19890905HI - 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 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 Operate the system(s) as specified in the operator's manual and as directed by the HRD/DRS, unless superseded by directions from the on-board LPS or as required for aircraft safety as determined by the OAO flight director or aircraft commander.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.

Form E-5
Page 1 of 3

Doppler Radar Scientist Check List

Flight ID 890905H1

Aircraft # N42RF

Operators DORST

Radar Tech. LYNCH

Number of digital magnetic tapes on board 20

Number of tape labels on board +

Component systems up and checked:

MARS	✓	Computer	✓
DMTR1	✓	DMTR2	✓
LF	✓	R/T#	103M
TA	✓	R/T#	42671 GPN

Time correction between radar time and digital time _____

Radar Postflight Summary

Number of digital tapes used: DMTR1 1

DMTR2 0

Significant recorder down time:

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

Other problems: Everything A-OK, just no data

Form E-5
Page 2 of 3

HRD Radar Tape Log

Flight 890905H Aircraft N42RF Operator ~~DERST~~ Sheet 1 of 1

Tape #	Time On	Time Off	Comments
D1/T1	18:28:15	19:36:30	"Clear" air; Pete Black Special Request
D2/T1			

HRD Radar Down-Time Log

Operator DORST Sheet 1 of 1

Item	Time Down	Time Up	Problem
System	19:36	19:50	? DIDN'T AFFECT DATA GATHERING

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

890905H1 - Synoptic Flow around Hurricane Gabrielle.
LPS - Dr B Burpee; CDW Sci Dr P Black James Franklin; RADAR - N Dodge FD - Phil Bogert. 2 NWS guests.
T/O SJU 17:15Z
LAND SJU 23:23Z

1748 - Word just came down that 43 blew an engine & is returning to MIA. James doesn't want to run a full Synoptic flow so we have a truncated 6hr flight. No return on LF, yet.

18:26 - No large scale echos are in sight. Dr Black wants 1 tape's worth of Doppler data to show Dr Marks the slew in ground speed. Dr Burpee sez OK, so will record D1/T1 now.
19:36 - Stopped recording. This is a real "apple pie" flight. Everyone very relaxed & our guests are think it's always like this.

23:23 - Land San Juan.