

MAP 991107

MAP P.V. Banners

991107 NOAA-42

<u>Sensor or system</u>	<u>Number or Name</u>
INE	2
Accelerometer	2
Temperature Probe	2
Dew Point Probe	2
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 was patched with valid APN-232 values before take-off, after landing, and during numerous brief spikes during the flight.

Dewpoint #2 source was patched from 132430z-133030z during an instrument calibration.

JW Liquid Water Counter failed throughout the flight.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	955.3.0	958.0
Corrected tower pressure		1027.0

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: 91107M	FM: LOW F	TO: LOW F
FLT NO: 00-14	BLK IN: 1857	ATA: 1851
ETD: 13Z	DLK OUT: 1306	RTD: 1314
ETE: 6	BLK TIME: 5:51 (58)	FLT TIME: 5:37 (56)
SPONSOR ORG: MAR	PROGRAM: P.V. Banner	PURPOSE:

OAO PERSONNEL

AC: Tennosen	SYS ENG: Lynch ✓
CP: Kenul ✓	DATA SYS: Wornbrook ✓
NAV: Newman ✓	RADAR: Carpenter ✓
FE: Moore	DT/ODW: Mc Damara ✓
RADIO: Parrish ✓	CLD PHYS:
FD:	DOPPLER:

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
Dance, L. ✓		
Coleman, B. ✓		
Shapiro, J. ✓		
White, S. ✓		
Graham, W. ✓		
Binder, P. ✓		
Ross, A. ✓		
Smith, R. ✓		

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

T.O. Fly way adjusted PV Banner Ex over Adriatic - Fewer
 61/10.0. VFA legs
 457.3 1750
 88/4.5 Var 2K Flw numerous legs between 1K & 8K on Italian side
 of the Adriatic.
 3404.3K 1950
 0055K 4.8 bk
 5/4
 1027
 81958
 202/6
 4.9/2.3

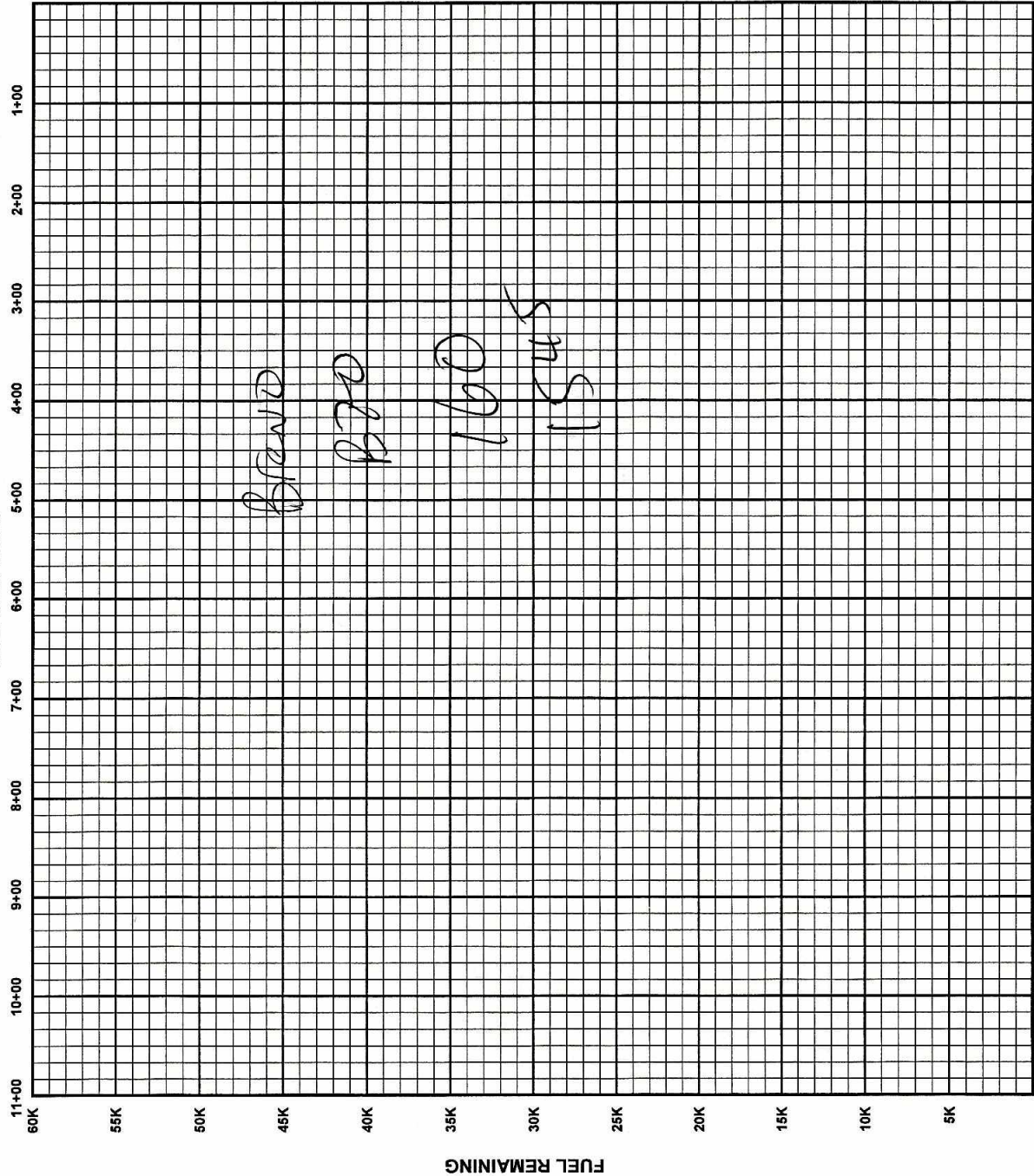
1348

9911074 MAP R.V. Bunner (Adriatic) 45 10 12 25

Time	LAT	LONG	TK	WD	WS	PA	GA	TA	TD	SP	PS	
1306	47 15.8	11 21.2				493		7.1	-2.3		955.4	BLOCK
1314	47 16	11 22	77	59	2.3	853	362	2.6	-1.0	904.6	8755	↑
133530	46 14	11 26	106	38	9.7	4906	2837	-13.4	-22.2	799	547	—
134615	45 30	11 54	↓	40	10 K	134	745	+	AT D	layer	12.2	MSL
135340	45 08	12 23	135	68	23	1257	1246	8.1	-3.4	1011	871	-4K
1400	44 54	12 44	135	83	33	1257	1239	8.1	-1.9	1009.8	871	
141045	44 27	13 20	137	85	19.2	1261	1236	8.7	-0.8	1008.8	870.9	
143500	43 40	14 18	919	75	36	660	619	11.1	4.4	1008.2	935	5 to 4 leg 2 ZK
1457	44 38	13 00	320	69	28	668	630	9.3	4.7	1012	936	END 100750
151045			1K	LEG								
152230	44 36	13 08	138	50	40	333	321	10.1				
152330	44 36	13 08	138	50	40	333	321	10.1				
1526	44 28	13 19	136	56	40	324	306	12.0	10.1	1011	975	
1539	43 55	14 01	136	61	34	327	293	13.9	5.2	1008.9	975	
154645	43 36	14 26	↑	to 10K	↓	8K						
155345	43 38	14 22	306	114	24	2441	2407	0.5	-1.0	1007	751	-8K C→D
162330	45 08	12 25	END OF 8K	LEG								
1629	44 58	12 45	—	4K		START	LEG			1636	→ C/A	3080
164130	44 25	13 23	136	71	21	1237	1224	8.1	-0.3	1011	823	-4K
1649	44 03	13 49	~	78	25	1238	1237	7.2	2.4	1011	839	END LEG
165145	44 02	13 44	338	90	24.5	1842	1831	2.4	2.5	1011.7	810	-6K START
165815	44 22	13 24	318	77	15	1843	1842	3.9	1.0	1011.6	810.5	
171230	45 03	12 30	315	90	28	1842	1858	2.1	-4.5	1015	810	171415 END
171800	45 04	12 33	138	67	24	1532	1545	4.2	-3.6	1014.8	842	5K START
1732	44 26	13 20	138	97	14.5	1534	1533	5.7	1.4	1012.2	842.3	
1740	44 05	13 46	138	82	18.5	1532	1521	4.9	3.9	1011.8	842.4	END 174145
174415	44 04	13 53	292	83	16	2471	2462	-0.2	-0.8	1010.7	749.4	START 8K
180430	44 59	12 34	↓	to 4K	—	END OF 8K	LEG					
180700	45 06	12 24	311	70	27	1345	1482	4.9	-4.7	1016	839	↑ END OF START
181845	45 43	11 44	340	50	9	5500	5375	-18.6	-24.3	991	505	-18K → LOW 2K
183115	46 49	11 49	6	268	9	5500	3728	-18.2	-27	781	501	
1851	On											
1857	In					463		6.0	5.9		958.9	BLOCK IN

RANGE CONTROL GRAPH

TIME REMAINING



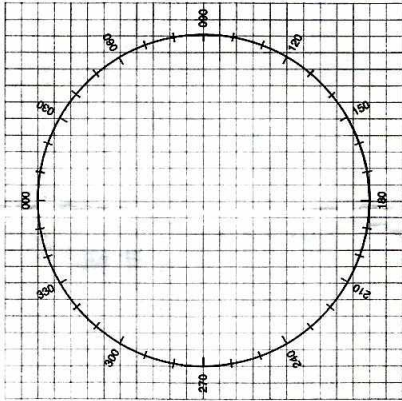
ENROUTE FUEL	
ENROUTE TIME	
ENROUTE FUEL (6K 5K 4 5K RULE)	
RESERVE AT DESTINATION	
REQUIRED RAMP	
ACTUAL RAMP FUEL	

TACTICAL (OFFSTA TO DESTINATION)		4 ENG	3 ENG
DISTANCE (OFFSTA TO DEST)			
ENROUTE TIME (OFFSTA TO DEST)			
BURN RATE (LBS/HR)	4500	5500	
ENROUTE FUEL REQUIRED			
RESERVE AT DESTINATION			
FUEL AT OFFSTA			

POINT OF SAFE RETURN		4 ENG	3 ENG
ETP DISTANCE (TO DEPARTURE)			
ENROUTE TIME (TO DEPARTURE)			
BURN RATE (LBS/HR)	4500	5500	
FUEL REQUIRED			
RESERVE AT DEPARTURE			
PSR FUEL			

CEX - TRUE BEARING METHOD				CEX SIGHT	
COMPASS TYPE	INS1	INS2	WET	GMT	
MCH (READING)				GHA	
- MTH (SEXTANT)				CORR	
CE				GHA	
- VAR				LONG +W -E	
DEV				EXACT LHA	
				LAT	
				BODY	
				DEC	
				HC/D	
				CORR	
				HC	
				Z	
				ZN	

CEX - ERB METHOD			
COMPASS TYPE	INS1	INS2	WET
MERB (DIAL 000)			
+ ZN			
= MTH			
MCH (READING)			
CE			
- VAR			
= DEV			



WIND FACTOR		
WINDSPEED	HEADWIND	TAILWIND
10	1.03	.97
20	1.06	.94
30	1.10	.92
40	1.14	.89
50	1.18	.87
60	1.22	.85

DISTANCE REMAINING

ETP = .5(TOTAL DISTANCE x OUTBOUND WIND FACTOR)

PRESS ALT		200	250	300	350
10,000		1.0	1.0	.99	.99
20,000		.99	.98	.97	.97
30,000		.97	.96	.95	.94
40,000		.96	.94	.92	.90

TRUE AIRSPEED CROSS-CHECK					
TIME	IAS	PRESS ALT	"F" FACTOR	EAS	OAT
					TAS
					ITAS

PAGE **OF**

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 _____
 _____ E/W AT _____ Z _____

- HEADING _____ TRUE/MAG _____

-AT _____ KTS TRUE/INDICATED

- FLIGHT LEVEL OR ALTITUDE _____ SOULS ON BOARD _____
- WE ARE A P-3 AIRCRAFT WITH _____

- NATURE OF EMERGENCY
- ASSISTANCE DESIRED

- PILOT INTENTIONS
- WE HAVE

ENDURANCE REMAINING

POSITION REPORT

1. POSITION

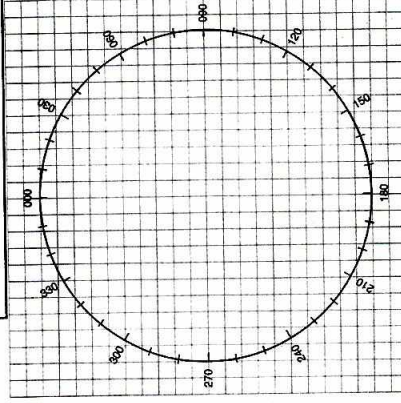
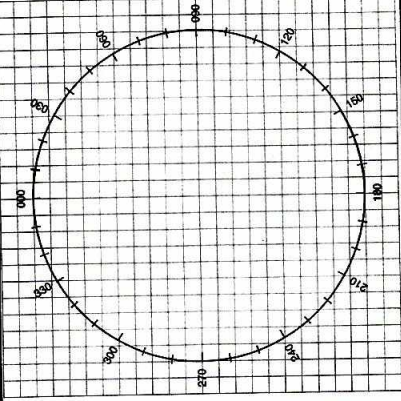
2. TIME

3. ALTITUDE

4. NEXT POSITION

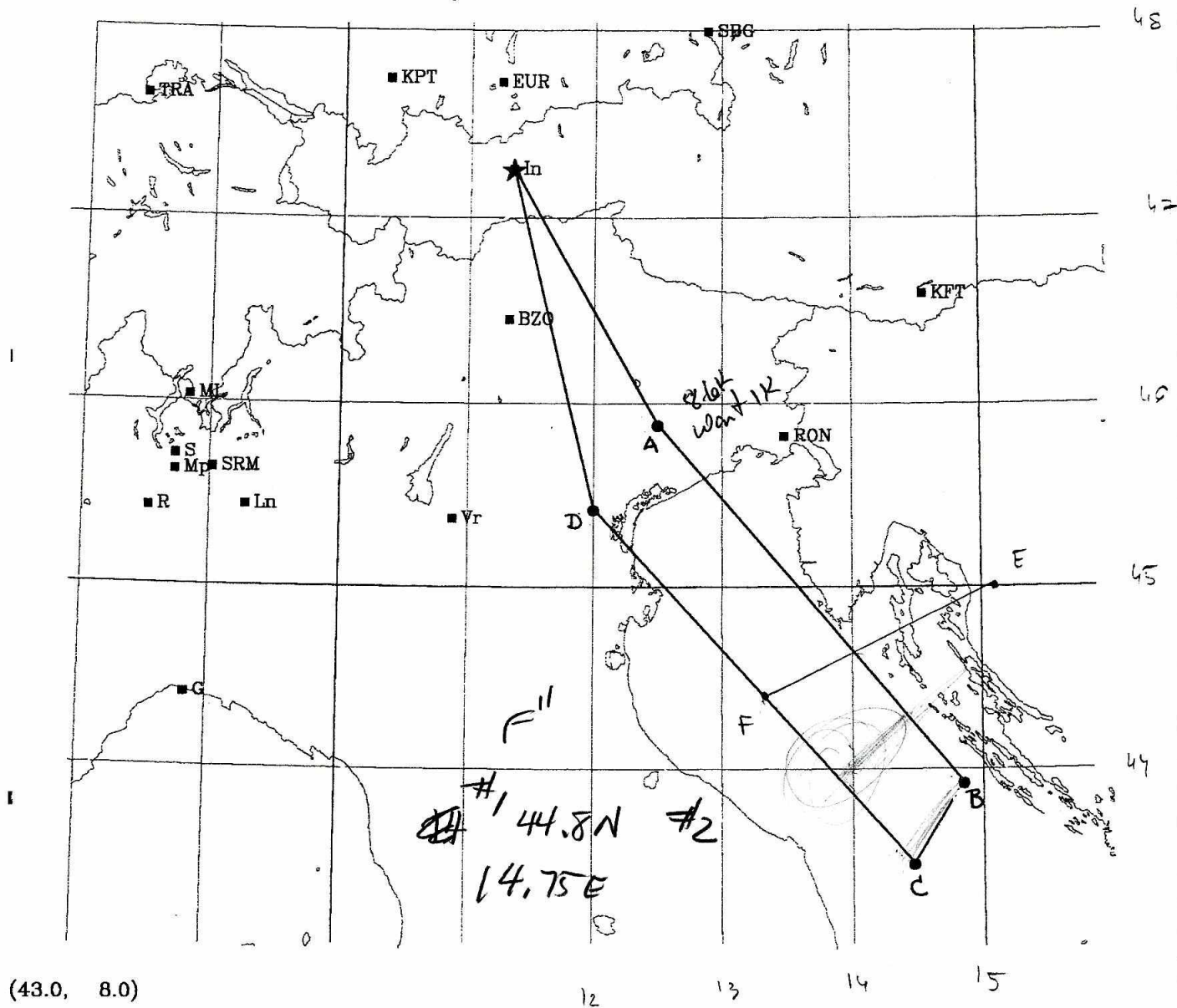
5. ETA

6. NEXT POSITION

[illegible][illegible]

Aircraft Flight Track Plan

(48.0, 16.0)



NOAA/NSSL Lambert Conformal (45.5, 12.0)

31.5

4 2 1 3

3400

26.7

37.7