



# FAA-NWS Aviation Weather Requirements Working Group (ARWG)

Friends and Partners in Aviation Weather

October 23, 2013



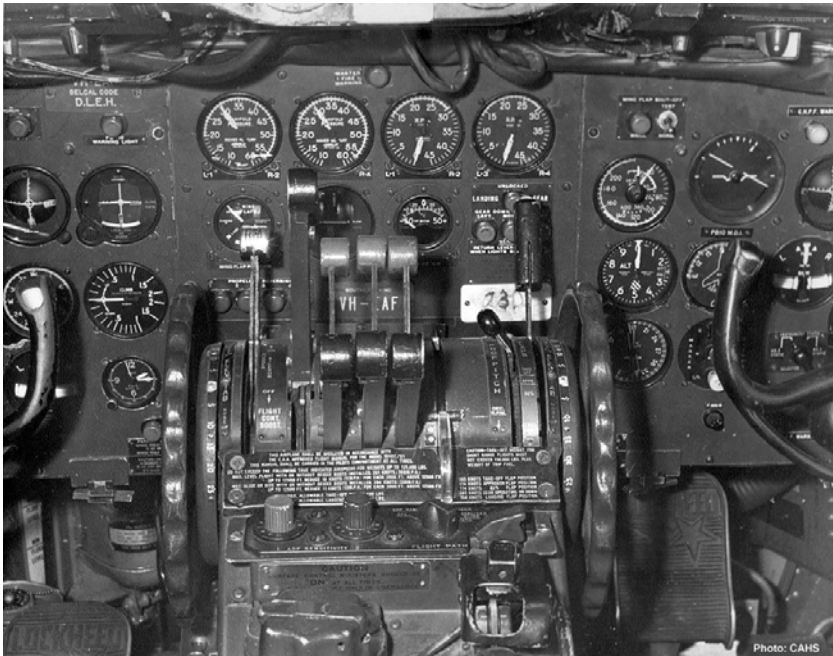
**NOAA**



**FAA**

**Airplanes ...**

**have changed.**



**Lockheed Constellation**



**Airbus A380**



**FAA**



**NOAA**

**NextGEN**

# Aviation weather products ...

FA ATL 071245  
08E-20E WED

WRN NC WRN SC NRN GA ALA EXCP MOBILE AREA

CLDS AND WX. ○ OVR SRN AND CNTRL ALA

OVR NRN ALA AND NRN GA C15-20⊕V⊕ TOPS 40-60 BCMG MSTLY C30⊕V⊕ TOPS 40 BY 12E AND 35⊕ BY 14E AND ○ BY 19E

OVR WRN SC 40⊕V⊕ MSL TOPS 90 BCMG ○ BY 19E

OVR WRN NC C20-40⊕V⊕ TOPS 100-120 LCLY C10⊕7 IN THE MTNS WITH OCNL C10X2S- BCMG C40⊕V⊕ TOPS 80 BY 12E WITH A FEW SNW FLRYS PRSTG IN THE MTNS. CLRG BY 20E.

ICG. LGT TO MDT RIME ICGIC WITH CHANCE OF MDT MXD ICGIP WRN NC TIL 12E. FRZG LVL SFC OVR THE WRN CAROLINAS AND NRN GA SLPG TO 30-40 CNTRL AND SRN ALA LFTG TO 25 WRN NC AND 50 SRN ALA BY AFTN

TURBC. MDT BLO 80-120 OVR WRN NC WRN SC NRN GA WITH OCNL SVR TURBC OVR AND ALG E SLPS OF MTNS. TURBC WL DMSH LATE AFTN. MOST PRBL AREA OF MDT CAT 250-350 OVR THE WRN CAROLINAS AND NRN GA ESPECIALLY OVR THE MTNS

OTLK. 20E WED-08E THU. ○ OVR AREA BCMG C200⊕ OVR WRN ALA BY DABRK. VSBY UNRSTD LWRG LCLY TO 4KH BY 06E

# not so much.

NOAA's National Weather Service  
Aviation Weather Center

Home News Organization

Local forecast by "City, St" or Zip Code  
City, St  Go

Find us on Facebook  
AWC on Facebook

Advisories  
SIGMET/AIRMET »  
Center Weather

Forecasts  
Convection »  
Turbulence  
Icing  
Winds/Temps »  
Prog Charts »  
TAF / FA »

Observations  
PIREPs »  
METARs »  
Radar »  
Satellite »  
Ceiling and Visibility  
Flight Planning »

AWC Home > Area Forecasts > Miami FA

### Miami Area Forecast (FA) [FYI/Help](#)

Forecast updated: 17:32 UTC [FAMAP](#) [BOS](#) [MIA](#) [CHI](#) [DFW](#) [SLC](#) [SFO](#) [GULF](#) [CARIB](#)  
[Alaska](#) [Hawaii](#)

000  
FAUS42 KKCI 091745  
FA2N  
MIRC FA 091745  
SYNOPSIS AND VFR CLDS/WX  
SYNOPSIS VALID UNTIL 101200  
CLDS/WX VALID UNTIL 100600...OTLK VALID 100600-101200  
NC SC GA FL AND CSTL WTRS E OF 85W  
.  
SEE AIRMET SIERRA FOR IFR CONDS AND MTN OBSCN.  
TS IMPLY SEV OR GTR TURB SEV ICE LWS AND IFR CONDS.  
NON MSL HGTS DENOTED BY AGL OR CIG.  
.  
SYNOPSIS...18Z WRMNT FM LOW NRN NC CSTL WTRS EWD INTO INTL WTRS.  
STNR FNT FM LOW NRN NC CSTL WTRS TO LOW 210SE CHS. CDFNT FM LOW 210SE CHS ACRS NRN BAHAMAS-EXTRM SERN PTN FL CSTL WTRS CONTG SSWWD INTO CUBA. TROF FM LOW NRN NC CSTL WTRS ACRS 40E ORF-SIE LN. 12Z OCFNT FM LOW 100E ILM TO 140SE ECG. STNR FNT FM 140SE ECG EWD INTO INTL WTRS. CDFNT FM 140SE ECG SWD INTO INTL WTRS CONTG ACRS NRN BAHAMAS TO EXTRM SE PTN FL CSTL WTRS. TROF FM LOW 100E ILM ACRS NC OUTER BANKS-SERN MD-NRN NJ.  
.

## Area Forecast 1965

## Area Forecast 2013



FAA



NOAA

NextGEN

# FAA and NWS Face Fiscal Challenges

- Budget cut storm hits National Weather Service  
[\[CNBC, February 2011\]](#)
- Sequester: Let the FAA furloughs begin  
[\[MSNBC, April 2013\]](#)
- NWS suffers budget cuts, furloughs during hurricane season  
[\[Sun Sentinel, April 2013\]](#)
- NextGen progress faces lack of FAA funding  
[\[AINonline, July 2013\]](#)
- FAA official: Budget cuts driving FAA reform  
[\[AINonline, August 2013\]](#)



**FAA**



**NOAA**

Next**GEN**

# Aviation Weather Requirements Working Group (ARWG)—Background

- Established in 2012 at the request of FAA's COO, and agreed-to by the Director of NWS, ARWG builds upon prior efforts by the *Traffic-Flow Management (TFM) Requirements Working Group (TRWG)*
- ARWG is tasked with reviewing all weather information produced by NWS for aviation purposes
  - ✦ Many NWS weather products are decades old with little change in format, and without performance requirements or measures
- ARWG's goal is to improve NWS products in-support of aviation weather
  - ✦ Increase emphasis on digital products and focus the activities of NWS forecasters on maximizing operational benefit



**FAA**



**NOAA**

Next**GEN**

# Aviation Weather Requirements Working Group (ARWG)—Objectives

- Identify NWS products and services in support of aviation weather with duplicative or overlapping information
- Identify NWS products and services that are resource intensive, with limited utility to operators
- Identify opportunities for digitizing legacy NWS products and services
- Identify opportunities to transition existing NWS products and services to graphical information for little or no cost
  - ✦ **NOTE:** Text products will continue to be produced, in accordance with ICAO obligations



**FAA**

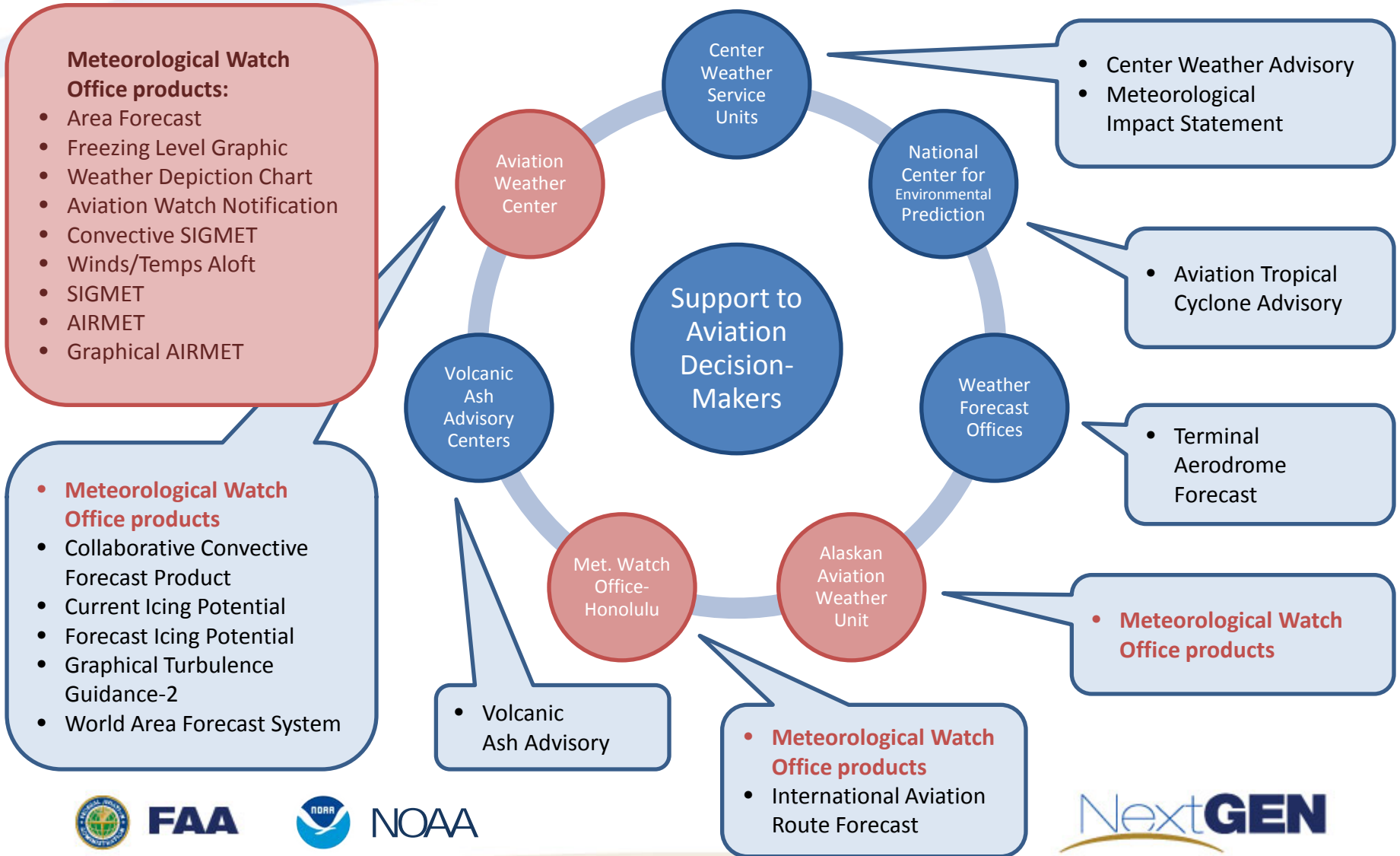


**NOAA**

Next**GEN**

# Forecast Product Sources

(observational products and services, also under review)



FAA



NOAA



# Aviation Weather Requirements Working Group (ARWG)—Process

1. Generate a list of products and services provided by NWS to NAS users (controllers, FOC's, pilots and airport operators) based on AC 00.45G;
2. Assess the utility and usage of NWS products and services in-support of aviation;
3. Identify duplicative products and services; and
4. Make formal recommendations and transmit requirements to NWS.



**FAA**



**NOAA**

**NextGEN**



# Preliminary Discussion/Analysis

## Non-ICAO products with high potential for change(s):

- Area Forecast
- Freezing Level Graphic
- Weather Depiction Chart
- Radar Summary Chart
- Aviation Watch Notification Message

## Non-ICAO products with some potential for change(s):

- Convective SIGMET
- Center Weather Advisory
- Winds and Temperatures Aloft
- Meteorological Impact Statement

## Products required under international obligation—little potential for change(s):

- SIGMET
- AIRMET
- Graphical AIRMET
- Aviation Tropical Cyclone Advisory
- Volcanic Ash Advisory
- Terminal Aerodrome Forecast

## Additional products with constraints—little potential for change(s):

- International Aviation Route Forecast
- Collaborative Convective Forecast Product
- Current Icing Potential
- Forecast Icing Potential
- Graphical Turbulence Guidance



**FAA**



**NOAA**

Next**GEN**

# Questions?



**FAA**



**NOAA**

Next**GEN**

# NextGEN



NOAA



**FAA**