



**Meeting Summary, May 19, 2011
NextGen Advisory Committee (NAC)**

The May 19, 2011 meeting of the NextGen Advisory Committee (NAC) convened at 9:40 a.m. in the JetBlue Airways Hangar 81 – Cargo Area C, South Cargo Road and 148th Street, JFK International Airport, Jamaica, NY 11430.

The meeting discussions are summarized below. Attendees are identified in Attachment 1, the presentations for the Committee are contained in Attachment 2 (provide additional details), and each of the six recommendations approved by the Committee during the meeting are included as individual attachments, 3 through 8.

Welcome and Introductions

Mr. Dave Barger, President and CEO of JetBlue Airways, and the Chairman of the NextGen Advisory Committee, called the meeting to order and welcomed the NAC members and others in attendance at this public, Federal advisory committee meeting. He also expressed his interest in having the NAC meetings in other locations, suggesting that in 2012 the Committee consider Wichita or Seattle as possible meeting sites in addition to Washington, DC.

Chairman Barger recognized and welcomed new NAC members:

- Vicki Cox, Senior Vice President for NextGen & Operations Planning, FAA
- Christa Fornarotto, Associate Administrator for Airports, FAA
- Patrick Ky, Executive Director, SESAR Joint Undertaking
- David Grizzle, Acting Chief Operating Officer, Air Traffic Organization, FAA
- Ms. Arlene Mulder, Mayor, Village of Arlington Heights, IL

All NAC members, as well as others in attendance, were asked to introduce themselves.

Designated Federal Official Statement

Designated Federal Official (DFO) Michael Huerta, FAA Deputy Administrator, read the Federal Advisory Committee Act notice governing the open meeting.

Approval of February 11, 2011 Meeting Summary and NAC Subcommittee Terms of Reference

Chairman Barger asked for consideration of the written summary of the February 11, 2011 meeting. The Committee approved the Summary with no revisions or objections.

Chairman Barger asked for consideration of the revised Terms of Reference (TOR) for the NACSC to incorporate the equipage tasking from the FAA and establishment of the Trajectory Operations Task Group (TOPs2). The Committee subsequently approved the revised TORs.

Chairman's Remarks

Excerpts from Mr. Barger remarks to the Committee follow:

“This morning we are gathered to *continue the Momentum...*
 Momentum from our previous two gatherings in September and February...
 Momentum from the work of the Subcommittee and Work Groups – as you will hear about today...
 Momentum from our dinner last night and our breakfast earlier today with Mayor Bloomberg at Gracie Mansion...

When we last met in February, we sought a common, high level definition of NextGen - an “Elevator Speech”...

Themes from February Exercise

WHAT is NextGen	<ul style="list-style-type: none"> •Technologies, Procedures, Policies and People •More efficient use of airspace and airports
WHAT are the Benefits?	<ul style="list-style-type: none"> •Enhance safety •Increase efficiency •Increase capacity •Decrease flying time •Decrease fuel •Decrease environmental footprint •Create jobs •Maintain global leadership in aviation
WHO Benefits?	<ul style="list-style-type: none"> •Flying public •Operators •Residents of communities •Employees and Employers in industry

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TODAY: Our agenda begins to address these themes and put meat on these bones. Since we met this past winter, I've been speaking with many of you on the NAC, at the FAA and of course our partners at RTCA...
 The more folks I meet with, the more excited I get that we are on the cusp of real, meaningful progress...
 I want to share some of the thoughts and commentary I have heard over these past few months (Word Cloud)...



Naysayers and challenges cannot be allowed to stop us from completing our task to suggest winning ways forward to the FAA and I am eager to continue working with each of you to achieve success.”

FAA Report – Mr. Huerta

Mr. Huerta expressed his appreciation to all the members of the Committee, pointing out the depth of experience and broad background is providing important advice to the FAA.

He explained how the FAA is responding to some of the recent issues associated with air traffic controllers by taking immediate steps to reinforce the agency’s commitment to safety and the Call to Action on professionalism. This included executive teams visiting facilities and addressing recommendations on reducing controller fatigue.

He outlined four steps as the FAA’s foundation for success:

1. Transform Human Resources
2. Optimize Shared Services
3. Redesign Governance
4. Prioritize NextGen

This includes changes in the structure of the NextGen organization so that the head of the NextGen office now reports directly to Michael Huerta as the Deputy Administrator to separate strategic management activities from the day-to-day operations of the air traffic system. A new

Senior Vice President, Program Management position is being established to help continue the implementation of NextGen.

He also explained the status of the FAA Re-authorization legislation, which was at its 19th extension, and the congressional budget discussions that are contemplating significant decreases in FAA spending from that contained in President Obama's 2012 budget request.

Mr. Heurta concluded by emphasizing that aviation is a key element in our nation's economy and that NextGen remains the most critical investment to keep our aviation system safe, sound and competitive in the global market.

Subcommittee Report: NAC Subcommittee & Work Groups

Chairman Barger introduced NAC Subcommittee (NACSC) Co-chair Steve Brown, Senior Vice President Operations and Administration, National Business Aviation Association; complimenting Steve and Co-chair, Tom Hendricks of the Air Transport Association for their efforts in leading the NACSC. Chairman Barger also acknowledged the efforts of each of the Work Group and Task Group co-chairs as well. Mr. Brown provided a report of the activities of the NACSC since the last meeting of the Committee. Much of this has been directed at developing the recommendations and reports for consideration by the NAC. He provided an overview of the three Work Groups and Task Group that report directly to the NACSC. These are:

Airspace and Procedures – this group has been focused on identifying and addressing issues associated with local and regional airspace initiatives, as well as collaboration with the use of Special Activity Airspace for civil use.

- Bob Lamond, Director, ATS & Infrastructure, National Business Aviation Association
- Bill Murphy, Director, ATC & Airfield Operations, US Airways

Business Case & Performance Metrics – has put in place the structure and done much of the ground work to develop recommendations for the September NAC meeting in addition to the preliminary report covered later in the meeting.

- Ed Lohr, Director, Fleet Strategy, Delta Air Lines
- Debby Kirkman, NextGen Performance Integration Lead, The MITRE Corporation

Integrated Capabilities – has been active in developing three recommendations/reports for NAC consideration at the meeting which are covered later in the meeting summary.

- Chris Oswald, Vice President, Safety & Technical Operations, Airports Council International
- Sarah Dalton, Director, Airspace & Technology, Alaska Airlines

Trajectory Operations Task Group – was established by the NACSC to provide continuity and to complete the work of the previous Air Traffic Management Advisory Committee in

developing a Trajectory-based operations Concept of Operations Report for consideration at the NAC September 29, 2011 meeting.

- Dan Earman, Systems Architect, Lockheed Martin
- Rick Shay, Flight Operations Technology & Flight Test, United Airlines

Mr. Brown also outlined the NACSC “deliverables” for NAC consideration at its September meeting. These are:

- Equipage Tasking – Defining/analyzing/refining
- NextGen Performance Metrics/Data Sources
- Metroplex Capabilities and Prioritization
- Airspace Optimization -- ATL/SOCAL/NOCAL/CLT/IAH
- Trajectory Operations Concept of Use

Consideration of Reports and Recommendations

The Committee received a series of briefings on the recommendations developed by the NACSC and an Ad Hoc of the NAC. After discussion, the Committee approved four final recommendations and two preliminary reports that are covered in more detail below.

FINAL RECOMMENDATION: Phase One of the Equipage Incentives Tasking – Who (Which User Groups) Should be Incentivized to Equip for NextGen?

FAA Tasking: Recommend the aircraft types or user groups that should be considered for incentives. Groups to consider are: national and international air carriers, regional air carriers, charter operators, business aviation, personal use/general aviation, recreational use aviation, military air transport, military tactical aircraft, helicopters and utility operators.

NAC Member Ed Bolen, chair of the NAC Equipage Ad Hoc Task Group outlined the work of the Task Group explaining that it was an inclusive process that resulted in a “template for success.” The members of the Ad Hoc consisted of NAC members that operate aircraft.

Mr. Bolen summarized that the NAC Ad Hoc Task Group developed a recommendation for fleet wide equipage, minimum capability incentives with regional, Metroplex deployment of operational capabilities. The Ad Hoc Task Group recommended an approach that equips nearly 100% of operator fleets to a minimum capability level with regional deployment of operational capabilities by the FAA consistent with approaches recommended in the RTCA TF5 final report and as adopted by the FAA in its NextGen Implementation Plan (NGIP). In meeting this policy goal, the U.S. government will have to fund federal public aviation organizations, such as DOD and DHS, to comply with appropriate minimum capabilities.

Ms. Jenny presented the findings of the Ad Hoc group. During the discussion of the report, RTCA President Margaret Jenny emphasized that the FAA had embraced this type of regional deployment of capabilities, but one of the issues remaining for future work was addressing those aircraft/operators already equipped with new technology. She also indicated that work

remained to complete the task, namely to validate the equipage cost estimates as well as the selection of the northeast region.

A member of the Ad Hoc Task Group emphasized the need for equipage beyond RNP for operations in the New York area. Another Ad Hoc Task Group member stated strong support for the direction and conclusion of the report that all users are important to the overall air traffic system and should be eligible for equipage incentives.

A NAC member raised a question about why the regional area was selected. Chairman Bolen responded that this area was identified as the one with the most potential for positive improvements in system performance that can establish a critical mass to achieve benefits.

Two NAC members then expressed their perspective that the FAA efforts must consider the differences between the European approach to time-based operations in SESAR with those contained in NextGen. This led to a discussion on the status of the FAA's DataComm program and the FAA's roadmap for DataComm services and technologies. Based on concerns raised by Committee members (including a letter sent to all NAC members prior to the meeting) and subsequent Committee discussion, Mr. Huerta endorsed the idea that the FAA task the NAC with developing a roadmap for Tower and En Route DataComm services and associated requisite technologies from present through 2025. Ms. Vicki Cox agreed. This tasking includes identifying specific dates for each set of capabilities and identifying services to support FANS 1/A+ and ATN –equipped aircraft over VDL-2.

An FAA member of the Committee also expressed the need to understand near-term benefits from DataComm if equipage is not incentivized.

Committee Action: The Committee agreed by consensus to approve the recommendation (Attachment 3) for submission to FAA. The Committee also endorsed the FAA generating a Tasking for developing a DataComm Roadmap.

FINAL RECOMMENDATION: Phase One of the FAA Equipage Incentives Tasking – What Capabilities?

FAA Tasking: Prioritize the NextGen mid-term operations that are dependent on equipage.

NACSC Co-chair Steve Brown summarized the work of the Integrated Capabilities Work Group (ICWG) that identified 25 capabilities as being priorities for consideration of equipage incentives. He explained that the NACSC recommended that the NAC approve the recommendation contained in this document entitled, "Recommendation for the Prioritization of NextGen Mid-Term Operations that are Dependent on Equipage" for submission to the FAA. This recommendation addresses Phase One of the FAA's Tasking that will be used as the basis for additional analysis and refinement in Phase Two Taskings that will be covered by the ICWG and Business Case Performance Metrics Work Group (BCPMWG) for presentation to the NAC in September. This will include identifying gaps in the business case for each user

group and capabilities, and identifying incentives that could close these gaps, as well as supporting the NAC Ad Hoc's work in identifying methods for economic and operational incentives and the criteria needed for evaluating the implementation of incentives.

Committee Action: The Committee agreed by consensus to approve the recommendation (Attachment 4) for submission to FAA.

PRELIMINARY REPORT: Metroplex Prioritization Criteria

FAA Tasking: Review criteria and considerations approved by the NAC on September 23, 2010 for site prioritization for the Metroplex Optimization efforts. Determine the applicability and extensibility of the objective criteria with regard to the broader Metroplex and integrated capabilities view for implementation and integration of other NextGen capabilities. Provide specific recommendations on suitability of the criteria set and applicable adjustments.

NACSC Co-chair Steve Brown explained how the ICWG, in consultation with the Airspace and Procedures Work Group (APWG), developed criteria for selecting Metroplex sites. (A Metroplex is a geographic area covering many airports, serving major metropolitan areas with a diversity of aviation users and aircraft operators.)

The criteria address a broad scope of issues including operational needs, benefits and feasibility. It was noted during the discussion that the criteria apply to areas and issues beyond just that of the airport and aviation operations, i.e. economic significance of aviation in a Metroplex.

Committee Action: The Committee agreed by consensus to approve the preliminary report (Attachment 5) for submission to FAA. The ICWG will use the preliminary report in developing a final recommendation for NAC consideration at its meeting in September 2011.

FINAL RECOMMENDATION: Integrated Capabilities Scoping & Requirements

FAA Tasking: Create preliminary portfolio of integrated capability requirements, with time frames for implementation. Use results of Task 1 to identify and prioritize the major Metroplexes. Map capabilities identified in the Task Force 5 Final Report and NGIP Task Force 5 Action Plans to identified Metroplexes.

NACSC Co-chair Steve Brown highlighted for the Committee the work of the ICWG to analyze the FAA NextGen Implementation Plan (NGIP) and certain elements of the FAA Enterprise Architecture that resulted in 59 operational improvements/increments of integrated capabilities being identified for a Metroplex "toolbox" for the mid-term (between now and 2018). The ICWG also identified six other operational improvements that are targeted for the longer term (post 2018) that the Work Group felt should begin in the mid-term time frame.

During the Committee discussion, ICWG Co-Chair Chris Oswald was called upon to explain the next steps in applying the prioritization of the capabilities by Metroplex.

Committee Action: The Committee agreed by consensus to approve the recommendation (Attachment 6) for submission to FAA.

PRELIMINARY REPORT: Key NextGen Performance Indicators and NextGen Measurement Methodology

FAA Tasking: Develop recommendations for a set of key performance indicators that will adequately capture how well NextGen implementation is meeting FAA's NextGen goals and a measurement methodology (baseline; empirical vs. analytical data; frequency).

NACSC Co-chair Steve Brown outlined for the Committee the activities of the BCPMWG in conducting numerous meetings and engaging in robust discussions with the NACSC on the Tasks to develop appropriate metrics for evaluating NextGen implementation. Mr. Brown explained the overall approach and direction of the Work Group.

During discussion, two Committee members from the European community (SESAR and Eurocontrol) volunteered to have representatives from their organizations collaborate with the BCPMWG on their efforts to develop NextGen implementation performance metrics. Work Group Co-chair Ed Lohr was recognized and agreed to follow-up so that this important input could be integrated in the BCPMWG efforts.

Mr. Lohr also spoke about the ability to get the most relevant metrics and how to isolate those that best reflect or are best representative of NextGen implementation. Mr. Huerta encouraged the Work Group to include "clean benefits," measurements of delay reductions as examples of areas that help address metrics attributable to fuel consumption.

Debby Kirkman, the WG's other Co-chair also explained that forecast versus actual performance is very important in the development of NextGen implementation performance metrics.

Another Committee member also emphasized that capacity is an important aspect of NextGen performance metrics.

Committee Action: The Committee agreed by consensus to approve the preliminary report (Attachment 7) for submission to FAA. The BCPMWG will use the preliminary report, including the information provided by SESAR and Eurocontrol, in developing a final recommendation for NAC consideration at its meeting in September 2011.

FINAL RECOMMENDATION: Special Activity Airspace Concept of Operations – A Recommendation for Improving the Information Available for Special Activity Airspace

FAA Tasking: Develop recommendations to transition to a fully automated Special Activity Airspace (SAA) and Special Use Airspace (SUA) system where real time, operationally useful information is available to operators.

NACSC Co-chair Steve Brown highlighted for the Committee how the APWG leveraged the efforts of previous RTCA and other industry work groups in developing the National Special Activity Airspace Concept of Operations. Mr. Brown explained that the purpose of the document is to make real-time information on the status of Special Activity Airspace used by the Department of Defense available to the FAA, maximizing the use of this airspace and improving the efficiency of aircraft operations.

Committee Action: The Committee agreed by consensus to approve the recommendation (Attachment 8) for submission to FAA.

Other Business/Anticipated Issues for NAC Consideration and Action at September 29, 2011 Meeting

In the last portion of the meeting, Committee Chair Barger engaged Michael Huerta, in a discussion about the role of the NAC as the FAA faces the challenges of diminishing budgets, asking, “what comes next for the Committee and how can we support the implementation of NextGen?”

Mr. Huerta outlined several issues including the importance of being able to measure/evaluate NextGen implementation, along with the challenging work over the summer to address the recommendations made by the Committee. While there has been significant progress with concept and principles, these lead to tough fiscal choices.

This will require creative thinking on public – private partnerships and how the FAA invests financial resources. The questions that we face:

- Does the Agency continue all of its NextGen activities at a slower rate because of diminished funding?

Or

- Does the Agency pick several high priorities?

The key is to not lose momentum. As the budget outlook becomes clearer the major question for the Committee will be, “what areas should the FAA establish as its priorities?”

Chairman Barger expressed his appreciation for all of the hard work of the NAC in support of the aviation industry and the FAA by the Committee members, NACSC and Work Groups. He also introduced members of his staff that supported the hosting of the meeting.

Adjourn

Chairman Barger closed the meeting of the Committee at 1:55 p.m.

Next Meeting

The next meeting of the NAC is September 29th, 2011, Washington, DC at RTCA Headquarters, 1150 18th Street.