

Fit ID: 040630I	From: Kmcf	To: Kmcf
Flt. No: 04-037	Blk In: 2001 z	Time On: 1951 z
ETD: 1400 z	Blk Out: 1450 z	Time Off: 1505 z
ETE: 4+30	Blk Time: 4+11 (5.2) Hrs	Fit Time: 4+46 (4.8) Hrs
Sponsoring Org: HRO	Program: CBLAST	Purpose: Cal flight

AOC Flight Crew

Aircraft Commander: Silah, M	Data System: Lynch, T
Co-Pilot: Choy, B	AVAPS: Tong, R
Navigator: Adler, Gallagher	System Eng:
Flight Eng: Klippel, Floyd	A A:
Flight Director: Mayeaux, Damiano	A A:
Avionics:	Crew Chief:

Participating Scientists / Visitors

Name (Last, First)	Activity on Aircraft	Affiliation
Landsea, C	PI	HRO
Black, R	PI	HRO
Ullrich Uhlhorn, E	Sci	HRO
Calderon, J	Sci/obs	HRO
Renta, E	Sci/obs	HRO
French, J	PI	CBLAST
Walsh, E	Sci/obs	HRO
Lasswell, J	Sci	Scipps
Litchendorf, T	Sci	USU UW

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

<u>Storm Name:</u> _____	<u>Recco Times</u>	<u>Fix #</u> <u>Fix Time</u>
<u>Mission ID:</u> _____		
<u>Penetration number and time</u>		

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

Flight ID: **040630I** Time Off: **1505** Z Time On: **1951** Z

	A/C - Takeoff	Wx Station - Takeoff	A/C - Land	Wx Station - Land
Pressure	1022.8 mb	3015 mb	1012.9 mb	3011 mb

ATIS	Time	Observation
Takeoff	1355Z	0800KT P6SM 24/24 A3015
Land	1855Z	05008KT P6SM 32/19 A3011

	Number	Data Disposition / Date / Quality
Flight Level Tapes		
Radar Tapes		
Cloud Physics Tapes / CDs		
Video Tapes		
Dropsondes	1	Good: <input checked="" type="checkbox"/> Bad:
Sonabuoys	2	
AXBT	6	
AXCP		
AXCTD		

Remarks:

1155Z 07005KT P6SM 25/23 A3012 PA172
 Inertial / problems at takeoff / preflight

1355Z 0800KT P6SM 24/24 A3015 PA199 P6SM 24/24
 Second Delay due to light bulbs in cockpit

Lower fuselage dead to day

1855Z 05008KT P6SM 32/19 A3011 PA162



NOAA P-3 N43RF CBLAST- CALIBRATION FLIGHT FLIGHT 2



Flight ID: 040630I

<u>Sensor or system</u>	<u>Number or Name</u>
INE	2
Accelerometer	2
Temperature Probe	1
Dew Point Probe	2 (Edgetech)
Altitude (for vertical wind)	Radar Altimeter 159
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage 1281
Time Source	Micro 99
Constants File	CO3042.CON

Notes:

There were no time/data gaps during this flight.

The King Liquid Water Sensor was inoperative during the entire flight.

RA-232 was substituted for RA-159 from 150301Z-150530Z and from 195108Z-195400Z.

Otherwise, from 172840Z-173031Z all dewpoint temperature values could be considered speculative due to spikes during a roll maneuver. However, no corrective action was performed on the data.

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.

	Takeoff	Landing
Aircraft Static Pressure	1022.8 mb	1017.9 mb
Corrected Tower Pressure	1021.0 mb	1019.6 mb

Flight Director: Marty Mayeaux (813) 828-3310 ext. 3086

Aircraft Operations Center
P.O. Box 6829
MacDill AFB, FL 33608-0829

AOC1:ABD

MEMORANDUM FOR: N42RF Flight Crew

FROM: A. Barry Damiano

SUBJECT: N42RF Wind Calibration Flight

A wind calibration flight for N42RF has been tentatively scheduled for xxxxx with a fall back to xxx. As always this is a **weather dependent** flight (clear undisturbed air is required) and is subject to change so be alert. The P3 hurricane hotline extension 3128 will be utilized to provide updates for this flight.

NOAA42 will block out at xxx local time and fly at various altitudes over open water in clear air.

NOTE!!! Each racetrack leg will be three (3) minutes in duration. This allows for adjustments to airspeed as the leg is flown. Also once a leg is started **DO NOT** change aircraft track or heading until the leg is completed. If the wind speed is greater than 13 knots and wind direction changes by more than 10 degrees over the course of the leg, that leg is no good and must be repeated. There **will be** 90/270 turns for at least one complete indicated airspeed leg (into and out of the wind) per altitude.

The aircraft will perform the following maneuvers in VFR conditions:

1500 feet **Radar Altitude** - racetracks **TRACKING TRUE** into and out of the wind. Racetracks will be at 180, 210 and 240 knots IAS. Perform a yaw maneuver. Five cycles will be enough at ± 55 mb of side differential pressure (**BP1**)... (approx. ± 5 degrees of sideslip). For the **yaw maneuver indicated airspeed should be about 215 knots.**

5000 feet **Radar Altitude** - racetracks **TRACKING TRUE** into and out of the wind at 180, 210 and 240 knots IAS. After the legs are completed fly three (3) left turn circles then three (3) right turn circles with approximately 30 degrees of roll angle.

10000 feet **Radar Altitude** - racetracks **TRACKING TRUE** into and out of the wind at 180, 210 and 240 knots IAS.

15000 feet PA - racetracks **TRACKING TRUE** into and out of the wind at 180, 210 and 240 knots IAS. Perform a yaw maneuver. Five cycles will be enough. For the **yaw maneuver indicated airspeed should be about 215 knots.**

20000 feet PA - racetracks **TRACKING TRUE** into and out of the wind at 180, 210 and 240 knots IAS. Perform pitch maneuver, ± 5 degrees of pitch. Five cycles will be enough.

After all calibration maneuvers have been completed the aircraft will ferry back to MacDill AFB. If any problems occur during the flight, they will be dealt with accordingly.

Total flight time will be about 7.0 hours.

Mission CBLAST TEST #2 Flt ID 0406300

SED Crew LYNCH, SMITH, TONG ~~FRANSONE~~

Pre-Flight 12:00 Take-Off 15:05 Landing 19:51

System		Pre-Flight		In-Flight			Post-Flight			
NAV	GPS	FM: 1		TL			LAT	LONG	GS	RE
	INE #1	Time On: 11:54	Aligned to: 0	OK			-1.0	40.9	2	1
	INE #2	Time On: 11:54	Aligned to: 0	OK			-1.3	41.9	0	2
	Diff GPS			TL						
RADAR	MARS Data	Start	Stop	Ready?	HRD?		# DATs ? 1 Given To: B. B. Kuck			
	MARS	15:41	19:10	TL	Y (N)					
	MARS Data / Tape Status				LFRec	TARec	EOP's			
	MARS LU8	Clear		TL	0	9471	16			
	MARS LU9	Clear		TL						
	RADAR R/T SN	Tail 202/102 LF 102		TL	Mod Switches ON (A)		Mod Switches OFF			
	Nose			OK			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	=		
TEMP		Cal High	Cal Low				Cal High	Cal Low		
	Temp #1	-30.4	+30.5	TL			30.6	-30.2		
	Temp #2			TL			Power	OFF		
	Temp #3			NI			Power	OFF		
	Dewpoint	#1 #2 #3 (TDL)		TL			Power	OFF		
PRESES	Attack / Slip Angle	AP	AB	BP	DB		Power	OFF		
	Differential	PC	PD	PE	PF		Power	OFF		
	Absolute	PS	PT	PU	PV		Power	OFF		
FLTLVL	Apn-159 SN:	SN-1		TL			Power	OFF		
	Apn-232 SN:	1699		TL			Power	OFF		
	Liquid Water	J&W	kg		28V WOW: ON?		Power	OFF		
	Radiometer	CO2	OST	TL	28V WOW: ON?		Power	OFF		
RAMS	RAMS Data	Start	Stop	Ready?	Errors 8	Errors 9	# DATs ? 2 Given To: MM			
	CPU: (A) B	14:48	20:01	TL	0	0	Power	OFF		
	RAMS Data / Tape Status				Slow Rec	Fast Rec	Disk Records: 1878			
	RAMS LU8	Clear		TL						
	RAMS LU9	Clear		TL						
	Flight Director Laptop			TL			Power	OFF		
	Network			NI						
	ASDL Mission #:	6204 Name: TRAIN		TL	Freq: 30	Block: 10	Power	OFF		
	C.I. Printer	Start	Stop	Ready?	Paper Bin Stores			Given To: MM		
	PRATE: 10	14:47	20:01		0%	25%	50%	75%	100%	Power OFF
MISC	Exterior Walk Around	Plugs	Covers	RT			Plugs	Covers		
	SATCOM	W/S Inmarsat	GlobalStar	(3)			Power	OFF		
	AXBT Internal	# Loaded:	0				# Launched:	0		
	AXBT External	# Loaded:	8	✓		28V WOW	# Launched:	8		
	AVAPS	# On Board:	3				# Dropped:	1		
	Video Cameras	Start	Stop	Ready?	Cameras	Mode	# Tapes ? 0 Given To: -			
	VHS SVHS				N L R D	2 / 12	Lens Cap ? :			
	FCU	-B-C-D-		TL			UPS	OFF		
USER	SFMR	ARO	AOC	TL			Accelerometers			
	NASA SRA			OK			#1 (2 G):	8202		
	ARL BAT Probe, SST & IRGA						#2 (2.5 G):	6681		
	UW PDA						#3 (3 G):	5967		
	Scripps MASS, Laser Alt, IR Cam & Sono						#4 (3.5 G):	2892		
	RSMAS Licor			TL						

D 75 58.208 W 085-53.9

25-54.985 W 085 53.407

26 06.584
080 12.569

CLEARANCES

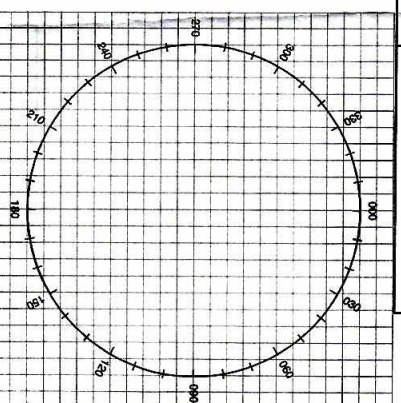
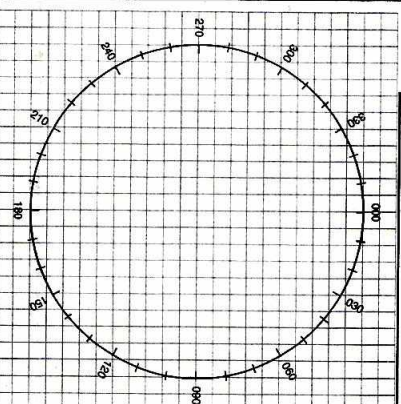
MISSION LOG

PAGE ___ OF ___

POSITION REPORT

EMERGENCY MESSAGE

FREQ	ALT	HDG	OTHER
119.9	1600	2080	07000 0.110
125.5			4640



1. POSITION
2. TIME
3. ALTITUDE
4. NEXT POSITION
5. ETA
6. NEXT POSITION

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 M/F/VOICE HF/CW M/F/CW
243.0 121.5 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	
1449	GPS																					
1451	GPS																					
1505	T/OP																					
1518	X																					
1615	A	N 25-55.2 W 084-27.3	N 25-55.2 W 084-27.3	-0.5	N 25-55.3 W 084-27.2	-0.1	272	2W	270	-	270	232	100	6	6500	273	500	71	+18	1633		
1715	A	N 26-09.9 W 086-05.4	N 26-09.9 W 086-05.4	-0.3	N 26-09.9 W 086-05.4	+0.1	142	2W	140	2W	142	195	14	14	7000	207	500	13	+04	1719		
1815	A	N 25-49.3 W 085-47.5	N 25-49.8 W 085-47.5	-0.5	N 25-49.8 W 085-46.6	-0.9	093	2W	091	1L	090	135	20	20	3000	213	500	201	+02	1817		
1924	A	N 27-18.3 W 083-45.1	N 27-18.3 W 083-45.1	-0.4	N 27-18.9 W 083-44.2	+0.8	046	3W	043	1L	042	278	110	15	9000	279	500	64	+14	1938		
1952	Land	N 27-51.0 W 082-29.6	N 27-52.0 W 082-28.7	-1.0	N 27-51.8 W 082-27.7	+1.9																

2400
1200
0800
0600
0500
0400
0300
0200
0100

26 14.255 W 086-10.91

25 54.3 085-54.123

N 26 07.721
W 086-13.625

26 06.584
080 12.569

