

19850831I2.FDIR

U.S. DEPT. COMM./NOAA/OAO - DATA SECTION WORK FORM NO.1 OAOWF1 FILE

FLT ID: 850831 I	FM: KMFA	TO: KMFA
FLT NO: 59-85	BLK IN: 0413	ATA: 0406
ETD: 1800 Z	BLK OUT: 1805 Z	RTD: 1816
ETE: 0400 Z	BLK TIME: 10:08	FLT TIME: 9:50
SPONSOR ORG: NHC	PROGRAM: <sup>HYPER</sup> ELENA 9	PURPOSE: RECCO

OAO PERSONNEL

AC TURNER, D	SYS ENG GOLDSTZEN, A
CP MEYERS, B	DATA SYS STONE, R
NAV GERISH, T	RADAR BOGENT, P
FE RICCI, A	BT/ODW
RADIO MORRIS, R	CLD PHYS
FD DARBY, E	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON R/C	AFFILIATION
MARKS, FRANK	P I	HRD
BLACK, BOB	CP	HRD
KCHLER, BOB	RARAN	HRD
LEND, S	DOPPLER	HRD
BARRY, B	OBSERVER	HRD
THOMAS, MRS	OBSERVER	
KRYTH	OBSERVER	AOML

PROPOSED/ACTUAL MISSION/REMARKS (RECCO, FIXES, STORM, PENET, NHOP #)

11 EYE PENET.

A PATTEN E-W, N-S 60NM LEGS

0315-0330 TT2 ICE  
 AVI-INDP  
 FC-MHF 2000Z-400  
 RS-NG EGN END OF FLT

FINAL RUN 11/25/85  
 THEE TT2 AV2 PORT RAMOD

U.S. DEPT. COMM./NOAA/OAO - DATA SECTION WORK FORM NO.2 OADWF2 FILE

FLT ID: \_\_\_\_\_ TIME OFF: \_\_\_\_\_ TIME ON: \_\_\_\_\_

	R/C T/O	WX STN	R/C LAND	WX STN
PRESSURE	1012.2	1014.1	1013.1	1015.0

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES	1	
FAST FLT LVL TAPES		
RADAR TAPES	19	HRD
DOPPLER TAPES	18	HRD
ODW CASSETTES		
HARD COPIES	2	HRD
AXBT		
AXCP		
ODW		

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON		1856	1856	
OFF		0132	0132	
RATE				

REMARKS

27 45  
04 06

A/C COMMANDER	NAVIGATOR	A/C NO.	MISSION NO.	TIME AIRBORNE	LOCATION	DATE	PROJ. NAME
Turner	Gerish	N 43	405 Elena	1816	Miami	8/31/95	Hurricane Elena

TIME OF ENTRY	POSITION	TYPE	INERTIAL POSITION	LAT LON COR'S	POSITION	LAT LON COR'S	REMARKS
✓ 1805	25 48.3 80 17.6	4	25 48.3 80 17.5	0 +0.1	25 48.2 80 17.5	+0.1 +0.1	Block
1816	25 48.0 80 17.6	4	25 48.2 80 17.5	-0.2 +0.1	25 47.9 80 17.5	+0.1 +0.1	Airborne
✓ 1845	26 35.3 81 52.0	2	26 34.9 81 50.8	+0.4 +1.2	26 34.9 81 52.2	+0.4 -0.2	Over FMY
1927	28 46 83 56	10	28 44.1 83 53.8		28 45.4 83 56.4		Eye
✓ 1946	28 49.0 82 50.5	2	28 45.1 83 49.6	+2.9 +0.9	28 48.2 82 49.4	+0.2 +0.7	DME Ocala 39 Cross City 49
2015	28 48 83 53	10	28 49.4 83 52.9		28 49.2 83 52.3		Eye
✓ 2054	28 47 82 52	2	28 47.1 82 50.1		28 46.1 82 52.5	-1.1 +0.5	DME Ocala 42 St. Pete 54
2065	28 45.4 82 52.0	2	28 45.4 82 49.4	-0.4 +3.1	28 47.0 82 51.4	-1.6 +0.6	Ocala 41.5 DME St. Pete 52.7
* 2110	28 49 83 52	10	28 48.5 83 50.5		28 50.4 83 53.0		Eye INE #1 Decoupled Warn Codes INE 25) (NCS)
2202	28 49 83 51	10	28 51.3 83 50.6		28 49.4 83 50.1		Eye
2242	28 49 83 49	10	28 55.3 83 44.2		28 50.3 83 49.2		Eye
✓ 2255	28 48.3 82 59.5	2	28 54.4 82 56.4	-10.1 +3.1	28 49.4 82 58.2	-1.1 +1.3	Ocala 46.5 DME Cross City 47.3

SYS	BEGIN ALIGN TIME	NCS CONN	Ω AID	TIME OUT OF COARSE	ALIGN STS 0-5	(1) TIME INTO NAV.	(2) TIME OUT NAV.	Δ T (2)(1)	TERMINAL ERRORS		
				ELAPSE ALIGN POST TIME					LAT	LONG	GS
INS 1	1730	✓	✓		5	1744	0413	10.5	-5.0	+9.9	26
INS 2 or IMU	1730	✓	✓		5	1744	0413	10.5	+1.0	+3.2	0

ALIGN REMARKS: On initial start up NCS computer fail - Program reloaded & Operational

OTHER REMARKS: INE #2 used as Primary

TYPE OF FIX : (1) DR (2) RADIO (3) CELESTIAL (4) VISUAL (5) LORAN  
(6) RADAR (7) DOPPLER (8) OMEGA (9) INERTIAL  
(10) OMEGA - INERTIAL



OA0/SED-E&TSB FLIGHT PERFORMANCE LOG

TECH CREW: ASG, RAS FLIGHT ID: 850831 I  
 AIRCRAFT: N43RF MISSION: HURRICANES 85 ELENA  
 TIME: (PRE-FLIGHT) 1615Z (TAKE-OFF) 181601Z (LAND) 040613Z

SYSTEM			PRE-FLIGHT	IN-FLIGHT	POST-FLIGHT			
	ALIGN	PI	AID			LAT	LON	GS
N	INE1			✓		-5.0	+9.9	26
A	INE2			✓		+1.0	+3.2	0
V	ONE		①	✓				
	DOPLR			✓				
R	INTEGRATION (PRI'S)							
A	NOSE	N/A		✓		# TAPES: 0		
D	L/F	15	✓	✓	WVGD PRESS	④		
A	TAIL	63	✓	②	PUMP ON?			
R	DATA SYSTEM			✓		# TAPES: 19		
	DOPPLER			②	③	# TAPES: 18		
TEMP	CAL HI	CAL LO	AMBIENT			CAL HI	CAL LO	
TEMP #1	30.4	-30.0	+35.1			30.4	-30.0	
TEMP #2	30.8	-30.1	+35.4			30.8	-30.0	
DEW POINT (CLEANED: Y(N))			+25.3					
ATTACK ANGLE (AP/DAP)			✓					
SLIP ANGLE (BP/DBP)			✓					
ABSOLUTE PRESSURE (PS)			✓					
DIFFERENTIAL PRESSURE (PQ)			✓					
ROSEMOUNT PRESSURE XDCRS			✓					
RADAR ALTIMETER S/N: SW-2			✓					
J&W			✓			⑥		
SURFACE RADIOMETER			✓					
CO2 RADIOMETER			✓					
P	OAP2D-C		✓					
M	OAP2D-P		✓					
S	FSSP-100		✓					
	DATA SYSTEM			✓	⑤	# TAPES: 2		
ICE RATE DETECTOR			NI					
RAMS DATA SYSTEM			✓			⑦		
CLEAN MAG TAPE HEADS			✓			# TAPES(SLO): 1		
EXTERIOR WALK-AROUND			RHS ✓			# TAPES(FAST): 0		
ASDL			✓			# MESSAGES: 19		
HARDCOPY			✓			⑧		
SCIENTIFIC POWER SYSTEMS			✓			POWER OFF? ✓		
SFMR			✓					
AXCP			NU					
P		RATE	(COUNTS)	ON	TIME OFF	(COUNTS)		
H	1) FORWARD		NI					
O	2) VERTICAL							
T	3) LEFT SIDE	1/5	φφ	1856Z	2532Z	4818		
O	4) RIGHT SIDE	1/5	φφ	"	"	4819		
AXBT SYSTEM			NU					
ODW SYSTEM			NU					
AXBT EXPENDABLES:			# ON BOARD:	φ	# DROPPED:	-	# GOOD:	-
DROPSONDES:			# ON BOARD:	φ	# DROPPED:	-	# GOOD:	-
CUMMULATIVE ACCEL. (MELC)			#1 (2G)	#2 (2.5G)	#3 (3G)	#4 (3.5G)		
(LOG AT END OF FLIGHT)			8078	6679	5966	2892		

CPTFILE: FLOG3HUR85

CODE: - OPERATIONAL; X(#)(TIME) - FAILURE (NOTE);

NI - NOT INSTALLED; NU - NOT USED

USE REVERSE SIDE FOR NOTES.

REPORT COMPLETION OF PRE-FLIGHT AND INSTRUMENT STATUS TO FLIGHT DIRECTOR.



- ① CNPTR LIGHT ON PREFLT - RELOADED ONE OK
- ② VSWR LIGHT ON - EVEN WHEN IN STBY MODE - INOP ~~WAS~~ ~~RELOADED~~
- ②A VSWR LIGHT COMES ON  $\approx 10$ sec after fault breaker set to on position (while in stby); then stays on till unit turned off & on again
- ③ timing may have been coincidence - VSWR may be coming on after 4 min timeout.
- ③ 1925Z DOPPLER DATA RECORDING BEING CONTAMINATED BY L/F RADAR. TRIED WRAPPING TIN FOIL AROUND CABLE, WITHOUT SUCCESS. WIGGLE L/F R/T AND PROBLEM GOES AWAY. MAY HAVE A WAVE GUIDE LEAK.
- ④ 1930Z L/F HAS ERRATIC SWEEP, SPEEDS UP THEN SLOWS DOWN. SWITCHED ACU & ASEU. STILL NO GOOD.
- ⑤ 2245Z PMS SYSTEM WILL NOT RECORD DATA. RESEATED FORMATTER BOARDS & ALLOWED P.A.S. TO COOL, NO GO.
- ⑥ J/W WOP. METER PEGGED TO LEFT END OF SCALE.
- ⑦ RAMTEK, SCREEN 7, DRAW EXTRA VERTICAL LINES. LOOKS LIKE MEMORY BOARD PROBLEM.

② 1930Z Tail R/T OK - no explanation

④A 0310 L/F OK now - no explanation - a/c poor for a few min, but by 0320 operation properly but top of screen is not aircraft heading point - looks like  $\approx -120^\circ$  offset from acft hdg

⑧ Hardcopy full of paper bits - contributes to the pile when

⑧ operation is attempted  
 INE# decoupled 3 hrs into flight & had erratic drift afterwards  
 Repairs:

⑧ JFW head had bad solder joint - replaced head - no cal box available so comp & zero settings may have to be adjusted on next flight.

no joy on L/F ant control  
 didn't try to fix PMS