19940822 HI - RADAR

940822 HI

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 Operate the system(s) as specified in the operator's manual and as directed by the HRD/DRS, unless superseded by directions from the on-board LPS or as required for aircraft safety as determined by the OAO flight director or aircraft commander.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 940822H1

Aircraft # N42RF

Operators MARKS / DORST

Radar Tech. ROLES

Number of digital magnetic tapes on board 6+

Number of tape labels on board ?

Component systems up and checked:

MARS	✓	Computer	HURR1
DMTR1	✓	DMTR2	—
LF	✓	R/T#	122
TA	✓	R/T#	101/102

Time correction between radar time and digital time ~1 sec

Radar Postflight Summary

Number of digital tapes used:

DMTR1 1

DMTR2 —

Significant recorder down time:

DMTR 1	—	Radar LF	—
DMTR 2	—	Radar TA	17 min.

Other problems: A restart of TA & LF at ~17Z

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HRD Radar Tape Log

Flight 940822H Aircraft 42 Operator DORST Sheet 1 of 1

Tape #	Time On	Time Off	Comments
D1/T1	160125	183800	Picking up dust? on TA

HRD Radar Down-Time Log

Operator _____ Sheet ___ of ___

Item	Time Down	Time Up	Problem
R/T 101	~16 23 Z	164030Z	Switched to R/T 102

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

1993

1994

1701 Z - TA, LF reset.
1717 Z - ODW launched
1736 Z - ODW splashdown
1838 Z - Stopped recording radar
offeem of Andros Island
1848 Z - Radar System Shut off.

1994 HURRICANE SEASON —·—

940822H1 - Flying ferry mission thru Saharan Dust Air Mass.
LPS - Dr F Marks, Seascatt. Dr P Black, IVAN Popstefanija, ODW James Franklin, radar, SFMR N. Dorst
T/O 15:35 Z San Juan, PR
LAND ~19:55 Z Opa Locka, FL
1550 Z - J. Roles starts radar system, allowing it to warm up
1601 Z - Started recording LF/TA on Drive #1 Painting PR
1604 Z - End roll #1
160626 Z - Start roll #2
161106 Z - End roll #2
161335 Z - Start double roll
161925 Z - End " "
~1623 Z - TA radar stopped XMTing so J Roles & Co switch RT 101 out to RT 102.
163833 Z - Turn toward Cb
164030 Z - TA XMTing again
164120 Z - Punch clouds
1643 Z - Punch clouds
164555 Z - Begin decent sounding
165530 Z - Begin ascent sounding
1659 Z - TA restarted

1994