19910808HI-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. 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 ID 910808HI

Aircraft # N42RF

Operators CAMACHE / DORST

Radar Tech. LEYVA

Number of digital magnetic tapes on board 16

Number of tape labels on board 20

Component systems up and checked:

MARS	✓	Computer	✓
DMTR1	✓	DMTR2	✓
LF	✓	R/T#	Same
TA	✓	R/T#	Same

Time correction between radar time and digital time +1 Sec

Radar Postflight Summary

Number of digital tapes used:

DMTR1 4

DMTR2 4

Significant down time:

DMTR 1	—	Radar LF	—
DMTR 2	—	Radar TA	—

Other problems:

Form E-5
Page 2 of 3

HRD Radar Tape Log

Flight 910808H1 Aircraft N42RF Operator CAMACHE DORST Sheet 1 of 1

Tape #	Time On (HHMMSS)	Time Off (HHMMSS)	Comments
D1T1	202530	214240	
D2T1	214240	222440	
D1T2	222440	231313	
D2T2	231313	235903	
D1T3	235903	005710	
D2T3	005710	014501	
D1T4	014501	024650	
D2T4	024650	033655	

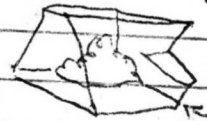
Form E-5
Page 3 of 3

HRD Radar Down-Time Log

Operator GAMACHE/DORST Sheet 1 of 1

Item	Time Down (HHMMSS)	Time Up (HHMMSS)	Problem

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

910808H1 10P6/2 TW#27
LPS – Dr K Emanuel, Dr P Black
Radar – Dr J Gamache, N Dorst
T/O ACA 1915Z LAND-ACA Z
1940Z - Electra alongside begin Interc.
1950Z - Start stairstep decent Intercomp.
2020Z - Intercomparison ascr climb 850mb
2030Z - begin F/AST sector mode on right hand side to "box" a Cb.
2052Z - "box" completed, no 1 corners & turns on the legs. Start 2nd box to catch one screwy box

new growth on N side of cell.
2100Z - Stop second "box" turn W. to begin "racetrack". 2102Z - back to continuous F/AST mode.
2148Z - Switch out of F/AST mode
2152Z - back to F/AST mode
2156Z - begin decent to 1000' 2159Z - there
01 59 07Z - climb for 1850 mB
02:25Z - found center 14°26N 106°21W

0242Z - Climb for home.
0336Z - Stop recording.