19870929HL_RADAR

SEP 29 1987

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 checklists 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/RS and the on-board LPS.

_____ 4. Complete the appropriate preflight calibrations and checklists 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 Operate the system(s) as specified in the operator's manual and as directed by the HRD/RS unless superseded by directions from the on-board LPS or as required for aircraft safety as determined by the OAO/Flight Director or Aircraft Commander.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 checklists and all other appropriate checklists 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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Radar Scientist Checklist

SEP 2 9 1987

Flight ID 870929H1

Aircraft # 42

Operators DODGE

Radar Tech JARVI, HANCHEET

Number of digital magnetic tapes on-board 20

Number of tape labels on-board plenty

Component systems up and checked:

RDSC ✓ DSC1 ✓

Computer ✓ DSC2 ✓

DMTR1 ✓ DMTR2 ✓

Every TA
Every other LF
both antennas
max ROT

LF _____ R/T# 102M

TA _____ R/T# 104

Time correction between radar time and digital time _____

radar time ~2 seconds fast

Radar Postflight Summary

Number of digital tapes used DMTR 1 4

DMTR 2 4

Significant recorder downtime:

DMTR 1 none Radar LF none

DMTR 2 none Radar TA none

Other problems:

None - TA display looks a little SPOKEY 

Also - what is ring about 2 nmi around TA display?
Side lobes?

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HRD RADAR TAPE LOG

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FLIGHT 87092941 AIRCRAFT 42 OPERATOR Dodge SHEET 1 OF 1

Tape #	Time On	Time Off	Source Radar TA	Source Radar LF	Comments
1-1	1752	1818	✓	✓	TA every sweep LF every other
2-1	1818	1844	✓	✓	
1-2	1844	1910	✓	✓	
2-1	1910	1935	✓	✓	
1-3	1935	2001	✓	✓	
2-3	2001	2026	✓	✓	
1-4	2026	2051	✓	✓	
2-4	2051	2107	✓	✓	LAST TAPE

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OPERATOR Dodge

SHEET 1 OF 1

HRD RADAR LOG

RADAR DOWN-TIME LOG

ITEM	TIME DOWN	TIME UP	PROBLEM

ITEM LIST: VTR, DMTR1, DMTR2, COMP, ROSC, LF, NO, TA, DSC1, DSC2