

Name: DENNIS OSTERHAGE
Project Name: KMEM PIEPE SID
Output File: KMEM PIEPE4 SID RW18C IBUFY 20161117_0606
Procedure Name: PIEPE4
Software: RNAV-Pro™
Version: 2.39
Date/Time: 11/17/2016 6:13:16 AM
Input File: [KMEM PIEPE4 SID RW18C IBUFY 20161116_1252.txt](#)
Databases: AIRNAV Date: 10/27/2016
 CIFP Date: 8/18/2016
 DTED® (MAX) Date: 2002

Results Summary:

Flyability



Please Check Flyability Results

DME/DME



No Critical DMEs Exist

Radars

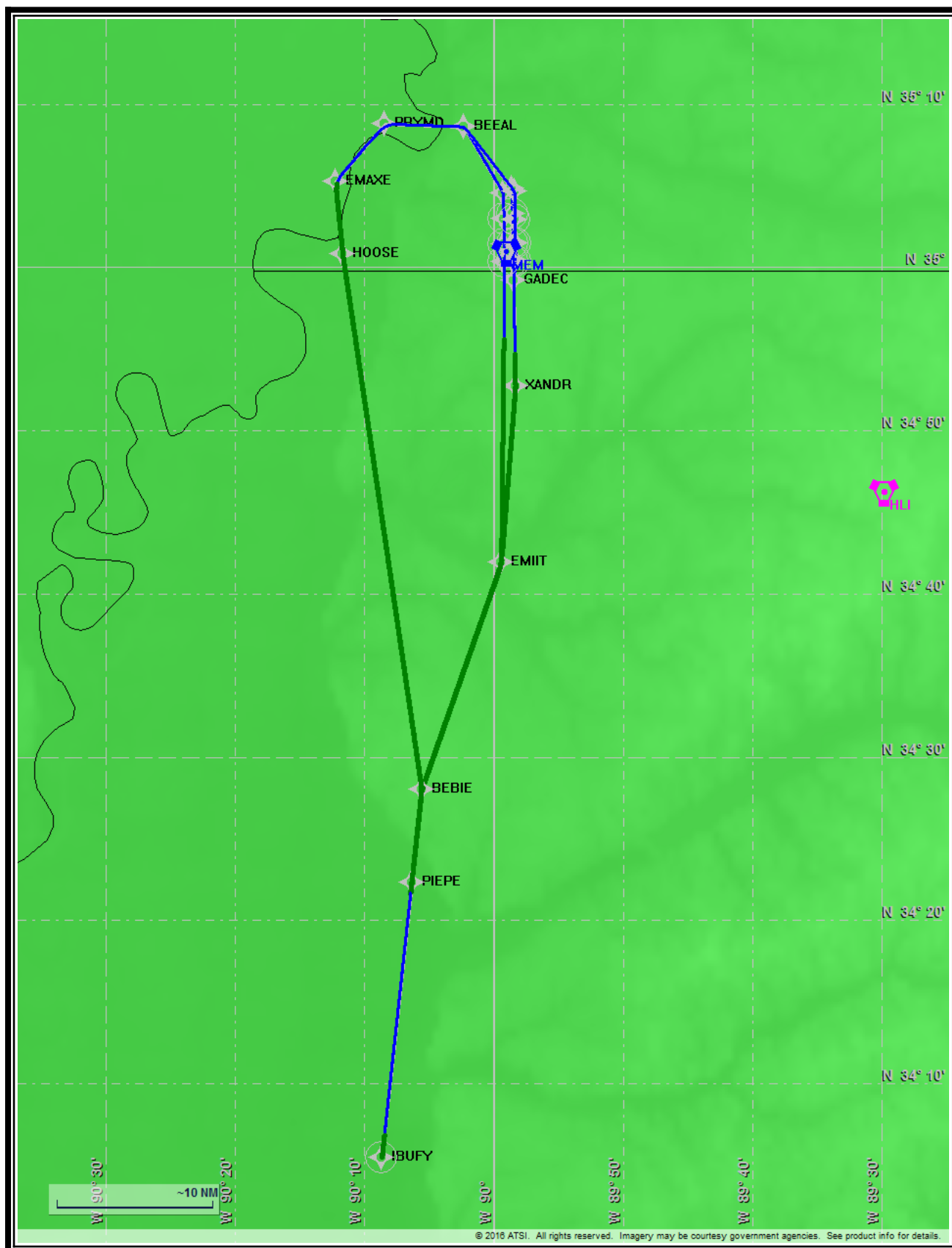


Comms



TERPS

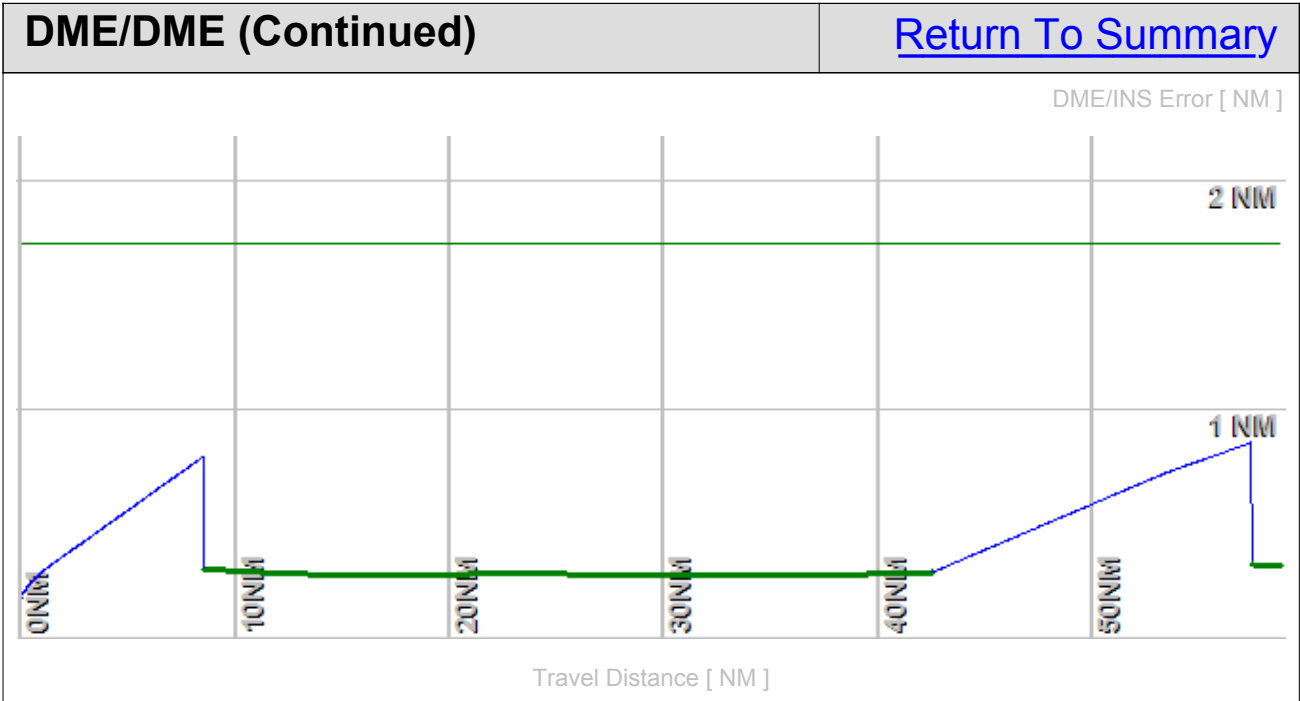




Flight Plan					Return To Summary		
Name	Type	Lat/Lon	Alt [ft]	VNAV Mode	IAS [Kts]	Turn Type	Leg Type
RW18C(...	WP	N 35° 3' 16.54" W 89° 58' 34.21"	270.6	VNAV	0.0	Fly Over	TF
RW36C(...	WP	N 35° 1' 26.58" W 89° 58' 31.90"	375.9	VNAV	130.0	Fly Over	VA
GH18C:	WP	N 35° 0' 24.20" W 89° 58' 30.59"	895.0	VNAV	145.0	Fly Over	DF
GADEC	WP	N 34° 59' 11.38" W 89° 58' 29.05"	1100.0	VNAV	180.0	Fly By	TF
XANDR	WP	N 34° 52' 40.80" W 89° 58' 20.78"	2400.0	VNAV	180.0	Fly By	TF
EMIIT	WP	N 34° 41' 53.27" W 89° 59' 25.66"	4600.0	VNAV	180.0	Fly By	TF
BEBIE	WP	N 34° 28' 0.16" W 90° 5' 35.16"	7800.0	VNAV	180.0	Fly By	TF
PIEPE	WP	N 34° 22' 19.15" W 90° 6' 21.77"	9000.0	VNAV	180.0	Fly By	TF
IBUFY	WP	N 34° 5' 27.95" W 90° 8' 39.84"	12100.0	VNAV	210.0	Fly Over	TF
Climb Gradient: 500.0 ft/NM up to 860.0 ft MSL							

Flyability		Return To Summary
Settings:	Flight Type: Runway Departure Selected Airport: KMEM Aircraft Category: Cat D Climb Gradient: 500.0 ft/NM up to 860.0 ft MSL Ground Speeds: Departure: 120.0 Kts out to 10.0 NM Table: 200.0 Kts up to 11000.0 ft 240.0 Kts up to 18000.0 ft 260.0 Kts up to 24000.0 ft 340.0 Kts up to 99900.0 ft Wind Settings: <i>None assigned</i> Descent During a Turn: Allowed VNAV Mode: Flight Plan	
	Flight Track comes into contact with terrain. Minimum AGL along route was -13.76 Ft. Flight Track contacted terrain (DTED 0 MAX) between AER and DER or within 2/3 NM of DER.	

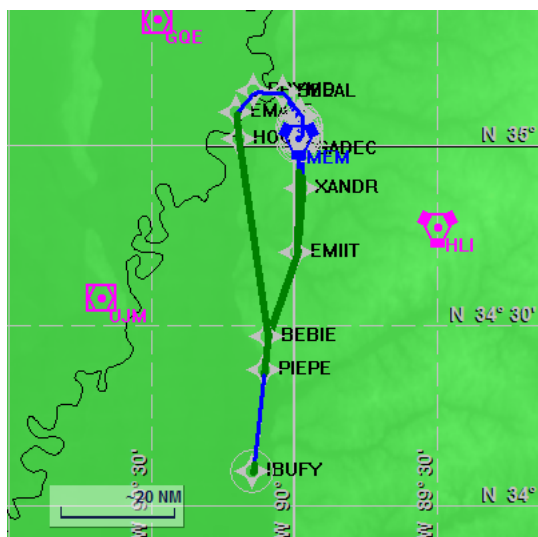
DME/DME		Return To Summary
Settings:	RNP: 2.0 Flight Mode: Manual Line of Sight (DTED Level 0 Max): Evaluated DME Restrictions: Evaluated Inertial Drift: Enabled Initial Drift: 0.165 NM INS Drift Rate: 8.000 NM/Hour Range Mode: OSV Co-Frequencies: Evaluated RNP Edges: Evaluated Min DME Range: 3.0 NM Allowed Gap Length: 4.0 NM DME Types: VOR/DME, VORTAC, Standalone, and User DME Include Angles: 30 to 150 Critical DMEs: Allowed DoD Facilities: Not included Foreign Facilities: Not included Low DMEs: Included Terminal DMEs: Included Flight Check DMEs: Selected Higher Altitudes: Evaluated Near Maximum Altitude: Evaluated Minimum MSL DMEs Avail: 1994 ft	
Total Number of DMEs Used: 6 Maximum DME Error: 0.859 NM. No Critical DMEs were found. Available DMEs: GQE, HLI, MEM, UJM, IGB, SQS		



DME/DME (Continued)						Return To Summary			
DMEs Used									
#	Name	Lat/Lon/MAGVAR	Range	Source	Critical	Err. [NM]	Status	Time	Distance
1	HLI	N 34° 46' 12.95" W 89° 29' 47.39" 03 E	L + ESV	User	NO	1.236	Enabled	33.1%	33.4%
2	MEM	N 35° 0' 54.42" W 89° 58' 59.55" 01 E	H	Database	NO	1.152	Enabled	45.0%	47.2%
3	UJM	N 34° 34' 30.16" W 90° 40' 27.84" 01 E	L + ESV	User	NO	0.975	Enabled	21.0%	24.4%
4	GQE	N 35° 20' 49.31" W 90° 28' 41.37" 04 E	L + ESV	User	NO	0.859	Enabled	9.1%	10.6%
5	IGB	N 33° 29' 7.75" W 88° 30' 48.93" 04 E	L + ESV	User	NO	0.905	Enabled	1.7%	2.4%
6	SQS	N 33° 27' 49.86" W 90° 16' 38.46" 03 E	H	Database	NO	0.905	Enabled	1.7%	2.4%
	Total Coverage							55.9%	60.2%
Flight Check DME Selection									
Distance [NM]		Selected DMEs						Alternate	
0.0									
1.8									
2.9		GQE							
4.1		GQE	HLI	MEM					
10.5		GQE	UJM	HLI	MEM				
21.0		GQE	UJM	HLI	MEM				
35.7		GQE	UJM	HLI	MEM				
41.9		SQS	UJM	IGB	MEM				
Inertial Drift Segments									
#	Start Location			End Location				Length [NM]	

Available DMEs by Waypoints		Return To Summary
Waypoint Before	Waypoint After	DME List
RW18C(AER)	RW36C(DER)	
RW36C(DER)	GH18C:	
GH18C:	GADEC	GQE
GADEC	XANDR	HLI, GQE, and MEM
XANDR	EMIIT	UJM, HLI, GQE, and MEM
EMIIT	BEBIE	UJM, HLI, GQE, and MEM
BEBIE	PIEPE	UJM, HLI, GQE, and MEM
PIEPE	IBUFY	IGB, UJM, MEM, and SQS

User Data					Return To Summary		
User Data Files							
#	File Name						
1	UserDMEs_KMEM PIEPE2 SID RW36C IBUFY 20130410_1116.udt						
User DMEs							
#	Name	Lat/Lon/MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	GQE	N 35° 20' 49.31" W 90° 28' 41.37" 04 E	L	211.0	113.00	GQE	Used
		ESV:	Bearing [True]: 110.0° to 200.0° Bearing [Mag]: 106.0° to 196.0°		Arc Distance: Out to 62.0 NM Altitude: 3200.0 to 19000.0 ft		
2	HLI	N 34° 46' 12.95" W 89° 29' 47.39" 03 E	L	630.0	112.40	HLI	Used
		ESV:	Bearing [True]: 246.0° to 288.0° Bearing [Mag]: 243.0° to 285.0°		Arc Distance: Out to 96.0 NM Altitude: 8500.0 to 19000.0 ft		
		ESV:	Bearing [True]: 290.0° to 328.0° Bearing [Mag]: 287.0° to 325.0°		Arc Distance: Out to 51.0 NM Altitude: 2500.0 to 18000.0 ft		
3	UJM	N 34° 34' 30.16" W 90° 40' 27.84" 01 E	L	240.8	109.60	UJM	Used
		Restriction:	Bearing [True]: 351.0° to 136.0° Bearing [Mag]: 350.0° to 135.0°		Distance: Beyond 25.0 NM Altitude: Below 2800.0 ft		
		ESV:	Bearing [True]: 15.0° to 90.0° Bearing [Mag]: 14.0° to 89.0°		Arc Distance: Out to 60.0 NM Altitude: 3500.0 to 18000.0 ft		
		ESV:	Bearing [True]: 50.0° to 70.0° Bearing [Mag]: 49.0° to 69.0°		Arc Distance: Out to 59.0 NM Altitude: 3000.0 to 17000.0 ft		
4	IGB	N 33° 29' 7.75" W 88° 30' 48.93" 04 E	L	240.1	116.20	IGB	Used
		ESV:	Bearing [True]: 265.0° to 301.0° Bearing [Mag]: 261.0° to 297.0°		Arc Distance: Out to 96.0 NM Altitude: 8500.0 to 23000.0 ft		



Name: DENNIS OSTERHAGE
Project Name: KMEM PIEPE SID
Output File: KMEM PIEPE4 SID RW18L IBUFY 20161117_0606
Procedure Name: PIEPE4
Software: RNAV-Pro™
Version: 2.39
Date/Time: 11/17/2016 6:08:27 AM
Input File: [KMEM PIEPE4 SID RW18L IBUFY 20161116_1253.txt](#)
Databases: AIRNAV Date: 10/27/2016
 CIFP Date: 8/18/2016
 DTED® (MAX) Date: 2002

Results Summary:

Flyability



Please Check Flyability Results

DME/DME



No Critical DMEs Exist

Radars

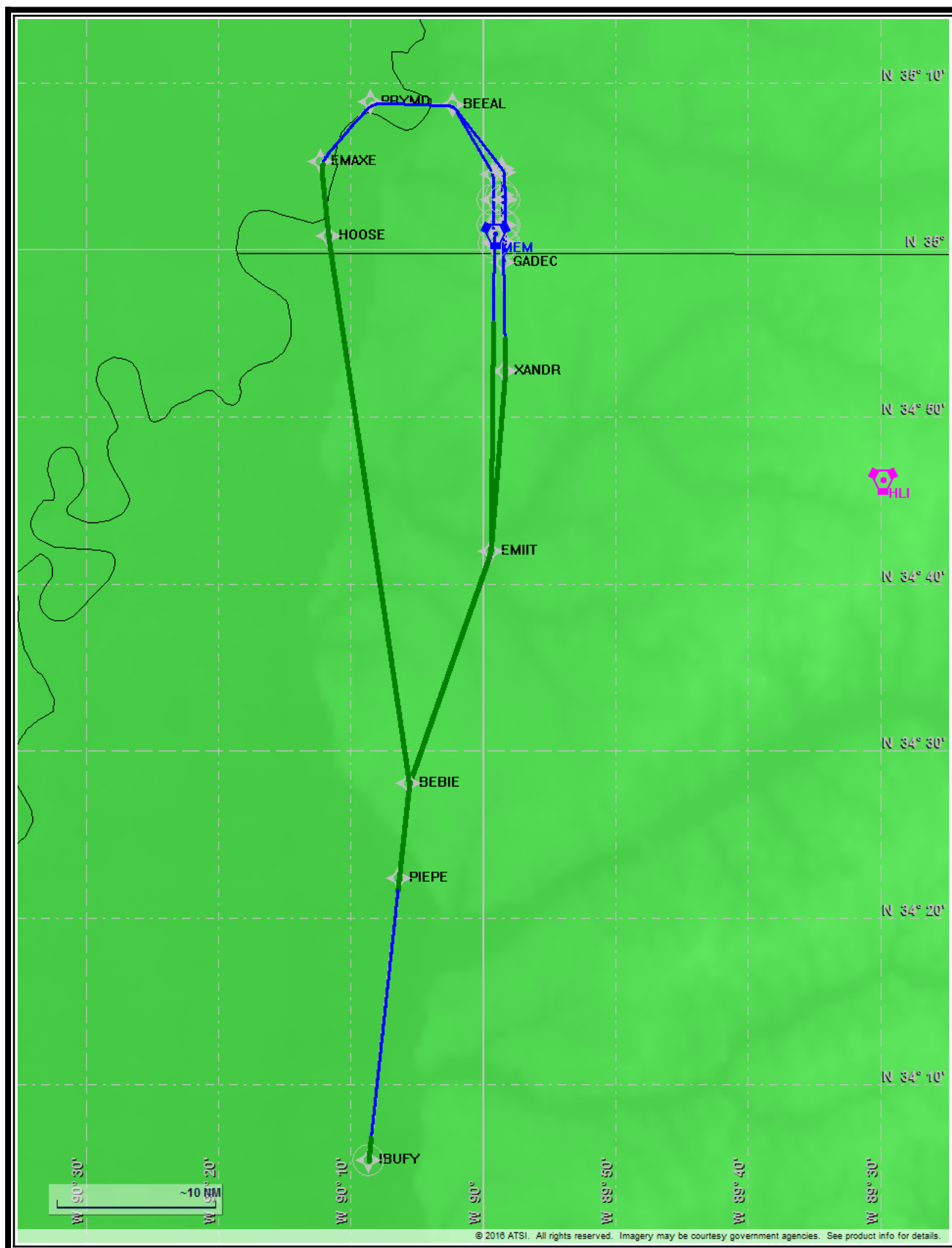


Comms



TERPS

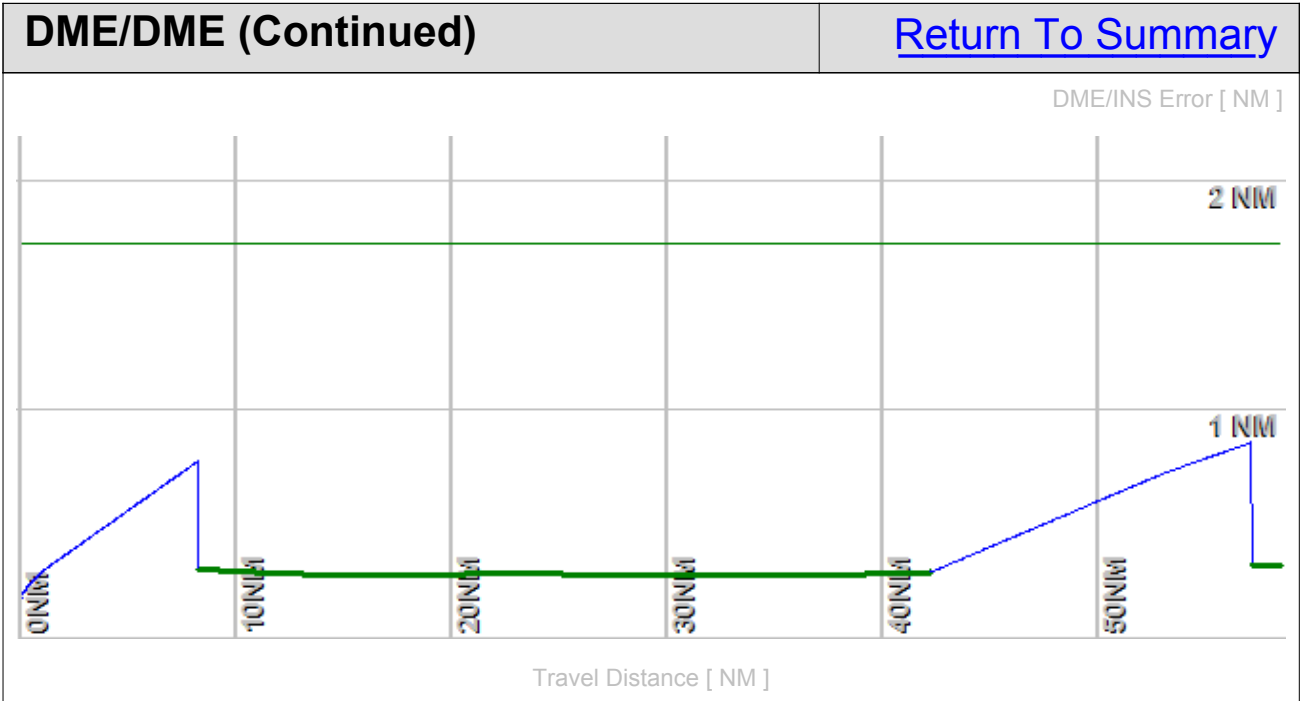




Flight Plan					Return To Summary		
Name	Type	Lat/Lon	Alt [ft]	VNAV Mode	IAS [Kts]	Turn Type	Leg Type
RW18L(...	WP	N 35° 2' 55.74" W 89° 58' 22.63"	277.5	VNAV	0.0	Fly Over	TF
RW36R(...	WP	N 35° 1' 26.74" W 89° 58' 20.75"	369.7	VNAV	130.0	Fly Over	VA
GH18L:	WP	N 35° 0' 23.61" W 89° 58' 19.41"	895.0	VNAV	145.0	Fly Over	DF
GADEC	WP	N 34° 59' 11.38" W 89° 58' 29.05"	1100.0	VNAV	180.0	Fly By	TF
XANDR	WP	N 34° 52' 40.80" W 89° 58' 20.78"	2400.0	VNAV	180.0	Fly By	TF
EMIIT	WP	N 34° 41' 53.27" W 89° 59' 25.66"	4600.0	VNAV	180.0	Fly By	TF
BEBIE	WP	N 34° 28' 0.16" W 90° 5' 35.16"	7800.0	VNAV	180.0	Fly By	TF
PIEPE	WP	N 34° 22' 19.15" W 90° 6' 21.77"	9000.0	VNAV	180.0	Fly By	TF
IBUFY	WP	N 34° 5' 27.95" W 90° 8' 39.84"	12100.0	VNAV	210.0	Fly Over	TF
Climb Gradient: 500.0 ft/NM up to 860.0 ft MSL							

Flyability		Return To Summary
Settings:	Flight Type: Runway Departure Selected Airport: KMEM Aircraft Category: Cat D Climb Gradient: 500.0 ft/NM up to 860.0 ft MSL Ground Speeds: Departure: 120.0 Kts out to 10.0 NM Table: 200.0 Kts up to 11000.0 ft 240.0 Kts up to 18000.0 ft 260.0 Kts up to 24000.0 ft 340.0 Kts up to 99900.0 ft Wind Settings: <i>None assigned</i> Descent During a Turn: Allowed VNAV Mode: Flight Plan	
	Flight Track comes into contact with terrain. Minimum AGL along route was -21.46 Ft. Flight Track contacted terrain (DTED 0 MAX) between AER and DER or within 2/3 NM of DER.	

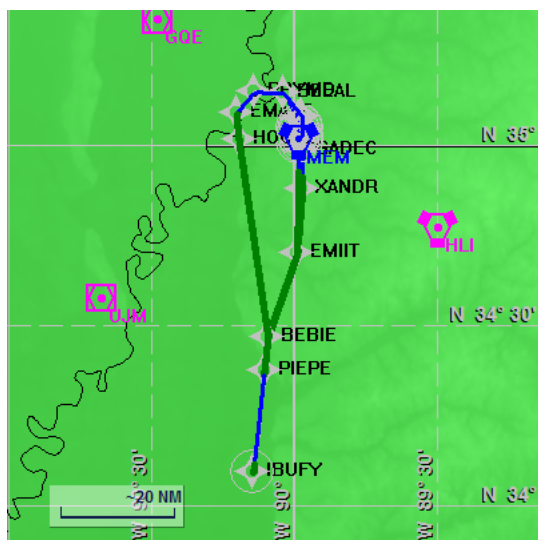
DME/DME		Return To Summary
Settings:	RNP: 2.0 Flight Mode: Manual Line of Sight (DTED Level 0 Max): Evaluated DME Restrictions: Evaluated Inertial Drift: Enabled Initial Drift: 0.165 NM INS Drift Rate: 8.000 NM/Hour Range Mode: OSV Co-Frequencies: Evaluated RNP Edges: Evaluated Min DME Range: 3.0 NM Allowed Gap Length: 4.0 NM DME Types: VOR/DME, VORTAC, Standalone, and User DME Include Angles: 30 to 150 Critical DMEs: Allowed DoD Facilities: Not included Foreign Facilities: Not included Low DMEs: Included Terminal DMEs: Included Flight Check DMEs: Selected Higher Altitudes: Evaluated Near Maximum Altitude: Evaluated Minimum MSL DMEs Avail: 1995 ft	
Total Number of DMEs Used: 6 Maximum DME Error: 0.859 NM. No Critical DMEs were found. Available DMEs: GQE, HLI, MEM, UJM, IGB, SQS		



DME/DME (Continued)						Return To Summary			
DMEs Used									
#	Name	Lat/Lon/MAGVAR	Range	Source	Critical	Err. [NM]	Status	Time	Distance
1	HLI	N 34° 46' 12.95" W 89° 29' 47.39" 03 E	L + ESV	User	NO	1.209	Enabled	33.4%	33.6%
2	MEM	N 35° 0' 54.42" W 89° 58' 59.55" 01 E	H	Database	NO	1.129	Enabled	45.4%	47.5%
3	UJM	N 34° 34' 30.16" W 90° 40' 27.84" 01 E	L + ESV	User	NO	0.977	Enabled	21.2%	24.5%
4	GQE	N 35° 20' 49.31" W 90° 28' 41.37" 04 E	L + ESV	User	NO	0.859	Enabled	9.2%	10.6%
5	IGB	N 33° 29' 7.75" W 88° 30' 48.93" 04 E	L + ESV	User	NO	0.905	Enabled	1.7%	2.4%
6	SQS	N 33° 27' 49.86" W 90° 16' 38.46" 03 E	H	Database	NO	0.905	Enabled	1.7%	2.4%
	Total Coverage							56.3%	60.5%
Flight Check DME Selection									
Distance [NM]		Selected DMEs						Alternate	
0.0									
1.5									
2.5		GQE							
3.6		GQE	HLI	MEM					
10.1		GQE	UJM	HLI	MEM				
20.6		GQE	UJM	HLI	MEM				
35.4		GQE	UJM	HLI	MEM				
41.5		SQS	UJM	IGB	MEM				
Inertial Drift Segments									
#	Start Location			End Location				Length [NM]	

Available DMEs by Waypoints		Return To Summary
Waypoint Before	Waypoint After	DME List
RW18L(AER)	RW36R(DER)	
RW36R(DER)	GH18L:	
GH18L:	GADEC	GQE
GADEC	XANDR	HLI, GQE, and MEM
XANDR	EMIIT	UJM, HLI, GQE, and MEM
EMIIT	BEBIE	UJM, HLI, GQE, and MEM
BEBIE	PIEPE	UJM, HLI, GQE, and MEM
PIEPE	IBUFY	IGB, UJM, MEM, and SQS

User Data					Return To Summary		
User Data Files							
#	File Name						
1	UserDMEs_KMEM PIEPE2 SID RW36C IBUFY 20130410_1116.udt						
User DMEs							
#	Name	Lat/Lon/MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	GQE	N 35° 20' 49.31" W 90° 28' 41.37" 04 E	L	211.0	113.00	GQE	Used
		ESV:	Bearing [True]: 110.0° to 200.0° Bearing [Mag]: 106.0° to 196.0°		Arc Distance: Out to 62.0 NM Altitude: 3200.0 to 19000.0 ft		
2	HLI	N 34° 46' 12.95" W 89° 29' 47.39" 03 E	L	630.0	112.40	HLI	Used
		ESV:	Bearing [True]: 246.0° to 288.0° Bearing [Mag]: 243.0° to 285.0°		Arc Distance: Out to 96.0 NM Altitude: 8500.0 to 19000.0 ft		
		ESV:	Bearing [True]: 290.0° to 328.0° Bearing [Mag]: 287.0° to 325.0°		Arc Distance: Out to 51.0 NM Altitude: 2500.0 to 18000.0 ft		
3	UJM	N 34° 34' 30.16" W 90° 40' 27.84" 01 E	L	240.8	109.60	UJM	Used
		Restriction:	Bearing [True]: 351.0° to 136.0° Bearing [Mag]: 350.0° to 135.0°		Distance: Beyond 25.0 NM Altitude: Below 2800.0 ft		
		ESV:	Bearing [True]: 15.0° to 90.0° Bearing [Mag]: 14.0° to 89.0°		Arc Distance: Out to 60.0 NM Altitude: 3500.0 to 18000.0 ft		
		ESV:	Bearing [True]: 50.0° to 70.0° Bearing [Mag]: 49.0° to 69.0°		Arc Distance: Out to 59.0 NM Altitude: 3000.0 to 17000.0 ft		
4	IGB	N 33° 29' 7.75" W 88° 30' 48.93" 04 E	L	240.1	116.20	IGB	Used
		ESV:	Bearing [True]: 265.0° to 301.0° Bearing [Mag]: 261.0° to 297.0°		Arc Distance: Out to 96.0 NM Altitude: 8500.0 to 23000.0 ft		



Name: DENNIS OSTERHAGE
Project Name: KMEM PIEPE SID
Output File: KMEM PIEPE4 SID RW18R
IBUFY 20161117_0606
Procedure Name: PIEPE4
Software: RNAV-Pro™
Version: 2.39
Date/Time: 11/17/2016 6:17:53 AM
Input File: [KMEM PIEPE4 SID RW18R
IBUFY 20161116_1254.txt](#)
Databases: AIRNAV Date: 10/27/2016
CIFP Date: 8/18/2016
DTED® (MAX) Date: 2002

Results Summary:

Flyability



Please Check **Flyability Results**

DME/DME



No Critical DMEs Exist

Radars

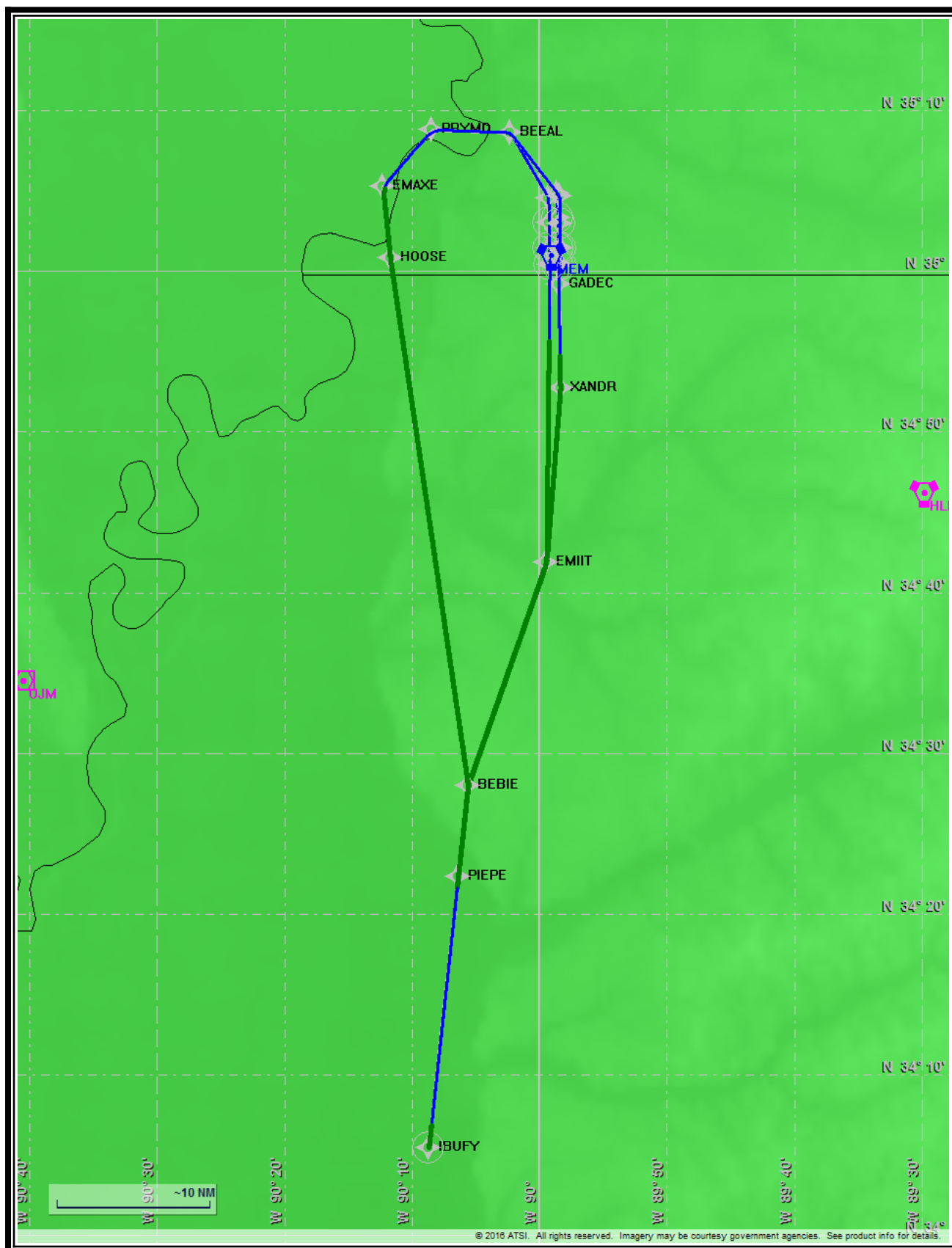


Comms



TERPS

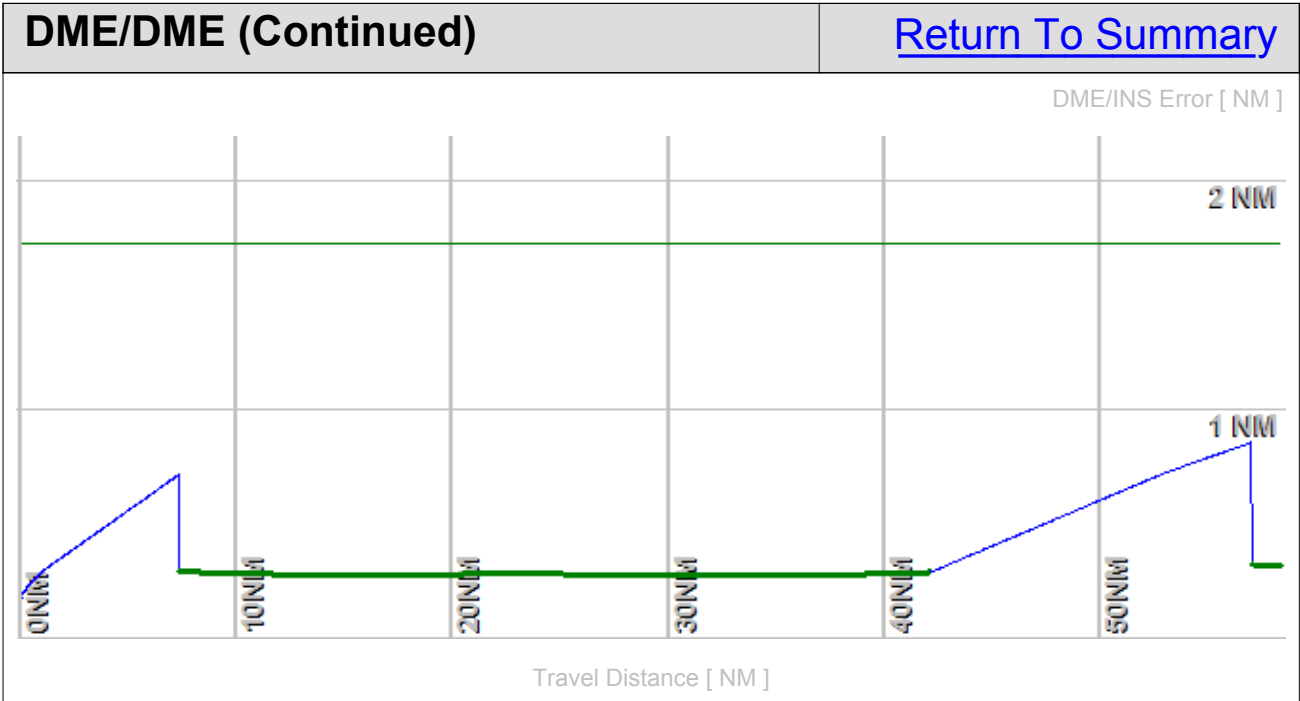




Flight Plan					Return To Summary		
Name	Type	Lat/Lon	Alt [ft]	VNAV Mode	IAS [Kts]	Turn Type	Leg Type
RW18R(...	WP	N 35° 2' 58.16" W 89° 59' 14.79"	288.4	VNAV	0.0	Fly Over	TF
RW36L(...	WP	N 35° 1' 25.98" W 89° 59' 12.81"	355.8	VNAV	130.0	Fly Over	VA
GH18R:	WP	N 35° 0' 21.19" W 89° 59' 11.43"	894.9	VNAV	145.0	Fly Over	DF
EMIIT	WP	N 34° 41' 53.27" W 89° 59' 25.66"	4600.0	VNAV	180.0	Fly By	TF
BEBIE	WP	N 34° 28' 0.16" W 90° 5' 35.16"	7800.0	VNAV	180.0	Fly By	TF
PIEPE	WP	N 34° 22' 19.15" W 90° 6' 21.77"	9000.0	VNAV	180.0	Fly By	TF
IBUFY	WP	N 34° 5' 27.95" W 90° 8' 39.84"	12100.0	VNAV	210.0	Fly Over	TF
Climb Gradient: 500.0 ft/NM up to 860.0 ft MSL							

Flyability		Return To Summary
Settings:	Flight Type: Runway Departure Selected Airport: KMEM Aircraft Category: Cat D Climb Gradient: 500.0 ft/NM up to 860.0 ft MSL Ground Speeds: Departure: 120.0 Kts out to 10.0 NM Table: 200.0 Kts up to 11000.0 ft 240.0 Kts up to 18000.0 ft 260.0 Kts up to 24000.0 ft 340.0 Kts up to 99900.0 ft Wind Settings: <i>None assigned</i> Descent During a Turn: Allowed VNAV Mode: Flight Plan	
	Flight Track comes into contact with terrain. Minimum AGL along route was -16.89 Ft. Flight Track contacted terrain (DTED 0 MAX) between AER and DER or within 2/3 NM of DER.	

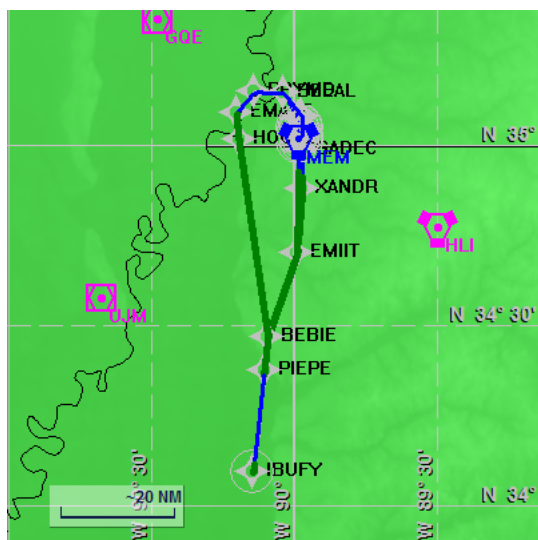
DME/DME		Return To Summary
Settings:	RNP: 2.0 Flight Mode: Manual Line of Sight (DTED Level 0 Max): Evaluated DME Restrictions: Evaluated Inertial Drift: Enabled Initial Drift: 0.165 NM INS Drift Rate: 8.000 NM/Hour Range Mode: OSV Co-Frequencies: Evaluated RNP Edges: Evaluated Min DME Range: 3.0 NM Allowed Gap Length: 4.0 NM DME Types: VOR/DME, VORTAC, Standalone, and User DME Include Angles: 30 to 150 Critical DMEs: Allowed DoD Facilities: Not included Foreign Facilities: Not included Low DMEs: Included Terminal DMEs: Included Flight Check DMEs: Selected Higher Altitudes: Evaluated Near Maximum Altitude: Evaluated Minimum MSL DMEs Avail: 1847 ft	
Total Number of DMEs Used: 6 Maximum DME Error: 0.859 NM. No Critical DMEs were found. Available DMEs: GQE, HLI, MEM, UJM, IGB, SQS		



DME/DME (Continued)						Return To Summary			
DMEs Used									
#	Name	Lat/Lon/MAGVAR	Range	Source	Critical	Err. [NM]	Status	Time	Distance
1	HLI	N 34° 46' 12.95" W 89° 29' 47.39" 03 E	L + ESV	User	NO	1.203	Enabled	35.5%	35.0%
2	MEM	N 35° 0' 54.42" W 89° 58' 59.55" 01 E	H	Database	NO	1.127	Enabled	47.6%	49.0%
3	UJM	N 34° 34' 30.16" W 90° 40' 27.84" 01 E	L + ESV	User	NO	0.975	Enabled	21.2%	24.5%
4	GQE	N 35° 20' 49.31" W 90° 28' 41.37" 04 E	L + ESV	User	NO	0.859	Enabled	9.1%	10.6%
5	IGB	N 33° 29' 7.75" W 88° 30' 48.93" 04 E	L + ESV	User	NO	0.905	Enabled	1.7%	2.4%
6	SQS	N 33° 27' 49.86" W 90° 16' 38.46" 03 E	H	Database	NO	0.905	Enabled	1.7%	2.4%
	Total Coverage							58.5%	62.0%
Flight Check DME Selection									
Distance [NM]		Selected DMEs						Alternate	
0.0									
1.5									
2.6		HLI	MEM	GQE	UJM				
20.5		HLI	MEM	GQE	UJM				
35.4		HLI	MEM	GQE	UJM				
41.5		SQS	MEM	IGB	UJM				
Inertial Drift Segments									
#	Start Location			End Location				Length [NM]	

Available DMEs by Waypoints		Return To Summary
Waypoint Before	Waypoint After	DME List
RW18R(AER)	RW36L(DER)	
RW36L(DER)	GH18R:	
GH18R:	EMIIT	UJM, HLI, GQE, and MEM
EMIIT	BEBIE	UJM, HLI, GQE, and MEM
BEBIE	PIEPE	UJM, HLI, GQE, and MEM
PIEPE	IBUFY	IGB, UJM, MEM, and SQS

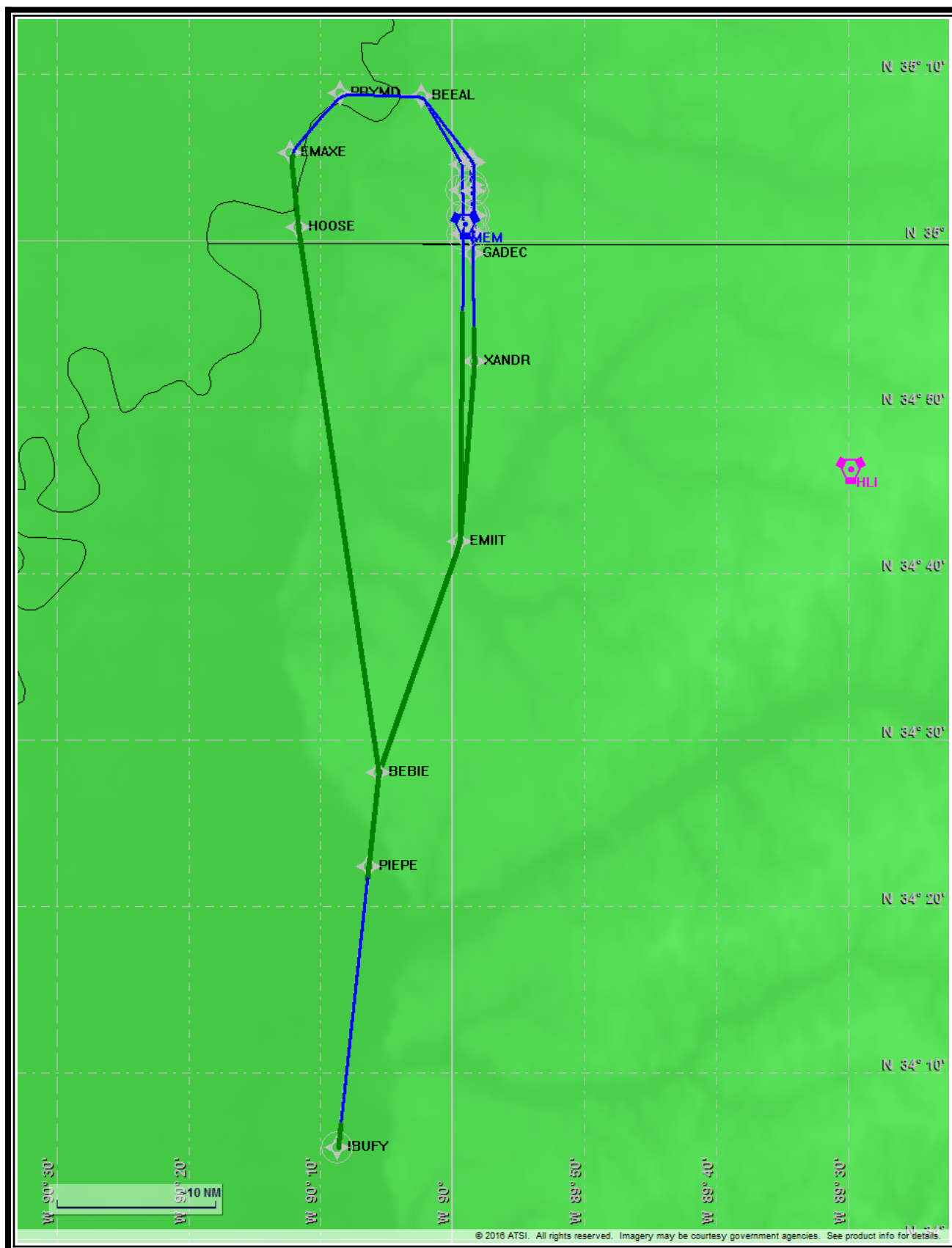
User Data					Return To Summary		
User Data Files							
#	File Name						
1	UserDMEs_KMEM PIEPE2 SID RW36C IBUFY 20130410_1116.udt						
User DMEs							
#	Name	Lat/Lon/MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	GQE	N 35° 20' 49.31" W 90° 28' 41.37" 04 E	L	211.0	113.00	GQE	Used
		ESV:	Bearing [True]: 110.0° to 200.0° Bearing [Mag]: 106.0° to 196.0°		Arc Distance: Out to 62.0 NM Altitude: 3200.0 to 19000.0 ft		
2	HLI	N 34° 46' 12.95" W 89° 29' 47.39" 03 E	L	630.0	112.40	HLI	Used
		ESV:	Bearing [True]: 246.0° to 288.0° Bearing [Mag]: 243.0° to 285.0°		Arc Distance: Out to 96.0 NM Altitude: 8500.0 to 19000.0 ft		
		ESV:	Bearing [True]: 290.0° to 328.0° Bearing [Mag]: 287.0° to 325.0°		Arc Distance: Out to 51.0 NM Altitude: 2500.0 to 18000.0 ft		
3	UJM	N 34° 34' 30.16" W 90° 40' 27.84" 01 E	L	240.8	109.60	UJM	Used
		Restriction:	Bearing [True]: 351.0° to 136.0° Bearing [Mag]: 350.0° to 135.0°		Distance: Beyond 25.0 NM Altitude: Below 2800.0 ft		
		ESV:	Bearing [True]: 15.0° to 90.0° Bearing [Mag]: 14.0° to 89.0°		Arc Distance: Out to 60.0 NM Altitude: 3500.0 to 18000.0 ft		
		ESV:	Bearing [True]: 50.0° to 70.0° Bearing [Mag]: 49.0° to 69.0°		Arc Distance: Out to 59.0 NM Altitude: 3000.0 to 17000.0 ft		
4	IGB	N 33° 29' 7.75" W 88° 30' 48.93" 04 E	L	240.1	116.20	IGB	Used
		ESV:	Bearing [True]: 265.0° to 301.0° Bearing [Mag]: 261.0° to 297.0°		Arc Distance: Out to 96.0 NM Altitude: 8500.0 to 23000.0 ft		



Name: DENNIS OSTERHAGE
Project Name: KMEM PIEPE SID
Output File: KMEM PIEPE4 SID RW36C IBUFY 20161117_0606
Procedure Name: PIEPE4
Software: RNAV-Pro™
Version: 2.39
Date/Time: 11/17/2016 6:23:52 AM
Input File: [KMEM PIEPE4 SID RW36C IBUFY 20161116_1254.txt](#)
Databases: AIRNAV Date: 10/27/2016
CIFP Date: 8/18/2016
DTED® (MAX) Date: 2002

Results Summary:

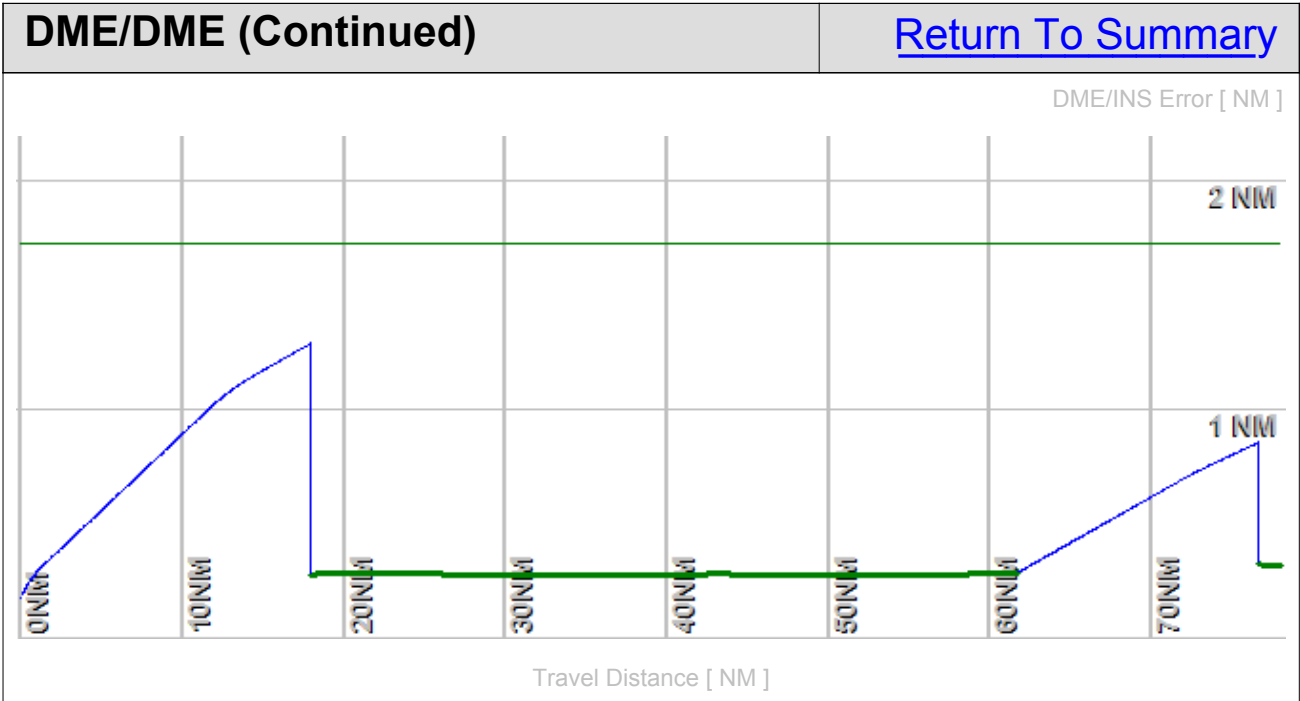
Flyability	✓	Please Check Flyability Results
DME/DME	✓	No Critical DMEs Exist
Radars	?	
Comms	?	
TERPS	?	



Flight Plan					Return To Summary		
Name	Type	Lat/Lon	Alt [ft]	VNAV Mode	IAS [Kts]	Turn Type	Leg Type
RW36C(...	WP	N 35° 1' 26.58" W 89° 58' 31.90"	340.9	VNAV	0.0	Fly By	TF
RW18C(...	WP	N 35° 3' 16.54" W 89° 58' 34.21"	305.6	VNAV	130.0	Fly Over	VI
GH36C:	WP	N 35° 4' 48.66" W 89° 58' 36.15"	923.3	VNAV	145.0	Fly By	CF - 321.5°
BEEAL	WP	N 35° 8' 37.23" W 90° 2' 17.24"	1900.0	VNAV	180.0	Fly By	TF
PRYMD	WP	N 35° 8' 48.18" W 90° 8' 27.62"	2900.0	VNAV	180.0	Fly By	TF
EMAXE	WP	N 35° 5' 14.52" W 90° 12' 15.67"	3900.0	VNAV	180.0	Fly By	TF
HOOSE	WP	N 35° 0' 46.88" W 90° 11' 40.96"	4800.0	VNAV	180.0	Fly By	TF
BEBIE	WP	N 34° 28' 0.16" W 90° 5' 35.16"	7800.0	VNAV	180.0	Fly By	TF
PIEPE	WP	N 34° 22' 19.15" W 90° 6' 21.77"	9000.0	VNAV	180.0	Fly By	TF
IBUFY	WP	N 34° 5' 27.95" W 90° 8' 39.84"	12100.0	VNAV	210.0	Fly Over	TF
Climb Gradient: 500.0 ft/NM up to 860.0 ft MSL							

Flyability		Return To Summary
Settings:	Flight Type: Runway Departure Selected Airport: KMEM Aircraft Category: Cat D Climb Gradient: 500.0 ft/NM up to 860.0 ft MSL Ground Speeds: Departure: 120.0 Kts out to 10.0 NM Table: 200.0 Kts up to 11000.0 ft 240.0 Kts up to 18000.0 ft 260.0 Kts up to 24000.0 ft 340.0 Kts up to 99900.0 ft Wind Settings: <i>None assigned</i> Descent During a Turn: Allowed VNAV Mode: Flight Plan	
	Required IAS at Fly-By WP PRYMD could not be reached with given A/C acceleration performance. Flight Track comes into contact with terrain. Minimum AGL along route was -23.27 Ft. Flight Track contacted terrain (DTED 0 MAX) between AER and DER or within 2/3 NM of DER.	

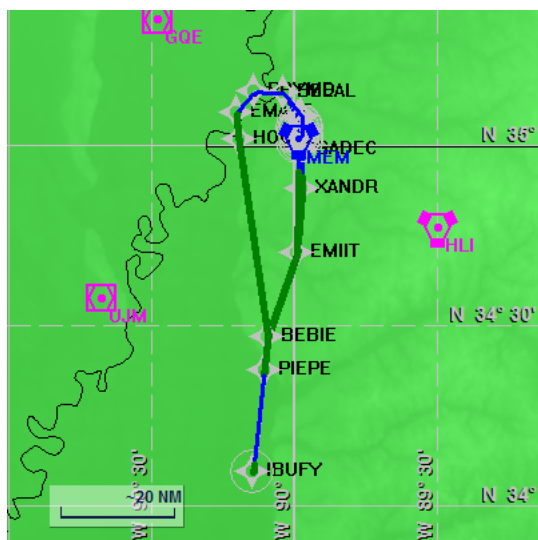
DME/DME		Return To Summary
Settings:	RNP: 2.0 Flight Mode: Manual Line of Sight (DTED Level 0 Max): Evaluated DME Restrictions: Evaluated Inertial Drift: Enabled Initial Drift: 0.165 NM INS Drift Rate: 8.000 NM/Hour Range Mode: OSV Co-Frequencies: Evaluated RNP Edges: Evaluated Min DME Range: 3.0 NM Allowed Gap Length: 4.0 NM DME Types: VOR/DME, VORTAC, Standalone, and User DME Include Angles: 30 to 150 Critical DMEs: Allowed DoD Facilities: Not included Foreign Facilities: Not included Low DMEs: Included Terminal DMEs: Included Flight Check DMEs: Selected Higher Altitudes: Evaluated Near Maximum Altitude: Evaluated Minimum MSL DMEs Avail: 3923 ft	
Total Number of DMEs Used: 6		
Maximum DME Error: 1.292 NM.		
No Critical DMEs were found.		
Available DMEs: MEM, GQE, HLI, UJM, IGB, SQS		



DME/DME (Continued)						Return To Summary			
DMEs Used									
#	Name	Lat/Lon/MAGVAR	Range	Source	Critical	Err. [NM]	Status	Time	Distance
1	HLI	N 34° 46' 12.95" W 89° 29' 47.39" 03 E	L + ESV	User	NO	1.292	Enabled	11.5%	12.8%
2	UJM	N 34° 34' 30.16" W 90° 40' 27.84" 01 E	L + ESV	User	NO	1.403	Enabled	36.3%	40.7%
3	GQE	N 35° 20' 49.31" W 90° 28' 41.37" 04 E	L + ESV	User	NO	1.292	Enabled	36.9%	41.3%
4	MEM	N 35° 0' 54.42" W 89° 58' 59.55" 01 E	H	Database	NO	1.292	Enabled	15.6%	17.5%
5	IGB	N 33° 29' 7.75" W 88° 30' 48.93" 04 E	L + ESV	User	NO	1.292	Enabled	1.3%	1.8%
6	SQS	N 33° 27' 49.86" W 90° 16' 38.46" 03 E	H	Database	NO	1.292	Enabled	1.3%	1.8%
	Total Coverage							51.5%	57.9%
Flight Check DME Selection									
Distance [NM]		Selected DMEs						Alternate	
0.0									
1.8									
3.1		GQE	MEM	HLI					
7.9		GQE	MEM	HLI					
12.5		GQE	MEM	HLI					
17.1		GQE	MEM	HLI	UJM				
22.1		GQE	MEM	HLI	UJM				
55.0		GQE	MEM	HLI	UJM				
61.1		SQS	MEM	IGB	UJM				
Inertial Drift Segments									
#	Start Location			End Location				Length [NM]	

Available DMEs by Waypoints		Return To Summary
Waypoint Before	Waypoint After	DME List
RW36C(AER)	RW18C(DER)	
RW18C(DER)	GH36C:	
GH36C:	BEEAL	HLI, GQE, and MEM
BEEAL	PRYMD	HLI, GQE, and MEM
PRYMD	EMAXE	HLI, GQE, and MEM
EMAXE	HOOSE	UJM, HLI, GQE, and MEM
HOOSE	BEBIE	UJM, HLI, GQE, and MEM
BEBIE	PIEPE	UJM, HLI, GQE, and MEM
PIEPE	IBUFY	IGB, UJM, MEM, and SQS

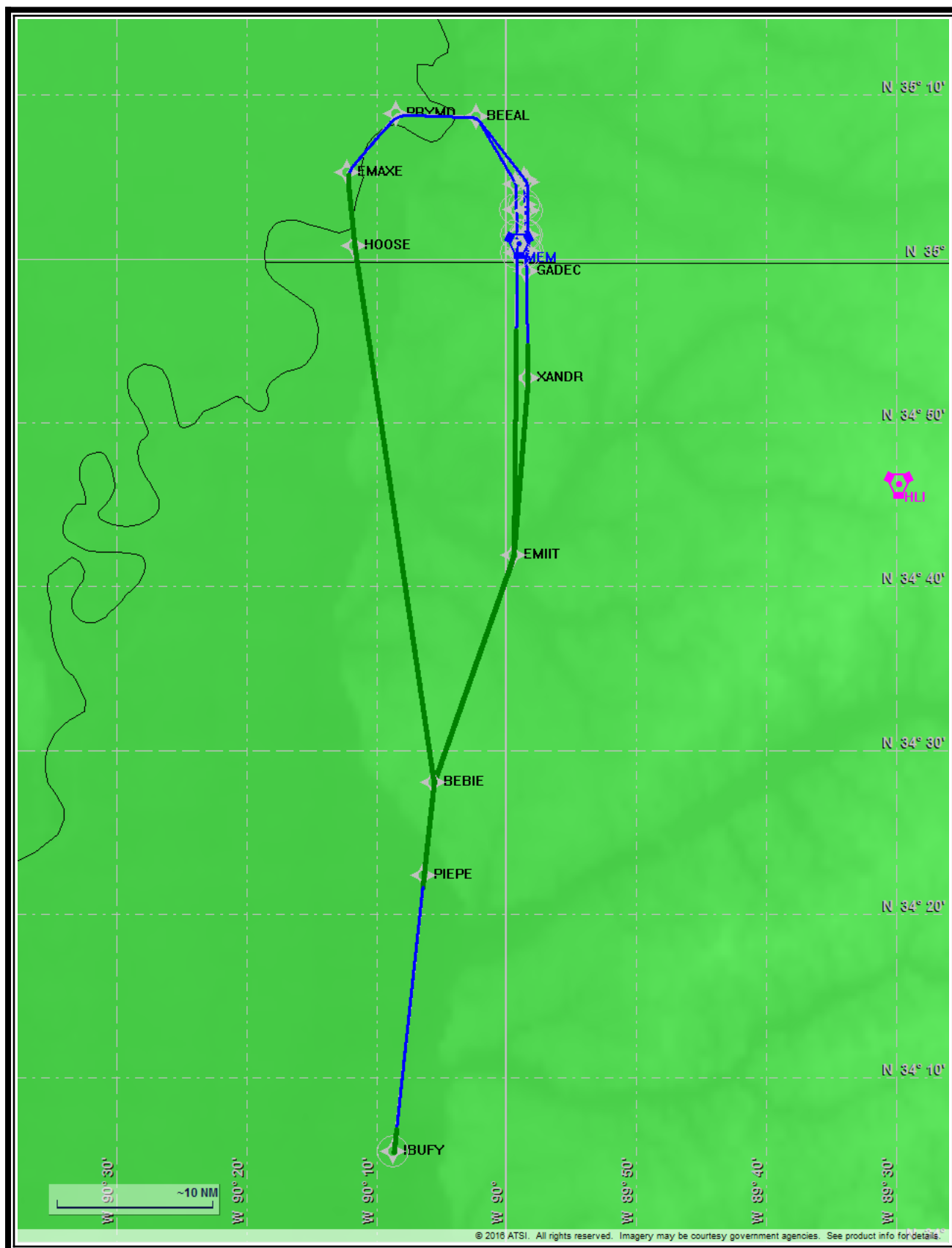
User Data					Return To Summary		
User Data Files							
#	File Name						
1	UserDMEs_KMEM PIEPE2 SID RW36C IBUFY 20130410_1116.udt						
User DMEs							
#	Name	Lat/Lon/MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	GQE	N 35° 20' 49.31" W 90° 28' 41.37" 04 E	L	211.0	113.00	GQE	Used
		ESV:	Bearing [True]: 110.0° to 200.0° Bearing [Mag]: 106.0° to 196.0°		Arc Distance: Out to 62.0 NM Altitude: 3200.0 to 19000.0 ft		
2	HLI	N 34° 46' 12.95" W 89° 29' 47.39" 03 E	L	630.0	112.40	HLI	Used
		ESV:	Bearing [True]: 246.0° to 288.0° Bearing [Mag]: 243.0° to 285.0°		Arc Distance: Out to 96.0 NM Altitude: 8500.0 to 19000.0 ft		
		ESV:	Bearing [True]: 290.0° to 328.0° Bearing [Mag]: 287.0° to 325.0°		Arc Distance: Out to 51.0 NM Altitude: 2500.0 to 18000.0 ft		
3	UJM	N 34° 34' 30.16" W 90° 40' 27.84" 01 E	L	240.8	109.60	UJM	Used
		Restriction:	Bearing [True]: 351.0° to 136.0° Bearing [Mag]: 350.0° to 135.0°		Distance: Beyond 25.0 NM Altitude: Below 2800.0 ft		
		ESV:	Bearing [True]: 15.0° to 90.0° Bearing [Mag]: 14.0° to 89.0°		Arc Distance: Out to 60.0 NM Altitude: 3500.0 to 18000.0 ft		
		ESV:	Bearing [True]: 50.0° to 70.0° Bearing [Mag]: 49.0° to 69.0°		Arc Distance: Out to 59.0 NM Altitude: 3000.0 to 17000.0 ft		
4	IGB	N 33° 29' 7.75" W 88° 30' 48.93" 04 E	L	240.1	116.20	IGB	Used
		ESV:	Bearing [True]: 265.0° to 301.0° Bearing [Mag]: 261.0° to 297.0°		Arc Distance: Out to 96.0 NM Altitude: 8500.0 to 23000.0 ft		



Name: DENNIS OSTERHAGE
Project Name: KMEM PIEPE SID
Output File: KMEM PIEPE4 SID RW36L IBUFY 20161117_0606
Procedure Name: PIEPE4
Software: RNAV-Pro™
Version: 2.39
Date/Time: 11/17/2016 6:28:43 AM
Input File: [KMEM PIEPE4 SID RW36L IBUFY 20161116_1255.txt](#)
Databases: AIRNAV Date: 10/27/2016
 CIPF Date: 8/18/2016
 DTED® (MAX) Date: 2002

Results Summary:

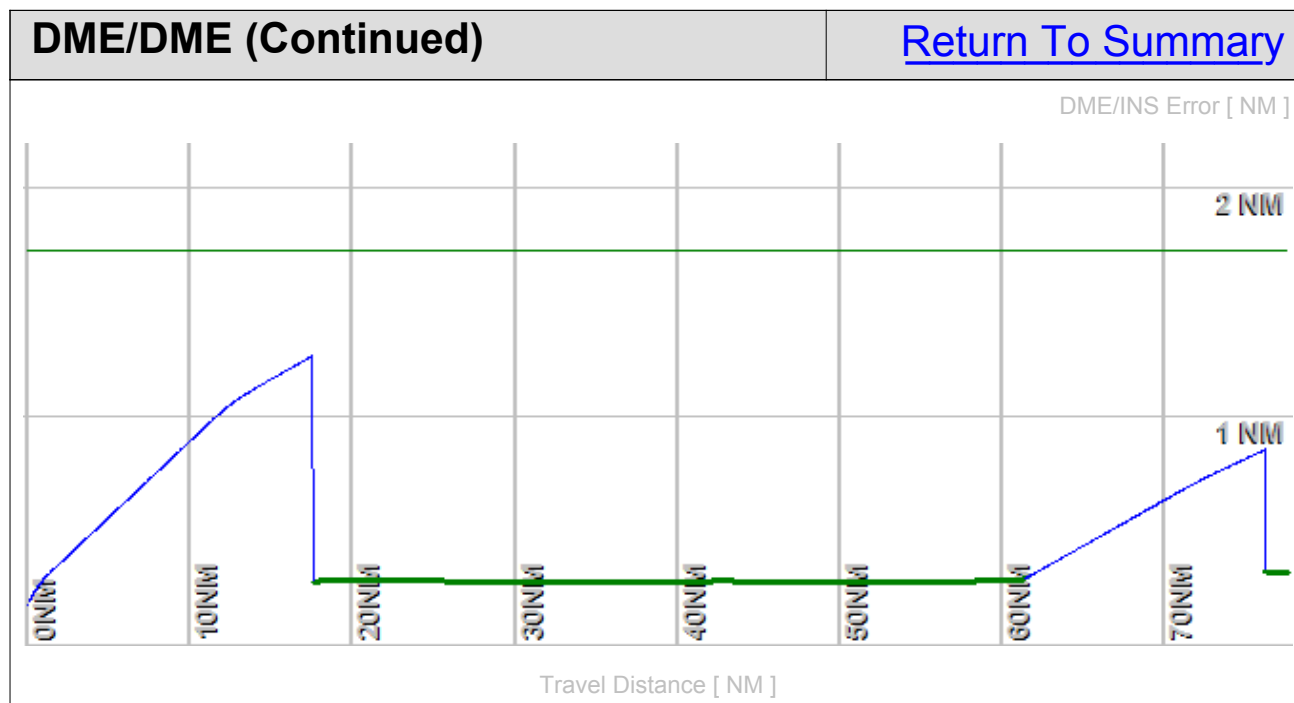
Flyability	✓	Please Check Flyability Results
DME/DME	✓	No Critical DMEs Exist
Radars	?	
Comms	?	
TERPS	?	



Flight Plan					Return To Summary		
Name	Type	Lat/Lon	Alt [ft]	VNAV Mode	IAS [Kts]	Turn Type	Leg Type
RW36L(...	WP	N 35° 1' 25.98" W 89° 59' 12.81"	320.8	VNAV	0.0	Fly By	TF
RW18R(...	WP	N 35° 2' 58.16" W 89° 59' 14.79"	323.4	VNAV	130.0	Fly Over	VI
GH36L:	WP	N 35° 4' 30.49" W 89° 59' 16.78"	910.5	VNAV	145.0	Fly By	CF - 329.0°
BEEAL	WP	N 35° 8' 37.23" W 90° 2' 17.24"	1900.0	VNAV	180.0	Fly By	TF
PRYMD	WP	N 35° 8' 48.18" W 90° 8' 27.62"	2900.0	VNAV	180.0	Fly By	TF
EMAXE	WP	N 35° 5' 14.52" W 90° 12' 15.67"	3900.0	VNAV	180.0	Fly By	TF
HOOSE	WP	N 35° 0' 46.88" W 90° 11' 40.96"	4800.0	VNAV	180.0	Fly By	TF
BEBIE	WP	N 34° 28' 0.16" W 90° 5' 35.16"	7800.0	VNAV	180.0	Fly By	TF
PIEPE	WP	N 34° 22' 19.15" W 90° 6' 21.77"	9000.0	VNAV	180.0	Fly By	TF
IBUFY	WP	N 34° 5' 27.95" W 90° 8' 39.84"	12100.0	VNAV	210.0	Fly Over	TF
Climb Gradient: 500.0 ft/NM up to 860.0 ft MSL							

Flyability		Return To Summary
Settings:	Flight Type: Runway Departure	
	Selected Airport: KMEM	
	Aircraft Category: Cat D	
	Climb Gradient: 500.0 ft/NM up to 860.0 ft MSL	
	Ground Speeds:	
	Departure: 120.0 Kts out to 10.0 NM	
	Table:	
	200.0 Kts up to 11000.0 ft	
	240.0 Kts up to 18000.0 ft	
	260.0 Kts up to 24000.0 ft	
	340.0 Kts up to 99900.0 ft	
	Wind Settings: <i>None assigned</i>	
	Descent During a Turn: Allowed	
	VNAV Mode: Flight Plan	
Required IAS at Fly-By WP PRYMD could not be reached with given A/C acceleration performance.		
Flight Track comes into contact with terrain. Minimum AGL along route was -43.37 Ft.		
Flight Track contacted terrain (DTED 0 MAX) between AER and DER or within 2/3 NM of DER.		

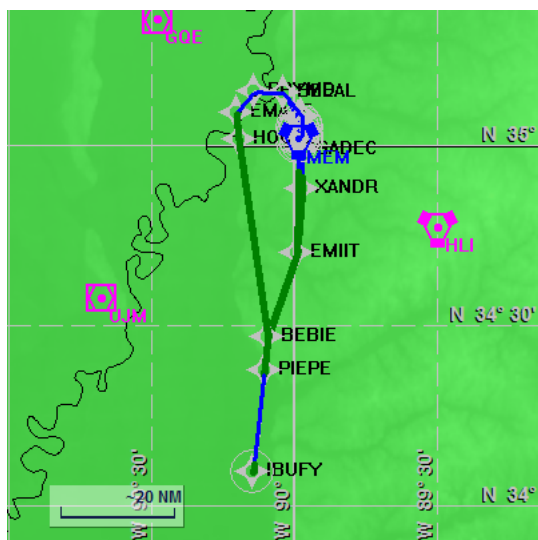
DME/DME		Return To Summary
Settings:	RNP: 2.0 Flight Mode: Manual Line of Sight (DTED Level 0 Max): Evaluated DME Restrictions: Evaluated Inertial Drift: Enabled Initial Drift: 0.165 NM INS Drift Rate: 8.000 NM/Hour Range Mode: OSV Co-Frequencies: Evaluated RNP Edges: Evaluated Min DME Range: 3.0 NM Allowed Gap Length: 4.0 NM DME Types: VOR/DME, VORTAC, Standalone, and User DME Include Angles: 30 to 150 Critical DMEs: Allowed DoD Facilities: Not included Foreign Facilities: Not included Low DMEs: Included Terminal DMEs: Included Flight Check DMEs: Selected Higher Altitudes: Evaluated Near Maximum Altitude: Evaluated Minimum MSL DMEs Avail: 3914 ft	
Total Number of DMEs Used: 6 Maximum DME Error: 1.267 NM. No Critical DMEs were found. Available DMEs: GQE, MEM, HLI, UJM, IGB, SQS		



DME/DME (Continued)						Return To Summary			
DMEs Used									
#	Name	Lat/Lon/MAGVAR	Range	Source	Critical	Err. [NM]	Status	Time	Distance
1	HLI	N 34° 46' 12.95" W 89° 29' 47.39" 03 E	L + ESV	User	NO	1.267	Enabled	11.5%	12.9%
2	UJM	N 34° 34' 30.16" W 90° 40' 27.84" 01 E	L + ESV	User	NO	1.381	Enabled	36.6%	40.9%
3	GQE	N 35° 20' 49.31" W 90° 28' 41.37" 04 E	L + ESV	User	NO	1.267	Enabled	37.2%	41.6%
4	MEM	N 35° 0' 54.42" W 89° 58' 59.55" 01 E	H	Database	NO	1.267	Enabled	15.7%	17.5%
5	IGB	N 33° 29' 7.75" W 88° 30' 48.93" 04 E	L + ESV	User	NO	1.267	Enabled	1.3%	1.8%
6	SQS	N 33° 27' 49.86" W 90° 16' 38.46" 03 E	H	Database	NO	1.267	Enabled	1.3%	1.8%
	Total Coverage							51.9%	58.3%
Flight Check DME Selection									
Distance [NM]		Selected DMEs						Alternate	
0.0									
1.5									
2.9		GQE	MEM	HLI					
7.5		GQE	MEM	HLI					
12.1		GQE	MEM	HLI					
16.8		GQE	MEM	HLI	UJM				
21.8		GQE	MEM	HLI	UJM				
54.5		GQE	MEM	HLI	UJM				
60.7		SQS	MEM	IGB	UJM				
Inertial Drift Segments									
#	Start Location			End Location				Length [NM]	

Available DMEs by Waypoints		Return To Summary
Waypoint Before	Waypoint After	DME List
RW36L(AER)	RW18R(DER)	
RW18R(DER)	GH36L:	
GH36L:	BEEAL	HLI, GQE, and MEM
BEEAL	PRYMD	HLI, GQE, and MEM
PRYMD	EMAXE	HLI, GQE, and MEM
EMAXE	HOOSE	UJM, HLI, GQE, and MEM
HOOSE	BEBIE	UJM, HLI, GQE, and MEM
BEBIE	PIEPE	UJM, HLI, GQE, and MEM
PIEPE	IBUFY	IGB, UJM, MEM, and SQS

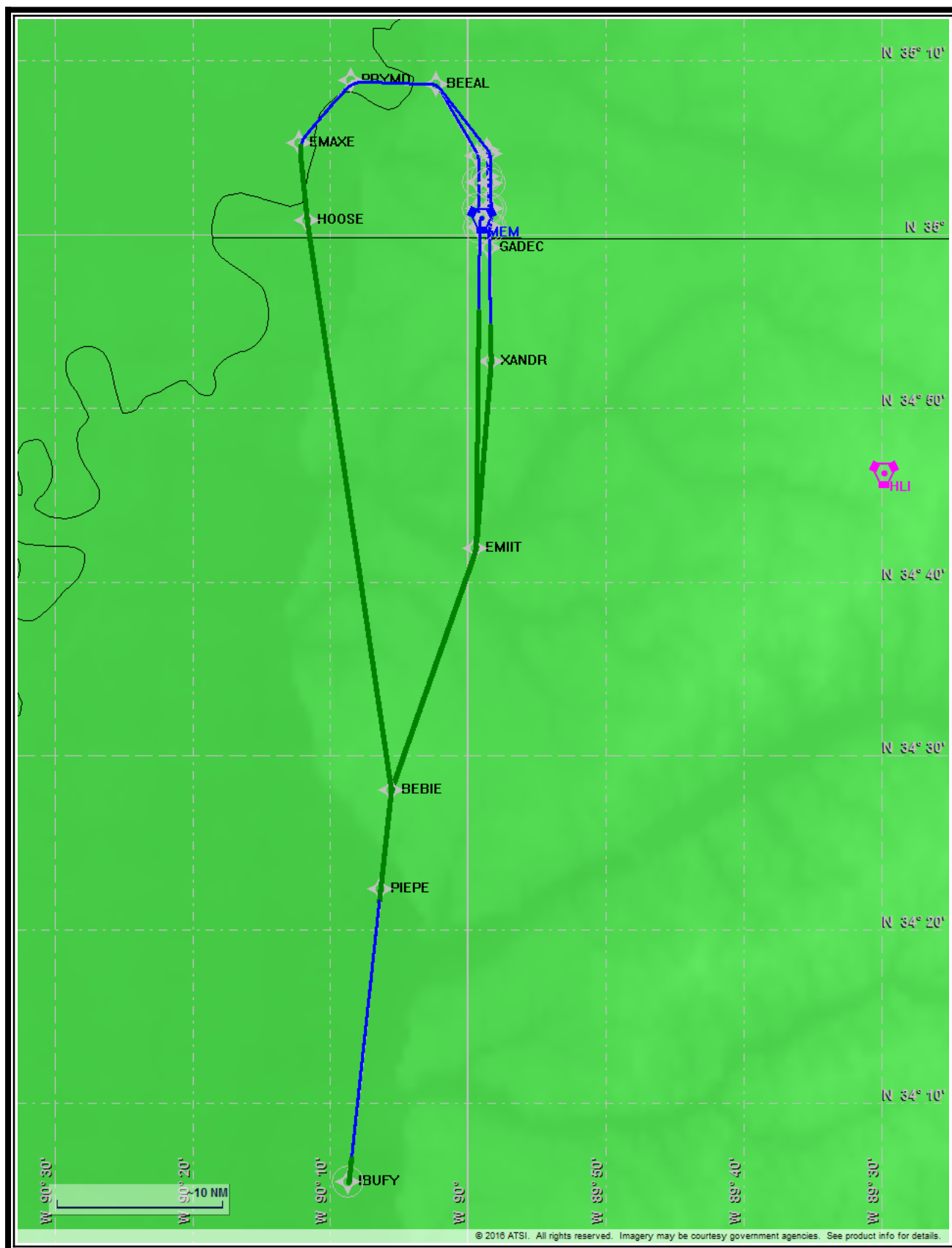
User Data					Return To Summary		
User Data Files							
#	File Name						
1	UserDMEs_KMEM PIEPE2 SID RW36C IBUFY 20130410_1116.udt						
User DMEs							
#	Name	Lat/Lon/MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	GQE	N 35° 20' 49.31" W 90° 28' 41.37" 04 E	L	211.0	113.00	GQE	Used
		ESV:	Bearing [True]: 110.0° to 200.0° Bearing [Mag]: 106.0° to 196.0°		Arc Distance: Out to 62.0 NM Altitude: 3200.0 to 19000.0 ft		
2	HLI	N 34° 46' 12.95" W 89° 29' 47.39" 03 E	L	630.0	112.40	HLI	Used
		ESV:	Bearing [True]: 246.0° to 288.0° Bearing [Mag]: 243.0° to 285.0°		Arc Distance: Out to 96.0 NM Altitude: 8500.0 to 19000.0 ft		
		ESV:	Bearing [True]: 290.0° to 328.0° Bearing [Mag]: 287.0° to 325.0°		Arc Distance: Out to 51.0 NM Altitude: 2500.0 to 18000.0 ft		
3	UJM	N 34° 34' 30.16" W 90° 40' 27.84" 01 E	L	240.8	109.60	UJM	Used
		Restriction:	Bearing [True]: 351.0° to 136.0° Bearing [Mag]: 350.0° to 135.0°		Distance: Beyond 25.0 NM Altitude: Below 2800.0 ft		
		ESV:	Bearing [True]: 15.0° to 90.0° Bearing [Mag]: 14.0° to 89.0°		Arc Distance: Out to 60.0 NM Altitude: 3500.0 to 18000.0 ft		
		ESV:	Bearing [True]: 50.0° to 70.0° Bearing [Mag]: 49.0° to 69.0°		Arc Distance: Out to 59.0 NM Altitude: 3000.0 to 17000.0 ft		
4	IGB	N 33° 29' 7.75" W 88° 30' 48.93" 04 E	L	240.1	116.20	IGB	Used
		ESV:	Bearing [True]: 265.0° to 301.0° Bearing [Mag]: 261.0° to 297.0°		Arc Distance: Out to 96.0 NM Altitude: 8500.0 to 23000.0 ft		



Name: DENNIS OSTERHAGE
Project Name: KMEM PIEPE SID
Output File: KMEM PIEPE4 SID RW36R IBUFY 20161117_0606
Procedure Name: PIEPE4
Software: RNAV-Pro™
Version: 2.39
Date/Time: 11/17/2016 6:31:37 AM
Input File: [KMEM PIEPE4 SID RW36R IBUFY 20161116_1256.txt](#)
Databases: AIRNAV Date: 10/27/2016
 CIFP Date: 8/18/2016
 DTED® (MAX) Date: 2002

Results Summary:

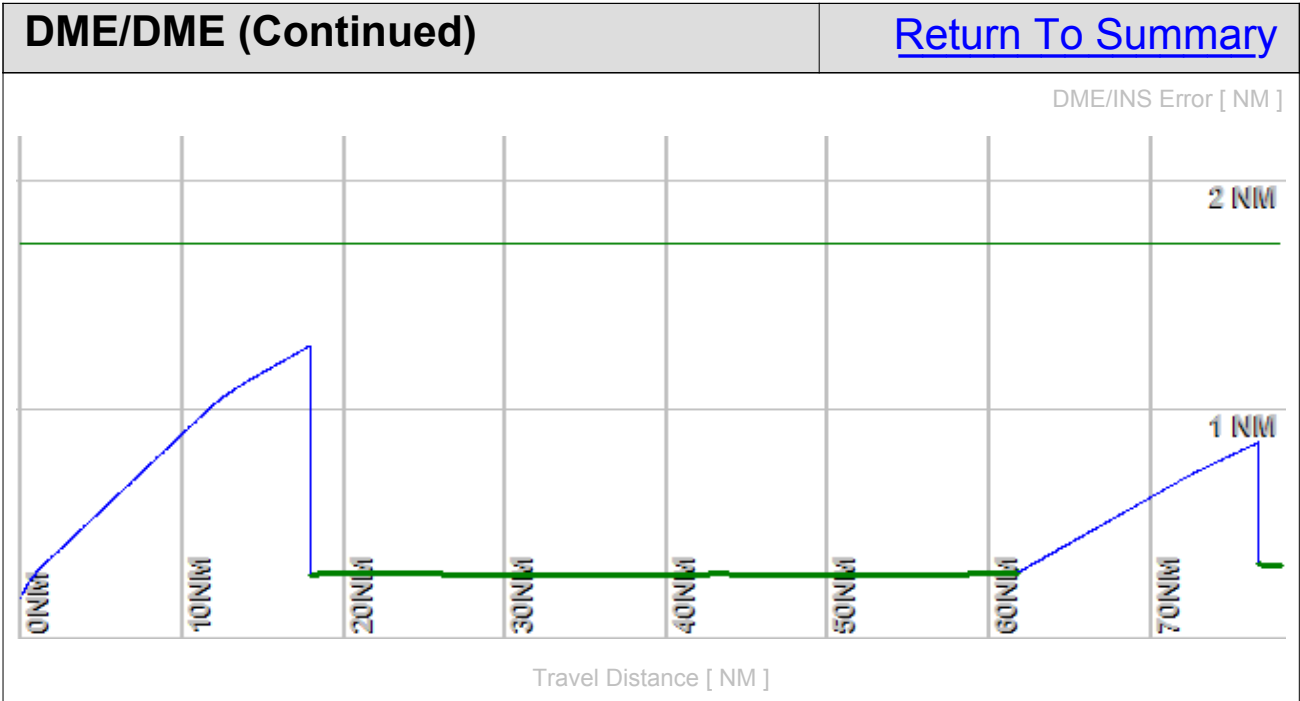
Flyability	✓	Please Check Flyability Results
DME/DME	✓	No Critical DMEs Exist
Radars	?	
Comms	?	
TERPS	?	



Flight Plan					Return To Summary		
Name	Type	Lat/Lon	Alt [ft]	VNAV Mode	IAS [Kts]	Turn Type	Leg Type
RW36R(...	WP	N 35° 1' 26.74" W 89° 58' 20.75"	334.7	VNAV	0.0	Fly By	TF
RW18L(...	WP	N 35° 2' 55.74" W 89° 58' 22.63"	312.5	VNAV	130.0	Fly Over	VI
GH36R:	WP	N 35° 4' 37.08" W 89° 58' 24.78"	999.2	VNAV	145.0	Fly By	CF - 321.5°
BEEAL	WP	N 35° 8' 37.23" W 90° 2' 17.24"	1900.0	VNAV	180.0	Fly By	TF
PRYMD	WP	N 35° 8' 48.18" W 90° 8' 27.62"	2900.0	VNAV	180.0	Fly By	TF
EMAXE	WP	N 35° 5' 14.52" W 90° 12' 15.67"	3900.0	VNAV	180.0	Fly By	TF
HOOSE	WP	N 35° 0' 46.88" W 90° 11' 40.96"	4800.0	VNAV	180.0	Fly By	TF
BEBIE	WP	N 34° 28' 0.16" W 90° 5' 35.16"	7800.0	VNAV	180.0	Fly By	TF
PIEPE	WP	N 34° 22' 19.15" W 90° 6' 21.77"	9000.0	VNAV	180.0	Fly By	TF
IBUFY	WP	N 34° 5' 27.95" W 90° 8' 39.84"	12100.0	VNAV	210.0	Fly Over	TF
Climb Gradient: 500.0 ft/NM up to 860.0 ft MSL							

Flyability		Return To Summary
Settings:	Flight Type: Runway Departure	
	Selected Airport: KMEM	
	Aircraft Category: Cat D	
	Climb Gradient: 500.0 ft/NM up to 860.0 ft MSL	
	Ground Speeds:	
	Departure: 120.0 Kts out to 10.0 NM	
	Table:	
	200.0 Kts up to 11000.0 ft	
	240.0 Kts up to 18000.0 ft	
	260.0 Kts up to 24000.0 ft	
	340.0 Kts up to 99900.0 ft	
	Wind Settings: <i>None assigned</i>	
	Descent During a Turn: Allowed	
	VNAV Mode: Flight Plan	
Required IAS at Fly-By WP PRYMD could not be reached with given A/C acceleration performance.		
Flight Track comes into contact with terrain. Minimum AGL along route was -29.47 Ft.		
Flight Track contacted terrain (DTED 0 MAX) between AER and DER or within 2/3 NM of DER.		

DME/DME		Return To Summary
Settings:	RNP: 2.0	
	Flight Mode: Manual	
	Line of Sight (DTED Level 0 Max): Evaluated	
	DME Restrictions: Evaluated	
	Inertial Drift: Enabled	
	Initial Drift: 0.165 NM	
	INS Drift Rate: 8.000 NM/Hour	
	Range Mode: OSV	
	Co-Frequencies: Evaluated	
	RNP Edges: Evaluated	
	Min DME Range: 3.0 NM	
	Allowed Gap Length: 4.0 NM	
	DME Types: VOR/DME, VORTAC, Standalone, and User	
	DME Include Angles: 30 to 150	
	Critical DMEs: Allowed	
DoD Facilities: Not included		
Foreign Facilities: Not included		
Low DMEs: Included		
Terminal DMEs: Included		
Flight Check DMEs: Selected		
Higher Altitudes: Evaluated		
Near Maximum Altitude: Evaluated		
Minimum MSL DMEs Avail: 3912 ft		
Total Number of DMEs Used: 6		
Maximum DME Error: 1.283 NM.		
No Critical DMEs were found.		
Available DMEs: GQE, MEM, HLI, UJM, IGB, SQS		



DME/DME (Continued)						Return To Summary			
DMEs Used									
#	Name	Lat/Lon/MAGVAR	Range	Source	Critical	Err. [NM]	Status	Time	Distance
1	HLI	N 34° 46' 12.95" W 89° 29' 47.39" 03 E	L + ESV	User	NO	1.283	Enabled	11.5%	12.8%
2	UJM	N 34° 34' 30.16" W 90° 40' 27.84" 01 E	L + ESV	User	NO	1.396	Enabled	36.5%	40.7%
3	GQE	N 35° 20' 49.31" W 90° 28' 41.37" 04 E	L + ESV	User	NO	1.283	Enabled	37.0%	41.4%
4	MEM	N 35° 0' 54.42" W 89° 58' 59.55" 01 E	H	Database	NO	1.283	Enabled	15.6%	17.4%
5	IGB	N 33° 29' 7.75" W 88° 30' 48.93" 04 E	L + ESV	User	NO	1.283	Enabled	1.3%	1.8%
6	SQS	N 33° 27' 49.86" W 90° 16' 38.46" 03 E	H	Database	NO	1.283	Enabled	1.3%	1.8%
	Total Coverage							51.6%	58.0%
Flight Check DME Selection									
Distance [NM]		Selected DMEs						Alternate	
0.0									
1.5									
2.9		GQE	MEM	HLI					
7.9		GQE	MEM	HLI					
12.5		GQE	MEM	HLI					
17.2		GQE	MEM	HLI	UJM				
22.2		GQE	MEM	HLI	UJM				
55.0		GQE	MEM	HLI	UJM				
61.1		SQS	MEM	IGB	UJM				
Inertial Drift Segments									
#	Start Location			End Location				Length [NM]	

Available DMEs by Waypoints		Return To Summary
Waypoint Before	Waypoint After	DME List
RW36R(AER)	RW18L(DER)	
RW18L(DER)	GH36R:	
GH36R:	BEEAL	HLI, GQE, and MEM
BEEAL	PRYMD	HLI, GQE, and MEM
PRYMD	EMAXE	HLI, GQE, and MEM
EMAXE	HOOSE	UJM, HLI, GQE, and MEM
HOOSE	BEBIE	UJM, HLI, GQE, and MEM
BEBIE	PIEPE	UJM, HLI, GQE, and MEM
PIEPE	IBUFY	IGB, UJM, MEM, and SQS

User Data					Return To Summary		
User Data Files							
#	File Name						
1	UserDMEs_KMEM PIEPE2 SID RW36C IBUFY 20130410_1116.udt						
User DMEs							
#	Name	Lat/Lon/MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	GQE	N 35° 20' 49.31" W 90° 28' 41.37" 04 E	L	211.0	113.00	GQE	Used
		ESV:	Bearing [True]: 110.0° to 200.0° Bearing [Mag]: 106.0° to 196.0°		Arc Distance: Out to 62.0 NM Altitude: 3200.0 to 19000.0 ft		
2	HLI	N 34° 46' 12.95" W 89° 29' 47.39" 03 E	L	630.0	112.40	HLI	Used
		ESV:	Bearing [True]: 246.0° to 288.0° Bearing [Mag]: 243.0° to 285.0°		Arc Distance: Out to 96.0 NM Altitude: 8500.0 to 19000.0 ft		
		ESV:	Bearing [True]: 290.0° to 328.0° Bearing [Mag]: 287.0° to 325.0°		Arc Distance: Out to 51.0 NM Altitude: 2500.0 to 18000.0 ft		
3	UJM	N 34° 34' 30.16" W 90° 40' 27.84" 01 E	L	240.8	109.60	UJM	Used
		Restriction:	Bearing [True]: 351.0° to 136.0° Bearing [Mag]: 350.0° to 135.0°		Distance: Beyond 25.0 NM Altitude: Below 2800.0 ft		
		ESV:	Bearing [True]: 15.0° to 90.0° Bearing [Mag]: 14.0° to 89.0°		Arc Distance: Out to 60.0 NM Altitude: 3500.0 to 18000.0 ft		
		ESV:	Bearing [True]: 50.0° to 70.0° Bearing [Mag]: 49.0° to 69.0°		Arc Distance: Out to 59.0 NM Altitude: 3000.0 to 17000.0 ft		
4	IGB	N 33° 29' 7.75" W 88° 30' 48.93" 04 E	L	240.1	116.20	IGB	Used
		ESV:	Bearing [True]: 265.0° to 301.0° Bearing [Mag]: 261.0° to 297.0°		Arc Distance: Out to 96.0 NM Altitude: 8500.0 to 23000.0 ft		