Future of Aviation Advisory Committee
Environment Subcommittee
Record of Meeting
September 20, 2010

Teleconference

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) Environment Subcommittee meeting in a Federal Register notice published September 13, 2010 (75 FR 55626).

Subcommittee Members in Attendance

Name		Affiliation(s)
Bryan K. Bedford *(Subcommittee Chair)*	President and Chief Executive Officer	Republic Airways Holdings, Inc. (Republic Airways)
Juan J. Alonso	Associate Professor, Department of Aeronautics and Astronautics	Stanford University
Kinney Baxter	Attended for Raul Regalado	Metropolitan Nashville Airport Authority
Brian Brandewie	Attended for Cynthia Egnotovich	Goodrich Corporation (Goodrich)
Billy Glover	Attended for Nicole Piasecki	Boeing Commercial Airplanes (Boeing)

Committee Members Not in Attendance

Name		Affiliation(s)
Cynthia M. Egnotovich	Segment President, Nacelles and Interior Systems	Goodrich
Nicole W. Piasecki	Vice President, Business Development	Boeing
Raul Regalado	President and Chief Executive Officer	Metropolitan Nashville Airport Authority

Other Officials Present

Name		Affiliation(s)
Lynne Pickard *(Designated Federal Officer (DFO))*	Deputy Director, Office of Environment and Energy	DOT
Camille Mittelholtz (*Alternate DFO)*	Environmental Policies Team Leader, Office of Assistant Secretary for Transportation Policy	DOT

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Name		Affiliation(s)
Carl Burleson	Deputy Assistant Administrator, Office of Aviation Policy, Planning, and Environment	Federal Aviation Administration (FAA)

Other Persons Present

Name		Affiliation(s)
Bill Edmunds	Senior Human Performance Specialist	Air Line Pilots Association, International
Scott Harper	FAAC Support	PAI Consulting
Jonathan Hoffman	Senior Principle Scientist	The MITRE Corporation
Anne Kohut	Publisher	Airport Noise Report
Richard Marchi	Senior Advisor, Policy and Regulatory Affairs	Airports Council International–North America (ACI–NA)
Glenn Morse		Continental Airlines (Continental)
Doug Obey	Reporter	Inside EPA
Sue Presti	Senior Director of Government Affairs	The International Air Cargo Association (TIACA)
Nancy N. Young	Vice President, Environmental Affairs	Air Transport Association of America, Inc. (ATA)

Background and Welcoming Remarks

This is the record of the third meeting of the FAAC Environment Subcommittee, a Federal advisory committee formed pursuant to and subject to the requirements of the Federal Advisory Committee Act (FACA). The subcommittee and its meetings are likewise subject to the requirements of FACA.

Mr. Bryan K. Bedford, Subcommittee Chair, Republic Airways, called the meeting to order at 1:03 p.m. He welcomed the subcommittee members and thanked them for their participation. He then thanked Dr. Juan J. Alonso, Stanford University, for filling in as the subcommittee chair for the last meeting.

Administrative Matters

Mr. Bedford asked Ms. Lynne Pickard, DFO, DOT, to review the FACA requirements.

Ms. Pickard briefed the subcommittee on the history and purpose of FACA, and noted some of its key requirements, including balanced representation and publicly accessible meetings. She outlined her responsibilities as DFO, including maintaining information on costs and membership, ensuring efficient operations, and keeping publicly available records of FAAC activities.

Ms. Pickard noted meetings of the subcommittee are accessible to the public. She stated interested persons will have the opportunity to submit comments before each meeting, and the minutes of each meeting will be made available both in the regulatory docket at http://www.regulations.gov (Docket number DOT-OST-2010-0074) and on the FAAC Web site at http://www.dot.gov/faac.

Ms. Pickard read the formal statement required under FACA. She noted although the meeting was open to the public, participation in the meeting was limited to subcommittee members, their alternates, and Federal officials, subject to the discretion of the subcommittee chair. Ms. Pickard added that only subcommittee members and their alternates are entitled to vote on subcommittee business.

DISCUSSION

Ms. Pickard turned the meeting over to Mr. Bedford, who noted the Obama Administration recently embraced infrastructure spending on the Next Generation Air Transportation System (NextGen) and proposed to permanently extend research and development tax credits.

Mr. Bedford asked Dr. Alonso to summarize the FAAC meeting that took place August 25, 2010. Dr. Alonso mentioned that the Environment Subcommittee gave two presentations. He noted Ms. Jeanne Yu, Boeing, gave a presentation titled, The Environmental Benefits of Aircraft/Engine Technology. She stated aircraft and engine technologies have accounted for 80 to 90 percent of the environmental improvements in the air transportation system.

Mr. John Heimlich, ATA, gave the second presentation, on sustainable alternative aviation fuels. He highlighted some of the barriers to ensuring the presence of sustainable fuel in the market.

Dr. Alonso stated the presentations were well received. He noted the only comments were about ensuring cost was being considered. He added the subcommittee should focus on operational improvements, technology improvements, and sustainable alternative aviation fuels. Dr. Alonso then stated the day's discussions should be about the degree to which the subcommittee focuses on NextGen, given the previously mentioned initiatives from the Obama Administration. He expressed his belief that these three areas, possibly along with harmonized domestic and global efforts for reducing emissions, would be the areas the subcommittee should use as the basis for its proposals.

Mr. Bedford noted that other subcommittees have also focused on NextGen. Dr. Alonso agreed, noting that there were five presentations on NextGen at the full committee meeting, and it was clear NextGen impacts every subcommittee. He stated although NextGen seems to be gaining momentum, he was not sure what initiatives or finances could help meet its environmental goals.

Ms. Pickard agreed with Dr. Alonso and added that much of the attention for NextGen seems to be given to the air traffic side, and the environmental component seems to be treated as a side benefit that is achieved through more efficient air traffic. She stated she was not sure if the Presidential initiatives had any language about environmental equipage, and asked Mr. Bedford if a discussion with the Chair of the Financing Subcommittee would be desirable because they are probably holding the same discussions.

Mr. Billy Glover, Boeing, asked what is meant by the phrase "environmental equipage." He stated he thought the environmental benefit from NextGen stemmed from a more efficient system. Ms. Pickard stated environmental equipage could also include new environmental technologies that come out of the research and development pipeline that could be added or retrofitted to the fleet.

Dr. Alonso suggested environmental equipage would come out of technological improvements. He questioned whether the subcommittee should consider it as a separate proposal with its own funding, timeline, and priorities.

Mr. Bedford requested more clarity about the Presidential initiative and exactly what is in the proposal beyond a general commitment to infrastructure. Ms. Camille Mittelholtz, DOT, stated there is not a very high level of detail in terms of where the money would go. She added she will try to get more information about the proposal and send it to the subcommittee members.

Ms. Nancy N. Young, ATA, agreed and added that although there were probably ongoing negotiations, it might be appropriate for the FAAC to suggest goals for the proposal.

Mr. Bedford asked if any proposals can be made based on the presentations given during the last two meetings. Mr. Glover suggested they could pull some material together about equipage and procedures from the presentations. He endorsed moving forward, noting there could be associated environmental benefits. Mr. Brian Brandewie, Goodrich, agreed and stated the largest impact would be on carbon emissions. He noted implementing area navigation (RNAV), required navigation performance (RNP), and other procedures would reduce carbon emissions by 25 to 30 percent.

Dr. Alonso stated there were some misconceptions about with the figures presented and explained that most studies show, at most, a 10 percent reduction in fuel consumption from all NextGen operational improvements. He noted when people talk about a 30 percent reduction in fuel consumption, they are talking about the fuel burned in the terminal area.

The subcommittee members then discussed what proposals could come out of further consideration of NextGen. They observed there are environmental benefits, especially in terms of carbon reduction, that come from NextGen and its components. Ms. Pickard stated this issue may not be the primary subcommittee proposal, but the subcommittee is setting the stage for more conversation at the October 5, 2010, meeting to discuss more topics in terms of NextGen support.

Mr. Glover suggested the Environment Subcommittee take its past presentations and determine which areas, such as RNAV and RNP, appear to have the most benefits and are ready to deploy. He stated they should discuss this list and how to pare it down at the next meeting.

Mr. Bedford asked, after hearing all the presentations on NextGen, and given that it is such a simple term for a subject that is so broad in scope, how the subcommittee should choose two or three topics on which to focus? He questioned whether they would come from en route navigation opportunities and terminal area navigation opportunities, or from a focus on high-density airports and a concentration on runway metering.

Mr. Glover suggested the subcommittee should focus on carbon dioxide and stated they could look at the procedures that provide carbon dioxide benefits over those that have noise reduction benefits. He expressed his belief that if the subcommittee prioritized its list, the procedures that provide carbon dioxide reduction benefits would rise to the top.

Dr. Alonso suggested NextGen is a topic they should coordinate with the Subcommittee on Financing. He stated because this is being discussed among all the subcommittees, its proposal should come from the FAAC. He added it should include environmental issues; if it does not, the Environment Subcommittee should develop its own proposals.

Mr. Bedford stated that NextGen touches on the subject matter of every subcommittee. He noted they all benefit from it because aircraft will spend less time in the air or waiting in lines, saving millions of dollars in fuel, making the air carriers more competitive, and reducing carbon emissions. He expressed concern about which parts of NextGen could be decoupled from the 15-year plan and could be implemented over the next 3 years.

Dr. Alonso stated there are a number of procedures, such as RNAV/RNP and surface operations, that could have a favorable impact on the environment. He expressed concern about the possible acceleration of NextGen and added that in the rush to equip aircraft and the entire system so it can operate properly, environmental concerns might not be considered first and foremost in the decisions that would be made.

Mr. Bedford asked for an example, and Dr. Alonso discussed RNP and RNAV. Dr. Alonso noted with these in place, aircraft approach and landing patterns would be tighter, the noise footprint would not be spread out, and there would be an increase in the frequency of airplanes. He noted noise could increase over a 24-hour period. Dr. Alonso added when the designers start planning, they will have to make compromises with different interests, and Dr. Alonso is concerned the environmental issues may be removed during these decisions.

Mr. Bedford agreed and noted the subcommittee's focus is to reduce carbon emissions; noise and water are still important secondary environmental considerations for this purpose. He stated the subcommittee needs to investigate the by-products of lower emissions and whether reducing carbon dioxide will increase the noise over a community, which might derail the process.

Mr. Bedford suggested the subcommittee add a placeholder for operational improvements and further investigate the cost, speed to market, and potential effects on emission reduction of RNAV and RNP. Mr. Glover agreed and stated the subcommittee also should highlight emissions metrics as part of the implementation plan for NextGen. Mr. Richard Marchi, ACI-NA, suggested the subcommittee also include some of the surface surveillance opportunities to reduce emissions and the time aircraft spend idling on the ground, much like they did at John F. Kennedy International Airport.

Mr. Bedford asked Mr. Marchi to provide suggestions about how the metering program used at John F. Kennedy International Airport might be implemented at other airports, and which airports could benefit from the program. Mr. Marchi stated there is language in the House version of an FAA reauthorization bill that directs the FAA to conduct a five-airport pilot program to develop tools for

effective taxi flow management. He stated the subcommittee could endorse that program. Mr. Bedford asked Mr. Marchi if he could help identify 5 to 10 airports with a similar operating profile to John F. Kennedy International Airport that could benefit from this program. Mr. Marchi asked Ms. Young and Mr. Glover to help him with this project.

Mr. Bedford then raised the subject of technology and asked Mr. Brandewie if there was anything he wanted to add now that Administration support for extension of the research and development tax credits was clearer. Mr. Brandewie stated the research and development tax credits were covered, and no further discussion was needed.

Mr. Bedford stated it seemed that ground service equipment issues were not going to make it in the final proposals and asked the subcommittee if anyone disagreed. The consensus was the subcommittee could remove these issues from the list. He then asked if there would be any benefit to examining aircraft and engine technology, because the subcommittee has a 3-year window to call for action.

Dr. Alonso stated that NextGen and operational improvements can provide about a 10 percent overall increase in environmental benefits, but this will take about 5 years. On the technology side, the industry has committed to a 1.5 percent improvement in fuel efficiency per year. He noted in 5 years there should be a 9.5 percent improvement, and the fuel burn benefits can grow over time with improved technologies. Dr. Alonso stated the subcommittee's argument should be that although it may not achieve its target within the 3 years, technologies have the potential to provide up to a 30 percent improvement in fuel burn reductions over the next 15 to 20 years.

Dr. Alonso further noted that sustainable alternative aviation fuels could significantly reduce carbon emissions. He explained that some alternative fuels have a carbon life cycle impact that is half of the current petroleum life cycle. He stated that in 10 to 15 years, if 20 to 25 percent of the total fuel used came from alternative fuels, it could reduce carbon emissions impacts by 10 to 15 percent. Dr. Alonso then stated the air carrier industry could achieve a 10 percent reduction in carbon emissions in 5 years from operational improvements, another 30 percent reduction in 15 to 20 years from technological improvements, and up to 10 to 20 percent from alternative fuels in the same timeframe. He noted these numbers show what kind of relative impacts alternative fuels can have on carbon dioxide emissions, which is the focus of the subcommittee. He added he was a little less concerned about what they achieve in the next 3 years, and more concerned that these things happen in the future. Dr. Alonso stated he would like to see more discussion about technology improvements and aviation fuels, even though these are long-term issues.

Mr. Glover stated that what is done in the next 3 years will affect the next 10 to 15 years, and the decisions in research and development and implementation work are important even though there will not be immediate benefits, because the air carrier industry is in the long-cycle business.

Mr. Bedford stated he did not disagree, but the charter is looking for more immediate items because that is what the Administration requested. He added that although he did not want to stifle conversation about long-term improvements, he thought the subcommittee should focus on proposals that, if funded now, could have quick implementation and benefits by industry standards.

Mr. Bedford observed that proposals like runway metering would have more immediate tangible benefits. He then asked Dr. Alonso and Mr. Glover if they thought Ms. Yu's report to the FAAC, The Environmental Benefits of Aircraft/Engine Technology, had any elements that this subcommittee could adopt as proposals.

Mr. Glover stated that Ms. Yu discussed the Continuous Lower Energy, Emissions, and Noise (CLEEN) technology program and the new technology in the ecoDemonstrator aircraft, which is within the 3-year window. He added there may be additional technologies and proposals that could be added to the ecoDemonstrator.

Dr. Alonso stated although Ms. Yu's presentation did not have a lot of specific recommendations, she stressed that programs like the CLEEN program could help accelerate equipage of some technologies in the fleet. He added he would like to see more discussion about technology programs the Secretary of Transportation could support that would pay dividends beyond the 3-year window. He suggested if these programs are not implemented now, they will produce possible benefits in the 10 to 15-year timeframe.

Ms. Mittelholtz clarified to the subcommittee that her understanding of the charter was that its proposals are for actions the Secretary could take in the near future, and should not be limited to actions that have effects in the near future. Dr. Alonso agreed with her.

Mr. Bedford stated although he thought some focus should be placed on actions that could have some immediate effect, he would support proposals on technologies the subcommittee could place its weight behind. Dr. Alonso, Mr. Glover, and Mr. Brandewie agreed to work together on proposals about technology the subcommittee could make.

Mr. Bedford then raised the subject of sustainable alternative fuels, which could have some good options for the subcommittee to pursue. Ms. Young noted ATA has a lot of interest in this subject, and it would be a good opportunity for the FAAC to suggest the Secretary should provide more support for the development of alternative aviation fuels. Mr. Glover agreed and stated there are some specific proposals the subcommittee could develop. Mr. Brandewie added that these could include collaboration with the U.S. Air Force.

Ms. Young stated air carriers have been engaged with the military, but there are more opportunities within the government to support such collaboration. She observed the biggest hurdle the industry faces is the commercialization of alternative aviation fuel facilities, and financial support within the Federal Government for these programs is needed. Mr. Bedford asked what the return on investment would be if one of the subcommittee's proposal was for the government to invest more in alternative fuel programs.

Dr. Alonso stated most people believe alternative fuel is a technology with great potential, but it is in the early stages. He added the commercialization issue, in terms of plant construction, is one area that might be worth investing in, if only on a small scale. He noted he fully supports any proposals to investigate this technology's potential.

Mr. Glover described current programs in the U.S. Department of Agriculture, U.S. Department of Energy, and other Federal agencies. He stated the Secretary could work with other agencies to generate financing specifically focused on aviation fuel.

Mr. Marchi suggested individual components of the proposal should emphasize the unique requirements of aviation, specifically that aviation is heavily dependent on fuels with energy density — in terms of both weight and volume. He also observed the range of carbon efficiency among the various alternative fuels is quite large and can range from fuels that actually produce more carbon per pound of fuel to fuels that produce half as much. Mr. Marchi suggested the support should be for the fuels with the largest carbon reduction and greatest environmental benefit.

Mr. Bedford asked Ms. Young if she would create a proposal that suggests how to support alternative fuels with the existing infrastructure. Ms. Young agreed and asked Mr. Glover to assist her. He agreed.

Mr. Bedford stated he would be stepping away from the meeting for a moment. Before he left he stated the last bullet point for discussion was the idea of targets and goals within the framework of domestic and global emissions reduction efforts. He suggested these targets should be reasonably achievable and economically viable. Mr. Bedford then passed the meeting chair to Dr. Alonso until he returned.

Dr. Alonso continued the meeting with discussion on goals set by different portions of the air carrier industry, the Federal Government, and internationally. Mr. Glover offered some background on this topic and described the International Civil Aviation Organization (ICAO) Council meeting that took place the week before. The ICAO Council discussed recommendations for a framework on greenhouse gas emissions reductions that it could present to the ICAO General Assembly. In addition, there was a letter from the United Nations Framework Convention on Climate Change (UNFCCC) to ICAO stating (to paraphrase) that the UNFCCC expected ICAO to take care of international emissions from aviation, and that domestic emissions, including aircraft, would be handled by the UNFCCC. The letter explained how the two organizations would be compatible: the principles laid out by the UNFCCC would apply domestically and the ICAO principles would apply internationally. Dr. Alonso added that, in addition to the commercial aviation interests, the National Business Aviation Association agreed to the proposition. He noted while there are still some gaps between the various positions, they are all working toward an equitable framework that provides real benefits.

Dr. Alonso stated it would be difficult to develop a proposal that would bring all groups together with a unified set of goals. He asked if some of the Environment Subcommittee's goals about technology, fuels, and operations could be measured against the goals of ICAO and UNFCCC to determine if they are realistic, but he was not sure if that should be a role of this subcommittee.

Mr. Glover stated all the figures on the potential benefits on technology, operational improvements, and fuels that have been presented to the subcommittee are consistent with what industry papers have reported at the international level.

Dr. Alonso stated that in setting long-term fuel burn goals, he worked with a committee from ICAO that examined technology and various other things that could make a difference. He read the following excerpt from an untitled report:

> A number of system goals have been conveyed by various different communities in the aerospace community. ICAO has adopted an aspirational goal of 2 percent global fleet fuel efficiency improvements per year from 2021 to 2050. The U.S. government is advocating a goal of achieving carbon neutral growth on the basis of 2005 by 2020, with net reductions by 2050. The International Air Transport Association is calling for carbon neutral growth from 2020 and a 50 percent reduction by 2050 from the baseline of 2005.

Dr. Alonso stated these are all ambitious goals. He expressed concern that technology, operational improvements, and the onset of sustainable fuels will not be enough to achieve the goals.

Mr. Glover agreed these are certainly stretch goals, especially those set by the United States, which will be very difficult to achieve. Ms. Young stated that she agreed with everyone. She added that Ms. Pickard had made a good suggestion at the August 10, 2010, Denver, Colorado, meeting, when she said even though the subcommittee may not develop a specific proposal, these are very aggressive goals that will be difficult to achieve. Ms. Pickard suggested there needs to be a concerted effort for investment in technology, operational improvements, alternative fuels, and infrastructure to achieve these goals.

Mr. Glover highlighted the need for harmonization between domestic and international goals, which he stated needs to be part of the proposal.

Mr. Kinney Baxter, Metropolitan Nashville Airport Authority, stated the subcommittee has been focusing on carbon emissions, and asked if there were other environmental issues the subcommittee should discuss. Dr. Alonso reminded the subcommittee members that although they had discussed other issues, they decided to focus on carbon dioxide reductions for their main proposals at the first meeting. The subcommittee agreed to focus on ways to achieve carbon dioxide reductions without negatively impacting other environmental issues, such as noise, water quality, and local emissions.

Ms. Pickard stated that Dr. Jake Plante, FAA, gave a presentation at the August 10, 2010, meeting on low-emission ground support equipment. She reminded the Environment Subcommittee that at the end of the meeting the subcommittee concluded that low-emission ground support equipment did not rate a proposal. She added that Dr. Plante offered to present a broader airport sustainability initiative to the subcommittee. She asked if the subcommittee would consider hearing more on such an approach at its October 5, 2010, meeting. Dr. Alonso polled the subcommittee and asked Ms. Pickard to have Dr. Plante send a read-ahead statement to the subcommittee about his proposal so the subcommittee could then discuss it at the October 5, 2010, meeting.

Dr. Alonso asked the subcommittee for comments about harmonization of goals and global efforts on reducing carbon dioxide. Ms. Pickard again stated that the goals are aggressive and the outcome is difficult to predict because there are so many uncertainties about technological improvements and alternative fuels. She added that instead of looking at these numbers, it would be more productive to look at ways to reach them. Ms. Pickard recommended that the subcommittee think about what the Secretary can do that would help achieve these goals. She expressed concern that some proposals to

control carbon emissions would just siphon money from the aviation sector without producing improvements.

Dr. Alonso stated he was also struggling to develop a reasonable proposal on this topic. He agreed the current goals are aggressive and a concerted effort toward technological and operational improvements and alternative fuels will be required. He added that as an industry, having harmonized goals is very important. He asked if anyone on the subcommittee could elaborate on what the U.S. Government was doing to achieve harmonization at the ICAO level.

Ms. Pickard stated the FAA was taking the lead in ICAO concerning NextGen goals. She added that Mr. Carl Burleson, FAA, represents the United States on this issue. She noted that international aviation should address climate change through mutual agreements at ICAO. Having said that, she asked what the Secretary could contribute. Ms. Pickard observed that there is concern that other domestic legislation or international regulations could impede, rather than support, progress.

Ms. Young reiterated that the FAA and the U.S. Department of State represent the United States at ICAO and the UNFCCC in international agreements. She stated that at the Air Transport Action Group Environmental Summit, September 16 and 17, 2010, in Geneva, Switzerland, the FAA confirmed that the U.S. Government remains dedicated to ensuring ICAO remains the leader. She added although the subcommittee is developing some concrete proposals on technology, infrastructure, and operational improvements, ICAO will be undermined without consistent international and complementary national agreements. She added there needs to be an international regulatory regime that supports meeting these targets. As an example of a target being undermined by the lack of an international framework, she described the air passenger duty the German government approved and justified on environmental grounds. She explained that in absence of an international framework, this will continue to happen.

Mr. Burleson joined the meeting, and Dr. Alonso gave him a brief overview of the global harmonization discussions. Mr. Burleson stated the U.S. Government probably has the most coherent position on aviation emissions at ICAO. He explained that the Government developed an integrated position based on input from the FAA, Environmental Protection Agency, and the U.S. Department of State. He noted the U.S. position is based on how ICAO policies and ICAO standards are used to achieve harmonization. Mr. Burleson added that when developing items on which the Secretary can act, timing will be an issue because the ICAO General Assembly will already have met by the time anything comes out of the Environment Subcommittee. He stated that in discussions at the Air Transport Action Group Environmental Summit, one of the differences in some countries' positions is whether they use the international standard of ICAO to address situations where there is a distinction between international and domestic or if they use it as an international standard to address global issues. Mr. Burleson stated the United States is taking a more holistic approach by treating it as a global industry. He noted there needs to be more consideration about how to address things globally. Carbon dioxide emissions have a global impact regardless of where they originate. He observed this attitude is not shared by other countries, and an artificial distinction between international and domestic issues could lead to strange policies that are not optimal for either aircraft standards or air traffic management.

Dr. Alonso asked Mr. Burleson if he thought some ICAO States would start acting on their own because it is so difficult to get the international communities that face different challenges together in a single ruling. He further asked, if they do start acting on their own, could it affect the U.S. industry adversely. Mr. Burleson stated he saw more potential in countries moving at different speeds. He noted the standard-setting was well-harmonized, because technical experts are doing their work on carbon dioxide and noise standards consideration. He explained he does not predict a wide divergence because there are a limited number of aircraft engine manufacturers. Mr. Burleson further stated the air traffic side is a little harder to coordinate, because getting best practices out is more of a challenge. He added the area with the greatest challenge is market-based measures, because countries differ so much on this issue.

Ms. Young stated she was referring to market-based measures. Without a global framework in place, countries are acting alone and using the environment as an excuse to raise revenues, such as the German air passenger duty mentioned earlier. She suggested the subcommittee raise the point that it is important to push back against the proliferation of types measures that would siphon money out of aviation and away from the ability to invest in research and development, new aircraft that can fly in the NextGen system, and alternative fuels.

Mr. Burleson noted Ms. Young was correct about the lack of harmonization in the market-based measures, and that is why the United States is working hard to establishing principles about how these measures will be used. He stated while these measures are important and cost-effective, there is concern about the potential proliferation of different measures without consistent principles, and depending on how these measures are applied by States, there could be perverse disincentives for technology adoption.

Mr. Bedford stated after all of the subcommittee's discussion, there may be nothing that could be developed into a proposal for the Secretary, but he explained that making no recommendations could be a worse alternative. Mr. Bedford reiterated the commission the FAAC was given, which states that competitiveness, viability, labor, the environment, and growth of the industry need to fit together. He expressed concern that there is a potential for these needs to be undermined by overly-ambitious, unreasonable, or unachievable international actions. .

Mr. Burleson noted one of the upsides of working through ICAO in the standard setting area is that over time a philosophy of adopting things that are technologically feasible, economically reasonable, and environmentally beneficial has been developed. He added this philosophy also takes into account the tradeoffs of interdependency. Mr. Burleson stated this framework is driven by data, and it serves the U.S. industry very well.

Mr. Bedford asked the subcommittee members if they thought these targets were reasonable, and if not, should the subcommittee speak up. He reiterated from an earlier briefing that the ICAO targets are not as aggressive as those in the European Union, but he questioned whether the ICAO targets fit within the U.S. framework of ambitious but achievable goals, and whether these targets are something the industry can pay for.

Ms. Pickard agreed the goals are ambitious and stated the subcommittee would get more mileage by focusing on recommendations that would help meet those goals. Ms. Young suggested in the absence of acknowledging specific targets, the subcommittee should acknowledge there are many aggressive targets and there is a need for investment to help achieve those targets. She noted that technology, operational, and infrastructure improvements would be needed to advance toward these targets.

Mr. Bedford asked Ms. Young to articulate this in a presentation to the subcommittee at its next meeting to determine where the industry stands in relation to ICAO. Ms. Young agreed to give this presentation.

Mr. Bedford then asked if there was any other business, and Ms. Pickard suggested the subcommittee should address the public comments.

PUBLIC COMMENTS

Ms Mittelholtz summarized the public comments that had been received.

Mr. Bob Knauer recommended the DOT and FAA regulations be changed to allow air carriers to deny service to any passenger with excessive perfume.

Air Services Australia entered a report in the docket regarding the Brisbane Green Aviation Program and its navigation modernization program. Air Services Australia noted the program had some environmental benefits.

CLOSING REMARKS/NEXT MEETING

Mr. Bedford reminded the subcommittee members of the next meeting at the Intercontinental Hotel in Chicago, Illinois, on Tuesday, October 5, 2010, from 10:30 a.m. to 3 p.m. Central Daylight Time. He stated his expectation for the next meeting would be to narrow down and prioritize the proposals. He summarized the issues as follows:

- Acceleration of components of NextGen, specifically RNAV/RNP, and related equipage issues;
- Expanding the airport metering program;
- Research and development of new technology;
- Spurring development of alternative fuels and looking for financial support from existing sources;
- Harmonization of domestic and international frameworks; and
- Consideration of a potential broad airport sustainability proposal.

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Assigned to	Action Item
Camille Mittelholtz	Provide more information to the subcommittee on the Presidential initiative.
Brian Brandewie	Provide more specifics on the acceleration of NextGen components, such as RNAV/RNP, and equipage.
Richard Marchi, Billy Glover, and Nancy Young	Look into proposals for expanding the airport metering program.
Nancy Young	Provide bullets articulating her understanding of the greenhouse gas target proposals before ICAO, and provide the subcommittee with current indications of what industry and ICAO targets mean and how to get there.
Billy Glover, Nancy Young	Look into an alternative fuel proposal, possibly including supporting the necessary infrastructure and proposing financial support.
Juan Alonso, Billy Glover, and Brain Brandewie	Research technology improvements with regard to engine and aircraft technologies, and suggest proposals including the CLEEN technology program and R&D tax credits for industry.

ADJOURNMENT

Mr. Bedford solicited a motion for adjournment. On motion, duly seconded and approved by the majority of the FAAC members present, the meeting was adjourned.

The meeting adjourned at 3:05 p.m.

I hereby certify that, to the best of my knowledge, the foregoing minutes are accurate and complete.

Approved by: Lynne Pickard
Lynne Pickard, Designated Federal Official

Dated: February 8, 2011