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

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

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

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

PR 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 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:

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: 030912I

Aircraft Number: N43RF

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:

RF 0625 VTC

Form E-5
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HRD Radar Tape Log

Flight 030912I **Aircraft** N43RF **Operator** Rogers **Sheet** ____ **of** ____

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	135012	Switch to F/AST, ferrying to IP at 5kft
	N	164357	switch to continuous, started IP at 16400, heading 71
	Y	170330	Switch to F/AST, in eye
	N	173736	Switch to cont., beginning outbound leg
	Y	174103	F/AST; starting downwind leg at stepped descent