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#### **Public Announcement**

The U.S. Department of Transportation (DOT), Office of the Secretary of Transportation, told the public of this Future of Aviation Advisory Committee (FAAC) Aviation Safety Subcommittee meeting in a Federal Register notice published September 29, 2010 (75 FR 60163).

#### **Subcommittee Members in Attendance**

Name	Affiliation(s)	
Nicole W. Piasecki (Subcommittee Chair)	Vice President, Business Development	Boeing Commercial Airplanes (Boeing)
Juan J. Alonso <sup>1</sup>	Associate Professor, Department of Aeronautics and Astronautics	Stanford University
Susan M. Baer	Director, Aviation Department	Port Authority of New York & New Jersey (PANY/NJ)
David Barger	President and Chief Executive Officer	JetBlue Airways Corporation (JetBlue)
John M. Conley	International Administrative Vice President and Air Transport Division Director	Transport Workers Union of America (TWU), American Federation of Labor and Congress of Industrial Organizations (AFL-CIO)
Robert L. Lekites	President	United Parcel Service Airlines (UPS)
William J. McGee	Travel and Aviation Consultant	Consumers Union

### **Other Officials Present**

Name	Affiliation(s)	
Tony Fazio	Designated Federal Official	Federal Aviation Administration (FAA)
Arnold Konheim	Alternate Designated Official	DOT
Susan Kurland	Assistant Secretary for Aviation and International Affairs (FAAC Chair)	DOT

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<sup>&</sup>lt;sup>1</sup> By phone.

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#### **Other Persons Present**

Name	Affiliation(s)
Jim Albaugh	Boeing
Steve Atkins	Boeing
Brad Brugger	TWU
Patty Clark	PANY/NJ
Mike Derrick	PAI Consulting
Paul Feldman	General Aviation Manufacturers Association (GAMA)
Christa Fornarotto	DOT
Jeff Goodel <sup>1</sup>	JetBlue
Dean Hubbard	TWU
Shanta Hyde	Boeing
Gary Konop	Boeing
Brian McCullagh	FAA
John Meenan	Air Transport Association (ATA)
Brian Moran	Boeing
Steve Predmore	JetBlue
David Traynham	Boeing
Jerry Yates	TWU
Daniel Zuspan	Boeing

#### **BACKGROUND AND WELCOMING REMARKS**

This is the record of the forth meeting of the Aviation Safety Subcommittee of the FAAC, a Federal advisory committee formed pursuant to and subject to the requirements of the Federal Advisory Committee Act (FACA).

Ms. Nicole Piasecki, Subcommittee Chair, Boeing, called the meeting to order at 9:13 a.m. She welcomed the subcommittee members and members of the public in attendance, and opened the meeting by asking the members to introduce themselves to the subcommittee. The members made introductions.

Mr. Tony Fazio, FAA, read the formal statement required under FACA. He noted the meeting is recorded and asked the subcommittee to give supporting documents to Mr. Mike Derrick, PAI Consulting, for posting to the docket. Ms. Piasecki noted that the subcommittee needed to ratify

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the minutes from the previous meeting, and that it would be handled outside of the meeting. She requested that any edits to the minutes be sent to Mr. Fazio by email.

Ms. Piasecki stated the objective of the meeting was to refine the subcommittee's issue areas for presentation to the FAAC in Los Angeles, California the following day. She stated the subcommittee would first work on the draft issue paper, and then hear from Mr. William McGee, Consumers Union, and Mr. John Conley, TWU, on the issues of use of child restraint systems on aircraft and oversight of outsourced maintenance. She noted lunch would be provided, followed by a tour of Boeing's assembly plant before the subcommittee flies to Los Angeles for the FAAC meeting.

Ms. Piasecki took the opportunity to recognize that UPS Airlines, represented on the subcommittee by Mr. Robert Lekites, recently experienced a fatal aircraft accident in Dubai, United Arab Emirates. She expressed regrets on behalf of herself and Boeing, as did other members of the subcommittee. Mr. Lekites expressed his appreciation, and recognized the outpouring of support from the aviation industry. He stated an investigation was ongoing, with the goal of identifying contributing factors that could prevent future accidents.

#### **OPENING DISCUSSION**

Ms. Susan Kurland, DOT, briefly discussed how the issue areas would be presented at the FAAC meeting. She stated that all five subcommittees would report out to the FAAC on their work, and present proposals on issues that could become recommendations to the Secretary of Transportation (Secretary). Ms. Kurland noted that packages from the subcommittees containing the draft recommendations to the Secretary would be due November 22, 2010 to give adequate review time before the final FAAC meeting on December 15, 2010. Ms. Piasecki and Ms. Kurland further discussed the process of bringing forward the subcommittees' recommendations.

Mr. McGee asked how issues discussed by the subcommittee that did not reach consensus as recommendations to the Secretary would be handled. Ms. Kurland responded that at the October 20, 2010, FAAC meeting, a discussion of issues considered by the subcommittees would be heard by the full committee. She also noted the FAAC's final report will provide an opportunity for the subcommittees to discuss these issues.

Ms. Piasecki offered her assessment that the Aviation Safety Subcommittee was in general agreement on most areas and would discuss areas of contention during the current meeting. She stated the subcommittee would need to have one more meeting in November to finalize its recommendations, and that it likely could be handled as a teleconference. Mr. Conley stated he would prefer a face-to-face meeting, because of the added value of meeting in person and that it would be the final meeting of the subcommittee. Ms. Piasecki stated a determination could be made on the next meeting at the end of this meeting.

Mr. David Barger, JetBlue, expressed his opinion that the subcommittee had accomplished good work and was mostly aligned on the issue areas. Ms. Susan Baer, PANY/NJ, agreed and noted that safety is typically a topic on which agreement can be found. She commended the subcommittee's good work on

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identifying pertinent issues for presentation to the FAAC. Mr. Juan Alonso, Stanford University, added his opinion that early prioritization of the issue areas by the subcommittee made the process of selecting pertinent issues more effective.

Mr. McGee noted that there was little overlap between the Aviation Safety Subcommittee's issue areas and those identified by other subcommittees with the exception of the Next Generation Air Transportation System (NextGen). He expressed regret, though understood, that some of the issues he raised may not reach consensus to go forward as recommendations to the Secretary, but expressed appreciation that they were heard by the subcommittee.

Ms. Piasecki asked the subcommittee to consider, when, in future looking back at the subcommittee's work, were the pertinent aviation safety issues captured. She expressed her belief they had. Mr. McGee stated his belief that although the Secretary was seeking near-term actionable recommendations from the FAAC, the recommendations would likely have long-term impacts on the U.S. aviation industry. Mr. Alonso stated he was pleased with the subcommittee's efforts to incorporate safety enhancements into the development of NextGen technologies and expressed his belief that safety enhancements will be an effective recommendation. Mr. Steve Predmore, JetBlue, acknowledged the good efforts of the subcommittee, and stated the ATA Safety Committee was encouraged by the briefing he provided on the Aviation Safety Subcommittee's strategic focus on enhancements to aviation.

Ms. Piasecki recognized the need for the general aviation community to be involved in the process, and expressed her appreciation for the attendance of Mr. Paul Feldman, GAMA, at this meeting. Mr. Feldman expressed his appreciation for the opportunity to participate, and acknowledged the good work of the subcommittee.

#### **ISSUE PAPER DISCUSSION**

Ms. Piasecki asked Mr. David Traynham, Boeing, to cover changes made to the subcommittee's draft issue paper, an internal working document for use by the subcommittee, since the teleconference on September 28, 2010. Mr. Traynham noted the version distributed to the subcommittee members was more current than the version in their preparatory package for the October 20, 2010, FAAC meeting. He added that new text was in blue ink for ease of identification.

#### "Just" Safety Culture

Mr. Traynham explained the wording on a "just" safety culture had been added on page 2 of the issue paper based on the presentation given by Mr. Brad Brugger, TWU, at a previous meeting. There was no further discussion of this topic.

#### **Increased Protections for Voluntary Safety Data**

Mr. Traynham then discussed the issue of increased legal protections of voluntary safety data. He noted it was an issue area still in need of further development, particularly with assistance from the

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general aviation community. Mr. Traynham added there was recently enacted legislation on Safety Management Systems (SMS) as part of a short-term funding bill for the FAA, and that further discussion with legal experts at the FAA, DOT, and external firms on the provisions of the rule would be needed. He noted the discussions would likely provide background information for the issue paper rather than a recommended change in policy. Ms. Piasecki asked Mr. Traynham the intent of the legislation. Mr. Traynham stated it would generate a rule to require SMS throughout the U.S. air carrier industry, and noted references were made to voluntary safety programs, including Flight Operations Quality Assurance and Aviation Safety Information Analysis and Sharing (ASIAS). He cited the need to explore what the effects would be on these voluntary programs if participation is mandated by the SMS rulemaking.

Ms. Piasecki asked for Mr. Feldman's input on the possible effects of the SMS rulemaking. Mr. Feldman stated that although this would be an issue for more than just the general aviation community, it is broader in the sense of what happens when a voluntary safety program is mandated. He stated there would likely be industry concerns over who would have access to submitted data, how it would be used, and by whom. Mr. Feldman noted the SMS Aviation Rulemaking Committee (ARC) identified this as a key issue and submitted it with its recommendations to the FAA. Mr. Traynham added that the legislation requires SMS programs but is more open on what data is required and how voluntarily submitted data is handled. He stated the need to further research the topic.

Ms. Kurland asked if the subcommittee would have recommendations differing from those of the SMS ARC. Mr. Feldman stated the subcommittee's recommendations were focused on voluntary programs, though he noted regulatory changes were in process and the recommendations should be compared against the proposed regulatory changes. Ms. Baer stated the subcommittee's recommendation could go further by suggesting mandating legal protections for safety data used in SMS programs because without protections for data, SMS will not succeed.

Mr. Brugger added that he had participated on an SMS ARC subcommittee on this subject, and its focus was primarily with preventing voluntary safety data from being used in litigation following an aircraft incident or accident, and suggested legislation to accomplish this. Mr. McGee asked if the legislation would have an impact on the NASA Aviation Safety Reporting System. Mr. Fazio stated it possibly could. He also cautioned the subcommittee that discussions with the FAA on SMS would have to be carefully framed because the agency is currently in the process of rulemaking on SMS, and, as a result, discussion with industry and the public on this subject may be limited. Mr. Fazio asked the subcommittee for clarification of its intent on this issue, as he believed it primarily dealt with voluntary safety data being used in civil litigation cases, rather than increasing protections under part 193 of Title 14, Code of Federal Regulations (14 CFR), which deals with enforcement cases initiated by the FAA.

Mr. Predmore stated that part 193 prevents release of data to the media. He added there is currently no protection against use of voluntary safety data in civil litigation cases, and that expanding protections under part 193 to prevent release in civil litigation could be considered. Mr. Barger asked if consideration was given to global harmonization on this issue. Mr. Traynham replied that it had not, though criminalization of aircraft accidents in foreign countries was cited as a rationale for pursuing

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increased protection of safety data. Mr. Feldman added the SMS ARC recommended the International Civil Aviation Organization make protection of data used in SMS programs one of its recommended practices to member states. Mr. Traynham stated a small group would be convened to finalize this issue area.

Mr. Barger asked a general question on the layout of the issue paper. Ms. Kurland covered the process of transitioning the issue papers to recommendations for submission to the Secretary and explained how DOT could offer assistance throughout the process. Mr. Barger asked if the subcommittee was recommending a legislative change, should they attempt to write it in legislative language. Ms. Kurland clarified that the recommendations should be broad, rather than using specific regulatory language, or the recommendations could suggest undertaking a study on an issue. Mr. Traynham stressed the need for using plain language so the final recommendations are understood by a wide audience.

#### **Predictive Discovery**

Mr. Traynham continued to the second topic in the issue paper: a shift from traditional forensic safety studies to more predictive searches for future vulnerabilities by increasing analytic capability for parties that analyze safety data and information under the ASIAS program. Mr. Traynham added his opinion that the topic should be kept broad to allow the FAA and MITRE, Inc. (MITRE) to determine how to accomplish improvements in analytic capabilities. Ms. Baer agreed, stating it would be best to let the affected parties determine how to best implement the subcommittee's recommendation. Ms. Piasecki suggested the word "predictive" be added to "analytic capabilities." Mr. Traynham agreed and made the revision.

Mr. Steve Atkins, Boeing, expressed his opinion that having the capability to better understand safety vulnerabilities from a data perspective is on point, but he was concerned about the ability to make safety decisions based only on vulnerabilities. He furthered his point by citing that the aviation industry has made decisions on safety enhancements largely based on forensic studies for decades (that is, typically after an accident has occurred). Mr. Atkins noted the government and aviation industry have collaborated for years on safety enhancements to the U.S. aviation system, but are not experienced in making safety decisions based on data alone. He cautioned that the aviation industry could get very good at predictive discovery of safety hazards, but may still fall short in the ability to make decisions, particularly when undertaking cost benefit analyses, on implementation of recommended safety enhancements as a result of such a discovery.

Mr. Atkins expressed his belief that a new decision making methodology will be needed to improve aviation safety. He added that a cultural shift in the review process at the Office of Management and Budget (OMB) will be needed because safety enhancements are typically justified based on preventing an incident or accident from a forensic study. Mr. Atkins stated his opinion that it will be difficult to make a case for safety enhancements that are proposed based on data analysis alone. He likened it to acting on a gut feeling, which would carry slight legitimacy when conducting an economic analysis that lacks a tangible event, such as an accident, to justify the need.

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Ms. Kurland asked if there was a recognized methodology for conduct of a cost benefit analysis using predictive discovery. Mr. Atkins cited the Commercial Aviation Safety Team (CAST) process, and stated that it could be used as a model for prioritizing safety enhancements. He noted the CAST process is based on worldwide aviation accident rates, but it could translate into a workable methodology. Ms. Baer stated that development of a cost benefit analysis methodology to facilitate the fundamental shift Mr. Atkins cited as needed, and this is potentially how a recommendation from the subcommittee could be worded.

Mr. Fazio stated that vulnerability discoveries driving FAA policy changes are a difficult proposition and will take time to accomplish, because it is hard for the agency to initiate rulemaking efforts without accidents and fatalities to justify the resulting costs to the aviation industry. He added that OMB does recognize safety analysis in its economic reviews.

Ms. Baer stated that the subcommittee's intent was to recommend a new methodology to evaluate safety enhancements without supporting fatalities and accidents. Mr. Barger pointed out that this issue may overlap with the fifth topic in the issue paper. He also cautioned the subcommittee on the use of the word "vulnerability," noting it can often be misunderstood, especially out of context. Mr. Traynham noted Mr. Barger's comments. Mr. Predmore cited the Joint Implementation Measurement Data Analysis Team process of the CAST as a way to quantify and prioritize where to spend limited resources. He further discussed how this process relates to identifying safety priorities, the work of the CAST in the 1990s, and how to take this process to the next level of safety. Ms. Piasecki noted this discussion was very pertinent to the fifth topic, but encouraged the subcommittee to continue the discussion and for Mr. Traynham to capture the information for the fifth topic.

Mr. Lekites stated there is a large amount of data available in the aviation industry that allows individual air carriers to validate performance against peers in areas such as unstabilized approaches and air turn backs, which is helpful to identify areas that may become safety hazards. He stated his opinion that the FAA is good at compliance, but less so at analyzing data. He questioned if finding an error in a maintenance logbook during a compliance inspection really had an impact on safety. He noted the new methodology the subcommittee is recommending is primarily based on instinct and may be difficult to adopt. Ms. Baer added that safety recommendations are typically very focused and data driven, but there is a human factors side to this new methodology which must be considered, even though it is difficult to articulate.

Mr. Barger cited an example of proactive installation of Engineered Material Arresting Systems at airports considered at risk of a runway overrun accident, noting that some airports have installed it based solely on risk factors, not because of past overruns. Ms. Baer asked how the aviation industry could become more predictive in the human factors area, noting that safety enhancements have traditionally come after a problem is identified or accident has occurred. She questioned how the aviation industry could transition to a point where problems are identified before incidents, and what are the necessary tools to identify a problem and apply the necessary mitigations.

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Mr. Lekites responded that there will always be unknown hazards, though the aviation industry could move toward predictive safety measures through implementation of SMS. He endorsed the SMS concept, but expressed some uncertainty on exactly how safety data will be used in SMS programs. Ms. Baer suggested this issue area may belong with the subcommittee's SMS issue area. Mr. Lekites stated the subcommittee will be remiss if this topic is not addressed. He stated it is pertinent to learn from accidents and he sees SMS as an obligation that should be recognized.

#### **Enhanced Safety Performance in Nextgen**

Mr. Traynham continued to the third issue area, enhanced safety performance in NextGen. He noted several other subcommittees have identified issue areas for NextGen, and theorized that the various NextGen issue areas may be combined. Mr. Barger questioned how the various elements could be taken from the subcommittees to the NextGen Advisory Committee (NAC), of which he is the chairman. He stated the work done in the subcommittees will help with the execution of NextGen and he inquired how best to proceed. Ms. Baer stated safety is a piece of NextGen; however, NextGen crosses into each of the subcommittees' topics.

Ms. Kurland clarified that the FAAC is the umbrella organization under which recommendations will be presented to the Secretary. She noted the NAC's primary objective is to put metrics on NextGen. Ms. Kurland acknowledged the work done by the FAAC will be helpful to Mr. Barger and the NAC. Mr. Barger stated the tasking of NAC deals with the implementation of NextGen. He added the proposals from the five FAAC subcommittees will have overlap on the topic of NextGen. Ms. Kurland responded that there may be a single recommendation with several subsets as a result.

Ms. Baer expressed her belief that the FAA has made good progress in the last 2 years on implementing NextGen, and she feels more confident that it will be fully implemented in the coming years. She noted NextGen is very important to the U.S. population as a whole, not just those who use air travel. Ms. Kurland added that the work of several subcommittees highlight the potential benefits of NextGen implementation and this will be considered by the FAA, the DOT, and airports.

Mr. McGee noted from the standpoint of the DOT, NextGen encompasses a large number of rollout dates and deliverables rather than just a "flip of the switch" implementation. Ms. Piasecki added the importance of the subcommittee capturing the need for public outreach in its recommendation on this topic. Mr. Barger stated part of the execution of NextGen is communication. Ms. Kurland cited outreach by the Secretary and other government officials on NextGen and noted the topic of NextGen is being communicated to the public.

Mr. Barger raised a point on the FAAC making recommendations that other parties take action on issue areas, even if they already are or should be through recommendations or taskings from other committees or legislation. He stated his concern that this could potentially draw attention to these parties if they have been remiss in taking action. Ms. Baer stated the FAA has identified individual items to be address and the next step is to make organized changes. She stated this subcommittee should make a proposal to strengthen and encourage the efforts of the FAA.

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Ms. Kurland referred to the NAC charter and inquired if a proposal to organize and implement NextGen is within the charter. She stated this proposal may fall under the Joint Planning and Development Office (JPDO). Mr. Barger stated he will look at the NAC charter and determine where the proposal best fits. Ms. Baer suggested the proposal needs to be worded so the JPDO will have support for focusing on the safety criteria of NextGen. The subcommittee discussed the current task forces that may be able to address the issue and Ms. Kurland offered to search for groups within the FAA and the DOT to help determine how best to word this proposal.

Ms. Piasecki reminded Mr. Traynham of a key statement made at a previous subcommittee meeting that interrupting a system introduces risk. Mr. Daniel Zuspan, Boeing, noted this was contained in issue area three. Mr. Traynham took an action to expand this subject area.

#### **Voluntary Safety Data Sources**

Mr. Traynham stated the fourth issue area pertains to expanding sources of voluntary safety data. He stated there is a need to expand the involvement of general aviation. He acknowledged the general aviation community's desire to expand the use of voluntary safety data in their operations.

Mr. Barger turned the conversation back to the topic of NextGen and inquired how the proposals get blended into one NextGen proposal. Ms. Kurland stated the goal is to draft an overarching NextGen proposal that includes the topics discussed by the five subcommittees. She stated it would not be combined into one paragraph; rather it would include all areas of discussion. Ms. Kurland added the proposal will become stronger as more information is gathered.

Ms. Piasecki noted several issues in need of discussion, including child safety seats; Notices to Airmen (NOTAM) presented by Mr. Predmore; followed by Mr. McGee and Mr. Conley's presentation on outsourced maintenance.

Ms. Piasecki directed the conversation back to topic area four concerning sources of data. Mr. Traynham explained this topic is about making sure the stakeholders within the aviation community that are not fully a part of ASIAS are brought into the program. He noted two sizeable groups not participating include ground maintenance personnel and most facets of the general aviation community. Mr. Traynham added participation from these groups would benefit the ASIAS program. Ms. Piasecki questioned if the subcommittee wished to directly seek that participation through the recommendation or make a broader recommendation that the FAA Administrator work with CAST and JSC to identify those stakeholders. Mr. Traynham stated it would be a good idea for the subcommittee to specifically identify whose participation is being sought, rather than just a broad term of "ground maintenance personnel. Ms. Piasecki asked if there were any other comments or inputs regarding increasing the sources of safety data. Mr. Conley asked for clarification if the ground maintenance personnel referred to third party providers or are air carrier employees included. Mr. Traynham stated he thought the discussion included both groups. Mr. Brugger stated the maintenance segment of ASIAS is in its early phases. He added there have been three meetings and maintenance and flight data has just started to be brought together through ASIAS. Mr. Brugger noted the group is trying to determine the best way to collect more data from maintenance for ASIAS so it can be a more useful

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resource. He noted MITRE is developing the methodology and has two representatives working on the ASIAS advisory team. Ms. Piasecki asked if Mr. Feldman had any input regarding the issue of the general aviation community's participation in ASIAS. Mr. Feldman responded if the programs are being expanded for more participation by the general aviation community, there needs to be a way to streamline and reduce the financial burden of implementing voluntary safety data reporting programs because the cost is prohibitively high for most private operators. Mr. Conley asked if it is intentional that the group is delaying including the ground maintenance personnel in the voluntary safety programs. He stated it looks like the recommendations call for general aviation to be included right away. Ms. Piasecki interjected the group would want stakeholders brought in immediately.

Ms. Piasecki asked if there were any additional comments from the group. Mr. Barger asked if there are think tanks at institutions of higher learning involved on safety priorities. Mr. Alonso replied that the FAA has the Centers of Excellence for research; however, Ms. Baer noted these institutions and research centers do not focus specifically on safety. She stated this proposal may be a mechanism for doing research to see if educational institutions can be expanded to assist in formulating the future of aviation.

#### **Prioritizing Safety Issues**

Ms. Piasecki stated the focus of proposal number five pertains to prioritizing safety issues currently facing the FAA. She stated there is a need to focus on the large areas of concern, while not expending limited resources on issues with little potential for enhancing aviation safety. Ms. Piasecki stated there is a need to prioritize safety items to get the most effective results.

Ms. Piasecki continued to the topic of child safety seats. Mr. McGee opened the conversation and noted the meeting last week in Washington, DC. He stated the issue regarding mandating child restraint systems (CRS) has a long history. Mr. McGee added at this point, the topic can be abbreviated because the majority of the discussion has already been heard at previous subcommittee meetings. He stated from his experience with this topic, there is no conflicting science with regard to a CRS being the safest place for a small child on an aircraft. Mr. McGee mentioned the FAA Web site states that a child in a CRS is safer than a child being held on a person's lap during a flight. He pointed out that the family page on the FAA Web site provides useful information for air travelers.

Mr. McGee noted the FAA and the National Transportation Safety Board (NTSB) have had conflicts regarding this issue but both sides are very sincere in their beliefs even though there is opposition. He stated if the subcommittee were to address this issue, three choices should be focused on: (1) to support the current system, (2) recommend current policy stay in place, but FAA/DOT and the air carrier industry increase education and awareness by the traveling public, or (3) mandate CRS's. Mr. McGee stated he believes it should be mandated and that education and awareness is not enough. He noted the validity of the FAA's position that mandating CRS will make air travel prohibitively expensive for families, causing more families to opt to drive, which is less safe than commercial air travel.

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Mr. McGee noted his concern with a lack of public awareness on the issue of CRS. He stated he asked the Consumers Union to commission a survey on this issue, but noted it will not be ready by the final FAAC meeting on December 15, 2010. Mr. McGee added when a survey of this nature is conducted on a certain consumer group (for example, parents of small children), it can be very detailed and take a great deal of time to complete. Mr. McGee reiterated awareness on use of CRS on aircraft among parents needs improvement, but acknowledged several government agencies (including the FAA and ATA) have invested their efforts in educating the traveling public on this issue.

Mr. McGee stated his belief that CRS use must be mandated by age, not weight. He reiterated the mandate calls for CRSs for children 2 years of age and under. Mr. McGee cited a statement previously made by Mr. Bob Matthews of the FAA, which states "our assumption is people respond to price". He added one caveat he would make to Mr. Matthew's statement asking if there is an assumption being made that the person has full knowledge of the risk involved of flying with a child in their lap, and he believes they do not. Mr. McGee opened the issue to the subcommittee for discussion.

Ms. Baer agreed a number of people likely do not make a conscious decision regarding use of CRS on aircraft. She noted most people will just pay for children under 2 years old. Ms. Baer stated she supports this idea, for a number of reasons, including her belief that small children typically behave better in car seats and that improves the flight experience for all. Mr. McGee noted the current regulations require all passengers to be secured at certain times, except those under 2 years of age. He added it raises a question on the scope of what is being regulated. Mr. John Meenan, ATA, agreed the issue is very complex. He stated the only question he would pose to the subcommittee is whether it is appropriate to raise one narrow issue within the context of the other broader recommendations. Mr. Meenan stated the ATA does not disagree the issue is worth further discussion and study, but he questioned if the issue really fits into the context of what the subcommittee has developed.

Mr. McGee acknowledged Mr. Meenan's point was fair. He stated though the issue may not be one of the subcommittee's top five issues, it does have a long history. Mr. McGee added the issue was recommended in 1997 by the Gore Commission. Ms. Piasecki asked if there were any other thoughts for Mr. Meenan's earlier comment. Ms. Baer questioned the number of children 2 years of age and under are actually flying. Mr. Meenan responded the number is not easily obtainable. He stated the FAA uses 3 fatalities over 30 years as a benchmark, but the data could be different now.

Mr. Conley stated the issue is certainly a worthy topic and should be an ongoing conversation. He noted education on this issue should be enhanced. Mr. McGee cited the 1989 United Airlines accident at Sioux City, Iowa and noted two children who perished in the flight. He added the Association of Flight Attendants' point on whether parents are consciously making this decision to have a child sit on their lap. Mr. Predmore added to Mr. McGee's comment and stated he took the issue to the ATA Safety Council and it is a significant safety issue to the carriers. He added there has been significant progress in the last few months. Mr. Predmore explained the feedback he received from the ATA Safety Council which questioned the role of the FAAC driving this specific individual issue when other more significant safety priorities exist.

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Mr. McGee responded the subcommittee is what we make of it, and this subcommittee has a diverse group of stakeholders. He noted this issue has been around for 20 years and added he believed at a bare minimum, more education on the topic is needed. Mr. Atkins stated the first step is to the answer the question of what saves the most lives. He noted it seems to be a debate between mandating CRS and the lives saved there, as compared to how many people would choose to drive and how many lives would be lost as a result in car accidents. Mr. Atkins questioned if there is a fourth option where data can be understood so more lives can be saved. He added once that is understood then it can be compared with other things that save the most lives. Mr. Atkins stated the worst case scenario is the subcommittee does something that has an unintended consequence and increases the number of fatalities.

Mr. Barger discussed how to best organize the topics being discussed. He stated there are items that are important but on which the subcommittee cannot agree. Ms. Kurland noted the important part of the process is to get a paragraph or two on such topics in the report, even if consensus is not reached. Mr. McGee reiterated the historical importance of the issue to the subcommittee. He noted these issues are not just important today but can be important for the future. Mr. Barger stated if the FAAC passes now on certain issues, the issues may be overlooked in the future. A number of subcommittee members agreed this inevitably happens, even to important topics, which cannot be agreed upon by the parties considering them.

Mr. Barger stated the recommendations need to be realistic so that they can be acted upon, specifically with the topic of CRS. Ms. Baer noted topics such as CRS, updating the NOTAM process, and updating data analysis without fatalities can be combined under one proposal for areas that need closer examination. Mr. Barger stated there are certain things that do not need to be mandated; however, the topic matter cannot be overlooked. Mr. McGee noted, with regard to the issue of CRS, there is a need to combine education and regulation.

Mr. Alonso commented even if every flight in the United States carries 7 to 10 percent children, then the improvement made in safety is tremendous because it is an improvement applying to any kind of accident. He added other areas the subcommittee is discussing may have more impact in one kind of accident versus another type. Mr. Alonso reiterated if a person thinks a child can be safely held during an aircraft accident, this demonstrates the need for more education. Mr. Predmore commented this is a challenge the aviation industry faces. He stated it underscores the type of recommendations needed regarding how to prioritize and the value of this issue versus other issues. Mr. Predmore added this can be brought out in the report. Mr. McGee stated in terms of full disclosure, this is something we were all asked to put forth our first draft proposals. He stated in the beginning, he looked at everything in a narrow way and thought everything would boil down to five proposals, but he feels the subcommittee is communicating on issues in another way. Mr. McGee added he would be willing draft another statement if the subcommittee does not feel this issue is strong enough to be a recommendation.

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Ms. Piasecki stated she is hearing the subcommittee be very supportive of this issue, including it in the report, and asking the Secretary to provide leadership and responsibility for communicating it to the public. Members of the subcommittee agreed the data should also be updated. Mr. Fazio agreed it should be a recommendation for ongoing education; make education happen on a regular basis. Mr. Meenan noted it takes a lot to get the message out. He added it is a complex issue and the subcommittee needs to look at complexities before deciding to mandate an issue. Ms. Baer noted the sense of urgency to complete the issue and send it out.

Ms. Piasecki recognized Mr. Jim Albaugh, President and Chief Executive Officer, Boeing Commercial Airplanes, who made a short visit to the subcommittee meeting. Mr. Albaugh thanked everyone for attending and the work that is being done the Aviation Safety Subcommittee and the FAAC. He discussed the work that is currently being done at their facility located in Everett, Washington. Ms. Kurland thanked Boeing for the support and everything that has been accomplished.

#### **Oversight of Outsourced Maintenance**

Ms. Piasecki asked Mr. McGee and Mr. Conley to cover the topic of FAA oversight of outsourced maintenance. Mr. McGee stated in some ways, the topic of oversight of outsourced maintenance may have been narrowed more than intended. He noted the subcommittee is not discussing how air carriers should maintain their aircraft, whether in-house or outsourced, but rather if the FAA provides a consistent level of oversight, regardless of where the maintenance takes place. Mr. McGee rhetorically asked if all aircraft maintenance is being overseen in the same way. He referred to Mr. Atkins' earlier statement regarding moving into an era of fewer accidents. Mr. McGee noted this issue area was based more on the potential for accidents based on hazard discovery, rather than forensic studies of accidents with outsourced maintenance noted as a causal or contributing factor.

Mr. McGee noted two significant statistical trends in domestic commercial aviation over the last decade: (1) U.S. air carriers are outsourcing their regional flying, and (2) the outsourcing of maintenance. Mr. McGee noted 10 years ago, an estimated 30 percent of heavy maintenance was outsourced and today it has reached an estimated 70 percent. He posed the question based on the statistics, are the oversight tools keeping pace with this trend? He noted the traditional method to conduct maintenance was at an air carrier's own hangar in a hub city, and the FAA usually established an office nearby, allowing frequent oversight by inspectors. He reiterated his concern on whether the oversight tools are keeping pace with the changes in the air carrier industry.

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Mr. Conley commented that part of the subcommittee's task is to make aviation safer, and by statistics, the United States has the safest system. He stated his approach to safety is preemptive, not reactive. Mr. Conley provided an example from one air carrier who had 10 instances this year of contraband found on inbound airplanes from South America. He stated he does not know whether the people who had access to these aircraft had the same background checks or alcohol and drug testing as those in the United States. Mr. Conley added his belief that there needs to be one level of safety in the aviation industry. He also cited the lack of drug and alcohol testing at international repair stations. Mr. Conley explained when an air carrier issues a request for a proposal to perform maintenance on its aircraft, organizations whose employees do not undergo such testing should not be allowed to apply, and air carriers should not use them. He expressed his belief that the topic is very straightforward.

Mr. Barger cited a recent visit to Hanover, Germany, and noted the country's privacy laws do not allow the same level of drug and alcohol testing the United States requires. He stated the facility he visited showed an abundance of quality. Mr. Barger cited his visits to foreign repair stations and how each one has different policies. He added it is an interesting debate. Ms. Piasecki noted she just returned from China and spent a great amount of time with China Civil Aviation (CAAC). She stated the FAA has done an excellent job working with the CAAC to improve the aviation safety record in China. Ms. Piasecki added the FAA has an office in China and culturally it is not practical to think the CAAC or the Chinese government will adopt the same drug and alcohol standards as the United States. She stated that some factors of the aviation industry in China are better than those the United States, but it all comes down to the practicality of a recommendation. Ms. Piasecki added that she is struggling with understanding whether this is a safety or labor issue.

Mr. Conley stated more data is needed to understand the issue. Mr. Feldman noted there is currently a rulemaking that the U.S. Transportation Security Administration (TSA) has initiated regarding foreign repair station security. He stated in terms of data, the NTSB has not made recommendations on this issue. Mr. Feldman noted the DOT Inspector General investigated this issue and had some comments on the FAA's oversight, but nothing in the report suggested foreign repair stations were unsafe. He stated GAMA has not seen the kind of data that could show foreign repair stations pose a compelling safety issue.

Mr. Lekites cited examples of aircraft containing contraband after having maintenance conducted at US repair stations. He noted the foreign repair stations have to deal with the same oversight the United States does. Mr. Lekites stated there is no data that can prove alcohol and drug testing would improve the situation at foreign repair stations. He added from a safety standpoint, the issue of implementing increased oversight at foreign repair stations is not a high priority.

Mr. McGee noted the enforcement of 14 CFR 145. He stated whether the work is being done at Timco Aviation Services or overseas, the bottom line is whether it is being overseen to the same standard. Mr. Feldman reiterated earlier issues of change to greater outsourced maintenance. Mr. McGee mentioned the good carriers and manufacturers in the industry, but also noted that there are carriers and repair stations that do not meet the regulations. He again asked if the FAA has the tools for oversight. He noted he has heard complaints from dozens of FAA inspectors citing their inability to get to locations where maintenance is being performed.

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Mr. Lekites stated his local FAA office says that is not an issue. He cited an example where a flightcrew member was found to be under the influence of alcohol at departure time for his flight in Poland. Mr. Lekites stated the Polish officials made a mistake during the alcohol test and had to let the crewmember go without charges, even though he could have served 8 years in prison as a result of attempting to fly while intoxicated, a more severe punishment than what he would face in the United States. He asked why other countries do not insist the rules be changed in the United States to meet their more stringent policies. Mr. McGee cited the inability of an FAA inspector to travel to a repair station in China in prompt fashion. He emphasized his concern with whether the FAA has the resources to continue to do its job.

Ms. Piasecki suggested the issue should come to a close because no agreement is being achieved. She stated that she liked the way Mr. Lekites open the conversation regarding changes in industry and that the subcommittee believes in global harmonization and a standard of safety, especially with regard to the issue of drug testing. Mr. McGee agreed the subcommittee will not come to a consensus on the issue.

Mr. McGee noted the need for one level of safety and that not all Flight Standards District Offices are the same. Mr. Fazio reiterated the fact that there is only one standard for repair stations, which is certification under 14 CFR part 145. He stated, except for drug and alcohol testing, there is one standard. He stated there is a TSA rule being drafted that will address the issues of security and background checks. Ms. Kurland stated the subcommittee needs to focus more on identifying the problem rather than focusing on how to fix it. She stated the FAA will be responsible for implementing the changes the proposal suggests.

Ms. Piasecki asked Mr. McGee if he was comfortable his concerns had been heard, even though consensus had not been reached. Mr. McGee responded he was and stated being heard at subcommittee level is important, but he is hopeful it will be heard at the full committee level. Ms. Kurland covered the process of adding text on this topic in the final report.

#### **A**DJOURNMENT

The subcommittee members will be in attendance	e at the FAA	AC Meeting in	Los Angeles,	California to
present these proposals to the full committee.				

The meeting adjourned at 1:02 p.m.

I hereby certify that, to the best of my knowledge, the foregoing minutes are accurate and complete.		
Approved by:	Tony Fazio, Designated Federal Official	
Dated:	December 13, 2010	