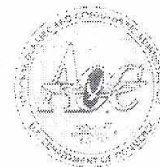




NOAA P-3 N42RF

Ocean Winds Helene



Flight ID: 060917H

Sensor or system

INE
Accelerometer
Temperature Probe
Dew Point Probe
Altitude (for vertical wind)
Static Pressure
Dynamic Pressure
Time Source
Constants File

Number or Name

2
2
1
1 (General Eastern)
Radar Altimeter 159
Rosemount Fuselage
Rosemount Fuselage 1281
Micro 99
CO2062.con

Notes:

There were several time/data gaps during this flight which occurred from 155501Z-155510Z, 154507Z-154510Z, 170801Z-170810Z, and 203622Z-203630Z.

The King liquid water sensor was inoperative throughout the flight.

Altitude from inertial one and two were both inoperative throughout the entire flight.

Temperature and dewpoint values from sensor number 3 are also erroneous.

From takeoff through 124640Z data from radar altimeter 232 was substituted into radar altimeter 159.

Data from dewpoint sensor number two was substituted into sensor number one from 130801Z-142258Z, 195837Z-200443Z, and from 201352Z-211105Z.

There were numerous times during the flight where the dewpoint temperature exceeded ambient temperature resulting in RH>100%. This was likely due to rain, a wet-bulb effect on the total temperature sensor, and/or an artificial warming of the dewpoint sensor as it tried to burn off excess moisture. No edits were made to the data to correct this.

Otherwise, all sensors worked optimally during this flight.

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	1007.2 mb	1005.2 mb
Corrected Tower Pressure	1006.7 mb	1004.8 mb

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

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

Fit ID: 060917H	From: TBPB	To: TBPB
Fit. No: 06-064	Blk In: 2137 Z	Time On: 2134 Z
ETD: 1300 Z	Blk Out: 1237 Z	Time Off: 1245 Z
ETE: 9+00	Blk Time: 9+00(9.0) Hrs	Fit Time: 8+49 (8.8) Hrs
Sponsoring Org: HRO NESDIS	Program: Ocean Winds	Purpose: Helene

AOC Flight Crew

Aircraft Commander: Strong	Data System: Mcmillan
Co-Pilot: Giramonte	AVAPS: Rasco
Navigator: Gallagher / Bishop	System Eng:
Flight Eng: Bast / Klippel	A A:
Flight Director: Mayeaux	A A:
Avionics: Olney	Crew Chief:

Participating Scientists / Visitors

Name (Last, First)	Activity on Aircraft	Affiliation
McFadden, J	Programs	AOC
Black, M	OBS	HRO
Leighton, P	OBS	HRO
Rogers, R	OBS	HRO
Chang, P	OBS	NESDIS
Chu, T	OBS	UMASS
Esteban, D	OBS	JPL
Jelenak, Z	OBS	NESDIS

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

Storm Name: Helene

Mission ID: AVORAZ WXXXA HELENE

Penetration number and time

20.7 49.3 @ 171800 Z

Recco Times

Descent DoGcard to 7000 1524Z

Time data gap 1555Z - 2.5 seconds

Fix # Fix Time

1546Z 20 44
48 44

1704Z
No center
fixing reqd

1636Z
No center fixing
required

1858Z
No fix reqd

1751Z
No center
fixing reqd

1837Z
2056 48 53

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

Flight ID: <u>060917H</u>		Time Off: <u>1245</u> Z		Time On: <u>2134</u> Z	
A/C: <u>Takeoff</u>		Wx Station: <u>Takeoff</u>		A/C: <u>Land</u>	
Wx Station: <u>Land</u>		A/C: <u>Land</u>		Wx Station: <u>Land</u>	
Pressure	<u>1007.2</u> mb	<u>1013</u> mb	<u>1005.2</u> mb	<u>2987-1011</u> mb	
ATIS	Time	Observation			
Takeoff	<u>1200 Z</u>	<u>09012kt P65m f.w. 29/24 @1013</u>			
Land	<u>2121 Z</u>	<u>09008kt P65m f.w. 29/23 @1011 -Hz</u>			
	Number	Data Disposition / Date / Quality			
Flight Level Tapes					
Radar Tapes					
Cloud Physics Tapes / CDs					
Video Tapes		<u>6 Hrd Sndes 6 bts HRD Rev FS</u>			
		<u>12 OW Sndes 2 bad 2 N/A Sndes</u>			
Dropsondes		Good:	Bad:		
AXBT					
AXCP					
AXCTD					

Remarks:

Enroute - 8-10 minute between drops - 2 sequence of 3 drops bts? 1 inbound 50 miles out.
 Paul - in and out of storm center - 7000ft. 2 pitch on legs 1 in center -
 ferry out max altitude

IP: 19.458 5045.52

Drops B/W 18-19N 19.5-20N (18 5311) (18.5 5229) (19 05149) (19.5 5100) 20 05023
 3 3

1 Drop in eyewall - out other side - Drop

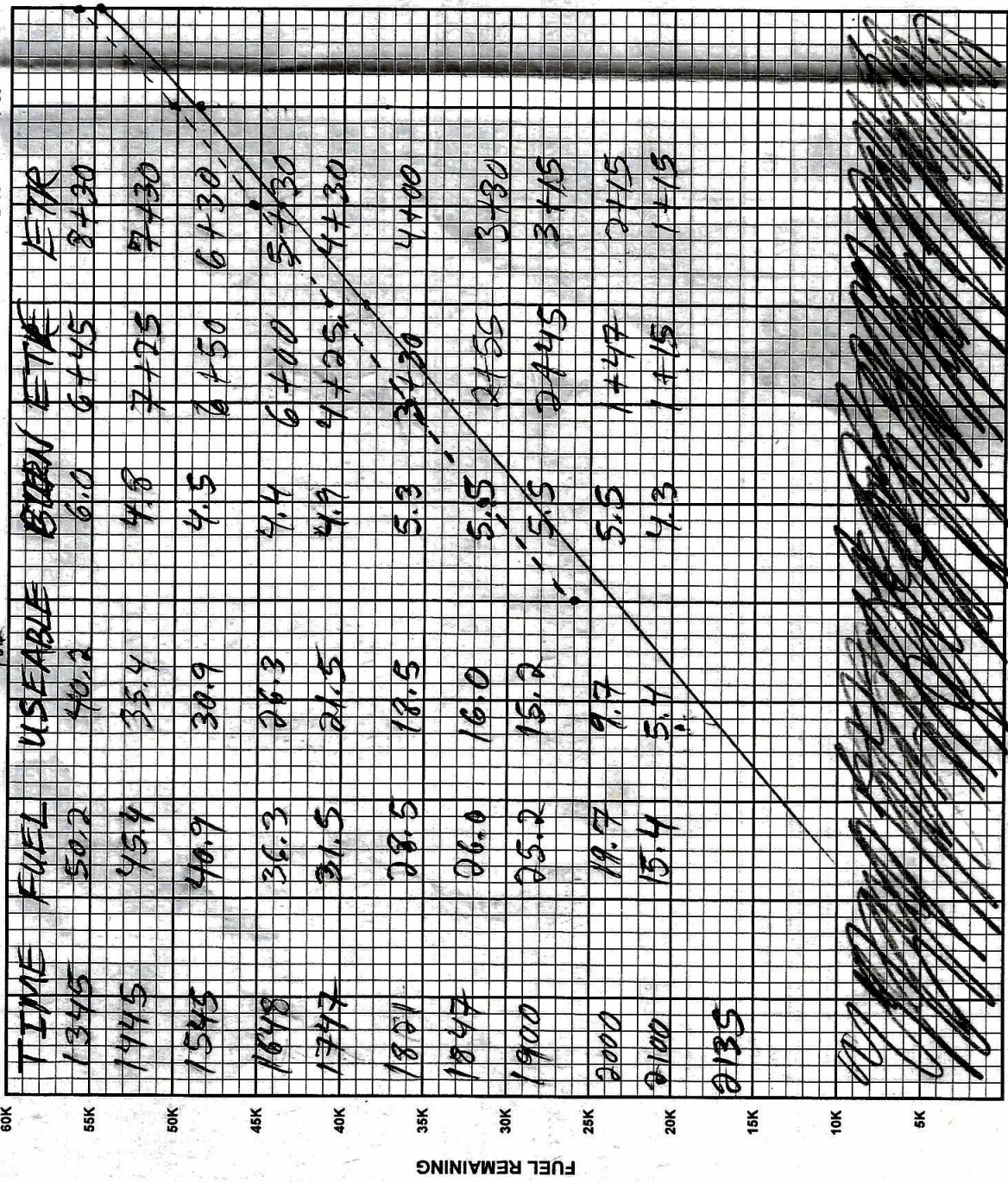
19⁴⁵


[illegible]

1947 1947

RANGE CONTROL GRAPH

TIME REMAINING TUX 1645 1545 1445 1345 1245

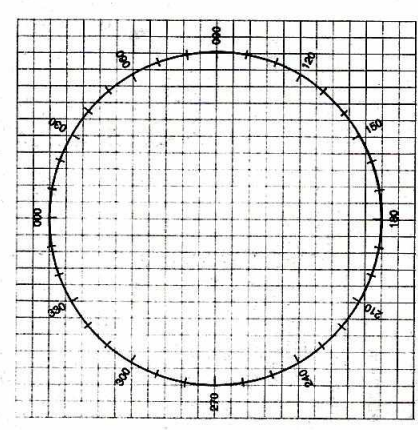


ENROUTE FUEL	
ENROUTE TIME	9+30
ENROUTE FUEL (6K 5K 4.5K RULE)	47.0
RESERVE AT DESTINATION	10.0
REQUIRED RAMP	54.7
ACTUAL RAMP FUEL	56.2

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

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

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



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		
10,000	1.0	.99
20,000	.99	.97
30,000	.97	.95
40,000	.96	.92

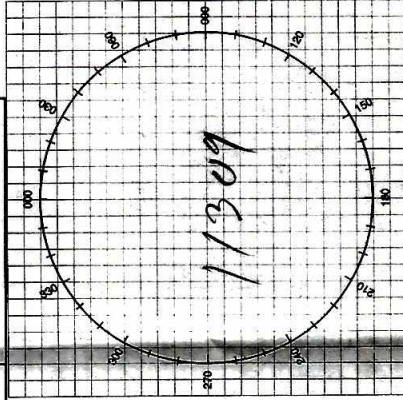
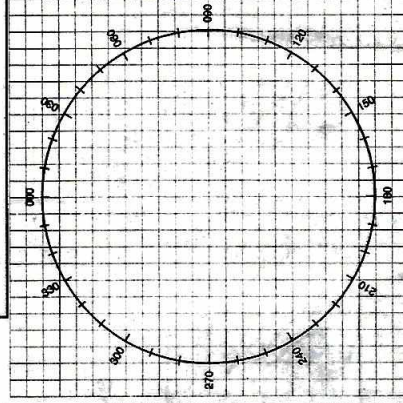
TRUE AIRSPEED CROSS-CHECK					
TIME	IAS	PRESS ALT	"F" FACTOR	EAS	OAT
1305	206	7.0	X	+23	227
					232

DISTANCE REMAINING

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

POSITION

FREQ	ALT	HDBG	OTHER
118.7			# 2 on Taxiway Alpha
129.35			CAR WFR
133.7			1084 P.S.
			113.04 133.54
			SGND



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 _____

- POSITION _____ N/S _____
E/W AT _____

- 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 DESIG

- PILOT INTENTIONS
WE HAVE

[illegible]

PAGE _____ **OF** _____

(C) = CIPS (I) = INS (I) = RADIO (V) = VISUAL (C) = CELESTIAL (D) = DR

[illegible]

N42RF AVAPS DROP LOG

Project : O. W

Mission : HEURKE

Flight ID : 060717h

Take Off :

Landing :

Flt Dir :

Launcher S/N:

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Wind s Time	\$\$	DropT ech	Comments	Good ✓
1	053166241	1	0	1437	15		WLS		✓
2	053416009	2	0	1448	10				✓
3	053116164	4	-4	1459	5				✓
4	053166097	1	-4	1510	5			SCREEN	✓
5	053726006	2	0	1514	5			BT(12)	✓
6	053726009	3	0	1521	5			BT(14)	✓
7	053626122	1	.4	1540	5			EYE WALL	✓
8	053166193	2	.3	1546	5			EYE BT(16)	✓
10	053726007	1	0	1624	—			NO WINDS SSAT	
09	053626128	4	+1.3	1554	5		✓	EYE WALL	✓
11	053626067	1	0	1638	5		CL	EYE WALL	✓
12	053626071	1	0	1703	7			EYE WALL	✓
13	053626032	2	0	1718	—			NO WINDS	
14	053626088	1	0	1743	6			EYE WALL	✓
15	053626027	1	0	1808	6			EYE WALL	✓
16	053626035	1	0	1830	8			EYE WALL	✓
17	053636093	2	0	—	—			FAST FALL	
18	053636091	3	0.2	1837	5			CENTER	✓
19	053626004	1	0	1845	7			EYE WALL	✓
20	053636018	2	0	—	—	NOT	LAUNCHED	—	—
20	053626081	2	0	1859	6		✓	EYE WALL	✓

OCEAN WINDS 12

HRD 8