Radar Scientist

Flight ID _20170422 H1_   Storm _Mayta_

Radar Scientist _Jim Kelley_   Radar Technician _Mike Maiano_

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 real-time TA display, to make sure the Doppler radar is scanning and working normally.

_____ 2.   Once at the IP, request that the tilt be adjusted to remove sea clutter.

_✓_ 3.   Request that the LF radar is set to full scan (non-sector mode) for first Figure 4.

_✓_ 4.   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 Belly (LF) scan radar data files to thumb drive.

_✓_ 3.   Download all tar'd (TA) radar data files to thumb drive.

_✓_ 4.   Brief the LPS on equipment status and turn in completed forms and thumb drives to the LPS.

_✓_ 5.   Debrief at the base of operations.

_✓_ 6.   Determine the status of future missions and notify HFP Director as to where you can be contacted.

HRD Radar Scientist Check List

Flight ID: _____
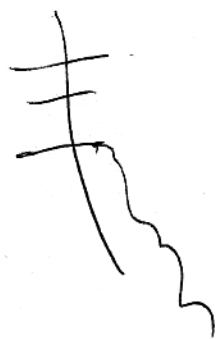
Aircraft Number: _____

Radar Scientist: _____

Radar Technician: _____

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

Radar Computer _____

Lower Fuselage (LF) Antenna _____

Tail (TA) Antenna _____

Radar Post flight Summary

Significant down time:

    Radar LF _____

    Radar TA _____

Other Problems:

4500 — 1.5 km

4000 — 8 min

3000 — 8 min

2000 — 8 min

1??? — 8 min

1000 — 8 min

800 — 10 min

inflow modules

DM pointing down

HRD Radar Event Log

Flight ID __20170923H1__ Storm __Maria__

Radar Scientist __Jim Kelly__ Radar Technician __Mike__

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

Time (HHMMSS)	Event
	TDR 2 analyses sent to Emc

Doppler Wind parameters

Flight ID: 20170923 H1		Doppler flight-leg notes (for use in automatic QC and analysis)						Scientist: Jun/Kelly		

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)
2207	2237	345	8	2221	26/23	72/23	180	180			
2255	2329	345	8	2311	26/28	72/27	270	270			