



NOAA P-3 N42RF
GHOSTNET Ferry Flight
KMHR-PHNL



Flight ID: 050318H

<u>Sensor or system</u>	<u>Number or Name</u>
INE	2
Accelerometer	1
Temperature Probe	1
Dew Point Probe	1 (General Eastern)
Altitude (for vertical wind)	Radar Altimeter 159
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage 1281
Time Source	Micro 99
Constants File	CO2052.CON

Notes:

There were two time/data gaps during this flight. These occurred during the following times, 203751Z-203810Z and 034441Z-034900Z.

Radar altimeter 232 was inoperative from takeoff until 1832Z.

Due to moisture freezing in the radome pressure sensor lines during rain events early in the flight, there was a block of time when the dynamic slip pressure values from the nose radome were erroneous. From 184400Z-193300Z, the dynamic pressure values from the fuselage were substituted in place of the faulty radome values. Also, similar substitutions were made to the dynamic attack pressure values from the nose radome with values from the sensor on the lower fuselage from 190300Z-191100Z when the aircraft performed a pitch maneuver.

The ambient temperature from sensor number two trended differently from that of sensor number one during a change in pitch at 193300Z. No corrections were made to the data from sensor number two.

Dewpoint sensor number two exhibited rhythmic oscillations and random spikes throughout the flight.

The King Liquid Water sensor was inoperative throughout the flight.

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.

	Takeoff	Landing
Aircraft Static Pressure	1011.2 mb	1014.0 mb
Corrected Tower Pressure	1010.5 mb	1014.2 mb

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

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Flt ID: 050318H	From: KMHR	To: PHNL
Flt. No: 05-014	Blk In: 0350 Z	Time On: 0343 Z
ETD: 1800 Z	Blk Out: 1814 Z	Time Off: 1827 Z
ETE: 10+00	Blk Time: 9+36 (9.6) Hrs	Flt Time: 9+16 (9.3) Hrs
Sponsoring Org: NOAA/ETL	Program: Ghostnet/Atmospheric Rivers	Purpose: Ferry KMHR PHNL

AOC Flight Crew

Aircraft Commander: Strong	Data System: Mcmillan
Co-Pilot: Choy	AVAPS: Delgado
Navigator: Gallagher / Siegel	System Eng:
Flight Eng: Floyd / Wade	A A:
Flight Director: Mayeaux	A A:
Avionics: Rogers	Crew Chief: Torrey

Participating Scientists / Visitors

Name (Last, First)	Activity on Aircraft	Affiliation
Veenstra, T	PI	Airborn Technologies
Madsen, W	Sci	Noaa/ETL
Brown, J	EAA Checkride	Eaa

Remarks (Storm Name, Mission ID, Recco Times, Fix Times)	<u>Recco Times</u>		<u>Fix #</u> <u>Fix Time</u>	
	<u>Storm Name:</u>			
	<u>Mission ID:</u>			
	<u>Penetration number and time</u>			

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Flight ID: 050316H		Time Off: 1827 Z		Time On: 0343 Z	
A/C - Takeoff		Wx Station - Takeoff		A/C - Land	
A/C - Land		Wx Station - Land			
Pressure	1011.2 mb	2984 (1010.5) mb	1014.0 mb	2995 (1014.2) mb	
ATIS	Time	Observation			
Takeoff	1755 Z	15003KT 10sm overcast 16/07 A2984			
Land	0253Z	07006KT 10sm few 045 SCT 055 25/15 A2995			
	Number	Data Disposition / Date / Quality			
Flight Level Tapes					
Radar Tapes					
Cloud Physics Tapes / CDs					
Video Tapes					
Dropsondes		Good:	Bad:		
AXBT					
AXCP					
AXCTD					

Remarks:

No TD3

1953Z - Both Inertials reporting wind around 73° at 9 kts. Flight data system shows winds at 224° 12.9 kts. Winds from FDS would be more accurate.

Display on TT1 going out

Lost Scientific Power on landing

Flight ID: 05031814

1967
1971 191340
191240

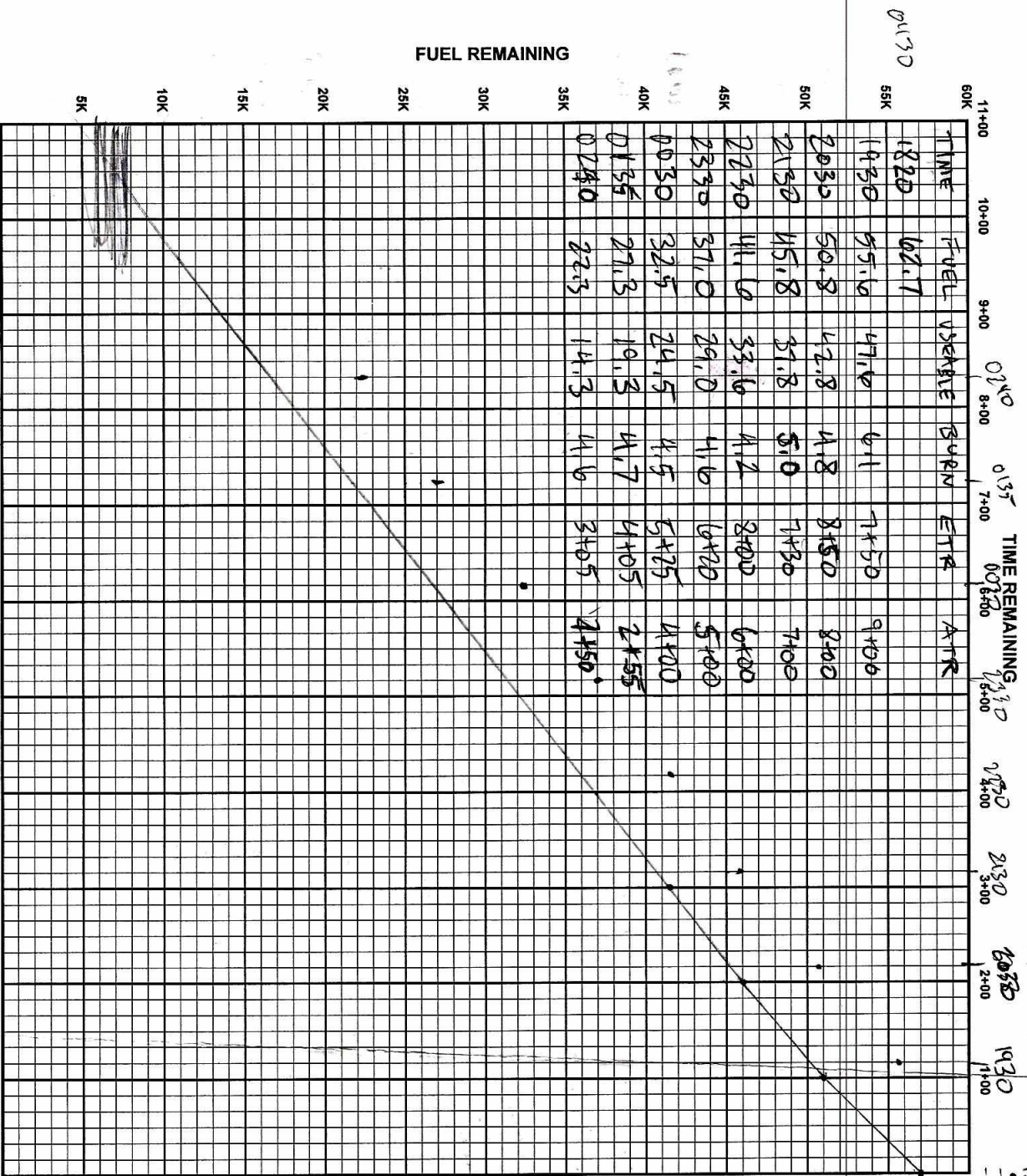
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Form 413-50

Time	Lat	Long	Trk	Hdg	Wind Dir	Wind Spd	T _a	T _d	Press. Alt	Geo. Alt	Sfc Press.	Press. Sfc	Dyn. Press	Remarks
1828	3832	1220	204	204	73	4	13.0	-0.6	355	374	1009.0	9580	67.9	Takeoff
1900	3741	12339	216	246	245	18	-8.6	-9.8	4295	4310	1005.5	592.9	83.4	Clouds
1934	3656	12651	251	250	218	16	-12.3	-14.2	4919	4928	1002.7	546.0	79.9	Clouds/Twls
2001	3553	12855	249	248	212	19	-13.6	-22.2	4922	4921	1005.0	545.8	89.0	Set clouds below
2037	3454	13553	248	251	262	38	-15.7	-45.8	5492	5490	1000.6	505.6	76.6	Clouds Below
2059	3422	13325	248	255	269	81	-11.4	-46.4	5489	5502	992.5	505.8	70.7	Clouds Above/Below
2129	3341	13516	246	254	272	83	-12.6	-39.5	5490	5526	996.7	505.8	73.3	Set clouds above/Below
2159	3259	13704	245	252	268	73	-13.4	-35.4	5487	5547	1001.8	505.9	70.5	Below clouds below
2234	3205	13915	244	250	267	71.7	-13.2	-39.2	5490	5574	1004.0	505.8	73.0	Set clouds below
2305	3115	14110	241	247	260	74.4	-13.4	-33.9	5491	5593	1006.8	505.7	82.0	Set clouds Above/Below
2332	3027	14253	241	247	261	70.1	-13.3	-25.1	5489	5607	1007.9	505.8	83.3	Set clouds Above/Below
0000	2938	14436	241	247	263	67.6	-12.8	-20.4	5490	5623	1008.3	505.8	83.1	Dark clouds below
0024	2842	14626	240	245	260	67.9	-11.7	-20.8	5490	5640	1007.1	505.7	81.9	Set clouds below
0055	2747	14810	239	244	259	67.1	-11.4	-21.6	5490	5659	1009.2	505.8	85.7	Set clouds below
0128	2638	15017	238	243	261	63.0	-11.4	-22.1	5490	5674	1010.6	505.8	87.0	Overcast Above/Below
0200	2527	15221	235	240	259	56.5	-11.0	-16.1	5489	5691	1011.5	505.8	86.2	Overcast Above/Below
0230	2420	15412	234	238	251	45.7	-10.0	-18.4	5488	5709	1011.0	505.8	87.6	Overcast Below
0257	2258	15559	222	227	258	35.8	-8.9	-19.0	5491	5719	1009.3	505.8	88.0	Set below

RANGE CONTROL GRAPH



DISTANCE REMAINING

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

1820

ENROUTE FUEL	
ENROUTE TIME	10:00
ENROUTE FUEL (6K 5K 4.5K RULE)	47.0
RESERVE AT DESTINATION	10.0
REQUIRED RAMP	57.0
ACTUAL RAMP FUEL	62.7

TACTICAL (OFFSTA TO DESTINATION)

DISTANCE	
(OFFSTA TO DEST)	
ENROUTE TIME (OFFSTA TO DEST)	
BURN RATE	4500 5500
ENROUTE FUEL REQUIRED	
RESERVE AT DESTINATION	
FUEL AT OFFSTA	

POINT OF SAFE RETURN

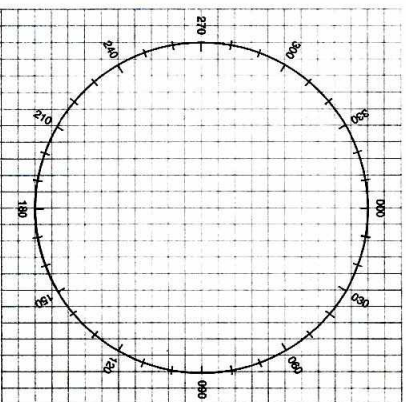
ETP DISTANCE (TO DEPARTURE)	
ENROUTE TIME (TO DEPARTURE)	
BURN RATE (LBS/HR)	4500 5500
FUEL REQUIRED	
RESERVE AT DEPARTURE	
PSR FUEL	

6 4.5
36 36.0
47

CEX - TRUE BEARING METHOD			
COMPASS TYPE	INS1	INS2	WET
MCH (READING)	240	240	240
MTH (SEXTANT)	251	251	251
CE	5	5	5
-VAR			
DEV			

CEX SIGHT	
GMT	1920
GHA	108.6
CORR	
GHA	408.01
LONG +W	124.01
EXACT LHA	344
LAT	38
BODY	0
DEC	S 041
HC/D	4915.57
CORR	7.39
HC	4836
Z	455
ZN	155

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



TRUE AIRSPEED CROSS-CHECK

TIME	IAS	PRESS ALT	"F" FACTOR	EAS	OAT	TAS	ITAS
1857	214	140	X	X	+2	281	251/276

MISSION PREFLIGHT LOG

DESTINATION PHNL		MISSION G/N Transit # 2		NAVIGATOR Siegel		AIRCRAFT COMMANDER STPOUG		FLIGHT DIRECTOR MAYEAUX		SCHEDULED / ACTUAL TAKEOFF Z 1800 / 1833		DATE OF TAKEOFF 18 MAR 05	
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WP	LAT / LON	RTE	MH	VAR +/-=>	TH	DR +/-=>	TRK	GS	WD	WS	ALT	TAS	LEG / TOT DIST	LEG / TOT TIME	PROP ETA	ETA	ATA	REMARKS
KMHR	N 38 33.2 W 121 17.9		207	15E	222	0	222	210	L	V	↗	210	66 66	0+19 0+19				→ OAK
OAK	37 43.6 122 13.4		237	15E	252	0	252	210	L	V	↘	210	89 1416	0+23 0+42				→ SUPER
SUPER	37 18.2 123 48.8		238	15E	253	3L'	150	255	210	20	160	270	60 206	0+19 0+56				→ GEBOP
GEBOP	37 00.0 125 00.1		236	15E	251	4L	247	260	190	20	140	270	98 304	0+23 1+19				→ BAKRT
BAKRT	36 27.7 126 56.0		235	14E	249	2L	247	252	215	21	160	270	140 444	0+33 1+52				→ BLUFF
BLUFF	35 38.6 129 38.1		234	13E	247	7R	254	208	275	71	180	270	299 743	1+26 2+18				→ BAKON
BAKON	33 41.9 135 13.3		231	13E	244	9R	253	200	275	81	180	270	342 1085	1+42 3+00				→ BILLB
BILLB	31 10.7 141 17.4		229	12E	241	15R	246	217	265	59	180	270	257 1342	1+11 6+11				→ BEATS
BEATS	29 06.8 145 37.3		228	11E	239	5R	241	211	260	64	180	270	300 1642	1+25 7+36				→ BANDY
BANDY	26 31.8 150 27.4		226	11E	237	4R	241	223	260	51	200	270	219 1861	0+59 8+35				→ BRADR
BRADR	24 32.6 153 50.9		225	11E	236	2R	238	229	250	43	200	270	108 1969	0+28 9+03				→ BITTA
BITTA	23 31.7 155 28.7		203	11E	214	6R	220	234	250	45	200	270	87 2056	0+22 9+25				→ BOMOH
BOMOH	22 19.3 156 20.6		220	10E	230	3R	233	229	250	41	200	270	45 2101	0+12 9+37				→ MAXGHI
MAXGHI	21 18.5 157 55.8	7 17																→ PHNL
PHNL																		
SAC	38 26.6 121 33.1																	
SPRGS	38 10.8 122 72.4																	
SHARK	22 30.9 156 05.4																	
OMACK	22 31.7 156 10.3																	
CEH99	22 19.0 156 20.5																	

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
AIRCRAFT OPERATIONS CENTER

INS PERFORMANCE	
INS 1	INS 2
BEGIN ALIGN TIME	1604 1604
ALIGN STATUS (0-5)	0 0
END NAV TIME	0344 0344
START NAV TIME	1750 1750
DELTA T	9+54 9+54

TERMINAL ERRORS	
INS 1	INS 2
DELTA LAT	+4.7 +6.3
DELTA LON	+1.7 -2.5
RGS	5 3
RADIAL ERROR	5 7

REMARKS	
44 ✓	11282 ✓
8843 Pri	

