

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

FLT ID: 970720 H	FM: TBPB	TO: TBPB
FLT NO: 97-048	BLK IN: 2216	ATA: 2214Z
ETD: 1530Z	BLK OUT: 1523	RTD: 1532Z
ETE: 2300Z	BLK TIME: 6:53 6.9	FLT TIME: 6:42 6.7
SPONSOR ORG: HRD	PROGRAM: HRD Cyclogenesis	PURPOSE: TD #5

OAO PERSONNEL

AC McKim, G ✓	SYS ENG BARR, J ✓
CP JAGGANT, B ✓	DATA SYS CARPENTER, D ✓
NAV RATHBUN, D ✓	RADAR
FE TORREY, R ✓	BT/ODW GONZALEZ, J
RADIO	CLD PHYS
FD CZYZK, S ✓	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
WILLOUGHBY, H ✓		
ABERSON, S ✓		
GOLDENBERG, S ✓		
DODGE, P ✓		
BLACK, M ✓		

PROPOSED/ACTUAL MISSION/REMARKS (RECCO, FIXES, STORM, PENET, NHOP #)
 BALANCE DPTR #1 161040 - 161315

U.S. DEPT. COMM./NOAA/OAO - DATA SECTION WORK FORM NO.2 OAOWF2

FLT ID: 970720H

TIME OFF: 1532Z

TIME ON:

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1010.4	3004/1012.0	1009.2	30.01/1016.0

NO

DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES	✓ 1		
FAST FLT LVL TAPES	✓ 1		
RADAR TAPES			
DOPPLER TAPES			
ODW CASSETTES			
HARD COPIES			
AXBT			
AXCP			
ODW			
GPS	17		

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

970 720 H

[illegible]

NOAA • AOC • SED
N42RF DROP STATION LOG

Project : ADEOS

Mission : _____

Flight ID : 970720H

Take Off : _____

Landing : _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Sonde OK	Comments
1	970150112	1	-0.8	1703	\$		PTH GOOD WIND ON & off
2	385-400 041	1	0	1731			Good
MOD 3		1	-1.0	1745			NO WINDS PTH OK
4	970150167	2	-0.6	1757			GOOD WITH WINDS ON & off
MOD 5	385-400-025	1	0.3	1825			PTH OK NO GOOD
MOD 6	970150002	2	-0.3	1832			WINDS ON & off Good
7	970150123	1	-0.6	1843			NO WINDS
8	970150181	2	-0.4	1854			NO WINDS
9	970150204	1	0	1913			Good
10	970150122	1	-0.8	1930			Good
11	970150006	1	-0.4	1944			Good
12	970150113	1	-0.9	1958			PTH OK NO GOOD

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Sonde OK	Comments
13	970150023	2	45	2008	G		NO WINDS PTI4 OK
14	970150119	1	-8	2021			PTI4 OK NO WINDS
15	970150026	1	-3	2045			No Goup PTI4 OK
16	970150115	2	-7	2052			No Goup
	RE BOOTED SYSTEM 2100 Z						
17	970150007	1	-4	2110			GOOD
18							
19							
20							
21							
22							
23							
24							

Drop Station Operator Notes

TD #5/TROPICAL WAVE

Flight #2 H970720

<u>Sensor or system</u>	<u>Number or Name</u>
INE	2
Accelerometer	2
Temperature Probe	1
Dew Point Probe	1
Altitude (for vertical wind)	RA-159
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO2973.CON

Notes:

Downward spikes in radar altimeter are a result of overflying land (1619:20-1620:50, 1627:40-1628:00, 1634:40-1637:30, 1923:00-1923:30, 2138:30-2145:00).

Radar altimeter (RA-159) had a spike at takeoff (1532:31-1532:55) and was replaced with RA-232. RA-159 had spike just prior to landing and was replaced by RA-232 2213:24-2213:40. RA-159 was set to zero at landing due to spike (2213:40-2216:00).

Dewpoint (DW1) was balanced and replaced by DW2 1610:20-1613:30. DW1 was not working properly due to precipitation and icing 1634:30-1654:00 and 2137:00-2205:00.

Dewpoint #1 (DW1) exceeded ambient temperature several times due to heavy precipitation.

Temperature probe (TT1) had dropout due to heavy precipitation 2130:45-2138:00. TT1 was replaced by TT2 2138:01-2148:15.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1010.4	1017.0
Corrected tower pressure	1009.2	1016.0

The aircraft INE positions were renavigated with respect to GPS.

SPECIAL NOTE!!! Locations 80, 81 and 82 of record five on the standard tape contain vertical ground, vertical air and vertical speeds, respectively, computed using Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

Flight Meteorologist: Stan Czyzyk, (813) 828-3310 ext. 3086

970720H

1523:21
1523:50

2208:51
2209:10

155700, -0.2, 0.2	14 27.9	-60 15.2
162300, -0.6, 0.8	16 9.3	-61 19.0
170600, -0.2, -0.5	19 11.2	-62 39.4
173100, -0.1, 0.0	20 34.8	-63 33.3
181400, 0.9, 0.0	20 37.1	-67 3.6
184300, 0.0, 0.1	19 14.1	-67 56.0
192000, -0.8, 0.5	18 21.5	-65 33.0
194600, 0.6, -0.4	17 29.5	-66 54.5
202600, 0.1, 0.7	16 18.2	-66 30.6
204500, -1.3, 0.5	16 14.1	-64 58.0
211000, 0.1, -0.5	16 18.6	-63 1.5
221600, -2.3, 1.1	13 4.6	-59 29.4

BPR PROB IN PRECIP

BPR PROB FROZEN SEVERAL TIMES

TT2 DROPOUT IN PRECIP 1700:40 - 1704:00
 " " " 1707:30 - 1726:30
 " " " 2104:20 - 2107:00
 " " " 2130:30 - 2140:00

TT1 DROPOUT IN PRECIP 2130:45 - 2148:15 -
 REPLACE W/2 FROM 2138:00 - 2148:15 ✓

RA-159 SPIKE & TAKEOFF REPLACE W/232 1532:31 - 1532:55 ✓ -
 RA-159 OVERLAND 1619:20 - 1620:50 DIPS -
 OVERLAND 1627:40 - 1628:00 DIP -
 OVERLAND 1634:40 - 1637:30 DIPS -
 SPIKE 1923:00 - 1923:30 -
 OVERLAND 2138:30 - 2145:00 DIPS -

RADAR SPIKE & LANDING SET TO ZERO 2213:40 ✓ -
 REPLACE W/232 2213:24 → 2213:40 ✓ -

DW1 BALANCE OPTIC 1610:31 - 1613:20
 REPLACE W/DW2 1610:20 - 1613:30 ✓ -

DW3 SPIKES 1610:01 - 1612:30 (2)

DW1, 2, 3 FROZEN 2137:00 - 2205:00 -

DW2 PROBS IN PRECIP 1550:01 - 1610:00

DW2 OUT TO LUNCH 1630:00 - 1650:00

DW1+3 PROBS 1634:30 - 1654:00 -

TT2 LAG PROBS 1531:00 - 1552:30

```

TITLE (MAX 21 CHARACTERS) -- EX HURRICANE PAINE
TD #5/WAVE #2
YYMMDDL FLT I.D.
970720H
HHMMSS START TIME -99999 DEFAULT TO START OF DATA FOR PRINTOUT ONLY
152801
HHMMSS END TIME 999999 DEFAULT TO END OF DATA FOR PRINTOUT ONLY
221600
HHMMSS TAKE OFF TIME
153201
* NUMBER OF TAPES (I2) ...FOR STANDARD TAPE OUTPUT ONLY
2
* -----LOGICAL UNIT OF INPUT DATA (I1) 5, 8 OR 9 FOR TAPE DRIVE
9
* -----LOGICAL UNIT OF OUTPUT TAPE DRIVE (I1) [FOR STANDARD TAPE ONLY]
9
* -----LOGICAL UNIT OF PRINTER (I1)
6
* -----DATE OF PROGRAM (MMDDY)
06094
* -----STATIC PRESSURE PROBE (I1)
* 1 = PSW (WINGTIP)
* 2 = PSF (CO-PILOT/FUSELAGE)
* 3 = FUTURE USE
2
* -----DYNAMIC PRESSURE PROBE (I1)
* 0 = PQW(WINGTIP)
* 1 = PQF1 (FUSELAGE 1281)
* 2 = PQF2 (FUSELAGE 1221)
* 3 =FUTURE US
1
* -----INE SELECTION (I1)
* 1 = INE 1
* 2 = INE 2
2
* -----ACCELEROMETER (I1) - USUALLY THE SAME AS YOUR INE SELECTION
2
* ----- TOTAL TEMPERATURE PROBE (I1) [1 OR 2]
1
* ----- DEWPONT TEMPERATURE PROBE (I1) [1 OR 2]
1
* -----ALTIMETER OPTION (I1) - FOR VERTICAL WIND COMPUTATION
* 0 = PRESSURE ALTITUDE (OVER LAND)
* 1 = RADAR ALTITUDE APN-159 (OVER WATER)
* 2 = RADAR ALTITUDE APN-232 (OVER WATER)
1
* -----PRINTOUT RATE SECONDS (I2)
10
* -----WINDSPEED/DIRECTION RUNNING AVERAGE TIME, SECONDS (I2)
10 ! FOR STANDARD TAPE OUTPUT ONLY
* -----TIME OPTION (I1)
* 1 = MICRO 29
* 2 = TIME BASED GENERATOR #1
* 3 = TIME BASED GENEATOR #2
1
* -----NAME OF CONSTANTS FILE EX C03863.CON
C02973.CON
*****

```

Aircraft Operations Center
PO Box 6829
MacDill AFB, FL 33608-0829

March 16, 1996 AOC1:sw

MEMORANDUM FOR: *Dr. Hugh Willoughby, Director HRD*

FROM: Captain George C. Player, III, NOAA
Director, Aircraft Operations Center

SUBJECT: Hazard Duty Flight

The mission flown on AOC aircraft # N42AF on 7/20/97 has been declared hazardous. The following personnel from your laboratory participated in this mission.

H. WILLOUGHBY
M. BLACK
P. DODGE
S. AMBERSON
S. GOLDENBERG

For purpose of computing allowable hazard duty time, the hazard period during this mission was from 01123 local time on 7/20/97 until 1820 on 7/20/97.

DATE : 7/20/97

TO : Chief, AOC Flight Operations

TO : Chief, AOC Flight Operations

FROM : Pilot/Flight Director, Aircraft NY2RF ON 1523Z BLOCKTIME

FROM : Pilot/Flight Director, Aircraft N42RF
OFF 2216 6.9

SUBJECT: Hazardous Duty

PURPOSE OF FLIGHT: GENESIS MISSION INTO TD #5/TW

Hazardous Duty Pay is required for flight made on 7/20/97
(DATE)

Request based on INTENT TO FLY IN TO SEVERE WEATHER

Personnel on board authorized Hazard Pay:

C2424K; 5

TORREY, R

CARPENTER, D

BARR, J

GONZALEZ, J

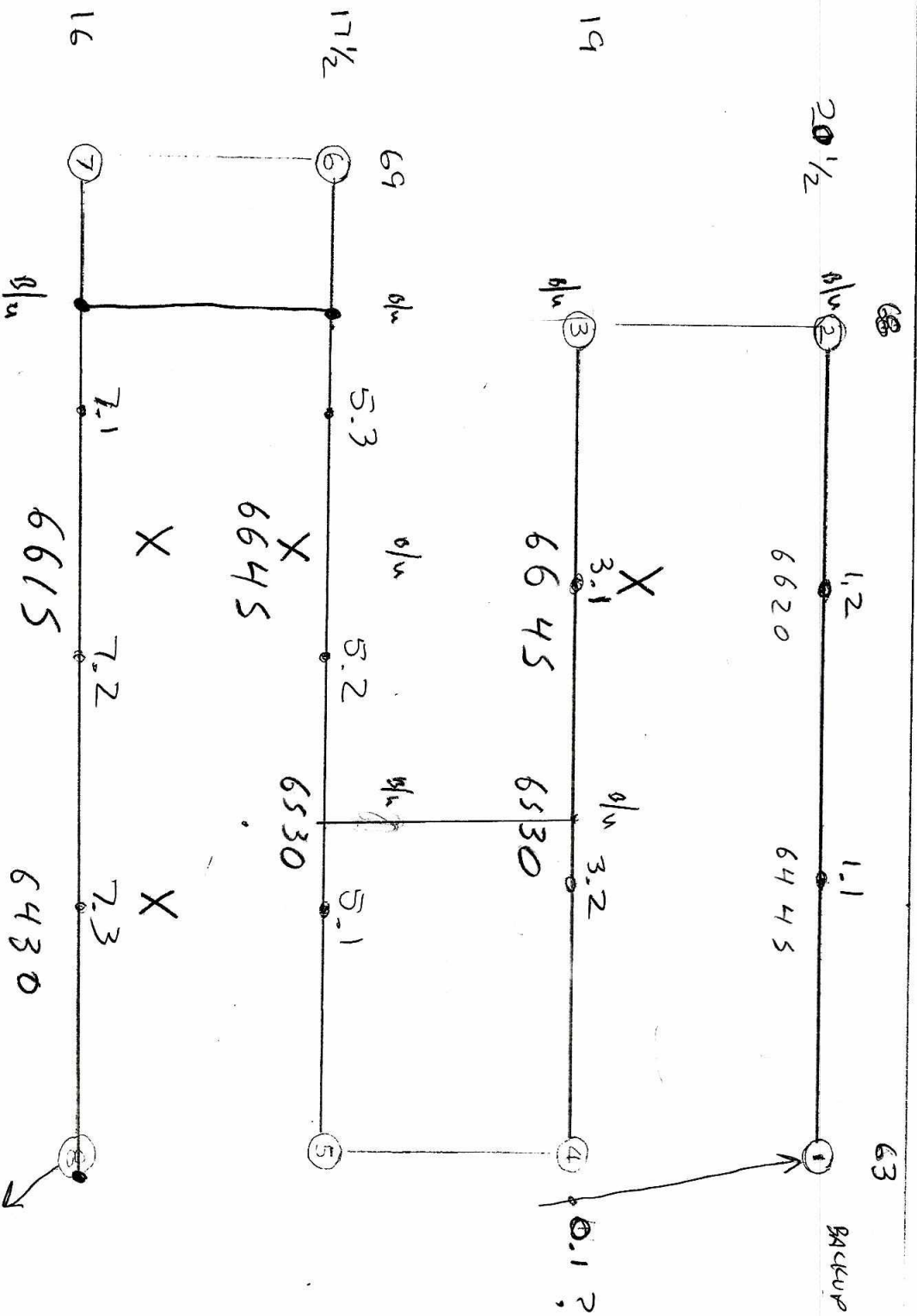
PILOT/FLIGHT DIRECTOR:

APPROVED:

DISAPPROVED:

CHIEF, AOC FLIGHT OPERATIONS:

970620H



17 37
65 42
ETN

16 17
66 34

65
16 13

63
16 18

TBPB

20.5N	63W
20.5N	68W
19.0N	68W
19.0N	63W
17.5N	63W
17.5N	69W
16.0N	69W
16.0N	63W

150 miles prior to IP

IP DROP

CORNER DROPS

DROP EVERY 150 NM

2-HR RECCOS

WXXXX WXX

30 sec / 10 mw bursts

RØ, A

612	6.21
47	0.59

