



# *53rd Weather Reconnaissance Squadron* ***“The Hurricane Hunters”***



403d Wing / Air Force Reserve Command



*Lt Col Kait Woods*  
*Aerial Weather Reconnaissance Officer*

*Integrity - Service - Excellence*



U.S. AIR FORCE

# ***53rd Weather Reconnaissance Squadron*** ***2016***



## Data and Equipment:

- High Density Observations
- Vortex Data Message
- Radiation:
  - SFMR
- Expendables:
  - Dropwindsonde
  - AXBT
  - APEX float
  - ADOS / mini mets
  - Solo S2-X

## Operations:

- AOR: 52.5°W to International Date line
- 3 Storms at one time / 20 crews (10 full time, 10 part-time)
- 6-hourly fixes per day when within 500nm of US
- 3-hourly fixes per day when within 300nm of US
- Two synoptic surveillance missions in 24-hours

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***I n t e g r i t y - S e r v i c e - E x c e l l e n c e***



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# ***53rd Weather Reconnaissance Squadron*** ***2030***



## Additional Data and Equipment:

- *Ability to transmit Radar imagery* (current requirement testing this storm season)

## Additional Requirements

- APAR or equivalent requirement
- HIRAD or equivalent requirement
- Coyote UAS or similar requirement

## Operations:

- No change to Operational NHC Requirements
- Better Utilization of C-130 Assets for research projects



# ***53rd Weather Reconnaissance Squadron*** ***Previous Research Missions***

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FASTEX: Out of St Johns Newfoundland	NWS
NORPEX: Alaska and West Coast	NWS
TCM92 and TCM93: Guam,	Navy
TCS08: Navy Typhoon project	Navy
ITOP: 2010, Impact of Typhoons on the Oceans in the Pacific, Guam	Navy
Atmospheric River: 2016. Hawaii and West Coast	NOAA
APEX Buoy Deployments: <i>Coming Soon</i>	Navy