

19910720H1-RADAR

Form E-5
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Doppler Radar Scientist Check List

Flight ID 910720 #1
Aircraft # N42RF
Operators Gomache
Radar Tech. Salim

Number of digital magnetic tapes on board 18

Number of tape labels on board enough for this flight

Component systems up and checked:

MARS /
DMTR1 /
LF /
TA /

Computer /
DMTR2 /
R/T# 5N102
R/T# Property # 42671

Time correction between radar time and digital time _____

Radar Postflight Summary

Number of digital tapes used: 11

DMTR1 _____

DMTR2 _____

Significant down time:

DMTR 1 _____

Radar LF 2214-2237

DMTR 2 _____

Radar TA Briefly at 2237

Other problems:

E.5 Doppler Radar Scientist (On-Board)

The on-board Doppler radar scientist (DRS) is responsible for data collection from all radar systems on his/her assigned aircraft. Detailed operational procedures and check lists are contained in the operator's manual supplied to each operator. General supplementary procedures follow. (Check off and initial.)

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 on-board LPS.
- ☒ 4. Complete the appropriate preflight calibrations and check lists 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 on-board LPS or as required for aircraft safety as determined by the AOC flight director or aircraft commander.

E.5.3 Postflight

- ☒ 1. Complete the summary check lists and all other appropriate check lists 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 AOC 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.

HRD Radar Down-Time Log

Operator Garnache

Sheet 1 of 1

Item	Time Down (HHMMSS)	Time Up (HHMMSS)	Problem
1	2214	223720	Shut down LF because it was not updating. Eventually brought TA down also and brought whole system up successfully

Item List: DMTR1, DMTR2, COMP, MARS, LF, TA.

91072014

[illegible]

Only No
For this
short
fare

870720I
TEXMOTAP #3/1

~~21.0~~

~~22.8~~ = TD (Bis fluctuations)

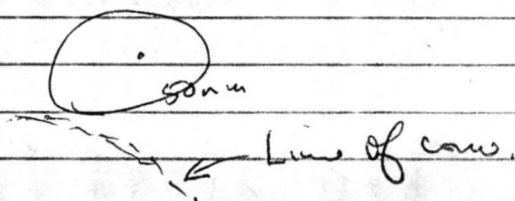
318 ~~324~~ = TA WD 193 WS 1

PS 1014.0

T/O = 200430

202500 Start recording

Flying SW 203000



Started FAST 203700

204300 Just passed through above
band 14°26' 101°21'

210200

SE winds

13° 3' 102° 17'

20-25 knot sea state

2108

In the middle
of TAS calibration

2110

heading SW again

13° 0', 102° 18'

2120

~~Test~~ Test ended
Shalifan
Max tops about 13km

212630

approx Tape #1 ends

2144 - ~~104~~ 11° 37' 104° 19'
Still seeing 15 km tops

2156 Stratifan (10km) to our left

2158

11° 105° SE wind
at sea.

221450

Rewind tape
tracking 225°

221833

Turn to N

221930

Levelled out at ~~000°~~ heading

222113

ODW

749.90 7.2° TD

242° W kts

700.1 ps GA = 3138

On tape 4 switched

from NAV1 to NAV2

223720 Tape #4 (D2T2) Starts

225130 Tracking N 12 17N 106° W

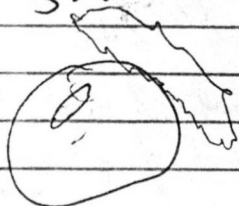
2302 Tracking N turn to track ~~S~~ S
(160°)

2305 ODW drop

2322 DIT3 Starts

234248 - Turn from 160° →

2352 - heading ~~15~~ 15°
50 mms CF radar looks like



heading towards a conver. line to
N.

0001 ODW while heading N

0013 This line has been mostly
stratiform - good melting band -
and a few embedded

001406 DIT3 and S

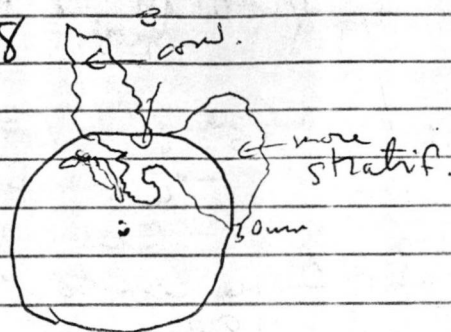
We must have turned around 0020
Got up to change tape turn to 160°

004500 11 31 105 5
See 15 km tops on
line to E of us

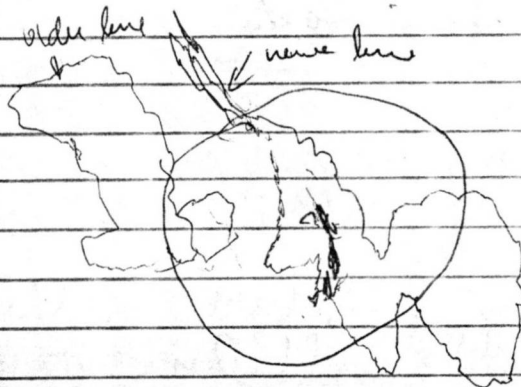
~~00540~~ 005830 Tape D2T3 and S

010710 Turn N 000°

010958 0° cont.



012320 11 7 103 43



0144

Once again
I didn't see
where tape ended
now on D2T4

0148 50

13° 1' 103 45

Turn to WSW

Line with orientator
280° - 100°
thin and intense
Bob Gall thinks it is just
front.

022500

Descending to 1000'
12° 4' 906° 27'

0228 tried a little EVAID although
little refl. here @ 150° track

023845 D2T4 end DITS start

0249 Turn 060°

0312 Left to 315°

322 turn to 225° 12° 46'
104° 55'

032510 end DITS

034230 12° 17' 160° 13'

c. 043000 ~~430~~ DIT6
started

0529 Landing in Azapulco