SEP 25 1994

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 HRD/DRS and 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 Operate the system(s) as specified in the operator's manual and as directed by the HRD/DRS, unless superseded by directions from the on-board LPS or as required for aircraft safety as determined by the OAO flight director or aircraft commander.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 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 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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Doppler Radar Scientist Check List

Flight ID 940925I

Aircraft # N431F

Operators WILLOUGHBY

Radar Tech. LYNCH

Number of digital magnetic tapes on board PLENTY

Number of tape labels on board do

Component systems up and checked:

MARS	_____	Computer	_____
DMTR1	_____	DMTR2	_____
LF	_____	R/T#	_____
TA	_____	R/T#	_____

Time correction between radar time and digital time _____

Radar Postflight Summary

Number of digital tapes used: DMTR1 _____

DMTR2 _____

Significant recorder down time:

DMTR 1	_____	Radar LF	_____
DMTR 2	_____	Radar TA	_____

Other problems:

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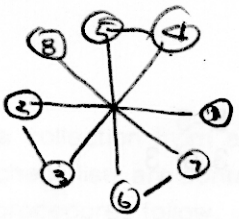
HRD Radar Tape Log



Flight 940925I Aircraft N431F Operator WILLOUGHBY Sheet 1 of ___

Tape #	Time On	Time Off	Comments	
1	25/1937	2219		
	1940		OLIVIA VISIBLE AT EXTREME RANGE CONCENTRIC EYEWALL? FAST ON 10 RPM ON TA	
	1943	1943	LF + REWIND TAPE 1	
1	1953		RECORDING RESTARTED ON TAPE 1	
	1955 30		FAST ON	
	2023		IP, FAST OFF, W → 6	(1)
	2032		18-58 120-03 6 TRAK W	
	2048		TURN SE FAST ON	(2)
	2054		FAST OFF TRAK NE → 6	(3)
	2106		925 19-02 120-04 6 TRAK NE	
	2118		FAST ON TRAK NW	(4)
	2127		FAST OFF TRAK S → 6	(5)
	2138		19-05 120-02 6 TRAK S	
	2150		FAST ON TRAK NE	(6)
	2158		FAST OFF TRAK NW → 6	(7)
	2211		935 19-13 120-05 6 TRAK NW	
	2219		RADAR ↓	
2	2235	260200	RADAR ↑ RECORDING	
	2237		TRAK E → 6	(8)
	2249		19-16 119-58 6 TRAK E	
	2300		FAST ON TRAK NW	(1)
	2308		FAST OFF TRACKING SW → 6	(4)
	2317		19-19 119-59 6	
	2328		FAST ON	

19 10
120 10

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HRD Radar Tape Log

Flight 950925I Aircraft N431RF Operator HILLSBOROUGH Sheet 2 of 2

Tape #	Time On (HHMMSS)	Time Off (HHMMSS)	Comments
2	2328		FAST ON TILT MAY HAVE BEEN 10°
	2337-35		TRAK N → G (6)
	2349		1924 11956 G
	0011		TURN 180 TRAK S → G (5)
	0012		19-28 119-58 G TRAK E → P.V.
	0018		START CLIMB E OF G
	0058		RECORDING OFF BY ACCIDENT
	0113		RECORDING BACK ON LF ONLY
	0200		RECORDING OFF

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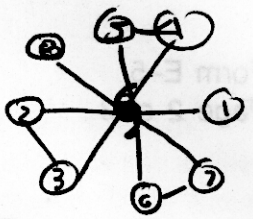

HRD Radar Down-Time Log

Operator WILLOUGHBY Sheet 2 of 2

Item	Time Down	Time Up	Problem
RADAR	2219	2235	WOULD NOT RESET
DMTR1	260058	260113	OPERATOR ERROR

Item List: DMTR1, DMTR2, COMP, RDSC, LF, TA, DSC1, DSC2.