

FLT ID: 970720 I	FM: TBPB	TO: TBPB
FLT NO: 97-23	BLK IN: 0009	ATA: 0006
ETD: 1530Z	BLK OUT: 1525Z	ATD: 1534
ETE: 9	BLK TIME: 8:44(8.7)	FLT TIME: 1
SPONSOR ORG: HAD	PROGRAM: Research	PURPOSE: TD 05 - Genesis

DAO PERSONNEL

AC Kennedy ✓	SYS ENG Lynch ✓
CP O'Malley/Kenul ✓	DATA SYS McNamee
NAV Kozak ✓	RADAR
FE Moore/Wade ✓	BT/ODW Delgado ✓
RADIO	CLB PHYS McFarlane ✓
FD Parrish ✓	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/DAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
Black, P. ✓		
Marks, F. ✓		
Bracken, E. ✓		
Leighton, P. ✓		
Crone, J. ✓		

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

JW (maybe) working.
 Water in P24M - no time to completely blow out.
 Mission - Fly broad pattern, more or less N, W, S of PR, at 8500 ft.
 1720 - 42 has cockpit instrument trouble.

42M49
 29.
 1017.
 1000/09.
 28/25
 10,007
 SP 1010.1
 Fm 2K
 SP 1016.9
 000-420
 115/11.7K

SP 1016.8 090/10 Tower C
 Fm 3.5K
 82/8

59
 1011 PS land

970720T T.D.S. Genesis

080/20
FDT
Reant Gyro

Time	LAT	LONG	TK	WD	WS	PA	GA	TA	TD	SP	B			
1525	1304.6	5929.4				23		37.0	23.8		1010.4	BLK		
153915	1311.8	5924.4	339	123	20	1217	1325	19.0	15.9	1017.8	868.7	7		
154945	1334.1	5959.3	315	103	13.5	3807	4040	4.2	0.6	1014.7	629.6			
160130	1410.8	6036.9	319	105	14.6	4289	4558	3.0	-5.8	1013.1	593.6	-14K	PA	
161815	1504	6135.4	312	110	13	4287	4556	2.9	-5.1	1013.2	593.9			
1637	1602	6243	312	109	18	4284	4550	1.7	-0.6	1014.5	593.9			
1657	1707.5	6355.9	308	124	17	4282	4554	1.6	-3.2	1015.4	594.0			
171900	1822.9	6506.7	329	152	10.2	4250	4522	1.5	-2.5	1016.3	596.5			
1732	1912.9	6539.1	327	141	5.5	4251	4525	1.1	-1.0	1017.3	596.6			
1735	↓	to SK												
1741	1947	6602	287	126	16.2	1517	1639	19.8	12.6	1016.9	843.8	~PT 1	PA	
1752	1958.1	6648.6	286	95	19.3	1518	1641	19.5	13.2	1017.0	843.7			
1809	2017.4	6800.5	284	101	19.9	1517	1638	18.9	13.1	1017.2	843.9			
182130	2030.9	6854.8	285	113	24	1517	1634	19.1	12.5	1016.8	843.8	Twn	PA 2	
1831	2000	6900.2	179	130	21	1517	1629	18.6	13.7	1016.2	843.8			
183915	1930	6857	136	138	21	1517	1631	18.9	15.2	1016.0	843.8	PT 3		
1851	1921.6	6812.4	100	133	15.4	1516	1628	17.8	14.2	1016.8	843.8			
190230	1913.9	6729.0	100	124	19	1515	1629	18.4	13.9	1016.6	843.9			
191945	1903.5	6629.3	100	101	15.5	1516	1630	19.0	12.8	1016.5	843.9			
1927	1857	6601.5	250	78	18.7	1517	1631	18.5	13.0	1016.7	843.8	PT 4		
1938	1842	6646	248	104	18.2	1531	1643	18.3	13.5	1016.7	842.4			
1951	1819.6	6736.5	243	120	21	1531	1642	18.1	13.5	1016.4	842.3	JUST (AST OLD) CORRECTION		
200215	1804.2	6821.7	248	111	15	1533	1641	16.6	16.5	1016.8	842.9	PT 5		
201515	1743	6756	117	124	14.3	1530	1636	17.4	13.8	1016.4	842.5			
2024	1727.4	6733.6	263	119	12.5	1530	1637	17.0	13.7	1016.6	842.6	PT 6		
203845	1719.3	6836.6	262	105	15.6	1530	1636	17.2	14.8	1016.3	842.6			
2049	1713	6920	260	101	15	1529	1628	17.5	16.7	1014.8	842.6			
205845	1708.4	7001.6	262	95	14	1530	1625	19.0	11.3	1014.3	842.5			
2109	1702.2	7044.9	262	117	18	1531	1623	18.8	11.1	1014.2	842.4			
211330	1657	7057	96	69	9.3	2260	2360	15.0	6.7	1013.0	760.0	↑ to OK at 71		
2118	1654	7040.7	100	80	15.9	3056	3239	11.1	3.3	1011.7	696.1	-10K PA		
2124	1650	7017	101	91	13	3056	3237	10.9	5.0	1011.8	696.0			
2137	1638.9	6924.4	103	80	12.2	3060	3242	9.4	8.0	1013.3	695.7			
214715	1633.1	6843.3	103	87	16	3061	3242	8.4	6.5	1014.5	695.7			
215730	1625.4	6801.7	101	122	15	3060	3240	8.1	6.5	1015.0	695.8			
220745	1617.4	6721.7	100	115	19	3068	3251	8.5	6.1	1014.8	694.9			
2221	1607.2	6629.3	102	117	19	3068	3254	9.0	4.6	1014.6	695.0			
222715	1602	6604	102	111	19	3069	3258	9.3	5.3	1014.5	694.9			
222830	1601	6559	↑									PT 8		
2238	1544	6525	117	177	6	5832	6182	-7.6	-11.8	1011.1	482.8	-19K		
2252	1512.4	6425.2	119	184	10.9	5831	6184	-7.6	-11.4	1012.0	482.9			
2312	1435	6258	112	135	11	5831	6185	-7.7	-21.3	1012.0	482.8			
232915	1403.3	6142.3	115	104	18	5828	6186	-8.0	-12.5	1013.3	482.9			
2342	1341.8	6048.1	115	91	15.6	5829	6189	-7.5	-23.4	1013.3	483			
2346	↓	to land												
2357	1314	5952	125	93	18	2379	2541	13.0	9.1	1016.9	775	↓		
0009	1304.6	5929.4				23		28.3	25.0		1010.5	BLKS		

970720Z 10E1 Renav

160930	-0.3	⊕ -0.1	37.1	03.3 ✓
165500	-0.4	- +0.5	00.7	48.1 ✓
174000	-1.5	+0.1	43.6	58.9 ✓
182600	+0.1	+0.4	18.1	00.0 ✓
191000	-3.6	+0.3	09.3	01.4 ✓
195400	-1.6	+1.6	14.7	47.8 ✓
204030	-2.2	+0.6	18.4	43.8 ✓
212500	-2.9	+1.7	49.2	12.6 ✓
220930	-2.1	+1.3	16.1	14.7 ✓
225500	-1.9	+2.1	05.5	13.0 ✓
234000	-0.2	+2.5	45.2	56.3 ✓
000900	+0.6	+3.4	04.6	29.4 ✓

US6DSTZ (about 5°C cooler than T1, closer to T3)

RPFZ had ~ 14-15 m/s offset from other Fuse Resources.

Patched ARD 159 source at landing with 232.

REANV we1 with good obs posits.

970720I N43RF T.D.5 HRD RESEARCH

<u>Sensor or system</u>	<u>Number or Name</u>
INE	1
Accelerometer	1
Temperature Probe	2
Dew Point Probe	1
Altimeter	APN-159
Altitude change option (for vertical winds)	RA
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO3972.CON

Notes:

INE 1 positions were corrected periodically with good GPS positions. No corrections were made to groundspeeds.

The APN-159 radar altimeter was corrected at take off and landing by substituting offset APN-232 values.

PQF2 had a 14-15 mb offset during the flight, and should not be used. PQF1 was used for all dynamic pressure calculations.

Special note. Locations 80, 81 and 82 of the Type 5 record on the Standard Tape contain vertical groundspeed, vertical airspeed and vertical wind, respectively, computed using Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

Jack Parrish, Flight Director



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Rockville, MD 20852-3019

OFFICE OF NOAA CORPS OPERATIONS

Aircraft Operations Center
P.O. Box 6829
Tampa, Florida 33608-0829

MEMORANDUM FOR: *Dr. Hugh Willoughby, NOAA*
Director, HAD, AOMC

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

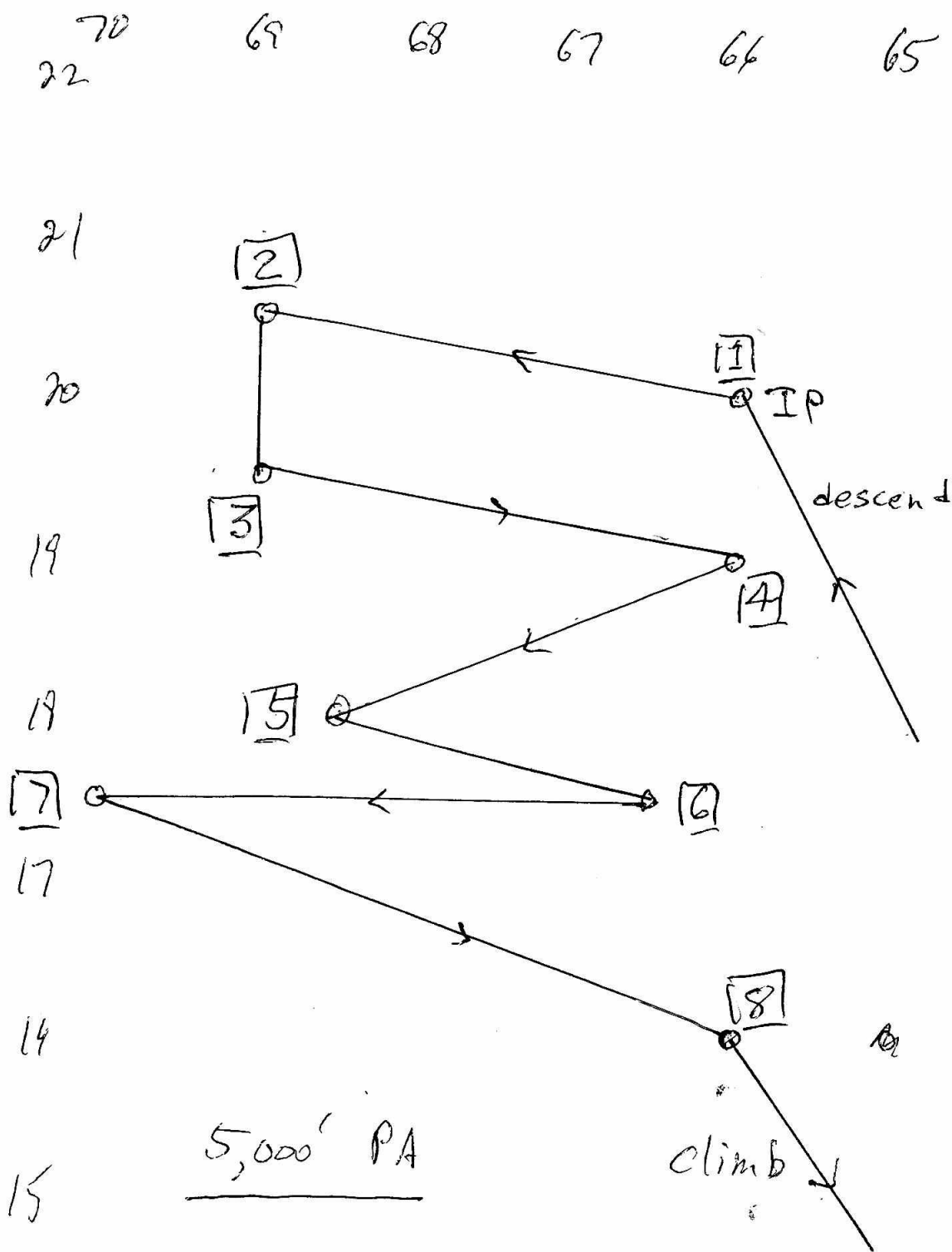
SUBJECT: Hazard Duty Flight

The mission flown on AOC aircraft # N43AF on 20 July 97 has been declared hazardous. The following personnel from your laboratory participated in this mission.

F. Marks E. Bracken
P. Black J. Cione
P. Leighton

For purposes of computing allowable hazard duty time, the hazard period during this mission was from 1125 local time on 20 July until 2009 on 20 July.





11/26

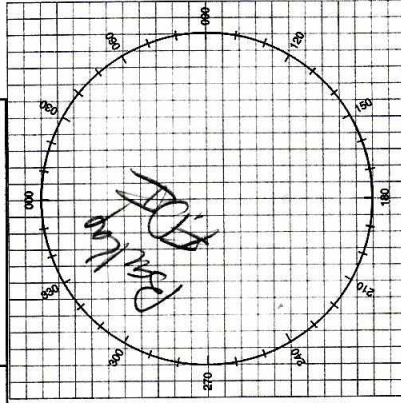
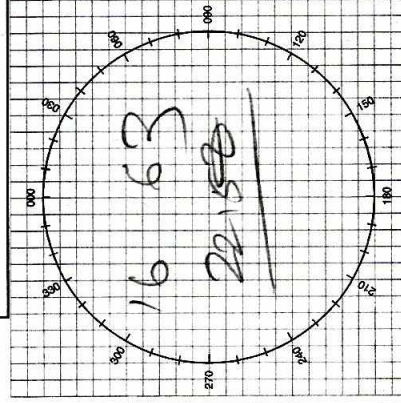
20 30	19 30	19	18 30	17 30	16	16	2215Z ETA
68	68	65 30	65 30	68	68	63	For 42

CLEARANCES

FREQ	ALT	HDG	OTHER
			2030N 69W
			19N 68W
			10N 6530W
			1730N 6530W
			1730 6800Z
			1000N 08

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	VHF/VOICE	MF/VOICE	HF/CW	MF/CW
243.0	121.5	2182 KHZ	8364 KHZ	500 KHZ

MAYDAY, MAYDAY, MAYDAY

THIS IS NOAA _____, NOAA _____

- POSITION _____ N / S _____

- HEADING _____ TRUE/MAG _____

- AT KTS TRUE/INDICATED
FLIGHT LEVEL OR ALTITUDE

- FLIGHT LEVEL OR ALTITUDE
- WE ARE A P-3 AIRCRAFT WITH

- WE ARE A F-3 AIRCRAFT WITH _____ SOLES ON BOARD
- NATURE OF EMERGENCY

- ASSISTANCE DESIRED

- PILOT INTENTIONS

- WE HAVE

[illegible][illegible]

[illegible]