MAP 991106H1
MAP Gap Flow

991106H1 NOAA-42

Sensor or system	Number or Name
INE	2
Accelerometer	2
Temperature Probe	2
Dew Point Probe	1
Altitude (for vertical wind)	Pressure Altitude
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO2992.CON

Notes:

Inertial Navigation System #2 was corrected using good GPS fixes during the flight.

Wind data may be highly degraded when the pitch is ±10 degrees and/or when then roll is ±30 degrees. Wind speed has an estimated error of ±2.5 m/s in turns and wind direction can exceed 10 degrees in turns.

RA-159 had a spike at takeoff and landing and was replaced by RA-232.

	Takeoff	Landing
Aircraft static pressure	940.2	938.7
Corrected tower pressure	1007.8	1020.5

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: Jack Parrish, (813) 828-3310 ext. 3077.

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

FLT ID: 91106H	FM: LOWI	TO: LOWI
FLT NO: 00-14	BLK IN: 1036/1934	ATA: 1031 / 1928
ETD: 8Z	BLK OUT: 0828/1351	ATD: 0837/1356 : 148
ETE: 2	BLK TIME: 2:08 (2.1) 5:43	FLT TIME: 5:32 (5.5)
SPONSOR ORG: MAP	PROGRAM: Cap - Flow	PURPOSE:

OAO PERSONNEL

2.6 4500 2KACC

AC Tennesen ✓	SYS ENG Lynch ✓
CP Kenul	DATA SYS Hornbrook ✓
NAV Newman ✓	RADAR McDamara ✓
FE Moore/Bast *	DT/ODW
RADIO	CLD PHYS Floyd * ✓
FD Parrish ✓	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
Nance, L. ✓	Nance,	
Dutton, D. ✓	Ralph * ✓	
Svenachen, K. ✓		
Gabersek, S. ✓		
Shapiro, T. ✓	Small * ✓	
Coleman, B. ✓	Colman	
Pumpelly ✓	Shepherd	
Mullendore, G. ✓	Arnagans *	
Dabernit, H. ✓		
Salches, M. ✓		

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

29.77 Delayed due to data system problem.
1007.8 - From high alt, lots of clouds in Brenner.
8/6 - Unable to work up into Brenner Valley.
270/10 ATTS
--- 29.85 1515Z - Lost ABN 159
8.5/5.5 265/7 155940Z - CPA Merlin 155945 - CPA ARM
9402 942.5 160845 - CPA Electra
260/8

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

FLT ID: TIME OFF: TIME ON:

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE				

	NO	DATA DISPOSITION/DATE/QUALITY
1/SEC FLT LVL TAPES		
FAST FLT LVL TAPES		
RADAR TAPES		
DOPPLER TAPES		
ODW CASSETTES		
HARD COPIES		
AXBT		
AXCP		
ODW		

PHOTOGRAPHY

	FWD	LS	RS	VERT	
ON					
OFF					
RATE					

REMARKS

413-50

991100617 Gap Flow

25 540 22 40

Time	LAT	LON	TK	QD	WS	GA	PA	TA	TD	SP	PS		
0828	Out							10	3		940		BLOCK
0839	47 166	11 12.8	291	97	12	1896	1107	3.0	0.6	927	800	↑	
084845	47 21	11 12	51	232	30.7	4962	7802	-16.3	-20.9	904	5458		
085030	47 22	11 21	160	234	27	4953	2666	-18.3	-20.2	847	543.7	- 16K	085810
090030	46 57	11 30	340	218	39	4629	3001	-14.6	-22.6	792	566	- 15K	090645
090910	47 22	11 14	141	246	30.7	5265	3438	-20.7	-23.7	856	522	- 17K	092250
092653	46 31	11 45	337	227	36	4629	2549	-15.3	-18.2	802	567	- 15K	
094645	47 17	11 40	247	285	4.6	[illegible]	406	8.4	0.8	855	853	4.5K	
095620	47 16.9	11 13	116	271	5.4	1190	9087	5.5	2.3	910	878	3.5K	100212
100430	47.16	11 31	237	99	3.1	1431	719	9.0	0.1	926	853	4.5K	
101140	47 18.7	11 41	94	62	6	1433	771	7.2	1.5	936	853	4.5K	
101940	47 18	11 38											
1024	47 15	11 14	110	48	6.3	1501	641	48	7	912	843	→ to land	
1036	47 15.8	11 21.2				639		13.6	1.9			BLOCK	
1351	47 15	11 21						5.5	4.1		944	BLOCK	
1400	47 19	11 37	71	300	11.3	3195	2517	-10.3	-11.7	938	665	↑	
141145	47 37	10 52	291	181	46	5797	4721	-24.7	-26	911.6	485	-19K	
142710	47 33	9 19	196	170	24	5799	5210	-26.7	-28.2	949	484		
1459	46 48	9 0											
145830	45 30	8 56	174	145	15	5244	5004	-19	-21	985	525	↓	
141015	44 43	9 03	176	330	7	3061	2442	-35.3	-4.4	832	695		
152620	43 48	8 30	217	4	11	1902	3317	10.8	0.9	11	802	-6K AT A	
1543	43 15	7 24	230	353	23	1925	1828	2.9	-7.6	1001	803		
155930	42 51	6 14	240	320	52	1927	1868	0.8	-15	1007.8	802.8		
160050	42 29	5 26	—	329	46	1922	1898	-1.9	-7.7	1013.8	802	AT B	
161355	42 30	5 26	60	319	49	1925	1897	-1.3	-4.2	1012.6	802.7	PT B → A	
162845	42 59	6 32	59	322	53	1925	1856	+1.9	-12.4	1005	802		
1652	43 42	8 12	58	359	37	1931	1836	-1.5	-2.9	1005	801.7	165715	END
172230	45 27	6 59	345	120	21	6098	3455	-27	-29			P3	
173645	45 29	8 2	99	3	28	3369	3032	-10.1	-10.7	977	669	P2	
175315	45 29	9 27	92	84	19	3364	3166	-7.4	-7.7	990	669	175930	
180215	45 27	9 56	266	94	26	3371	3189	-7.4	-7.2	993	669	P1 - P2	
181115	45 27	9 01	266	89	31.5	8367	3150	-7.6	-7.5	987	6689		
1825	45 27	8 18	88	24	41	3016							
1829	45 24	8 29	85	44	35	2744	2498	-6.3	-7.2	988	724	-9K	D2 BK
183830	45 28	9 13	87	98	11	2734	2535	-4.2	-4.6	989.5	725		
184750	45 27	10 00	91	106		END OF LEG							
190045	46 05	10 53	43	169	28	5987	3754	-20.9	-21.7	856	506	→ to Inn	
1934	47 15.5	11 21.2					551	6.0	-3.2		548	BLOCK	

NOAA FORM 56-49
(2-95)

MISSION PREFLIGHT LOG

DESTINATION	MISSION	NAVIGATOR	AIRCRAFT COMMANDER	FLIGHT DIRECTOR	SCHEDULED / ACTUAL TAKEOFF Z	DATE OF TAKEOFF
LOWI	MAP #19	Newman	Tennessen	PARRISH	0800	6 NOV 99

WP	LAT / LON	RTE	MH	VAR +E==>	TH	DR +R==>	TRK	GS	WD	WS	ALT	TAS	LEG / TOT DIST	LEG / TOT TIME	PROP ETA	ETA	ATA	REMARKS
#1	47 25 11 19.3																	
#2	46 52 N 113 5.3 E																	

INS PERFORMANCE

	INS 1	INS 2
BEGIN ALIGN TIME	0600	0600
ALIGN STATUS (0-5)	1	1
END NAV TIME	1030	1030
START NAV TIME	0815	0815
DELTA T	2.2	2.2

TERMINAL ERRORS

	INS 1	INS 2
DELTA LAT	-1.6	+1.0
DELTA LON	-1.4	-.3
RGS	7	2
RADIAL ERROR	2	1

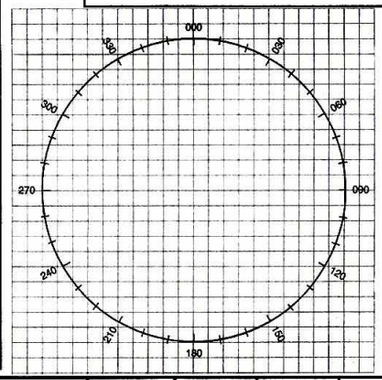
REMARKS

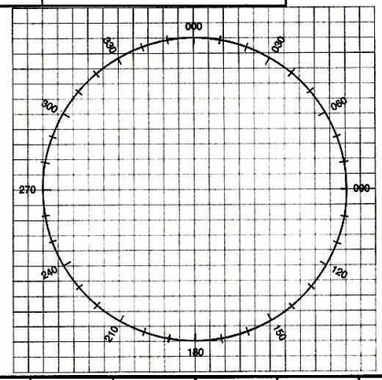
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
AIRCRAFT OPERATIONS CENTER

CLEARANCES			
FREQ	ALT	HDG	OTHER

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 _____, 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	K ERR	INS 2 POSITION	K ERR	MH	VAR +E==>	TH	DR +R==>	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	TIME	ETA	REMARKS
1828																					BAK 24K 39.74 26 Rwy
0837																					
1031							1.9		FLIGHT												LAND
1036							2.1		BLOCK												
			FE→W 4500 MSL																		
		160/35 W-E	8500 MSL																		