

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: 080815H1
Aircraft Number: N42 RF
Radar Operators: Leighton
Radar Technician: R. J. Peck
Number of digital magnetic tapes on board: 5+

Component Systems Status:

MARS <u>↑</u>	Computer <u>↑</u>
DAT1 <u>↑</u>	DAT2 <u>↑</u>
LF <u>↑</u>	R/T Serial # <u>121 / 123</u> <u>LF</u>
TA <u>9</u>	R/T Serial # <u>to 1201</u>

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 _____
DAT2 _____ Radar TA _____

Other Problems:

Shirley Gave me a "hard" time,

06DDA WAVE

Form E-5
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pre-flight

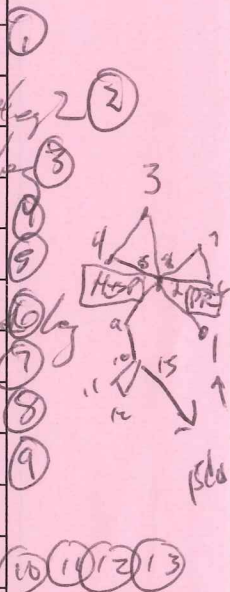
HRD Radar Tape Log

Flight 08081541 Aircraft 42rf Operator Legnib- Sheet 1 of 1

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
			looking for center @ 1847m 67 42 min
		1456	Takeoff
		1505	Reed Recording
		2123	Stop Recording
		1652	Start leg 1
		1715	center Pass 1 end leg 1 start leg 2
		1742	end Pass 1 start downwind leg 3
		1800	start Pass 2
		1822	center Pass 2
		1848	end Pass 2 start downwind leg 4
		1859	start Pass 3
		1926	center Pass 3
		1945	end Pass 3
			Convective Cell pattern



WAVE AL92 → T.S. FAY

6838 2020

FLIGHT ID:

08081541

Doppler Wind parameters

06DDA WAVE

Scientist: P. Leighton & S. Murillo

Time (Start leg)	Time (End Leg)	Storm Motion		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)
1652	1742	275	13	1715						312		10		Y
1800	1858	210		1822 ¹⁸¹⁰	19/0	68/20				125		105 90		Y
1859	1950	210	12	1926 ¹⁹³⁰	18/20	68/30				225		235		Y
1905	1945	280	12	1926	18/20	68/30				225		235		

69.3