19920929I1-RADAR Sep 29 1992

E.5 Doppler Radar Scientist (On-Board)

The on-board Doppler radar scientist (DRS) is responsible for data collection from all radar systems on his/her assigned aircraft. Detailed operational procedures and check lists 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 on-board LPS.

____ 4. Complete the appropriate preflight calibrations and check lists 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 on-board LPS or as required for aircraft safety as determined by the AOC flight director or aircraft commander.

E.5.3 Postflight

____ 1. Complete the summary check lists and all other appropriate check lists 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 AOC 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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Doppler Radar Scientist Check List

Flight ID 920929I1

Aircraft # 43

Operators M. Black S. Houston

Radar Tech. Jim Roles, Terry Lynch

Number of digital magnetic tapes on board Several Boxes

Number of tape labels on board Enough

Component systems up and checked:

MARS	✓	Computer	✓
DMTR1	✓	DMTR2	✓
LF	✓	R/T#	102
TA	✓	R/T#	~~102~~ 201

Time correction between radar time and digital time _____

Radar Postflight Summary

Number of digital tapes used: DMTR1 5

DMTR2 5

Significant down time:

DMTR 1 _____ Radar LF ~~S~~

DMTR 2 _____ Radar TA _____

Other problems:

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HRD Radar Tape Log

Flight 920929I Aircraft 43 Operator M. Black Sheet 1 of ___
S. Houston

Tape #	Time On (HHMMSS)	Time Off (HHMMSS)	Comments
D1T1	191800	200630	1930 eye visible to SE, 2007 at IP north of S good bright band
D2T1	200630	203720	hdg to S, eye 2018, FAST 203154 2035 FAST downwind leg —
D1T2	203720	210700	FAST — 2052 hdg to eye east of S, E-O FAST @ Approx 2050
D2T2	210700	212000	HEADING WEST TOWARD EYE PROBLEMS W/TAPE D2, WAITING OVER (SEE PROBLEM SHEET)
D1T3	212000	214800	2128 = FAST, 2138 = NON-FAST, HEAD NE TOWARD EYE
D2T3	214800	222157	STARTED, APPEARS OK 2201 in band where we will do elective, 2220 - starting elect
D1T4	222157	225747	beginning of elect. band NW of S 2234 in eye, 2252 climb
D2T4	225747	232935	hdg to S, E of eye,
D1T5	232935	000020	NE of eye, eye 7200 meters
D2T5	000020	003000	high altitude, 7700 m'

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HRD Radar Down-Time Log

Operator M. Black Sheet 1 of 1

Item	Time Down (HHMMSS)	Time Up (HHMMSS)	Problem
~~D1T1~~			
D2T2	210700	212000	Bottom tape Drive Not WORKING Started Tape Drive #1, WILL WAIT
			SAVED TAPE IN CASE SOME DATA ON IT
D2T3	NO PROBLEM THIS 2148	TIME, ALL APPEARS OK.!	
D1T4	2228	2230	Not updating, stop + start recording.

Item List: DMTR1, DMTR2, COMP, MARS, LF, TA.