

## Radar Scientist

Flight ID 20160828I1 Storm 99L Radar Scientist ANNANE

The on-board radar scientist is responsible for data collection from all radar systems on his/her assigned aircraft. Detailed operational procedures and checklists are contained in the operator's manual. General supplementary procedures follow. (Check off or initial.)

### Preflight

1. Determine status of equipment and report results to lead project scientist (LPS).
2. Confirm mission and pattern selection from the LPS.
3. Select the operational mode for radar system(s) after consultation with the LPS.
4. Complete the appropriate preflight check list.

### In-Flight

1. Monitor the Tail Doppler Radar function regularly, using the realtime TDR display, to make sure the Doppler radar is scanning and working normally.
2. Maintain the Doppler Wind Parameter form as well as a written commentary in the Radar Event Log of event times, such as ending and restarting of radar recording. Also document any equipment problems or changes in R/T, INE, or signal status.

### Post flight

1. Complete the summary checklist and all other appropriate forms.
2. Download all Tail (TA) radar data files to thumb drive.
3. Brief the LPS on equipment status and turn in completed forms and thumb drives to the LPS.
4. Debrief at the base of operations.
5. Determine the status of future missions and notify HFP Director as to where you can be contacted.

**HRD Radar Scientist Check List**

Flight ID: 20162828I1

Aircraft Number: N43

Radar Scientist: ANDREW

Radar Technician: MASCARO

Component Systems Status (Up ↑, Down ↓, Not Available N/A, Not Used O):

Radar Computer UP

Lower Fuselage (LF) Antenna UP

Tail (TA) Antenna UP

**Radar Post flight Summary**

Significant down time:

Radar LF \_\_\_\_\_

Radar TA \_\_\_\_\_

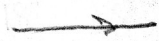

**Other Problems:**





# Doppler Wind parameters

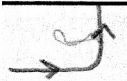
Flight ID: 20160828I1      Doppler flight-leg notes (for use in automatic QC and analysis)      Scientist: Reason

Leg Start Time	Leg End Time	Storm Motion		Center Fix			Inbound	Outbound	Max Radius (km)	Horz. Res (km)	Sent ?
				Time	Latitude	Longitude					
HHMMSS	HHMMSS	Degrees	Knots	HHMMSS	(Deg/Min)	(Deg/Min)	track	track	Default = 245	Default = 5	(Y/N)
175020 W→E	183135	295	8	181000	24.0	81.8	90	90	245	5	Y
											
183238 NE→SW	191123	295	8	185658	24.0	81.8	225	225	245	5	Y
	191700										
193342	194214	295	8	193400	24.0	81.8	35	35	245	5	Y
	195114										
195232	200734	295	8	200100	24.0	81.8	125	125	245	5	Y
	201010										
201109	202258	295	8	201700	24.0	81.8			245	5	Y
202318	204618	295	8	203700	24.0	81.8	215	215	245	5	Y

205056

# Doppler Wind parameters

Flight ID: 20160828 II cont Doppler flight-leg notes (for use in automatic QC and analysis) Scientist: Reason

Leg Start Time	Leg End Time	Storm Motion		Center Fix			Inbound track	Outbound track	Max Radius (km)	Horz. Res (km)	Sent ?
				Time	Latitude	Longitude					
HHMMSS	HHMMSS	Degrees	Knots	HHMMSS	(Deg/Min)	(Deg/Min)			Default = 245	Default = 5	(Y/N)
7) <u>205155</u>	<u>212208</u>	<u>295</u>	<u>8</u>	<u>205700</u>	<u>24.0</u>	<u>81.8</u>			<u>245</u>	<u>5</u>	<u>Y</u>
											
8) <u>212254</u>		<u>295</u>	<u>8</u>	<u>213800</u>	<u>24.0</u>	<u>81.8</u>			<u>245</u>	<u>5</u>	<u>Y</u>
<u>213428</u>	<u>214436</u>										
<u>215221</u>									<u>245</u>	<u>5</u>	<u>Y</u>
9) <u>215246</u>	<u>222622</u>	<u>295</u>	<u>8</u>	<u>220900</u>	<u>24.0</u>	<u>81.8</u>					
