

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

FLT ID: 980311H	FM: KMRY	TO: KMRY
FLT NO: 98-037	BLK IN: 0515Z	ATA: 0509Z
ETD: 2000Z	BLK OUT: 1944Z	ATD: 1954Z
ETE: 0600Z	BLK TIME: 9:31 9.5	FLT TIME: 9:15 9:3
SPONSOR ORG:	PROGRAM: CALJET	PURPOSE: DROPS/FRONT. REVE

OAO PERSONNEL

AC KENNEDY, P / PHILIPPSBIRN	SYS ENG ROLES, J ✓
CP	DATA SYS MCNAMARA, R ✓
NAV STRONG, T / WHITE, S ✓	RADAR
FE MOORE, B	DT/ODW CARPENTER, D ✓
RADIO	CLD PHYS
FD CZ4241K, S ✓	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
PERRSON, O ✓	P.I.	ETL
SHEPHERD, T ✓	SCIENTIST	NSSL
JORGENSEN, D ✓	SCIENTIST	
MILLER, D ✓	SCIENTIST	MPS
MILLER, M ✓	MEDIA	POPULAR SCIENCE
STRONG, L ✓	MEDIA	"
POSEY, C ✓	MEDIA	SMITHSONIAN
SNELL, W ✓	SCIENTIST	NMFS Monterey

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

BALANCE OPTN 2959Z
 PSIM + P23M 6.5 MB DIFF
 SNAKE SURF PRES 222Z, SEVERAL OTHER SPIKES
 DROP #5 SURF PRES 992 MB
 #6 986 MB

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

FLT ID: 980311H

TIME OFF: 1954Z

TIME ON: 0509Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	30.10 100.2	30.10	1008.9	30.02

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES	1	
FAST FLT LVL TAPES	1	
RADAR TAPES	1	
DOPPLER TAPES		
ODW CASSETTES		
HARD COPIES		
CLOUD PHYSICS	2	
AXBT		
AXCP		
ODW GPS	14	

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

4 VIDEO

980311H

TIME	LOT	LOW	TR	HD	TA	TD	WO	WS	PA	GA	PS	SP	REMARKS
2016:45	3727	12325	305	303	-15.3	-22.5	244	18.2	5491	5655	505.7	1018.4	LEVEL 18K
2028:40													CLIMB
2030													LEVEL 19K
2032													7 PITCH MAN.
2034:20													SIDESLIP MAN
2036:20													8-10 PITCH MAN
2039:40													SIDESLIP
2050:40	3850	12608	294	287	-17.5	-23.8	205	28.8	5801	5941	484.9	1015.3	170 THS
2057:50													248 THS
2113													RECCO
2115													TURN 230 THS
2121:10													TURN 180°
2123:00													TURN 180°
2130:00													TURN 180°
2131:50													TURN 180°
2142:00													TURN 180°
2145:00													TURN 180°
2155:10													TURN BACK IN TRK
2156:30	4011	12756	287	281	-18.4	-29.5	199	35.2	5793	5892	485.4	1013.0	CLIMB
2202:26	4020	12830	290	283	-18.1	-31.9	195	41.2	5793	5891	485.4	1010.9	CLIMB
2223:20	4057	13031	297	282	-18.2	-20.6	200	76.8	5792				CLIMB
2224:20	4059	13036	297	282	-18.2	-20.7	200	77.9					CLIMB
2224:40													CLIMB
2226	4105	13051	298	282	-21.0	-20.8	197	81.7	6095	6107	465.7	1003.8	CLIMB
2246													CLIMB
2249:04	4158	13200	292	274	-26.2	-55.3	197	93.2	6093	5974	465.9	1004.4	CLIMB
2302:45	4222	13415											CLIMB
2310:44	4240	13500	294	284	-37.7	-45.2	200	60.0	6720	6487	427.0	1012.2	CLIMB
2331:32	4328	13700	295	290	-36.6	-39.8	227	31.0	6719	6436	427.1	1005.2	CLIMB
2341													CLIMB
2351:57	4401	13859	294	290	-34.6	-39.8	218	27.6	6714	6399	427.4	994.7	CLIMB
0013:46	4230	13900	179	186	-33.4	-36.9	242	33.0	6714	6421	427.7	993.8	CLIMB
0033:05	4100	13900	180	189	-33.4	-37.9	279	39.3	6714	6472	427.4	999.5	CLIMB
0051:08	3930	13900	179	189	-34.2	-37.8	288	48.1	6714	6521	427.4	1008.2	CLIMB
0108:41	3800	13900	179	191	-34.0	-38.4	288	57.4	6713	6557	427.5	1012.3	CLIMB
0120:09	3630	13906	180	190									CLIMB
0141													CLIMB
0149:32	3440	13625	88	94	-36.0	-46.2	242	68.0	6713	6607	427.5	1025.2	CLIMB
0209:28	3644	13400	97	101	-26.4	-47.4	224	91.7	6711	6688	427.6	1002.8	CLIMB
0230:06	3646	13137	90	102	-26.4	-28.0	224	71.7					CLIMB
0244:44	3636	13013	104	113	12.6	10.9	218	39.3	606	506	427.4	1011.5	CLIMB
0301 ~	3615	12845											CLIMB
0315:00	3605	12756	110	118	12.7	10.3	214	28.1	570	598	946.6	1015.8	CLIMB
0316:55													CLIMB
0319:50	3606	12755	282	275	14.3	12.8	192	26.9	134	852	997.8	1015.8	CLIMB
0331:00	3610	12842											CLIMB
0334:30	3627	12839	22	22	12.0	9.3	216	28.8	886	913	911.5	1015.1	CLIMB
0343													CLIMB
0401:00	3811	12754											CLIMB
0406	3811	12732	99	107									CLIMB
0422:00	3750	12601	107	112	-26.7	-30.3	238	33.1	7027	7175	408.0	1017.0	CLIMB

980311H

RA-159 SPIKE @ TAKEOFF REPLACE W/232

RA-159 SPIKES THROUGHOUT, REMOVE

RA-159 SPIKE @ LANDING REPLACE W/232

POAR FROZEN TWICE

PPSR FROZEN ONCE

DW41 BALANCED, REMOVE SPIKE 1959Z (PERFORMED BETTER)

DW43 EG-6 SPIKES 2330Z - 0030Z

TI4 NOT PERFORMING TOO WELL

PS AUG. 7MB DIFF THROUGHOUT FLIGHT

TI1 SPIKES 2020Z - 2140Z, ~ 0230Z (PRECIP)

~~PRFL~~ PRFL SPIKES 2320Z - 0045Z (YES)

INEZ

HD6 SPIKE BETWEEN 2100Z - 2200Z

PSF SPIKES 13000 - 17200

6 LARGE SPIKES, SEVERAL SMALL

REPLACE PSF W/PSW 13000 - 14700 7.3 OFFSET

" PSF W/PSW 15060 - 15070 7.0 OFFSET

" " " " 17050 - 17060 7.1 OFFSET

SEVERAL RA-159 SPIKES THROUGHOUT FLIGHT (>100)

RA-159 SPIKE @ TAKEOFF REPLACED BY RA-232

RA-159 SPIKE @ LANDING REPLACED BY RA-232 339200 - END

? HI1,2 SPIKE 10950 - 11050 ALSO RA-232, RA-159, LAT11, LAT12
LONG11, LONG12, UX11, UX12

SPIKES IN OPEGG 13000 - 17100 (SEVERAL)

~~SPIKES~~

HI1, HI2 SPIKE @ 11000 + many others, BIG PROPORT

CORRELATE ?
PSF + RA-159

BLOCK UP TO 22K

80 nm radius

GUST PROBE CALIBRATION MANEUVERS

Pick an area to do maneuvers where wind conditions are relatively uniform.

(1) Pitching maneuver

Do 6-8 cycles; do smooth sinusoidal variations of $\pm 5^\circ$

(2) Sideways maneuver

Do 6-8 cycles; try to do with minimum roll $\approx \frac{1}{2}$ ball changes

(3) Repeat pitching maneuver

(4) Repeat sideways maneuver

ALONG TK

(5) Speed run

170 MAX
190 KT - 240 KT

30 sec

Slowly increase speed from 110 m/s to 150 m/s; hold max. for a short time then slowly decrease back to 110 m/s.

210 $\rightarrow$ 300 TAS(6) Reverse headingNormal
IAS

TAS

Do the run upwind/downwind

Get 0° drift angle and set the heading - hold heading for ≈ 10 min

At the end of the run do a 90° or 270° left turn and return back along the same line.

PLAN BY
EAR

If there is time also do a reverse heading run in the crosswind direction at the end of the upwind/downwind legs.

INTO & OUT SPEED RUN

PERPENDICULAR SPEED RUN

INTO + OUT ~~50~~ 210 IAS

CALJET NOAA P-3

TAIL # N42RF

CALL SIGN NOAA 42

KMRY 202 11 MARCH

<u>POINT</u>	PT	LAT	LONG
	A	44° N	139° W
	B	38° N	139° W
	C	36° 42' N	131° W
	D	35° 48' N	127° W
	E	36° 12' N	128° 30' W
	F	38° N	127° W

KMRY → A → B → C FL 180

C ~~ENROUTE~~ DESCENT TO 2000 FT

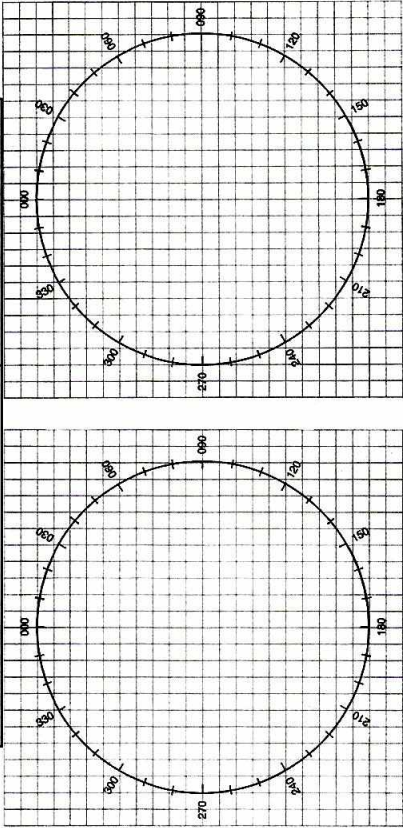
C → D " 2000 FT 1000 FT/MIN

D → E " 500 FT

E → F " 3000 FT

F → KMRY " FL 200

CLEARANCES		
FREQ	ALT	HDG
		30.00 10R



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 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	VAR +E==>	TH	DR +R==>	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	TIME	ETA	REMARKS
1941																				ENG
1945																				TAXI
1953	✓	36.22 121.45																		TOFF
2000	✓	36.49 122.15	36.47 122.15					307	0	307	280	133	4.0	17	222	280	221	145	2045	Post w 260 FL180-FL220
	D	38.45 126						307	0	307	280	180	5.0	17	222	280	221	145	2045	Post w 260 FL180-FL220
2003	G	37.43 123.54	37.41 123.54	-0.3 -0.2	37.40 123.54	-0.3 -0.1		301		301	269	322	12	180	224	A	222	2450	2313	CRUISE
2200	G	40.16 128.77	40.16 128.20		40.15 128.20			283	7R	290	283	194	41	190	282	A	504	1450	2358	
2217	DR	40.45 129.50						283	7R	290	281	✓	✓	✓	✓	✓	80	117		DR
2220	DR	40.50 130.05						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			DR
2020	G	40.51 130.13	40.51 130.13		40.50 130.13			282			278									
2227	D	41.0 130.45						284	15R	299	272	193	80	190	275	A	408	1430	2352	DR
2240	D	41.30 132.10						289	15R	296	304	186	80	✓	290		65	413		DR
2300	D	42.20 133.55	42.12 133.54							✓	278						78	420		DR 4220- 134.55
2330	D	43.20 136.46									302	175	85	✓			134	430		
2330	G	43.18 136.50	43.17 136.51	-1.0 -0.4	43.17 136.51	-1.2 -0.6		290	4R	294	268	236	25	190	280	A				
2354	D	44.04 138.58	44.02 138.58		44.00 138.58					297	271						108	424	2354	

