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 or initial.)

Preflight

___ 1. Determine the status of equipment and report results to the lead project scientist (LPS).

___ 2. Confirm mission and pattern selection from the LPS.

___ 3. Select the operational mode for radar system(s) after consultation with the LPS.

___ 4. Complete the appropriate preflight calibrations and check lists as specified in the radar operator's manual.

In-Flight

___ 1. Operate the system(s) as specified in the operator's manual and as directed by the 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.

Post flight

___ 1. Complete the summary checklists and all other appropriate forms.

___ 2. Brief the 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: 060829H1

Aircraft Number: 42rf

Radar Operators: P. Leighton

Radar Technician: S. McMillan

Number of digital magnetic tapes on board: _____

Component Systems Status:

MARS up Computer up

DAT1 up DAT2 up

LF up R/T Serial # 121

TA up R/T Serial # 123

Time correction between radar time and digital time: 0

Radar Post flight Summary

Number of digital tapes used: DAT1 _____

DAT2 _____

Significant down time:

DAT1 _____ Radar LF _____

DAT2 _____ Radar TA _____

Other Problems:

HRD Radar Event Log

Flight 060829H1 **Aircraft** 42 **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
~~095656~~	X	095656	Take off
1	ON ✓	10:06:00	Radar up and Recording
1	✓	10:18:00	Surveillance begun w/ 060829H1swp
		18:45	Radar off
			No Sig Down time

HRD Radar Event Log

Flight 060829H1 **Aircraft** 42 **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

296 9kts 5 5s

FLIGHT ID: 060829H1 — Doppler Wind parameters — **Scientist:** P. Leighton

Time (Start leg)	Time (End Leg)	Storm Motion Degrees	Storm Motion Knots	Time (Center)	Ctr. Lat. (Deg/Min)	Ctr. Long. (Deg/Min)	Radius 66/88/110	Hor. Res 3/4/5	Vert. Res. 0.5	Track (In/Out)	In Azm. Trk.+/-180	Out Azm. (track out)	ja? H/TS	Sent (Y/N)
~~1100~~		330?	10?											
1112	1152	296	9	1132	2243	7909	110	5	.5	115 ~~295~~	295 ~~115~~	115	Jets angle	Y
~~1225~~	1305	296	5	1245	2245	7910	110	5	.5	235	55	355	X	N Bounds
1542 1548	1628	296	9	1608	2329	7925	110	5	.5	120		300	TS	?
1636	1716	310	9	1657	2331	7925	110	5		270		90	TS	?

1542 345 5 26.959 ~~85~~ 56.9 110 5 5 300 120 300

1552 2329 7925 060 240 60

1558 ~~345~~ 330 150 330

1604