NOAA P-3 N43RF
CBLAST 2004
FLIGHT #12

Flight ID: I040915

Sensor or system	Number or Name
INE	1
Accelerometer	1
Temperature Probe	1
Dew Point Probe	2
Altimeter (for vertical wind)	RA-159
Static Pressure	Rosemount (fuselage)
Dynamic Pressure	Rosemount (fuselage)
Time Source	Micro 99
Constants File	CO3043.con

Local Met. Data: Not copied at takeoff

Take off: 2257Z
Land: 0707Z

The RA-232 was substituted for the RA-159 during take off and landing due to spiking (T.O. 225411-230134; Land 070532-070900).

The RA-159 had spikes that were removed and patched (042500-042505; 042803-042806).

The Johnson-Williams liquid water sensor was operative for the entire flight.

The differential attack pressure (APF) had spikes that were removed and patched (232817-233006). The differential slip pressure (BPF) had spikes that were removed and patched (2331-39-233356). The dynamic attack pressure (DAP) had spikes that were removed and patched (232820-233026). The dynamic slip pressure (DBP) had spikes that were removed and patched (233231-233351).

There were times during heavy precipitation events (e.g. eye wall penetrations) when the dew point exceeded ambient temperature yielding a RH of 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.

The aircraft INE positions were re-navigated with respect to GPS.

SPECIAL NOTE: Locations 80, 81, and 82 of record 5 in the standard data contain vertical ground speed, vertical air speed, and vertical wind speed computed using Dr. Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

	Take off	**Land**
Aircraft Static Pressure	1011.1 mb	1011.3 mb
Corrected Tower Pressure	1011.9 mb	1012.9 mb

Flight Director: Tom Shepherd
813-828-3310 x3053

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

Flt ID: 040915I	From: KMCF	To:
Flt. No: 04-066	Blk In: 0716 z	Time On: 0707z
ETD: 2300Z	Blk Out: 2243z	Time Off: 2257z
ETE: 9+00	Blk Time: 8+33 8.5 Hrs	Flt Time: 8+10 8.2 Hrs
Sponsoring Org: NOAA/NHC	Program: Hurr. 2004	Purpose: H. IVAN

AOC Flight Crew

Aircraft Commander: TEBEEST, R	Data System: LYNCH, T
Co-Pilot: STRONG, T / NELSON, M	AVAPS: SMITH, J
Navigator: SIEGEL, P / BRAKOB	System Eng:
Flight Eng: FLOYD, D / KLIPPEL, J	A A: TOPEY, B
Flight Director: SHEPHERD, T / +4	A A:
Avionics: SANS SOUCI, D	Crew Chief:

Participating Scientists / Visitors

Name (Last, First)	Activity on Aircraft	Affiliation
GAMACHE, J	PI	NOAA/HRD
Dodge, P	1	1
BLACK, M		1
WALSH, E P	SRA	
Stafford, F. Col.	OBS	
ROBERTS, NED	MEDIA	TAMPA CH 10 - CBC
HARRIGAN, Robert	1	SARASOTA - ABC

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

Storm Name: IVAN

Mission ID: NOAA3 4209A IVAN

Recco Times	Fix #	Fix Time
0032	1	0014
0102	2	0130
0155	3	0238
0305	4	0407
0500	5	0538
0628		

0527

(See reverse for additional remarks)

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

Flight ID: 040915I	Time Off: 2257	Time On: 0707

	A/C - Takeoff	Wx Station - Takeoff	A/C - Land	Wx Station - Land
Pressure	1011.1	29.88	1011.3	29.91

	Number	Data Disposition / Date / Quality
Flight Level Tapes	2	
Radar Tapes	3	
Cloud Physics Tapes / CDs		
Video Tapes	4	
Dropsondes	31	Good: Bad:
AXBT	Ø	
AXCP	1	
AXCTD	1	

Remarks:

Total Sondes 8/30/04 → 9/15/04 275 ~15% bad

N43RF Hurricane / CBLAST '04 Flight Performance Log

29.0
88.2

Mission IVAN - SFMR + Fix Flt ID 040915I

SED Crew Lynch, Sans Souci, Smith

Pre-Flight 21:00 Take-Off 22:56 Landing 07:06

	System			Pre-Flight	In-Flight			Post-Flight			
								LAT	LON	GS	RE
NAV	GPS	FM : 1		DB							
	INE #1	Time On: 2110	Aligned to : Ø	DB				-9.1	43.4	4	5
	INE #2	Time On: 2110	Aligned to : Ø	DB				-9.7	45.9	2	11
	Diff GPS										
RADAR	MARS Data	Start	Stop	Ready?	HRD?			# DATs ? 5 Given To: Dodge			
	MARS	23:08	00:37		Y / N						
	MARS Data / Tape Status	0:28	01:47		LFRec	TARec	EOF's				
	MARS LU8	Clean	01:47 / 000105								
	MARS LU9	Clean									
	RADAR R/T SN	Tail 202 / 102	LF 102		Mod Switches	ON		Mod Switches OFF			
	Nose			DB				Power OFF			
PMS	FSSP Ref VDC:	Covers	OFF	NI				Covers ON			
	Cloud Mono	Covers	OFF					Covers ON			
	CIP	Covers	OFF					Covers ON			
	SEA Data DAT	Start	Stop:	Ready?	#DATS	Errors	Disk Write	Given To: —			
	DAT Clean?						Y / N				
		Cal High	Cal Low					Cal High	Cal Low		
TEMP	Temp #1	30.5	-30.4	TL				30.6	-30.2		
	Temp #2			TL				Power OFF			
	Temp #3			NI				Power OFF			
	Dewpoint #1 #2 #3 (TDL)			TL				Power OFF			
PRES	Attack / Slip Angle AP DAP BP DBP			TL				Power OFF			
	Differential PQ1 PQ2 PQ3 PQ4			TL				Power OFF			
	Absolute PS1 PS2 CBPS			TL				Power OFF			
FLTLVL	Apn-159 SN: 66-024							Power OFF			
	Apn-232 SN: 1761			TL				Power OFF			
	Liquid Water J&W King			JS	28V WOW : ON ?			Power OFF			
	Radiometer CO2 SST			JS	28V WOW: ON ?			Power OFF			
RAMS	RAMS Data	Start	Stop	Ready?	Errors 8:	Errors 9:		# DATs ? 2 Given To: Shop			
	CPU: A B	22:41	7:17	TL				Power OFF			
	RAMS Data / Tape Status				Slow Rec	Fast Rec		Disk Records: 3102			
	RAMS LU8	Clean		TL							
	RAMS LU9	Clean		TL							
	Flight Director Laptop			JS				Power OFF			
	Network			NI							
	ASDL Mission #: 42094	Name: IVAN			Freq: 30	Block: 10		Power OFF			
	C.I. Printer	Start	Stop	Ready?	Paper Bin Stores			Given To: Shop			
	PRATE: 10	22:39	07:17	TL	0% 25% 50% 75% 100%			Power OFF			
MISC	Exterior Walk Around	Plugs	Covers	JS				Plugs Covers			
	SATCOM W/S Inmarsat		Global Star	JS				Power OFF			
	AXBT Internal	# Loaded :		NA				# Launched : —			
	AXBT External	# Loaded :		NA	28V WOW			# Launched : —			
	AVAPS	# On Board : 55		JS				# Dropped : 31			
	Video Cameras	Start	Stop	Ready?	Cameras	Mode		# Tapes ? Given To:			
	VHS SVHS	22:40	07:18	TL	(1) 2 3 4	2 / 12		Lens Cap ? : ✓			
	FCU	B — C — D		TL				UPS OFF			
USER	SFMR HRD AOC			TL							
	HRD Work Station							Accelerometers			
	NASA SRA							#1 (2 G) : 8205			
	ARL BAT Probe, SST & IRGA			NA				#2 (2.5 G) : 6687			
	UW PDA			NA				#3 (3 G) : 5967			
	Scripps MASS, Laser Alt, IR Cam & Sono			NA				#4 (3.5 G) : 2892			
	RSMAS Licor			TL							

Please Note any Discrepencies

Item #	Zulu Time	Problem Description	Initials	Status
1		Restored L4 19 from CPU 4	TL	
2		All pressure lines need to be purged	TL	
3	23:40	Switch from [redacted] to SPMR	TL	

DATE	SCHEDULED RX TIME	AIRCRAFT NUMBER	FLIGHT DIRECTOR
9/15/04	06Z	N43	SHEPHERD

WX MISSION IDENTIFIER	OB NUMBER
NOAA3 A209A IVAN	38

VORTEX DATA MESSAGE

A	16 / 0538 Z	DATE and TIME of FIX
B	29 DEG 56 MIN (N) S	LATITUDE of FIX
	87 DEG 53 MIN (W) E	LONGITUDE of FIX
C	700 MB 2604 M	MINIMUM HEIGHT of STANDARD LEVEL
D	NA KT	ESTIMATE of MAXIMUM SURFACE WIND OBSERVED
E	NA DEG NM	BEARING and RANGE FROM CENTER of MAXIMUM SURFACE WIND
F	220 DEG 115 KT	MAXIMUM FLIGHT LEVEL WIND NEAR CENTER
G	134 DEG 44 NM	BEARING and RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND
H	939E 943 MB	MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.
I	19 C / 3060 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE OUTSIDE EYE
J	19 C / 3058 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE INSIDE EYE
K	14 C / NA C	DEWPOINT TEMP / SEA SURFACE TEMP INSIDE EYE
L	OPEN S	EYE CHARACTER: Closed wall, poorly defined, open SW, etc.
M	C40	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	/ / NM	NAVIGATION FIX ACCURACY / METEOROLOGICAL ACCURACY
P	REMARKS	

MAX FL WIND 112 KT SE QUAD 0527 Z

SLP From 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.

DATE	SCHEDULED RX TIME	AIRCRAFT NUMBER	FLIGHT DIRECTOR
9/15/04	~~—~~	N43	SHEPHERD

WX MISSION IDENTIFIER	OB NUMBER
NOAA3 4209A IVAN	29

VORTEX DATA MESSAGE

A	16 / 0407 Z	DATE and TIME of FIX
B	29 DEG 34 MIN N S	LATITUDE of FIX
	87 DEG 58 MIN W E	LONGITUDE of FIX
C	700 MB 2583 M	MINIMUM HEIGHT of STANDARD LEVEL
D	NA KT	ESTIMATE of MAXIMUM SURFACE WIND OBSERVED
E	NA DEG NM	BEARING and RANGE FROM CENTER of MAXIMUM SURFACE WIND
F	157 DEG 116 KT	MAXIMUM FLIGHT LEVEL WIND NEAR CENTER
G	65 DEG 43 NM	BEARING and RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND
H	936E 939 MB	MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.
I	19 C / 3057 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE OUTSIDE EYE
J	20 C / 3061 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE INSIDE EYE
K	14 C / NAC	DEWPOINT TEMP / SEA SURFACE TEMP INSIDE EYE
L	Poorly defined	EYE CHARACTER: Closed wall, poorly defined, open SW, etc.
M	C50	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	/ / NM	NAVIGATION FIX ACCURACY / METEOROLOGICAL ACCURACY
P	REMARKS MAX FL WIND 122 KT SE QUAD 0010 Z SLP FROM 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.

#3

DATE	SCHEDULED RX TIME	AIRCRAFT NUMBER	FLIGHT DIRECTOR
9/15/04	03	N43	SHEPHERD

WX MISSION IDENTIFIER	OB NUMBER
NOAA3 4209A	21

VORTEX DATA MESSAGE

A	16 / 0238 Z	DATE and TIME of FIX
B	29 DEG 15 MIN (N) S	LATITUDE of FIX
	88 DEG 05 MIN W E	LONGITUDE of FIX
C	706 MB 2548 M	MINIMUM HEIGHT of STANDARD LEVEL
D	NA KT	ESTIMATE of MAXIMUM SURFACE WIND OBSERVED
E	NA DEG NM	BEARING and RANGE FROM CENTER of MAXIMUM SURFACE WIND
F	88 DEG 99 KT	MAXIMUM FLIGHT LEVEL WIND NEAR CENTER
G	003 DEG 20 NM	BEARING and RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND
H	933E 936 MB	MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.
I	14 C / 3065 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE OUTSIDE EYE
J	21 C / 3066 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE INSIDE EYE
K	13 C / NA C	DEWPOINT TEMP / SEA SURFACE TEMP INSIDE EYE
L	OPEN SW	EYE CHARACTER: Closed wall, poorly defined, open SW, etc.
M	C 40	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 122 KT SE QUAD 0010 Z

SLP FROM DROPSONDE

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

#2

DATE	SCHEDULED RX TIME	AIRCRAFT NUMBER	FLIGHT DIRECTOR
9/15/04	—	N43	SHEPHERD

WX MISSION IDENTIFIER	OB NUMBER
NOAA3 4209A IVAN	11

VORTEX DATA MESSAGE

A	161030 Z	DATE and TIME of FIX
B	29 DEG 03 MIN (N) S	LATITUDE of FIX
	88 DEG 06 MIN (W) E	LONGITUDE of FIX
C	700 MB 2525 M	MINIMUM HEIGHT of STANDARD LEVEL
D	NA KT	ESTIMATE of MAXIMUM SURFACE WIND OBSERVED
E	NA DEG NM	BEARING and RANGE FROM CENTER of MAXIMUM SURFACE WIND
F	294 DEG 100 KT	MAXIMUM FLIGHT LEVEL WIND NEAR CENTER
G	202 DEG 13 NM	BEARING and RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND
H	~~934~~ 933 MB	MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.
I	22 C / 2997 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE OUTSIDE EYE
J	22 C / 3014 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE INSIDE EYE
K	13 C / NA C	DEWPOINT TEMP / SEA SURFACE TEMP INSIDE EYE
L	OPEN SW	EYE CHARACTER: Closed wall, poorly defined, open SW, etc.
M	C40	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	/ / / NM	NAVIGATION FIX ACCURACY / METEOROLOGICAL ACCURACY
P	REMARKS MAX FL WIND 122 KT SE QUAD 0010 Z	

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.

#1

DATE	SCHEDULED RX TIME	AIRCRAFT NUMBER	FLIGHT DIRECTOR
9/15/04	00Z	N43	SHEPHERD

WX MISSION IDENTIFIER: NOAA3 4209A IVAN

OB NUMBER: 5

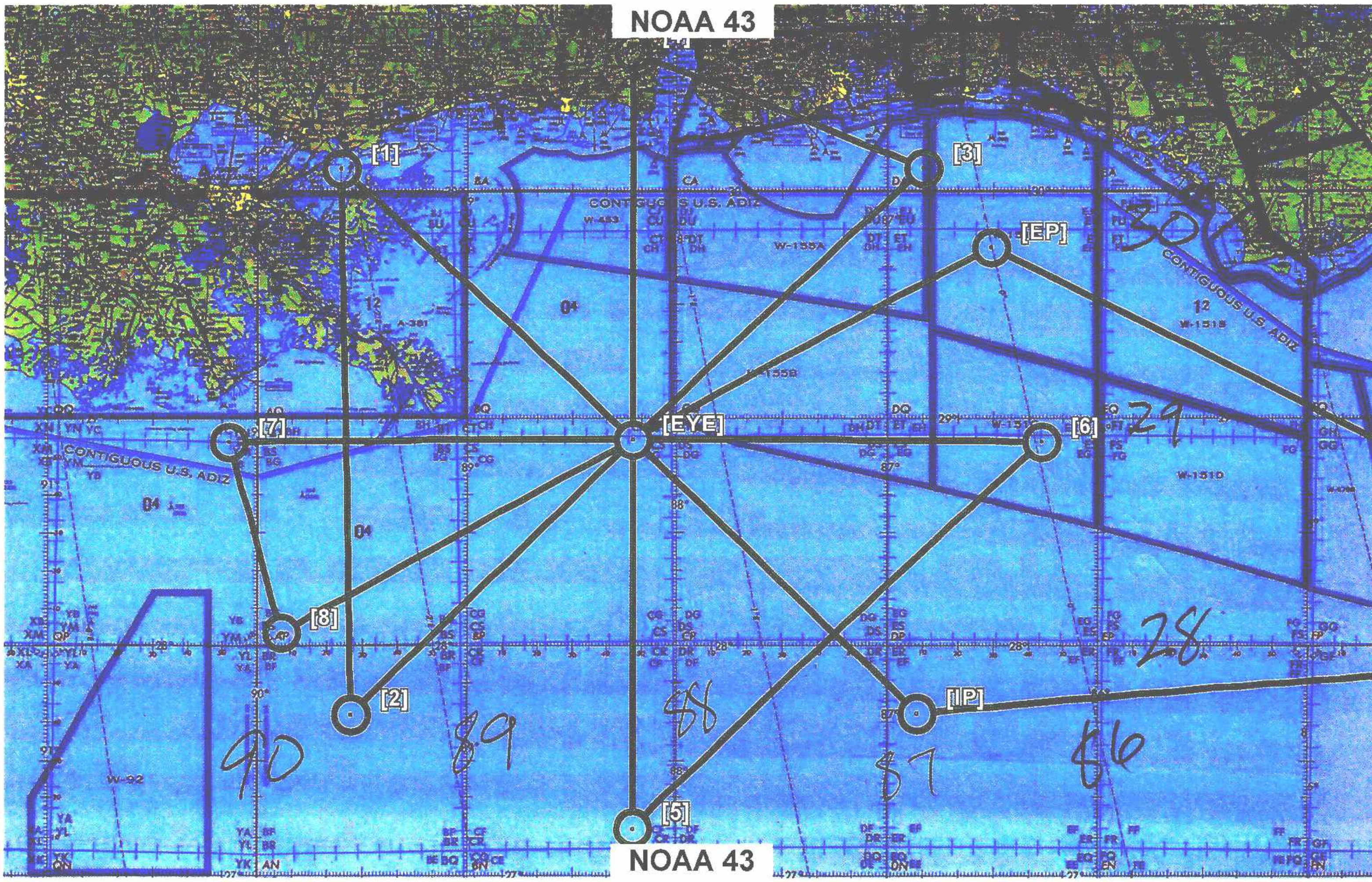
VORTEX DATA MESSAGE

A	16/0014 Z	DATE and TIME of FIX
B	28 DEG 53 MIN (N) S	LATITUDE of FIX
	88 DEG 11 MIN (W) E	LONGITUDE of FIX
C	700 MB 2520 M	MINIMUM HEIGHT of STANDARD LEVEL
D	NA KT	ESTIMATE of MAXIMUM SURFACE WIND OBSERVED
E	NA DEG NM	BEARING and RANGE FROM CENTER of MAXIMUM SURFACE WIND
F	192 DEG 122 KT	MAXIMUM FLIGHT LEVEL WIND NEAR CENTER
G	110 DEG 21 NM	BEARING and RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND
H	931 MB	MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.
I	20 C / 3051 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE OUTSIDE EYE
J	22 C / 3052 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE INSIDE EYE
K	13 C / NA C	DEWPOINT TEMP / SEA SURFACE TEMP INSIDE EYE
L	OPEN NW-SE	EYE CHARACTER: Closed wall, poorly defined, open SW, etc.
M	C 40	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 122 KT SE QUAD 0010Z

SLP FROM 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.



NOAA 43
[1]
[3]
[EP]
[EYE]
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[IP]
[5]
CONTIGUOUS U.S. ADIZ
90
89
88
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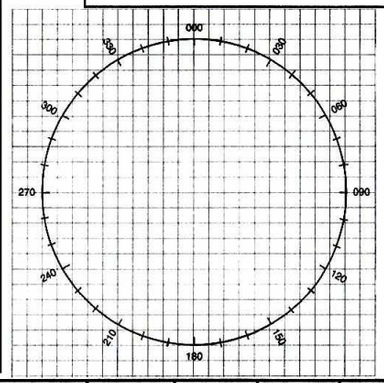
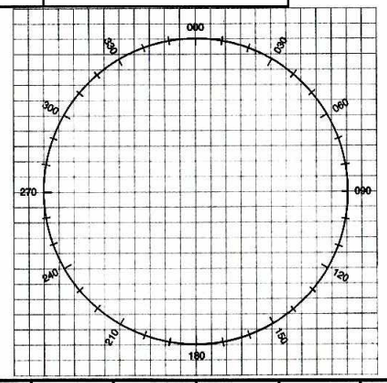
86
30
29
28
NOAA 43

205/280 20002 28 15 88 16 2255 28 40 88 10 19 50B

CLEARANCES			
FREQ	ALT	HDG	OTHER
			CAF L190 ↗1600
			14 +10 119.65 ~~6063~~

MISSION LOG PAGE ___ OF ___





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 _____, NOAA 43

- 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 19 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
2237	START																				
2243	TAXI																				
2243	BLOCK																				
2257	T/O																				
2259	X V	27 43.2 82 31.0	27 43.2 82 31.1	0 -.1	27 43.1 82 31.2	+.1 -.2	271	4W	267	8R	275	247	177	35	↗120	275	RUDDF	63	+19	2318	085/9
2345	△	27 54.3 86 14.4	27 55.0 86 14.8	-.7 -.4	27 55.1 86 15.0	-.8 -.6	300	2W	302	12R	314	320	189	73	100	294	EYE				
0045	△	28 58.5 89 28.0	28 59.6 89 27.5	-1.1 +.5	29 00.4 89 27.9	-1.9 +.1	187	1E	189	4L	185	315	347	65	100	252	(2)				
0145	△	29 48.5 87 19.9	29 49.4 87 19.7	-.9 +.2	29 51.6 87 20.0	-3.1 -.1	070	1W	069	2L	045	256	143	110	100	243	(3)				
0230	△	29 43.4 88 05.0	29 45.8 88 04.4	-2.4 +.6	29 48.8 88 03.9	-5.4 -1.1	155	1W	154	16R	170	228	094	77	100	252	EYE				
0330	△	29-07.4 86-27.5	29-09.9 86-26.0	+2.5 +1.5	29-13.5 86-25.5	-6.1 +2.0	020	2W	018	8L	010	348	185	100	100	245					
0430	△	28-53.9 89-12.6	28-56.6 89-11.9	-2.7 +.7	29-01.4 89-11.3	-7.5 +1.3	256	0	256	15L	241	224	320	60	100	246					
0520	△	28 58.0 86 52.6	29 02.1 86 50.9	-4.1 +1.7	29 07.2 86 48.7	-9.2 +3.9	302	1W	301	19R	320	275	208	89	100	243	EYE				
0620	△	28 43.2 85 57.5	28 46.9 85 54.2	-3.7 +3.3	28 52.3 85 52.3	-9.1 +5.2	121	2W	122	15L	107	291	208	75	120	267	KMCF				
0707	LAND	KMCF																			
		27 51.3 82 31.0	27 55.4 82 28.6	-4.1 +3.4	28 01.0 82 25.1	-9.7 +5.9															

315 → exit w

0255

NOAA FORM 56-49
(2-95)

MISSION PREFLIGHT LOG

DESTINATION	MISSION	NAVIGATOR	AIRCRAFT COMMANDER	FLIGHT DIRECTOR	SCHEDULED / ACTUAL TAKEOFF Z	DATE OF TAKEOFF
KMCF	IVAN #6	BRAICOB / SIEGEL	TEBEEST	SHEPHERD	2300 / 2257	15SEP04

	WP	LAT / LON	RTE	MH	VAR +E==>	TH	DR +R==>	TRK	GS	WD	WS	ALT	TAS	LEG / TOT DIST	LEG / TOT TIME	PROP ETA	ETA	ATA	REMARKS
KMCF	1	N 27 51.7 W 82 30.8		275	2W	273	0	273	280	L	V								
RUDOF	2	27 55.2 83 43.1		268	1W	266	0	266	280										
IP	3	27 39.0 86 49.0		316	0	316	0	316	280										
EYE	8	29 45 88 05	8																
	1	29 51.6 89 18.3			30 07.4 89 36.7														
	2	27 38.5 89 34.9																	
	3	30 17.1 86 41.1																	
	4	30 06.9 88 06.7																	
	5	27 30.1 88 04.8	20																
	6	29 14.1 86 05.5	21																
	7																		
	8																		
EP																			
MILNE		27 39.5 82 40.7																	

INS PERFORMANCE	INS 1	INS 2
BEGIN ALIGN TIME	2117	2117
ALIGN STATUS (0-5)	0	0
END NAV TIME	0707	0707
START NAV TIME	2221	2221
DELTA T	8+46	8+46

TERMINAL ERRORS	INS 1	INS 2
DELTA LAT	-4.1	-9.7
DELTA LON	+3.1	+5.9
RGS	4	2
RADIAL ERROR	5	11

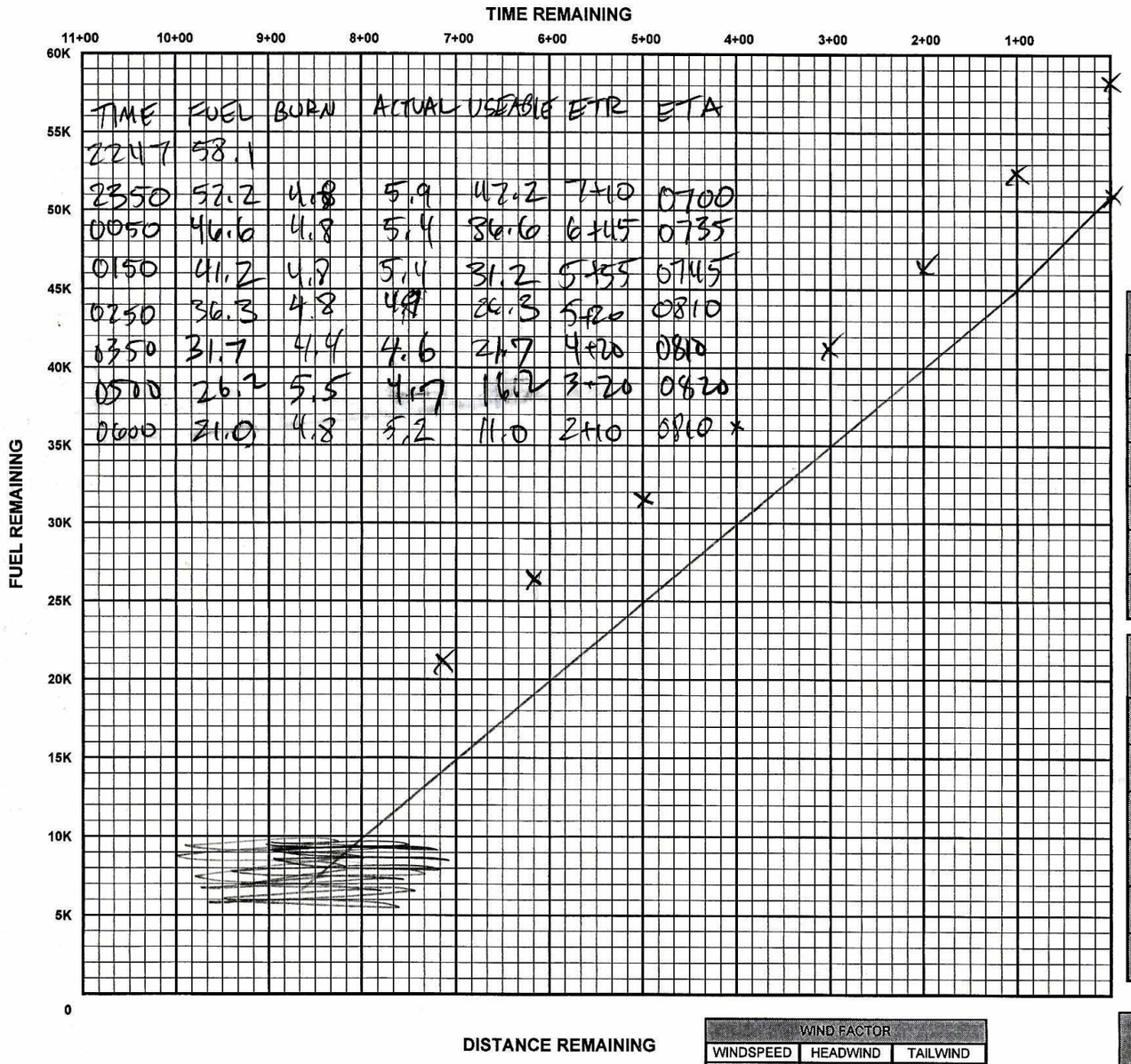
REMARKS
BCN 243.0
29 33.5
87 27.9

MISSION LOG | PAGE ___ OF ___

FIX TYPES
(G) - GPS (I) - INS (R) - RADIO (V) - VISUAL (C) - CELESTIAL (D) - DR

	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
EYE1	0014	G	28 53.4 88 11.0									018	11									
EYE2	0129	G	29 03.6 88 06.8									020	9									
EYE3	0238	G	29 15.0 88 05.0									008	12									
EYE4	0407	G	29-33.7 87-58.6									017	13									
EYE5	0538	G	29 55.1 87 53.3									012	14									

RANGE CONTROL GRAPH



ETP = .5(TOTAL DISTANCE x OUTBOUND WIND FACTOR)

ENROUTE FUEL	
ENROUTE TIME	8+00
ENROUTE FUEL (6K, 5K 4.5K RULE)	41.0
RESERVE AT DESTINATION	10.0
REQUIRED RAMP	51.0
ACTUAL RAMP FUEL	58.1

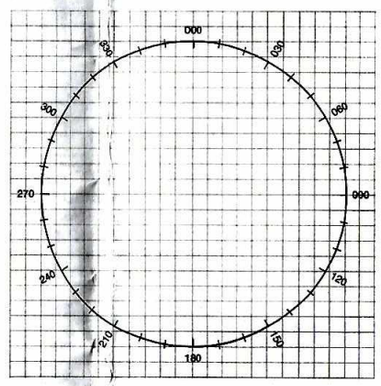
TACTICAL (OFFSTA TO DESTINATION)	4 ENG	3 ENG
DISTANCE (OFFSTA TO DEST)		
ENROUTE TIME (OFFSTA TO DEST)		
BURN RATE (LBS/HR)	4500	5500
ENROUTE FUEL REQUIRED		
RESERVE AT DESTINATION		
FUEL AT OFFSTA		

POINT OF SAFE RETURN	4 ENG	3 ENG
ETP DISTANCE (TO DEPARTURE)		
ENROUTE TIME (TO DEPARTURE)		
BURN RATE (LBS/HR)	4500	5500
FUEL REQUIRED		
RESERVE AT DEPARTURE		
PSR FUEL		

CEX - TRUE BEARING METHOD	INS1	INS2	WET
COMPASS TYPE			
MCH (READING)			
- MTH (SEXTANT)			
CE			
- VAR			
DEV			

CEX - ERB METHOD	INS1	INS2	WET
COMPASS TYPE			
MERB (DIAL 000)			
+ ZN			
= MTH			
MCH (READING)			
CE			
- VAR			
= DEV			

CEX SIGHT	
GMT	
GHA	
CORR	
GHA	
LONG +W -E	
EXACT LHA	
LAT	
BODY	
DEC	
HC / D	
CORR	
HC	
Z	
ZN	



WIND FACTOR		
WINDSPEED	HEADWIND	TAILWIND
10	1.03	.97
20	1.06	.94
30	1.10	.92
40	1.14	.89
50	1.18	.87
60	1.22	.85

"F" FACTOR	200	250	300	350
PRESS ALT				
10,000	1.0	1.0	.99	.99
20,000	.99	.98	.97	.97
30,000	.97	.96	.95	.94
40,000	.96	.94	.92	.90

TRUE AIRSPEED CROSS-CHECK							
TIME	IAS	PRESS ALT	"F" FACTOR	EAS	OAT	TAS	ITAS