

15th Operational Weather Squadron

Thunderbolts

Generate ready Airmen to characterize and converge weather intelligence with mission partners in order to **predict mission impacts and drive behavior.**



Ready, Innovative, and Professional Airmen

WEATHER DRIVES BEHAVIOR



Task Organizational Chart





Command Philosophy

Mission Statement

Generate ready Airmen to characterize and converge weather intelligence with mission partners in order to predict mission impacts and drive behavior

Vision Statement

The premier source of weather intelligence fueled by innovative, adaptable, and multi-capable Airmen who are empowered to shape the future to create a decisive advantage

Pillars

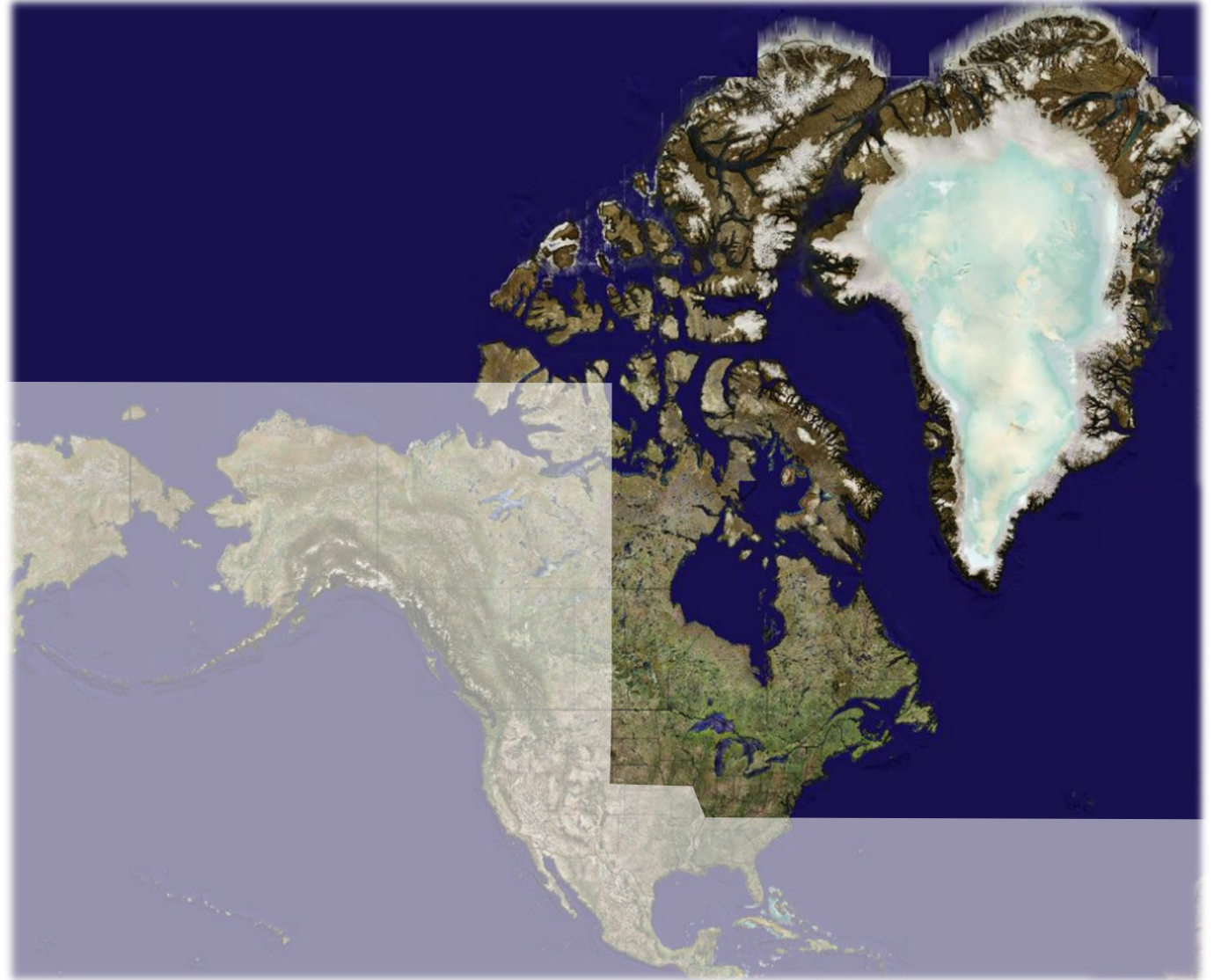
Ready, Innovative, and Professional Airmen



15 OWS Area of Responsibility



- 153 DoD installations
- 320 Joint and Total Force units
- 11M square-mile area of responsibility
- Resources protected
 - 490K personnel
 - Assets/equipment valued at \$226B





Operations Floor



- **151 authorized personnel**

- 11 officers
- 125 enlisted
- 15 civilians

- **Execute 24/7 weather operations**

- Threat-Based Operations (TBO)
- Continuity of Operations Plan (COOP)
- Continuous worldwide production supporting all 11 Combatant Commands

- **Senior Duty Officer**

- Full control of operations floor
- Assesses long- and short-range weather threats

- **Shift Supervisors**

- Manages and mentors 3-4 forecasters
- Oversees airfield forecasts, weather alerts, flight weather briefings, and aviation hazard charts

- **Overwatch Manager**

- Threat identification and develops weather alert strategies
- Mentors junior forecasters and shift supervisors

- **Forecasters**

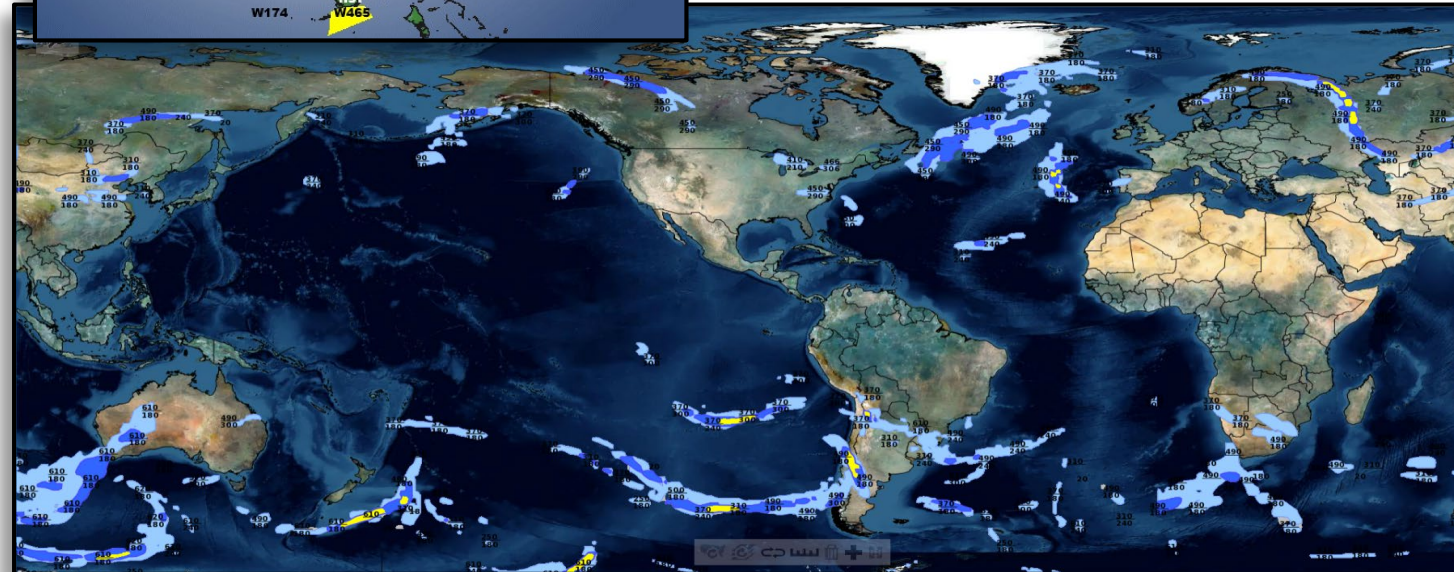
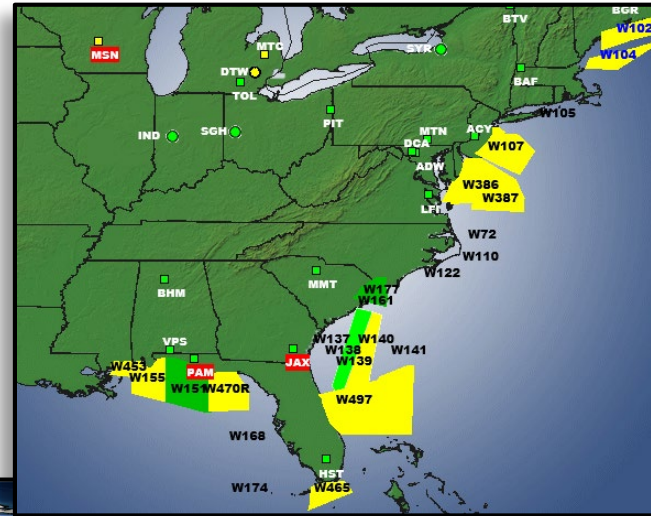
- Delivers 30 airfield forecasts daily
- Resource protection alerts in support of 153 DoD locations





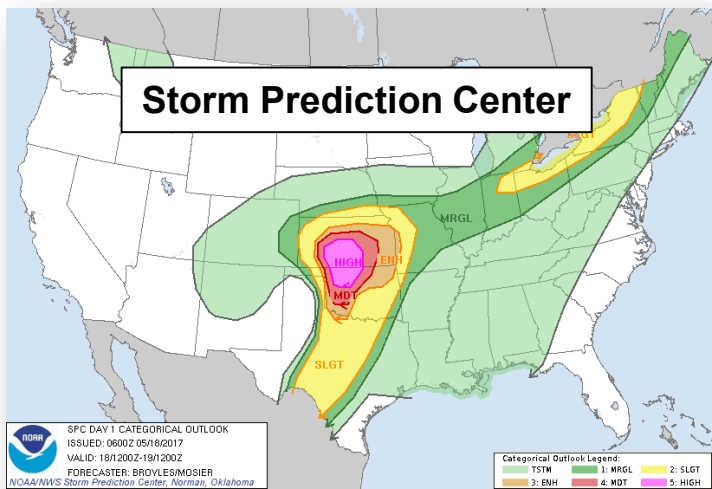
Mission Execution Function

- **Mission watch for Operation NOBLE EAGLE (Eastern Area Defense Sector)**
 - #1 priority
 - Western Area Defense Sector backup for 25 OWS
- **Aviation weather support**
 - 1,400+ flight weather briefings per month
 - 45% Air Force Total Force
 - 50% Army aviation
 - 5% transient/other
- **Global Aviation Hazard Graphics**
 - All aviation weather hazard products for the globe start here
 - Mission planning/execution
 - Supports all Combatant Commands

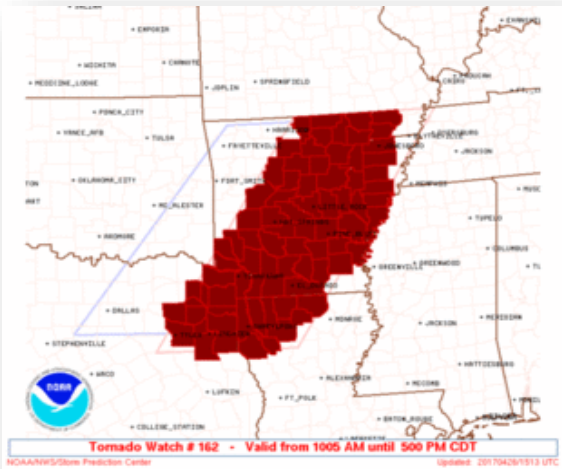
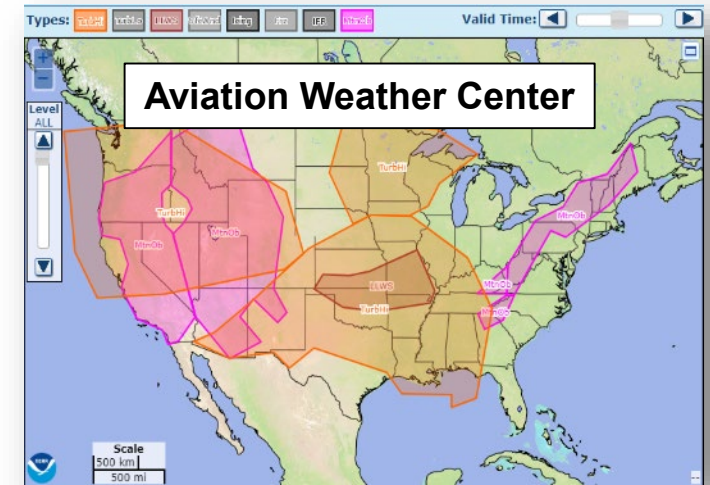




National Weather Service Interagency Backup Missions



- Partnered since May 2009
- 1-hour response time 24/7
- 25-30 personnel on backup team
- Responsibility
 - ~323 million people
 - ~87,000 flights per day
- 2 SPC/3 AWC live backup tests per year
- 10K+ products disseminated since 2009
- COOP support continued through COVID-19



URGENT - IMMEDIATE BROADCAST REQUESTED
SEVERE THUNDERSTORM WATCH NUMBER 625
NWS STORM PREDICTION CENTER NORMAN OK
ISSUED BY 15TH OWS SCOTT AIR FORCE BASE IL
530 PM CDT THU AUG 19 2010

THE NWS STORM PREDICTION CENTER HAS ISSUED A SEVERE THUNDERSTORM WATCH FOR PORTIONS OF

CENTRAL NEBRASKA
SOUTHEASTERN SOUTH DAKOTA

EFFECTIVE THIS THURSDAY AFTERNOON AND EVENING FROM 530 PM UNTIL 1100 PM CDT.

HAIL TO 1.5 INCHES IN DIAMETER...THUNDERSTORM WIND GUSTS TO 80 MPH...AND DANGEROUS LIGHTNING ARE POSSIBLE IN THESE AREAS.

THE SEVERE THUNDERSTORM WATCH AREA IS APPROXIMATELY ALONG AND 60 STATUTE MILES EITHER SIDE OF A LINE FROM 65 MILES SOUTH SOUTHEAST OF NORTH PLATTE NEBRASKA TO 20 MILES NORTH OF HURON SOUTH DAKOTA. FOR A COMPLETE DEPICTION OF THE WATCH SEE THE ASSOCIATED WATCH OUTLINE UPDATE. (R04S64 WENS R04S)





Systems Flight



- **3 DoD civilians and 3 Active Duty**
 - 26 servers/194 workstations
 - 3 unclassified networks
- **3 major production systems**
 - Leading Environmental Analysis and Display System (LEADS)
 - Joint Environmental Toolkit (JET)
 - Advanced Weather Interactive Processing System (AWIPS)
- **#1 bandwidth user on Scott Air Force Base**
 - Total *exceeding* the use of the next 3 squadrons combined
 - Data stream averages 20 MB/min (21K files) during model runs
 - 786K files processed every 24 hours totaling 278 GBs
- **Vulnerability management**
 - Developed a process to increase cybersecurity in January 2019
 - Continued DISA “Excellent” rating for patch management
 - Headquarters Air Force benchmarked process across all OWSs
 - Load 1.5K patches yearly maintaining 99% server uptime rate



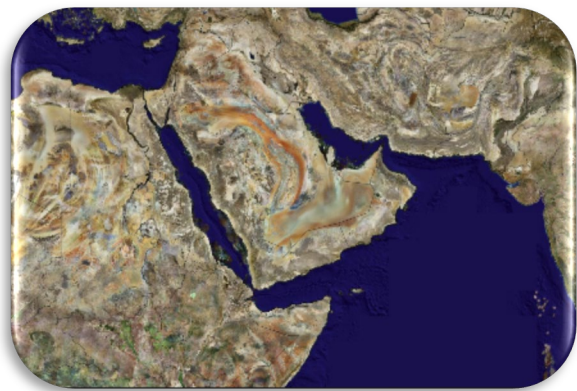


Deployment Training Program



Observations

Theater Familiarization

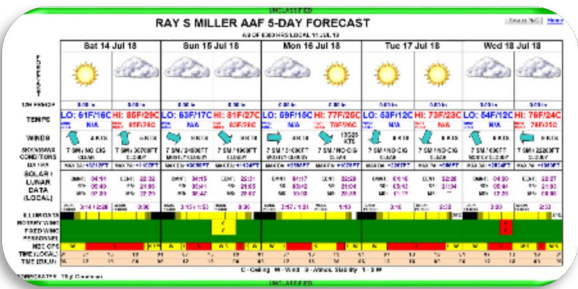


3 Base Operations Support (BOS) teams per month (9 Airmen)



Mission Execution Forecast

Limited Data Forecast





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Questions?



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