19880628HI-RADAR

AUG 28 1988

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 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

NMD 1. Determine the status of equipment and report results to the on-board lead project scientist (LPS).

NMD 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.

NMD 4. Complete the appropriate preflight calibrations and check lists as specified in the radar operator's manual.

E.5.2 In-Flight

NMD 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 Operate the system(s) as specified in the operator's manual and as directed by the HRD/RS, unless superseded by directions from the on-board LPS or as required for aircraft safety as determined by the OAO flight director or aircraft commander.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

NMD 1. Complete the summary check lists and all other appropriate check lists and forms.

NMD 2. Brief the on-board LPS on equipment status and turn in completed forms to the LPS.

NMD 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.]

NMD 4. Debrief at the appropriate operations center (FGOC or MGOC).

NMD 5. Determine the status of future missions and notify the appropriate operations center (FGOC or MGOC) as to where you can be contacted.

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Radar Scientist Check List

Flight ID 880828H

Aircraft # 42RF

Operators DORST

Radar Tech. ROLES

Number of digital magnetic tapes on board 11

Number of tape labels on board +

Component systems up and checked:

RDSC	↓	DSC1	↓
Computer	↓ ?	DSC2	↓
DMTR1	✓	DMTR2	✓
LF	✓	R/T#	102
TA	✓	R/T#	201

Time correction between radar time and digital time +2 sec

Radar Postflight Summary

Number of digital tapes used:

DMTR 1 2

DMTR 2 1

Significant recorder down time:

DMTR 1 _____ Radar LF _____

DMTR 2 _____ Radar TA _____

Other problems:

TA WAS OFF FREQUENCY
RADAR COMPUTER SYSTEM WAS FLAKY ALL TRIP.
ONLY AVAILABLE FOR 1 HR.

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HRD Radar Tape Log

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Flight 880828H Aircraft 42 RF Operator DoRST Sheet 1 of 1

Tape #	Time On	Time Off	Source Radar		Comments
			TA	LF	
D1T1	134026	1406	✓	✓	TA RETURN (?)
D2T1	1406	1431	✓	✓	9 FIX 1430Z
D1T2	1431	144030	✓	✓	
	144030	1442		✓	SWITCH TO LF ONLY
					CRASH !

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HRD Radar Down-Time Log

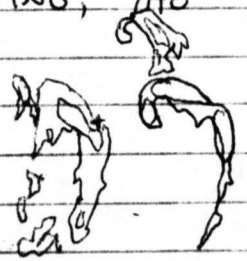
Operator DORST Sheet 1 of 1

Item	Time Down	Time Up	Problem
DATA SYS	1051Z	1340Z	SYSTEM DOWN MOST OF FLIGHT NO
			DATA TO COLLECT.
TA R/T	1340Z		TAIL R/T NOT ON FREQUENCY
COMPUTER	1442	1940Z	CRASH, RADAR STOPPED RECORDIN
			OFF REST OF FLIGHT

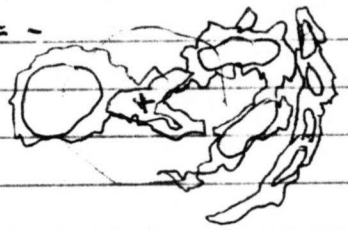
Item List: DMTR1, DMTR2, COMP, RDSC, LF, TA, DSC1, DSC2.

880828H1 - RECCO OF TS CHRIS
LPS - F MARKS RADAR - DORST
FLIGHT DIR - P BOGERT
T/O MIAMI 1051Z LAND MIAMI 1945Z
EL TECH ROLES Running 'round this morn trying to get the radar data system to work, big ?' whether there'll be any radar on this flight.

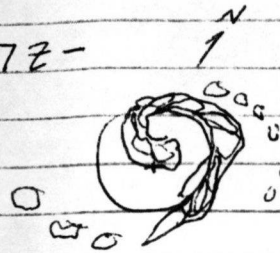
1250Z - WIND MIN OF A SORT, W/ A SHIFT IN DIRECTION, BEEN IN LOW LEVEL TURBULENCE LAST ½ HOUR NO END IN SIGHT. STILL NO RADAR
1340Z - SYSTEM UP & RUNNING. AM RECORDING, THO' TAIL RADAR MAY BE FLAKY.



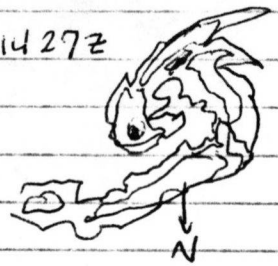
1345Z - TAIL RT NOT ON FREQUENCY
1405Z -



1417Z -



1427Z



1440Z - SWITCHED OFF TA RECORDING AS DATA IS NEXT TO USELESS. RECORDING ONLY LF RADAR
1442Z - COMPUTER WENT DOWN!
1420Z - LAST FIX HAD CHRIS ASHORE AT SAVANNAH.
1524Z - DR FM SEZ "THAT'S IT FOR THE RADAR!" ATTEMPTS TO RESTART WERE UNSUCCESSFUL.
1700Z - WE'VE TRUCKED ALL THE WAY UP TO CAPE HATTERAS TO GET SYNOPTIC FLOW FOR NHC. STILL NO RADAR, BUT EVERY NOW AND THEN THEY TRY AGAIN. LONG RIDE HOME.
1800Z - CLIMB FOR RIDE HOME. SYSTEM WAS NEVER REVIVED. ONE HOUR'S WORTH OF DATA ON 3 TAPES. TA VERY QUESTIONABLE.