

19840909I2 - RADAR

E.4 Radar Scientist (On-Board)

This individual is responsible for data collection from all radar systems on board his or 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.4.1 Preflight

- ✓ Kck 1. Determine status of equipment and report results to the on-board lead project scientist (LPS).
- ✓ Kck 2. Confirm mission and pattern selection from on-board LPS.
- ✓ Kck 3. Select operational mode for radar system after consultation with HRD radar scientist and on-board LPS.
- ✓ Kck 4. Complete appropriate preflight calibrations and checklists as specified in the radar operator's manual.

E.4.2. In-Flight

- ✓ Kck 1. Operate system as specified in the operator's manual and as directed by the HRD radar scientist, unless superseded by directions from the on-board LPS or as required for aircraft safety as determined by the OAO flight director or aircraft commander.

E.4.3 Postflight

- ✓ Kck 1. Complete summary checklists and all other appropriate checklists and forms.
- ✓ Kck 2. Brief on-board LPS on equipment status and turn in completed forms to LPS.
- _____ 3. Hand-carry all radar tapes and arrange delivery as follows:
 - a. Outside of Miami - the HRD operations center.
 - b. In Miami - the HRD/AOML offices.
- _____ 4. Debrief at operations center.
- _____ 5. Determine status of future missions and notify operations center as to where you can be contacted.

Radar Scientist Checklist

SEP 9 1984

Flight # 840909 IZ T.S. Diana
A. C. # N43RF
Operator Wiggert, Lord, Kohler ^{Cl. Phys.} ^{Doppler} ^{Radar} ✓
Radar Tech. Goldstein, Schneider

Number of digital magnetic tapes on board 23 2400'

Number of video tapes on board 5

Number of tape labels on board enough

Component systems up and checked:

RDSC ✓

VTR not available

Computer ✓

DSC1 ✓

DMTR1 ✓

DSC2 ✓

DMTR2 ✓

Scopes

NO

LF ✓

TA ✓

Time correction between radar time and digital time 0^s

Radar Postflight Summary

Number of digital tapes used DMTR 1 7

DMTR 2 6

Number of video tapes used

Significant recorder down time (other than for tape changes):

DMTR: LF dubious operation

VTR: LF

NO

NO

TA ok

TA

Other problems: (stabilization, interference, etc.)

HRD DOPPLER RADAR TAPE LOG

Hurricane Diana
 Take off 2235Z
 1100

FLIGHT 840909I2 AIRCRAFT 43RF OPERATOR LORD SHEET 1 of 1

TAPE NO.	TIME ON	TIME OFF	SOURCE			NO. PULSES	SCAN RATE	COMMENTS
			V	H	S			
1	0015:04	004900	✓			150 m gates	256	on: 001504 on: 004200 No off: 002313 off: 004900 E OF
2	005700	014200	✓			"	"	on: 005700 on: 012833 off: 010200 off: 014200 E OF written
3	0155:28	020308	✓			"	"	E OF written
4	021600	023955	✓	-		"	"	on 021600 023000 on off 022400 023955 off E OF written
5	024405	030000	✓			"	"	E OF written
6	030515	032000	✓					E OF written
7	032807	035420	-			"	"	on: 032807 on 034110 off: 033310 off 035420 E of written
8	040500	042531						on 040500 on 041732 off 041500 off 042531 E OF written
9	043512	052400	-			"	"	on 043512 051303 on off 044245 052400 E OF written
10	053012	054721						E OF written
11	055400	060604						E OF
11 tapes used								
OAO Retraining Tape Temporarily								

[illegible]

No VCR Available

Flight (840909 I 2)

Wiggert
Kohler

Takeoff: 6:30 pm - 12235Z

TAIL 7 20 31 36 40 47

DIANA

L/F 3 7 17 23 28 33

begin record 234500Z Not much to see yet.

TIA + LF Began Doppler after DZT1 began (0015Z)

0030 Don't know whether LF is working right - radar tech playing with it a lot RA M down (ADC's) ~ 0105 - 0120

Computer, LF cursor joystick, Poppler, Cloud Physics, LF

radar, ADC's, all have been down & up etc.

LF tilt too high but that's the way Darby & Schickel want it