §§ 65.75(a) and 65.77 and provide recommendations whether what is allowed under an exemption should be broadly allowed under the rule.
    - Review advisory circular (AC) 147–3A and suggest revisions based on the working groups recommendations.
    - Review and suggest revisions, additions, and deletions to the PMI handbook related to part 147.

EXCOM Meeting – Dec 5, 2007

- ARAC “Recharter” in Process
  - Membership ~ 40 organizations
  - Closing Issue Groups if no activity but Asst Chairs maintain position on EXCOM
    - Air Carrier/General Aviation Maintenance
    - Aircraft Certification Procedures
    - Occupant Safety
    - General Aviation Certification and Operations
    - Noise Certification
    - Training and Qualification

EXCOM Meeting – Dec 5, 2007

- New EXCOM Members
  - Aircraft Certification Procedures
    - Mike Romanowski (AIA)
  - Occupant Safety-
    - Courtney Makela (Boeing)
  - General Aviation Certification and Operations
    - Ric Peri (AEA)
  - Noise Certification
    - Dennis McGrann (NOISE)
  - Training and Qualification
    - Ty Prettyman (NACA)

Transport Canada Civil Aviation Report

Presented to: TAEIG

By: Eric S. Lucas

Date: February 4, 2008





Briefing to TAEIG in Nov. 2006 covered:

1. Rewrite of procedural regulations on aeronautical product certification
2. New Accountability Framework – Aircraft Certification
3. Implementation of Safety Management Systems
4. Re-organization of Transport Canada Civil Aviation

Status of 4 Major Activities, since Nov 2006:

1. Rewrite of procedural regulations on aeronautical product certification (CAR 521)
   - Nearing completion of legal review by Dept. of Justice
   - Will open for public consultation no later than December 2008
2. New Accountability Framework – Aircraft Certification (CAR 521)
   - Extensive consultations with Canadian industry completed, and proposal being finalized for regulatory submission.
   - Proposed regulation will open for public consultation late 2009

Status of 4 Major Activities, since Nov 2006:

3. Implementation of Safety Management Systems

- SMS for design organization is part of the regulatory proposal on New Accountability Framework.
- TCCA to look at compatibility with ICAO proposal on SMS

4. Re-organization of Transport Canada Civil Aviation

- Rulemaking arm of Aircraft Certification now joined with other policy making offices *(under the Standards Branch)*
- National Aircraft Certification office is primarily an operational entity
- Completion of TCCA re-organization by 2010.

Thank You.

Questions ?

Contact:

Eric S. Lucas

lucase@tc.gc.ca

 # (613)-952-0212

Transport Canada Civil Aviation Report

Presented to: TAEIG

By: Eric S. Lucas

Date: February 4, 2008





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Thank You.

Questions ?

Contact:

Eric S. Lucas

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 # (613)-952-0212

Propeller Harmonization Working Group for Critical Parts

TAEIG Status Report

February 6, 2008

Propeller Harmonization Working Group for Critical Parts - Task

Federal Register document FR Doc E6-21651 dated December 20, 2006 (Volume 71, Number 244), pages 76422-76423

- The Propeller Harmonization Working Group (PHWG) will:
- Review the background and intent of relevant existing requirements, existing guidance material, related ARAC recommendations on part 35, and the current EASA requirements for propeller critical parts integrity.
- Develop a report containing recommendations for rulemaking or guidance material, or both, and explain the rationale and safety benefits for each proposed change. The report will define a standardized approach for applying specific propeller critical parts integrity in the appropriate circumstances. The FAA will define the report format to ensure the report contains the necessary information for developing a Notice of Proposed Rulemaking (NPRM), Advisory Circular (AC), or both.
- Make recommendations to ARAC for acceptance and submission to the FAA.
- If a NPRM or proposed AC is published for public comment as a result of the recommendations from this tasking, the FAA may ask ARAC to review the comments received and provide a recommendation for disposition of comments for each issue.

Working Group Members

No change in membership

Richard Edinger	Hartzell Propeller (chair)
Jay Turnberg	FAA, Engine/Propeller Directorate
Stuart Browning	Hamilton Sundstrand
Tom Knopp	McCauley Propeller
Gerd Mühlbauer	MT-Propeller
Chuck Swanson	Sensenich Propeller
Michael Trott	Dowty (monitor by phone or e-mail)
Pascal Lair	EASA (monitor by phone or e-mail)

Work Plan

Task	Estimated Completion Date
Team members become familiar with the CS-P rule and Advisory Materials and provide comments.	Complete
FAA (Turnberg) consolidates comments into one document and submits them back to the group.	Complete
Team members discuss the comments, thus gaining a common understanding of the subject matter and relevant issues.	Completed July 18-19, 2007
The team drafts and agrees on the definition of a Propeller Critical Part and Attributes.	Second review completed November 6-7 2007
The team drafts and agrees on a Critical Part rule.	Second review completed November 6-7, 2007
The team drafts and agrees on the proposed advisory material.	First review completed November 6-,7 2007
The team drafts and agrees on a report that contains the recommendations and explains the rationale and safety benefits and submits to ARAC.	TBD; approx end of year 2008

Working Meeting Schedule

- 1st meeting Jul 18-19 2007 complete
- 2nd meeting Nov 6-7 2007 complete
- 3rd meeting Feb 27-28 2008 scheduled
- 4th meeting TBD

2nd Meeting Accomplishments

- Reviewed and revised the draft rule and definitions
- Reviewed 1st draft advisory circular (AC)
- Developed an aluminum blade example for the draft advisory circular
- Next meeting scheduled Feb 27-28, 2008
- Provided EASA and Dowty with meeting minutes, draft rule and AC

Tasks for 3rd Meeting

- Review and prepare comments on
  - the draft rule, definitions, and guidance based on company organizational implementation considerations
- Prepare a draft submittal report
- Review EASA comments on rule and AC
- Set next meeting date

Summary

- The working group is functioning well
- EASA and Dowty remain involved
- The team remains on-track for providing deliverables by year-end 2008

Ice Protection HWG Status

Presentation to ARAC TAEIG
Feb 6 - 2008

IPHWG Activities

- All IPHWG tasking completed except:
  - ⇨Task 2 – Phase IV review (SLD/Mixed Phase Icing Rule)
    - Simulation methods, acceptable means of compliance (SLD)
  - ⇨Task 2 – EHWG/PPIHWG compliance methods
- FAA priority on this rule package has been elevated
- Funding for continued development of large droplet simulation methods is still uncertain
  - ⇨Plan is to review an interim compliance methodology with currently available methods

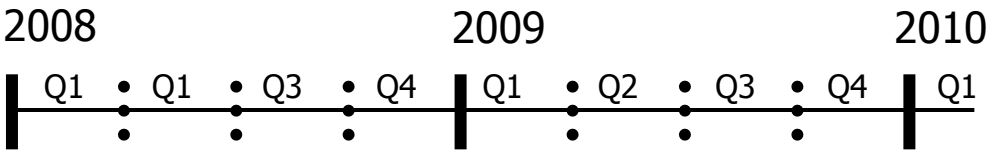
IPHWG

- FAA drafting a white paper on interim means of compliance as a starting place
- Plan is to hold at least one IPHWG meeting in 2008
  - ⇨ Meeting in the May timeframe to review/discuss interim means of compliance on SLD
    - and provide further input for economic analysis
  - ⇨ Second meeting in 3rd to 4th Qtr ’08 (if required for follow-on discussion/resolution)
- Anticipate receiving the draft NPRM with economic analysis in February 2009
- Third meeting in 1st Qtr ’09 for completion of Phase IV review

IPHWG Task 2/Phase IV Review

IPHWG

(draft schedule)



IPHWG - Meeting on interim MOC/Economic Factors — May □ (dates tbd)

FAA - NPRM sent to Directorates (ACO's) for review — 7/15 ○

IPHWG Meeting (if required to wrap up MOC/Economics) — Q3/Q4 □ (if req'd)

FAA - Economic Analysis — 10/15 ▭ 1/30

IPHWG - Meeting for wrap-up of Task 2/Phase IV Review — Q1 □ (dates tbd)

FAA - ARAC Phase IV Review Completed — 5/30 ○

FAA - NPRM Published — 1/15 ○

Engine HWG Status

Presentation to ARAC TAEIG
Feb 6, 2007

Tasking Status

- Task 2, Phase IV Review: (no change from last review)

- EHWG continues to meet to discuss a Technology Plan to develop adequate knowledge for means of compliance for High Ice Water Content (HIWC) environments
  - ⇨ Improved instrumentation to measure atmosphere
  - ⇨ Flight trials to characterize atmosphere (understand particle size, concentration and extent)
  - ⇨ Fundamental physics of ice accretion and shedding
  - ⇨ Test methods and facilities
- Purpose is to provide fundamental data for the development of appropriate certification tests and modeling of the engine in glaciated and mixed phase environments

Ongoing work

EHWG

- NASA/EC/FAA/NRC sponsored development of improved instruments to measure HIWC environment – Icing tunnel testing for new instruments to accurately measure the ice water contents at flight velocities progressing, successful testing of a "reference probe" partly complete
- NASA/EC/FAA sponsored flight program using Viking S3 in HIWC environments: 2008 program fully funded, later years may need collaborative funding. Discussions with Ohio Aerospace Institute (OAI) initiated to lead consortium.
- Definition of fundamental physics tests which could be supported by an industry consortium underway
  - ⇨ Initial discussions with OAI to lead a consortium for this project is planned for next week (Feb 7th)
- NRC work on ice crystal test methods proceeding
  - ⇨ Rig simulating ice crystal impingement on engine surfaces demonstration planned for this summer

- Questions?

AAWG Report to TAEIG
February 6, 2008

Dr. Rao Varanasi

Co Chair

Airworthiness Assurance Working Group

Airworthiness Assurance Working Group

- Membership
- Meetings
- Current Task
- Status

AAWG Membership: No changes

Last Name	First Name	Representing	Voting	E-mail Address
Arabi	Mary	Airborne Express	Yes	mary.arabi@airborne.com
Coile	Mark	UPS	Yes	amx1mac@ups.com
White	Joe	ATA	Yes	jwhite@air-transport.org
Demarest,	Harry	American Airlines	Yes	harry.demarest@aa.com
Fenwick	Linsay	ALPA	Yes	fenwickl@alpa.org
Gaillardon	Jean-Michel	Airbus	Yes	jean_michel.gaillardon@airbus.fr
Goyaniuk	Bohdan	Transport Canada	No	goyanib@tc.gc.ca
Heath	David	Evergreen	Yes	david.heath@evergreenaviation.com
Jones	Rusty	FAA	Yes	Rusty.jones@faa.gov
Knegt	Martin	Fokker Services	Yes	martin.knegt@fokkerservices.storkgroup.com
Lotterer	Dave	RAA	Yes	david.lotterer@dc.sba.com
Moses	Joseph	Continental Airlines	Yes	jmoses@coair.com
Oberdick	Jon	USAirways	Yes	jober@usairways.com
Pattison	Gregg	Northwest Airlines	Yes	gregg.pattison@nwa.com
Pinsard	Laurent	EASA	Yes	Laurent.pinsard@easa.eu.int
Schneider	Greg	FAA	Yes	greg.schneider@faa.gov
Williams	larry	United Airlines	Yes	Larry.williams@united.com
Ashwell	Phil	British Airways	Yes	Phil.b.ashwelll@britiah-airways.com
Varanasi	Rao (Co-Chair)	Boeing	Yes	rao.varanasi@ boeing.com
Walder	Ray	IATA	Yes	walderr@iata.org
Jun	Yamanaka	JAL	No	jun.yamanaka@jal.com
Yerger	Mark (Co-Chair)	FedEx	Yes	mdyerger@fedex.com

Meetings

- There were two meetings of the AAWG:
  - November 14, 2007 in Seattle to discuss Task 4 for the implementation of STGs
  - January 4, 2008, a Virtual Meeting (webex & telecon) to discuss Part 26 Delegation issues
- Member Representatives from the following organizations were in attendance
  - Airbus, AA, ABx, BA, Boeing, CA, JAL, UPS, FAA, FedEx, NW, UA, US Air

Meetings Con't

- Next Meeting is tentatively planned at the Airbus Training Facility in Miami, FL on February 27, 2008.

Current Tasks

- AASFR Task:
  - Tasked - May 13, 2004;
  - Status - In work and on schedule;
  - Two Phases:
    - Phase 1 is complete as of April 2007
    - Scheduled Completion for Phase 2 is December 2009.

AASFR
ARAC Tasking

- On May 13, 2004, the FAA officially notified ARAC that it had tasked the AAWG to provide both Advisory Material and Model Specific Information.
  - Two Phases:
    - Phase 1 - Develops an Advisory Circular for compliance to §121.370a/129.16 - due December 2005;
    - Phase 2 - Develops any necessary Model Specific information needed for §121.370a/129.16 Compliance.
  - Phase 2 Tasking must be complete by Dec 2009.

TAEIG Action

- Accepted the AAWG Final Report and AC concerning Repairs (Task 1) December 2005.
- Authorized AAWG recommended follow-on work on Phase I, Tasks 2 and 3:
  - Phase I, Task 2 - Supplemental Inspections of Alterations;
  - Phase I, Task 3 - WFD analysis of alterations.
- Accepted the AAWG Final Report and AC concerning Repairs and Alterations (Task 2) June 27, 2006.
- Accepted the AAWG Final Report and AC for Phase I, April 2007

Phase 2, Task 4.—Model Specific Programs

- Oversee the Structural Task Group (STG) activities that will be coordinated for each applicable airplane model by the respective type certificate holders' and part 121 and 129 certificate holders. These STG activities will involve the development of model specific approaches for compliance with §§ 121.370a and 129.16 under the guidance material supplied in Task 1.
- As part of this tasking, the AAWG will identify those airplane models that do not have an STG, and will assess the need to form one (based on industry benefit). For those airplane models that will need to form an STG, the AAWG will initiate the coordination required to form the STG with the respective type certificate holder and/or part 121 and 129 certificate holders.
- In addition, the AAWG will support the implementation of the action plan to address recommendations made in tasks 2 and 3 as determined necessary by the ARAC, Transport Airplane and Engine Issues Group, and concurred with by the FAA.

Phase 2, Task 4 Schedule

- Development of Model Specific Compliance Data began April 2007 when the TAEIG accepted the AAWG Phase 1 recommendations.
- Completion of Phase 2 is scheduled for December 2009.

Task 4
AAWG Action

- **November 14, 2007 AAWG meeting:**
  - **AAWG agreed that the 1996 AAWG publication concerning the operation and governance of an STG is applicable to the current task**
  - **AAWG would like to limit its oversight of the STGs to means of compliance issues and clarifications**
    - **Monitoring of an STG will be by period reports submitted by the TCH on behalf of the STG**
    - **Specific requests will be required for the AAWG to become involved**
    - **The AAWG does not have a dispute resolution role regarding specific design issues involving proprietary data**

Task 4
AAWG Action

- **November 14, 2007 AAWG Meeting (cont'd)**
  - **Boeing reported that on November 13, 2007, a Type Certificate Holder/Authorities meeting was held to discuss harmonized criteria to determine Fatigue Critical Baseline Structure. The results of that meeting were presented to the AAWG for review. AAWG recommended that the TCHs use this criteria as a starting point in developing the lists of FCBS**
  - **AAWG will revise an earlier report to TAEIG, replacing "Special Certification Review" by "Review"**

STG Formation and Representation

- Manufacturer Co-chair designated by the Manufacturer
- Operator Co-chair
  - Recommended by Manufacturer based on fleet size and experience
  - Confirmed by STG member operators
- Membership should represent a minimum of 60% of the fleet
  - Operator members selected by Manufacturer and Operator Co-chairs considering
    - Fleet size
    - Fleet composition (i.e. new vs. high time)
    - Structures engineering experience
    - Operating Environments
- Certifying regulatory authority

STG Responsibilities

- Complete the assigned task within schedule commitments
- Co-chairs review operator membership after each meeting and recommend changes as required
- Co-chairs to submit a summary of activities to AAWG including Status of Activities including Schedule to Completion after each STG meeting
- Where significant Issues regarding means of compliance occur within a meeting, the Co-chair will submit a special report to the AAWG including:
  - Any clarifications on means of compliance
  - Deviation to the means of compliance stipulated in the AC
- TCH should assume the following responsibilities
  - Publish and distribute model specific documents
  - Maintain a record of STG decisions

Determining the FCBS

- Begin with the Primary Structure
- Determine the PSEs (see AC 25.571-1C)
  - Delete metallic compression structure
  - Delete secondarily loaded or unloaded stiffening elements
  - Delete safe life structure with understanding that any repair or rework requires a re-evaluation of the safe life.
  - Retain composite structure (**1)
- Eliminate structure with low operational stress or designed for conditions other than flight or ground loads.
  Examples:-
  - Outboard lower surface of the wing of certain models
  - Structure designed by crash loads
- Add back special issue items that have been treated similar to PSEs or were identified post-certification.
  Example:-
  - Flap failure mitigation program

(**1) Note: Large repairs to composite PSEs must be evaluated for damage tolerance per 25-571.

Caveats

- Additional considerations exist for components that were eliminated from the FCBS list because of low operational stresses or other considerations.
  - Eliminated structure may need to be reclassified as FCS if:
    - An alteration is accomplished to the airplane, that adversely affects the component's normal loads environment.
    - A physical alteration significantly changes the load path or limits inspectability.
    - Repairs or alterations not of SRM quality.

Task 4
AAWG Action

- **January 4, 2008 AAWG Virtual Meeting**
  - **AAWG reviewed steps taken by FAA to expedite Part 26 Delegation Authorization necessary to deal with Published and Unpublished data releases from the effective date of the rule, January 11, 2008**
  - **Unpublished repairs on FCBS: The FAA will be willing to consider a revised schedule for submittal data required for Subpart E based on suitable justification presented to the FAA Oversight Office**

Task 4
AAWG Action

- **January 4, 2008 AAWG Virtual Meeting (cont'd)**
  - **SRM/SB/STC submittals that comply to FAR 25.571 Amdt 45 or higher: The FAA has stipulated that current submittals under consideration meet the requirements of Subpart E but may not contain the language that Subpart E requires. These can be handled by suitable proposals made to the FAA Oversight Office.**

Task 4
AAWG Action

- **January 4, 2008 AAWG Virtual Meeting (cont'd)**
  - **SRM/SB/STC submittals that do not comply with FAR 25.571 Admt 45: As this is more difficult, the FAA will entertain a proposal that would defer the compliance of the data required by Subpart E on a case by case basis**
  - **AMM and CMM issues: The FAA agreed that they would consider clarifying that only those repairs in the AMM and CMM that contain approved data are subject to review under Subpart E**

Questions?

Coordinated Airport designation is warranted to ensure there is no exceedance of the level of operations the FAA will allow for summer 2008. The Level 3 status also will set carrier expectations for future coordination needs and for the need to schedule new operations during periods when the airport has the available capacity.

ADDRESSES: Any change to schedule information for summer 2008 may be submitted by mail to Slot Administration Office, AGC–240, Office of the Chief Counsel, 800 Independence Ave., SW., Washington, DC 20591; facsimile: 202–267–7277; ARINC: DCAYAXD; or by e-mail to: *7-AWA-slotadmin@faa.gov*.

FOR FURTHER INFORMATION CONTACT: James W. Tegtmeier, Associate Chief Counsel for the Air Traffic Organization, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone number: 202–267–3073.

Issued in Washington, DC, on December 19, 2007.

James W. Whitlow,

Deputy Chief Counsel.

[FR Doc. 07–6179 Filed 12–19–07; 1:36 pm]

BILLING CODE 4910–13–M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Aviation Rulemaking Advisory Committee Meeting on Transport Airplane and Engine Issues

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of public meeting.

SUMMARY: This notice announces a public meeting of the FAA's Aviation Rulemaking Advisory Committee (ARAC) to discuss transport airplane and engine (TAE) issues.

DATES: The meeting is scheduled for Wednesday, February 6, 2008, starting at 9 am Eastern Standard Time. Arrange for oral presentations by January 23, 2008.

ADDRESSES: Boeing, 1200 Wilson Blvd, Conference Room 234, Arlington, Virginia 22209.

FOR FURTHER INFORMATION CONTACT: Nicanor Davidson, Office of Rulemaking, ARM–207, FAA, 800 Independence Avenue, SW., Washington, DC 20591, Telephone (202) 267–5174, FAX (202) 267–5075, or e-mail at *nicanor.davidson@faa.gov.*

SUPPLEMENTARY INFORMATION: Pursuant to Section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92–463; 5 U.S.C. app. III), notice is given of an ARAC meeting to be held February 6, 2008.

The agenda for the meeting is as follows:

- Opening Remarks
- FAA Report
- European Aviation Safety Agency Report
- ARAC Executive Committee Report
- Transport Canada Report
- Airplane-level Safety Analysis Working Group Report
  - Closure of Task 2 and Status of Task 3
- Propeller Harmonization Working Group (HWG) Report
- Ice Protection HWG Report
- Airworthiness Assurance HWG Report
- Avionics HWG Report
- Any Other Business
- Action Item Review

Attendance is open to the public, but will be limited to the availability of meeting room space. Please confirm your attendance with the person listed in the **FOR FURTHER INFORMATION CONTACT** section no later than January 23, 2008. Please provide the following information: Full legal name, country of citizenship, and name of your industry association, or applicable affiliation. If you are attending as a public citizen, please indicate so.

For persons participating by telephone, the call-in number is (202) 366–3920; the Passcode is ''6039.'' To insure that sufficient telephone lines are available, please notify the person listed in the **FOR FURTHER INFORMATION CONTACT** section of your intent to participate by telephone by January 23, 2008. Anyone calling from outside the Washington, DC metropolitan area will be responsible for paying long-distance charges.

The public must make arrangements by January 23, 2008, to present oral statements at the meeting. Written statements may be presented to the ARAC at any time by providing 25 copies to the person listed in the **FOR FURTHER INFORMATION CONTACT** section.

If you need assistance or require a reasonable accommodation for the meeting or meeting documents, please contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section. Sign and oral interpretation, as well as a listening device, can be made available if requested 10 calendar days before the meeting.

Issued in Washington, DC on December 19, 2007.

Pamela Hamilton-Powell,

Director, Office of Rulemaking.

[FR Doc. E7–25020 Filed 12–26–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

Environmental Impact Statement: Chautauqua County, NY

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Notice of Intent.

SUMMARY: The FHWA is issuing this notice to advise the public that an Environmental Impact Statement (EIS) will be prepared for the proposed Millennium Parkway project in Chautauqua County, New York, Project Identification Number (PIN) 5757.55.

FOR FURTHER INFORMATION CONTACT: Jeffrey W. Kolb, P.E., Division Administrator, Federal Highway Administration, New York Division, Leo W. O'Brien Federal Building, 7th Floor, Clinton Avenue and North Pearl Street, Albany, New York 12207, *Telephone:* (518) 431–4127; or

Alan E. Taylor, P.E., Regional Director, NYSDOT Region 5; 100 Seneca Street, Buffalo NY 14203, *Telephone:* (716) 847–3238; or

George E. Spanos, P.E., Director, CCDPF, 454 North Work Street, Falconer, New York 14733, *Telephone:* (716) 661–8400.

SUPPLEMENTARY INFORMATION: The FHWA, in cooperation with the New York State Department of Transportation (NYSDOT) and the Chautauqua County Department of Public Facilities (CCDPF), will prepare an EIS on a proposal to construct the Millennium Parkway in Chautauqua County, New York.

An industrial corridor, including industrial districts located along Werle Road, Harrington Road, Progress Drive, and County Route (CR) 82 (Middle Road), is being developed to provide further economic opportunities within the surrounding communities. This industrial corridor includes the Chadwick Bay Industrial Park, located to the east of the City of Dunkirk in the Town of Sheridan. Although directly adjacent to air and rail facilities, tractor-trailer truck traffic access to the industrial corridor is currently not adequate.

The purpose of the Millennium Parkway Project is to improve tractor-trailer truck traffic access to the industrial corridor, including the Chadwick Bay Industrial Park, from New York (NY) Route 60 (Bennett Road). Objectives to be met with the construction of the Millennium Parkway are to: Improve tractor-trailer truck-oriented infrastructure to the industrial corridor; improve vehicular and