

19960913HI - RADAR

- H. HORTENSE

**E.5 Doppler Radar Scientist (On-Board) - LAND-SEA**

The on-board Doppler radar scientist (DRS) is responsible for data collection from all radar systems on his/her assigned aircraft. Detailed operational procedures and check lists 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 Postflight**

- ☒ 1. Complete the summary check lists 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 HRD Field Ground Operations Center (FGOC).
  - 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 the appropriate operations center (FGOC or MGOC).
- ☒ 5. Determine the status of future missions and notify the appropriate operations center (FGOC or MGOC) as to where you can be contacted.

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Doppler Radar Scientist Check List

Flight ID: 960912H  
Aircraft Number: 42  
Doppler Radar Operators: LANDSEA  
Radar Technician: SEAN  
Number of digital magnetic tapes on board: 20

Component Systems Status:

MARS <u>↑</u>	Computer <u>↑</u>
DAT1 <u>↑</u>	DAT2 <u>↑</u>
LF <u>↑</u>	R/T Serial # <u>124</u>
TA <u>↑</u>	R/T Serial # <u>201/102</u>

Time correction between radar time and digital time: Radar is 1-2 seconds ahead of digital time

Radar Postflight Summary

Number of digital tapes used: \_\_\_\_\_  
DAT1 \_\_\_\_\_  
DAT2 \_\_\_\_\_

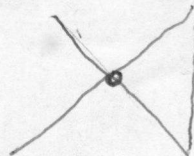
Significant down time:

DAT1 _____	Radar LF _____
DAT2 _____	Radar TA _____

Other Problems:



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HRD Radar Tape Log

Flight 960912H Aircraft 42 Operator LANDSEA Sheet 1 of       
LF RPM 2 TA RPM 8

(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
<u>1</u>		<u>033120</u>	<u>Take off...</u>
		<u>0409</u>	<u>Radars started</u>
		<u>0416</u>	<u>Tape started</u>
		<u>0416-26</u>	<u>Run + mode</u>
	<input checked="" type="checkbox"/>	<u>0430-40</u>	<u>Run F/AST mode</u>
		<u>0537</u>	<u>Trt on LF changed to 3° - down to 950mb</u>
	<input checked="" type="checkbox"/>	<u>0640</u>	<u>F/AST mode started on N bound leg</u>
		<u>0710</u>	<u>F/AST ended - Inbound leg from NE started</u>
	<input checked="" type="checkbox"/>	<u>0802</u>	<u>F/AST mode started - E bound leg</u>
		<u>0807</u>	<u>Radars (LF+TA) stopped</u>
		<u>0821</u>	<u>Tape restarted ---</u>
		<u>0823</u>	<u>Trt set to 2.5 on LF</u>
	<input checked="" type="checkbox"/>	<u>0825</u>	<u>F/AST mode started (again)</u>
		<u>0834</u>	<u>F/AST ended - inbound leg from SE started</u>
	<input checked="" type="checkbox"/>	<u>0935</u>	<u>F/AST started - S bound leg</u>
		<u>1003 ?</u>	<u>F/AST ended - inbound leg from SE started</u>
		<u>1157</u>	<u>Tape stopped +</u>
<u>Tape 1</u>	<u>not</u>	<u>0416-1157</u>	<u>START-END 0416 - 0807</u>
<u>Tape 2</u>		<u>1157-1819</u>	<u>START-END 0807 - 1157</u>

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HRD Radar Down-Time Log

Operator LANDSEA Flight ID 960912H Sheet 1 of     

Item	Time Down (HHMMSS)	Time Up (HHMMSS)	Problem
LF+TA	0807		Both radars stopped updating
✓	0821		Radars re-started + cv

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

Include serial numbers of any new R/Ts.

HRD Radar Down-Time Log

Operator LANDSEA Flight ID 960912H Sheet 1 of     

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