

willis

## 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. *FAST and VI*
- ☒ 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.

*log book not done*

### 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: 050629I  
062905

Aircraft Number: 43RF

Radar Operators: Willis / 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 1

DAT2 \_\_\_\_\_

#### Significant down time:

DAT1 \_\_\_\_\_

Radar LF

radars off for formation flying

DAT2 \_\_\_\_\_

Radar TA

#### Other Problems:

TAIL DSCI USA hurl  
PRF 2100

LF DSCI USA hurl  
PRF 200



# HRD Radar Event Log

050629I  
Flight 062905 Aircraft 43RF Operator Willis Sheet 1 of 2

LF RPM \_\_\_\_\_ TA RPM 10 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
		1301/00 <del>0901/00</del>	Taxi WATCH <sup>25 fast</sup> ahead of display
		1311/36	T/O
Tape #1		0932/37	radar leak ok HAG SW TO BUOY TAIL CONTINUOUS
		0952/36	FORMATION will shut off TXR
		1021/50	GPS <sup>test - not to place</sup> sonde, Radar still off
		1034/00	GPS sonde Drop still in formation
		1040/40	splash (sonde)
		1052/30	BT drop
		1103/30	Terry restarting radar
		1109	300m altitud for SRMR buoy run
		1111/25	trouble start radar
		1114/40	climbing
		1118/02	tail radar ok, no towers
		1119/00	LF on, maybe ok, yes ok
		1143/00	very small cell, to right on Tail
	1150/12	1150/12	NO TARGET
	1153		SET FAST TO $\pm 20^\circ$ was only $2^\circ$
			some small cells ahead to left.
		1200/39	will go thru some low cells ahead
		1202/40	entering cells
		1203/03	in cloud, radar ok 24dBZ?
		1204/45	turning, small cell
		1205/38	in cell, good bumps tail radar ok <sup>juv worked</sup>
		1206/40	weak cell, 20-40 km to right on tail



## HRD Radar Event Log

050629I  
Flight 062905 Aircraft 43RF Operator Willu Sheet 2 of 2

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)

[illegible]