

Radar Scientist

Flight ID 2014082411 Storm TID #4 Radar Scientist Jun Zhang

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: 20140824H1

Aircraft Number: 42

Radar Scientist: Jun Zhang

Radar Technician: Terry Lyuh

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

Radar Computer _____

Lower Fuselage (LF) Antenna _____

Tail (TA) Antenna _____

Time correction between LF radar time and digital time: ____

TA Radar Parameters:

(Single/Dual) PRF _____ F/AST (Y/N) Rotation Rate _____ RPM

Sweeps/File _____ Record 2nd Trip (Y/N) (Circle appropriate status)

Radar Post flight Summary

Significant down time:

Radar LF _____

Radar TA _____

Other Problems:

HRD Radar Event Log

Flight ID _____ Aircraft _____
 Radar Scientist _____ Radar Technician _____

(Include down time and times of when recording ended and was restarted)

Time (HHMMSS)	Event
0804	75 42 22 54 IP
0819	74 35 22 56 midpoint drop
0838	trying to find a center
0843	22 47 72 54 center drop
0859	drop midpoint
0854	seeing radar reflectivity echo going up to 12 km going through the convective region
9:11	Sonde end point or trying find the high winds released within convection
	- ground person couldn't get on Xchat likely because the ftp server is off, the primary ftp
0936	Sonde - end of downwind leg domain size 300 km
0953	Sonde second IX - radar second figures ↓ midpoint drop
10:03	center 22 54 72 38 drop - SWP center
1019	Sonde midpoint
1038	drops - end of cross section -
11:01	drop - end of down wind leg
11:17	Sonde midpoint going through convection - convective area
11:30	Sonde - center - find high wind

11:50 - sonde - midpoint

12:02 - sonde - 24 57, 73 46 -

Doppler flight-leg notes

(for use in automatic QC and analysis)

Scientist:

[illegible]