

U.S. Dep't. of Commerce / NMAO / NOAA / Aircraft Operations Center

FLT ID: <u>070815H</u>	From: <u>KMCF</u>	To: <u>KMCF</u>
Flt No: <u>—</u>	In: <u>1743Z</u>	On: <u>1737 Z</u>
ETD: <u>0930 Z</u>	Out: <u>0936 Z</u>	Off: <u>0945Z</u>
ETE: <u>9+00</u>	Blk Time: <u>8+07 8.1 Hrs</u>	Flt Time: <u>7+52 7.9 Hrs</u>
Sponsoring Org: <u>NOAA</u>	Program: <u>Hurr 07</u>	Purpose: <u>TDS</u>

PRX AOC Flight Crew

Aircraft Commander: <u>STRONG</u>	Data System: <u>PEEK, B</u>
Co-Pilot: <u>NELSON, M' GIRMONT, A</u>	AVAPS: <u>CARPENTER, D</u>
Navigator: <u>SIEGEL, P'</u>	System Engineer:
Flight Eng: <u>WADE, S' BAST, G</u>	AA:
Flight Director: <u>SHERROD, T'</u>	AA:
Avionics: <u>OLNEY, B</u>	Crew Chief:

Participating Scientists / Visitors

Name (Last, First)	Activity on Aircraft	Affiliation
<u>GAMACHE, J</u>	<u>PI - RADAR</u>	<u>NOAA/HRD</u>
<u>LEIGHTON, P</u>	<u>CO PI "</u>	<u>"</u>
<u>Philips, T</u>	<u>OBS</u>	<u>"</u>
<u>CHU, TAD</u>	<u>SFMR</u>	<u>UMASS</u>
<u>CONTRERAS, R</u>	<u>PI - SFMR/IWRAP</u>	<u>"</u>
<u>M^cMANUS, JOE</u>	<u>SFMR</u>	<u>"</u>
<u>SPINLER, NICK</u>	<u>OBS</u>	<u>AOC</u>

Remarks (Storm Name, Mission ID, Recco Times, Fix Times)

Recco Times

Fix #

Fix Time

Storm Name: _____

Mission ID: NOAA2 0205A Cyclone

2448N

9224W

020

0405A Erin

97

45

52

(See reverse for additional remarks)

U.S. DEPT OF COMMERCE / NMAO / NOAA / AIRCRAFT OPERATIONS CENTER

FLT ID: 070815H		TIME OFF: 0945 Z		TIME ON: 1737 Z	
A/C - Takeoff		WX Station - Takeoff		A/C - Land	
Pressure		29.91		29.97	
ATIS - Takeoff		0855 V3 26/25 29.91			
ATIS - Land					
Data Source	Number	Data Disposition / Date / Quality			
Flight Level Tapes					
Radar Tapes					
Cloud Physics Tapes / Cds					
Video Tapes/DVDs					
Dropsondes		Good:	Bad:		
AXBT					
AXCP					
AXCTD					
SONOBUOY					
REMARKS:					
IP 2602 9102		TT2 INDP		RECCO	
				0951	
				1015	
				1043	
				1111	
				1130	
				1147	
				1212	
				1238	
				1318	
				10-1356	
				11-1425	
2515 9325				VMSG -12	
				13-1535	
				14-1556	



NOAA P-3 N42RF

T.S. Erin

8/15/2007



Flight ID: 070815H

Sensor or system

INE

Accelerometer

Temperature Probe

Dew Point Probe

Altitude (for vertical wind)

Static Pressure

Dynamic Pressure

Time Source

Number or Name

2

2

1

2 (Edgetech)

RA159

Rosemount Fuselage psf

Rosemount Fuselage pqfl

Micro 99

Local Met Data:

Takeoff (0945Z)

Landing (1737Z)

Aircraft Static Pressure

1012.3 mb

1013.6 mb

Tower Pressure

1012.9 mb

1014.9 mb

Notes:

There were no errors noted in the selected sensors. Total temperature probe #2 was in error for most of the flight.

There were times during heavy precipitation events (e.g. eye wall penetrations) when the dew point exceeded ambient temperature yielding a RH greater than 100%. This is probably due to a wet bulb effect on the total temperature probe and/or the dew pointer over heating while trying to remove excess moisture. In these instances, no corrections were attempted.

SPECIAL NOTE: In the netCDF file, 070815H_RC.nc, vertical ground speed (dpj_wgs), vertical air speed (dpj_was), and vertical wind speed (dpj_wz) were computed using Dr. Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

Flight Director:

Tom Shepherd

Phone #:

(813) 828-3310 ext. 3053

070815H
TS Erw

TD2

TT1

INE2

ACC2

TT2 prob entire flight
RA159 no spikes

no data gaps

275
225
18045 **VORTEX DATA MESSAGE**

Date	7/15/07	Scheduled Fix Time	15Z	Aircraft Number	N42RF	Flight Director	Shepherd
Mission Identifier: NOAA 2 0205A CYCLONE						OB Number: 12	
A	151 1444 Z		Date and Time of Fix				
B	25 DEG 37 MIN (N)		Latitude of Fix (If in Southern Hemisphere, use "S")				
	93 DEG 24 MIN (W)		Longitude of Fix (If in Eastern Hemisphere, use "E")				
C	MB NA M		Minimum Height of Standard Level				
D	35 KT		Estimate of Maximum Surface Wind Observed (visually)				
E	045 DEG 35 NM		Bearing and Range From Center of Maximum Surface Wind				
F	119 DEG 44 KT		Maximum Flight Level Wind Near Center				
G	047 DEG 36 NM		Bearing and Range From Center of Maximum Flight Level Wind				
H	EXTRAP 1005 MB		Minimum Sea Level Pressure computed from Dropsonde or Extrapolated from flight level. If extrapolated, clarify in remarks.				
I	25 CI 483 M		Maximum Flight Level Temp / Pressure Altitude Outside Eye				
J	27 CI 483 M		Maximum Flight Level Temp / Pressure Altitude Inside Eye				
K	24 CI 29 C		Dewpoint Temp / Sea Surface Temp Inside Eye				
L	Poorly defined		Eye Character (Closed wall, poorly defined, open SW, etc.)				
M	NA		Eye Shape / Orientation / Diameter Code eye shape as: C – circular; CO – concentric; E – elliptical. Transmit orientation of the major axis in tens of degrees from 01 to 18, i.e., 01 => 010 to 190; 17 => 170 to 350. Transmit diameter in nautical miles. Examples: C8 = Circular eye 8 nm in diameter; E07/15/5 = Elliptical eye oriented 070 to 250, length of major axis is 15 nm, length of minor axis is 5 nm; CO18-30 = Concentric eye walls with diameter of inner eye 18 nm and diameter of outer eye 30 nm.				
N	13 11		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 – 925 mb; 8 – 850 mb; 7 – 700 mb; 5 – 500 mb; 4 – 400 mb; 3 – 300 mb; 2 – 200 mb; NA - Other				
O	11 / NM		Navigation Fix Accuracy / Meteorological Accuracy				
P	REMARKS: MAX FL WIND 44 KT NE QUAD 1433Z SLP EXTRAPOLATED FROM 1500 FEET						

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 fixes.

$$\begin{array}{r} 393 \\ 90 \\ \hline 300 \end{array}$$

33



$$\begin{array}{r} 33 \\ 90 \\ \hline 123 \end{array}$$

100

1308

91

92

Fit 1

2530

1325

7

1308

1335

122

1400

1300

1215

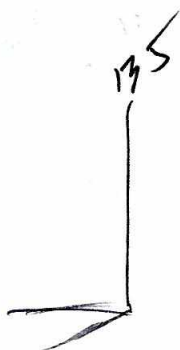
12531

125

2-1227

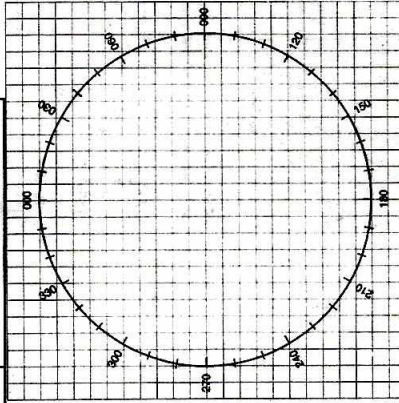
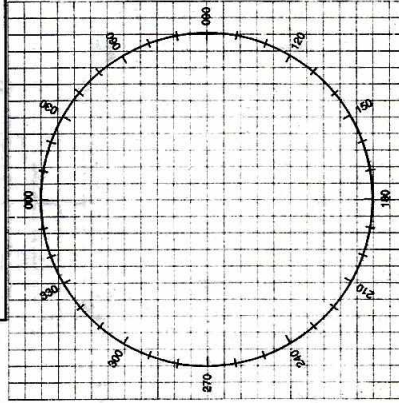
1420

$$\begin{array}{r} 225 \\ 5 \overline{) 1125} \\ \underline{100} \\ 125 \\ \underline{125} \\ 0 \end{array}$$



$$\begin{array}{r} 135 \\ - 90 \\ \hline 45 \end{array}$$

FREQ	ALT	HDG	OTHER	1035
			132.65	
			135.77	LOW C MNOU
			130.7	N4 AVINC
				133
				h02504
			h0255	253 982 4208
				5560
			400 281 230	5552
			MIA	305 716 178



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	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 _____

- HEADING _____ TRUE/MAG _____
AT _____ KTS TRUE/INDICATED _____

- AI _____ KIS INDICATED _____
- FLIGHT LEVEL OR ALTITUDE _____

- WE ARE A P-3 AIRCRAFT WITH 10 SOULS ON BOARD

- NATURE OF EMERGENCY

- ASSISTANCE DESIR

- PILOT INTENTIONS
- WE HAVE

[illegible]