19990913 II - RADAR

E.5 Doppler Radar Scientist (On-Board)

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.

Doppler Radar Scientist Check List

Flight ID: 990913c1

Aircraft Number: 43rf

Doppler Radar Operators: Leighton / Dorst

Radar Technician: George Delgado / Richard McNamara

Number of digital magnetic tapes on board: 10+

Component Systems Status: See 990911c1

MARS _____ Computer _____

DAT1 _____ DAT2 _____

transmitter LF 122 changed to 124 at 1855 R/T Serial # _____

TA _____ R/T Serial # 102

Time correction between radar time and digital time: _____

Radar Postflight Summary

Number of digital tapes used: DAT1 _____

DAT2 _____

Significant down time:

DAT1 _____ Radar LF _____

DAT2 _____ Radar TA _____

Other Problems:

HRD Radar Tape Log

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LF RPM 2.0 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
—	—	17:45:00	Radars up Not Recording
1	Yes	17:55:00	Radar Recording Begun F/AST
		18:53:50	LF Radar brought down to change transmitters
		18:58:00	New transmitter install #124 was 122
		19:08	" " Not working swapping back to 122
		19:15:	Back recording Both LF and TA
		2030	LF down trying other transmitter
		~~2045~~	~~LF back up again~~
		204925	LF back w/old XTMTR
		25:0000	It's over

HRD Radar Down-Time Log

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Item	Time Down (HHMMSS)	Time Up (HHMMSS)	Problem
	173000		Running
	185350		Transmitter swapped to see
		185900	if will improve
	185800		warming up?
*	1950	2005	Main data system down

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

Include serial numbers of any new R/Ts.