Radar Scientist

Flight ID 110723I1   **Storm Name** TS Dora

Radar Scientist P. Leighton   **Radar Technician** Joe Bosco

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 the status of equipment and report results to the 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 calibrations and check lists as specified in the radar operator's manual.
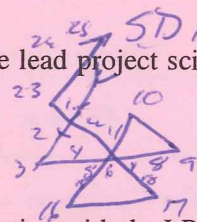
prefer 2100 but get 1600 w/ Frank

In-Flight

_____ 1. Remind the AOC data technician to start the radar capture files.

_____ 2. Operate the system(s) as specified in the operator's manual and as directed by the LPS or as required for aircraft safety as determined by the AOC flight director or aircraft commander.

_____ 3. Maintain the Radar Scientist's form as well as a written commentary in the radar logbook of tape and event times, such as the start and end times of F/AST legs. Also document any equipment problems or changes in R/T, INE, or signal status.

Post flight

_____ 1. Complete the summary checklists and all other appropriate forms.

_____ 2. Obtain from the AOC data technician all radar tapes and give him a thumbnail drive to download the radar capture files.

waiting for end of exp.

_____ 3. Brief the LPS on equipment status and turn in completed forms, the thumbnail drive, and all radar tapes to the LPS. [**Note**: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]

_____ 4. Debrief at the base of operations.

_____ 5. Determine the status of future missions and notify MGOC as to where you can be contacted.

HRD Radar Scientist Check List

Flight ID: __110723I1__

Radar Operators: __P. Leighton__

Radar Technician: __Joe Bosco__

Number of DAT tapes on board: __10 +__

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

Device	Pre-flight	In-flight	Post-flight	R/T Serial #
Radar Computer	↑	↑		
DAT drives	↑	↑		
Lower Fuselage antenna	↑	↑		102
Tail Antenna	↑	↑		201

Time correction between radar time and digital time: _____

Radar Post flight Summary

Number of DAT tapes used: _____

Significant down time:

Radar Computer _____   Radar LF _____

DAT drives _____   Radar TA _____

Other Problems:

02 04 E

HRD Radar Event Log

Flight ID 110723I1   Storm Name TS. Dora   Sheet 1 of ___
Radar Scientist P. Leighton   Radar Technician Joe Bosco
LF RPM 2   TA RPM 10

(Include start and end times of recording as well as times of F/AST legs and any changes of radar equipment status)

Tape #	F/AST On?	Event Time (HHMMSS)	Event
		171700	Start Data Recording

HRD Radar Problem Log

Flight ID 110723H   Storm Name _T.S. Dora_   Sheet _1_ of ___
Radar Scientist _P. Leighton_   Radar Technician _Joe Bosco_

(Include times of when recording ended and was restarted)

Tape #	Time (HHMMSS)	Problem
		Not clearing error messages
		or earlier
	2145	Radar Down was LF
		but couldn't boot to six
	2259	Radar Back up

FDir. Ian Sears   MID: 0204E DORA

Doppler Wind parameters
Doppler flight-leg notes (for use in automatic QC and analysis)

FLIGHT ID: 110723I1   T.S. Dora   Scientist: P. Leighton

Leg Start Time	Leg End Time	Storm Motion		Center Fix			Max Radius (km)	Horz. Res (km)	Inbound track	Outbound track	ja?	Angle check?	Sent?
				Time	Latitude	Longitude							
HHMMSS	HHMMSS	Degrees	Knots	HHMMSS	(Deg/Min)	(Deg/Min)	49/98/147/196	1/2/3/4	Azimuth (deg)	Azimuth (deg)	H/TS	(Y/N)	(Y/N)
165930	Take off	~~305~~ ~~315~~	8	~~15~~	21.3	111.9							
19~~30~~00 20~~20~~ ~~1955~~25	2020	305	8	1953²⁵ ᶦ⁶	21.³⁶ 21.6	112.³⁵ 112.5⁴			90	90			
End Dwl	2043												
204600	2140	312	10.5	21¹² 12	21.75 ~~21~~	112.74			210	210			
End Dwl	2200 2241												

371   SST 24.5 2202

2241