

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

FLT ID: 2013061811	From: KMQY	To: KMQY
FLT #:	Blk In: 0023 Z	Lnd Time: 0016 Z
ETD: 2200 Z	Blk Out: 2144 Z	T/O Time: 2153 Z
ETE: 7+00	Total Blk: 2.7	Total Flt: 2.4
Sponsoring Org: (CS)	Program: SENEX	Purpose: ST LOUIS NIA HT

AOC Flight Crew

Aircraft Commander: KIBBY	SSA: ROSMO
Co-Pilot: KERNY	AVAPS: /
Navigator: SLOAN,	Scientists: WARNEKE, CARSTEN
Flight Eng: HEYSTER	Scientists: FOLLOCK, LANA
Flt Director: SEARS,	Scientists: WELTI, ANDRE
SEB: PAUL,	Scientists: EDWARDS, PETER
Crew Chief:	Visitors: RICHARDSON, MATT

	A/C - Takeoff	Wx Station - Takeoff	A/C - Land	Wx Station - Land
Pressure				

AS REQUIRED BY ORM	YES	NO	REMARKS
VOLCANIC ASH			
SCIENCE MISSION WITHIN BOUNDARY LAYER			
LACK OF PRECIPITATION			
RELATIVE HUMIDITY AT OR ABOVE 80%			
LARGE AIR-SEA TEMPERATURE GRADIENT			
HIGH SURFACE WINDS			
LONG FETCH AND/OR DURATION OF SFC WIND			
SEA SALT ACCRETION FORECAST			
SEA SALT ACCRETION OBSERVED			

Dropsondes	Good:	Bad:	Sent:
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AXBT	Good:	Bad:	Sent:
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List other data sources in Remarks section

Remarks (Storm VDM Identifier, Mission ID, Fix Times)	Fix #	VDM	
		Ob Num	Fix Time / SLP
Storm Number Identifier (VDM): (ie: AL072012)			
TCPOD/WSPOD Mission ID: SENEX 67 (ie: NOAA2 2418A SANDY)			

Remarks:

FLAP ASym - HOLD TO GET LIGHT
ENOUGH TO LAND

- HOLDING SOUTH OF BNA FOR SOME
COLLECTION

14-20



N42RF ERROR SUMMARY

SENEX 2013 KMQY

18 June 2013



Flight ID: 20130618H1

<u>Sensor or system</u>	<u>Number or Name</u>
Static Pressure Probe	PSM.2
Dynamic Pressure Probe	PQM.2
Total Temperature Probe	TTM.1
Dewpoint Temp. Probe	TDM.2
Vertical Accelerometer	AccZI.1
Altimeter	AltIGPS.1
INE Selection	1
Differential Attack Pressure Probe	PDALPHA.1
Differential Sideslip Pressure Probe	PDBETA.1
Dynamic Attack Pressure Probe	PQALPHA.1
Dynamic Sideslip Pressure Probe	PQBETA.1
Flight Directory	acdata/MET/2013/20130618H1

Local Met Data:	<u>Takeoff</u> (2153Z)	<u>Landing</u> (0016Z)
Aircraft Static Pressure	997.5mb	996.1mb
Tower Pressure (corrected)	993.8mb	994.3mb

Notes:

TDM.3 was unavailable for this flight.

This mission was aborted due to a mechanical issue with the aircraft that required it to return to the airport. While the plane consumed fuel to become light enough to land, it circled west of the Nashville area with flaps out and at a relatively slow speed. The altered flight profile had an adverse affect on the vertical winds.

After the aircraft returned to MacDill AFB, a few instruments that were installed on N42RF were removed and calibrated in the AOC calibration laboratory. The final Quality Control data sets use the post project calibration coefficients for determining the output of the instruments.

The following parameters that have been updated from the original data set follow.

PDALPHA.2 - Radome Attack Differential Pressure Measured

PDBETA.2 - Radome Sideslip Differential Pressure Measured

PDALPHA.1 - Fuselage Attack Differential Pressure Measured

PQALPHA.1 - Fuselage Attack Dynamic Pressure Measured

PDBETA.1 - Fuselage Sideslip Differential Pressure Measured

PQBETA.1 - Fuselage Attack Dynamic Pressure Measured

PQM.3 - Measured Fuselage Dynamic Pressure, Two Sources --co-pilot

PQM.4 - Radome Dynamic Pressure Measured

TTM.1 - Measured Total Temperature Degree

TTM.2 - Measured Total Temperature Degree

Any derived value using the outputs from the measured parameters listed above have changed slightly from the values measured in real-time.

See SENEX_READ_ME.txt for file information.

Flight Director:

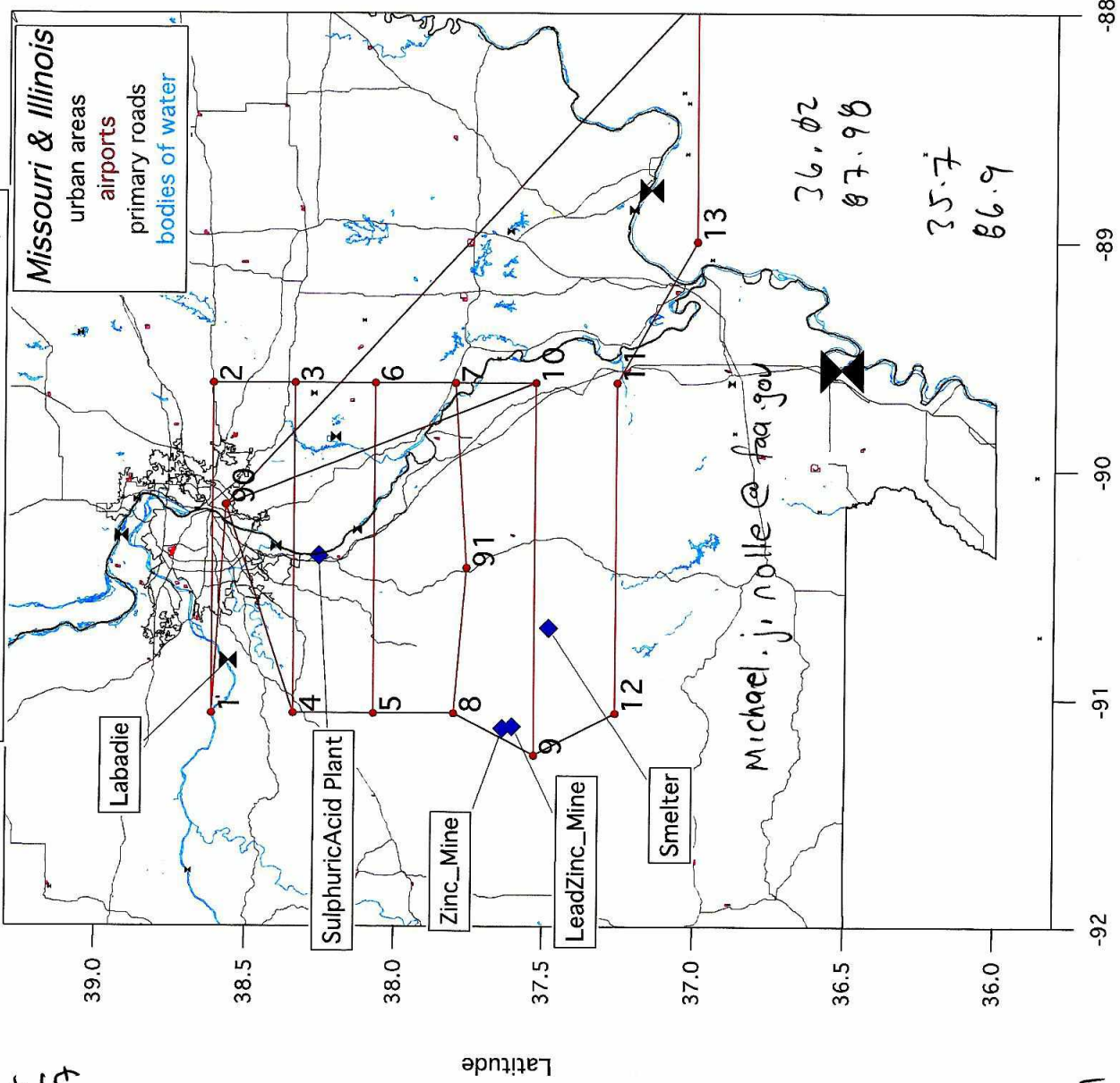
Phone #:

Ian Sears

(813) 828-3310 ext. 3039

CNC - OPS 34 15N + 10 118.4 / HS 32 1512 RLS / RT 090 / SN
 0716
 114
 77
 37

StLouis_plus_NtoS_day_into_night



WASH
 YILUL

6/18

START - 2138 / 2143
 TAXI - F' 360/6 29.92 32
 I - 2148
 TPO - 2153
 IV - #1
 JHS 024 / 22 -
 JHS 052 / 31

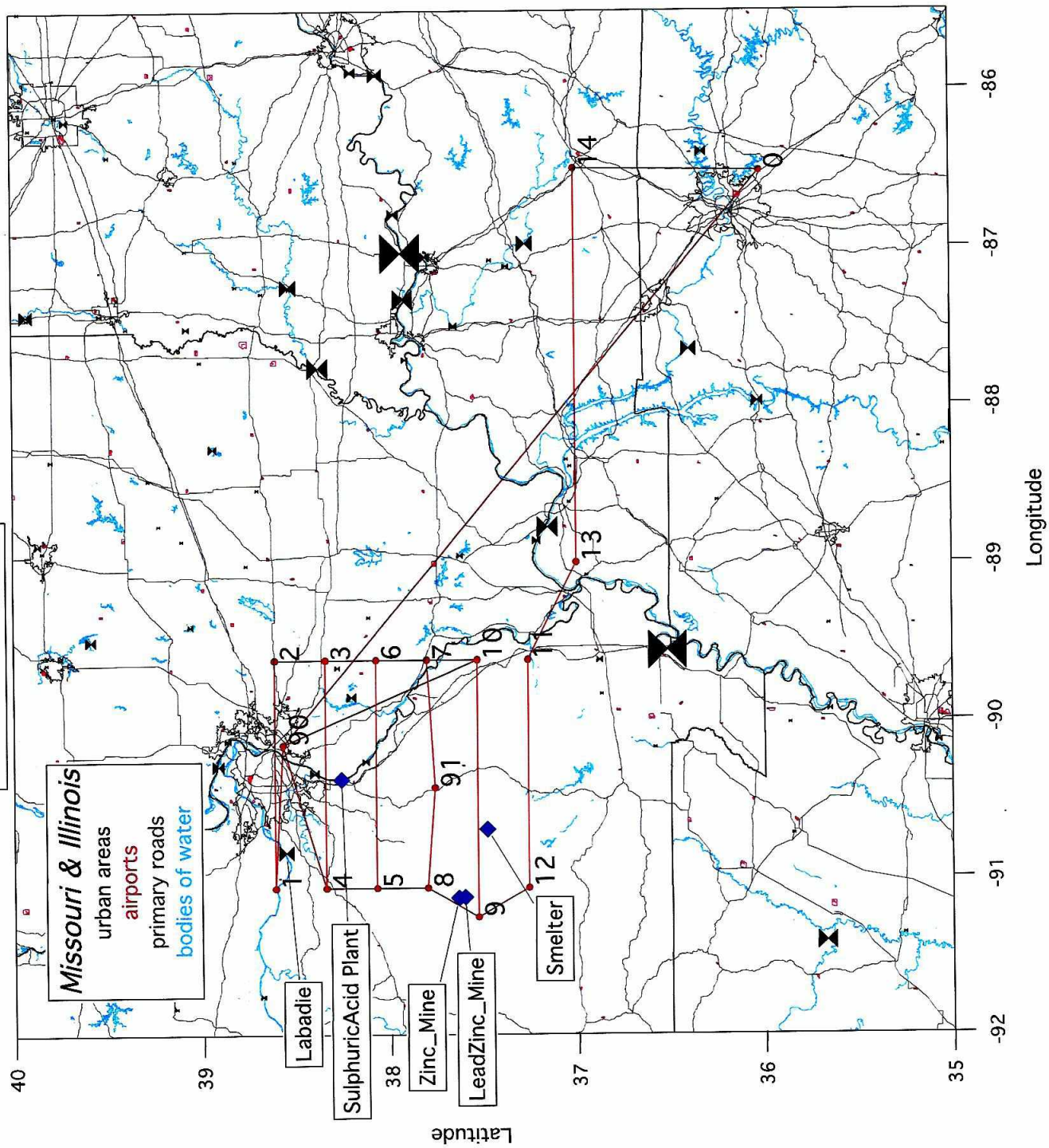
missed approaches at Pt.91
 KFAM Farmington optional

adjust legs to the E or W
 according to wind direction

return from Pt 13 to Smyrna
 at ~ 2000 ft AGL to possibly
 see IN, KY power plant plumes

LAND - 0017 (#2) MOHKE
 DEWBY
 1M - GFM 136 / 18 -
 GFM 121 / 30
 BNA 204 / 34
 BNA 222 / 39
 RT 300
 270 / 10-20

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StLouis_plus_NtoS_DtoN_b

est_time	alt_ft	Comments	lat_deg	lat_min	lng_deg	lng_min	lat	lng	point	AGL_MSL
0:00:00	543	KMQY Smyrna	36	0.54	-86	31.2	36.009	-86.52	0	MSL
0:18:00	18000	enroute up								MSL
0:52:00	18000	enroute down								MSL
1:08:42	300	miss appr KCPS St Louis Dntwn	38	34.22	-90	9.31	38.5704	-90.155	90	AGL
1:10:42	2000									AGL
1:21:21	2000		38	36.81	-91	3.79	38.6136	-91.063	1	AGL
1:41:25	2000		38	36.81	-89	37.15	38.6136	-89.619	2	AGL
1:46:14	2000		38	20.6	-89	37.15	38.3433	-89.619	3	AGL
2:06:22	2000		38	20.6	-91	3.79	38.3433	-91.063	4	AGL
2:11:11	2000		38	4.38	-91	3.79	38.073	-91.063	5	AGL
2:31:24	2000		38	4.38	-89	37.15	38.073	-89.619	6	AGL
2:36:12	2000		37	48.17	-89	37.15	37.8028	-89.619	7	AGL
2:45:37	2000									AGL
2:47:37	300	miss appr KFAM Farmington	37	45.66	-90	25.72	37.761	-90.429	91	AGL
2:49:37	2000									AGL
2:56:34	2000		37	48.17	-91	3.79	37.8028	-91.063	8	AGL
3:02:03	2000		37	31.95	-91	15	37.5325	-91.25	9	AGL
3:25:03	2000		37	31.95	-89	37.15	37.5325	-89.619	10	AGL
3:33:03	10000	enroute up, note nocturnal jet								AGL
3:33:03	10000	enroute down, note nocturnal jet								AGL
3:44:59	300	miss appr KCPS St Louis Dntwn	38	34.22	-90	9.31	38.5704	-90.155	90	AGL
3:46:59	2000									AGL
3:58:15	2000		38	20.6	-91	3.79	38.3433	-91.063	4	AGL
4:18:24	2000		38	20.6	-89	37.15	38.3433	-89.619	3	AGL
4:23:12	2000		38	4.38	-89	37.15	38.073	-89.619	6	AGL
4:43:26	2000		38	4.38	-91	3.79	38.073	-91.063	5	AGL
4:48:14	2000		37	48.17	-91	3.79	37.8028	-91.063	8	AGL
4:55:11	2000									AGL
4:57:11	300	miss appr KFAM Farmington	37	45.66	-90	25.72	37.761	-90.429	91	AGL
4:59:11	2000									AGL
5:08:35	2000		37	48.17	-89	37.15	37.8028	-89.619	7	AGL
5:13:24	2000		37	31.95	-89	37.15	37.5325	-89.619	10	AGL
5:36:24	2000		37	31.95	-91	15	37.5325	-91.25	9	AGL
5:41:53	2000		37	15.73	-91	3.79	37.2622	-91.063	12	AGL
6:02:20	2000		37	15.73	-89	37.15	37.2622	-89.619	11	AGL
6:07:20	7000	enroute up, down								AGL
6:12:16	2000		37	0	-89	0	37	-89	13	AGL
6:47:47	2000		37	0	-86	30	37	-86.5	14	AGL
7:03:25	2000									AGL
7:05:25	543	KMQY Smyrna	36	0.54	-86	31.2	36.009	-86.52	0	AGL

KH08

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