

2018 NOAA/AOML/HRD Hurricane Field Program - IFEX

APPENDIX E Aircraft Instrumentation List

Table E-1. WP-3 (N42RF) instrumentation

Instrument	Parameter	PI	Group
Navigational			
INE1/2	lat, lon		AOC
GPS1/2	lat, lon		AOC
Honeywell HG9550 altimeter	Radar altitude		AOC
Standard Meteorological			
Buck1101c, Edgetech Vigilant, Maycom TDL	T_d		AOC
Rosemount temp	T, T'		AOC
Static pressure	p		AOC
Dynamic pressure	p'		AOC
Horizontal wind	V_h		AOC
Vertical wind	w		AOC
Infrared Radiation			
Side CO ₂ radiometer	T		AOC
AOC down radiometer	SST		AOC
Weather Radar			
LF radar (MMR?)	R	Gamache	AOC
TA Doppler radar	V, R	Gamache	AOC
Passive Microwave			
AOC SFMR/pod	V_{10}, Z	Goldstein	AOC
2nd SFMR (until 8/15-31)	V_{10}, Z		
Airborne Ocean Profiler			
AOC (Mark 10/21) receivers for AXBTs, AXCTDs, AXCPs	T, S, u, v	Smith (N. Shay)	AOC (UM)
Dropsonde Systems			
GPS AVAPS Dropsonde-8CH	V, T, RH, p vs z	Smith	AOC
Video Systems			
Down video	F(%), WD	Cione	AOC
Right Side, and nose	LCL		AOC
On board processing			
PC/LINUX workstation	Radar - Radar processing, Web, xchat, Python 2.7, Numpy, Matplotlib	Hill	AOC
PC/LINUX workstation	LPS - xchat, Web, AAMPS	Hill	AOC
PC/LINUX workstation	Dropsonde - ASPEN, Web, xchat	Hill	AOC
Real-time data communications systems	FL, radar data	Chang, Carswell	NESDIS, RSS
Active Microwave			
iWRAP (CSCAT, KSCAT) (from 8/15-31)	V_{10}, Z, V vs z	Chang	NESDIS
ProSensing WSRa (until 8/15-31)	HS, WPS, WDS	Fairall	ESRL, NHC
Cloud Microphysics/Sea Spray			
DMT CCP probe	Cloud particle spectra	R. Black	AOC
DMT PIP probe	Precipitation particle spectra	R. Black	AOC
DMT CAS probe	Aerosol/cloud droplet spectra	R. Black	AOC
DMT DAS	processor	R. Black	AOC
SEA probe	liquid water	R. Black	AOC, HRD
Weather Radar			
Doppler Wind Lidar (until 8/15-31)	V, R	Atlas	HRD
Compact rotational Raman lidar (CRL) (from 8/15-31)	T, water vapor	J. Zhang, Z. Wang	HRD, Wyoming
Turbulence Systems			
Friehe radome gust probe system	U', V', W', T'	J. Zhang, Drennan	HRD, UM
UAS			
Coyote (P-3 deployed) (2 available?)	V, T, RH, p vs z and IR SST	Cione, Fairall	HRD, ESRL

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APPENDIX E *Aircraft Instrumentation List*

Table E-2. G-IV (N49RF) instrumentation

Instrument	Parameter	PI	Group
Navigational			
INE1/2	lat, lon		AOC
GPS1/2	lat, lon		AOC
Honeywell HG9550 altimeter	Radar altitude		AOC
Standard Meteorological			
Buck1101c, Edgetech Vigilant, Maycom TDL	T_d		AOC
Rosemount temp	T, T'		AOC
Static pressure	p		AOC
Dynamic pressure	p'		AOC
Horizontal wind	V_h		AOC
Vertical wind	w		AOC
Weather Radar			
TA Doppler radar	V, R	Gamache	AOC
Passive Microwave			
SFMR	V_{10} , Z	Goldstein	AOC
Dropsonde Systems			
GPS AVAPS Dropsonde-8CH	V, T, RH, p vs z	Smith	AOC
On board processing			
Real-time data communications systems	FL, radar data	Chang, Carswell	AOC
PC/LINUX Computer	radar data, sondes	Goldstein	AOC