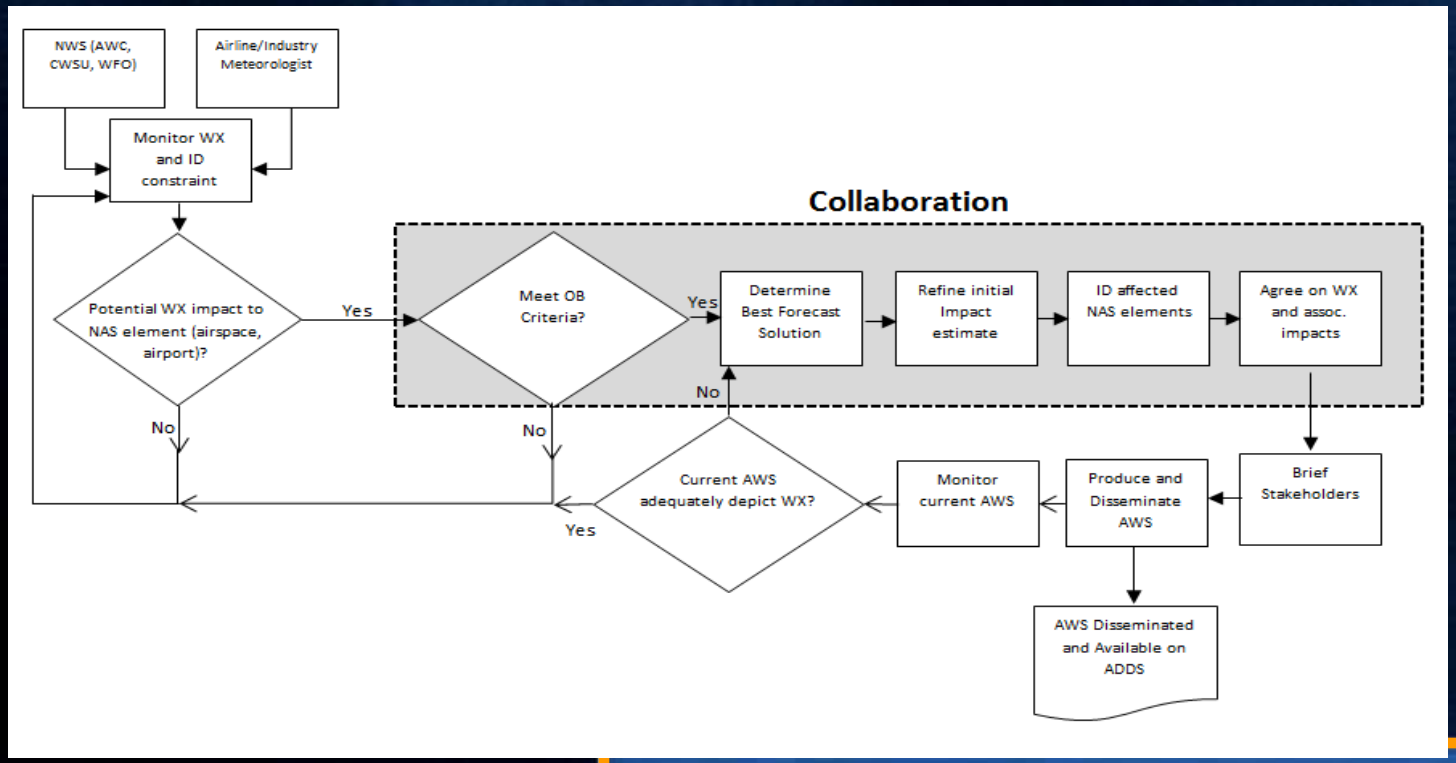
# Motivation for Operational Bridging and the Aviation Weather Statement

CDM
Collaborative Decision Making

Weather Evaluation Team Presentation
Friends and Partners of Aviation Weather
October 23, 2013

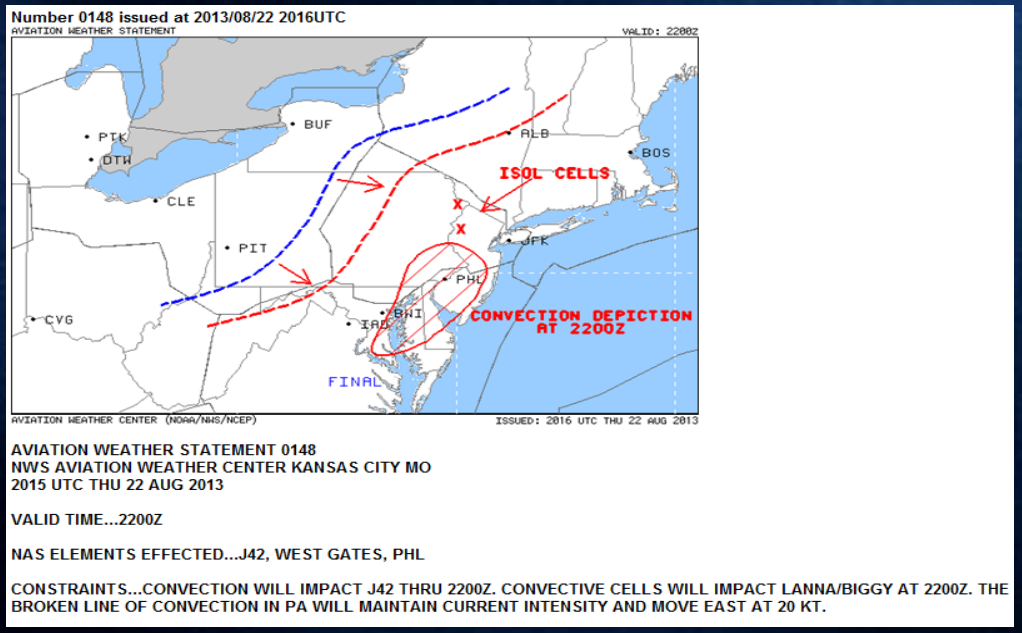
# Operational Bridging (OB)

- **OB is a set of weather forecasting processes, meteorologist / TFM decision maker engagement protocols and communications tools.**



# Aviation Weather Statement (AWS)

- Event driven Text/graphical forecast
- Collaboration: government & industry mets. and
- Disseminated to TFM planners concerning weather constraints deemed critical to traffic flow decisions



# Motivation for OB and AWS

- **WET believes the TFM community is positioned to begin exploiting information provided by the meteorology community today**
- **Reliable probabilistic convective weather information is now available**
  - TFM planners build a plan for the day that is based on the most likely weather scenario
  - This info supports alternative plans to account for other potential weather scenarios
  - NextGen calls for use of probabilistic weather forecasts in planning
  - New Decision Support Tools, e.g., Collaborative Trajectory Options Program (CTOP)

# Motivation for OB and AWS

- **OB supports transition from strategic to tactical planning**
  - Strategic plan / probabilistic products
  - Operational bridging / AWS and OB interaction
  - Tactical plan / deterministic products
  - Multiple scenarios = fewer “surprise” weather disruptions
- **This dynamic forecast process including AWS is the conceptual evolution of the CCFP**
- **Additional motivation: NextGen themes**
  - Single Authoritative Source (SAS)
  - Human Over The Loop (HOTL) of the forecast process

# Motivation for OB/AWS

- Ultimate goal of OB and the AWS is to provide an ability for TFM decision makers to more **proactively** initiate, amend or terminate planned or active TFM initiatives, and result in more efficient use of available airspace.

# Evaluation of OB / AWS

- Limited in scope demonstrations of the OB process and the AWS have been rated favorably by users and provided sufficient support for strategic planning during convective weather events.
- The AWS was found to be effective in highlighting small spatial scale events with potentially high impacts and also provided additional trend information to users.

# Status

- Proposal to CSG in September with presentation for decision in November
- Current thinking is a 2016 implementation NAS wide
- If a “scheduled” CCFP still required, plan is to automate

# Future Efforts Needed

- Understanding probabilistic weather information for TFM decisions and defining particular thresholds for traffic management initiatives
- Determine standard thresholds (requirements) that would trigger the need for an AWS to be generated
- Standardize the format of the AWS graphic and text
- Potential automation of current CCFP
- Linkage with other TFM initiatives

# Questions?

## Contacts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**URL:**
**http://testbed.aviationweather.gov/aws/index**

# Backup slides

# Demonstration Participants

- **Participants –**
  - Industry – AOCs, FOCs, Meteorologists
    - Delta, FedEx, JetBlue, NetJets, Southwest, United, UPS, and NBAA
  - Government
    - Traffic Management Units – New York Air Route Traffic Control Center (ARTCC)(ZNY), Washington ARTCC (ZDC), New York Terminal Radar Approach Control (TRACON) (N90), Boston ARTCC (ZBW), and Cleveland ARTCC (ZOB)
    - Air Traffic Control System Command Center
    - Center Weather Service Units – Cleveland, Washington D.C., New York, and Boston