

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 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: 070921h

Aircraft Number: 42

Radar Operators: J. Bamaere / K. Valde

Radar Technician: S. McMillen

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 Down-Time Log

Flight 22222222 Aircraft 42 Operator _____ Sheet ____ of ____

[illegible]

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

Include serial numbers of any new R/Ts.

HRD Radar Tape Log

Flight 070921H Aircraft 42 Operator GAMACHE/VALDE 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
DR 1	YES	1312	START RECORDING
		132149	RESET
		132330	RECORDING BACK ON
			NOT GOOD BUT NEAR 2936 85°35'
			WILL USE 300 12 KTS
			WILL USE A FALSE
			CENTER TO MAXIMIZE
1457			CVERAGE WHILE MAXIMIZING RESOLUTION
			NEW CORNER 2936 85°35' NE CORNER
			28°57' 84°2'
			30 2830' 84°50' 12 KTS 315
			267 1435
			132754 145517
	1554		"FLAGGING RAY" QC COMING ON A LOT.
			1455 (28°57' 84°2') 1544 (2656 84°48')
			280° 84°25' 1520 28 85°20' 210
			1730 29°39' 86°2'
			REMEMBER THESE TIMES / JOB FILES
			AND COMPARE 8 ja with ja-ts
19004			RADAR IS DOWN
1907			RADAR UP 250 315 OUT

2032

300 IN 29°57' 86°18' 324 7 KTS

2125 END RADAR RECORDING