021002I LHI

E.5 Radar Scientist

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.

____ 2. Maintain a written commentary in the radar logbook of tape and event times, such as the start and end times of F/AST legs. Also document any equipment problems or changes in R/T, INE, or signal status.

E.5.3 Post flight

____ 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 LPS.
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 MGOC or the hotel during a deployment.

____ 5. Determine the status of future missions and notify MGOC as to where you can be contacted.

HRD Radar Scientist Check List

Flight ID: 021002I LHI

Aircraft Number: 43

Doppler Radar Operators: ~~RM~~ Black

Radar Technician: Terry

Number of digital magnetic tapes on board: 20

Component Systems Status:

MARS _____ Computer _____

DAT1 _____ DAT2 _____

LF _____ R/T Serial # _____

TA _____ R/T Serial # _____

Time correction between radar time and digital time: _____

Radar Post flight Summary

Number of digital tapes used: DAT1 _____

DAT2 _____

Significant down time:

DAT1 _____ Radar LF _____

DAT2 _____ Radar TA _____

Other Problems:

4, 9

3.9

Form E-5
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HRD Radar Tape Log

Flight 021002F **Aircraft** 43 **Operator** M. Black **Sheet** 1 **of** ____

LF RPM 2 TA RPM 10

(Include start and end times of DATs, as well as times of F/AST legs and any changes of radar equipment status)

Tape #	F/AST On?	Event Time (HHMMSS)	Event
—	—	020138	Take off RF
1	Yes	0217	Heading away from FL — Started Radar.dat
	✓	0228	Descend to 6,000 ft Rd
		0236	Far outer rain band
		0250	eye visible 160 mi away
		0329	outer eyewall N
		0332	N eyewall
		0334	near center
			sent LF cmp #1 0415
		0336	SW eyewall
		0437	S of eye - nasty RDS
		0445 ~	Data system down
			orbiting the eye
		0508	in eye hdg N
			0559 - sent LF cmp #2
			0549 -
		1045	end recording