

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

AOCWF1

Flt ID: <i>N050614</i>	From: <i>KMCF</i>	To: <i>KMCF</i>
Flt No: <i>05-086</i>	Blk In: <i>1834Z</i>	ATA: <i>1824Z</i>
ETD: <i>1700Z</i>	Blk Out: <i>1753Z</i>	ATD: <i>1808Z</i>
ETE:	Blk Time: <i>:41 (.7)</i>	Flt Time: <i>:16 (.3)</i>
Sponsor Org: <i>NOAA AL</i>	Program: <i>AIR CHEM</i>	Purpose: <i>TEST FLT</i>

AOC Personnel

AC: <i>POSTON</i>	Sys Eng:
CP: <i>FINN</i>	Data Sys: <i>BROGAN</i>
Nav:	Radar : <i>TONG</i>
FE:	GPS/BT: <i>CARPENTER</i>
FD: <i>DAMIANO</i>	Old Phys : <i>ROGERS</i>
Avionics:	

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
<i>Hübner, G.</i>	PI <i>PI</i>	<i>NOAA AL</i>
<i>De Gouw, J. ^{Joat}</i>	<i>PI Science, PTRMS</i>	
<i>HOLLOWAY, J.</i>	<i>Science, CO</i>	

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

Urban emissions
Biogenic emissions

TABIR 28°25'
83°00'
at 5K

~~*160° 82°30'*~~
if possible

~~*22°30' 28°30'*~~
~~*82°50' 82°50'*~~
FL 2500-2500

Mission aborted *due to pressurization problems*

172322 29.91

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AOCWF2

Flt ID: *N050614* Time Off: *1808Z* Time On: *1824Z*

	A/C (Take Off)	Wx Station (Take Off)	A/C (Land)	Wx Station (Land)
Pressure	<i>1012.5</i>	<i>29.91</i>	<i>1012.4</i>	<i>29.91</i>

	Number	Data Disposition / Date / Quality
Flt Lvl Tapes	<i>1</i>	
Radar Tapes		
Cloud Physics Tapes		
Video Tapes		
AXBT		
AXCP		
AXCTD		
Dropsondes		

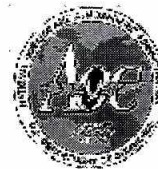
Video

	Forward	Left Side	Right Side	Down	Remarks
Time On					
Time Off					
Rate					

Remarks



**NOAA G-IV ERROR SUMMARY
AERONOMY LAB SUMMER 2005
MISSION #1**



Flight ID: N050614

<u>Sensor or system</u>	<u>Number or Name</u>
INE (for wind derivation)	VEW_PITR, VNS_PITR
Accelerometer	ACINS_PITR
Temperature Probe	AT1
Dew Point Probe	DPRC
Static Pressure	PS2C
Dynamic Pressure	QC2C
Attack Angle	AKRD1
Slip Angle	SSRD2
Vert. Wind	PALT
Constants File	49cal041
Project Directory	/proj/506

Local surface observation not current or unavailable.

Notes:

There were no data gaps.

The mission was aborted shortly after takeoff due to aircraft pressurization problems.

All instruments worked optimally during the brief flight.

	Takeoff	Landing
Aircraft Static Pressure	1012.5mb	1012.4mb
Corrected Tower Pressure	1012.5mb	1012.5mb
Flight Director:	A. Barry Damiano	(813) 828-3310 ext. 3073

NOAA AOC Gulfstream GIV-SP N49RF

Flightplan 06/14/2005

Objective:

- Verify instruments are operational
- Verify vertical operational range (surface to operational ceiling/45 kft)
- Test flow systems
- Sample downwind/over of urban center
- Sample biogenic emissions

Anticipated meteorology:

Weather forecast for 0613 1800Z predict light easterly winds within PBL over Tampa

Anticipated duration: ~ 3 hrs

Doors Close: 1230 hrs

Takeoff from MacDill: 1300 hrs

1) Point A (KMCF: 27° 51' N, 82° 31' W)

Head out west over the Gulf to play area at pilots discretion while climbing en-route to 43 kft.

Delay at each of the following flight levels for 4 min each

FL 100
FL 200
FL 300
FL 350
FL 400
Delay at FL 450 for 15 min

Direct climb @ 1 kft/min
= 40 min
+ 5 x 4 = 20 min
+ 15 = 15
+ 15 = 15

level 90 min
top level
descent

2) Head to PT B (27° 30' N, 82° 50' W);

Descent en-route best rate into Marine Boundary Layer (MBL: expected to reach up to about FL 45;

Arrive at PT B at FL 25-35

3 kft/min = 15 min

Δ 60 nm

3) Head to PT C (28° 30' N, 82° 50' W) across Tampa Bay west of KMCF & KTPA at FL 25-35

Δ 50 nm

4) Head to PT D (29° 20' N, 82° 50' W) at FL 25-35

Δ 107 nm

5) Head to PT E (28° N, 81° 30' W) at FL 25-35

Δ 58 nm

6) Head to PT F (27° 37' N, 82° 30' W) at FL 25-35; STAY NORTH OF LAKE PLACID MOA IF NECESSARY

Δ 14 nm

7) RTB (KMCF: 27° 51' N, 82° 31' W)

289 nm

≈ 90 min

clockwise
440 NM
3x15

Best rate descent 450 to ~300

