

Radar Scientist

Flight ID 20140703I Storm Arthur 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: 2014070321

Aircraft Number: 43

Radar Scientist: Jun Zhang

Radar Technician: Dana

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:

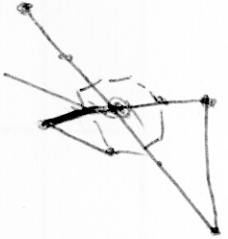
Radar LF _____

Radar TA _____

Other Problems:



74 mb
29 Sept
90



Joseph Patton

HRD Radar Event Log

Flight ID _____ Aircraft P3-43
 Radar Scientist _____ Radar Technician _____

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

Time (HHMMSS)	Lat	Lon	Event
202035	33°22.7'N	78°55.1'W	IP
203148	33°21.50'	77°58.50'	CEM
205230	33°21.3'	76°21.6'	TURN
211150	33°52.3'	77°51.5'	EP
211150	33°52.3'	77°51.5'	IP
211820	33°26.2'	77°50.6'	CEM
			TURN
			EP
			1
			2
			3
			4
			5
			6
			7
			8
			EP
			CEM
			TURN
			EP
			EP
			CEM
			TURN
			EP

1st Leg
 211150
 33 52.3
 77 51.5
 2nd Leg

Circumnavigation
 5000 ft radius
 25 min

2nd Fly Four
 1st Leg
 2nd Leg

977 mb! WS: 125 kts

Doppler Wind parameters

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

