19910804H1_ RADAR

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.

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- 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.

Form E-5 Page 1 of 3

Doppler Radar Scientist Check List				
Flight ID91080Aircraft #N 42 ROperatorsGAMACHERadar Tech.PRAD	4H1 Contract DORST AS			
Number of digital magnetic tapes on board Number of tape labels on board Component systems up and checked:	26 O (using OAO (abels)			
MARS DMTR1 LF TA	Computer DMTR2 R/T# <u>Same</u> R/T# <u>Same</u>			
Time correction between radar time and digital time				
Number of digital tapes used:	DMTR1 <u>6</u> DMTR2 <u>5</u>			
Significant down time:				
DMTR 1 DMTR 2	Radar LF Radar TA <i>Hmu</i>			
Other problems: SMSTEM DOWN 1	Howr			

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Form E-5 Page 3 of 3

HRD Radar Down-Time Log

Operator GAMACHE DORST Sheet 1 of 1

Item	Time Down (HHMMSS)	Time Up (HHMMSS)	Problem
LF R/T		6	intermittant radials dropont
DISPLAY	045500	0554	Screens flaky
TA	10 52 30	1102	TAIL ANT. CONE BESERK
	24		
	1. 1. 1. 1. 1.	Les States	

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

Form E-5 Page 2 of 3

HRD Radar Tape Log

Flight 910804HlAircraft 42KF Operator DORST Sheet of 1

Tape #	Time On (HHMMSS)	Time Off (HHMMSS)	Comments
PITI	032645	040722	
D2T1	040722	044639	ra la
DIT2	044639	045800	DATA SHSTEM DOWN
D2T2	055400	063552	SYSTEM BACK UP
DITS	063352	070929	and and the second s
D273	070929	075530	
DITY	075530	083830	
D274	083830	093520	
DITS	093520	101037	
DZTS	10 1037	10 4432	
DITC	104432	110426	TIME GAP 1052-1102 Z
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	and the second		
1	1. 1. 1. 1.		
32.7	A. A. Sala		

03267-Start recording 03397 - level at SOOmb 04327 begin decent to 700 mb 04397 at 700 mb DOR trace the radar Ning plays went (laky Gunpy Carlos termitant) ish 04582-1-)ata reend STOPPED 0554 Z - After futzing book record in decent to ~ 1000' - beg 300 m at - det mite Swirl in oches 0844 winding 10:012 - Start plints to 700,mb 700mb, make pass 7- A8 121 Z - Leist pass flure, prominent 1 02- TAI antenna began TAIL Scan errat, cally, restorted 11:03:34 - Begin climb 1:19 - Land

910804 HI JOP5/2 LPS-Dr K Emperiel, Dr PBlack Radar Dr J GAMACHE N DOR3T El Lete Grande A