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

RR 1. Determine the status of equipment and report results to the on-board lead project scientist (LPS).

RR 2. Confirm mission and pattern selection from the on-board LPS.

RR 3. Select the operational mode for radar system(s) after consultation with the on-board LPS.

RR 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: 030913I

Aircraft Number: N43RF

Doppler Radar Operators: Rogers

Radar Technician: Lynch

Number of digital magnetic tapes on board: _____

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:

HRD Radar Tape Log

Flight 030913I **Aircraft** N43RF **Operator** Rogers **Sheet** 1 **of** 1

LF RPM ________ **TA RPM** ________

(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
	Y	195710	switch to F/AST, enroute to IP
	N	175020	switch to cont.; outbound leg
	Y	[illegible]	messed up cont., kept it at 20° tilt, going to F/AST
	N	193950	switch to cont.; inbound leg from E
	N	194335	problem w/ TA radar stabilization display; not sure i[illegible] this is affec[illegible] data
		195602	polygonal eyewall; outer eyewall also conforming