



THE NEXT GENERATION AIR TRANSPORTATION SYSTEM INITIATIVE

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I am delighted to be here today to talk about one of the most important transportation policy developments in many years – the Bush Administration’s Next Generation Air Transportation System initiative. First, however, I want to express my heartfelt thanks to ATCA for working with our Joint Planning and Development Office to sponsor this event. You have been genuine pioneers in your support for our effort to transform the air transportation system between now and 2025. In fact, I can’t imagine a better audience for a presentation on the future of our air transportation system. No organization has been more associated with the development of our superb national airspace system than ATCA. It is a privilege to be with you.

Progress in Pursuing a Next Generation System

A lot has happened since I last spoke to an ATCA gathering – your July 2003 Workshop on the Future Air Transportation System here in Washington. We have achieved significant milestones in laying the foundation for this once-in-a-lifetime effort. Last December, as you know, President Bush signed “VISION 100” – the law that furnishes the authority for most of our federal aviation programs. While the JPDO’s work was already well underway at that point, Congress’s stamp of approval lent enormous credibility to the proposition that the time for procrastination had ended – that we must take aggressive action *now* if we are to continue to enjoy an air transportation system that facilitates economic growth in the years ahead. In support of this effort, VISION 100

called on the Administration to deliver to Congress within one year an integrated National Plan for the Next Generation System. That year runs out in mid-December.

Secretary Mineta outlined his vision for this effort in a major address to the Aero Club of Washington last January. He highlighted the tremendous changes that have occurred in the airline industry over the last few decades, starting with domestic deregulation and continuing with the dramatic opening up of international aviation markets that has occurred over the last dozen years through our aggressive pursuit of Open Skies agreements. We now have more than 60, and the benefits to users of the global air services system have been enormous.

He also noted that passengers are returning to our air transportation system in large numbers, and that this growth can be expected to continue in the years ahead. Estimates suggest, in fact, that we will need something on the order of three times our current capacity by the year 2025 in order to handle all those operations, which means that it is time to start addressing the issue in a deliberate and focused way. We simply cannot allow a lack of air traffic capacity to suffocate the great engine of economic growth that we call civil aviation.

Secretary Mineta made a compelling case for transformation that day, noting that, "The changes that are coming are too big, too fundamental for incremental adaptations of the infrastructure." The U.S. must act now, he said, if it is to retain its global leadership in air transportation.

The JPDO, having conducted extensive outreach to a wide range of stakeholders in the second half of 2003, then began working on the draft National Plan that will serve as the federal government's strategic business plan for the Next Generation System. Working with a broad spectrum of specialists and stakeholders from both government and the private sector, the JPDO's staff is now embarked on a collaborative effort to describe in detail the system of the future and the strategies needed to support that transformation.

As you can well imagine, this has been a very dynamic process. It has generated a spirit of ingenuity and unprecedented cooperation. We also have benefited a great deal from the good counsel and organizational expertise that Dr. John Hamre and others have provided through a newly created Executive Council of the FAA's Research and Development Advisory Committee, or REDAC. The REDAC Executive Council met for the first time last May, and immediately conveyed a series of suggestions on how best to tackle this most complex of tasks directly to the Senior Policy Committee that oversees the Next Generation effort. The Executive Council will meet again in early October, and will continue to provide important input in the years ahead.

The Senior Policy Committee that oversees the Next Generation initiative represents an important departure in its own right. It is worth spending a moment to consider what an innovation it is. Recognizing that a great many government agencies conduct research of critical value to the future of the air transportation system, and understanding the importance of closer collaboration on the direction, content, and funding of that research,

Secretary Mineta and FAA Administrator Marion Blakey reached out to counterparts across the government and invited them, in effect, to join the effort as members of its “board of directors.” Chaired by Secretary Mineta and including the Deputy Secretaries of the Homeland Security and Commerce Departments, the Secretary of the Air Force, the Administrators of FAA and NASA, and the Director of the White House Office of Science and Technology Policy, each member of this group is now actively enlisted in planning the future of our air transportation system. The participating agencies will work together in each budget cycle to ensure that resources are deployed effectively, through a coherent and transparent process, for the purpose of supporting the transformation we seek.

A first draft of the National Plan is in circulation and we are on target for a mid-December delivery to Congress.

Using an Integrated Approach

Even while we work to refine that document, however, the JPDO is pushing forward. We are assembling a series of Integrated Product Teams, or IPTs, that will develop the strategies and their accompanying action plans that will lead us to the Next Generation System. Breaking the project down into smaller, more manageable parts will improve our focus and allow each IPT to generate more detailed research plans and, ultimately, the mechanics of how we transition to the system of the future.

Current Programs as Building Blocks to the Future

I want to be clear, however, that transforming the air transportation system does not mean current projects and initiatives are being scrapped or even put on the back burner. We are taking a dual approach: We are working to address immediate operational and safety issues using existing programs wherever possible, while simultaneously developing longer-term solutions. As you all know as well as anyone, these are hardly new issues for the FAA. A great deal of good work is already underway, but we want that work to be coordinated more effectively and tied into a comprehensive plan with concrete performance measures.

Under Marion Blakey’s leadership, we are already witnessing what technology can do, both to add system capacity and to bolster our enviable safety record. For example, we commissioned four new runways in 2003, adding 4 percent to the capacity of the system, and over the next five years we expect to complete seven more runways and one runway extension. With the ongoing modernization of air traffic control towers and TRACONs, these projects will help generate another 6.5 percent in capacity across the system.

Over the next two years, we plan to install new advanced radar systems at 12 airports and STARS equipment at 16. Other initiatives are also generating capacity and safety gains. A good example is RNP – Required Navigation Performance -- which increases the safety and efficiency of commercial flights. For the most part, RNP uses technology that

is already in the cockpit, but it produces increased safety, fewer delays, more efficient use of the airspace, and less noise.

We are also taking greater advantage of satellite-based technologies. The Wide Area Augmentation System, or WAAS, which became operational last year, provides precision guidance to aircraft at thousands of airstrips where there is currently no other precision landing capability. The new approaches permitted by WAAS enable more aircraft to land safely at smaller airports, thereby holding out the potential for off-loading some of this traffic from busier airports.

Finally, the FAA and its colleagues at NOAA are becoming more “weatherwise” than ever through the new Integrated Terminal Weather System. When fully deployed, it will provide traffic management with tailored products that depict bad weather at 26 of our busiest airports, where the majority of delays occur, over the next five years.

These are just a few examples of how current technology can help improve capacity, performance, and safety today. These developments are mere harbingers, however, of what lies ahead.

For example, one of the most exciting and promising concepts for the Next Generation air transportation system is Network Enabled Operations, a principal focus of this gathering. The NEO model is simple: make information accessible, securable, and usable in real time, while building a framework of basic rules we can all live by.

The Next Generation air transportation system will have to be NEO-centric. NEO will enable increased air capacity while enhancing safety and security. With network-enabled air traffic operations, both users and air traffic managers will have a common operating picture that will dramatically improve collaborative decision-making. It will permit more rapid responses to unforeseen events, such as aviation weather and security threats.

Improving our security awareness and response capability is obviously a major goal. With the Defense Department taking the lead, we are currently working to model a new data exchange protocol among communities of interest both in government and in industry. The NEO model will facilitate more timely and ubiquitous data sharing and promote informational cross-checks that are automatic, not manual.

NEO features will also figure largely in air traffic management. Distribution, processing, correlation and display systems will provide a common operating picture, and decision makers will use collaborative information management systems to develop and update flow plans and to react and recover from system disruptions. Weather decision aids will be integrated with ground- and flight-deck-based decision support systems, and the use of satellites and enhanced flight deck technology will provide for increasing levels of aircraft autonomy. Through NEO, the entire nature and focus of ATM will change, and change for the better.

Conclusion

There can be no overstating the importance to America's future of the Next Generation Air Transportation System initiative. By continuing to work together as partners in this critical endeavor we can deliver a system that will ensure that aviation continues to be a driver of our national prosperity.

Thank you for allowing me to share these thoughts with you today.

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