

RADAR PREFLIGHT CHECKLIST

FLIGHT # 19800805I1 - RADAR AUG 5 1980

A.C. # 43RF

OPERATOR Marks/Lewis

RADAR TECH Fennel

NUMBER OF DIGITAL MAGNETIC TAPES ONBOARD 40

NUMBER OF VIDEO TAPES ONBOARD 10

NUMBER OF TAPE LABELS ON BOARD 40

COMPONENT SYSTEMS UP AND CHECKED.

RDSC ✓
COMPUTER ✓
DMTR1 ✓
DMTR2 ✓

VTR ✓
DSC1 ✓
DSC2 ✓
SCOPES ✓

just
DSC1 down after
take off

NO ✓
LF ✓
TA ✓

*Tail down at take off - AFC
Problem. Working on it.
no tail
it's up and then
down.*

Time correction between radar time and digital time 0

RADAR POSTFLIGHT SUMMARY

NUMBER OF DIGITAL TAPES USED DMTR 1 4
DMTR 2 3

NUMBER OF VIDEO Cassettes TAPES USED 2

SIGNIFICANT RECORDER DOWN TIME (other than for tape changes).

DMTR: LF 10-12 min.
NO 10-12 min.
TA no tail

*and radar computer needed to be rebooted.
DSC2 went down on approach to
first penetration 1126 up to 1134.*

VTR: LF 10-12 min
NO 10-12 min.
TA no tail

OTHER PROBLEMS: (stabilization, interference, etc.)

*Digital Scan converter kept going down intermittently and
would have to reboot radar computer. DSC1 out the whole
flight. Tail out the whole flight. (over)*

Radon DMTR Status panel

DMTR1 & 2 Lights

were on sometimes
and off sometimes.

Had to check tape recording
by eye.

Also DMTR1 and 2 lights
were reversed

DMTR1 was indicating DMTR2 status
and vice versa.

AUG 5 1980 NHEML RADAR TAPE LOG

FLIGHT 80080511 AIRCRAFT 43RF OPERATOR Marks/Lew.3 SHEET 2 OF 2

TAPE #	TIME ON	TIME OFF	SOURCE RADARS			REWOUND?		COMMENTS
			NO	TA	LF	YES	NO	
D213	163724	172748	X		X		X	start at beginning of southbound penetration! northbound Scan Converter down ~1628
								VT2 stopped at 163224 872 on Counter
								163740 turned on VTR
								1641 turned STC off LF
								164250 STC turned on again (LF)
								STC seems to be <u>bad</u> on LF
D114	162755	~1838	X		X		X	? broke pattern at 175050 kept tape running on ferry back at 15000

114555 eyewall has

upside down Coma or "6" structure

Allen 5 Aug. 1980 #2

~~South~~ during penetration of south side of outer eyewall
good nose data

"eyewall looks like a hexagon" B. Lewis

115020 rainbands prevalent bearing 240-330°

20-60 nmi.

weak area of eyewall moving

toward NE side of storm

peak wind stronger on north side

south side peak wind ~100 Kts

first pass
impressions:

(Markes)

1500 m

rainbands on east ^{side} of storm moving toward
NE quadrant feeding into strong region
to North.

inner eye has half
moon structure



AUG 5 1980

NHENL RADAR TAPE LOG

FLIGHT 80080501 AIRCRAFT 43RFOPERATOR Marks/Lewis SHEET 1 OF 1

TAPE #	TIME ON	TIME OFF	SOURCE RADARS			REWOUND?		COMMENTS
			NO	TA	LF	YES	NO	
DT1	105245	122429	X		X		X	off for problems then ~20 mi on again at 1004 elev. 3.5°
DT1				X			X	down 1121 DSC2 prob. on 113426 DSC2 up near eye
VT1	105857	150500						off at 1120 when DSC2 temp. down on ~1106
	120500							display frozen
	120544							unfrozen.
	131355							scan converter down.
	131415							scan converter reset
	134550							scan converter froze at beginning of 1st penetration.
	134910	VTR off						113400 diameter 20 mi heading 04
	135004	VTR on						8 mi thick elev. 2.5°
	121830							scan converter froze 122030 update on.
DT1	122443	132250	X		X		X	beginning has some data on that we don't know what it is we were fooling with. TA maybe good. Start at beginning of the second run.
								1239 getting spooky on LF tape ran out at ^{near} end of penetration. (no ring in tape)
								ended with about 1/3 tape left before data stopped recording 134500 1st penetration data started " 135936
DT2	133128	142515	X		X		X	started at end of 3rd penetration
DT2	142515	151304	X		X		X	
VT2	151030	180100						off at counter 1438 Counter set to 0000
DT3	151304	161255						

NHEML RADAR LOG

OPERATOR _____

SHEET _____ OF _____

RADAR DOWN-TIME LOG

ITEM	TIME DOWN	TIME UP	Allan 5 Aug. 1980 PROBLEM #1
<u>Penetration #1</u>	FL ~1500 m (RA)		
1126	HDG 255		
	eye wall just to left of FT. wind 107 / 107.5 mph		
1127	outer eyewall band ~10 nmi thick		
112845	eye fix from nose bearing 300° 50 nmi		
113117	eye fix from nose bearing 100° 40 nmi		
113400	eye fix from nose out band diameter ~8-10 nmi heading 15° 20° 30 nmi		
	digital back up 113420		
114030	outer open eyewall 340-350°		
	inner eyewall strongest at 114117 bearing 80° 5-8 nmi		
	WNW-NW quadrant (just to the right of our flight track) seems strongest first pass.		
Center 15.92	70.36-114259	0.9 kts min. wind speed.	

ITEM LIST: VTR, DMTRI, DMTR2, COMP, ROSC, LF, NO, TA, DSCI, DSC2

114450 open eyewall 270° bearing 20 nmi
 seems to be where rain band starts to

AUG 5 1980

NHEML RADAR CENTER FIXES

AUG 5 1980

FLIGHT 800805II AIRCRAFT 43RF OPERATOR MARKS/Lem³ SHEET 1 OF 1580

[illegible]