RADAR PREFLIGHT CHECKLIST

SEP 11 1981

FLIGHT # 810911H2

A.C. # N42RF

OPERATOR GRIFFIN / MARKS

RADAR TECH AL GOLDSTEIN

NUMBER OF DIGITAL MAGNETIC TAPES ONBOARD ~~29~~ 29.

NUMBER OF VIDEO TAPES ONBOARD 4.

NUMBER OF TAPE LABELS ON BOARD ✓.

COMPONENT SYSTEMS UP AND CHECKED.

RDSC	✓	VTR	✓
COMPUTER	✓	DSC1	✓
DMTR1	✓	DSC2	✓
DMTR2	✓	SCOPES	✓

NO ✓
LF ✓
TA ✓

Time correction between radar time and digital time +1 sec

RADAR POSTFLIGHT SUMMARY

NUMBER OF DIGITAL TAPES USED DMTR 1 4
DMTR 2 4

NUMBER OF VIDEO TAPES USED 2.

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

DMTR: LF None
NO "
TA "

VTR: LF None
NO "
TA "

OTHER PROBLEMS: (stabilization, interference, etc.)

NHEML RADAR TAPE LOG

SEP 11 1981

FLIGHT B10911H2 AIRCRAFT N42RF OPERATOR GRIFFIN MARKS SHEET 1 OF

TAPE #	TIME ON	TIME OFF	SOURCE RADARS			REWOUND?		COMMENTS
			NO	TA	LF	YES	NO	
VCR-1	234120	034225						
1-1	000538	004525		X	X	X	2683	Start of W-E run. 5000'
2-1	004536	012540		X	X	X	2636	
1-2	012554	020558		X	X	X	2633	
2-2	020617	024628		X	X	X	2637	
1-3	024638	032719		X	X	X	2634	
2-3	032723	040721		X	X	X	2638	
VCR-2	034256	053100				X		Start of NE run east of
1-4	040914	044902		X	X	X	2635	the eye
2-4	044917	052913		X	X	X	2639	
~~DS~~								

FORM 3-7

8109114Z SEP 1 1 1981

OPERATOR CRIFFIN MARKS

SHEET 1 OF ____

NHEML RADAR LOG

RADAR DOWN-TIME LOG

ITEM	TIME DOWN	TIME UP	PROBLEM
			Cat wngs evident at 5000'
			1500 m
			~ 30 degrees either side of the tail
			azimuth.
			doppler problem appears to be pulsepair processor
			still appears that the LF reads ~ 2.0° higher than its pointing. I'm not sure where the slop is probably recorded on the tape 2.0° higher than it should be.
			1087 VCR cycle
			VCR2-C857 0504

ITEM LIST: VTR, DMTR1, DMTR2, COMP, ROSC, LF, NO, TA, DSC1, DSC2

810911H2

GERT

9/11/81

1428: Began VCR1 and flipped thru channels.

There was some debate about DSC toggle switch settings since they are different from Harlan's. I double-checked

1500: Scn thru VCR@ 440

1508: Entry to NW band. Sfc. wind looks very strong 80 knots approx. Moderate turbulence. Occ drafts to -4 m sec^{-1}. Wind at 5000 ft. is 330 at ~~30 knots~~ 16 m sec^{-1} inside band. Bands surrounding eye - closed eye on radar, but relatively weak to south.

1512 Turn to 65°. Large band to E and SE at 55-60 nm.

1530 Scn. thru VCR @ 700

Storm moving at about 21 knots; fast.

1535 Exit from band on ~~NW~~ NE side. Turn west for North E/W leg down rainband.

1554 Turn back to center (2).

1600 Scn thru VCR @ 948

Entering north band. Very little turbulence

1612 Entering eye region, overcast but scattered cloud below. Winds 30 m sec from 225°
Sea below is rough.

1631 . Turn to 030 heading. SCN thru VTR @ 1180

1649 Moderate turbulency + 4. m sec^{-1} peak. -4. m sec^{-1} peak downdrafts.
Heading 270 for pass to center.
Strong vert. shear on east side. Sfc. winds 35 knot.

1700 Scan thru VTR @ 1354
min. Sfc. pressure 990 mb

flight level winds about 50 knots.
Clear below

1711 West side story:
+8 m sec^{-1}, -11 m sec^{-1},
a couple of bumps.
wind center tucked up
against NW convective wall.

Possible ~~a~~ large vert. shear here too
35 knots at flight level, looks stronger at sfc.

1730 ~~Heading~~ Track 130 to point 4.
Scan thru VCR @ 1540

1750 Turn to 30° Back to Center

1802 SCN Thru VCR @ 1700.

1809 very heavy rain in NE band
2-3 m sec^{-1} updrafts

1823 Changed to VCR#2
Some nice updrafts to +11 m sec
1825 Change to West at #5.

1831 Scan thru channels @ 136

1840 Turn to 150° toward center.

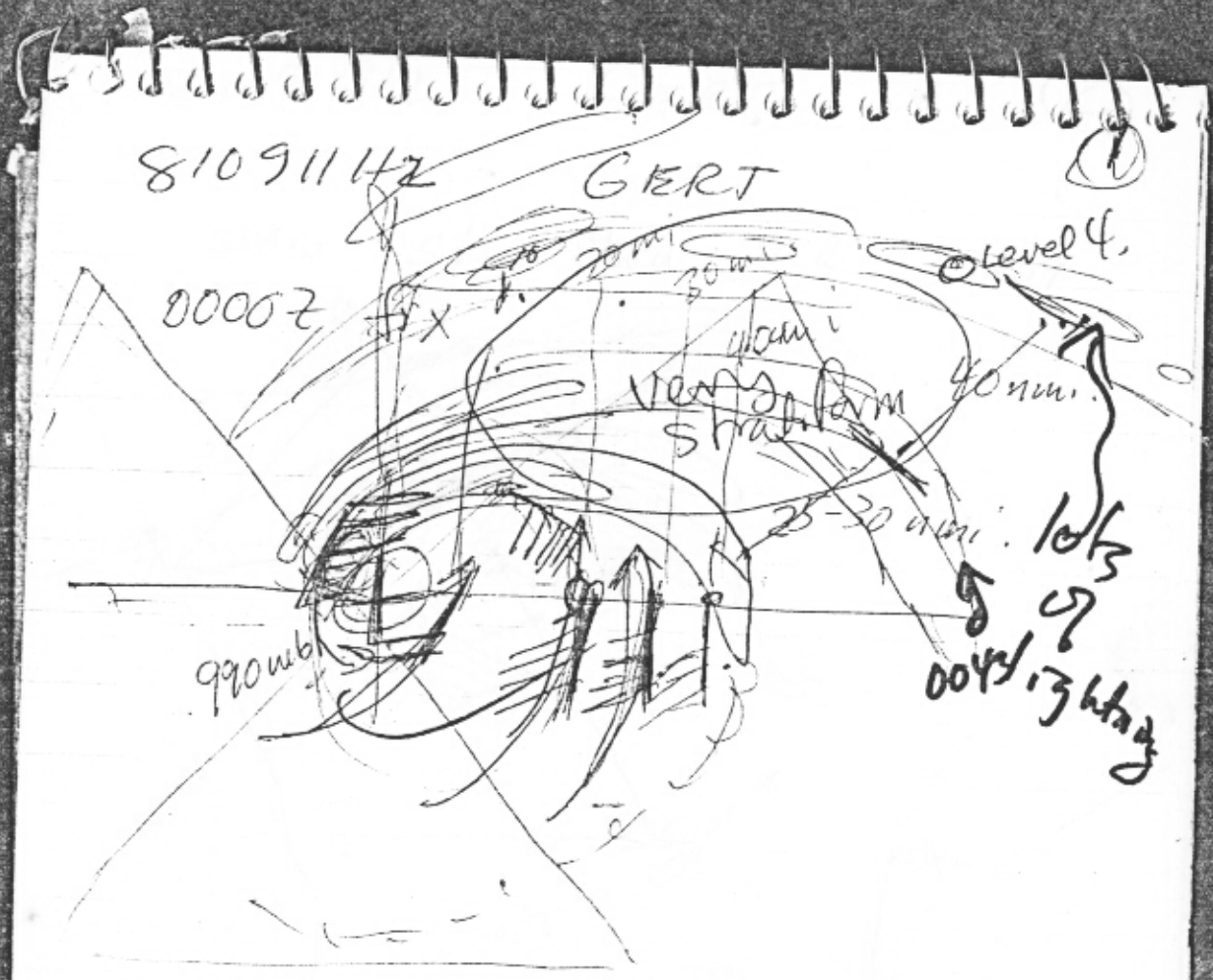
1858 Penetrating north eyewall +12.1 sec^{-1}
max sat. vel.
1900 Scan thru VCR @ 465
min SLP = 988

1930 Turn to 030
Scan thru VCR @ 758

1950 TURN to 270 for E/W penetration

2000 Scan thru VCR @ 995.

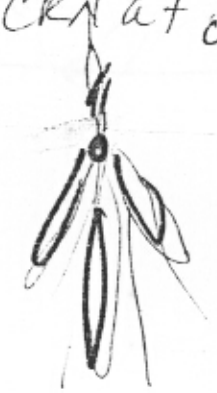
2016 Hit eye center. Min SSP = 988 mb



Go thru VCR1 at 003800 @659

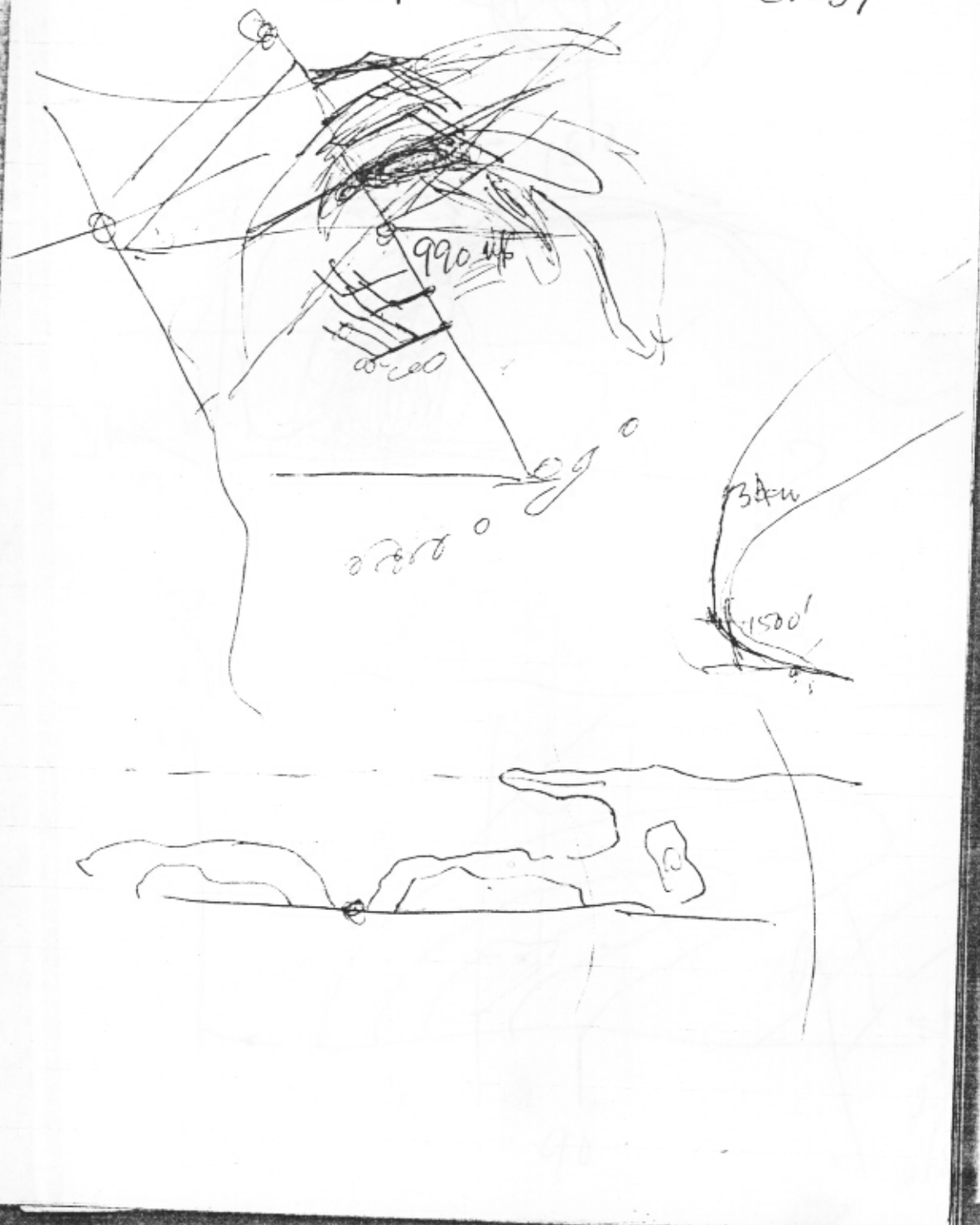
good tilt N stratiform rainbands north of eye wall

Go thru VCR1 at 013100 @1087



8109112 GERT (2)

01:56 step thru VCR C1259




0
90
180
z
x
z
90
180

~~810~~ 810911 H2 GERT

(3)

VCR1 03:21 step thru @ 1762

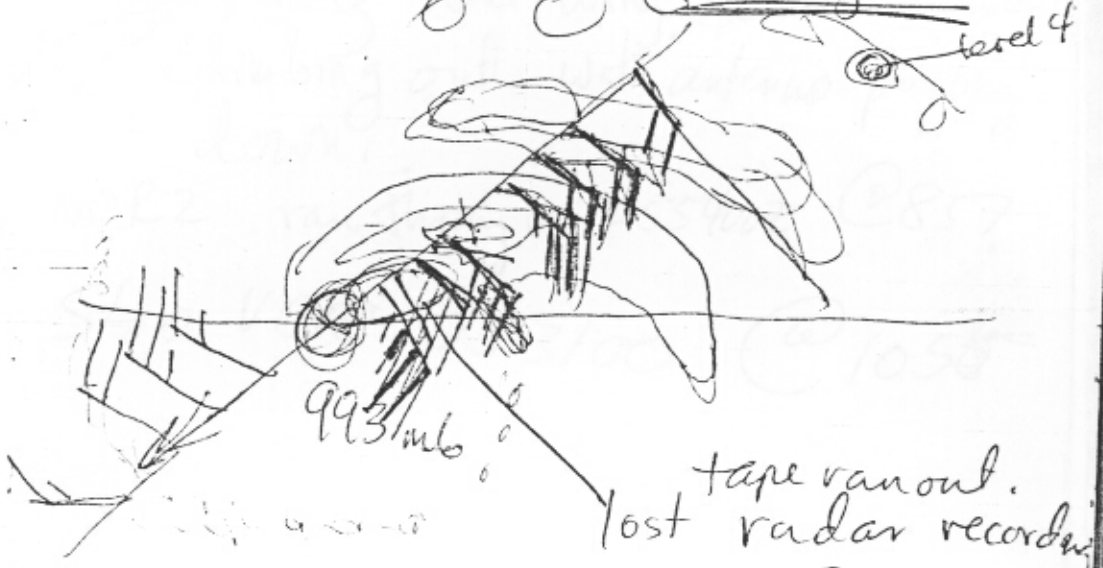
Great tail data VCR1 @1800 → 1862

VCR1 0340 step thru. @1862

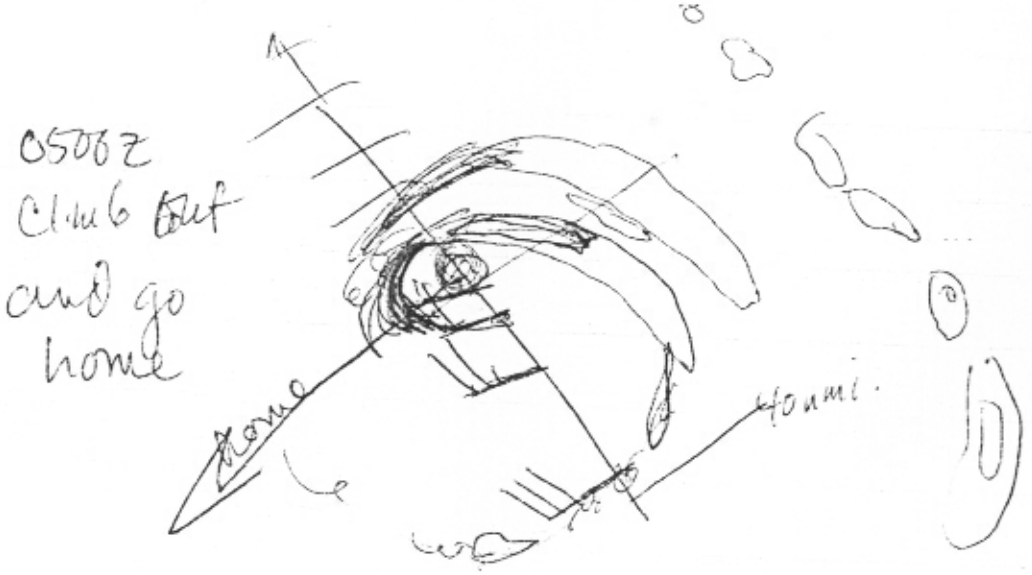
VCR2 0344 step thru @ 0002

810911HZ GERT (4)

near beginning of VCR2 0352:50 VCR2 @ 0132 switch from NO to LF to see intercomparison — looks great



VCR2 go thru plots 0416002 @ 426



on VCR2 @ 854

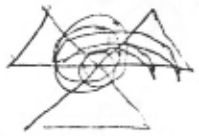
good notch in sea clutter from LF radar

defining bat wing sector while climbing out with antenna pointing down.

VCR2 ran through 055400Z @857

Stop VCR 053100 @1058

81 0911 Hz GERT



Good Tail profiles of Convective rainband N of Center

VCR1	1st pass	TA not on VCR	NE-SW	Tape beginning 1-1	0018 - 0028
	2nd pass		NE-SW	end 2-1	0115 - 0125
	3rd pass		SE-NW	end 2-2	0230 - 0240
	* 4th pass		W → E	Beginning 2-3	0332 - 0345
VCR1 → VCR2	* 5th pass	TA not on VCR	NE - SW	end 1-4	0400 - 0407
	6th pass		SE - Center	end 2-4 tape ran out	~~0518 - 0528~~ 0453 - 0503