



Introduction to the 2012 FPAW Summer Meeting



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What I'll cover

- Why FPAW Vision/Summer meetings?
- Goals, Topics and People: 2005-2011
- Progress?
 - Short example
- Confirmation...
 - A recurring topic

What Triggered FPAW Vision Meetings?

VISION 100 – CENTURY OF AVIATION REAUTHORIZATION ACT PUBLIC LAW 108-176

108th Congress, 2003–2004

Introduced	May 15, 2003
Reported by Committee	May 21, 2003
Passed House	Jun 11, 2003
Passed Senate w/Changes	Jun 12, 2003
Passed Senate	Nov 21, 2003
Signed by the President	Dec 12, 2003

This bill was enacted after being signed by the President on **December 12, 2003**.

SEC. 709. AIR TRANSPORTATION SYSTEM JOINT PLANNING AND DEVELOPMENT OFFICE.

a) ESTABLISHMENT- (1) The Secretary of Transportation shall establish in the Federal Aviation Administration a joint planning and development office to manage work related to the Next Generation Air Transportation System. The office shall be known as the Next Generation Air Transportation System Joint Planning and Development Office (in this section referred to as the 'Office').

Goals, Topics and People, 2005

FPAW Vision Meeting 2005 (Inaugural meeting)

The goal of this meeting is to give the opportunity for the community of aviation weather information providers to hear directly from the user community how they view the progress made in developing a vision for the aviation weather system for the Joint Planning and Development Office.

Overview of Vision, Goals, and Strategies:

Vision for Weather Information Integration:

Vision for Weather Information Dissemination:

Vision for Diagnosis and Forecasting:

Vision for Weather Observations:

Vision for Aircraft Weather Impact Mitigation:

Vision for Aviation Weather Training:

Vision for Aviation Weather Policies:

Mark Andrews, John McCarthy, Lisa Bee, Charlie Keegan

Steve Green, Gene Wilhelm

Ken Leonard, Gene Wilhelm

Kevin Johnston (NOAA), Bruce Carmichael

John Murray, Mark Weber

Ron Colantonio, Paul Stough

Al Kaehn, Jeremy Andrucyk

Rick Heuwinkel, Lisa Bee



Goals, Topics and People, 2006

FPAW Vision Meeting 2006

The goal of this meeting is for the *JPDO Weather Product Development Team (PDT)* to share with the broader aviation-weather community of interest *the status of “NGATS Weather”*.

The aviation-weather community of interest will have an opportunity to *provide feedback to the JPDO Weather IPT on the “NGATS Weather - Concept of Operations”* and overall vision for transforming how the Air Traffic Management (ATM) and Weather communities work together to mitigate the impacts of weather in the NAS.

Overview of Vision, Goals, and Plans:

NGATS Vision:

Weather IPT Concept of Operations:

Air Force Exploitation of Wx-Mission Support:

Private Sector Participation...:

2012 Initial Operating Capability:

The Way Forward – Community Input:

Mark Andrews, Rick Heuwinkel

Doug Arbuckle

Steve Green, Tom Fahey

Don Berchoff

Roy Strasser, Warren Qualley

Ken Leonard, Bob Lamond

Mark Andrews



Goals, Topics and People, 2007

FPAW Vision Meeting 2007

The goal of this meeting is for the *JPDO Weather Working Group (WWG)* to share with the broader aviation-weather community of interest *the status of "NextGen Weather"...*

Weather Concept of Operations:

Implementation of NNEW:

Private Sector Participation in NextGen Weather:

Research and Development/OI for Pre-imp. Plan:

Out-brief to Sr. Agency Execs:

Mark Andrews, Doug Arbuckle, Tom Fahey, Mike Lewis

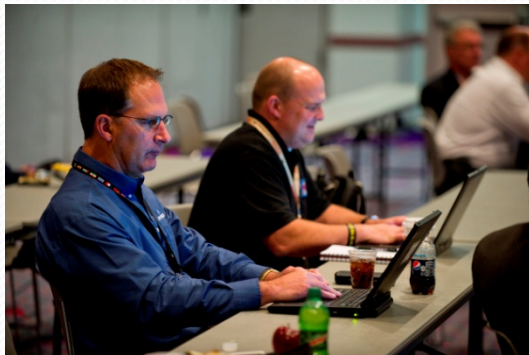
Ken Leonard, Kevin Johnston, Mike Babcock

Rick Heuwinkel, Bill Phaneuf, Mike Cetinich

John McCarthy, Matt Fronzak

Marion Blakey, Admiral Lautenbacher,

Col. Mary Lockhart



The Joint Planning and Development Office

Making NextGen a Reality

Goals, Topics and People, 2008

FPAW Vision Meeting 2008

The goal of this meeting is for the *JPDO Weather Working Group (WWG)* to share with the broader aviation-weather community of interest *the status of "NextGen Weather"*...

A Day in the Life of the Aviation System-NextGen:
4D Weather Cube and Single Authoritative Source:
Legacy System Conversion Plans:
Agency/Industry Roles/Responsibilities:
Hurdles to the Future - Elephants in the Room:
What the JPDO WWG Heard You Say Today:

Bill Leber, Leo Prusak
Tom Ryan, Jason Tuell, Adam Giraldes
Ken Leonard, Kevin Johnston, Bruce Lambert, Bill Phaneuf
Hank Krakowski, Matt Fronzak
Nick Stoer, Al Kaehn, Tom Fahey
Mark Andrews



Goals, Topics and People, 2009

FPAW Vision Meeting 2009

The goal of this meeting is for the JPDO Weather Working Group (WWG) to share with the broader aviation-weather community of interest the status of "NextGen Weather"...

Why is Wx Critical to NextGen?

Realignment of Wx Acquisition Programs in ATO:

Elephants in the Room:

Requirements and Concept of Operations:

4D Wx Cube, SAS, Net-Centric Ops:

Weather Integration Efforts:

Weather Research Plan:

Weather Demonstration Coordination:

What the JPDO WWG Heard You Say Today:

Hank Krakowski

Al Kaehn, Nick Stoer

Rick Heuwinkel, Joe Sherry, Leo Prusak

Tom Ryan, Jason Tuell, Doug Wreath, Randy Baker,

Bruce Landsberg

Steve Bradford, Mark Huberdeau, Jim Stobie

Ray Moy, Darien Davis, Matt Fronzak

Paul Strande, Steve Abelman, Joe Burns

Mark Andrews



NextGen
Generation Air Transportation
INSTITUTE



Goals, Topics and People, 2010

FPAW Vision Meeting 2010

*The goal of this meeting is for the **JPDO Weather Working Group (WWG) and Agencies to share** with the broader aviation-weather community of interest **the status of “NextGen Weather”**, with a focus on **activities related to Collaborative Decision Making (CDM)** between the operator community and the FAA...*

CDM “Road Show”

Traffic Flow Management (TFM):

Collaborative Decision Making (CDM):

Flow Evaluation Sub-Team (FET):

Future Concept Sub-Team (FCT):

Weather Evaluation Sub-Team (WET):

Surface Sub-Team (SCT):

Training Sub-Team:

Mark Libby

Mark Libby

Ernie Stelling

Mark Hopkins

Kevin Johnston,

Tom Fahey

Marshall Mowery

Joe Dotterer



NextGen Weather Concepts, Plans, Programs, and Progress

JPDO WWG (NextGen Wx Concept/Benefits):

FAA NextGen Solution Set for Weather:

FAA ATO-P Weather Office:

FAA Weather System Acquisition:

DOD Weather Perspective:

Net Centric Operations Concept:

Mark Andrews,

Mark Miller

Mary Cairns

Jaime Figueroa

Vaughn Yates

Dave Miller

Michael Little



Goals, Topics and People, 2011

FPAW Summer Meeting 2011

*The goal of this meeting is **for the Federal Agencies to share** with the broader aviation weather community of interest **the status of “NextGen Weather”**. The aviation-weather community will have an opportunity to provide feedback to the Agencies on the overall plans and activities for transforming how the Air Traffic Management (ATM) and Weather communities work together to mitigate the impacts of weather in the NAS.*

What is OMB Looking For?:

FAA Reauthorization/“Dest. 2025”:

Wx Speak, in English:

NextGen Senior Leadership:

NextGen Weather Programs:

Integrating Wx info into NAS Ops:

Building the SAS, Policy/Gov’t Issues:

Nick Stoer, Kristen Burnham, Rodney Weiher

Ray Young, Gael Sullivan, Toni Trombecky

Nick Stoer, Matt Tucker, Mark Miller, Mike Robinson, Sherrie Callon

Jaime Figueroa, Greg Burke, Vicki Cox, Jason Tuell, Paul Fontaine,

Ann Tedford, Rocky Stone

Steve Abelman, Jackie Hill, Benn Deans, Alfred Moosakhanian,

Mark Miller, Mark Zettlemyer

Rick Heuwinkel, Kevin Johnston, Kevin Grimm, Craig Wanke

Mark Miller, Ed Johnson, Rick Heuwinkel



Progress?

- The FPAW Vision meetings began with a vision of how weather would play in NextGen.
- The next meetings provided a description of the JPDO's PDTs and the NGATS Weather CONOPS.
- There were three years when the JPDO WWG shared the status of NextGen Weather.
- Following that, the CDM community described their roles in NextGen.
- Last year's FPAW Summer Meeting focused on the status of plans to transform how the ATM and Wx communities will work together in NextGen.

Progress?

You be the judge, but here's an interesting example...

8 March 1989

To: G.J. Spahr
From: W.L. Qualley
re: ASOS/AWOS Informational meeting

The ASOS/AWOS informational meeting seemed to raise more questions than it answered. Attendees were mainly from the N.W.S. and F.A.A. with others from the military, A.O.P.A., A.L.P.A. and three from the airlines.

The N.W.S. gave an overview of ASOS/AWOS followed by the F.A.A.'s comments, which at times were at odds to the preceding presentation.

ASOS will be capable of reporting the following parameters- altimeter setting, wind data, temperature, dewpoint, density altitude, visibility, cloud height, present weather (precipitation occurrence, type and amount of freezing rain). Site determination teams will decide the best location for the instruments at each airfield with consideration given to proximity of rivers, etc. In some cases more than one instrument cluster may be installed in high weather-variability locations.

Some questions that I felt were unsatisfactorily answered or not addressed at all include-

Any report of RVR?

Prevailing visibility will be replaced by what?

How will ASOS determine cloud amount? (answer given to this was "time-averaging" which assumes that the wind will blow the clouds over a vertical laser beam sensor which in turn assumes that it is "seeing" an average sky condition)

With approximately 1200 stations to be automated, and reports available every minute, how will data be disseminated across already-full lines? Will we have to go to a higher speed data line? Who will bear the cost of this?

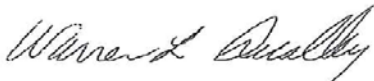
As only 2 U.S. airlines attended, the A.T.A. Meteorological Committee should address these and other questions regarding ASOS/AWOS at their meeting in May.

All overlays used in the meeting and lists of stations to be automated will be made available to attendees.

Any report of RVR?

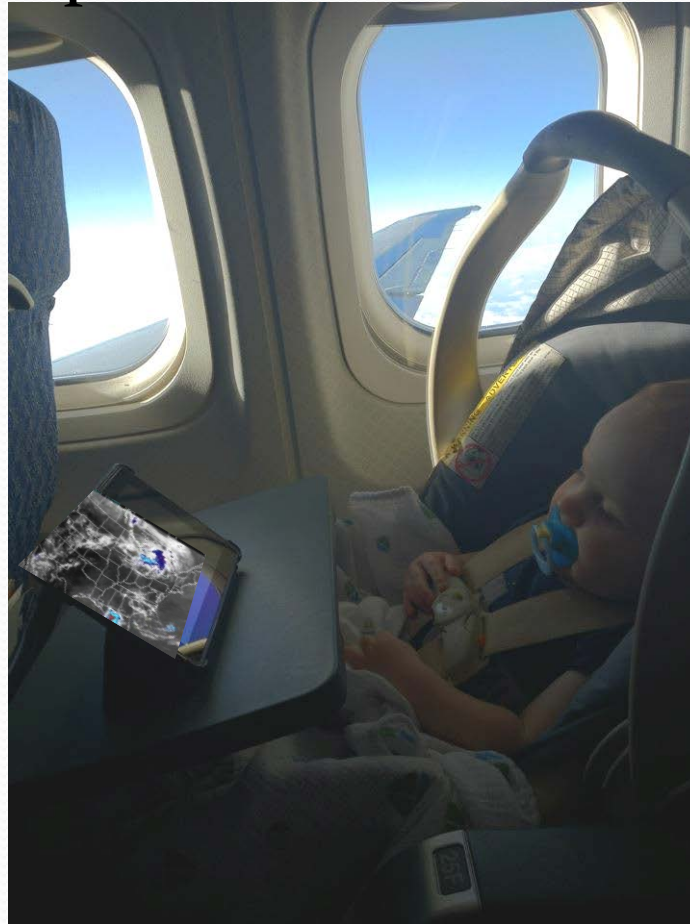
Excerpt from *Aviation Weather Services: A call for Federal Leadership and Action* (1995)

5. Equal or better level of service. "FAA policy is that the performance of combined automated systems must be equal to or better than manual observation capability" (FAA, 1994). Many users, however, do not believe that ASOS meets this standard at airports that previously had human weather observers. To some extent, this perception reflects a lack of consensus between the FAA and users about what data surface observations should include. **For example, air carriers did not realize that ASOS units would not provide RVR until the first ASOS units were being installed.** As late as April 1995, the FAA was still working with representatives of user groups and other interested parties to establish service standards for automated surface weather observations.



Confirmation...

that passengers DO have access to more weather information than pilots!



Enjoy today's FPAW Summer Meeting and remember to keep your seat belt fastened at all times!