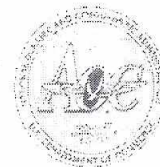




NOAA P-3 N42RF

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
Estes, 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 @ 17/1800 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: 060917H		Time Off: 1245 Z		Time On: 2134 Z	
A/C: Takeoff		Wx Station: Takeoff		A/C: Land	
Wx Station: Land					
Pressure	1007.2 mb	1013 mb	1005.2 mb	2987-1011 mb	
ATIS	Time	Observation			
Takeoff	1200 Z	09012kt P65m f.w. 29/24 Q1013			
Land	2121 Z	09008kt P65m f.w. 29/23 Q1011 -Hz			
	Number	Data Disposition / Date / Quality			
Flight Level Tapes					
Radar Tapes					
Cloud Physics Tapes / CDs					
Video Tapes		6 Hard Soudes 6 bts HRD Rev FS			
		12 OW Soudes 2 bad 2 N/A Soudes			
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 50 45.52

Drops B/W 18-19N 19.5-20N (18 5311) (18.5 5229) (19 05149) (19.5 5108) 20 05023
 3 3

1 Drop in eyewall - out other side - Drop

19⁴⁵


N42RF AVAPS DROP LOG

Project : O. W

Mission : HEURKE

Flight ID : 0609/7h

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		WRO		✓
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	1546	5			EYE WALL	✓
8	053166193	2	.3	1546	5			EYE BT(16)	✓
10	053726007	1	0	1624	—			NO WINDS SSAT	
9	053626128	4	+1.3	1554	5		✓	EYE WALL	✓
11	053626067	1	0	1638	5		CR	EYEWALL	✓
12	053626071	1	0	1703	7			EYEWALL	✓
13	053626032	2	0	1718	—			NO WINDS	
14	053626088	1	0	1743	6			EYEWALL	✓
15	053626027	1	0	1808	6			EYEWALL	✓
16	053626035	1	0	1830	8			EYEWALL	✓
17	053636093	2	0	—	—			FAST FALL	
18	053636091	3	0.2	1837	5			CENTER	✓
19	053626004	1	0	1845	7			EYEWALL	✓
20	053636018	0	—	—	—	NOT	LAUNCHED	—	—
20	053626081	2	0	1859	6		✓	EYEWALL	✓

OCEAN WINDS 12
HRD 8

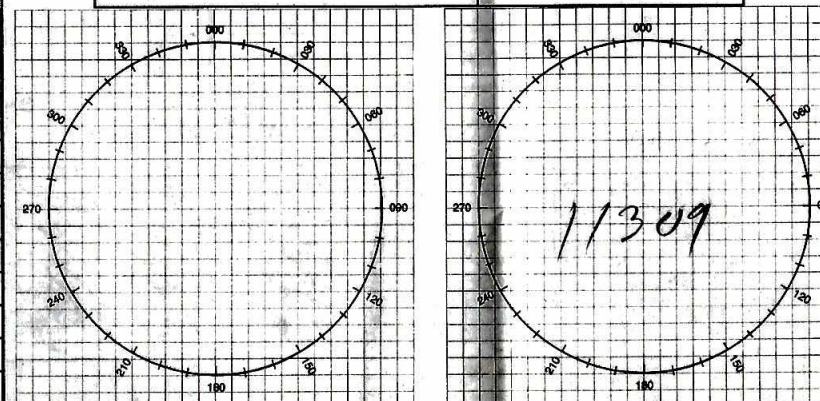
10-192

2025.5.20

W20.7
W49.3

CLEARANCES			
FREQ	ALT	HDG	OTHER
118.7			#2 on Taxiway Alpha
129.35			CAF WFR
123.7			1024 8.5
			113.09 133.54
			SGW

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 243.0 VHF/VOICE 121.5 MF/VOICE 2182 KHZ HF/CW 8364 KHZ MF/CW 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 +E==>	TH	DR +R==>	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	TIME	ETA	REMARKS
1232																					
1238																					
1245																					
1300	XV	15-27.1 56-37.7	15-27.0 56-37.9	+1 -2	15-27.3 56-38.0	+2 -3	065	14W	051	12	050	226	101	02	7K	240					BGT 050/53
1340	Δ	15-27.1 56-37.7	15-27.0 56-37.9	+1 -2	15-27.3 56-38.0	+2 -3	068	15W	053	11	052	263	070	06	15K	269					
1440	Δ	18-51.4 51-42.6	18-51.4 51-42.6	-1 -2	18-51.4 51-42.6	-1 -2	071	17W	054	10	034	265	019	06	15K	271					
1538	Δ	20-18.0 49-01.5	20-16.8 49-02.2	+1.2 -1.7	20-19.5 49-02.0	-1.5 -1.5	065	18W	047	12R	060	245	304	60	7K	229					
1640	Δ	20-18.0 49-01.5	20-16.8 49-02.2	+1.2 -1.7	20-19.5 49-02.0	-1.5 -1.5	065	18W	047	12R	060	245	304	60	7K	229					
1742	Δ	21-26.1 49-18.5	21-26.2 49-18.9	-1.1 -1.4	21-31.1 49-18.2	-4.0 +1.3	135	18W	107	14R	121	198	059	67	7-0	238					
1840	Δ	20-51.6 48-52.8	20-51.7 49-01.0	-1 -2.2	20-59.0 48-52.3	-7.4 -1.5	268	18W	230	10	230	234	136	10	5.0	235					
1940	Δ	18-51.4 51-42.6	18-52.3 51-44.5	-1.9 -2.5	18-58.6 51-41.3	-7.2 +1.7	257	18W	239	41	235	235	341	24	16.0	223					
2041	Δ	13-35.3 51-02.9	13-38.3 51-06.3	-3.0 -3.4	13-44.1 51-02.2	-8.8 +1.7	252	13W	239	01	239	292	134	05	6.0	291					BGT 050/40
2135	LANV																				
		13-04.6 59-27.5	13-08.6 59-27.9	-4.0 -2.4	13-14.4 59-28.5	-9.8 -1.0															

ENG
WLF/AXI
T/O
XV

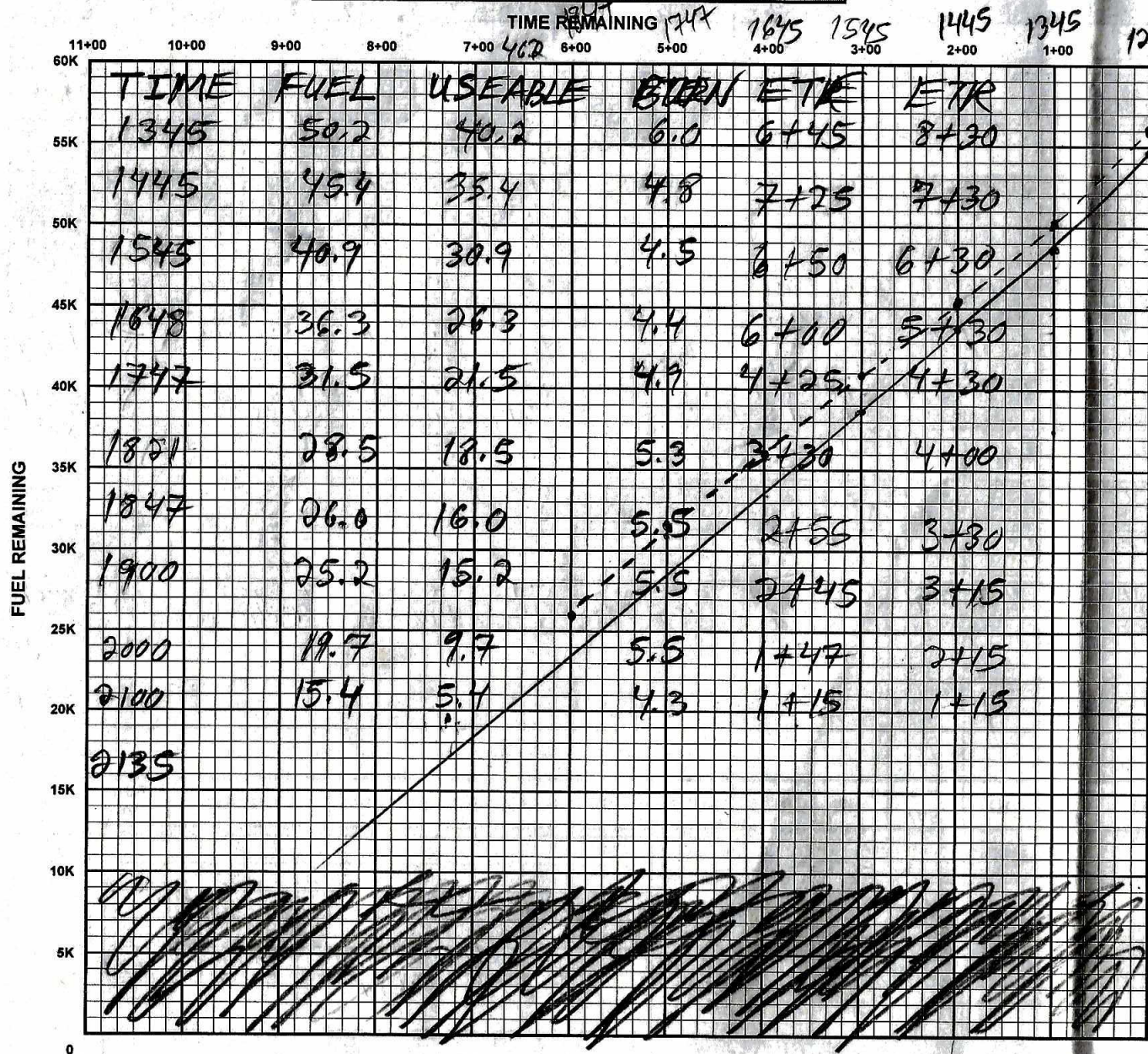
[illegible]

INS PERFORMANCE		
	INS 1	INS 2
BEGIN ALIGN TIME	1100	1100
ALIGN STATUS (0-5)	0	0
END NAV TIME	2145	2145
START NAV TIME	1228	1228
DELTA T	9417	9417

TERMINAL ERRORS		
	INS 1	INS 2
DELTA LAT	-4.0	-9.8
DELTA LON	-2.4	+1.0
RGS	4	3
RADIAL ERROR	5	10

[illegible]

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

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 (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		

PRESS ALT	200	250	300	350
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

CEX - TRUE BEARING METHOD

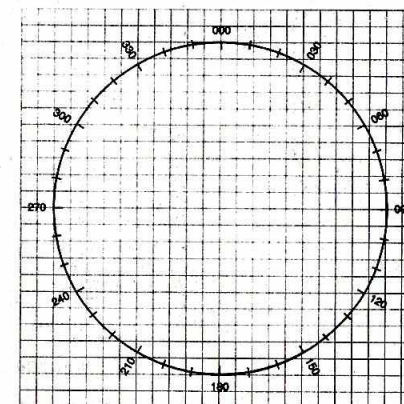
COMPASS TYPE	INS1	INS2	WET
MCH (READING)			
MTH (SEXTANT)			
CE			
VAR			
DEV			

CEX SIGHT

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

CEX - ERB METHOD

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



TRUE AIRSPEED CROSS-CHECK

TIME	IAS	PRESS ALT	"F" FACTOR	EAS	OAT	TAS	ITAS
1305	206	7.0	X	X	+23	227	232 (237)