RADAR PREFLIGHT CHECKLIST

FLIGHT # 19810907 HI-RADAR

A.C. # 42RF

OPERATOR Marks/LORD

RADAR TECH Burns

NUMBER OF DIGITAL MAGNETIC TAPES ONBOARD 40.

NUMBER OF VIDEO TAPES ONBOARD 4.

NUMBER OF TAPE LABELS ON BOARD $>10^6$.

COMPONENT SYSTEMS UP AND CHECKED.

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

NO	✓
LF	✓
TA	✓

Time correction between radar time and digital time _____

RADAR POSTFLIGHT SUMMARY

NUMBER OF DIGITAL TAPES USED DMTR 1 6
DMTR 2 5

NUMBER OF VIDEO ~~TAPES~~ cassetts USED 2.

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

DMTR: LF _____
NO _____
TA 160940-1614 down when RDSC in playback mode.

VTR: LF _____
NO _____
TA _____

OTHER PROBLEMS: (stabilization, interference, etc.)

problem with nose when pitot was having trouble.

19810907H1
Floyd

19810907H1_RADAR (1)

120000 Scan thru channels on VTR
Heading 90°, Wind 305° @ 5.6 m sec⁻¹ @ 1500 m. Some overcast and shallow clouds below

121000 Approaching outer rainband
wind 16 m sec⁻¹ from due north.

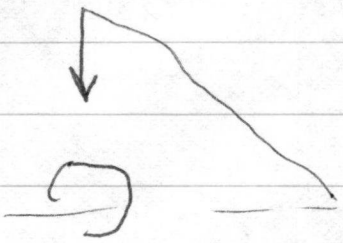
122100 Switched DSC2 to Tail
eye 40 n.mi. to ENE.
In rainband now

123200 VTR counter @ 504. Scan thru VTR channels
Sfc. Pres 979, winds 29 m sec @ 217°, 1500 m altitude

1250 Nice bands to north

Scan thru VTR channel

1310 00 Heading South toward eye



1330 Scan thru VTR channels
VTR at 999.

1340 – North back to eye.
Band to SW of eye looks good - very black with blue sky to the west.

1403 Scan thru. VTR @ 1233
1426 Tail Radar down
1432 Scan thru. VTR @ 1420.
1458 Scan thru. VTR @ 1567.
1510 end of S run at 2400m
1516 end of 2400 M run N
1520-1525 loitering north of eye trying to repair pilot radar scope

1528 Step thru VCR @ 1730
153130 Stop VCR1
1535 Step thru VCR2 @ 005
dummy stairsteps we got interference from 43RF on the NO and TA radars.

1555 S at 5000' RA
1600 N at 5000' great bump!!

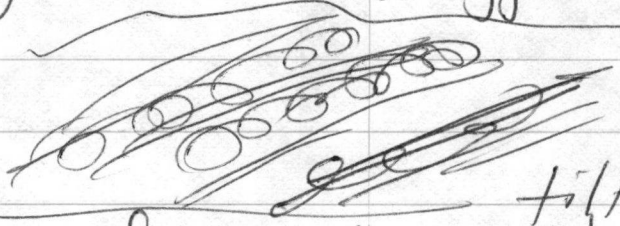
1607 turn thru VCR @429
1607 S at 2000'
1615 N at 2000'
16250 S at 500'
1631 turn to N Nose radar out at pilot we have control
Nose radar worked fine at radar cons. when we had control. didn't if pilot controls
1646 S at 2000'

Convection is getting better looking in the rainband we were flying.
1643 switch thru VCR @ 757
1656 turn to S climb to 5000'

(4)

data system display down 170000

Nose and LF don't appear to be agreeing that well on this penetration. have to check tail to see which is right. LF has few level 3's nose has few level 5's diameter 20-25 mi as opposed to 25-30 much more symmetric first pass stronger convection. 970 eye clear below closed on top eyewall kind of ragged



tilting convection southside closed in just

up +9 m s^{-1} down −11 m s^{-1}

in west eyewall ~70 m s^{-1} tangential

LF tape ran out.

~~28 69.13~~ 29.11N, 68.09 W

1720 step thru VCR @ 1053 west of
has last 2 penetrations on it eye.

1730 leave pattern head for home.
it's CAMEL TIME

1745 run thru VCR @ 1226

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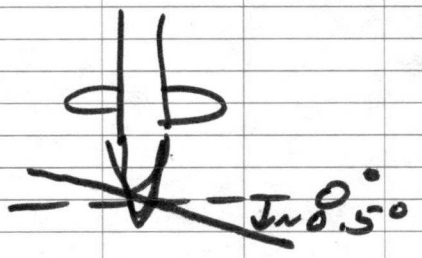
takeoff 1004Z

doppler testing on Ferry. Tape drive not working to well. checked antenna Alignment appear we get slightly positive velocities of grnd. on starboard side and slightly negative on the port. ∴ tail antenna is



1152 RA5000' start first east-west run eye about 160 km east of us.

115330 Now has LF playing with Nav. radar.

115940 LF back

1203 Now has LF again.

pitch ~+2.0 ± 0.3

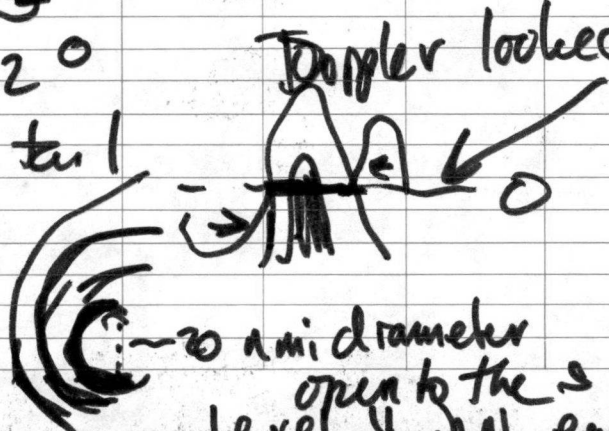
tilt ~3.1 3.2°

switch DSC2 to tape 1

1234Z #504 VTR

28.33°N 68.33°W

Doppler looked like this



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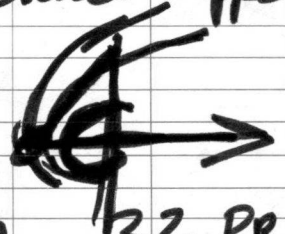
good tangential and radial tilts,
nice stratiform precip. outside eyewall
south side very weak - NE eyewall appears
to tilt inward at the top.
3 rainbands to the east.



—started doppler tape 130830 32 PRT
North of eyewall turning S through eye. 300 m gates
132000 doppler tape ran out before
we went through the eye wall.
eye overcast can't see sea surface
either.

1413 1000' RA North rainband
300 m Secondary wind max

1418 500' RA South through rainband.
150 m

1426 TA tape ran out.