

U.S. DEPT. COMM./NOAA/OAO - DATA SECTION WORK FORM NO. 1 OROWF1 FILE

FLT ID: 960815H	FM: BPB	TO: BPB
FLT NO: 56-043	BLK IN: 0001	ATA: <del>1535</del> 2356
ETD: 1500	DLK OUT: 1527	ATD: <del>1527</del> 1535
ETE: 7+30	BLK TIME: 8.6	FLT TIME:
SPONSOR ORG: NOAA	PROGRAM: HRD	PURPOSE: Trap Cytogen

OAO PERSONNEL

AC PLAYER, G ✓	SYS ENG M'NICLAN, S ✓
CP M'KIM, G ✓	DATA SYS
NAV RATHBUN, D ✓	RADAR
FE WADE, S ✓	BT/ODW
RADIO	CLD PHYS BARR, J ✓
ROCK WHITE, S ✓	DOPPLER

Rock

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
MCFADDEN ✓	PM	AOC
BLACK, P ✓		HRD
GAMACHE, J ✓		
BRACKEN, E ✓		
POSTENAJTA, J ✓		U MASS
POWELL, R ✓		"
HOCK, T ✓		NCAR
CHAMBERLAIN, N ✓		"

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

1016 ~ 30.01  
 1014 ~ 29.55 100/8 1800 SCT 2723 1015  
 070/10  
 080/12

U.S. DEPT. COMM./NOAA/OAD - DATA SECTION WORK FORM NO.2 DROWF2 F11

FLT ID: 960815H TIME OFF: 1535 TIME ON: 2356

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1017.0	1016	1015.2	1015.0

NO		DATA DISPOSITION/DATE/QUALITY	
1/SEC FLT LVL TAPES			
FAST FLT LVL TAPES			
RADAR TAPES			
DOPPLER TAPES			
DDW CASSETTES			
HARD COPIES			
CLD PHYSICS	1	J. Gamache	
AXBT			
AXCP			
DDW GPS	7		

PHOTOGRAPHY					
	FWD	LS	RS	VERT	
ON	1	1	1	1	
OFF					
RATE					

REMARKS

Time	TA	ID	WD	WS	PS	Remarks
1535	28.5	24.4	137	22.4	505.5	T/O
1616	-4.7	-11.2	112	16.8	505.5	Level 18k
1625:08	-4.7	-11.7	068	4.6	505.5	GA 5830
1630:27	-4.6	-12.2	074	5.2	505.5	GA 5830 GPS sonde
1645:03	-5.7	-12.0	114	7.1	505.9	GA 5822 GPS sonde
1715:00	-4.7	-9.5	107	12.0	506.4	GA 5810 GPS sonde
1722:27	-4.2	-11.3	076	18.0	506.6	GA 5806 GPS "
1730:26	-5.1	-8.7	096	14.8	506.6	GA 5810 GPS "
1736:41	-4.5	-7.8	84	18.0	506.1	GA 5814 GPS "
1742:21	-4.8	-7.5	83	26.0	506.2	GA 5810 GPS "
1745:00			92	17.0	506.6	turn to NE
1757:00	-4.4	-11.9	87	18.3	506.4	turn to W
1810:			98	23.3		turn to SE descend to 8k
1847	11.7	8.9	167	14.6	252.8	turn to NE
2003	12.1	8.1	180	28.2	253.0	nice S wind
2058	12.1	8.5	133	13.8	253.0	turn to NE
2134	12.1	12.7	140	13.3	252	" " SE
2203	22.2	22.6	83	23.7		turn to E
2356	"	"	"	"		CND

960815 H

START: 1532:01811  
END: 2358:00

BAD BLOCKS

~~1852:15~~  
~~:20~~

~~1544:12~~  
~~:20~~

1904:51 ✓  
05:10 ✓

INE 1

1617:11 ✓  
:20 ✓

~~1931:54~~  
1932:00

AUX 1 <sup>11/23/96</sup>

~~1644:28~~  
:30

1943:11 ✓  
:30 ✓

~~DW 2~~

~~2113:04~~  
:10

~~2010:18~~  
:20

DW 1 & 2

~~2320:53~~  
~~21:00~~

2046:01 ✓  
:10 ✓

saturated

183500 - 183900

~~2112:58~~  
13:00

212100 - 212200

NO RENUA

213300 - 213500

225500 - 225800

RA 159 w/232 1535:00 - 1537:00

RA 159 w/GPS + 20

160501 ~~1606:00~~ - 163:00

RA 159 w/232

~~2356:01~~ - 2358:00

~~2355:31~~

2355:00

TROP CYCLOGENESIS

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FLIGHT #2 H960815

TYPE OF DATA -----	SENSOR OR OPTION -----
INE	1
Accelerometer	1
Temperature probe	1
Altitude change option (for vertical winds)	RA159
Static pressure	Rosemount fuselage
Dynamic pressure	Rosemount fuselage
Time source	Micro 99
Constants file	CO2964.CON

Notes:

There were eight time/data gaps:      1617:11    1617:20    1904:51  
 1905:10    1943:11    1943:30    2046:01    2046:10

Dewpointers 1&2 (DW1 and DW2) became saturated during the following time periods:

1835:00 - 1839:00
2121:00 - 2122:00
2133:00 - 2135:00
2255:00 - 2258:00

The King Liquid water probe was inoperable for the entire flight.

Spikes in the RA159 were replaced with RA232 or GPS during the following time frames:

1535:00 - 1537:00
1605:01 - 1613:00
2355:00 - 2358:00

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.

	Takeoff -----	Landing -----
Aircraft static pressure	1017.0mb	1015.2mb
Corrected tower pressure	1016.0mb	1015.0mb

Flight Meteorologist: Sean White: (813) 828-3310 ext. 3072

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TITLE (MAX 21 CHARACTERS) -- EX HURRICANE PAINE
TROP CYCLOGENESIS
YYMMDDL FLT I.D.
960815H
HHMMSS START TIME -99999 DEFAULT TO START OF DATA FOR PRINTOUT ONLY
153211
HHMMSS END TIME 999999 DEFAULT TO END OF DATA FOR PRINTOUT ONLY
235800
HHMMSS TAKE OFF TIME
153500
* 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
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
CO2964.CON
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DATE : 19. August 1996

TO : Chief, AOC Flight Operations

FROM : Pilot/Flight Director, Aircraft N42RF ON 0001 BLOCKTIME  
OFF 1527 8.6

SUBJECT: Hazardous Duty

PURPOSE OF FLIGHT: TROP. CYCLOGENESIS

Hazardous Duty Pay is required for flight made on 15 Aug 1996  
(DATE)

Request based on SEVERE WX  
OPERATIONS

Personnel on board authorized Hazard Pay:

- WADE, S \_\_\_\_\_
- McMILLAN, S \_\_\_\_\_
- BARR, J \_\_\_\_\_
- McFADDEN, J \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

PILOT/FLIGHT DIRECTOR: CCDR Sean R. White

APPROVED: \_\_\_\_\_ DISAPPROVED: \_\_\_\_\_

CHIEF, AOC FLIGHT OPERATIONS: \_\_\_\_\_

14 67

15 67 SW 13 51 E

13/51 6630 v/slit

etc. of conv.  
active

1-13  
BS to SA

64/68

Fri. 50h  
N42 low

BGR

~~Parque~~

Modux  
Milde

16 57 6300

15 17 6552

15 17 69

14 20 69

14 20 64

13 20 64

13 20 70

12 30 6956.5

12 30 6031

RAKAN  
BGR

370-373, 377

~~14.5 66.7~~

~~15.5 66.5~~

~~14.1 65.4~~

~~16.0 63.2~~

~~15.8 62.5~~

~~13.0 65.2~~

~~12.2 64.6~~

~~15.2 61.7~~

14.6 61.0

12.0 63.0 30mm GPS

12.6 60.5 6min

13.0 59.5

~~14 64~~

~~14 68~~

~~15.5 66.6~~

~~14.0 66.0~~

15.0 64.0

BPA 13.0 59.5

136 mm

130 mm

60 mm

30 mm



N pt

17 63 14.5 67 @ 18k

1629 (N43) 12.5 62.5

Armano 2224

S↓ 6432 13N 64W

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

March 16, 1996 AOC1:sw

MEMORANDUM FOR: DR. H. WILLOUGHBY

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

SUBJECT: Hazard Duty Flight

The mission flown on AOC aircraft # N42RF on 15 Aug 96 has been declared hazardous. The following personnel from your laboratory participated in this mission.

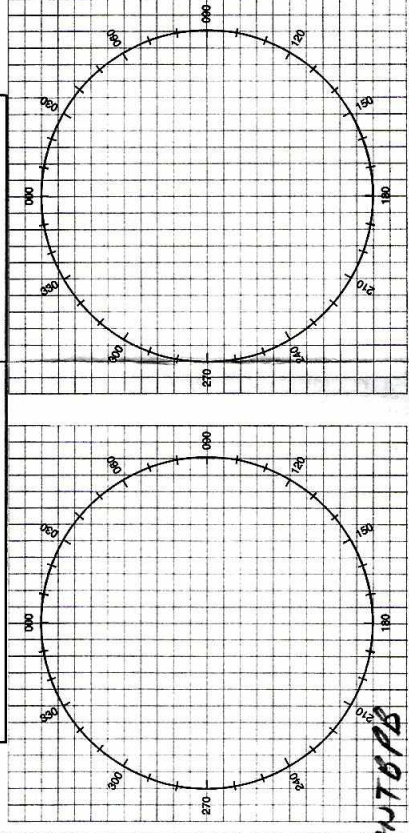
BLACK, P  
GAMACHE, J  
BRACKEN, E

For purpose of computing allowable hazard duty time, the hazard period during this mission was from 11:27 am local time on 15 Aug 96 until 8:01 pm on 15 Aug 96

2224

CLEARANCES		
FREQ	ALT	HDG
14	64	1304, 296
14	68	5930, 276
ARRIVAL		
14	66	1420 6520
15	64	1630 6315
BANK		
		1550 6230
		1300 6515
		1215 6435
		1510 6140
		FOF
		1200 6300 RAKANTOPS

MISSION LOG PAGE \_\_\_ OF \_\_\_



POSITION REPORT	
1. POSITION	
2. TIME	
3. ALTITUDE	
4. NEXT POSITION	
5. ETA	
6. NEXT POSITION	

**EMERGENCY MESSAGE**  
 TRANSMIT THE FOLLOWING MESSAGE TO ANY AGENCY ON THE AIR-GROUND FREQUENCY IN USE. IF UNABLE TO ESTABLISH COMMS, ATTEMPT CONTACT ON ANY OF THE FOLLOWING EMERGENCY FREQUENCIES:  
 UHF/VOICE 243.0 VHF/VOICE 121.5 M/F/VOICE 2182 KHZ M/F/CW 8364 KHZ 500 KHZ  
 MAYDAY, MAYDAY, MAYDAY  
 THIS IS NOAA, NOAA, NOAA  
 - POSITION \_\_\_\_\_ N/S \_\_\_\_\_ E/W AT \_\_\_\_\_ Z  
 - HEADING \_\_\_\_\_ TRUE/MAG  
 - AT \_\_\_\_\_ KTS TRUE/INDICATED  
 - FLIGHT LEVEL OR ALTITUDE \_\_\_\_\_  
 - WE ARE A P-3 AIRCRAFT WITH \_\_\_\_\_ SOULS ON BOARD  
 - NATURE OF EMERGENCY \_\_\_\_\_  
 - ASSISTANCE DESIRED \_\_\_\_\_  
 - PILOT INTENTIONS \_\_\_\_\_  
 - WE HAVE \_\_\_\_\_ ENDURANCE REMAINING

TIME	FIX TYPE	POSITION	INS 1 POSITION	KERR	INS 2 POSITION	KERR	MH	VAR	TH	DR	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	TIME	ETA	REMARKS
1322																					
1537																					
1535																					
1605	GPS	1422.8	1422.9	-1	1422.9	-1			318	1L	317	281	127	21	180	260					ENG START TAKEOFF
	FM1	6049.1	6048.7	+4	6048.9	+2															
1645		1633.4	1633.5	-1	1634.1	-7			314	1L	313	295	117	24	180	273					
		6319.1	6319.4	-3	6319.7	-6															
1838		1436.0	1435.7	+3	1438.6	-2.6			121	3L	118	228	213	12	8K	227					
		6350.0	6349.9	+1	6350.1	-1															
1936		1507.1	1507.0	+1	1510.0	-2.9			186	2R	188	225	121	7	8K	228					
		6352.3	6352.3	0	6352.4	-1															
2004		1408.1	1408.1	0	1411.3	-3.2			272	5R	277	243	150	24	8K	228					
		6455.5	6455.4	+1	6455.0	+5															
2101		1408.9	1408.8	+1	1412.7	-3.8			061	4L	057	238	184	21	8K	226					
		6831.2	6831.0	+2	6831.4	-2															
2137		1527.9	1528.0	-1	1532.3	-4.4			135	1L	134	235	271	2	8K	231					
		6641.8	6641.0	+8	6640.3	+1.5															
2205		1404.6	1405.1	-5	1400.0	-4.4			066	6L	060	248	194	29	8K	229					
		6553.2	6552.2	+10	6551.1	+2.1															
2235		1459.3	1459.4	-1	1504.7	-5.4			112	3L	109	244	247	17	8K	232					
		6359.3	6359.2	+1	6358.9	+4															
2309		1405.2	1405.9	-7	1410.9	-5.7			121	0	12	233	291	5	8K	227					
		6157.8	6156.6	+12	6154.6	+3.2															
2355																					

LAND