

Aeronomy Lab

Clouds and Radiation

Weak Orlando Convection

Flight #3: 000506H

<u>Sensor or system</u>	<u>Number or Name</u>
INE	2
Accelerometer	2
Temperature Probe	1
Dew Point Probe	1
Altitude (for vertical wind)	RA-159
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO2993.CON

Notes:

Dewpoint (DW1) was not functioning properly due to being "maxed out" and was replaced by DW2 from 2022:16-2036:17. Dewpoint exceeded ambient temperature several times due to heavy precipitation. DW1 had two overshoots removed and patched 1945:10-1945:40 and 2020:45-2021:15. Several other overshoots in DW1 were replaced by DW2 (1906:02-1906:53, 2001:11-2002:44, 2013:16-2014:55 and 2050:00-2051:42).

Radar altitude (RA-159) was replaced by RA-232 prior to takeoff due to spikes (1850:01-1901:36). RA-159 was replaced by RA-232 just prior to landing due to spikes (2107:49-2118:00).

Static pressure (PSF) had a spike removed and patched at landing 2112:45-2113:15.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1020.1	1017.3
Corrected tower pressure	1021.0	1018.3

The aircraft INE positions were renavigated 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 Meteorologist: Stan Czyzyk, (813) 828-3310 ext. 3086

Flt ID: 000506H	From: kmcf	To: kmcf
Flt No.: 00-41	Blk In: 2019Z	ATA: 2113Z
ETD: 19Z	Blk Out: 1843Z	ATD: 1859Z
ETE: 22Z	Blk Time: 2.36 2.6	Flt Time: 2:14 2.2
Sponsor Org: NOAA/AL	Program: CLOUDS + RAD	Purpose: CLOUD PENE ONLAND

AOC Personnel

AC: TAGGART, B	Sys Eng: McMILLAN, S ✓
CP: OMARA, T	Data Sys: HORN BROOK, C ✓
Nav: NEWMAN, C ✓ / ADLER, J ✓	Radar: ROLES, J ✓
FE: TORREY, R ✓	GPS/BT: ✓
Avionics:	Cld Phys:
FD: C2727K, S ✓	

Participating Scientists/Visitors/AOC

Name (Last, First)	Activity on Aircraft	Affiliation
Solomon, S ✓	P.I	NOAA/AL
DANIEL, J ✓	MIDAS	"

Proposed/Actual Mission/Remarks (Recco, Fixes, Storm, PENET, NHOP #)

HD

U.S. Dept. of Commerce/NOAA/Aircraft Operations Center					AOCWF2
Flt ID: 000506H		Time Off: 1859Z		Time On: 2113Z	
	A/C (Take Off)	Wx Stn (Take Off)	A/C (Land)	Wx Stn (Land)	
Pressure	1019.0	30.14	1017.5	30.08	
	Number	Data Disposition/Date/Quality			
Slow/Fast Flt Lvl Tapes	2				
Radar Tapes	2				
Cloud Physics Tapes					
Video Tapes					
Flt Lvl Data Printout					
AXBT					
AXCP					
AXCTD					
GPS					
Video					
	Forward	Left Side	Right Side	Down	Remarks
Time On					
Time Off					
Rate					
Remarks					

3608 1415

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MISSION LOG

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PAGE ___ OF ___

2820 081 180

19m

POSITION REPORT

- 1. POSITION**
- 2. TIME**
- 3. ALTITUDE**
- 4. NEXT POSITION**
- 5. ETA**
- 6. NEXT POSITION**

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:

**MAYDAY, MAYDAY, MAYDAY
THIS IS NOAA, NOAA**

- HEADING _____ TRUE/MAG _____
- AT _____ KTS TRUE/INDICATED _____

- FLIGHT LEVEL OR ALTITUDE
- WE ARE A P-3 AIRCRAFT WITH

- NATURE OF EMERGENCY
- ASSISTANCE DESIRED

- PILOT INTENTIONS
- WE HAVE
- ENDURANCE REMAINING

30 miles

[illegible]

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

TIME	LOT	CON	TK	HD	TA	TD	WD	WJ	PA	GA	PJ	SP	REMARKS
190450	2804	8224											CLOUD BASE 6000 FT
190915	2817	8221	36	35	3.7	-22.7	315	9.5	3605	3769	648.7	1011.9	LEVEL 12K ABOVE CLOUDS
													LEVEL 14K ON TOP
193500	2859	8120	070										END PT
194420	2854	8140											CLOUD TO 11K RAD
2035													NEXT CLOUD
													ABOVE CLOUD
204500	2815	8159	78	79	3.8	1.9	245	2.1	2701	2810	727.8	1016.6	DESCEND INTO CLOUD 9K
2050													DESCEND + TURN 7K
2053	2816	8139	259	259	2.8	6.9	100	6.5	2083	2173	786.8	1017.2	LEVEL 7K