



NOAA P-3 N42RF
NEAQS 2004 Flight #18
KPSM - KMCF



Flight ID: H040815

Sensor or system

Number or Name

Inertial + Accelerometer Data

1

Temperature Probe

1

Dew Point Probe

1

Altitude (for vertical wind)

Pressure Altitude

Radar Altitude

RA-159

Static and Dynamic Pressure

Rosemount Fuselage

Time Source

Micro 99

Constants File

CO2042.CON

Notes:

There were time/data gaps from 145711-20Z, and 180421-30Z. Be aware of data spikes as a result of these data gaps.

RA-232 was substituted for RA-159 during the following times: 143201-143511Z (take off), and 211410-213000Z (landing) due to spiking.

Dew pointer 2 (TDM 2) was substituted for dew pointer 1 (TDM 1) from 210351 until 213000Z (landing) due to spiking in TDM 1

There may have been instances (i.e. 1436-1450Z and 1824-1832Z) when the dew point temperature exceeded the ambient temperature resulting in a RH% above 100%. These times were during heavy precipitation events and were likely due to a wet-bulb effect on the total temperature sensor, and/or an artificial warming of the dew point sensor as it tried to burn off excess moisture. These periods are typically reflected in the J/W liquid water data. No corrections were made during these events unless noted above.

All other instruments worked optimally during the flight.

Due to AOC equipment/printer failure, the last step of our Quality Control process (visual QC) was not able to be performed. While other measures were taken to ensure there were no problems with the data, questions concerning questionable data should be brought to the attention of the Flight Director ASAP.

The aircraft INE positions were re-navigated 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:
Phone #:

Contact Paul Flaherty
(813) 828-3310 ext. 3094

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

Flt ID: 040815H	From: KPSM	To: KMCF
Flt. No: 04-039	Blk In: 2138 z	Time On: 2128 z
ETD: 1415 z	Blk Out: 1421 z	Time Off: 1434 z
ETE: 7.00	Blk Time: 7.17 (7.3 Hrs)	Flt Time: 6.54 (6.9 Hrs)
Sponsoring Org: NOAA / A.L.	Program: NEAQS	Purpose: For 18 / FERRY

AOC Flight Crew

Aircraft Commander: Kennedy, P	Data System: McMillen, S
Co-Pilot: Choy, B	AVAPS:
Navigator: Brakob, D / Gallagher, T	System Eng: Peek, B
Flight Eng: BAST, G	A A:
Flight Director: Flaherty, P	A A:
Avionics: XXXXXXXXXX	Crew Chief:

Participating Scientists / Visitors

Name (Last, First)	Activity on Aircraft	Affiliation
RYERSON, T	Principal Investigator	NOAA AL
NOWAK, J	SCI	"
PECTER, R	"	"
ZAHNSISSE, M	"	"
HOLLOWAY, J	"	"

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

Mission ID: T.O. INTS CHARLEY ^{ATL}
 DUPT 2 - FUEL BRUNING ^{ATL} 1816
 DUPT 1 - END OF PET-OUT (BRUNING) 2116

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

Flight ID: 040815H Time Off: 1434 Z Time On: 2928 Z

A/C - Takeoff Wx Station - Takeoff A/C - Land Wx Station - Land

Pressure 1021.8 mb 1025.0 mb 1018.2 mb 1018.5 mb

ATIS Time Observation

Takeoff 1355 Z 060 06 kt A 3028

Land 1455 Z 31008 kt 7SM 29/23 A 2008

Number Data Disposition / Date / Quality

Flight Level Tapes

Radar Tapes

Cloud Physics Tapes / CDs

Video Tapes

Dropsondes Good: Bad:

AXBT

AXCP

AXCTD

Remarks:

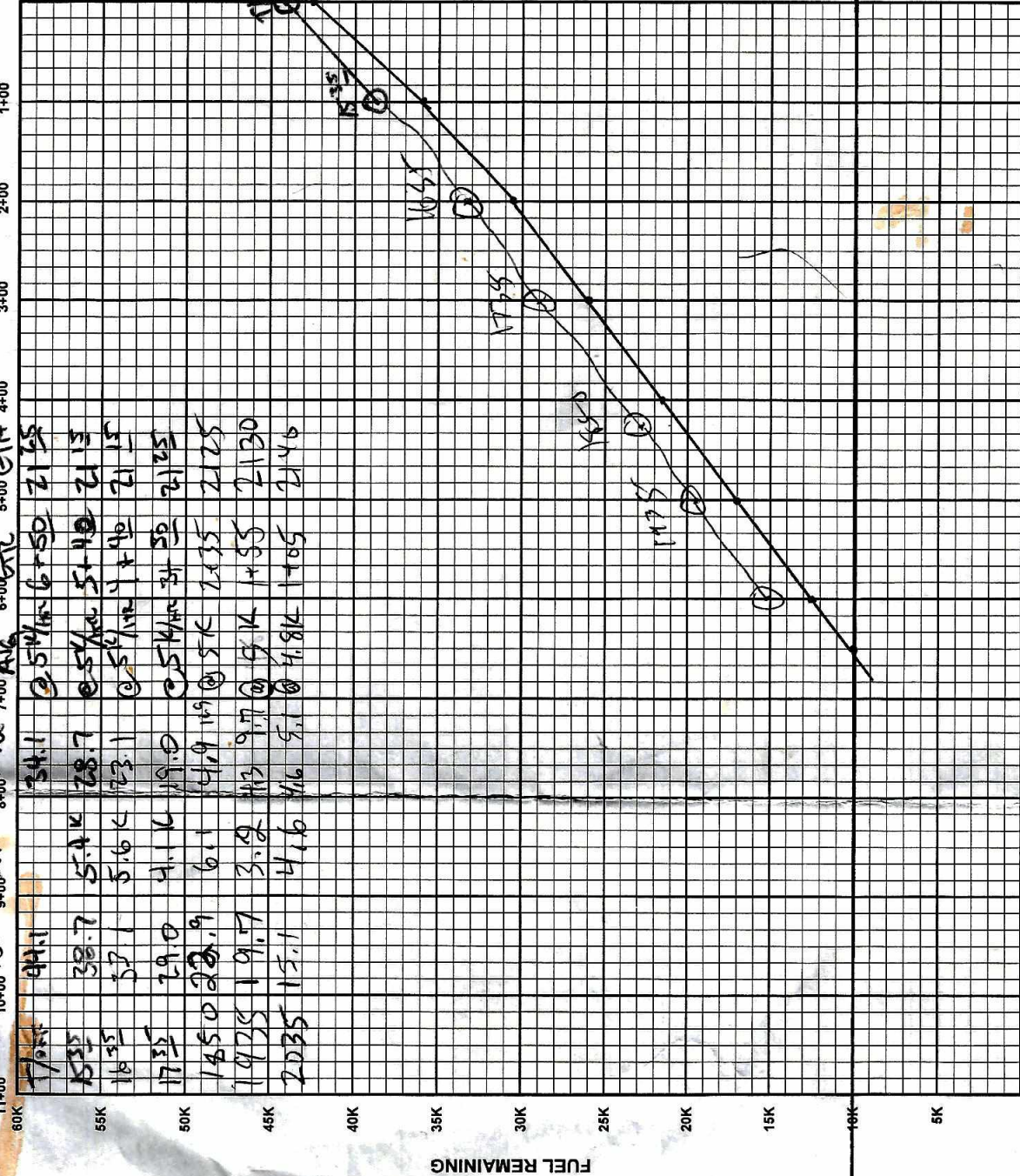
This image shows a full page of blank graph paper. The grid consists of small squares formed by thin black lines. There are approximately 20 columns and 25 rows of squares. The paper has a slightly off-white or cream color, suggesting it might be older or scanned from a physical document. There are no markings, text, or drawings on the grid.

120
10
30528.7

RANGE CONTROL GRAPH

TIME REMAINING

Time 11+00 10+00 9+00 8+00 7+00 6+00 5+00 4+00 3+00 2+00 1+00



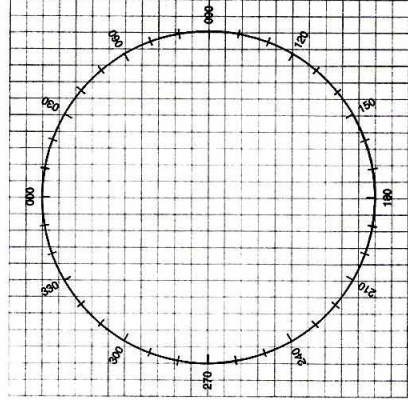
ENROUTE FUEL	
ENROUTE TIME	6+30
ENROUTE FUEL (6K SK45K RULE)	32.5
RESERVE AT DESTINATION	10.0
REQUIRED RAMP	42.5
ACTUAL RAMP FUEL	44.1

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

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

CEX - TRUE BEARING METHOD				CEX SIGHT	
COMPASS TYPE	INS1	INS2	WET	GMT	
MCH (READING)				GHA	
- MTH (SEXTANT)				CORR	
CE				GHA	
- VAR				LONG +W -E	
DEV				EXACT LHA	
				LAT	
				BODY	
				DEC	
				HC/D	
				CORR	
				HC	
				Z	
				ZN	

CEX - ERB METHOD				CEX SIGHT	
COMPASS TYPE	INS1	INS2	WET	GMT	
MERB (DIAL 000)				GHA	
+ ZN				CORR	
- MTH				GHA	
MCH (READING)				LONG +W -E	
CE				EXACT LHA	
- VAR				LAT	
= DEV				BODY	
				DEC	
				HC/D	
				CORR	
				HC	
				Z	
				ZN	



WIND FACTOR		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	

PRESS ALT		PRESS ALT	
10,000	1.0	250	.99
20,000	.99	300	.97
30,000	.97	350	.94
40,000	.96	400	.92

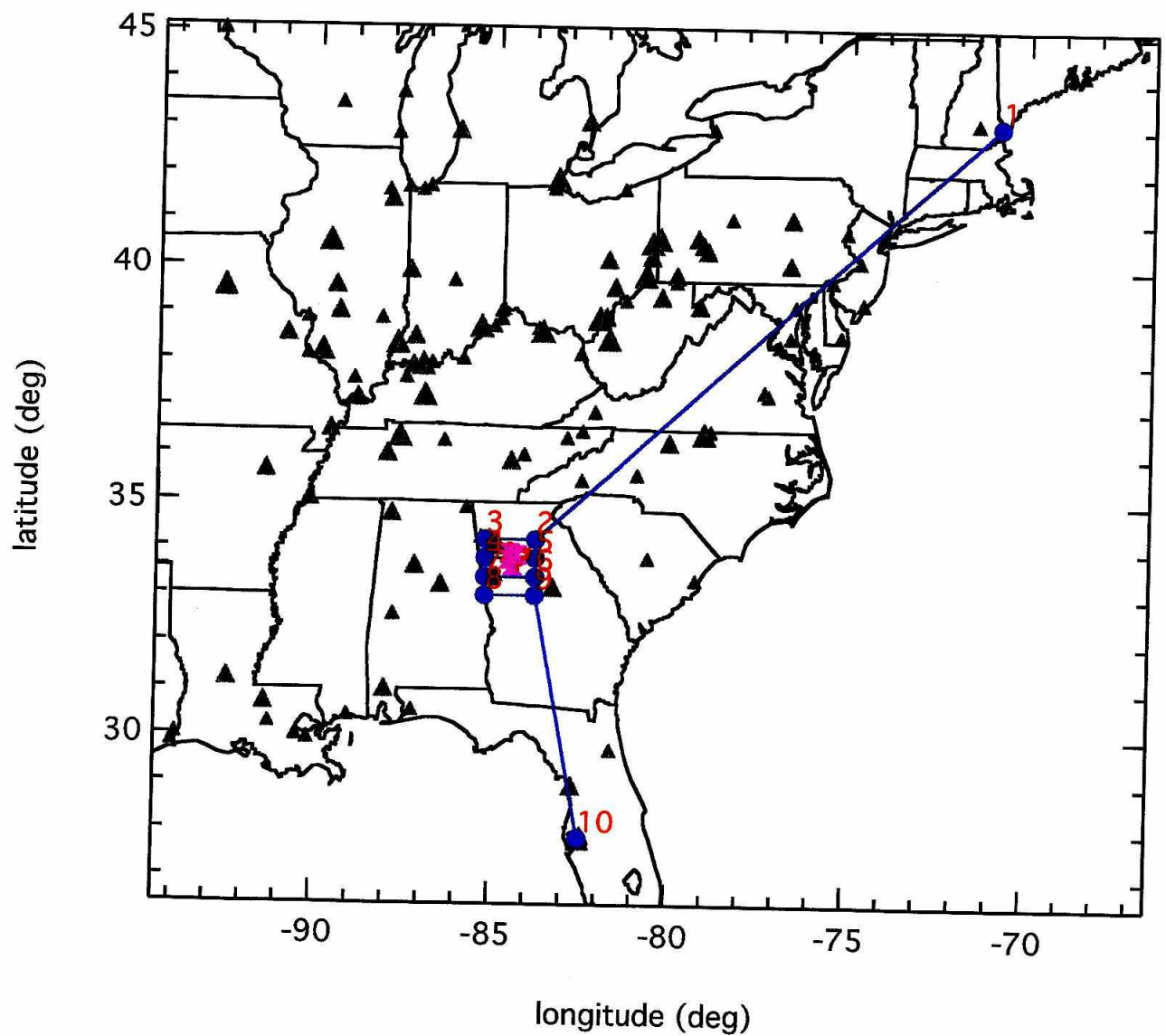
TRUE AIRSPEED CROSS-CHECK						
TIME	IAS	PRESS ALT	"F" FACTOR	EAS	OAT	ITAS
16-00	219	14000	.99	212	6	212
	204		1	208	-3.5	204

DISTANCE REMAINING

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

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	VAR	DR	TRK	POINT	INS	WVS	ALT	TAS	NEXT	DIST	TIME	STA	REMARKS
							1	WASM		23		615	WASM		45			HABIT	
							2	WAO		24			TRAP		46			CTV	
							3	RAF		25	6		GLW		47			OFF	
							4	WASOL		26			OTAO		48			CEADI	
							5	WERS		27			WELL		49			KAYE	
							6	WOL		28			WATS		50			GLW	
							7	WERS		29			WATY		51			WONTO	
							8	WERS		30	7		WOL		52			PIC	
							9	LHY		31			WASSA		53			WOLF	
							10	WZ		32			WOL						
							11	DIABO		33			WOL						
							12	WESS		34			WAPS						
							13	WGG		35	8		WSSO						
							14	WATY		36		WASSA	WSSO						
							15	WATY		37			WSSO						
							16	WATY		38			WSSO						
							17	WST		39			WSSO						
							18	WST		40			WSSO						
							19	WATY		41			WSSO						
							20	WATY		42			WSSO						
							21	WATY		43			WSSO						
							22	WATY		44			WSSO						

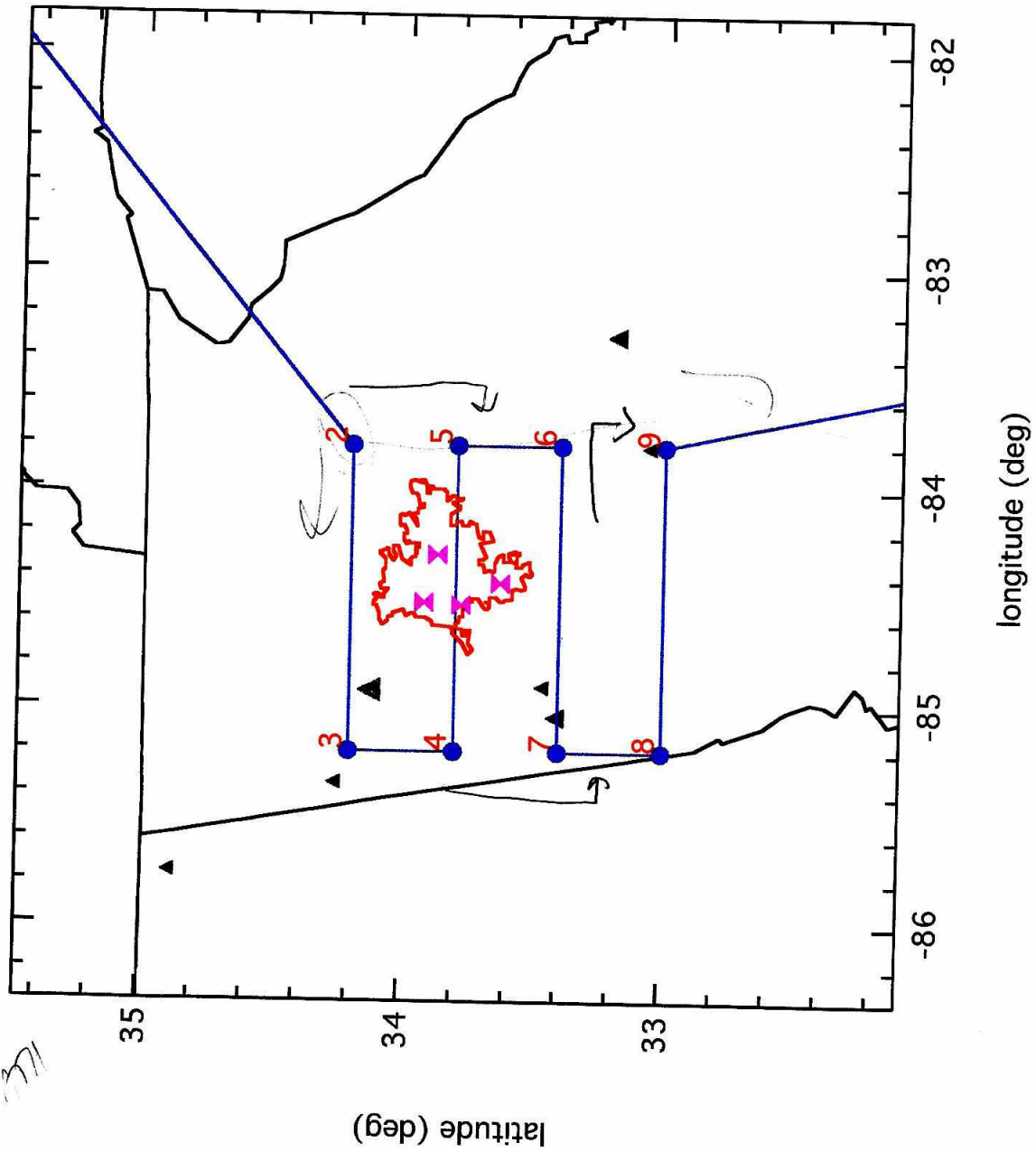
15 August, Transit from Pease to MacDill
via Atlanta and Plant Bowen



97L PDK
C2V

15 August, Transit from Pease to MacDill
via Atlanta and Plant Bowen

Winds from the North



15 August, Transit from Pease to MacDill
via Atlanta and Plant Bowen, Winds from the East

