

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

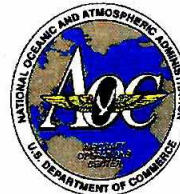
FLT ID: 20130624H1	From: Kmay	To: Kmay
FLT #:	Blk In: Z	Lnd Time: 2208 Z
ETD: Z	Blk Out: 1455 Z	T/O Time: 1501 Z
ETE:	Total Blk:	Total Flt: 7.1
Sponsoring Org:	Program:	Purpose:
AOC Flight Crew		
Aircraft Commander: KIBBY	SSA: BOSKO	
Co-Pilot: MARTIN /	AVAPS: DE GOUW Joesf	
Navigator: SLOAN /	Scientists: RICHARDSON, MATT	
Flight Eng: DARBY / \$ HEYSTER	Scientists: WELT, ANDREA	
Flt Director: SEARS /	Scientists: RE FEUER, SEAN	
SEB CARPENTER /	Scientists: POLLACK, WILL LANA	
Crew Chief:	Visitors:	/ /
	A/C - Takeoff	Wx Station - Takeoff
	A/C - Land	Wx Station - Land
Pressure		
AS REQUIRED BY ORM		YES / NO
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:
AXBT	Good:	Bad:
List other data sources in Remarks section		
Remarks (Storm VDM Identifier, Mission ID, Fix Times)	Fix #	VDM Ob Num
Storm Number Identifier (VDM):		
(ie: AL072012)		
TCPOD/WSPOD Mission ID:		
(ie: NOAA2 2418A SANDY)		
Remarks:		



N42RF ERROR SUMMARY

SENEX 2013 KMQY

22 June 2013



Flight ID: 2013622H1

<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/2013/20130622H1

Local Met Data:	<u>Takeoff</u> (1501Z)	<u>Landing</u> (2008Z)
Aircraft Static Pressure	1006.6mb	999.8mb
Tower Pressure (corrected)	1002.5mb	1000.3mb

Notes:

There is a data gap from 20:51:06Z – 21:09:10Z

There are no data available from Novatel GPS sources.

TDM.3 trended well with TDM.1, however, the average output was about 4.8 C too low.

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

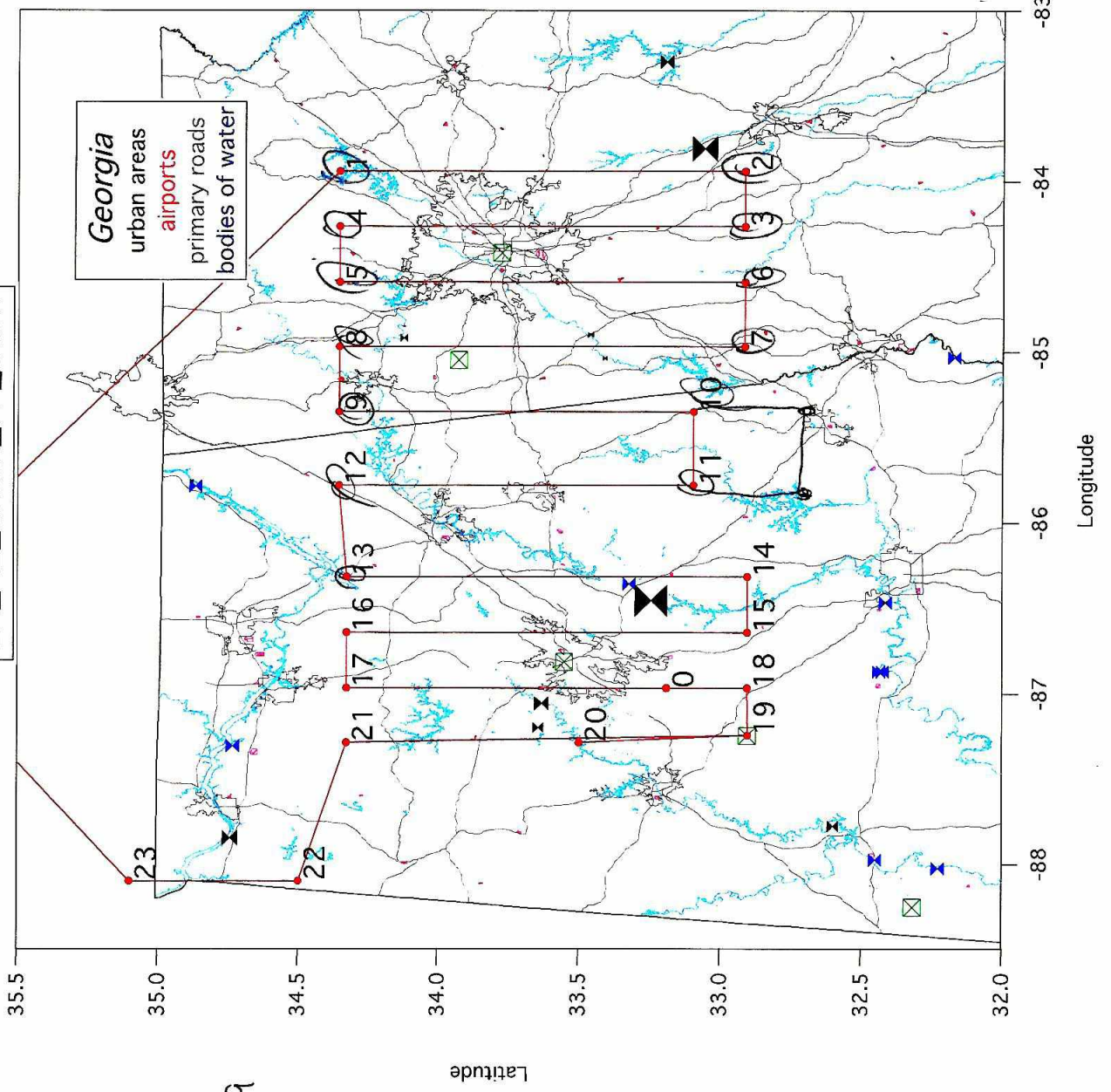
(813) 828-3310 ext. 3039

est time	alt ft	Comments	lat deg	lat min	lng deg	lng min	lat	lng	point
									AGL MSL
0:00:00	543	KMOY Smyrna	36	0.54	-86	31.2	36.009	-86.52	0 MSL
0:18:00	18000	enroute up							MSL
0:30:00	18000	enroute down							MSL
0:47:37	1500		34	21.45	-83	56.46	34.3574	-83.941	1 AGL
1:13:16	1500		32	54.96	-83	56.46	32.916	-83.941	2 AGL
1:18:07	1500		32	54.96	-84	15.93	32.916	-84.266	3 AGL
1:43:45	1500		34	21.45	-84	15.93	34.3574	-84.266	4 AGL
1:48:31	1500		34	21.45	-84	35.41	34.3574	-84.59	5 AGL
2:14:10	1500		32	54.96	-84	35.41	32.916	-84.59	6 AGL
2:19:49	8000	enroute up, down	32	54.96	-84	58.13	32.916	-84.969	7 AGL
2:23:49	1500	spiral down	32	54.96	-84	58.13	32.916	-84.969	7 AGL
2:49:27	1500		34	21.45	-84	58.13	34.3574	-84.969	8 AGL
2:55:01	1500		34	21.45	-85	20.86	34.3574	-85.348	9 AGL
3:17:27	1500		33	5.77	-85	20.86	33.0962	-85.348	10 AGL
3:20:30	8000	enroute up, above PBL							
3:23:54	1500	enroute down	33	5.77	-85	46.83	33.0962	-85.78	11 AGL
3:46:20	1500	enroute up, above PBL	34	21.45	-85	46.83	34.3574	-85.78	12 AGL
3:50:20	8000	enroute up, above PBL							
3:54:17	1500	enroute down	34	19.78	-86	19.19	34.3297	-86.32	13 AGL
4:19:36	1500		32	54.37	-86	19.19	32.9062	-86.32	14 AGL
4:24:27	1500		32	54.37	-86	38.65	32.9062	-86.644	15 AGL
4:49:46	1500		34	19.78	-86	38.65	34.3297	-86.644	16 AGL
4:54:32	1500		34	19.78	-86	58.11	34.3297	-86.969	17 AGL
5:14:51	1500	past EC Gaston plume:	0	0	0	0	33.19	-86.969	0
5:19:51	10000	start climb enr to Pt 19	32	54.37	-86	58.11	32.9062	-86.969	18 AGL
5:24:03	18000	Centreville ground site	32	54.17	-87	14.98	32.9029	-87.25	19 AGL
5:39:03	500	spiral down at Centreville ground	32	54.17	-87	14.98	32.9029	-87.25	19
5:40:03	1500								
5:49:41	1500	past EC Gaston plume:	33	30	-87	17.57	33.5	-87.29	20 AGL
5:53:41	5000	spiral to just below PBL top	33	30	-87	17.57	33.5	-87.29	20 AGL
6:04:20	5000	Centreville ground site	32	54.17	-87	14.98	32.9029	-87.25	19 AGL
6:06:20	7000	spiral up to near cloud tops	32	54.17	-87	14.98	32.9029	-87.25	19 AGL
6:17:00	7000	near cloud tops	33	30	-87	17.57	33.5	-87.29	20 AGL
6:21:00	1500	spiral down							
6:35:43	1500		34	19.78	-87	17.57	34.3297	-87.29	21 AGL
6:47:57	1500	optional, time permitting	34	30	-88	6	34.5	-88.1	22 AGL
6:58:37	1500	optional, time permitting	35	6	-88	6	35.1	-88.1	23 AGL
7:11:00	18000	enroute up, down							
7:26:37	543	KMOY Smyrna	36	0.54	-86	31.2	36.009	-86.52	0 AGL

6/22/13
 START - 1418/1453
 TAXI - 1455 14 BT 'C' 4219 RPT/CROSS 2207 19 14514
 - HELLO AF 3.6 13k 118.4 1377

V - 1458
 T10 - 1501
 IV - 1503
 III - 1505
 LAND - 2209
 H -

GA_AL_urban_PP_EtoW

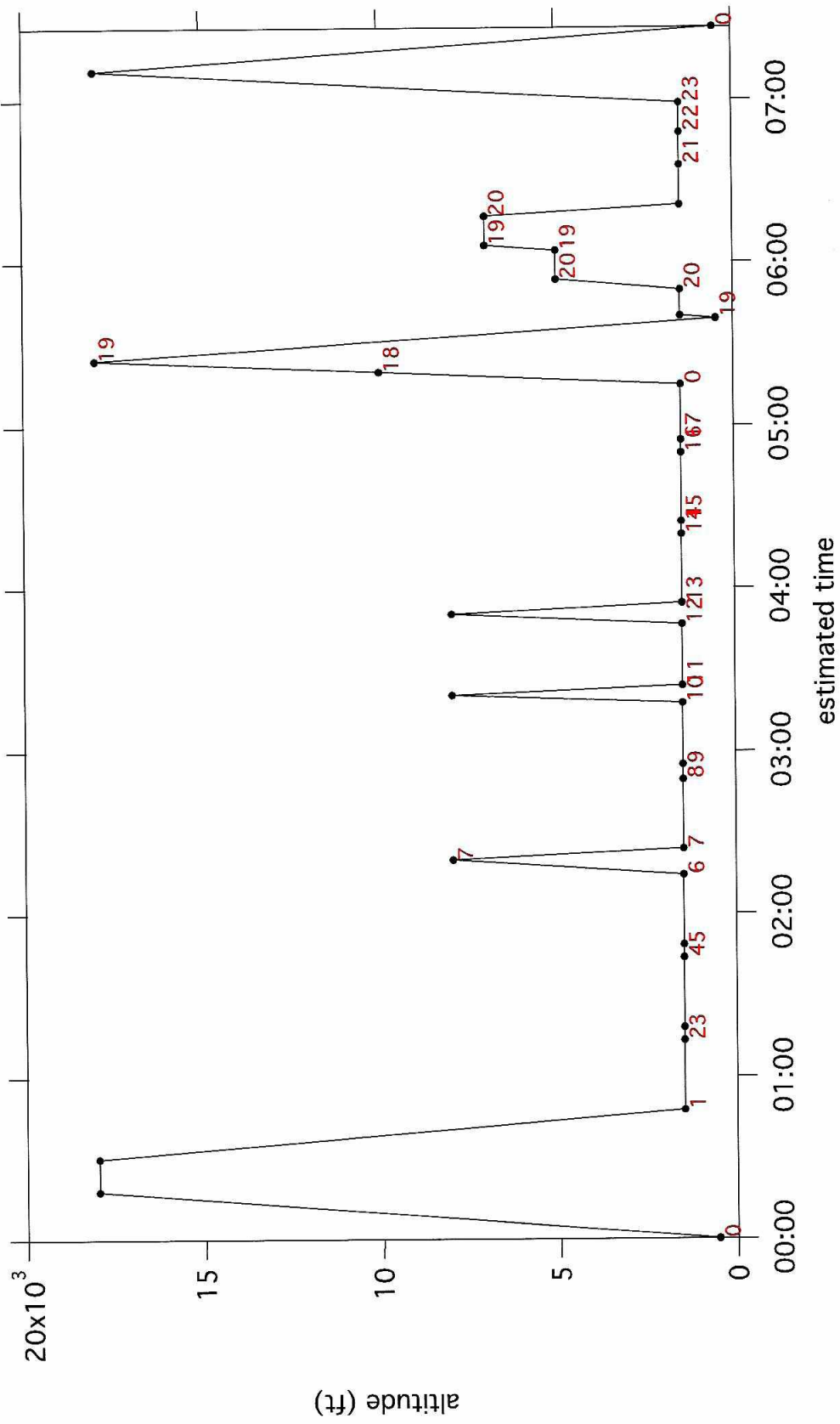


QUINNAP - 124.1
 PEACHTREE - 120.9
 MCCORMICK - 125.9
 DOBBINS - 120.75
 FULTON - 118.45
 BENTHAM 'C' -
 BHAM MOA
 COLUMBUS 2 MOA
 COLUMBUS 4 MOA

FREQ

118.5	124.6	1377
132.65	120.65	5257
133.1 (ATL/CTD) (BHAM)	125.45	4365
132.47	125.6 (HUNT)	
126.97 (APP)	127.67	
129.2	132.25 (ATL)	
130.19 +		
128.57		
125.5		
119.8		
119.25		
119.25		

GA_AL_urban_PP_EtoW



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	MSL
0:18:00	18000	enroute up								MSL
0:30:00	18000	enroute down								MSL
0:47:37	1500		34	21.45	-83	56.46	34.3574	-83.941	1	AGL
1:13:16	1500		32	54.96	-83	56.46	32.916	-83.941	2	AGL
1:18:07	1500		32	54.96	-84	15.93	32.916	-84.266	3	AGL
1:43:45	1500		34	21.45	-84	15.93	34.3574	-84.266	4	AGL
1:48:31	1500		34	21.45	-84	35.41	34.3574	-84.59	5	AGL
2:14:10	1500		32	54.96	-84	35.41	32.916	-84.59	6	AGL
2:19:49	8000	enroute up, down	32	54.96	-84	58.13	32.916	-84.969	7	AGL
2:23:49	1500	spiral down	32	54.96	-84	58.13	32.916	-84.969	7	AGL
2:49:27	1500		34	21.45	-84	58.13	34.3574	-84.969	8	AGL
2:55:01	1500		34	21.45	-85	20.86	34.3574	-85.348	9	AGL
3:17:27	1500		33	5.77	-85	20.86	33.0962	-85.348	10	AGL
3:20:30	8000	enroute up, above PBL								
3:23:54	1500	enroute down	33	5.77	-85	46.83	33.0962	-85.78	11	AGL
3:46:20	1500		34	21.45	-85	46.83	34.3574	-85.78	12	AGL
3:50:20	8000	enroute up, above PBL								
3:54:17	1500	enroute down	34	19.78	-86	19.19	34.3297	-86.32	13	AGL
4:19:36	1500		32	54.37	-86	19.19	32.9062	-86.32	14	AGL
4:24:27	1500		32	54.37	-86	38.65	32.9062	-86.644	15	AGL
4:49:46	1500		34	19.78	-86	38.65	34.3297	-86.644	16	AGL
4:54:32	1500		34	19.78	-86	58.11	34.3297	-86.969	17	AGL
5:14:51	1500	past EC Gaston plume:	0	0	0	0	33.19	-86.969	0	
5:19:51	10000	start climb enr to Pt 19	32	54.37	-86	58.11	32.9062	-86.969	18	AGL
5:24:03	18000	Centreville ground site	32	54.17	-87	14.98	32.9029	-87.25	19	AGL
5:39:03	500	spiral down at Centreville ground	32	54.17	-87	14.98	32.9029	-87.25	19	
5:40:03	1500									
5:49:41	1500	past EC Gaston plume:	33	30	-87	17.57	33.5	-87.29	20	AGL
5:53:41	5000	spiral to just below PBL top	33	30	-87	17.57	33.5	-87.29	20	AGL
6:04:20	5000	Centreville ground site	32	54.17	-87	14.98	32.9029	-87.25	19	AGL
6:06:20	7000	spiral up to near cloud tops	32	54.17	-87	14.98	32.9029	-87.25	19	AGL
6:17:00	7000	near cloud tops	33	30	-87	17.57	33.5	-87.29	20	AGL
6:21:00	1500	spiral down								
6:35:43	1500		34	19.78	-87	17.57	34.3297	-87.29	21	AGL
6:47:57	1500	optional, time permitting	34	30	-88	6	34.5	-88.1	22	AGL
6:58:37	1500	optional, time permitting	35	6	-88	6	35.1	-88.1	23	AGL
7:11:00	18000	enroute up, down								
7:26:37	543	KMQY Smyrna	36	0.54	-86	31.2	36.009	-86.52	0	AGL

GA-AL

Turn Pt	Type	Fix/Point Description	Latitude Longitude	Elev MV	Aspd Bank	Altitude Wind	Leg Time Clock Time	Leg Dist-KM Total Dist-KM
1	ST	KMQY/A	N 36 00.54	543FT		543M	00+00+00	0.0
*M		SMYRNA	W086 31.20	3.6W		139/006	00:00:00	0.0
2		level off	N 35 31.89	1102F	N/A	13000M	00+05+52	36.3
			W085 54.65	4.0W		123/003	00:12:27	76.5
3		descent pt	N 34 35.67	1525F	290T	13000M	00+07+42	67.4
*M			W084 34.01	4.8W		078/009	00:30:49	237.4
4			N 34 21.50	1102F	N/A	1500A	00+06+38	46.6
*M 1		HRS/R182035	W083 56.33	5.2W		094/013	00:39:51	301.3
5			N 32 54.94	725FT	210T	1500A	00+04+28	30.5
*M 3		MCN/R292034	W084 16.04	4.7W		084/012	01:09:00	491.8
6			N 34 21.42	1220F	210T	1500A	00+04+22	29.9
*M 5		RMG/R065029	W084 35.41	4.8W		100/012	01:38:02	681.6
7			N 32 54.94	751FT	210T	1500A	00+05+13	35.7
*M 7		CSG/R007018	W084 58.21	4.3W		090/012	02:08:04	877.0
8			N 34 21.34	1138F	210T	1500A	00+05+12	35.0
*M 9		RMG/R315016	W085 20.88	4.2W		104/008	02:37:50	1071.8
9			N 33 05.79	980FT	210T	1500A	00+05+56	40.3
*M 11		LGC/R275029	W085 46.79	3.7W		099/010	03:05:35	1251.8
10			N 34 19.71	561FT	210T	1500A	00+07+24	49.8
*M 13		VUZ/R034049	W086 19.25	3.5W		114/009	03:34:21	1441.4
11			N 32 54.37	580FT	210T	1500A	00+04+27	30.4
*M 15		OKW/R123037	W086 38.56	3.1W		096/011	04:03:26	1629.4
12			N 34 19.79	935FT	210T	1500A	00+04+28	29.9
*M 17		RQZ/R209033	W086 58.12	3.0W		124/008	04:31:58	1817.2
13			N 32 54.53	505FT	210T	1500A	00+04+52	31.2
*M 18		OKW/R144024	W086 58.05	2.9W		098/011	04:56:39	1974.8

Turn Pt	Type	Fix/Point Description	Latitude Longitude	Elev MV	Aspd Bank	Altitude Wind	Leg Time Clock Time	Leg Dist-KM Total Dist-KM
25	*M 20	OKW/R353016	N 33 30.04 W087 17.28	259FT 2.7W	210T	1500A 105/012	00+10+05 05:10:36	66.4 2067.6
27	*M 20	OKW/R353016	N 33 30.04 W087 17.28	259FT 2.7W	210T	1500A 098/012	00+10+09 05:31:11	66.4 2200.5
29	*M 22	MSL/R247033	N 34 30.03 W088 05.95	692FT 2.3W	210T	1500A 121/008	00+11+26 05:56:40	76.9 2369.2
		level off	N 35 23.92 W087 42.43	875FT 2.7W	N/A	10000M 132/008	00+07+53 06:14:32	48.7 2484.3
31	*M	POLAN/W	N 35 35.13 W087 27.64	784F 2.9W	280T	10000M 131/007	00+03+32 06:18:04	30.5 2514.8
32	*M	GHM /W GHM/R	N 35 50.04 W087 27.11	767FT 2.9W	280T	10000M 131/005	00+03+09 06:21:13	27.6 2542.4