

Flt ID: H011103	From: KMCF	To: KMCF
Flt No.: 02-05	Blk In: 0721Z	ATA: 0712Z
ETD: 2200Z	Blk Out: 2153Z	ATD: 2204Z
ETE:	Blk Time: 9:28 (9.5)	Flt Time: 9:08 (9.1)
Sponsor Org: NHC	Program: RECCO	Purpose: H. MICHELLE

AOC Personnel

AC: TENNESEN ✓	Sys Eng: DuGRANUT ✓
CP: TEBEEST ✓ / HALVERSON ✓	Data Sys: McMILLAN ✓
Nav: ADLER	Radar:
FE: WADE / FLOYD ✓	GPS/BT: SMITH ✓
Avionics:	Cld Phys:
FD: DAMIANO ✓	

Participating Scientists/Volunteers/AOC

Name (Last, First)	Activity on Aircraft	Affiliation
GUDES, S	DBS	Acting NOAA ADM
ALLEE, R.	DBS	NOAA
BLACK, P ✓	PI	NRD
DODGE, P ✓	RADAR	↓
ABERSON, S ✓	HAPS	
UHLHORN, E ✓	SFMR	
PARTISH, J ✓	RADAR, SFMR PHOTOGRAPHY? IMAGE TRANSMISSIONS	
ZHANG, A ✓	SFMR	UMASS

Proposed/Actual Mission/Remarks (Recco, Fixes, Storm, PENET, NHOP #)

Del DW1 2242Z
 11 DW2 2243Z

2337Z
 DW2 cooler

2247Z RAIS9 check

9 0013Z 1940' 8345'
 938mb from FL

9 0137Z
 1945'
 8338'
 944mb
 sound

9 0310Z
 1951'
 8332'
 944 sound

00Z 20.1 84.2

9 0411Z Teal 99
 1956'
 8327 943mb EXTRAP

9 0509Z
 2001' 941mb
 8323' EXTRAP

U.S. Dept. of Commerce/NOAA/Aircraft Operations Center

Flt ID: H071103 Time Off: 2204z Time On: 0712z

	A/C (Take Off)	Wx Stn (Take Off)	A/C (Land)	Wx Stn (Land)
Pressure	<u>1015.0</u>	<u>30.0 29.99</u>	<u>1015.2</u>	<u>30.01</u>

	Number	Data Disposition/Date/Quality
Slow/Fast Flt Lvl Tapes	<u>2</u>	
Radar Tapes		
Cloud Physics Tapes		
Video Tapes		
AXBT	<u>18</u>	
AXCP		
AXCTD		
Dropsondes	<u>30 34</u>	
MESSAGES	<u>26</u>	

	Forward	Left Side	Right Side	Down	Remarks
Time On					
Time Off					
Rate					

Remarks NO KING

H. Michelle

Flight #1 011103H

<u>Sensor or system</u>	<u>Number or Name</u>
INE	2
Accelerometer	2
Temperature Probe	1
Dew Point Probe	1 (General Eastern)
Altitude (for vertical wind)	RA159
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO2012.CON

Notes:

There was one time/data gap: 220311Z - 220330Z.

A spike was noted in the output from the radar altimeter, RA159, during the period 0700Z - 0703Z. The spike was removed and patched over.

Several small spikes were noted in the output from the General Eastern Dewpoint probe, DW1, during the following periods: 2240Z - 2243Z, 2253Z - 2257Z, 0011Z - 0013Z, 0256Z - 0258Z, 0442Z - 0444Z, 0610Z - 0612Z and 0627Z - 0629Z.

These spikes were removed and patched over.

During periods of heavy precipitation, the dewpoint temperature, TD, was greater than ambient temperature, TA.

The King Liquid Water probe was inoperative for the entire flight.

All other instruments worked optimally during the flight.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1015.0mb	1015.2mb
Corrected tower pressure	1015.1mb	1015.7mb

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

N42RF AVAPS DropSonde Log

N42RF Project: Hurricane 2001

Flight ID 011103h

Mission: Michelle

Flight #: 1

System Status: ✓

Drop #	Sonde Serial Number	Chn. #	Time (Zulu)	Press. offset	Winds time	Operator Initials	Comments / Drop Status/ Failure Reason	GOOD ☒
1	003248119	1	2349	0	44	JAS	1A	✓
2	003135106	2	2359	0	30		1B	✓
3	003135070	1	0007	0			1C	✓
4	003135021	2	0010	0			1D	✓
5	011118042							
6	011345042	1	0013	0		✓	1E - FAST FALL	✓
7	003248121	3	0019	0			1F	✓
8	011345051	1	0027	0			2A	✓
9	003115256	2	0040	0	✓		2B	✓
10	003115442	1	0113	0	16		2D	✓
11	003148122	2	0122	0	16		2E	✓
12	003115440	3	✓	0			2F	✓
13	011118042	4	✓	0			cc sonde	✓
	003115260	2	0137	0			3A	✓
	003025320	4	✓				3B	✓
16	011245453	1	0140				cc sonde	✓
17	003135137	3	0145		✓		4A	✓
18	003135136	1	✓		40		3B	✓
19	011345103	2	0203	0	16		3C	✓
20	003135142	1	0235	0			3D	✓
21	011335043	2	0245	0			3E	✓
22	003115275	1	0254	0	✓		3F	✓
23	003115274	3	0257	0				✓
24	011218042	4	0307				cc sonde	✓
25	002428037	2	0302					✓
26	003135061	1	0309					✓
27	003135062	3	0317					✓
28	003115290	2	0317					✓
29	003135169	1	0408	0			RRH1 FAIL?	✓
30	011218044	4	0408	0	0		cc sonde	✓
31	003135144	2	0408	0	12			✓
	011345075	1	0512	0			Eye-Tellm fail	✓
33	011345032	2	0517				NO WINDS -	✓

AVAPS system overloaded?

Drop #	Sonde Serial Number	Chn #	Time (ZULU)	Press. offset	Winds time	Operator Initials	Comments/ Drop Status /Reason for Failure	GOOD ☒
34	011 118 045	4				JAS	AVAPS FAIL	B
35	011 378 160	3				JAS	CC-Sonde	B
36								
37								
38								
39								
40								
41								
42								
43								
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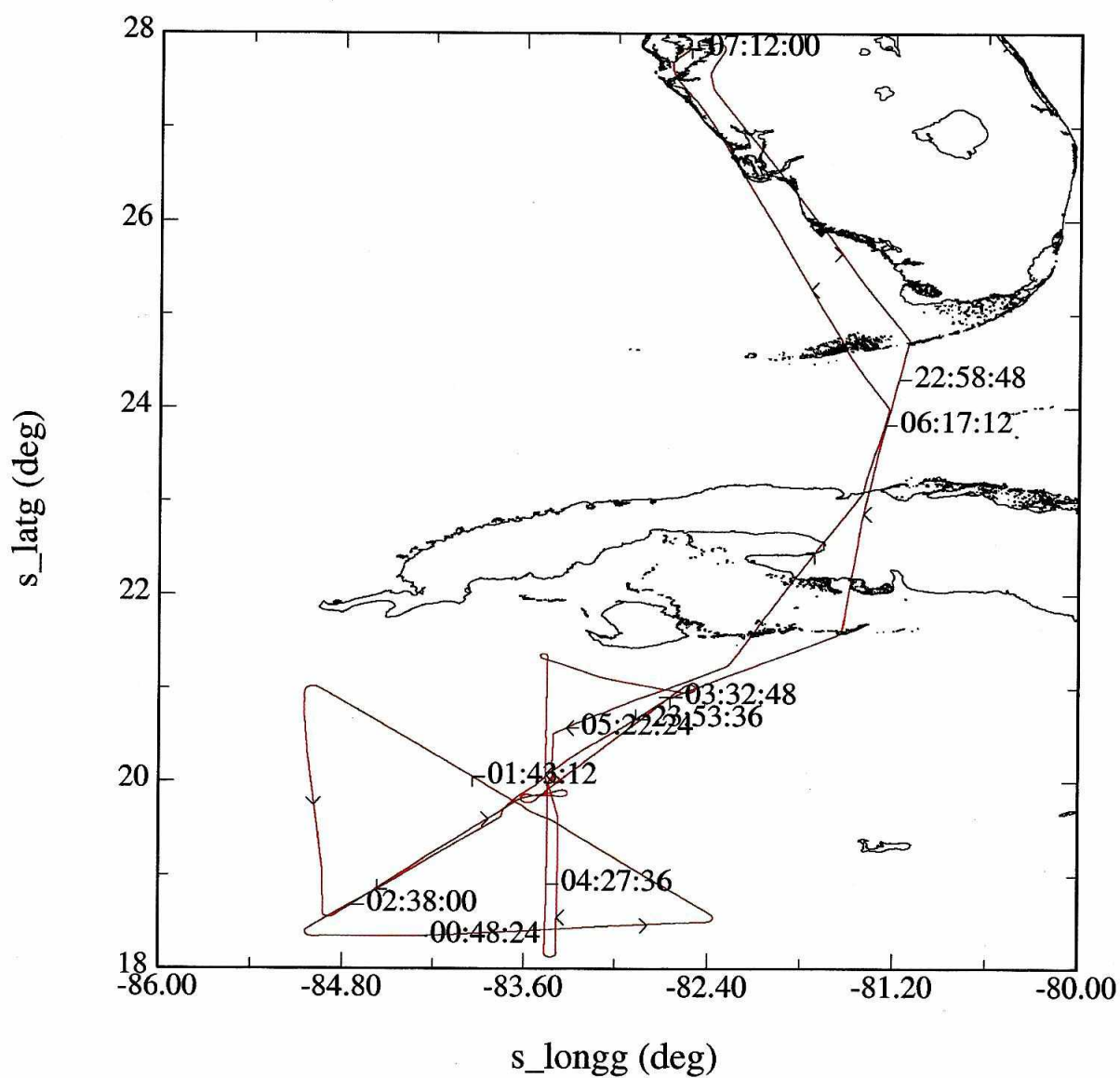
06/21/00

AVAPS HINTS

- N43's **RED PHONE** appears to interfere with AVAPS telemetry, don't allow its use while sondes are in the air
- ASDL transmits on 401.8MHz, and will trash AVAPS telemetry +/- 1 MHz from that point
- Rawinsondes transmit at 403.0. Caribbean taxi drivers and bandit radio stations transmit wherever they want.
- The sonde GPS Oscillator needs at least 2 minutes to warm-up and stabilize. If you drop early, the winds data (if any) will be initially not accurate and probably late.
- Below 10,000', open the P3 launch chute cover holes at least 2/3 of the way. From 10,000' to 18,000', open about 1/2 way, above 18,000' open 1/3 of the way.
- Dropping a backup sonde prior to selecting **BEGIN COLLECTING DATA** is the single most frequent operator error.
- 60 seconds is the cut-off time for Good vs. Late winds. If no satellites are locked on by 60 seconds, or no winds data by 80 seconds, drop the backup.
- Frequency block assignments: **Air Force - Block A** **N42RF - Block B** **N43RF - Block C** **N49RF - Block D**
- P3 Drops only.... Shorten the ribbon to about 20" - 25"
- When sonde telemetry fails prematurely, wait until the normal drop time has elapsed to terminate data collection.
- If Pre-launch sonde telemetry is dependent upon hand position while holding the sonde in order to **NOT** generate CRC errors, the sonde transmitter is bad and it should not be dropped.

H. Michelle Flight #1

011103Hs_P, 22:04:00-07:12:00



	mean	sigma	min	max
— s_latg (deg), 1 s/sec	21.42	2.72	18.13	27.89
— s_longg (deg), 1 s/sec	-83.00	1.10	-85.05	-81.11

Time	Lat	Long	Trk	Hdg	Wind Dir	Wind Spd	T _a	T _s	Press. Alt.	Geo. Alt.	Sfc Press.	Press. Sfc	Dyn. Press	Remarks
222000	2705	8214	156	154	70	12	3.3	-26.2	3784	3976	1015.4	633.0	64.6	BTN CLD
224300	2529	8128	159	157	87	16	3.0	-22.0	3966	4177	1013.6	619.3	89.5	BTN CLD
231200	2317	8120	187	184	105	20	2.8	2.0	3965	4163	1010.6	619.3	89.7	IN CLD (DARK)
233100	2149	8131	185	185	155	12	4.3	2.3	3962	4146	1006.8	619.5	84.4	RW-DARK
234200	2114	8267	237	233	99	31	9.6	8.5	3009	3118	1005.9	700.0	78.9	RW DARK
234940	2053	8040	221	219	110	53	9.4	10.4	3007	3086	1002.1	700.5	72.9	AXBT
234951	2053	8040	221	221										(49) DROP
235914	2024	8309												"XBT
235915	2024	8309	229	215	105	71	8.8	10.8	3046	3077	996.2	698.0	80.7	(30) DROP
000727	1958	8331	225											XBT
000730	1958	8331	225	140	100	10.4	11.4	3256	3086	969.3	680.5	74.3	(30) DROP	
001054	1948	8340												XBT
001057	1948	8340												DROP
001538	1932	8351												XBT 225
001541	1932	8351	226	248	315	90	16.4	10.2	3217	3004	98.4	679.3	67.8	and DROP
001947	1921	8403	225											XBT
001950	1921	8403	225	245	317	84	12.0	12.8	3120	3020	983.7	672.0	79.7	FOR DROP
002954	1852	8433												XBT
002957	1852	8433	225	239	322	60	9.8	9.3	3066	3133	1000.0	695.4	76.5	(20) DROP
004027	1821	8458												XBT
004031	1821	8458	90	85	308	41	10.5	5.5	3066	3166				DROP
011810	1835	8223												XBT
011814	1835	8223	316	307	207	49	10.9	6.8	3065	3169	1003.1	695.4	68.9	(16) DROP
012217	1902	8251												XBT
012220	1903	8251	315	302	215	65	12.2	7.0	3066	3127	996.1	695.5	70.1	(16) DROP
013135	1930	8320												XBT
013140	1930	8320												DROP
013206	1932	8320												DROP
013219	1932	8320												DROP
013721	1946	8339												DROP
014100	1953	8347												XBT
0141														XBT DROP
	1954	8348												N DROP
	1956	8349												DROP
014547	2010	8405												XBT DROP
014545	2010	8405												(20) DROP
015251	2031	8427												XBT
015254	2031	8427												(19) DROP

944 mb

(19) EYEDROP

XBT DROP

(20) DROP

(19) DROP

(19)

DATE		SCHEDULED RX TIME	AIRCRAFT NUMBER	FLIGHT DIRECTOR
WX MISSION IDENTIFIER				OB NUMBER 07
VORTEX DATA MESSAGE 0410013				
A	0410013 Z	DATE and TIME of FIX		
B	19 DEG 40 MIN (N) S	LATITUDE of FIX		
	83 DEG 45 MIN (W) E	LONGITUDE of FIX		
C	200 MB 25.71 M	MINIMUM HEIGHT of STANDARD LEVEL		
D	NA KT	ESTIMATE of MAXIMUM SURFACE WIND OBSERVED		
E	DEG NA NM	BEARING and RANGE FROM CENTER of MAXIMUM SURFACE WIND		
F	125 DEG 116 KT	MAXIMUM FLIGHT LEVEL WIND NEAR CENTER		
G	35 DEG 26 NM	BEARING and RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND		
H	EXTRAP 938 MB	MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.		
I	10 C 13004 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE OUTSIDE EYE		
J	16 C 13297 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE INSIDE EYE		
K	14 C 1 NA C	DEWPOINT TEMP / SEA SURFACE TEMP INSIDE EYE		
L	CLOSED	EYE CHARACTER: Closed wall, poorly defined, open SW, etc.		
M	C12	EYE SHAPE/ORIENTATION/DIAMETER: Code eye shape as: C - Circular; CO - Concentric; E - Elliptical. Transmit orientation of the major axis in tens of degrees, i.e., 01-010 to 190; 17 - 170 to 350. Transmit diameter in nautical miles. Examples: C8= Circular eye 8 miles in diameter. E09/15/5=Elliptical eye, major axis 090-270, length of major axis 15 NM, length of minor axis 5 NM. CO8-14=Concentric eye, diameter inner eye 8 NM, outer eye 14 NM.		
N	12345/7	FIX DETERMINED BY / FIX LEVEL. FIX DETERMINED BY: 1-Penetration; 2-Radar; 3-Wind; 4-Pressure; 5-Temperature. FIX LEVEL (Indicate surface center if visible; indicate both surface and flight level centers ONLY when same): 0-Surface; 1-1500 ft; 9-925mb; 8-850mb; 7-700mb; 5-500mb; 4-400mb; 3-300mb; 2-200mb; NA-Other		
O	111 NM	NAVIGATION FIX ACCURACY / METEOROLOGICAL ACCURACY		
P	REMARKS MAX FL WIND <u>116</u> KT <u>NE</u> QUAD <u>0006</u> Z' SEA LVL PRS EXTRAPOLATED FROM <u>900</u> MB			

INSTRUCTIONS: Items A thru G (and H when extrapolated) are transmitted from the aircraft immediately following the fix. The remainder of the message is transmitted as soon as available for scheduled fixes and at the Flight Director's discretion for unscheduled (intermediate) fixes.

13.4 12.6

10.4 8.4

DATE		SCHEDULED RX TIME	AIRCRAFT NUMBER	FLIGHT DIRECTOR
WX MISSION IDENTIFIER				OB NUMBER 18
VORTEX DATA MESSAGE				
A	04 / 0137 Z	DATE and TIME of FIX		
B	19 DEG 45 MIN N	LATITUDE of FIX		
	83 DEG 38 MIN W	LONGITUDE of FIX		
C	700 MB 2599 M	MINIMUM HEIGHT of STANDARD LEVEL		
D	NA KT	ESTIMATE of MAXIMUM SURFACE WIND OBSERVED		
E	DEG NA NM	BEARING and RANGE FROM CENTER of MAXIMUM SURFACE WIND		
F	213 DEG 128 KT	MAXIMUM FLIGHT LEVEL WIND NEAR CENTER		
G	138 DEG 20 NM	BEARING and RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND		
H	944 MB	MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.		
I	11 C / 3066 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE OUTSIDE EYE		
J	19 C / 3027 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE INSIDE EYE		
K	12 C / NA C	DEWPOINT TEMP / SEA SURFACE TEMP INSIDE EYE		
L	CLOSED	EYE CHARACTER: Closed wall, poorly defined, open SW, etc.		
M	C 20	EYE SHAPE/ORIENTATION/DIAMETER: Code eye shape as: C - Circular; CO - Concentric; E - Elliptical. Transmit orientation of the major axis in tens of degrees, i.e., 01-010 to 190; 17 - 170 to 350. Transmit diameter in nautical miles. Examples: C8= Circular eye 8 miles in diameter. E09/15/5=Elliptical eye, major axis 090-270, length of major axis 15 NM, length of minor axis 5 NM. CO8-14=Concentric eye, diameter inner eye 8 NM, outer eye 14 NM.		
N	12345/7	FIX DETERMINED BY / FIX LEVEL. FIX DETERMINED BY: 1-Penetration; 2-Radar; 3-Wind; 4-Pressure; 5-Temperature. FIX LEVEL (Indicate surface center if visible; indicate both surface and flight level centers ONLY when same): 0-Surface; 1-1500 ft; 9-925mb; 8-850mb; 7-700mb; 5-500mb; 4-400mb; 3-300mb; 2-200mb; NA-Other		
O	1 / 1 NM	NAVIGATION FIX ACCURACY / METEOROLOGICAL ACCURACY		
P	REMARKS MAX FL WIND 128 KT SE QUAD 0132 Z SEA LVL PRS FROM 700MB DROPSONDE			

INSTRUCTIONS: Items A thru G (and H when extrapolated) are transmitted from the aircraft immediately following the fix. The remainder of the message is transmitted as soon as available for scheduled fixes and at the Flight Director's discretion for unscheduled (intermediate) fixes.

JA 1947 8337

1940 8347

DATE		SCHEDULED RX TIME	AIRCRAFT NUMBER	FLIGHT DIRECTOR
WX MISSION IDENTIFIER				OB NUMBER 29
VORTEX DATA MESSAGE				
A	04 / 0310 Z	DATE and TIME of FIX		
B	19 DEG 51 MIN (N) S	LATITUDE of FIX		
	83 DEG 32 MIN (W) E	LONGITUDE of FIX		
C	700 MB 2602 M	MINIMUM HEIGHT of STANDARD LEVEL		
D	NA KT	ESTIMATE of MAXIMUM SURFACE WIND OBSERVED		
E	NA NM	BEARING and RANGE FROM CENTER of MAXIMUM SURFACE WIND		
F	325 DEG 135 KT	MAXIMUM FLIGHT LEVEL WIND NEAR CENTER		
G	210 DEG 18 NM	BEARING and RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND		
H	944 MB	MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.		
I	15 C / 3060 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE OUTSIDE EYE		
J	20 C / 3084 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE INSIDE EYE		
K	14 C / NA C	DEWPOINT TEMP / SEA SURFACE TEMP INSIDE EYE		
L	OPEN SE	EYE CHARACTER: Closed wall, poorly defined, open SW, etc.		
M	C 20	EYE SHAPE/ORIENTATION/DIAMETER: Code eye shape as: C - Circular; CO - Concentric; E - Elliptical. Transmit orientation of the major axis in tens of degrees, i.e., 01-010 to 190; 17 - 170 to 350. Transmit diameter in nautical miles. Examples: C8= Circular eye 8 miles in diameter. E09/15/5=Elliptical eye, major axis 090-270, length of major axis 15 NM, length of minor axis 5 NM. CO8-14=Concentric eye, diameter inner eye 8 NM, outer eye 14 NM.		
N	12345/7	FIX DETERMINED BY / FIX LEVEL. FIX DETERMINED BY: 1-Penetration; 2-Radar; 3-Wind; 4-Pressure; 5-Temperature. FIX LEVEL (Indicate surface center if visible; indicate both surface and flight level centers ONLY when same): 0-Surface; 1-1500 ft; 9-925mb; 8-850mb; 7-700mb; 5-500mb; 4-400mb; 3-300mb; 2-200mb; NA-Other		
O	1 / 1 NM	NAVIGATION FIX ACCURACY / METEOROLOGICAL ACCURACY		
P	REMARKS MAX FL WIND 135 KT SW QUAD 0258 Z MAX TEMP 265/6 FROM FL CENTER			

INSTRUCTIONS: Items A thru G (and H when extrapolated) are transmitted from the aircraft immediately following the fix. The remainder of the message is transmitted as soon as available for scheduled fixes and at the Flight Director's discretion for unscheduled (intermediate) fixes.

2007 83 25

DATE		SCHEDULED RX TIME	AIRCRAFT NUMBER	FLIGHT DIRECTOR
WX MISSION IDENTIFIER				OB NUMBER 36
VORTEX DATA MESSAGE				
A	04 10509 Z	DATE and TIME of FIX		
B	20 DEG 01 MIN (N) S	LATITUDE of FIX		
	83 DEG 23 MIN (W) E	LONGITUDE of FIX		
C	700 MB 2608 M	MINIMUM HEIGHT of STANDARD LEVEL		
D	NA KT	ESTIMATE of MAXIMUM SURFACE WIND OBSERVED		
E	DEG NA NM	BEARING and RANGE FROM CENTER of MAXIMUM SURFACE WIND		
F	265 DEG 124 KT	MAXIMUM FLIGHT LEVEL WIND NEAR CENTER		
G	186 DEG 16 NM	BEARING and RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND		
H	EXTRAP 941 MB	MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.		
I	16 C 13404 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE OUTSIDE EYE		
J	20 C 13435 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE INSIDE EYE		
K	6 C NA C	DEWPOINT TEMP / SEA SURFACE TEMP INSIDE EYE		
L	OPEN SE	EYE CHARACTER: Closed wall, poorly defined, open SW, etc.		
M	C 20	EYE SHAPE/ORIENTATION/DIAMETER: Code eye shape as: C - Circular; CO - Concentric; E - Elliptical. Transmit orientation of the major axis in tens of degrees, i.e., 01-010 to 190; 17 - 170 to 350. Transmit diameter in nautical miles. Examples: C8= Circular eye 8 miles in diameter. E09/15/5=Elliptical eye, major axis 090-270, length of major axis 15 NM, length of minor axis 5 NM. CO8-14=Concentric eye, diameter inner eye 8 NM, outer eye 14 NM.		
N	12345/7	FIX DETERMINED BY / FIX LEVEL. FIX DETERMINED BY: 1-Penetration; 2-Radar; 3-Wind; 4-Pressure; 5-Temperature. FIX LEVEL (Indicate surface center if visible; indicate both surface and flight level centers ONLY when same): 0-Surface; 1-1500 ft; 9-925mb; 8-850mb; 7-700mb; 5-500mb; 4-400mb; 3-300mb; 2-200mb; NA-Other		
O	1 / 1 NM	NAVIGATION FIX ACCURACY / METEOROLOGICAL ACCURACY		
P	REMARKS MAX FL WIND 135 KT SW QUAD 0258t Z SEA LVL PRES EXTRAPOLATED FROM 700 MB MAX TEMP 35/17 FROM FL CENTER 20c			

INSTRUCTIONS: Items A thru G (and H when extrapolated) are transmitted from the aircraft immediately following the fix. The remainder of the message is transmitted as soon as available for scheduled fixes and at the Flight Director's discretion for unscheduled (intermediate) fixes.

60nm extra eye 924 vs 24

WATIL 159°T = 160°M

NL7MT

CLEARANCES		
FREQ	ALT	HDG
		OTHER
		21.6 278K 212K
		170HD
		200HD
		185HD
		10K

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:

UHF/VOICE 2182 KHZ 500 KHZ

VHF/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	MH	VAR	TH	DR	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	TIME	ETA	REMARKS
2146	ENG																				
2153	TAXI																				
2153	BLK																				
2203	T-10																				
2208	X	27 50.7 082 18.6	27 50.7 082 18.6	+0 +0	27 50.8 082 18.7	-1 -1	159	2W	157	4R	161	248	050	25	21K	222	CTY				105/11 MCP
2210	A	25 42.6 081 34.1	25 42.6 081 34.0	-1 +1	25 41.9 081 33.2	-1 +1	159	2W	157	4R	188	280	075	10	13K	283	MTW				
2210	A	23 25.0 081 19.1	23 24.7 081 19.0	+1.2 +1	23 24.8 081 19.1	+1.2 +0	186	2W	184	3R	187	286	100	15	13K	287					
2340	A	21 20.5 081 56.0	21 20.4 081 55.7	+1 +1.3	21 20.5 081 55.8	+0 +2	237	2W	235	4R	237	282	085	20	10K	270					
0003	B																				19 39.6 083 44.7 001
0014	A	19 36.9 083 45.8	19 37.0 083 45.4	-1 +1.4	19 36.9 083 45.7	+0 +1															
0045	A	18 21.0 084 31.1	18 21.1 084 30.9	-1 +1.2	18 20.9 084 31.3	+1 -1.2															
0137	A	19 45.5 083 30.0	19 45.2 083 37.1	+1.3 +1.8	19 44.9 083 38.0	+1.6 +0	245	2W	243		313	236	410		10K	238					19 45.5 083 38.0 0137
0236	A	18 34.9 084 50.1	18 34.0 084 48.9	+1.9 +1.2	18 33.3 084 50.1	+1.6 +0	038	2W	036	10R	046	245	310	40	10K	245					
0302	A	19 40.2 083 32.8	19 42.8 083 29.5	+1.8 +1.8	19 44.3 083 30.9	+1.6 +0															
0310	A	19 51.0 083 31.8																			
0404	A	20 21.6 083 27.5	20 19.1 083 25.8	+2.5 +1.7	20 18.2 083 28.0	+1.4 -1.5	158	2W	156	24R	180	238	085	105	10K	246					19 50.7 0302 083 32.8
0411	A	19 56.1 083 31.4																			
0513	A	20 01.0 083 25.0																			

24R
28R
27R
30R
33R
37R
19 39.6
32
6nm
045/41

