

MEAPRS

Flight #07 H980613 IOP #07 (Thunderstorms in Oklahoma/Missouri)

DATA TYPE

SENSOR or OPTION

INE	1
Accelerometer	1
Temperature Probe	2
Altitude (for vertical wind)	Pressure Altitude
Static Pressure	Fuselage
Dynamic Pressure	Fuselage
Dewpoint Probe	2
Constants file:	CO2987.con

Notes:

There were no data/time gaps.

The RA232 radar altimeter was used in extrapolating surface pressure from flight level.

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

Sensors operated optimally most of the time.

Spikes in total temperature 2 data were removed and patched over during the following time periods:

002400Z - 002600Z
033800Z - 034000Z

Due to icing conditions data from total temperature 2 was deemed erroneous during the following time periods:

025633Z - 025847Z
034012Z - 034212Z

The erroneous data was replaced with total temperature 1 values.

A spike in dewpoint temperature sensor 2 data was removed and patched over during 052700Z - 052900Z.

Dewpoint temperature was warmer than ambient temperature during the following two time periods:

025630Z - 030020Z
033920Z - 034240Z

The Johnson-Williams liquid water probe was working but an offset of +2.5 must be applied to the data.

Aircraft inertial 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 wind speeds, respectively, derived from Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	957.6mb	954.4mb
Corrected tower pressure	957.0mb	955.2mb

Flight Meteorologist: A. Barry Damiano, (813) 828-3310 ext. 3073

FLT ID: H980613	FM: KOKC	TO: KOKC
FLT NO: 98-060	BLK IN: 07:05	ATA: 0656Z
ETD: 2300Z	BLK OUT: 2300Z	ATD: 2309Z
ETE:	BLK TIME: 8:05	FLT TIME: 17:47
SPONSOR ORG: NSSL/NSF	PROGRAM: MEAPRS	PURPOSE: MCS OVER OKLAHOMA

QAO PERSONNEL

AC KENNEDY ✓	SYS ENG
CP TENNENSEN / KENUL	DATA SYS McMILLAN ✓
NAV RATHBUN ✓	RADAR DELGADO
FE BAST	BT/ODW CARPENTER ✓
RADIO XXXXXXXXXX	CLD PHYS
FD DAMIANO ✓	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/QAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
31 ZIEGLER	PI	NSSL
SHEPHERD	ASST PI	↓
SCHULR	PMS	
BIGGERSTAFF	PMS	
KARL	OBS	TEXAS A&M
XXXXXXXXXX SEO	OBS	
FULLER	OBS	
47 ROTOFF	OBS	

PROPOSED/ACTUAL MISSION/REMARKS (RECCO, FIXES, STORM, PENET, NHOP #) 0573

U.S. DEPT. COMM./NOAA/ORA - DATA SECTION WORK FORM NO. 2 DROWF2 FILE

FLT ID: 17980613

TIME OFF: 2309Z

TIME ON: 0656Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	957.6	29.64	954.4	29.55

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES

2

FAST FLT LVL TAPES

RADAR TAPES

3

DOPPLER TAPES

ODW CASSETTES

HARD COPIES

PMS

1

AXBT

AXCP

ODW

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

2357 Radar out

260/50

KING OK

JW OFFSE -2.5

H980613

200 350 110
260 40 250
270 115 290 110

TIME	LAT	LOW	TRK	HD	WD	WS	TA	TD	PA	GA	SP	PS		PQ
231600	3539	9741	321	315	206	47	21.4	13.9	1957	1660	962.6	794.7	CLR	61.9
232600	3545	9742	326	318	236	46	9.7	2.6	3447	3275	966.7	662.4	CLR	72.8
233900	3621	9733	14	7	240	51	8.7	6.8	3446	5263	965.2	661.9	CLR	73.2
234620	start line													
235200	3707	9629	86	89	251	57	9.7	2.5	3187	2984	968.1	684.2	line	78.5
235500	end leg													
0007	BRITT													
002100	3709	9620	253	249	220	39	9.8	6.8	3090	2896	972.1	693.9	line	68.0
003100	end leg													
003600	3711	9552	273	268	219	37	10.3	.6	3152	2987	970.2	688.7	line	73.0
004000	end leg													
004420	start leg													
004700	3516	9604	107	119	225	55	8.9	4.6	3128	2954	973.3	689.7	line	73.6
005240	end leg													
005800	3712	9545	291	284	223	41	10.6	.3	3126	2988	975.4	690.2	line	73.6
010200	end leg													
010440	start leg													
010600	3718	9554	105	116	220	49	10.5	1.9	3119	2967	974.1	690.4	line	71.7
011250	end leg													
011440	start leg													
011700														
011900	3718	9541	298	288	214	50	10.3	1.3	3128	3001	975.9	689.8	line	70.8
012100	end leg													
012250	start leg													
013000	3718	9515	100	109	233	40	10.3	.3	3129	2989	975.6	689.2	line	80.6
013100	end leg (radar down)													
014500	3730	9401	110	120	240	50	7.3	5.1	3130	2929	973.3	689.2	BLW	70.0
015200	3730	9415	LAMAR											
020000	3731	9434	319	309	223	45	8.2	5.7	3126	2975	976.4	690.0	BLW	71.9
021200	3820	9421	27	23	242	39	9.0	3.2	3120	2953	972.9	689.9	BLW	75.6
023900	3831	9303	88	88	271	50	.7	-1.9	3844	3741	981.0	629.3	-	73.2
025000	3831	9309	267	272	284	60	-5.1	-5.1	4668	4575	976.5	685.1	-	69.4
025600	3831	9302	84	81	277	63	-6.0	-3.9	4665	4580	983.9	684.8	-	71.8
030400	3840	9209	77	77	292	20	-4.4	-4.5	4629	4609	978.4	684.7	-	64.7
032900	3839	9317	292	288	261	49	-3.2	-4.8	4793	4718	976.6	685.3	-	74.7
034400	3834	9224	271	271	263	63	-4.2	-2.0	4765	4769	979.8	687.0	-	70.6
035500	lead to MAPLES													
040800	3809	9228	246	248	252	48	6.7	3.1	3423	3272	975.3	664.1	-	76.6
042300	3734	9315	199	210	260	53	8.9	-1.4	3425	3217	967.0	664.2	-	73.3
043400	3705	9305	114	123	243	44	8.0	-0.5	3428	3116	958.4	663.9	line	75.9
045000	3654	9206	285	278	230	42	7.1	-1.1	3433	3324	970.4	663.5	line	69.2
050300	3732	9237	0	348	250	58	8.5	-1.2	3411	3141	959.7	665.3	-	74.4
051800	3704	9302	266	263	242	45	8.2	.2	3413	3119	957.9	665.2	-	73.9
053900	3635	9352	10	2	245	51	10.0	-0.7	3389	3073	953.8	667.4	-	70.0
055400	3612	9358	181	188	230	36	9.8	-2.3	3409	3142	958.9	665.7	-	73.7
062600	3531	9559	262	262	261	50	10.7	-2.4	3410	3347	979.9	665.4	-	76.7

[illegible]

017730UN6N FLAMAR

3550 3950
9725 9630

37.2 97.1

115 122

070/80

CLEARANCES		
FREQ	ALT	HDG
406.600		STILL AT PIO
406.606		ORC
605W 606		KINGFISHER AT ENW
406.606		
		ENW 355 PER 195 PER
		RF 200 DSK 11K 710
		124.6 580573

MISSION LOG

POSITION REPORT

1. POSITION

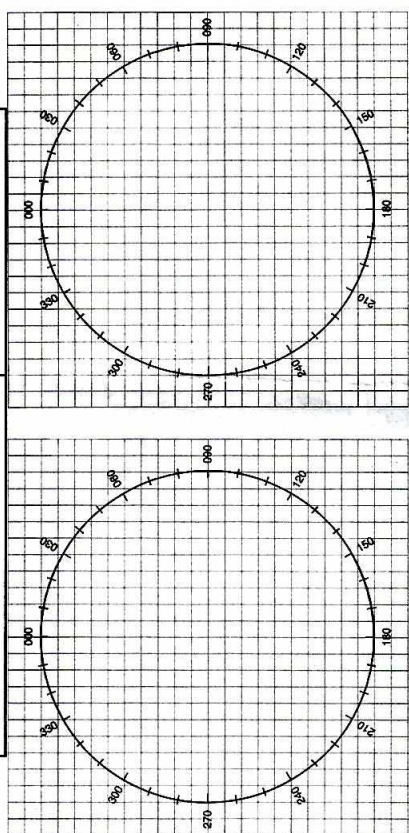
2. TIME

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:

UHFVOICE 243.0 VHFVOICE 121.5 MAYDAY, MAYDAY, MAYDAY

THIS IS NOAA, NOAA, NOAA

POSITION N/S E/W AT Z

HEADING TRUE/MAG 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
2252																					
2300																					
2309																					
2327	FMI	3550.1 9741.3	3550.4 9741.2	-1.3 +1.3	3550.3 9741.0	-1.2 +1.3			007 SR		012	291	214	67	111K	230					NO STAY BLOCK OUT TAKE OFF
0004		3650.1 9610.1	3650.5 9608.9	-1.4 +1.2	3657.9 9609.8	+1.2 +1.3			284 6R		290	226	201	24	101K	228					
0034		3711.1 9541.3	3711.4 9540.4	-1.3 +1.3	3711.0 9541.6	+1.1 -1.3			262 SR		267	274	158	19	101K	229					
0104		3720.0 9602.8	3720.7 9601.3	-1.7 +1.5	3719.9 9601.9	+1.1 +1.9			115 11L		104	276	244	68	101K	228					
0132		3714.9 9501.8	3715.5 9450.7	-1.6 +2.1	3715.1 9501.2	-1.2 +1.6			104 9L		131	260	267	51	101K	228					
0205		3752.3 9440.8	3753.2 9438.5	-1.9 +1.3	3752.7 9441.2	-1.4 -1.4			023 9R		032	285	240	70	101K	228					
0239		3831.4 9301.2	3832.8 9250.0	-1.4 +3.2	3831.3 9300.5	+1.1 +1.7			094 0		000	298	260	65	121K	223					
0334		3837.8 9303.7	3839.4 9300.1	-1.6 +3.6	3838.6 9304.0	-1.8 -1.3			092 1L		091	287	255	62	151K	227					
0408		3800.9 9229.7	3811.0 9225.5	-2.1 +4.2	3809.2 9229.4	-1.3 +1.3			249 4L		245	204	284	27	111K	228					
0449		3652.9 9202.2	3655.2 9158.0	-3.3 +4.2	3654.4 9202.6	-1.5 -1.4			278 7R		285	220	206	28	111K	228					
0539		3634.2 9352.4	3637.4 9346.1	-3.2 +6.3	3634.2 9352.1	0 +1.3			003 9R		002	290	227	67	111K	230					
0612		3537.2 9459.9	3540.3 9454.8	-3.1 +5.1	3537.0 9459.6	-1.8 +1.3			264 1L		263	211	272	19	111K	229					
0656		3523.4 9735.3	3527.4 9727.7	-4.0 +7.6	3522.8 9735.3	+1.6 0															LAND BLOCK IN
0705																					