

SEP 22 1987

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Radar Scientist Checklist

Flight ID 19870922I1-RADAR  
Aircraft # 43  
Operators Dodge Kaplan  
Radar Tech Schricker, Jarvi

Every Sweep of  
tail, every other  
LF

Number of digital magnetic tapes on-board at least 50 (2400')

Number of tape labels on-board plenty

Component systems up and checked:

RDSC                     

DSC1                      ✓

Computer                     

DSC2                      ✓

DMTR1                      ✗

DMTR2                      ✗

LF                      R/T# 101 M

TA                      R/T# 201 (DOPPLER)

Time correction between radar time and digital time radar time  
~ 2 seconds fast

Radar Postflight Summary

Number of digital tapes used DMTR 1 4  
DMTR 2 6

Significant recorder downtime:

DMTR 1                     

Radar LF                     

DMTR 2                     

Radar TA                     

Other problems:

SEE DOWN TIME LOG.  
Problem (mech) with Tape drive 1  
Tapes lasted ~ 50 minutes  
~ 1400 take OFF

### E.5 Radar/Airborne Doppler Radar Scientist (On-board)

The on-board Radar Scientist (RS) is responsible for data collection from all radar systems on his/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.)

041451-1152407891

#### 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 HRD/RS and the on-board LPS.
- \_\_\_\_\_ 4. Complete the appropriate preflight calibrations and checklists 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 Operate the system(s) as specified in the operator's manual and as directed by the HRD/RS unless superseded by directions from the on-board LPS or as required for aircraft safety as determined by the OAO/Flight Director or Aircraft Commander.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.5.3 Postflight

- \_\_\_\_\_ 1. Complete the summary checklists and all other appropriate checklists 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 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 OAO/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.

SEP 22 1987

OPERATOR Dodge Kaplan

SHEET 1 OF     

# HRD RADAR LOG

## RADAR DOWN-TIME LOG

ITEM	TIME DOWN	TIME UP	PROBLEM
<del>DMTR</del> Drive 1	1517	1529	Misloaded tape so/ first run restarted
Drive 1	1529	1535	Drive <sup>1</sup> fucked up again (spindle lock?) AL J & Terry S looked at (1600)
DRIVE 1	1630		FUCKED AG
•	1710		AL & Terry reloaded radar program because tapes were lasting way too long.
1733 - switched to "JUST USE fix drive 1			DRIVE 2" while Terry & AL try to
1820			TD 2 finished; rewound and TD 1 started.
2007 FM noted TA display locked - AJ says DSC maybe locked.			

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

NOTE SEQ OF TAPES

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DOPPLER

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Radar Scientist Checklist

Flight ID 870922 II  
Aircraft # 43 RF  
Operators Garnache  
Radar Tech Schricker, Jarvi

Number of digital magnetic tapes on-board \_\_\_\_\_

Number of tape labels on-board \_\_\_\_\_

Component systems up and checked:

RDSC \_\_\_\_\_

DSC1 ✓

Computer ✓

DSC2 ✓

DMTR1 \_\_\_\_\_

DMTR2 \_\_\_\_\_

LF \_\_\_\_\_ R/T# \_\_\_\_\_

TA \_\_\_\_\_ R/T# \_\_\_\_\_

Time correction between radar time and digital time Blank -  
Doppler = digital + 2 sec.

Radar Postflight Summary

Number of digital tapes used DMTR 1 24 Doppler  
DMTR 2 \_\_\_\_\_

Significant recorder downtime:

DMTR 1 \_\_\_\_\_

Radar LF \_\_\_\_\_

DMTR 2 \_\_\_\_\_

Radar TA \_\_\_\_\_

Other problems:

Doppler worked well. There were problems  
in reflectivity several times <sup>early</sup> during the flight.  
The ~~are~~ worst appear to have been DMTR problems.  
This should still be a great dataset!

# HRD DOPPLER RADAR TAPE LOG SEP 22 1987

FLIGHT 87092211

AIRCRAFT 43RF

OPERATOR GAMACHE SHEET 1 OF     

TAPE NO.	TIME ON	TIME OFF	SOURCE*			COMMENTS** (#pulses, scan rate, range)
			V	H	S	
						32, max, 38 km
1	15230	154550			✓	Problem for portion of this tape: No radar recording
2	154805	160810			✓	
3	161035	163100			✓	Tail at max elevation (250) in eye wall perurbation
4	163440	164750			✓	
5	165000	170000			✓	
6	170220	171300			✓	
7	171750	172740			✓	
8	172940	174400			✓	
9	174602	175910			✓	
10	180125	181420			✓	
11	181610	183315			✓	
12	183530	185020			✓	Formerly problems may have occurred after that had hit
13	192030	193300			✓	may just be loss of microwave blocker
14	193500	approx 194900			✓	
15	195155	200800			✓	
16	201102	202040			✓	
17	202230	203400			✓	
18	203635	205600			✓	
19	205755	211800			✓	
20	212055	<del>213110</del> 213110			✓	
21	213340	214800			✓	

\*Vertical, Horizontal, or Full Sweep Scan

\*\* # of pulses averaged (32, 64, 128, 256); scan rate (Min, Max); range resolution (150m, 300m)

22 215130 - 220525  
23 220750 - 222845  
24 223115 - 224917

OPERATOR \_\_\_\_\_

SHEET \_\_\_\_\_ OF \_\_\_\_\_

## HRD RADAR LOG

## RADAR DOWN-TIME LOG

[illegible]

ITEM LIST: VTR, DMTR1, DMTR2, COMP, ROSE, LF, NO, TA, DSCI, DSC2



173021  
L/F

RNG MK  
40 MI

HDG  
199  
TILT  
2.6

DMTR  
1-OFF  
2-REC

225839

L/F

RNG MK

40 MI

HDG

032

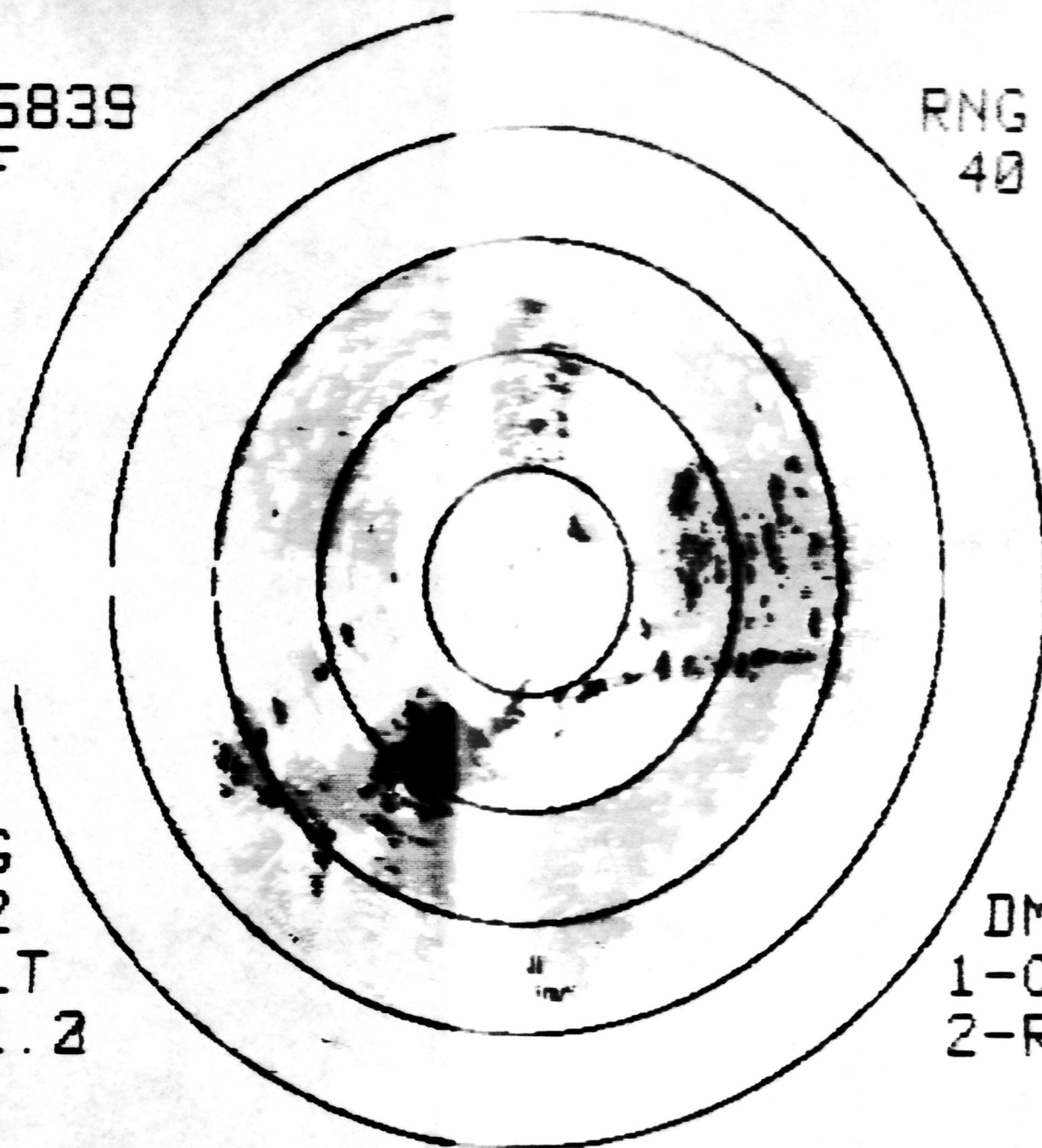
TILT

1.2

DMTR

1-OFF

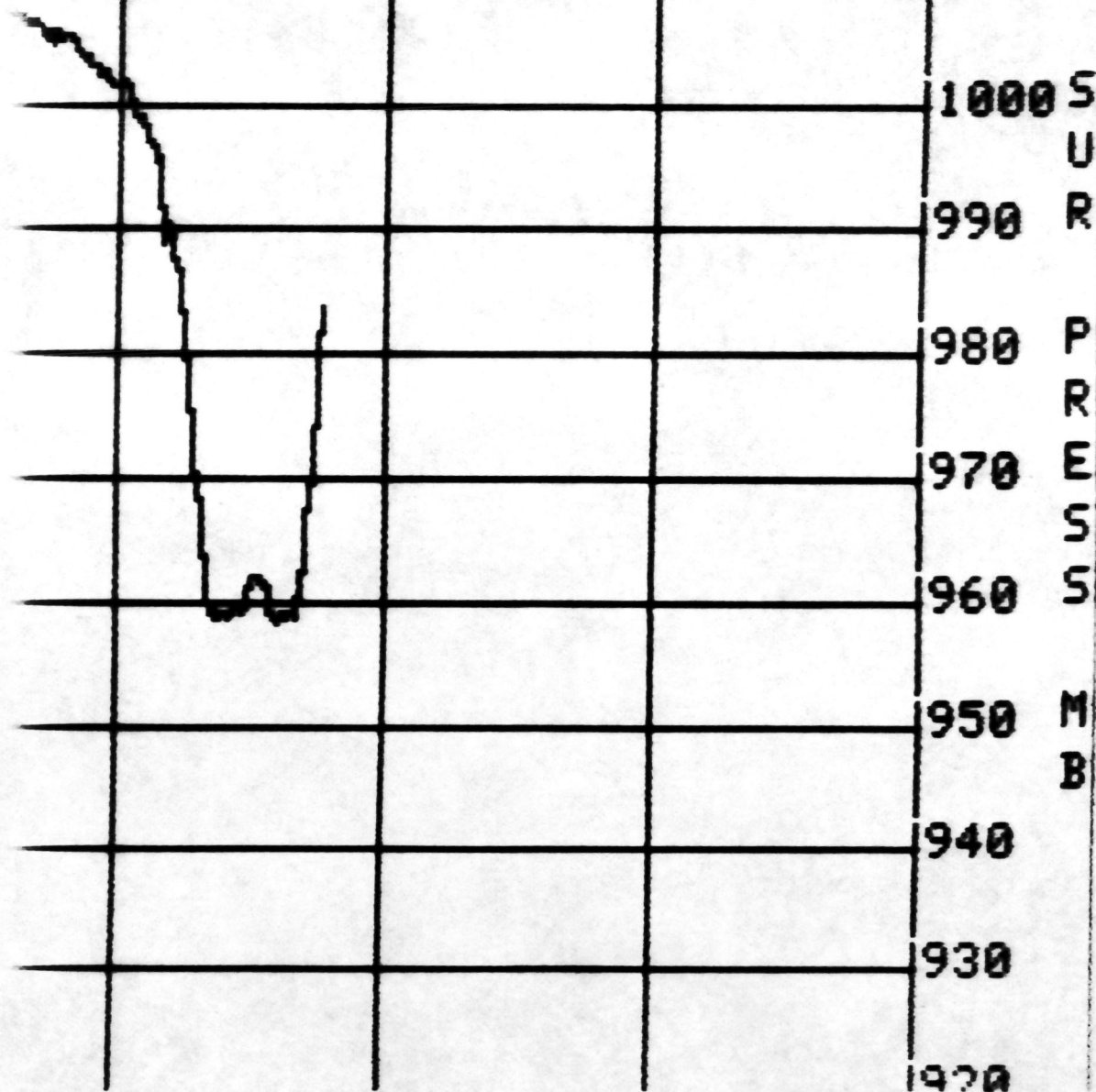
2-REC



02 870922I NOAA/OAO 18:36:46

ET#1

1010



225901  
L/F

RNG MK  
40 MI

HDG  
081  
TILT  
1.6

DMTR  
1-OFF  
2-REC

