

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

FLT ID: 203070314	From: KMGV	To: KMGV
FLT #:	Blk In: 0803 Z	Lnd Time: 0754 Z
ETD: 0100 Z	Blk Out: 0050 Z	T/O Time: 0056 Z
ETE: 7400	Total Blk: 7.2	Total Flt: 7.0
Sponsoring Org: OAR	Program: SENEX	Purpose: AR / POWER PLANTS

AOC Flight Crew

Aircraft Commander: SWEENEY	SSA: BOSKO
Co-Pilot: PRICE / DIDIER	AVAPS: /
Navigator: SLOAN /	Scientists: POLLOCK, LANA
Flight Eng: KLIPPER	Scientists: WARNER, CARSTEN
Flt Director: SENES /	Scientists: EDWARDS, PETER
SEB: GREENE /	Scientists: LIAO, JIN
Crew Chief:	Visitors: /

	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)

Storm Number Identifier (VDM):
(ie: AL072012)

TCPOD/WSPOD Mission ID:
(ie: NOAA2 2418A SANDY)

Remarks:

Fix #	VDM	
	Ob Num	Fix Time / SLP

SENEX 14



N42RF ERROR SUMMARY

SENEX 2013 KMQY

02 July 2013



Flight ID: 20130702H1

<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/2013/20130702H1

Local Met Data:	<u>Takeoff</u> (0056Z) 03July	<u>Landing</u> (0754Z) 03 July
Aircraft Static Pressure	998.7mb	998.0mb
Tower Pressure (corrected)	997.1mb	998.1mb

Notes:

All AOC instruments worked properly.

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

4436
24 34 44 54 64 74 84 94

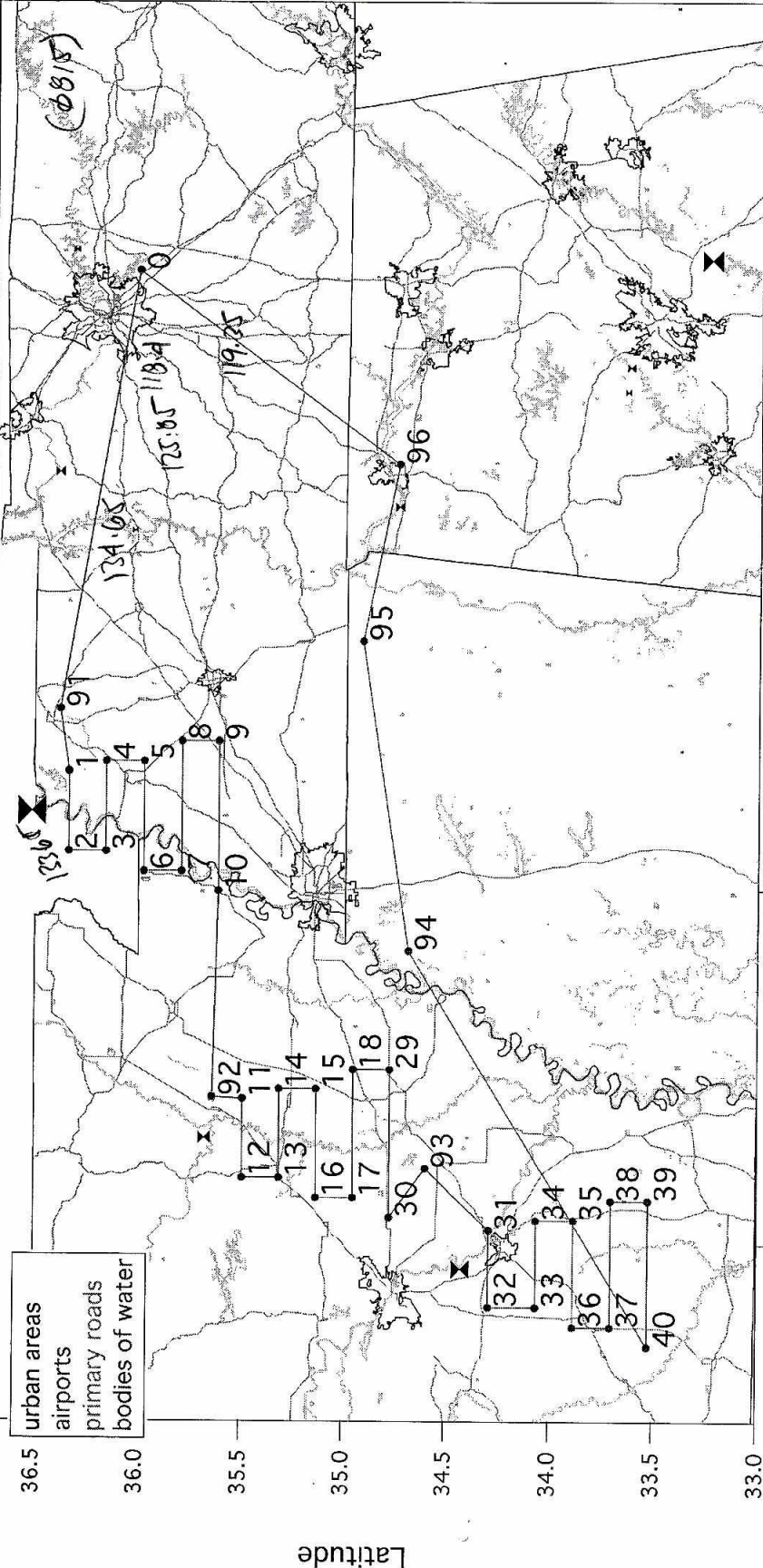
(246/24 66)
T10

KL' KOCV
24' 61M19
24' 61M19
24' 61M19
24' 61M19
24' 61M19

START - 0043 T10 - 0056 44M10 - 755
TAXI - 0050 11 - 0058 11 - 0060
T - 0052 11 - 0100

AR_MO_Power_Plants_LowAppr

urban areas
airports
primary roads
bodies of water



Power Plants:

New Madrid, MO: (36.5147, -89.5617)

Independence, AR: (35.6733, -91.4083)

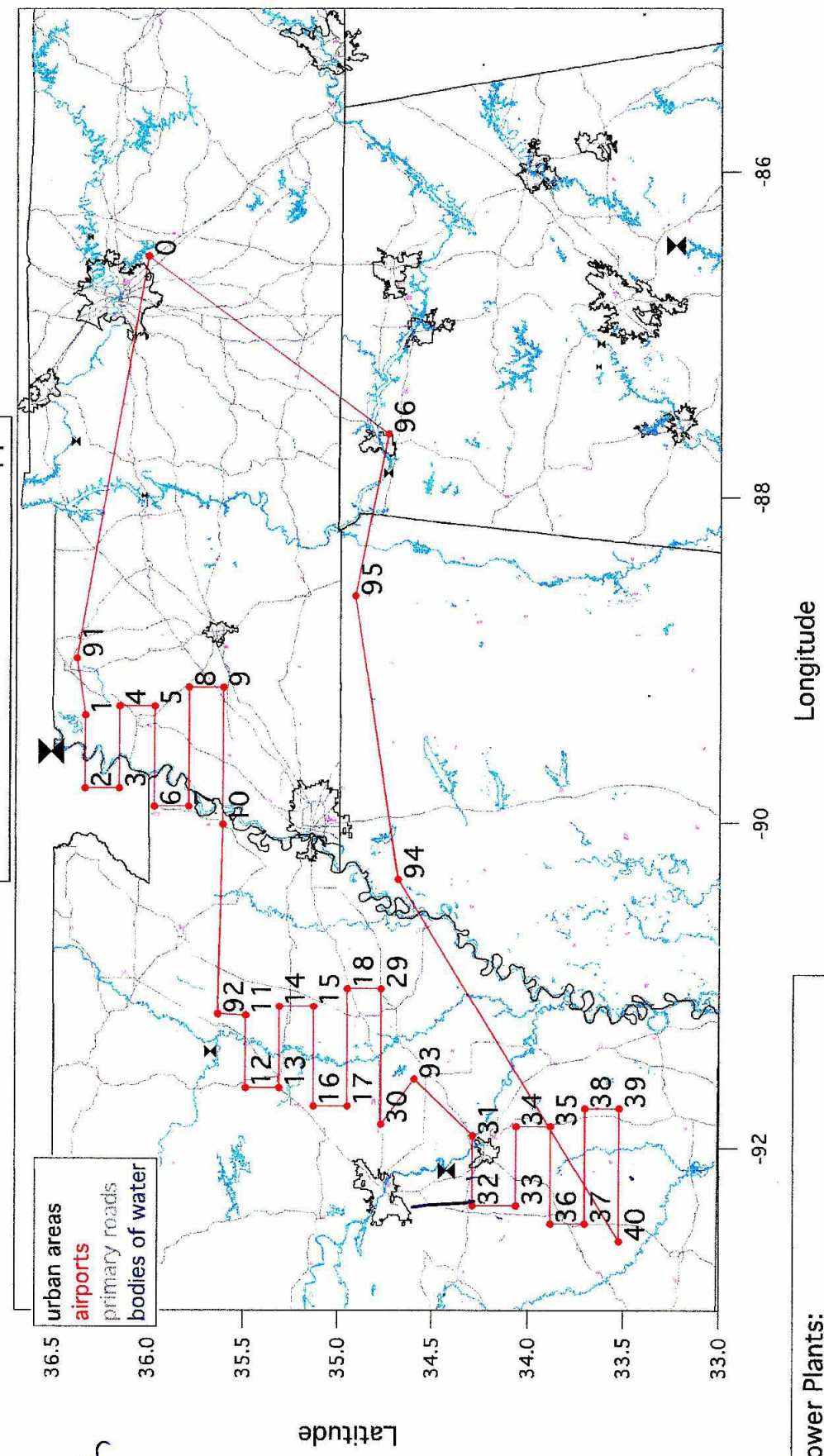
White Bluff, AR: (34.4236, -92.1392)

Sequence of the Power Plants according to weather.
Adjust increments of power plant plume transects according to wind direction and speed.

If only two Power Plants work out:
include the longitudinal transect through MS and AL with low approaches

est time	altit 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	AGL	
0:10:00	10000										
0:26:00	10000										
0:36:00	300	KUCY Everett, TN low approach	36	22.78	-88	59.14	36.3797	-88.986	91	AGL	
0:38:00	2000										
0:41:06	2000	New Madrid PP	36	20.07	-89	20.25	36.3345	-89.338	1	AGL	
0:47:31	2000		36	20.07	-89	47.15	36.3345	-89.786	2	AGL	
0:48:31	1500										
0:53:57	1500		36	20.07	-89	20.25	36.3345	-89.338	1	AGL	
0:54:57	2500										
1:00:22	2500		36	20.07	-89	47.15	36.3345	-89.786	2	AGL	
1:01:22	3000										
1:06:48	3000		36	20.07	-89	20.25	36.3345	-89.338	1	AGL	
1:07:48	4000										
1:13:13	4000		36	20.07	-89	47.15	36.3345	-89.786	2	AGL	
1:15:13	6000										
1:19:39	6000		36	20.07	-89	20.25	36.3345	-89.338	1	AGL	
1:26:04	2000	enroute down	36	20.07	-89	47.15	36.3345	-89.786	2	AGL	
1:29:17	2000		36	9.26	-89	47.15	36.1543	-89.786	3	AGL	
1:36:31	2000		36	9.26	-89	16.89	36.1543	-89.281	4	AGL	
1:39:44	2000		35	58.45	-89	16.89	35.9742	-89.281	5	AGL	
1:48:36	2000		35	58.45	-89	53.88	35.9742	-89.898	6	AGL	
1:51:49	2000		35	47.64	-89	53.88	35.794	-89.898	7	AGL	
2:02:19	2000		35	47.64	-89	10.16	35.794	-89.169	8	AGL	
2:05:32	2000		35	36.83	-89	10.16	35.6138	-89.169	9	AGL	
2:17:41	2000	New Madrid PP MO	35	36.83	-90	0.6	35.6138	-90.01	10	AGL	
2:26:33	8000										
2:34:33	300	M19 Newport, AR low approach	35	38.26	-91	10.58	35.6377	-91.176	92	AGL	
2:37:08	2000	Independence PP AR	35	29.59	-91	11.19	35.4931	-91.187	11	AGL	
2:43:33	2000		35	29.59	-91	37.81	35.4931	-91.63	12	AGL	
2:44:33	1500										
2:49:59	1500		35	29.59	-91	11.19	35.4931	-91.187	11	AGL	
2:51:59	2500										
2:56:24	2500		35	29.59	-91	37.81	35.4931	-91.63	12	AGL	
2:57:24	3000										
3:02:50	3000		35	29.59	-91	11.19	35.4931	-91.187	11	AGL	
3:03:50	4000										
3:09:15	4000		35	29.59	-91	37.81	35.4931	-91.63	12	AGL	
3:11:15	6000										
3:15:41	2000	enroute down	35	29.59	-91	11.19	35.4931	-91.187	11	AGL	
3:22:06	2000		35	29.59	-91	37.81	35.4931	-91.63	12	AGL	
3:25:19	2000		35	18.78	-91	37.81	35.3129	-91.63	13	AGL	
3:32:33	2000		35	18.78	-91	7.86	35.3129	-91.131	14	AGL	
3:35:45	2000		35	7.97	-91	7.86	35.1328	-91.131	15	AGL	
3:44:38	2000		35	7.97	-91	44.46	35.1328	-91.741	16	AGL	
3:47:50	2000		34	57.15	-91	44.46	34.9526	-91.741	17	AGL	
3:58:21	2000		34	57.15	-91	1.21	34.9526	-91.02	18	AGL	
4:01:33	2000		34	46.34	-91	1.21	34.7724	-91.02	29	AGL	
4:13:42	2000	Independence PP AR	34	46.34	-91	51.11	34.7724	-91.852	30	AGL	
4:15:42	4000										
4:18:47	300	KSGT Stuttgart, AR low approach	34	35.97	-91	34.5	34.5995	-91.575	93	AGL	
4:23:47	5000										
4:26:18	2000	White Bluff, AR PP	34	17.31	-91	55.25	34.2885	-91.921	31	AGL	
4:32:43	2000		34	17.31	-92	21.46	34.2885	-92.358	32	AGL	
4:33:43	1500										
4:39:08	1500		34	17.31	-91	55.25	34.2885	-91.921	31	AGL	
4:40:08	2500										
4:45:33	2500		34	17.31	-92	21.46	34.2885	-92.358	32	AGL	
4:46:33	3000										
4:51:59	3000		34	17.31	-91	55.25	34.2885	-91.921	31	AGL	
4:52:59	4000										
4:58:24	4000		34	17.31	-92	21.46	34.2885	-92.358	32	AGL	
5:00:00	6000										
5:04:49	6000		34	17.31	-91	55.25	34.2885	-91.921	31	AGL	
5:11:14	2000	enroute down	34	17.31	-92	21.46	34.2885	-92.358	32	AGL	
5:15:15	2000		34	3.79	-92	21.46	34.0632	-92.358	33	AGL	
5:22:29	2000		34	3.79	-91	51.97	34.0632	-91.866	34	AGL	
5:25:42	2000		33	52.98	-91	51.97	33.8831	-91.866	35	AGL	
5:34:34	2000		33	52.98	-92	28.01	33.8831	-92.467	36	AGL	
5:37:46	2000		33	42.17	-92	28.01	33.7029	-92.467	37	AGL	
5:48:17	2000		33	42.17	-91	45.42	33.7029	-91.757	38	AGL	
5:51:29	2000		33	31.36	-91	45.42	33.5227	-91.757	39	AGL	
6:03:38	2000	White Bluff, AR PP	33	31.36	-92	34.56	33.5227	-92.576	40	AGL	
6:23:00	18000	enroute up & down									
6:42:25	300	KUTA Tunica, MS low approach	34	41.1	-90	20.87	34.6851	-90.348	94	AGL	
6:44:25	2000										
7:06:13	2000	enroute down									
7:08:13	300	KCRX Turner low approach	34	54.9	-88	36.21	34.915	-88.603	95	AGL	
7:16:13	8000	enroute up & down									
7:23:02	300	KMSL Northwest, low approach	34	44.72	-87	36.61	34.7453	-87.61	96	AGL	
7:35:02	12000	enroute up & down									
7:50:31	543	KMQY Smyrna	36	0.54	-86	31.2	36.009	-86.52	0	AGL	

6K 285 4K 29505 3K 1AR 25 2001
 5K 300 AR_MO_Power_Plants_LowAppr 2000



Power Plants:

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