

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

FLT ID: 970401H	FM: KMLF	TO: KPAX
FLT NO: 97-034	BLK IN: 2056Z 2056Z	ATA: 2046Z
ETD: 1100Z	BLK OUT: 1052Z	RTD: 1102Z
ETE:	BLK TIME: 10.04 10.1	FLT TIME: 9.44 9.7
SPONSOR ORG: NESDIS	PROGRAM: AOEOS	PURPOSE:

OAO PERSONNEL

AC MCKIM, G ✓	SYS ENG PRADAS, C ✓
CP KENUL, P	DATA SYS SMITH, J ✓
NAV STRONG, T ✓	RADAR
FE TORREY, R ✓ / MOORE, R. ✓	BT/ODW
RADIO ROGERS, M	CLD PHYS
FD CZYZYK, S ✓	DOPPLER MCWHIRTER, D ✓

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
WILKERSON, J	P. I	NESDIS
CHANG, P ✓	SCIENTIST	"
DONNELLY, J	"	UMASS
CARSWELL, J ✓	"	"
LI, HAITAO	"	"

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

DW1 OFF UNTIL 1130Z

DW3 " " 1130Z

BALANCE & CALIBRATE 103 1130Z

U.S. DEPT. COMM./NOAA/ORD - DATA SECTION WORK FORM NO.2 OROWF2

FLT ID: 9704014

TIME OFF: 1102Z

TIME ON: 2046Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1017.8	30.07	1013.1	29.95

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		
GPS	11	

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

ADEOS 1997

Flight #1 H970401

<u>Sensor or system</u>	<u>Number or Name</u>
INE	2
Accelerometer	2
Temperature Probe	1
Dew Point Probe	1
Altitude (for vertical wind)	RA-159
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO2972.CON

Notes:

There were eight (8) small time gaps: 1452:31-1452:50, 1503:21-1503:30, 1503:51-1504:20, 1505:21-1505:30, 1505:51-1506:20, 1759:51-1800:10, 1801:01-1801:10, and 1801:31-1802:00.

Downward spikes in radar altimeter are a result of overflying land.

Radar altimeter (RA-159) had a spike at takeoff (1102:20-1103:00), the spike was removed and patched. RA-159 was set to zero after landing due to a spike (2046:18-2050:00).

Dewpoint (DW1) was not working correctly until 1132:00, and was replaced with DW2 from 1059:01-1111:59. DW1 was replaced by (DW2 minus 15 degrees) from 1112:00-1132:00. Fifteen degrees was subtracted from DW2 due to the sensors inability to reach the actual lower dewpoints. DW1 was patched from 1108:00-1113:00, and 1131:00-1133:00.

Dewpoint #1 (DW1) exceeded ambient temperature several times due to precipitation.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1017.8	1013.1
Corrected tower pressure	1018.3	1014.6

The aircraft INE positions were renavigated with respect to GPS.

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: Stan Czyzyk, (813) 828-3310 ext. 3086

970401H

TIME	LAT	lon	TK	HD	TA	TO	MO	WS	PS	SP	PA	GA	REMARKS
111700	28 01	81 27	90	85	3.3	-19.7	314	40.4	698.6	1012.8	3028	3115	10K
113848	28 28	80 02	359	350	3.3	-24.5	304	32.1	699.1	1013.7	3022	3113	8 MI 41009
115830	28 54	78 27	75	70	1.2	-26.5	305	38.2	699.2	1014.5	3020	3094	BUOY 41010
122000	29 58	77 23	42	30	2.9	-36.9	310	57.3	699.7	1008.0	3014	3053	
123412	30 44	76 43	31	22	-1.9	-38.0	310	47.3	699.9	1010.2	3012	3019	PROP 1
130435	32 15	75 07	30	18	-3.4	-17.2	315	52.9	698.3	1005.7	3033	2986	BUOY 41002
133219	33 37	73 44	44	33	-5.1	-12.8	304	51.1	698.7	999.5	3025	2912	PROP 2
1338													RADAR ALT 10K
135307	34 39	72 38	44	36	-11.3	-15.5	304	36.9	681.7	1000.2	3219	3049	BUOY 41001
141630	35 59	72 06	17	10	-9.0	-15.9	320	35.2	682.7	992.3	3230	3025	
142008	36 12	72 00	19	12	-10.9	-18.9	319	38.6	680.5	994.4	3233	3021	PROP 3
143905	37 17	71 34	17	12	-13.7	-14.9	340	43	676.4	993.9	3281	3039	PROP 4
150002	38 30	71 00	17	15	-11.6	-39.4	355	34.1	674.8	990.8	3306	3052	PROP 5
145930	38 28	70 01											BUOY 41004
152054	38 42	70 28	24	25	-10.1	-25.5	28	23.1	675.1	988.1	3296	3045	PROP 6
155300	41 38	69 35	21	24	-7.8	-12.4	48	21.1	675.4	987.7	3293	3067	
160800													CIRCLE
161954	42 54	68 56	25	28	-8.4	-9.4	38	47.1	675.7	991.1	3289	3083	BUOY 44005
162308													TURN 5
162840	42 54	68 56	198	195	-8.4	-9.6	38	50.2	675.8	990.4	3288	3078	BUOY 44105
164038	42 00	69 23	203	202	-8.3	-9.8	35	42.7	675.7	988.7	3289	3067	PROP 7 BROADW
164829	41 27	69 42	201	201	-8.1	-8.6	32	18.1	675.9	989.8	3288	3062	PROP 8
172911	38 42	70 58	197	202	-10.0	-14.1	357	24.3	675.9	980.7	3286	3058	PROP 9
1733													BUOY 44104 30M
175007	37 17	71 34	198	205	-9.4	-13.3	343	49.3	676.1	992.2	3286	3078	PROP 10
182030	35 03	72 32	199	209	-7.5	-9.7	330	51.6	684.6	999.3	3188	3062	
182541	34 41	72 39	194	204	-6.3	-10.7	326	54.3	684.6	999.1	3187	3071	BUOY 41001
183757	34 40	72 39	317	320	-5.6	-10.5	327	57.4	684.6	999.2	3187	3075	BUOY 41001
190052	35 30	73 38	318	322	-5.5	-11.5	338	46.2	684.9	1000.5	3185	3091	PROP 11
192802	36 32	74 52	329	335	-6.8	-20.0	355	49.6	3171	3056	3130	3055	BUOY 44014
193812	36 32	74 54	391	195	-6.4	-21.6	354	51.5	3133	1005.9	3134	3061	BUOY 44014
194700	36 33	74 52	18	14	-7.0	-22.8	354	53.8	3132	1006.2	3132	3057	BUOY 44014


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&dTITLE (MAX 21 CHARACTERS) -- EX HURRICANE PAINE
ADEOS - FERRY TO PAX
YYMMDDL FLT I.D.
970401H
HHMMSS START TIME -99999 DEFAULT TO START OF DATA FOR PRINTOUT ONLY
105901
HHMMSS END TIME 999999 DEFAULT TO END OF DATA FOR PRINTOUT ONLY
205000
HHMMSS TAKE OFF TIME
110200
* NUMBER OF TAPES (I2) ...FOR STANDARD TAPE OUTPUT ONLY
01
* -----LOGICAL UNIT OF INPUT DATA (I1) 5, 8 OR 9 FOR TAPE DRIVE
8
* -----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
2
* -----ACCELEROMETER (I1) - USUALLY THE SAME AS YOUR INE SELECTION
2
* ----- TOTAL TEMPERATURE PROBE (I1) [1 OR 2]
1
* ----- DEWPOINT 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
CO2972.CON
*****
CI>

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BAD BLOCK

~~TAKEOFF~~ START 1059:01
STOP 2050:00

RENAV

1452:31
1452:50
1503:24
1503:30
1503:51
1504:20
1505:21
1505:30
1505:51
1506:20
1759:51
1800:10
1801:01
1801:10
1801:31
1802:00

1175:00	-0.1, 0.0	28 4.8 .80 46.0
1425:00	0.6, -0.5	39 29.6 -71 53.1
1600:00	1.3, -0.6	42 3.1 -69 22.0
1818:00	1.9, -1.6	35 13.8 -72 27.4
2050:00	2.6, -2.4	38 17.2 -76 25.3

RA-159 SPIKE AT TAKEOFF 1102:20 - 1103:00 ^{REMOVED &} PATCHED

RA-159 SPIKE AT LANDING 2046:10 - 2050:00 ✓
SET TO ZERO @ 2046:18 → 2050:00 ✓

DW1 ~~UNRECORDED~~ FROM 1059:01 - 1132:00
NOT ON

DW1 REPLACED BY DW2 -15 @ 1112:00 - 1132:00 ✓

DW2 1059:01 - 1111:59 ✓

DW1 PATCHED 1109:01 - 1113:00 ✓

1131:00 - 1133:00 ✓

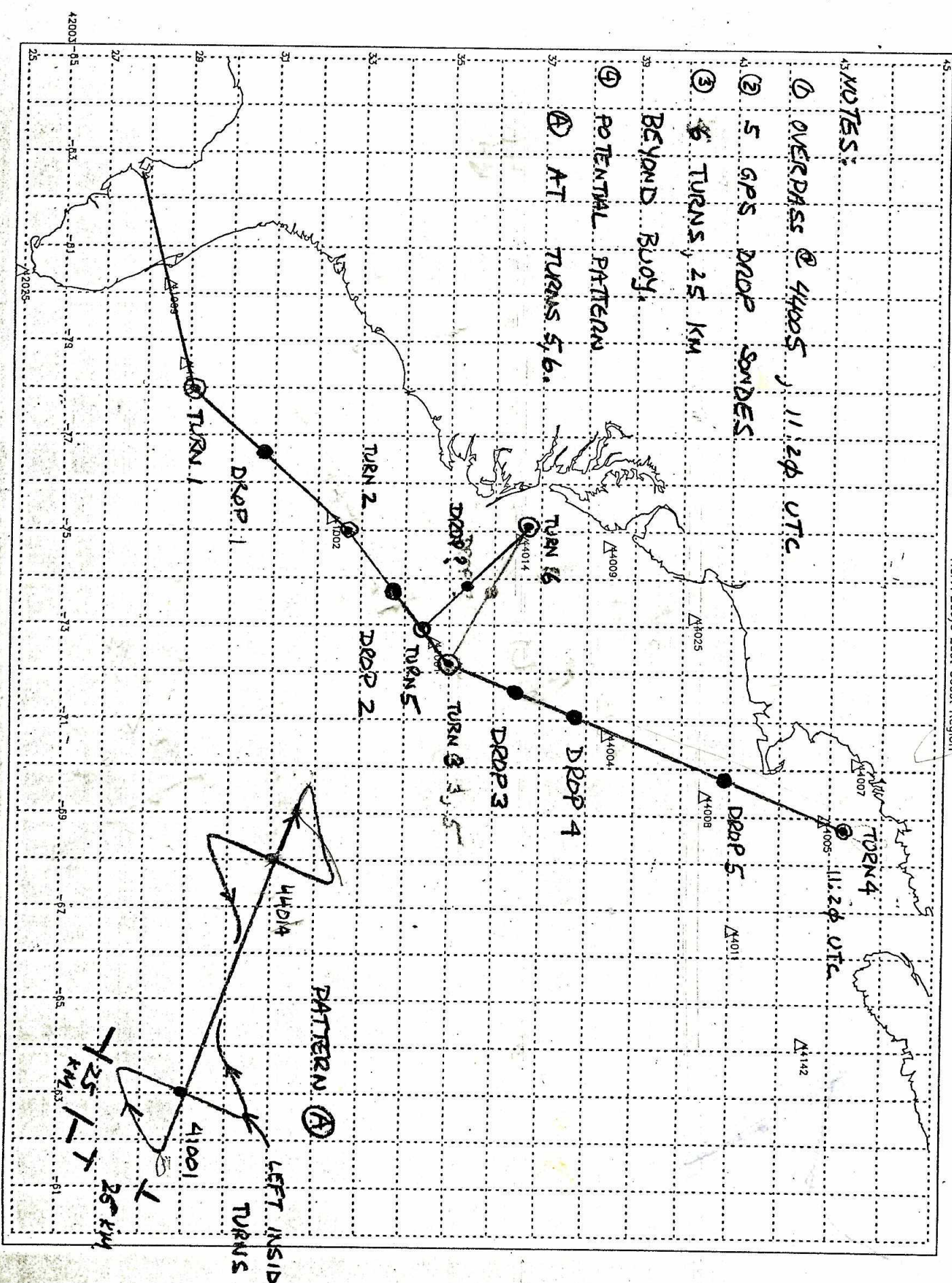
1108:00 - 1109:00 ✓

CALVAL 2 DATA FLIGHT #1 970401

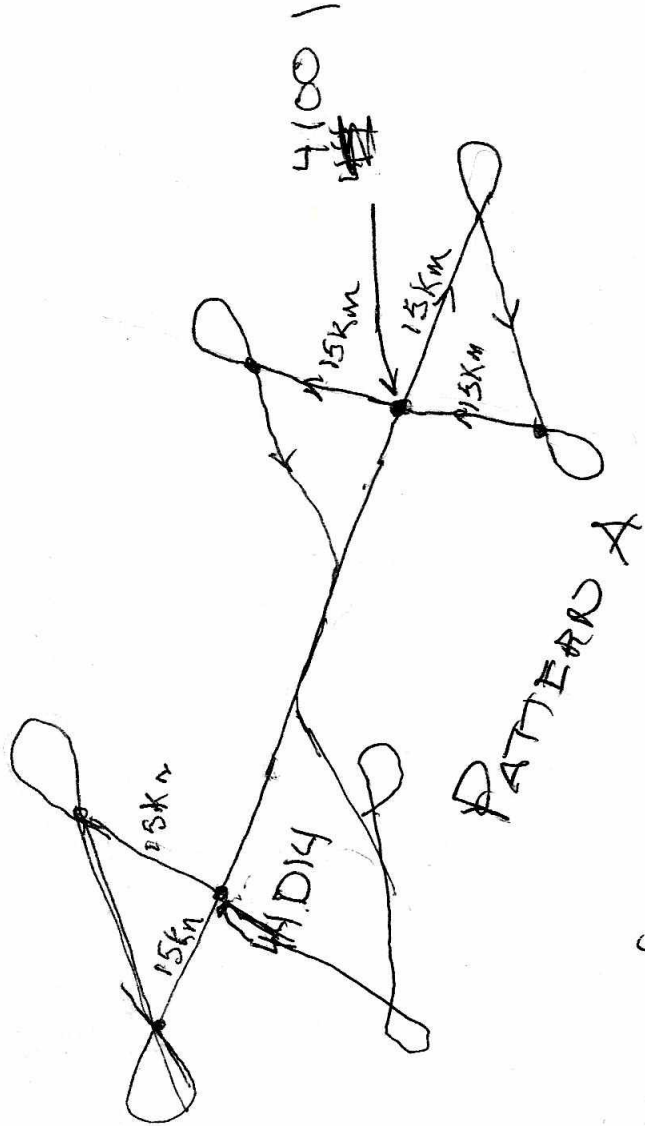
NOAA Buys East Coast Region

NOTES:

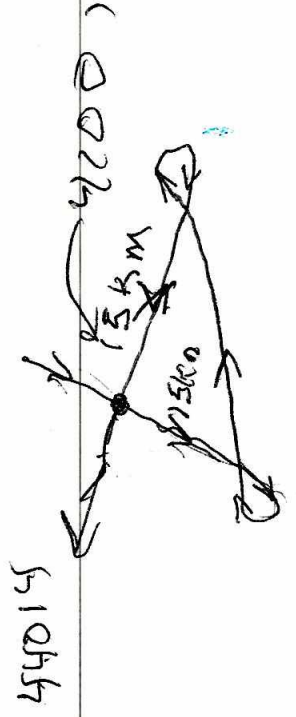
- ① OVERPASS @ 44005, 11:20 UTC
- ② 5 GPS DROP SITES
- ③ 6 TURNS, 25 KM
- BEYOND BUOY.
- ④ POTENTIAL PATTERN
- ⑤ AT TURNS 5, 6.



organized weather



Approach

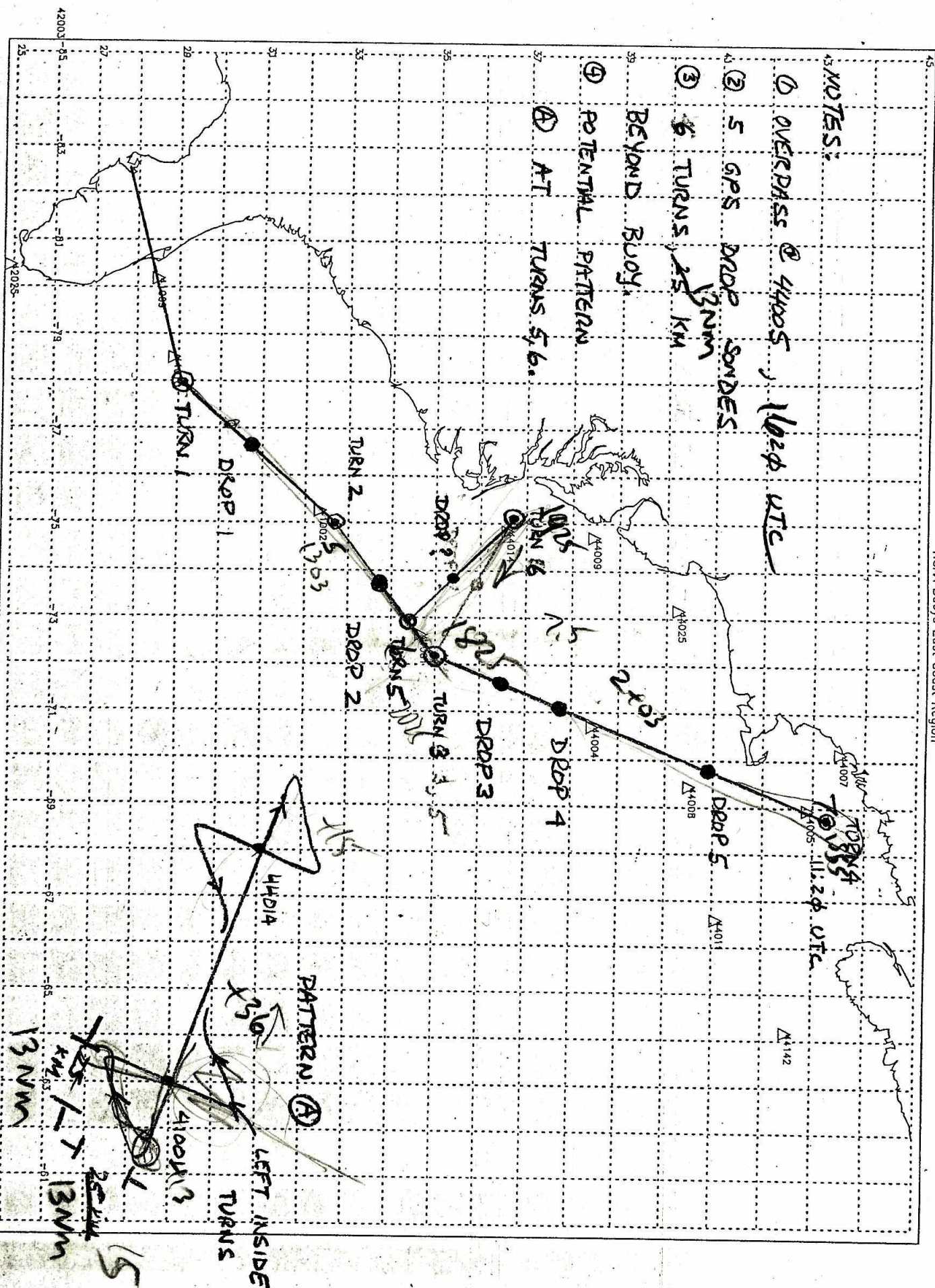


CALVAL 2 DATA FLIGHT #1 970401

NOM Buoy East Coast Region

NOTES:

- ① OVERPASS @ 44005, 11024 UTC
- ② 5 GPS DROP SONDES
- ③ 6 TURNS, 25 KM
- BEYOND BUOY.
- ④ POTENTIAL PATTERN
- ⑤ AT TURNS 5, 6.



CALVAL 2 DATA FLIGHT #1 970401

NOAA Buoy's East Coast Region

NOTES:

- ① OVERPASS @ 44005, 11:24 UTC
- ② 5 GPS DROP SONDERS
- ③ 6 TURNS, 25 KM BEYOND BUOY.
- ④ POTENTIAL PATTERN
- ⑤ AT TURNS 5, 6.

