

JPDO NEWS

June 2007

A newsletter from the Joint Planning and Development Office

From 1500 K Street

We are pleased to introduce a new communications vehicle, *JPDO News*. It is designed to keep you up-to-date and informed on developments impacting the JPDO and the Next Generation Air Transportation System (NextGen).

JPDO News will include information about progress on various initiatives, news from Congress, the FAA, NASA and our partner departments, guest articles, upcoming meetings, events and related happenings. It will be emailed to you. We hope you find *JPDO News* pleasing to the eye and stimulating to the spirit.

Let us know what you think. Please send your comments to: 9-AWA-ATO-JPDO-Partnership@faa.gov

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▶ **NEXTGEN DAY ON CAPITOL HILL** played to a standing-room-only audience at the Rayburn House Office Building on June 13. Secretary of Transportation Mary Peters, Members of the House of Representatives, FAA Administrator Marion Blakey, and members of JPDO Senior Policy Committee (SPC) reiterated the importance of NextGen's mission to transform the nation's air traffic system. Exhibits were also popular with attendees. More information can be found at www.jpdo.gov



Marion Blakey and Charles Leader at NextGen event.

Events

▶ **Senate Day.** NextGen Day on Capitol Hill visits the Senate on Wednesday, July 11, at 9:00 a.m. in Room SD-G50 Dirksen Senate Office Building. There will be speeches and exhibits on NextGen foundation technologies. More information can be found at www.jpdo.gov

▶ **Weather.** On June 27, JPDO's Weather Working Group is holding a "Friends/Partners in Aviation Weather" Vision Forum at FAA Headquarters, 800 Independence Ave., SW, Third Floor Auditorium. The all-day event starts at 8:00 a.m. More information can be found at www.jpdo.gov. We hope to see you at both events.

Updates

▶ **New Website.** Please note our new website, www.jpdo.gov. The website features a library of research papers, articles, speeches, Congressional testimony, and NextGen-related documents. The new website has a clean design and is easy to navigate.

▶ **New ConOps Version.** Following a comprehensive review period, the NextGen Concept of Operations (ConOps) Version 2.0, the latest edition of this document, has been released by JPDO. NextGen ConOps describes how NextGen will work from an operational standpoint. As research continues and technologies change, it will be updated.

▶ **Enterprise Architecture.** The NextGen Enterprise Architecture was released on June 22. This is the blueprint for NextGen. ➡

Best Environmental Practices a NextGen Goal

In today's world, environmental concerns are front and center. On March 29, 2007, JPDO Director Charles Leader, testifying before the House Subcommittee on Space and Aeronautics, stated, "A vital consideration in the development of the NextGen system is successfully managing aviation's environmental impacts." In this regard, JPDO will focus on "developing environmental protection that allows sustained aviation growth," said Leader.

In 2003, Congress addressed the future of our nation's air transportation system. Vision 100, Century of Aviation Reauthorization Act (P.L. 108-176), passed by Congress and signed into law by the President, endorsed the concept of NextGen and directed formation of the JPDO to facilitate the process. With the mission of transforming the national air transportation system, JPDO is working closely with the FAA, NASA, the Departments of Transportation, Defense, Homeland Security, and Commerce, as well as the White House Office of Science and Technology Policy.

NextGen is "Thinking Green"

The JPDO Environment Working Group, headed by Carl Burleson, Director of the FAA Office of Environment and Energy, is charged with addressing environmental issues. In an effort to be a good neighbor, environmentally speaking, the JPDO and its government and industry partners are working on developing environmental protection that allows sustained aviation growth. The efforts of the JPDO are centered on implementing the national vision and recommendations for aviation and the environment as outlined in the December 2004 NextGen "Integrated Plan" and the "2004 Report to Congress: Aviation and the Environment." This includes such key objectives as:

- community noise and local air quality emissions from aviation that significantly impact human health and welfare reduced in absolute terms,
- climate impact uncertainties reduced to enable action,
- communities valuing airports as gateways to the national and international transportation network, and
- commitment among all stakeholders that the U.S. will be the global leader in researching, developing, and implementing technological, operational and policy initiatives that address mobility and environmental needs.

Success in achieving these environmental objectives is crucial. Without such success, it is unlikely NextGen will be able to provide the additional capacity and services envisioned for air travel in the U.S. in the next 20 years.

To achieve environmental protection that allows sustained aviation growth, the Environment Working Group is developing and implementing new models, metrics, policy approaches, operational improvements, and technology innovation to mitigate aviation's environmental impact. To this end, it endorses a systematic and comprehensive approach to mitigate the impact of aviation on the environment. Such an approach should include (1) better scientific understanding; (2) modernization of air traffic management procedures; (3) development of new lower emissions and energy efficient technologies for aircraft and engines; and (4) exploration of the potential of alternative fuels. In this regard, FAA Administrator Marion Blakey recently announced that the agency has two studies underway to "develop a national roadmap on the viability of alternative fuels for aviation."

The Operational Procedures - Continuous Descent Arrival

JPDO has identified several methods to reduce environmental impacts. For example, Continuous Descent Arrival (CDA) procedures improve environmental impacts for noise, fuel burn, and emissions. In contrast to current "step-down" procedures, which require planes to level-off in stages during their descent with all the increased thrust, noise, and fuel burn, CDA reduces noise and emissions by allowing aircraft to power glide from the top of the descent all the way to touch-down. The environmental results have been significant. For example, at Louisville, UPS found four to six decibel reduction within 15 miles of the airport, hundreds of pounds of fuel saved per flight, and a reduction in emissions of over 30 percent below 3,000 feet.

A Green Partner Across the Atlantic

The Single European Sky ATM Research Program, commonly referred to as SESAR, Europe's counterpart to NextGen, is also furthering green goals for their air traffic management system. It identified CDA as a "best environmental practice" for airlines and airports to meet these goals. The European community is also exploring ways to create more flexible use of airspace to allow planes to fly more direct routes, which would result in significant fuel savings. Towards a globally harmonized air transportation system, JPDO is working with SESAR.

With anticipated increases in air traffic demand, national air transportation system environmental concerns must be addressed. "Thinking Green" is an important approach to assuring blue skies ahead for air transportation. 