

# JPDO NEWS

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A newsletter from the Joint Planning and Development Office

## From 1500 K Street, NW

Peggy Gervasi, JPDO Policy Division Director, will be speaking at the AAAE NextGen Airport Conference and Expo on August 5 in Louisville, KY. The conference focuses on technology solutions for U.S. airports, along with Automatic Dependent Surveillance-Broadcast (ADS-B).

David Kerr has returned from a Congressional assignment and has resumed his role as the JPDO Director of the Partnership Management Division.

On July 30, JPDO released a pair of related documents, the "Safety Culture Improvement Resource Guide" and the "Safety Management System Standard v1.4." Both papers were prepared by the Safety Working Group. Papers are available at [www.jpdo.gov/library.asp](http://www.jpdo.gov/library.asp).

The next JPDO "All Hands" meeting is scheduled for 9:00 a.m. on Wednesday, October 15, in the James Webb Auditorium at NASA Headquarters, 300 E Street SW, Washington, DC. This event is open to the JPDO community and the interested public. Please mark your calendar and join us. *Note: This is not a mandatory meeting and no travel compensation or per diem will be provided.*

We welcome your input. Please send your comments to [9-AWA-ATO-JPDO-Partnership@faa.gov](mailto:9-AWA-ATO-JPDO-Partnership@faa.gov).

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## JPDO Identifies Cross-Agency Surveillance Issues

In the past few months, the JPDO released two papers to guide how government partners enable surveillance operations in the Next Generation Air Transportation System (NextGen).

The FAA's "Surveillance/Positioning Backup Strategy Alternatives Analysis" paper (No. 08-003), prepared by the Air Navigation Services Working Group (WG), was released on July 15. It describes the JPDO's position regarding the alternatives of a backup strategy to Automatic Dependent Surveillance-Broadcast (ADS-B), which will be the future means of cooperative surveillance. As the positioning source, ADS-B will use GPS or a system with equivalent performance.

In the development of the paper, the JPDO revisited the FAA's Surveillance/Positioning Backup Strategy Alternatives Analysis on which the FAA Surveillance Broadcast Services program's investment decisions were based. The JPDO notes that underlying assertions about current technologies and procedures need revising. For example, assumptions about allowable aircraft positioning uncertainty will be different in a NextGen environment, where new paradigms for separation assurance are necessary to safely accommodate increased traffic demand. The JPDO also recommends that procedures used for separation management should be rethought from first principles due to the fact that current separation procedures will change with the use of ADS-B and Positioning, Navigation and Timing (PNT) systems.

The "Defining an Interagency Mechanism to Achieve NextGen Integrated Surveillance" paper (No. 08-006), also prepared by the Air Navigation Services WG, was released on June 24. The paper



addresses the need to better coordinate the development of integrated surveillance capabilities in the areas of security, navigation, telecommunications, and weather. The JPDO recognizes that the FAA, Department of Homeland Security, Department of Defense, Office of the Director of National Intelligence, Department of Commerce, and other aviation safety and security organizations have put considerable resources, time, and energy towards surveillance-related initiatives, programs, and activities. However, a lack of coordination will result in duplication, gaps, and inefficiencies that will impede or prevent the achievement of the integrated surveillance capabilities described in the NextGen Concept of Operations. To accommodate projected capacity increases, national assessments of threats, and weather surveillance capabilities, future national aviation surveillance data/information requirements must be analyzed holistically.

The next step the JPDO recommends is to determine a formal, institutionalized, interagency mechanism for the responsibility, management, and ownership of integrated surveillance elements as noted in the Integrated Surveillance Study Team's 2008 Interim Report. Further, the JPDO presents examples of mechanisms that would be sufficient to oversee integrated surveillance for the national air transportation system. ✈️

*Papers are published by the JPDO and are available at [www.jpdo.gov/library.asp](http://www.jpdo.gov/library.asp).*



## “Excellence in Government” Forum Highlights JPDO

It’s a challenging question: What makes a collaborative partnership work in a government environment? This was the issue that representatives of the JPDO discussed at the Government Executive Magazine’s annual “Excellence in Government” Forum on July 15 at the Ronald Reagan Building in Washington, DC. The JPDO, with its unique structure, is considered a model of inter-governmental partnership and this special session highlighted the factors that have made it successful.

The moderator was Jennifer L. Dorn, President and CEO of the National Academy of Public Administration. Representing the JPDO was Director Charles Leader, Deputy Director Robert Pearce, and Mark Andrews, Government Co-Chair of the JPDO’s Weather Working Group.

The panel discussed some of the special characteristics that are important to the JPDO’s mission. The JPDO’s high-performance partnership encompasses the efforts of seven different departments and agencies. The partners include the White House Office of Science and Technology Policy, the Departments of Commerce, Defense, Homeland Security, and Transportation, as well as the National Aeronautics and Space Administration (NASA), and the FAA.

The goal of the JPDO, as Mr. Leader put it, “is to develop a collaborative relationship with the government partners to bring air transportation into the world of emerging technology.” This is no small undertaking, and since each of these agencies has a role in our National Airspace System (NAS), it requires not only fostering the collaborative processes, “but mapping and documenting all of the key interfaces.”

Mr. Leader emphasized the value of JPDO’s Congressional mandate and governing structure in supporting this initiative. The JPDO Board and the Senior Policy Committee, both of which provide the structure for interagency oversight, have been essential to the JPDO’s success. Mr. Leader noted that “they set priorities, resolve differences, and provide continuity.”

Mr. Pearce talked about the new depth in the working relationship between NASA’s Aeronautics Research Mission Directorate and the FAA. The FAA and NASA, working together through JPDO-sponsored Research Transition Teams, now have a much more efficient and collaborative process for identifying, developing, and applying new technologies.

Mr. Andrews of the National Weather Service (NWS), which is a component of the National Oceanic and Atmospheric Administration (NOAA) within the Department of Commerce, discussed the JPDO’s success in developing a common government-wide weather strategy. There are four departments and agencies involved in weather and they have all agreed to work together in developing a common-use, probabilistically based, weather forecasting capability. Since weather is responsible for at least 70 percent of all the disruptions in the NAS, this represents a major step forward.

The success of the JPDO’s mission relies on the organization’s ability to facilitate joint action and collaboration with its government partners. While its mission is heavily focused on technology and changes to the NAS, many of the factors that have made it successful could well have application to other government initiatives and undertakings beyond aviation. The challenge, as Ms. Dorn said, is “how can other government organizations model this behavior.” 

## JPDO Friends and Partners Meet to Discuss Aviation Weather Issues

The JPDO Weather Working Group (WG) hosted a daylong “Friends/Partners in Aviation Weather” Vision Forum on July 15 at the National Transportation Safety Board (NTSB) Conference Center in Washington, DC. The event was an opportunity for the aviation weather community to share information about plans for mitigating the effects of weather in the National Airspace System.

Presentations were made by representatives of the JPDO along with government and industry partners. Hank Krakowski, Chief Operating Officer of the FAA’s Air Traffic Organization, was a featured speaker. Noting that the forum served as an example for the JPDO “to have discussions about all the benefits we can utilize,” he added that the JPDO should “keep a binocular on emerging technology,” including worldwide weather information sharing.

In discussing the 4-D Weather Data Cube and single authoritative source, Tom Ryan, FAA’s Program Manager for NextGen Network-Enabled Weather, captured a theme of the day by describing weather as “a complex landscape,” and emphasizing the importance of the effort, which addresses “a specific part of the equation for aviation.”

He explained that while the 4-D Weather Data Cube system will be initially operable by 2013, much work needs to be achieved through the 2016 and 2022 time frames. Mr. Ryan also mentioned that questions remain about data rights and domains, noting that the system will likely use some information that is proprietary to the airlines, and observational data from commercial entities.

In a presentation titled “Legacy System Conversion Plans,” Kevin Johnston, Chief, Aviation Weather Services, NWS, said that his agency has begun acquisition of aircraft weather-vapor sensors and data. It expects to have at least 1,200 sensors online by 2020 in order to provide approximately 7,000 atmospheric profiles daily. Likewise, the NextGen numerical weather prediction capability will be updated to provide better forecast guidance. Mark Andrews, Government Co-Chair of the Weather WG, summarized the event by describing the weather component as “a great example for NextGen,” and “the pathfinder” for the system’s overall success.

The next “Friends/Partners in Aviation Weather” Vision Forum is slated for October 9 in Orlando, FL. 