



NOAA P-3 N42RF ET. Ophelia

Flight ID: 050917H

Sensor or system

Number or Name

INE.....	1
Accelerometer.....	1
Temperature Probe.....	1
Dew Point Probe.....	1
Altimeter (for vertical wind).....	RA-159
Static Pressure.....	Rosemount (fuselage)
Dynamic Pressure.....	Rosemount (fuselage)
Time Source.....	Micro 99

Local Met. Data: Not copied at takeoff

Take off: 1611Z

Land: 2347Z

The RA-232 was substituted for the RA-159 during take off and landing due to spiking (T.O. 160801-160807; 234607-235000 Land).

The RA-159 had spikes that were removed and patched (231422-231425; 231435-231438; 231532-231543; 231558-231601; 231700-231708; 231720-231726; 231730-231733; 231759-231802; 231811-231814; 231823-231827; 231842-231845; 231900-231938; 231941-231944; 231952-232021).

All other instruments functioned normally during the flight.

There were data gaps noted: 212912-291215.

There were times during heavy precipitation events (e.g. eye wall penetrations) when the dew point exceeded ambient temperature yielding a RH of greater than 100%. This is probably due to a wet bulb effect on the total temperature probe and/or the dew pointer over heating while trying to remove excess moisture. In these instances, no corrections were attempted.

SPECIAL NOTE: These data have not had Dr. Dave Jorgensen's vertical wind algorithm applied to them. Only the Aircraft Operations Center standard vertical wind algorithm has been applied. A new post-flight data processing algorithm was employed which currently lacks the Jorgensen method. The data can and will be rerun if required by the investigator.

	Take off	Land
Aircraft Static Pressure	1009.5 mb	1009.3 mb
Corrected Tower Pressure	1012.2 mb	1012.9 mb

Flight Director: Tom Shepherd
813-828-3310 x3053

U.S. Dep't. of Commerce / NMAO / NOAA / Aircraft Operations Center

FLT ID: 050917H	From: KPSM	To: KPSM
Flt No: 05-	In: 2354 ^Z	On: 2347 ^Z
ETD: 1630 ^Z	Out: 1602	Off: 1611
ETE: 9+00	Blk Time: 7+52 7.9 Hrs	Flt Time: 7+36 7.6 Hrs
Sponsoring Org: NOAA/HRD	Program: Hurr 05	Purpose: E.T. OPHELIA

AOC Flight Crew

Aircraft Commander: KENNEDY, P ^{x18} ✓	Data System: McMillan, S ✓
Co-Pilot: STRONG, T ✓	AVAPS:
Navigator: GALLAGHER, T ✓	System Engineer: KERR, B ✓
Flight Eng: BAST, G ✓ WADE, S ✓	AA:
Flight Director: SHEPHERD, T ✓	AA:
Avionics: OLNEY, B ✓	Crew Chief:

Participating Scientists / Visitors

Name (Last, First)	Activity on Aircraft	Affiliation
ABERSON, S ✓	PI	NOAA/HRD
LEIGHTON, P ✓	HAPS	
VALDE, K ✓	I	
ABRAHAM, JY	OBS	CANADIAN Wx SVC
PRYSIAZNIUK, T ✓	MEDIA	CTV NEWS

Remarks (Storm Name, Mission ID, Recco Times, Fix Times)	Recco Times	Fix #	Fix Time
Storm Name: _____			
Mission ID: WX16A OPHELIA			

U.S. DEPT OF COMMERCE / NMAO / NOAA / AIRCRAFT OPERATIONS CENTER

FLT ID: 050917H

TIME OFF: 1611 Z

TIME ON: 2347 Z

A/C - Takeoff

WX Station - Takeoff

A/C - Land

WX Station - Land

Pressure

1009.5

29.89

1009.3

29.91

ATIS - Takeoff

ATIS - Land

Data Source

Number

Data Disposition / Date / Quality

Flight Level Tapes

2

Radar Tapes

1

Cloud Physics Tapes /
Cds

0

Video Tapes DVD

Dropsondes

27

Good: 26

Bad: 1

Total: 1 of "good" very late
was-2205.

AXBT

4

AXCP

AXCTD

SONOBUOY

REMARKS:

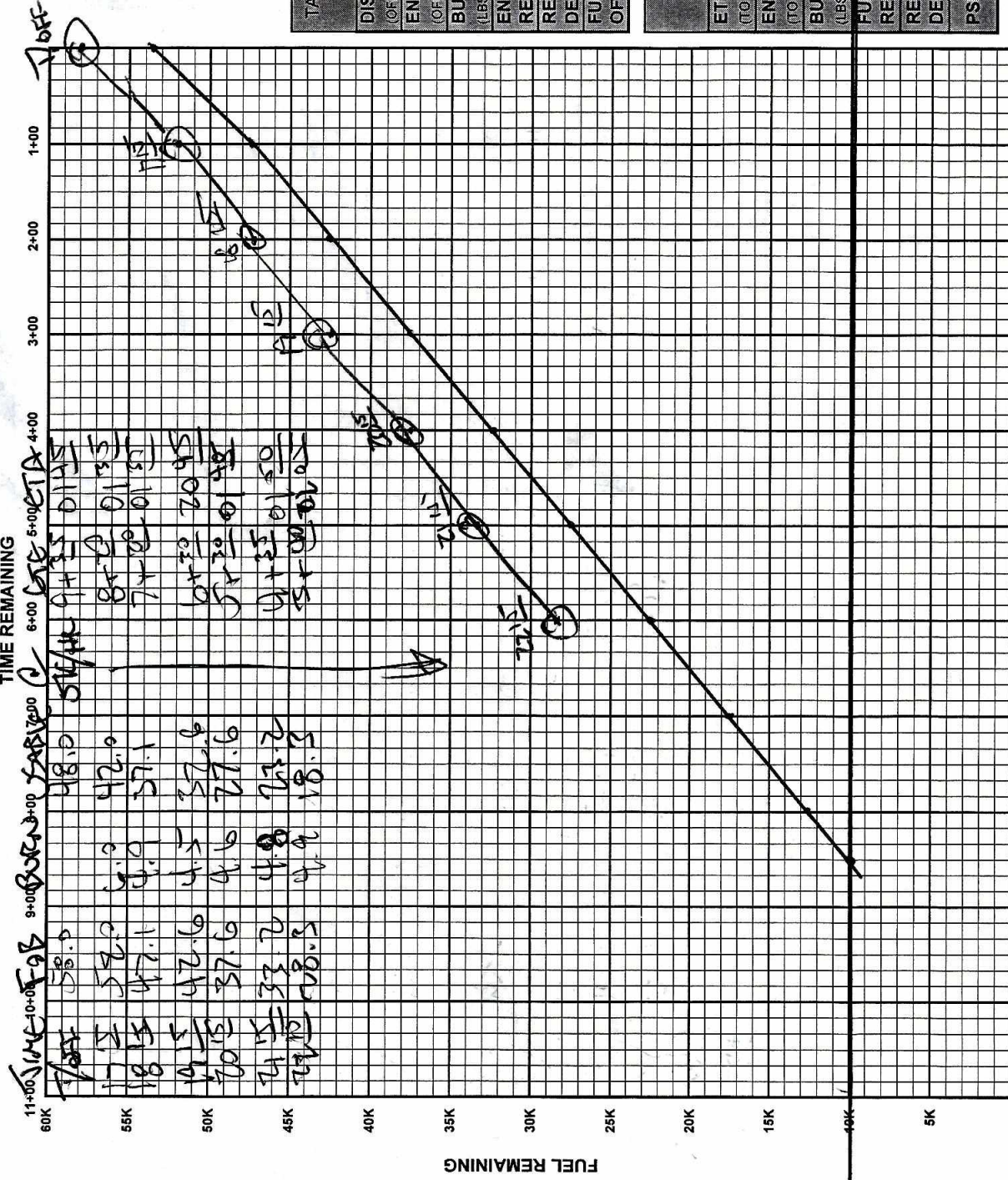
의의
109

15 + 00

12.

— 22 —

TIME REMAINING



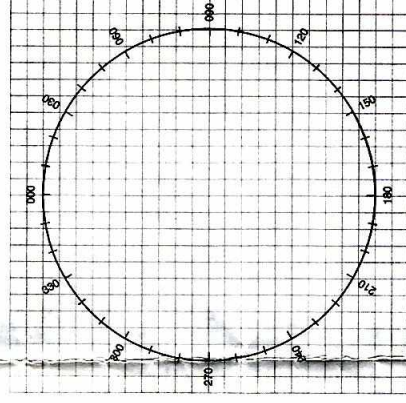
TACTICAL (OFFSTA TO DESTINATION)		
	4 ENG	3 ENG
DISTANCE (OFFSTA TO DEST)		
ENROUTE TIME (OFFSTA TO DEST)		
BURN RATE (LBS/HR)	4500	5500
ENROUTE FUEL REQUIRED		
RESERVE AT DESTINATION		
FUEL AT OFFSTA		

POINT OF SAFE RETURN		4 ENG	3 ENG
EIP DISTANCE (TO DEPARTURE)			
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		
MCH (READING)				GMT	
				GHA	
- MTH (SEXTANT)				CORR	
CE				GHA	
				LONG - W E	
- VAR				EXACT LHA	
DEV				LAT	
				BODY	
				DEC	
				HC / D	
				CORR	
				HC	
				Z	
				ZN	

CEX - ERB METHOD			
COMPASS TYPE	INS1	INS2	WET
MERB (DIAL 000)			
+ ZN			
= MTH			
MCH (READING)			

CEX, ER8 METHOD				
COMPASS TYPE	INS1	INS2	WET	
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	

DISTANCE REMAINING

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

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

[illegible]

050917H Time	Lat	Lon	TA	TD	Trk	Hdg	RA	PS	SP	WD	WS	WZ	Comments
160150	43. 4.20	-70.48.66	20.8	16.3	193.5	147.7	9976.0	1009.5	2856.5	147.1	4.0	.3	Block out
161101	43. 4.50	-70.49.26	19.1	16.6	329.0	330.2	3.0	1010.0	1010.4	54.5	3.9	.2	Take off
163628	42.56.58	-68.56.10	-1.7	-3.4	141.6	143.0	4770.0	571.0	1006.3	293.9	3.2	.4	D1; wnds 17s
165431	42. 4.74	-67.30.48	2.3	-2.8	90.3	90.8	4775.0	570.7	998.4	299.1	4.5	.8	D2; wnds 19s
165541	42. 4.50	-67.23.28	3.7	-5.8	99.2	99.8	4786.0	570.3	996.6	310.5	3.7	.2	D3; wnds 28s BT1 (CNTR??)
170303	41.42.72	-66.47.04	4.5	-6.4	134.2	139.3	4784.0	570.6	995.3	256.7	12.3	.9	D4; wnds 8s
170745	41.27.36	-66.25.02	5.0	-9.5	132.3	139.5	4797.0	570.5	995.9	260.5	18.8	.4	D5; wnds 204s
171811	40.57.00	-65.38.70	1.6	-15.3	81.2	89.0	4826.0	570.3	1005.7	223.2	27.2	1.2	D6; wnds 36s
173011	41.17.64	-64.19.26	1.3	-21.5	62.7	66.3	4836.0	570.5	1008.1	229.5	27.9	.3	D7; wnds
174312	41.49.26	-62.57.36	-1.4	-4.1	63.7	67.6	4842.0	570.5	1012.9	223.9	22.7	.4	D8; wnds 11s
180311	42.24.66	-60.48.06	-2.4	-14.7	70.1	74.5	4851.0	570.5	1017.1	223.6	18.9	.1	
180330	42.25.20	-60.46.02	-2.4	-14.3	70.1	74.4	4851.0	570.5	1017.1	223.6	18.7	.3	D9; wnds 19s
182338	43. 6.78	-58.41.82	-2.6	-5.4	66.4	67.5	4852.0	570.6	1017.0	244.8	14.7	.2	D10; wnds 10s
184331	43.47.88	-56.36.06	-6.1	-11.7	64.9	64.2	5483.0	526.7	1016.1	257.5	17.6	.2	D11; wnds 21s
184413	43.49.44	-56.31.56	-6.6	-9.2	64.8	64.2	5483.0	526.7	1017.1	256.3	18.2	.1	
184416	43.49.50	-56.31.20	-6.7	-9.1	64.8	64.3	5483.0	526.7	1017.1	256.1	18.2	.3	Now FL170
190342	44.34.56	-54.33.78	-7.1	-10.3	299.0	296.9	5463.0	526.9	1016.4	265.0	15.3	.0	D12; wnds 26s
193255	45.36.00	-56.59.58	-6.8	-9.6	359.4	350.4	5440.0	527.0	1013.4	243.9	25.5	.1	D13; wnds 16s
195053	46.59.40	-57. 4.20	-8.5	-10.9	239.9	243.3	5596.0	515.2	1012.4	253.2	18.1	-1	D14; wnds 15s
195130	46.58.32	-57. 6.96	-8.0	-11.7	240.5	243.3	5691.0	509.0	1012.2	252.7	17.6	.1	
195137	46.58.08	-57. 7.50	-8.9	-11.8	240.5	243.3	5703.0	508.2	1012.0	253.4	16.9	.1	Climb FL180
195141	46.57.96	-57. 7.80	-8.9	-11.9	240.5	243.3	5708.0	507.7	1011.6	253.8	16.9	.3	D15; wnds 26s
195656	46.47.22	-57.32.76	-9.1	-10.8	236.4	238.8	5746.0	505.6	1012.0	247.2	18.0	.3	D16; wnds 15s
201222	46.12.24	-58.48.72	-8.9	-10.7	237.5	240.5	5753.0	505.7	1012.5	251.7	20.7	.2	D17; NO wnds (winds at 2106Z)
203449	45.24.72	-60.37.32	-8.3	-10.0	237.1	241.2	5751.0	505.5	1010.2	258.7	22.0	.1	D18; wnds 78s (drop 2100Z)
205921	44.29.40	-62.21.78	-7.5	-8.5	230.1	232.4	5740.0	505.6	1007.0	236.8	27.7	.2	
210222	44.22.14	-62.33.66	-7.2	-8.2	229.1	232.5	5738.0	505.8	1006.2	245.1	22.8	.5	
211842	43.52.32	-63.55.62	-6.5	-8.1	254.3	254.8	5748.0	505.7	1005.6	248.9	14.5	.3	
212136	43.48.30	-64.11.88	-5.2	-8.6	220.9	224.1	5743.0	505.8	1002.1	239.2	14.4	-6	D19; wnds
212328	43.42.18	-64.19.14	-5.6	-7.2	221.1	221.3	5748.0	505.5	1003.1	211.9	11.2	1.0	D20; wnds 30s
213038	43.21.18	-64.45.66	-3.6	-6.5	270.1	264.7	5739.0	505.9	997.9	205.7	15.0	.5	D21; NO wnds BT2
213219	43.21.36	-64.55.38	-4.0	-6.7	271.3	267.9	5743.0	505.9	999.2	209.4	15.3	.1	D22; wnds 24s
214630	43.21.12	-66.20.04	-3.1	-21.3	269.7	267.5	5740.0	505.6	997.3	240.1	15.7	.5	D23; wnds 28s, BT3
220230	43.18.96	-67.55.62	-7.0	-10.8	178.9	183.8	5734.0	505.8	1005.8	244.1	9.9	.1	D24; wnds 10s
222227	41.51.72	-67.50.76	-5.8	-27.7	90.3	93.8	5759.0	505.8	1006.4	248.7	16.9	.2	D25; wnds 44s, BT4
223559	41.54.18	-66.18.90	-3.3	-26.8	.1	352.3	5765.0	505.9	1001.2	244.5	24.6	.1	D26; wnds 19s
225327	43.19.98	-66.19.62	-5.3	-15.5	358.9	354.5	5741.0	505.6	1002.5	237.0	15.6	.1	D27; wnds 19s
225758	43.32.28	-66.36.90	-8.4	-28.2	262.3	261.1	6366.0	466.1	999.3	239.0	13.7	.7	RTB; chips light #2 fairly stdy; #3 also
"flickering"													
234713	43. 4.02	-70.48.90	18.5	15.8	328.2	329.8	-6.0	1010.9	1010.2	143.9	4.3	-4	Land
235419	43. 4.20	-70.48.66	18.2	15.2	243.2	150.5	-6.0	1010.4	1009.7	95.6	.9	1.2	Block in

NOAA · AOC · SED
N42RF AVAPS DROP LOG

Project: Hurricane '05
Take Off:

Mission: OPHELIA

Flight ID: 050917H

Landing:

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Winds Time	Operator	Comments	Good ?
1	011 378 154	1	-0.3	1636	17	Kerr	Codeless	✓
2	011 378 095	1	-0.6	1654	19			✓
3	011 378 098	2	-0.8	1655	28		BT	✓
4	011 278 118	3	-0.5	1703	8			✓
5	011 378 097	1	-0.4	1707	204		late winds	✓
6	011 378 156	2	0	1718	36			✓
7	011 378 152	1	0	1730	38			✓
8	011 378 155	1	-0.6	1743	11			✓
9	012 225 067	1	0	1803	19			✓
10	012 615 150	2	-0.3	1823	10			✓
11	011 378 094	1	-0.4	1843	21			✓
12	012 025 087	2	-0.5	1903	26			✓
13	011 378 096	1	-0.4	1933	16		No altitude data until near splash	✓
14	011 378 091	2	0	1950	15			✓
15	012 025 090	1	-0.5	2012	26			✓
16	011 378 092	1	-7	2034	15	OLNEY		✓
17	012 615 155	2	-.4	2059	LATE		NO WINDS TILL LATE 900MB LATE WINDS	
18	011 218 135	3	0	2100	78		LATE WINDS	
19	011 245 146	1	-.8	2121				
20	011 378 089	2	-.3	2123	30			✓
21	011 378 090	3	0	2130			B.T. NO WINDS	
22	011 378 161	4	0	2132	24			
23	011 378 024	1	-.4	2146	28		B.T.	✓
24	012 025 088	1	-.6	2202	10			✓
25	012 225 050	1	-.4	2222	44		B.T.	✓
26	012 225 070	2	-.5	2236	19			✓
27	012 615 152	3	0	2253	19		ABORTED MISSION DUE TO CHIPS LIT	✓
28	011 218 023	1	-.3					
29								
30								
31								