E.5 Radar Scientist

The on-board radar scientist 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 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~~ Here 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 checklists 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: Give to LPS

   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: I030914H1

Aircraft Number: 42rf.

Radar Operators: Leighton

Radar Technician: S. McMillan Delgado drops

Number of digital magnetic tapes on board: 7

Component Systems Status:

MARS up Computer up

DAT1 up DAT2 up

LF up R/T Serial # LF 121

TA up R/T Serial # TA123 rec 201

Time correction between radar time and digital time: Ran Datacat PCAT

Radar Post flight Summary

Number of digital tapes used: DAT1 _____

DAT2 _____

Significant down time:

DAT1 _____ Radar LF _____

DAT2 _____ Radar TA _____

Other Problems:

HRD Radar Tape Log

Flight I030914H **Aircraft** 42rf **Operator** Leighton **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
1	Flight Ant.	150922	Take off
	"	1625	Sector mode on So Num out
		1645	Radar down
		1647	up Full Scan
		1716	~~Full Scan~~ Sector mode start
		1730	Cont. on
		1749	on and off freq's
		1759	Sector (wedge) started
		1825	cont. on
		~1900	wedge on
		1930?	wedge off
		1935?	wedge on
		20__	wedge off
		2010	wedge on
			wedge off
		2035	wedge on
			2048
		2210	wedge off for on sweep
		2230	Sector mode off.
		2316	Radar downed and outed

HRD Radar Down-Time Log

Flight 10309/4H **Aircraft** 42rf **Operator** Leigh Sheet 1 of ___

Item	Time Down (HHMMSS)	Time Up (HHMMSS)	Problem
	151500		Estimated T/O time
Down	164430	164645	
	174933	175047	On and off system

Item List: DAT1, DAT2, COMP, MARS, LF, and TA.

Include serial numbers of any new R/Ts.