

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

FLT ID: 970721H	FM: TBPB/KOPF	TO: KOPF/MCF
FLT NO: 97-049	BLK IN: 2107/2212Z	ATA: 2104Z/2203Z
ETD: 1600Z/2130Z	DLK OUT: 1550Z/2110Z	RTD: 1601Z/2118Z
ETE: 2100Z/2230Z	BLK TIME: 6:18 6.3	FLT TIME: 5.48 5.8
SPONSOR ORG: HRD	PROGRAM:	PURPOSE: TWave/Colt-Low

OAO PERSONNEL

AC McKim, G ✓	SYS ENG BARR, J ✓
CP TAGGART, B ✓	DATA SYS CARPENTER, D ✓
NAV RATHBUN, D ✓	RADAR
FE TORREY, R ✓	DT/ODW GONZALEZ, J ✓
RADIO ROGERS, M ✓	CLD PHYS MCWHIRTER, D
FD C2424K, S ✓	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/OAO

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

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

RA-159 NOT ON UNTIL 1604Z

DUMPED FUEL 1615:00 -

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

FLT ID: 970721H

TIME OFF: 1601Z

TIME ON: 2301Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1016.4	30.06	1016.2	30.04

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES		
FAST FLT LVL TAPES		
RADAR TAPES		
DOPPLER TAPES		
ODW CASSETTES		
HARD COPIES		
G		
AXBT		
AXCP		
ODW		
6Ps	6	

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

NOAA • AOC • SED
N42RF DROP STATION LOG

Project : ADEOS

Mission : _____

Flight ID : 970721 H

Take Off : 1600 Z

Landing : 2200 Z

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Sonde OK	Comments
1	970150121	1	-1.4	1909	JE		GOOD
2	970150168	2	.5	1928			GOOD WINDS ON FOSS
3	970150180	1	-.3	1943			NO WINDS
4	970150034	2	+1.3	1958			NO GOOD
5	970150242	1	-1.9				NO GOOD
6	965120027	2	0	2018			GOOD
7	965040239	1	-1.1				
8							
9							
10							
11							
12							

TD #5/TROPICAL WAVE

Flight #3 H970721

Sensor or system

Number or Name

INE	1
Accelerometer	1
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 (1604:40-1606:50, 1828:05-1830:00, 1758:00-1759:20, 1836:00-1840:10 and 1842:30-1845:00).

Radar altimeter (RA-159) had a spike at takeoff (1601:01-1604:20) and was replaced with RA-232. RA-159 had spike and was replaced by RA-232 2118:05-2122:40. RA-159 was set to zero at landing due to spike (2104:13-2118:05).

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

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1011.4	1016.2
Corrected tower pressure	1017.9	1017.3

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

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 # N42RF on 7/21/97 has been declared hazardous. The following personnel from your laboratory participated in this mission.

H. WILLOUGHBY

P. DODGE

S. ABERSON

S. GOLDENBERG

M. BLACK

For purpose of computing allowable hazard duty time, the hazard period during this mission was from 1150 local time on 7/21/97 until 1706 on 7/21/97.

970721H

[illegible]

97072/H

RENAV

163700	0.0, 0.1	14	4.6	-61	48.5
170900	-0.2, -0.1	15	7.8	-64	13.6
174300	0.0, 0.0	17	6.2	-66	13.1
181900	0.2, 0.2	18	58.4	-68	26.6
185700	-0.2, 0.6	20	11.6	-71	28.7
193100	1.9, -0.2	21	28.1	-74	9.1
200500	1.2, 0.7	23	30.4	-76	16.9
203500	1.5, 0.5	24	59.9	-78	25.3
213800	2.5, 0.9	26	41.8	-81	14.4
220300	3.4, 0.1	27	50.3	-82	31.9

1550:01

1550:30

1601:01 - 1604:00 RA-159 SPIKES REPLACE W/232 ✓ -

1604:40 - 1606:50 RA-159 DIPS OVERFLYING LAND -

1828:05 - 1830:00 RA-159 DIPS, OVERFLYING LAND -

2003:00 - 2022:00 TTZ DIPS, PRECIP (ICING)

2039:30 - 2041:15 APR FALLOFF

2104:13 - 2118:05 RA-159 SPIKE SET 2 ZERO ✓ -

1758:00 - 1759:20 RA-159 DIPS OVERFLYING LAND -

1836:00 - 1840:10 RA-159 DIPS OVERFLYING LAND -

1842:30 - 1845:00 RA-159 DIPS OVERFLYING LAND -

2046:00 - 2054:00 DW#3 PROBS

2016:00 - 2043:00 APR DEAD (FREEZE?)

1734:30 - 1754:00 BPR PROBS IN PRECIP (ICING)

2002:00 - 2038:00 BPR PROBS IN PRECIP (ICING)

1734:30 - 1742:00 RPR FROST IN PRECIP (ICING)

2118:05 - 2122:40 REPLACE RA/159 w/ RA 232 DUE TO SPIKE ✓ -

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TITLE (MAX 21 CHARACTERS) -- EX HURRICANE PAINE
TD #5/WAVE
YYMMDDL FLT I.D.
970721H
HHMMSS START TIME -99999 DEFAULT TO START OF DATA FOR PRINTOUT ONLY
155701
HHMMSS END TIME 999999 DEFAULT TO END OF DATA FOR PRINTOUT ONLY
210800
HHMMSS TAKE OFF TIME
160101
* NUMBER OF TAPES (I2) ...FOR STANDARD TAPE OUTPUT ONLY
3
* -----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
1
* -----ACCELEROMETER (I1) - USUALLY THE SAME AS YOUR INE SELECTION
1
* ----- 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 CO3863.CON
CO2973.CON
*****

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DATE : 7/21/97
TO : Chief, AOC Flight Operations
FROM : Pilot/Flight Director, Aircraft N42RF ON 2212 BLOCKTIME
SUBJECT: Hazardous Duty OFF 1500 6.3

PURPOSE OF FLIGHT: TROP. WAVE / COLD LOW INVESTIGATION

Hazardous Duty Pay is required for flight made on 7/21/97
(DATE)

Request based on INTENT TO FLY INTO SEVERE WEATHER

Personnel on board authorized Hazard Pay:

C2424K, S

TORREY, R

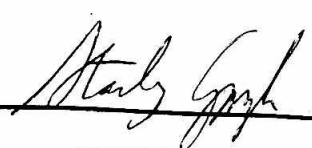
CARPENTER, D

BARR, J

GONZALEZ, J

MCWHIRTER, D

ROGERS, M

PILOT/FLIGHT DIRECTOR: 

APPROVED: _____

DISAPPROVED: _____

CHIEF, AOC FLIGHT OPERATIONS: _____

42 COME IN SOUTH OF P.R.

DROPS START BETWEEN HISP. + GREAT INAVGA

START RECCOS AROUND MOWA PASSAGE

Drops 72.5 W
74.0 W
75.0 W
76.0 W
77.6 W

<SOH>

941

FTUS31 KWBC 211147 RRA

TAF

KMEM 211130Z 211212 00000KT 3SM HZ SKC

FM1400 30005KT 5SM HZ SKC

FM1700 28006KT 5SM HZ SCT050

FM0000 20005KT 5SM HZ SCT100=

KORF 211132Z 211212 VRB03KT 4SM BR BKN005

TEMPO 1213 1SM BR OVC001

BECMG 1314 5SM HZ SCT009 BKN020

FM1500 18008KT 6SM HZ SCT025 BKN150 PROB40 1901 VRB12G25KT
2SM +TSRA BKN020CB

FM0200 18005KT 5SM HZ BKN025

TEMPO 0812 2SM BR OVC006=

KPHF 211132Z 211212 VRB03KT 4SM BR SCT010 OVC030

TEMPO 1214 2SM BR OVC006

BECMG 1416 18008KT 5SM HZ SCT025 BKN150 PROB40 1901

VRB12G25KT 2SM +TSRA BKN020CB

FM0200 18005KT 5SM HZ BKN025

TEMPO 0812 2SM BR OVC008=

KRDU 211137Z 211212 VRB03KT 2SM BR SCT050 BKN070

TEMPO 1213 1SM BR

FM1400 23006KT 5SM HZ SCT020 BKN250

FM1800 21009KT P6SM SCT040 PROB30 1802 2SM TSRA BKN020CB

FM0200 20006KT P6SM BKN250

FM0600 20006KT 5SM BR BKN250

TEMPO 1012 2SM BR=

KSEA 211139Z 211212 20008KT P6SM SCT007 SCT050

BECMG 1314 BKN007

FM1400 20008KT P6SM OVC007

FM1600 20008KT P6SM OVC011

FM1800 20008KT P6SM OVC021

FM2200 25008KT P6SM BKN030

FM0900 20008KT P6SM OVC022=

KTPA 211130Z 211212 13004KT P6SM VCSH SCT250

FM1500 20008KT P6SM VCTS SCT025CB BKN150

TEMPO 1517 BKN025

FM1700 27010KT P6SM SCT030 BKN250

TEMPO 1721 VRB15G30KT 2SM TSRA BKN015CB

FM2100 29008KT P6SM SCT030 BKN120 PROB30 2124 5SM SHRA BKN030

FM0200 VRB04KT P6SM FEW030 BKN250=

<ETX>

MISSION LOG	PAGE ____ OF ____
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The image contains two circular diagrams, each with degree markings around the perimeter. The top diagram has markings at 000, 090, 180, 270, 360, and 450. The bottom diagram has markings at 000, 090, 180, 270, 360, and 450. Handwritten text is present in the center of the bottom diagram: "MIN 8", "WINCO LABELLE", "V 97 61065", and "MCF".

[illegible]