1988090811_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 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.

MAND

Determine the status of equipment and report results to the on-board lead project scientist (LPS).

- MMD 2. Confirm mission and pattern selection from the on-board LPS.
- m
- 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 check lists as specified in the radar operator's manual.

E.5.2 In-Flight

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 Operate the system(s) as specified in the operator's manual and as directed by the HRD/RS, unless superseded by directions from the on-board LPS or as required for aircraft safety as determined by the OAO flight director or aircraft commander.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

. 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 Check List

	Flight ID Aircraft # Operators Radar Tech.	 Marli JARVI	108I1 3RF Darso /SCHRICK	F YER_	_		
Number	of digital magn	netic tapes on bo	ard	10			
Number	of tape labels	on board					
Compor	nent systems up	and checked:		,			
	RDSC		DSC1		-		
	Computer		DSC2		-		
	DMTR1	<u> </u>	DMTR2				
	LF		R/T#		_		
	ТА		R/T#	-lewy's	hew Poppler R/T		
Time correction between radar time and digital time							
Radar Postflight Summary							
Number	of digital tapes	s used:	DMTR 1 DMTR 2	4	_		
Significa	ant recorder do	wn time:					
	DMTR 1 DMTR 2	0	Radar LF Radar TA	0	_		
Other p	oroblems: Sow Terr	re dr. play . sync,	genera a loose	ta proble switch	us (no effect to data og tape		

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HRD Doppler Radar Tape Log

MARKS/DORST Sheet_1 of ____ Flight 88090871 Aircraft 43.RF Operator. Variable range spacing, Source* on the take Tape Comments** (#pulses, scan rate, range) Number Time On | Time Off V H S labot A dBZ 1943 - 1950 beautiful TAc 194000 32 203518 wid 2\$27 some minor problems with 214153 203518 RAT T.S fixed it up. TA 230957 1-2 214153 X 230957 002710 2-2 X Sync generator or something Squivelly - screwed up kkplay only. loose switch on syn generator X 00271010100 1-3 DO4036 great TA no tikel ar G X 2-3 40110 0213 in o 02552 0213 4 X LEAVING & BAND TO N 4EADING EAST 2 a tape stopped recording 2 250 km from

*Vertical, horizontal, or full sweep scan.

**Number of pulses averaged (32, 64, 128, 256); scan rate (min, max); range resolution (150 m, 300 m).

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	HRD	Radar	Down-Time	Log
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Ope	erator		Sheet of	
Item	Time Down	Time Up	Problem	
TA		2123	OUT FOR A WHILE	
ON BOARD	2227	0001	JITTERS / LOOSE SWITCH	
		1		

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