19871010HI_RADAR

E.5 Radar/Airborne Doppler Radar Scientist (On-board)

The on-board Radar Scientist (RS) 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 supplied to each operator. General supplementary procedures follow. (Check off and initial.)

E.5.1 Preflight

✓ 1. Determine the status of equipment and report results to the on-board Lead Project Scientist (LPS).

✓ 2. Confirm mission and pattern selection from the on-board LPS.

✓ 3. Select the operational mode for radar system(s) after consultation with the HRD/RS and the on-board LPS.

✓ 4. Complete the appropriate preflight calibrations and checklists as specified in the radar operator's manual.

E.5.2 In-Flight

✓ 1. Operate the system(s) as specified in the operator's manual and as directed by the HRD/RS unless superseded by directions from the on-board LPS or as required for aircraft safety as determined by the OAO/Flight Director or Aircraft Commander.

E.5.3 Postflight

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

✓ 2. Brief the on-board LPS on equipment status and turn in completed forms to the LPS.

✓ 3. Hand-carry all radar tapes and arrange delivery as follows:

   a. Outside of Miami - to the HRD operations center (FGOC).
   b. In Miami - to MGOC or to AOML/HRD. [Note: all data removed from the aircraft by HRD personnel should be cleared with the OAO/Flight Director.]

✓ 4. Debrief at the appropriate operations center (FGOC or MGOC).

✓ 5. Determine the status of future missions and notify the appropriate operations center (FGOC or MGOC) as to where you can be contacted.

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Radar Scientist Checklist

Flight ID 871010H

Aircraft # NOAA42

Operators BURPEE WILLOUGHBY

Radar Tech JARYI

Number of digital magnetic tapes on-board _____

Number of tape labels on-board _____

Component systems up and checked:

RDSC ✓ DSC1 ✓

Computer ✓ DSC2 ✓

DMTR1 ✓ DMTR2 ✓

LF _____ R/T# SN-102M

TA _____ R/T# SN-104

Time correction between radar time and digital time 0 seconds

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Radar Postflight Summary

Number of digital tapes used DMTR 1 5

DMTR 2 4

Significant recorder downtime:

DMTR 1 none Radar LF _____

DMTR 2 none Radar TA _____

Other problems:

200149-205610 - radar data system down - CPU problem - Al Jarvi replaced board

0015 LF R/T failed must be replaced before the next flight

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HRD RADAR TAPE LOG

TROPICAL STORM FLOYD

FLIGHT 871010H AIRCRAFT NOAA42 OPERATOR BURPEE WILLOUGHBY SHEET 1 OF

Tape #	Time On	Time Off	Source Radar TA	Source Radar LF	Comments
1/1	192620	200149	✓	✓	every other sweep of TA and LF for the whole flight, radar system down 200149, tape 1/1 continued to turn on the drive after 200149,
2/1	205610	2134	✓	✓	tilt angle ~ -0.5°, flight-level pressure ~ 463 mb
1/2	2134	221240	✓	✓	
2/2	221240	225035	✓	✓	
1/3	225035	2330	✓	✓	
2/3	2330	000700	✓	✓	
1/4	000700	0109			LF not working 0015 stopped recording 001730
2/4	0110	~0325			LF RT inoperative
1/5	~0225				resumed recording 002330
					LF recorded by mistake until 0035 after that TA only
2/4	0109	0225	✓		LF RT turned but still
1/5	0225	0340	✓		inoperative
	end of recording				

HRD RADAR LOG

OPERATOR_____

SHEET____ OF ____

RADAR DOWN-TIME LOG

ITEM	TIME DOWN	TIME UP	PROBLEM

ITEM LIST: VTR, DMTR1, DMTR2, COMP, ROSC, LF, NO, TA, DSC1, DSC2