

DME DME Assessment Results for BAINY4 path COLDD_BAINY

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Lisa A-CTR Thrysoe
Project File:	C:\Users\Lisa A-CTR Thrysoe\OneDrive - Federal Aviation Administration\Desktop\DME DME Screening\KMSP\KMSP BAINY FOUR STAR\KMSP STAR BAINY FOUR DME 241203.tgs
Output File:	C:\Users\Lisa A-CTR Thrysoe\OneDrive - Federal Aviation Administration\Desktop\DME DME Screening\KMSP\KMSP BAINY FOUR STAR\KMSP [IFPA] BAINY4 20241203_1454 EST\COLDD_BAINY\KMSP BAINY4 RNAV STAR COLDD BAINY 20241203_1454 EST.pdf
Procedure Name:	BAINY4
Software: DmeDmePlugin:	7.4.1
Date/Time:	12/03/2024 14:54 EST
Databases:	MITRE 3DEP 3 arcsec

Failures

No Failures

Warnings

No Warnings

Informational

No Informational

Notes For Flight Check

None

Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	Ground Speed (kts)	Turn Type	Leg Type
COLDD	WP	N46° 44' 40.0000", W092° 17' 48.0000"	13000	VNAV	280	FLY_BY	TF
MILAC	WP	N46° 01' 29.5600", W093° 21' 37.7600"	11000	VNAV	280	FLY_BY	TF
BAINY	WP	N45° 45' 13.0000", W093° 41' 58.0000"	10000	VNAV	280	FLY_BY	TF

Flyability

Flight Type:	RNAV_STAR
Selected Airport:	KMSP [IFPA]
Climb Gradient:	None assigned
Speeds:	200 Ground Speed to 11000 FT
	240 Ground Speed to 18000 FT
	260 Ground Speed to 24000 FT
	340 Ground Speed above 24000 FT
Descent During a Turn:	Allowed
VNAV Mode:	Flight Plan

DME DME Assessment Results for BAINY4 path COLDD_BAINY

DME/DME	
RNP:	RNP 2
Flight Mode:	Manual
Line of Sight (DTED Level 0 Max):	Evaluated
Inertial Drift:	Enabled
Initial Drift:	0.558 NM
INS Drift Rate:	8.0 NM/Hour
Range Mode:	OSV
RNP Edges:	Evaluated
Min DME Range:	3.0 NM
DME Types:	DME, VOR-DME, VORTAC, TACAN
DME Include Angles:	30 to 150
Critical DMEs:	Allowed
DoD Facilities:	Not included
Foreign Facilities:	Not included
High DMEs:	Included
Low DMEs:	Included
Terminal DMEs:	Included
Flight Check DMEs:	Not selected
Higher Altitudes:	Not Evaluated
Near Maximum Altitude:	Not Evaluated
Automatic ESVs:	Enabled
Disabled DMEs:	None

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	GPZ	N47° 09' 48.3971", W093° 29' 20.1570"	6.0 E	40	L		NO	Enabled	59.9 %	59.9 %
2	RWF	N44° 28' 02.1854", W095° 07' 41.6276"	7.0 E	130	DH		NO	Enabled	9.7 %	9.7 %
3	DLH	N46° 48' 07.7897", W092° 12' 10.3291"	5.0 E	130	H		NO	Enabled	75.1 %	75.1 %
4	STC	N45° 32' 57.5050", W094° 03' 30.9591"	3.0 E	25	T		NO	Enabled	5.7 %	5.7 %
5	GEP	N45° 08' 44.4656", W093° 22' 23.4514"	6.0 E	130	H		NO	Enabled	5 %	5 %
6	INL	N48° 33' 56.8740", W093° 24' 20.4400"	6.0 E	130	DH		NO	Enabled	0.7 %	0.7 %
7	AXN	N45° 57' 30.1977", W095° 13' 57.4854"	7.0 E	130	DH		NO	Enabled	71 %	71 %
8	DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	L		NO	Enabled	45.1 %	45.1 %
9	MSP	N44° 53' 47.3958", W093° 14' 11.5137"	2.0 E	40	L		NO	Enabled	56.4 %	56.4 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	GPZ	DLH	INL			
0.7	GPZ	DLH				
24.2	GPZ	DLH	AXN			
34.7	GPZ	AXN				
35.5	GPZ	DLH	AXN			
36.4	GPZ	DLH	AXN	MSP		
45.8	GPZ	DLH	AXN	MSP	DWN	
50.1	MSP	AXN	DLH	DWN		
63.6	MSP	AXN	DWN			
75.3	MSP	AXN	DWN	RWF		
78.7	MSP	AXN	STC	DWN	RWF	

DME DME Assessment Results for BAINY4 path COLDD_BAINY

Inertial Drift Segments

#	Start Location	End Location	Length [NM]
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Available DMEs by Waypoints

Waypoint Before	Waypoint After	DME List	Suggested DMEs
COLDD	MILAC	GPZ, DLH, INL, AXN, DWN, MSP	
MILAC	BAINY	RWF, DLH, STC, GEP, AXN, DWN, MSP	

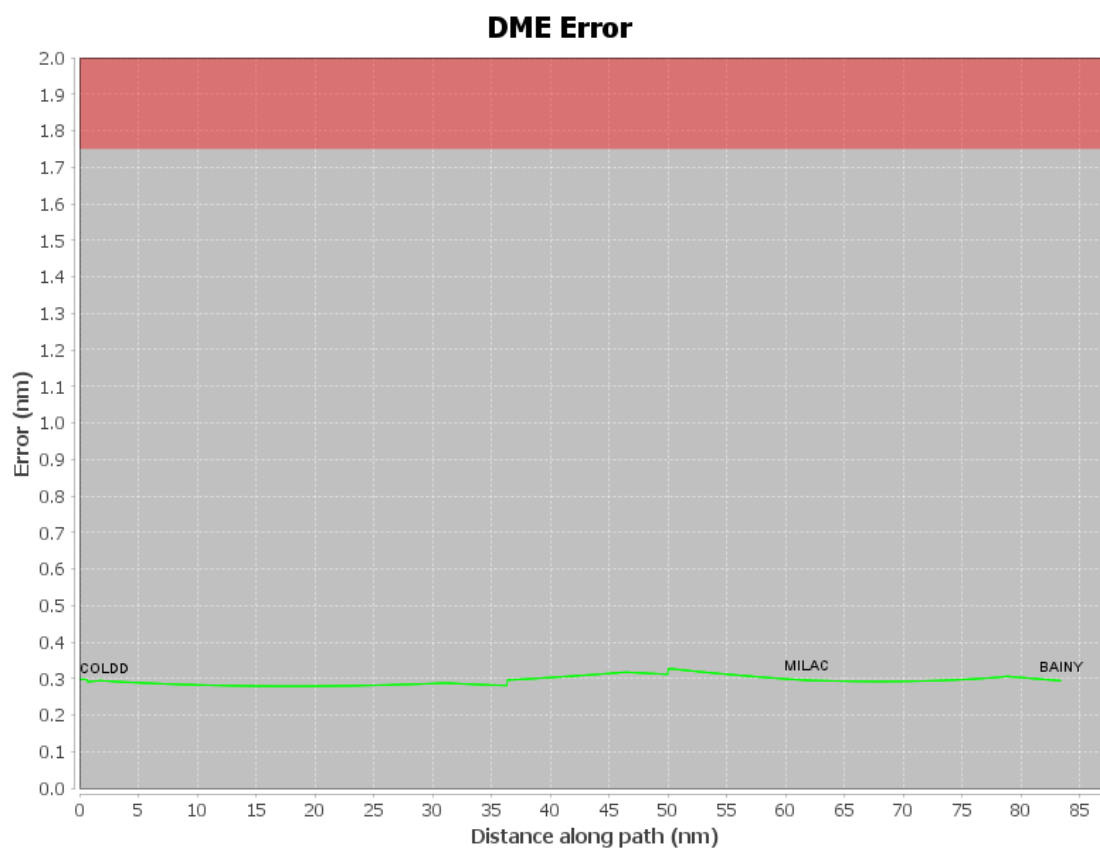
User Data Files

#	File Name
1	New Analysis.udt

User DMEs

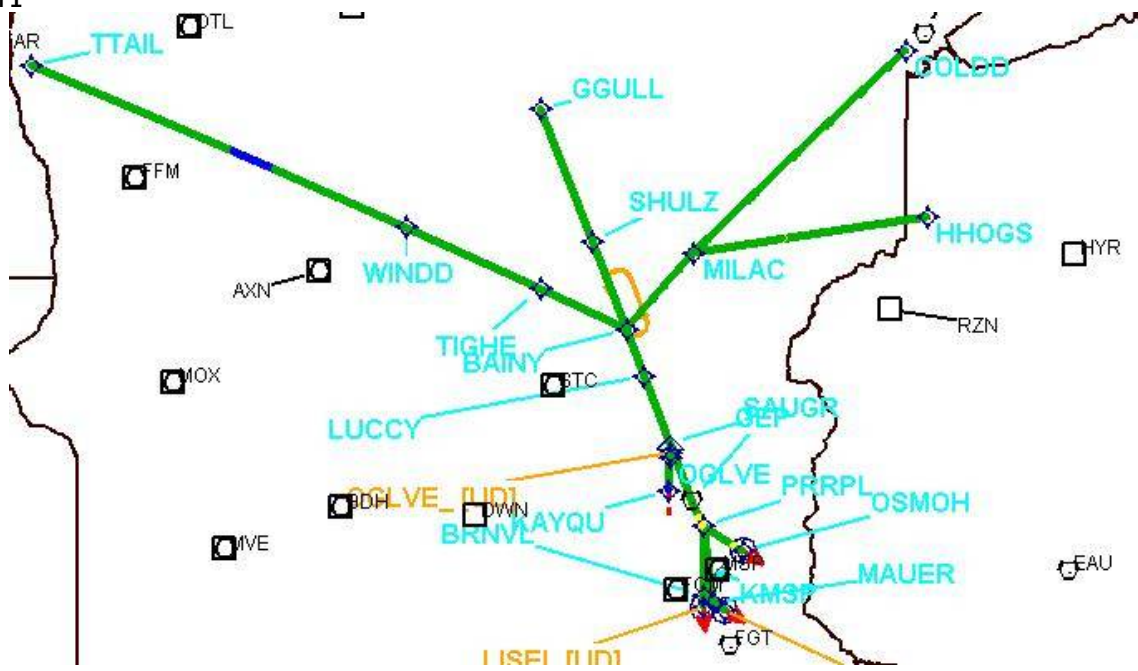
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	MSP FAA 830748-25 MSP	N44° 53' 47.3958", W093° 14' 11.5137"	2.0 E	40	831.6	115.3	MSP FAA 830748-25	
ESV:		Bearing [True]: 314.0° to 12.0° Bearing [Mag]: 312.0° to 10.0°				Arc Distance: Out to 89.0 NM Altitude: 7900.0 to 20000.0 ft		
2	GEP GEP	N45° 08' 44.4656", W093° 22' 23.4514"	6.0 E	130	877.3	117.3	GEP	
ESV:		Bearing [True]: 27.0° to 37.0° Bearing [Mag]: 21.0° to 31.0°				Arc Distance: Out to 75.0 NM Altitude: 10900.0 to 15400.0 ft		
3	GPZ FAA 795355-4 GPZ	N47° 09' 48.3971", W093° 29' 20.1570"	6.0 E	40	1359	111.4	GPZ FAA 795355-4	
ESV:		Bearing [True]: 114.0° to 183.0° Bearing [Mag]: 108.0° to 177.0°				Arc Distance: Out to 65.0 NM Altitude: 6400.0 to 24100.0 ft		
4	DLH FAA 704109-33 DLH	N46° 48' 07.7897", W092° 12' 10.3291"	5.0 E	130	1427.9	112.6	DLH FAA 704109-33	
ESV:		Bearing [True]: 183.0° to 232.0° Bearing [Mag]: 178.0° to 227.0°				Arc Distance: Out to 69.0 NM Altitude: 6000.0 to 16000.0 ft		
5	DWN FAA 703966-20 DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	1130	109.0	DWN FAA 703966-20	
ESV:		Bearing [True]: 319.0° to 82.0° Bearing [Mag]: 319.0° to 82.0°				Arc Distance: Out to 65.0 NM Altitude: 4200.0 to 20000.0 ft		
6	DWN DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	1130	109.0	DWN	
ESV:		Bearing [True]: 51.0° to 58.0° Bearing [Mag]: 51.0° to 58.0°				Arc Distance: Out to 117.0 NM Altitude: 10900.0 to 19200.0 ft		
7	GPZ GPZ	N47° 09' 48.3971", W093° 29' 20.1570"	6.0 E	40	1359	111.4	GPZ	
ESV:		Bearing [True]: 136.0° to 151.0° Bearing [Mag]: 130.0° to 145.0°				Arc Distance: Out to 85.0 NM Altitude: 10900.0 to 19400.0 ft		
8	DWN FAA 703966-21 DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	1130	109.0	DWN FAA 703966-21	
ESV:		Bearing [True]: 319.0° to 82.0° Bearing [Mag]: 319.0° to 82.0°				Arc Distance: Out to 89.0 NM Altitude: 8200.0 to 20000.0 ft		
9	GEP FAA 704267-63 GEP	N45° 08' 44.4656", W093° 22' 23.4514"	6.0 E	130	877.3	117.3	GEP FAA 704267-63	
ESV:		Bearing [True]: 331.0° to 348.0° Bearing [Mag]: 325.0° to 342.0°				Arc Distance: Out to 90.0 NM Altitude: 6000.0 to 15400.0 ft		
10	PKD FAA 765984-9 PKD	N46° 53' 53.1091", W095° 04' 15.6354"	0.0 E	40	1471.6	110.6	PKD FAA 765984-9	
ESV:		Bearing [True]: 218.0° to 264.0° Bearing [Mag]: 218.0° to 264.0°				Arc Distance: Out to 71.0 NM Altitude: 10000.0 to 11000.0 ft		

DME DME Assessment Results for BAINY4 path COLDD_BAINY

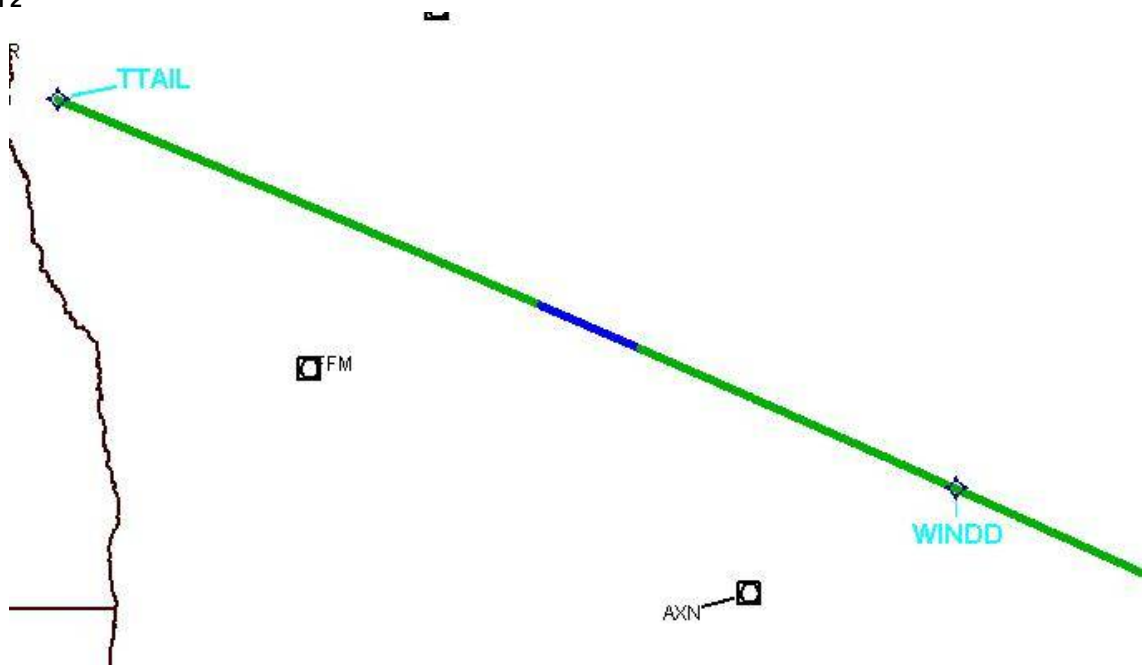


DME DME Assessment Results for BAINY4 path COLDD_BAINY

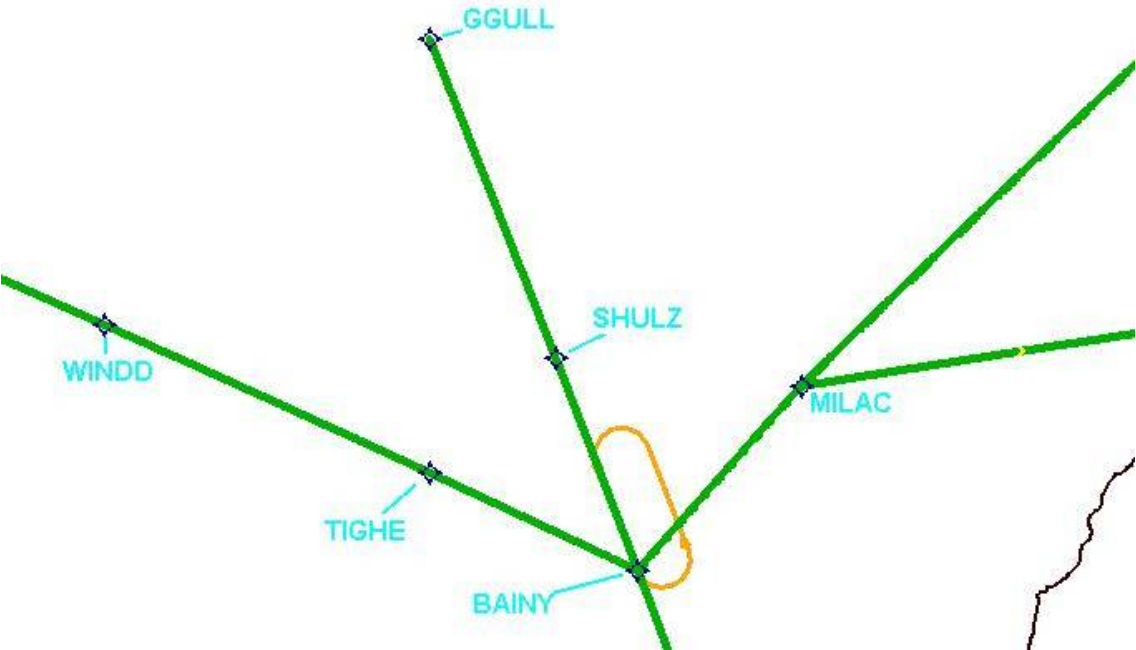
Graphic Depiction 1



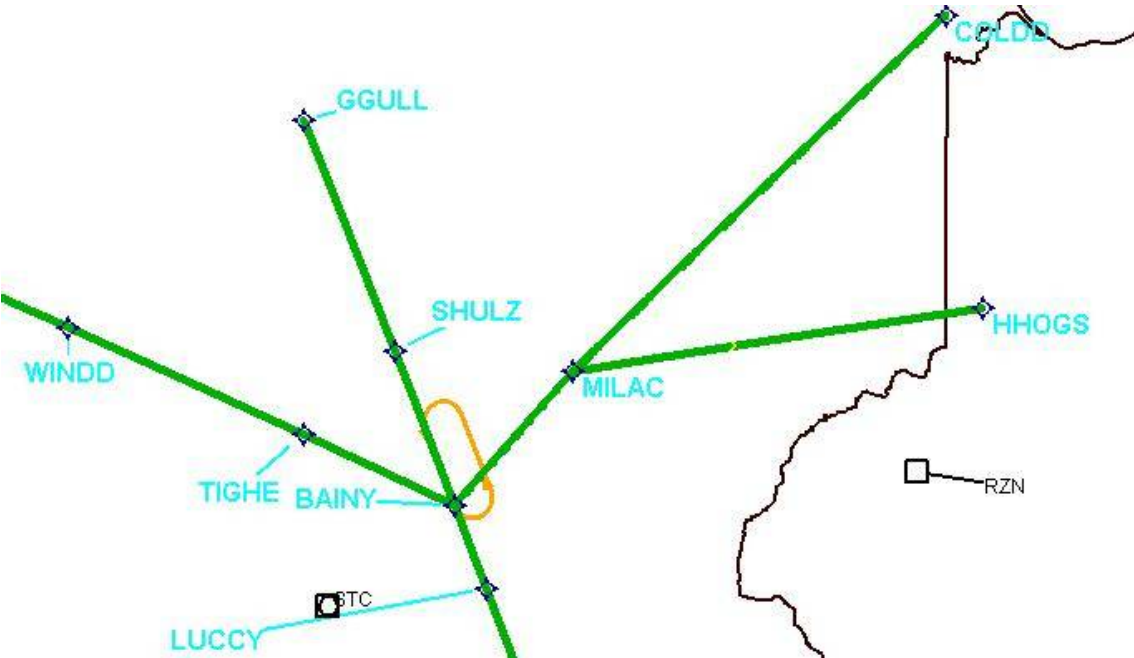
Graphic Depiction 2



Graphic Depiction 3

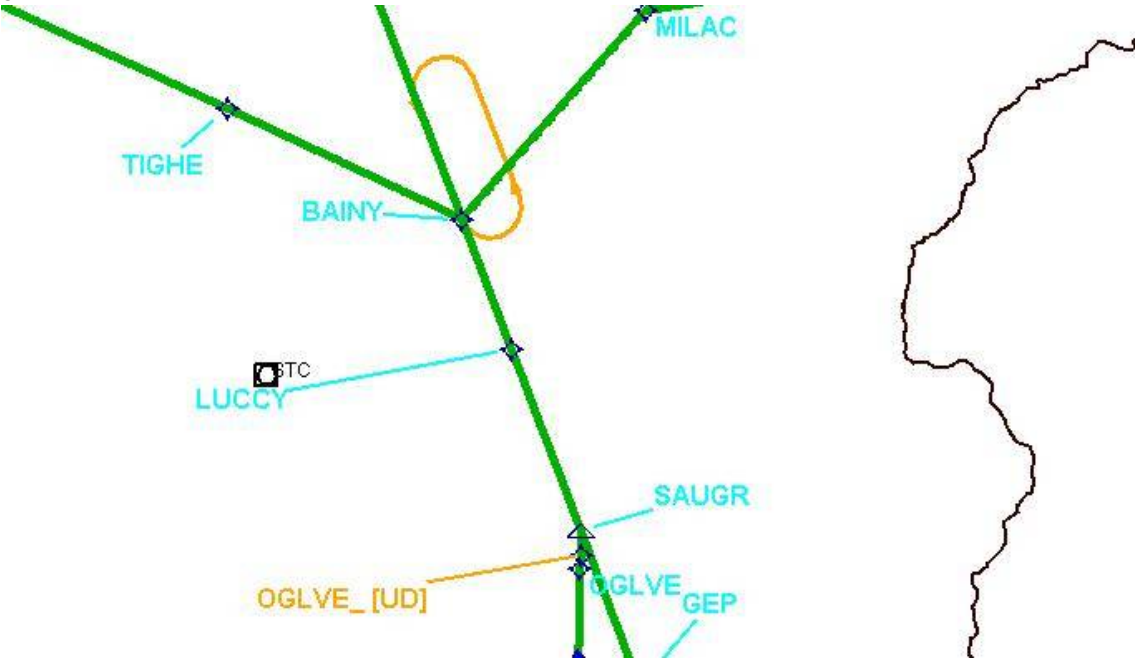


Graphic Depiction 4

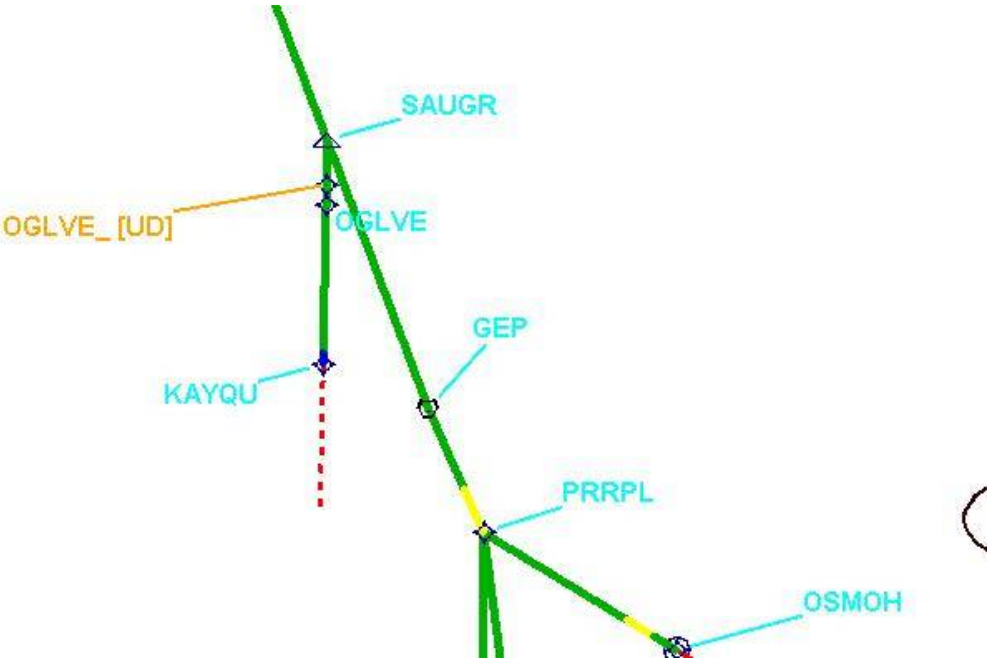


DME DME Assessment Results for BAINY4 path COLDD_BAINY

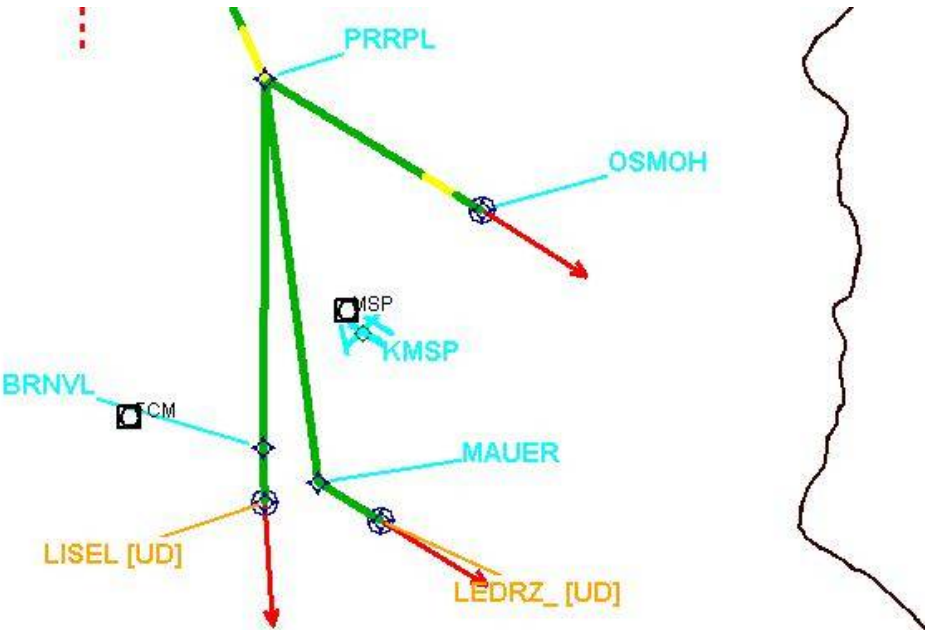
Graphic Depiction 5



Graphic Depiction 6



Graphic Depiction 7



DME DME Assessment Results for BAINY4 path GGULL_BAINY

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Lisa A-CTR Thrysoe
Project File:	C:\Users\Lisa A-CTR Thrysoe\OneDrive - Federal Aviation Administration\Desktop\DME DME Screening\KMSP\KMSP BAINY FOUR STAR\KMSP STAR BAINY FOUR DME 241203.tgs
Output File:	C:\Users\Lisa A-CTR Thrysoe\OneDrive - Federal Aviation Administration\Desktop\DME DME Screening\KMSP\KMSP BAINY FOUR STAR\KMSP [IFPA] BAINY4 20241203_1454 EST\GGULL_BAINY\KMSP BAINY4 RNAV STAR GGULL BAINY 20241203_1454 EST.pdf
Procedure Name:	BAINY4
Software: DmeDmePlugin:	7.4.1
Date/Time:	12/03/2024 14:54 EST
Databases:	MITRE 3DEP 3 arcsec

Failures

No Failures

Warnings

No Warnings

Informational

No Informational

Notes For Flight Check

None

Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	Ground Speed (kts)	Turn Type	Leg Type
GGULL	WP	N46° 32' 02.0000", W094° 07' 52.0000"	12000	VNAV	280	FLY_BY	TF
SHULZ	WP	N46° 03' 53.9300", W093° 52' 10.2100"	10000	VNAV	280	FLY_BY	TF
BAINY	WP	N45° 45' 13.0000", W093° 41' 58.0000"	10000	VNAV	280	FLY_BY	TF

Flyability

Flight Type:	RNAV_STAR
Selected Airport:	KMSP [IFPA]
Climb Gradient:	None assigned
Speeds:	200 Ground Speed to 11000 FT
	240 Ground Speed to 18000 FT
	260 Ground Speed to 24000 FT
	340 Ground Speed above 24000 FT
Descent During a Turn:	Allowed
VNAV Mode:	Flight Plan

DME DME Assessment Results for BAINY4 path GGULL_BAINY

DME/DME	
RNP:	RNP 2
Flight Mode:	Manual
Line of Sight (DTED Level 0 Max):	Evaluated
Inertial Drift:	Enabled
Initial Drift:	0.558 NM
INS Drift Rate:	8.0 NM/Hour
Range Mode:	OSV
RNP Edges:	Evaluated
Min DME Range:	3.0 NM
DME Types:	DME, VOR-DME, VORTAC, TACAN
DME Include Angles:	30 to 150
Critical DMEs:	Allowed
DoD Facilities:	Not included
Foreign Facilities:	Not included
High DMEs:	Included
Low DMEs:	Included
Terminal DMEs:	Included
Flight Check DMEs:	Not selected
Higher Altitudes:	Not Evaluated
Near Maximum Altitude:	Not Evaluated
Automatic ESVs:	Enabled
Disabled DMEs:	None

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	RWF	N44° 28' 02.1854", W095° 07' 41.6276"	7.0 E	130	DH		NO	Enabled	18.4 %	18.4 %
2	GEP	N45° 08' 44.4656", W093° 22' 23.4514"	6.0 E	130	H		NO	Enabled	100 %	100 %
3	STC	N45° 32' 57.5050", W094° 03' 30.9591"	3.0 E	25	T		NO	Enabled	9.7 %	9.7 %
4	FAR	N46° 45' 12.0129", W096° 51' 04.7483"	9.0 E	130	DH		NO	Enabled	1.9 %	1.9 %
5	AXN	N45° 57' 30.1977", W095° 13' 57.4854"	7.0 E	130	DH		NO	Enabled	100 %	100 %
6	DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	L		NO	Enabled	96.1 %	96.1 %
7	MSP	N44° 53' 47.3958", W093° 14' 11.5137"	2.0 E	40	L		NO	Enabled	65.8 %	65.8 %

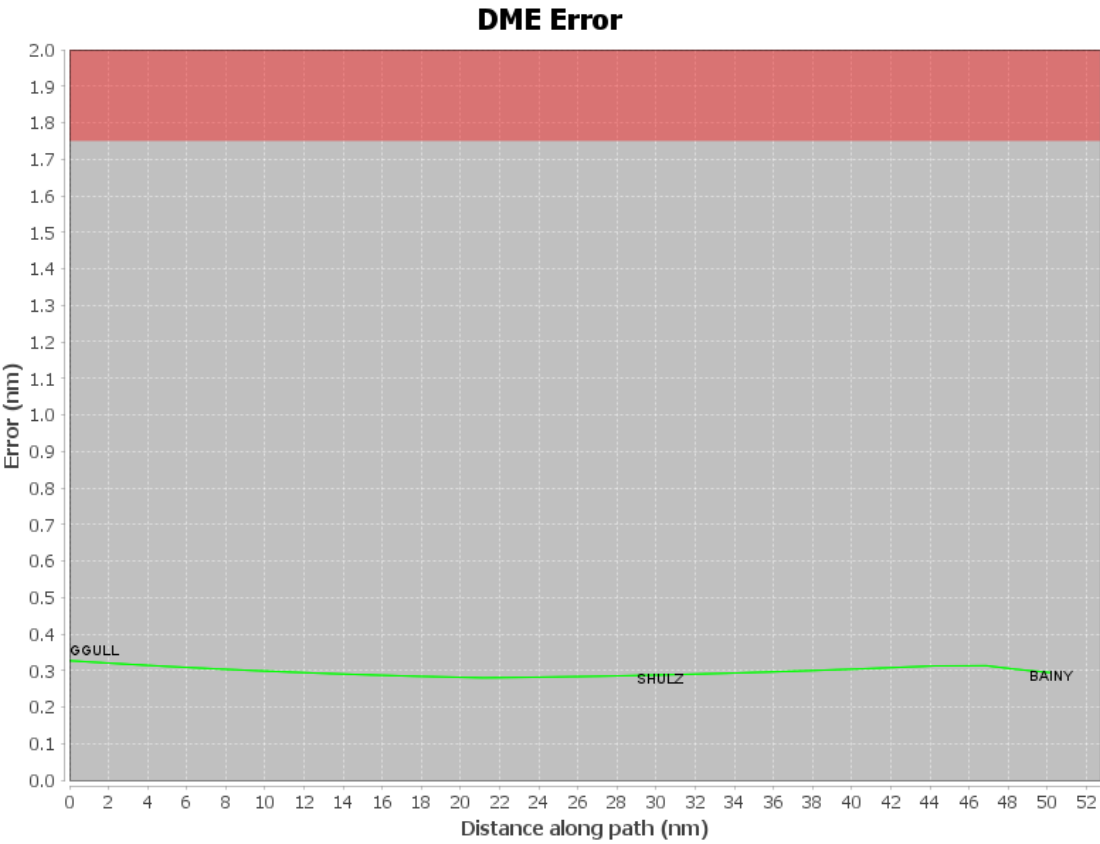
Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	GEP	AXN	FAR			
1.0	GEP	AXN				
1.1	GEP	AXN	DWN			
16.3	GEP	AXN	MSP	DWN		
40.9	GEP	AXN	MSP	DWN	RWF	
49.4	STC	GEP	AXN	RWF		

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]

Available DMEs by Waypoints			
Waypoint Before	Waypoint After	DME List	Suggested DMEs
GGULL	SHULZ	GEP, FAR, AXN, DWN, MSP	
SHULZ	BAINY	RWF, GEP, STC, AXN, DWN, MSP	

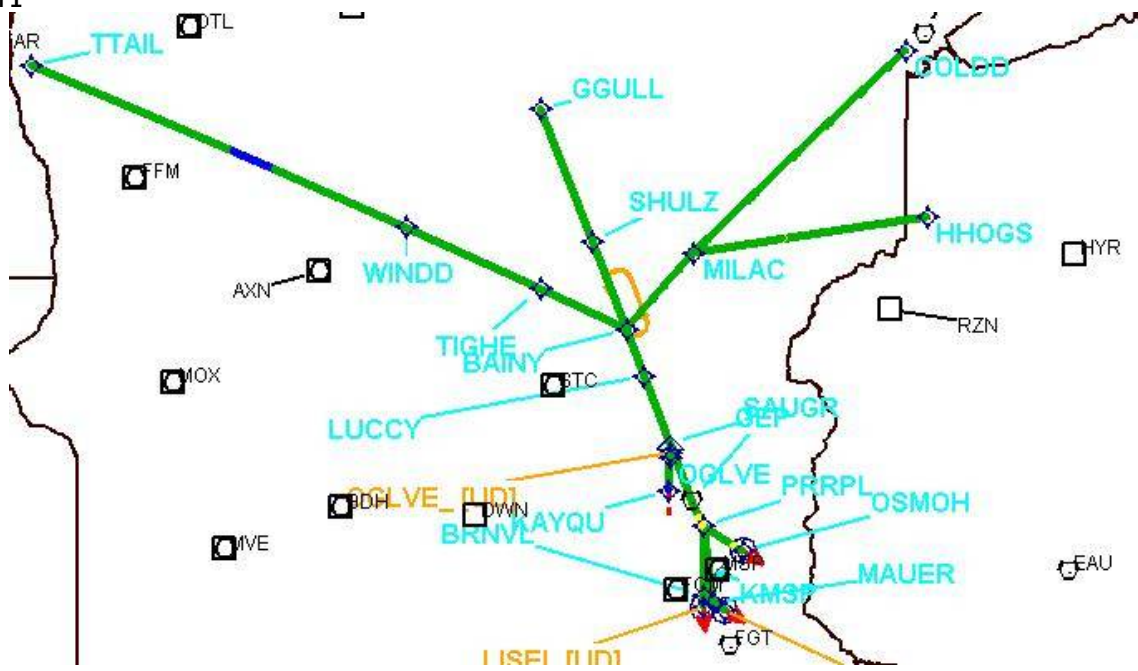
DME DME Assessment Results for BAINY4 path GGULL_BAINY

User Data Files								
#	File Name							
1	New Analysis.udt							
User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	MSP FAA 830748-25 MSP	N44° 53' 47.3958", W093° 14' 11.5137"	2.0 E	40	831.6	115.3	MSP FAA 830748-25	
ESV:		Bearing [True]: 314.0° to 12.0° Bearing [Mag]: 312.0° to 10.0°				Arc Distance: Out to 89.0 NM Altitude: 7900.0 to 20000.0 ft		
2	GEP GEP	N45° 08' 44.4656", W093° 22' 23.4514"	6.0 E	130	877.3	117.3	GEP	
ESV:		Bearing [True]: 27.0° to 37.0° Bearing [Mag]: 21.0° to 31.0°				Arc Distance: Out to 75.0 NM Altitude: 10900.0 to 15400.0 ft		
3	GPZ FAA 795355-4 GPZ	N47° 09' 48.3971", W093° 29' 20.1570"	6.0 E	40	1359	111.4	GPZ FAA 795355-4	
ESV:		Bearing [True]: 114.0° to 183.0° Bearing [Mag]: 108.0° to 177.0°				Arc Distance: Out to 65.0 NM Altitude: 6400.0 to 24100.0 ft		
4	DLH FAA 704109-33 DLH	N46° 48' 07.7897", W092° 12' 10.3291"	5.0 E	130	1427.9	112.6	DLH FAA 704109-33	
ESV:		Bearing [True]: 183.0° to 232.0° Bearing [Mag]: 178.0° to 227.0°				Arc Distance: Out to 69.0 NM Altitude: 6000.0 to 16000.0 ft		
5	DWN FAA 703966-20 DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	1130	109.0	DWN FAA 703966-20	
ESV:		Bearing [True]: 319.0° to 82.0° Bearing [Mag]: 319.0° to 82.0°				Arc Distance: Out to 65.0 NM Altitude: 4200.0 to 20000.0 ft		
6	DWN DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	1130	109.0	DWN	
ESV:		Bearing [True]: 51.0° to 58.0° Bearing [Mag]: 51.0° to 58.0°				Arc Distance: Out to 117.0 NM Altitude: 10900.0 to 19200.0 ft		
7	GPZ GPZ	N47° 09' 48.3971", W093° 29' 20.1570"	6.0 E	40	1359	111.4	GPZ	
ESV:		Bearing [True]: 136.0° to 151.0° Bearing [Mag]: 130.0° to 145.0°				Arc Distance: Out to 85.0 NM Altitude: 10900.0 to 19400.0 ft		
8	DWN FAA 703966-21 DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	1130	109.0	DWN FAA 703966-21	
ESV:		Bearing [True]: 319.0° to 82.0° Bearing [Mag]: 319.0° to 82.0°				Arc Distance: Out to 89.0 NM Altitude: 8200.0 to 20000.0 ft		
9	GEP FAA 704267-63 GEP	N45° 08' 44.4656", W093° 22' 23.4514"	6.0 E	130	877.3	117.3	GEP FAA 704267-63	
ESV:		Bearing [True]: 331.0° to 348.0° Bearing [Mag]: 325.0° to 342.0°				Arc Distance: Out to 90.0 NM Altitude: 6000.0 to 15400.0 ft		
10	PKD FAA 765984-9 PKD	N46° 53' 53.1091", W095° 04' 15.6354"	0.0 E	40	1471.6	110.6	PKD FAA 765984-9	
ESV:		Bearing [True]: 218.0° to 264.0° Bearing [Mag]: 218.0° to 264.0°				Arc Distance: Out to 71.0 NM Altitude: 10000.0 to 11000.0 ft		

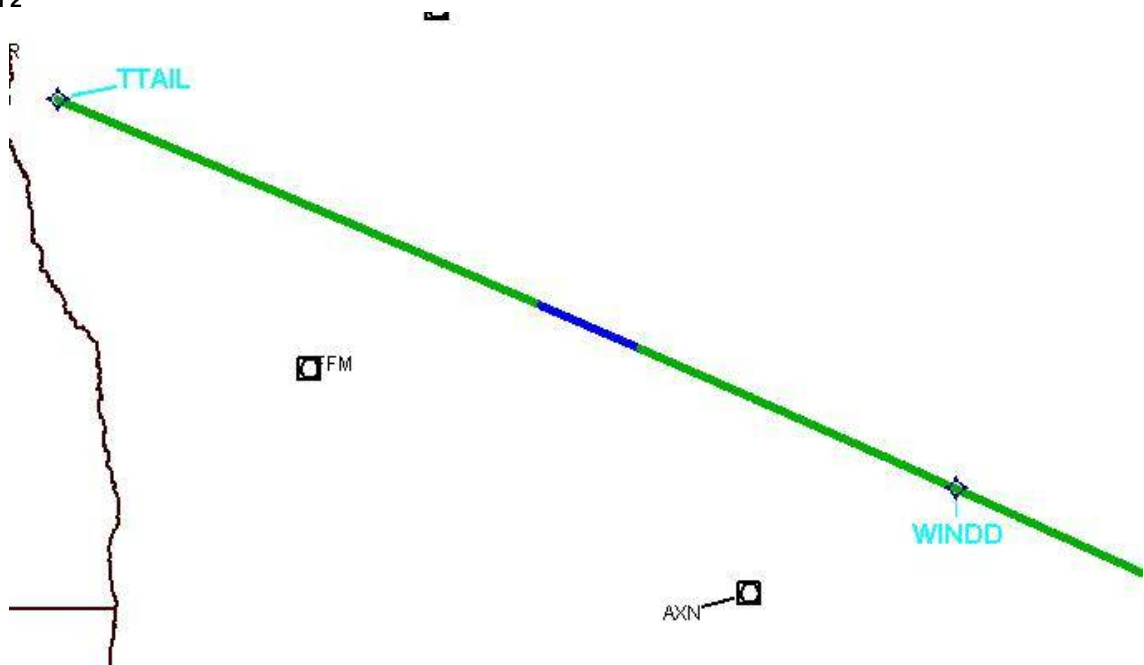


DME DME Assessment Results for BAINY4 path GGULL_BAINY

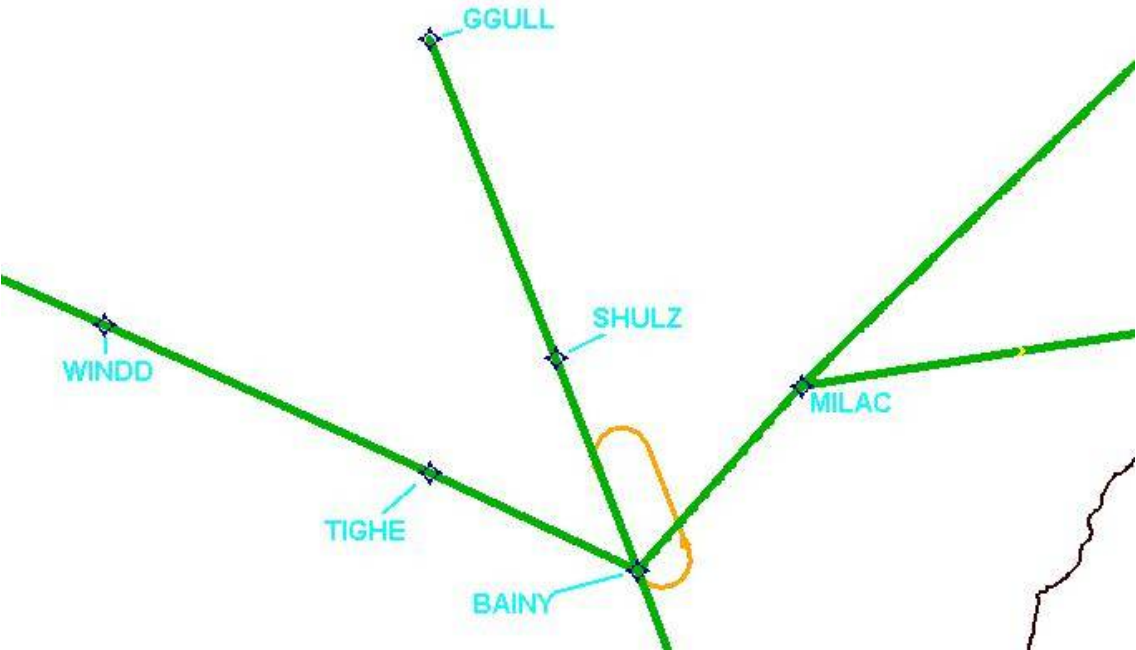
Graphic Depiction 1



Graphic Depiction 2

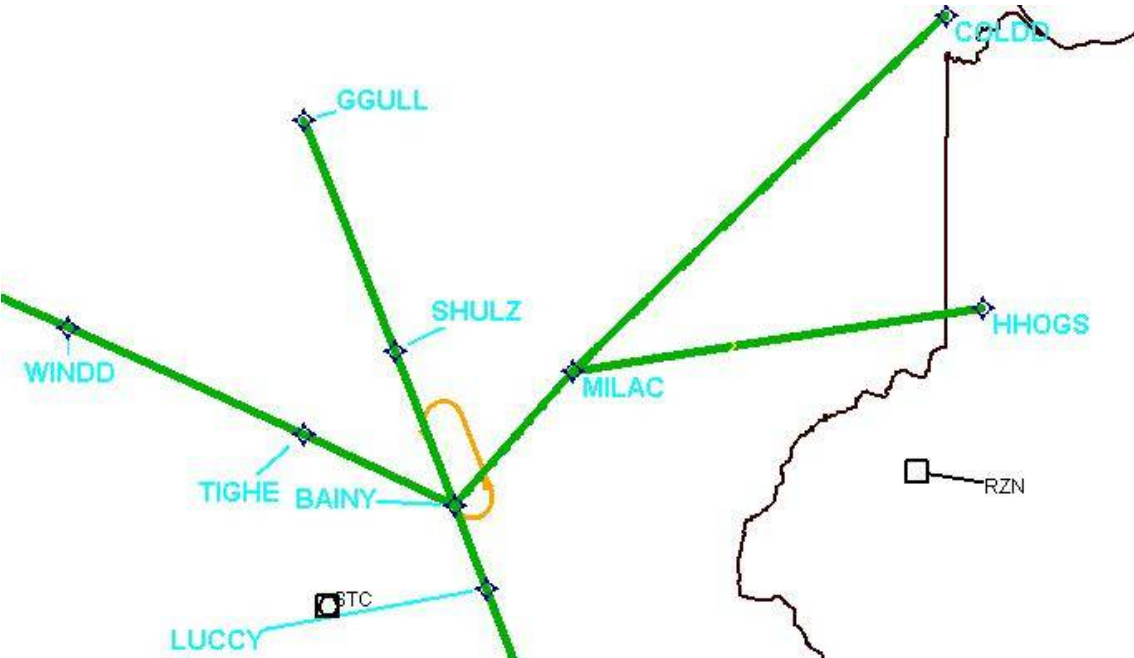


Graphic Depiction 3



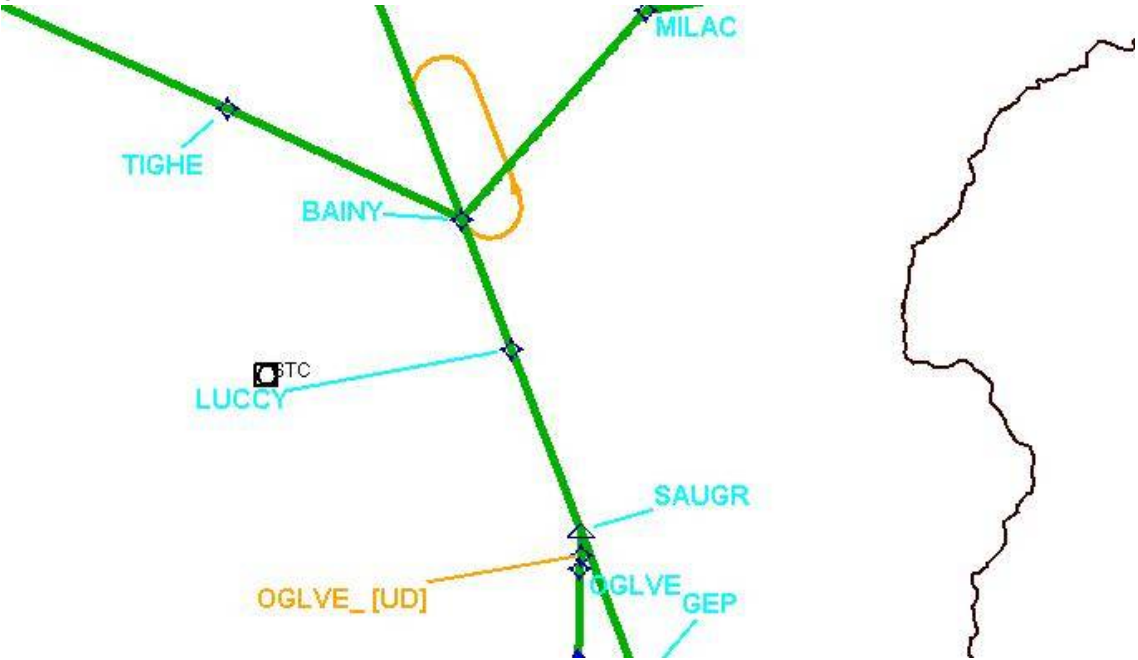
DME DME Assessment Results for BAINY4 path GGULL_BAINY

Graphic Depiction 4

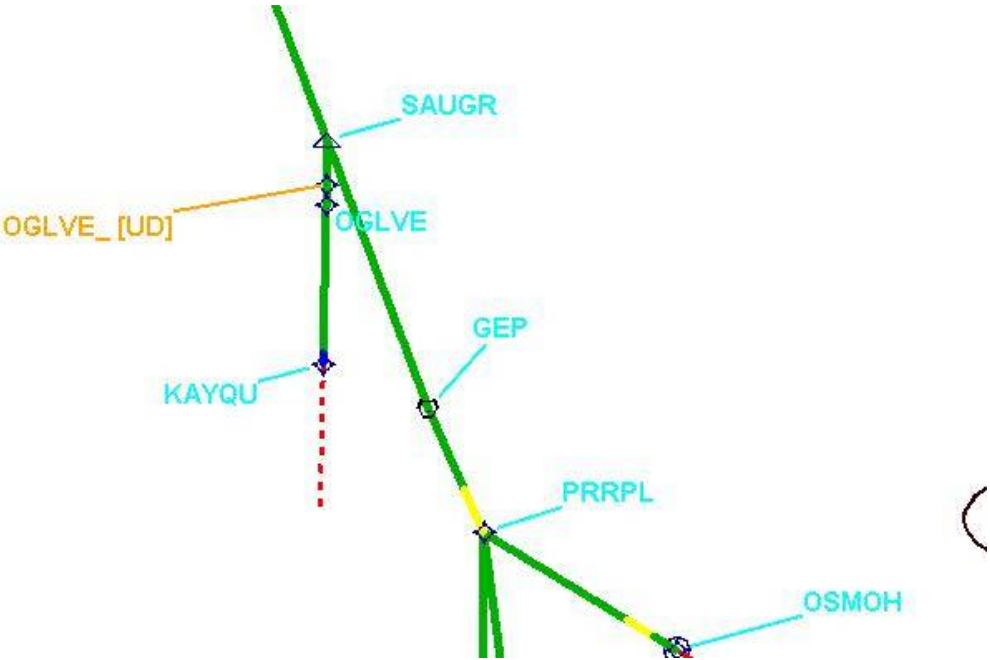


DME DME Assessment Results for BAINY4 path GGULL_BAINY

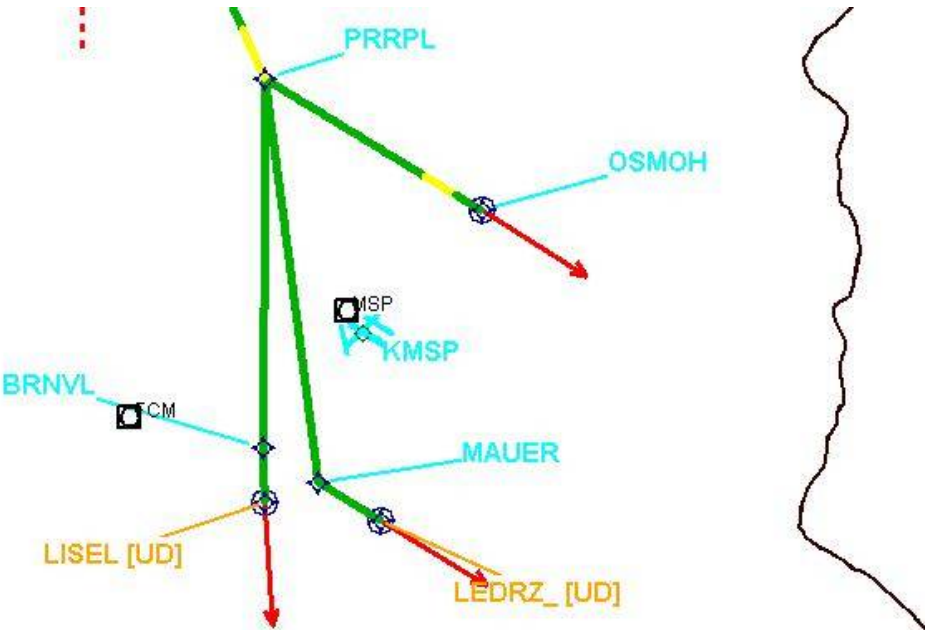
Graphic Depiction 5



Graphic Depiction 6



Graphic Depiction 7



DME DME Assessment Results for BAINY4 path HHOGS_MILAC

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Lisa A-CTR Thrysoe
Project File:	C:\Users\Lisa A-CTR Thrysoe\OneDrive - Federal Aviation Administration\Desktop\DME DME Screening\KMSP\KMSP BAINY FOUR STAR\KMSP STAR BAINY FOUR DME 241203.tgs
Output File:	C:\Users\Lisa A-CTR Thrysoe\OneDrive - Federal Aviation Administration\Desktop\DME DME Screening\KMSP\KMSP BAINY FOUR STAR\KMSP [IFPA] BAINY4 20241203_1454 EST\HHOGS_MILAC\KMSP BAINY4 RNAV STAR HHOGS MILAC 20241203_1454 EST.pdf
Procedure Name:	BAINY4
Software: DmeDmePlugin:	7.4.1
Date/Time:	12/03/2024 14:54 EST
Databases:	MITRE 3DEP 3 arcsec

Failures

No Failures

Warnings

No Warnings

Informational

No Informational

Notes For Flight Check

None

Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	Ground Speed (kts)	Turn Type	Leg Type
HHOGS	WP	N46° 09' 11.0000", W092° 11' 22.0000"	13000	VNAV	280	FLY_BY	TF
MILAC	WP	N46° 01' 29.5600", W093° 21' 37.7600"	11000	VNAV	280	FLY_BY	TF

Flyability

Flight Type:	RNAV STAR
Selected Airport:	KMSP [IFPA]
Climb Gradient:	None assigned
Speeds:	200 Ground Speed to 11000 FT
	240 Ground Speed to 18000 FT
	260 Ground Speed to 24000 FT
	340 Ground Speed above 24000 FT
Descent During a Turn:	Allowed
VNAV Mode:	Flight Plan

DME DME Assessment Results for BAINY4 path HHOGS_MILAC

DME/DME	
RNP:	RNP 2
Flight Mode:	Manual
Line of Sight (DTED Level 0 Max):	Evaluated
Inertial Drift:	Enabled
Initial Drift:	0.558 NM
INS Drift Rate:	8.0 NM/Hour
Range Mode:	OSV
RNP Edges:	Evaluated
Min DME Range:	3.0 NM
DME Types:	DME, VOR-DME, VORTAC, TACAN
DME Include Angles:	30 to 150
Critical DMEs:	Allowed
DoD Facilities:	Not included
Foreign Facilities:	Not included
High DMEs:	Included
Low DMEs:	Included
Terminal DMEs:	Included
Flight Check DMEs:	Not selected
Higher Altitudes:	Not Evaluated
Near Maximum Altitude:	Not Evaluated
Automatic ESVs:	Enabled
Disabled DMEs:	None

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	GPZ	N47° 09' 48.3971", W093° 29' 20.1570"	6.0 E	40	L		NO	Enabled	36.1 %	36.1 %
2	DLH	N46° 48' 07.7897", W092° 12' 10.3291"	5.0 E	130	H		NO	Enabled	92.3 %	92.3 %
3	GEP	N45° 08' 44.4656", W093° 22' 23.4514"	6.0 E	130	H		NO	Enabled	17.6 %	17.6 %
4	RZN	N45° 49' 13.6015", W092° 22' 28.2562"	-0.0 E	40	L		NO	Enabled	88.4 %	88.4 %
5	AXN	N45° 57' 30.1977", W095° 13' 57.4854"	7.0 E	130	DH		NO	Enabled	65.8 %	65.8 %
6	DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	L		NO	Enabled	58.2 %	58.2 %
7	MSP	N44° 53' 47.3958", W093° 14' 11.5137"	2.0 E	40	L		NO	Enabled	39.2 %	39.2 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	GPZ	RZN	DWN			
3.5	DWN	GPZ	RZN	DLH		
8.6	GEP	GPZ	DWN	DLH	RZN	
10.8	GEP	GPZ	DLH	RZN		
16.9	GEP	GPZ	RZN	DLH	AXN	
17.4	DLH	RZN	GPZ	AXN		
18.0	DLH	RZN	AXN			
30.1	DLH	RZN	MSP	DWN	AXN	
30.5	DLH	RZN	MSP	AXN		
31.8	DLH	RZN	MSP	DWN	AXN	
43.8	MSP	AXN	DLH	DWN		
49.3	MSP	AXN	DWN			

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]

DME DME Assessment Results for BAINY4 path HHOGS_MILAC

Available DMEs by Waypoints

Waypoint Before	Waypoint After	DME List	Suggested DMEs
HHOGS	MILAC	GPZ, DLH, GEP, RZN, AXN, DWN, MSP	

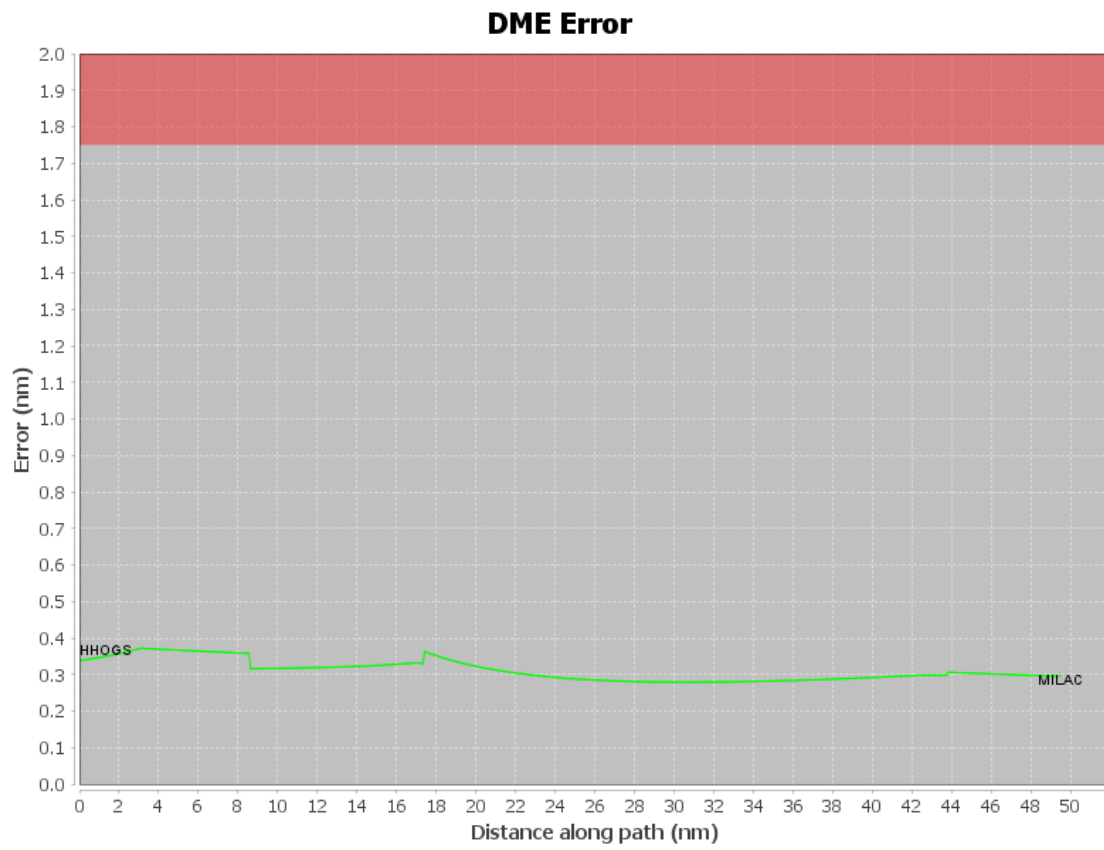
User Data Files

#	File Name
1	New Analysis.udt

User DMEs

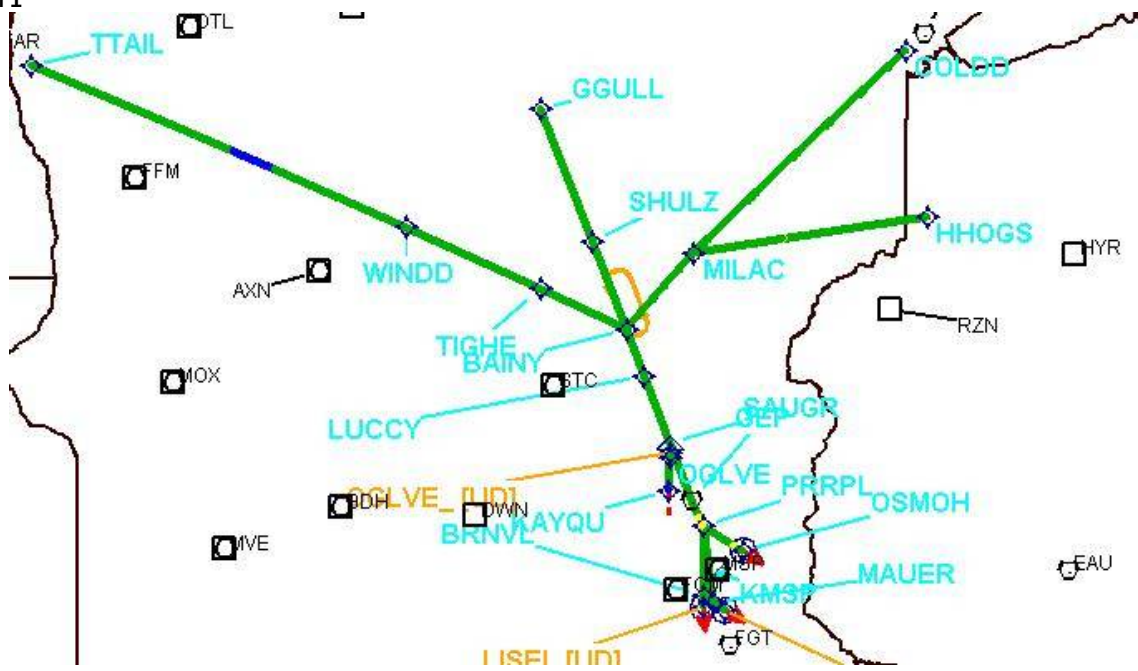
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	MSP FAA 830748-25 MSP	N44° 53' 47.3958", W093° 14' 11.5137"	2.0 E	40	831.6	115.3	MSP FAA 830748-25	
ESV:		Bearing [True]: 314.0° to 12.0° Bearing [Mag]: 312.0° to 10.0°				Arc Distance: Out to 89.0 NM Altitude: 7900.0 to 20000.0 ft		
2	GEP GEP	N45° 08' 44.4656", W093° 22' 23.4514"	6.0 E	130	877.3	117.3	GEP	
ESV:		Bearing [True]: 27.0° to 37.0° Bearing [Mag]: 21.0° to 31.0°				Arc Distance: Out to 75.0 NM Altitude: 10900.0 to 15400.0 ft		
3	GPZ FAA 795355-4 GPZ	N47° 09' 48.3971", W093° 29' 20.1570"	6.0 E	40	1359	111.4	GPZ FAA 795355-4	
ESV:		Bearing [True]: 114.0° to 183.0° Bearing [Mag]: 108.0° to 177.0°				Arc Distance: Out to 65.0 NM Altitude: 6400.0 to 24100.0 ft		
4	DLH FAA 704109-33 DLH	N46° 48' 07.7897", W092° 12' 10.3291"	5.0 E	130	1427.9	112.6	DLH FAA 704109-33	
ESV:		Bearing [True]: 136.0° to 232.0° Bearing [Mag]: 178.0° to 227.0°				Arc Distance: Out to 69.0 NM Altitude: 6000.0 to 16000.0 ft		
5	DWN FAA 703966-20 DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	1130	109.0	DWN FAA 703966-20	
ESV:		Bearing [True]: 319.0° to 82.0° Bearing [Mag]: 319.0° to 82.0°				Arc Distance: Out to 65.0 NM Altitude: 4200.0 to 20000.0 ft		
6	DWN DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	1130	109.0	DWN	
ESV:		Bearing [True]: 51.0° to 58.0° Bearing [Mag]: 51.0° to 58.0°				Arc Distance: Out to 117.0 NM Altitude: 10900.0 to 19200.0 ft		
7	GPZ GPZ	N47° 09' 48.3971", W093° 29' 20.1570"	6.0 E	40	1359	111.4	GPZ	
ESV:		Bearing [True]: 136.0° to 151.0° Bearing [Mag]: 130.0° to 145.0°				Arc Distance: Out to 85.0 NM Altitude: 10900.0 to 19400.0 ft		
8	DWN FAA 703966-21 DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	1130	109.0	DWN FAA 703966-21	
ESV:		Bearing [True]: 319.0° to 82.0° Bearing [Mag]: 319.0° to 82.0°				Arc Distance: Out to 89.0 NM Altitude: 8200.0 to 20000.0 ft		
9	GEP FAA 704267-63 GEP	N45° 08' 44.4656", W093° 22' 23.4514"	6.0 E	130	877.3	117.3	GEP FAA 704267-63	
ESV:		Bearing [True]: 331.0° to 348.0° Bearing [Mag]: 325.0° to 342.0°				Arc Distance: Out to 90.0 NM Altitude: 6000.0 to 15400.0 ft		
10	PKD FAA 765984-9 PKD	N46° 53' 53.1091", W095° 04' 15.6354"	0.0 E	40	1471.6	110.6	PKD FAA 765984-9	
ESV:		Bearing [True]: 218.0° to 264.0° Bearing [Mag]: 218.0° to 264.0°				Arc Distance: Out to 71.0 NM Altitude: 10000.0 to 11000.0 ft		

DME DME Assessment Results for BAINY4 path HHOGS_MILAC



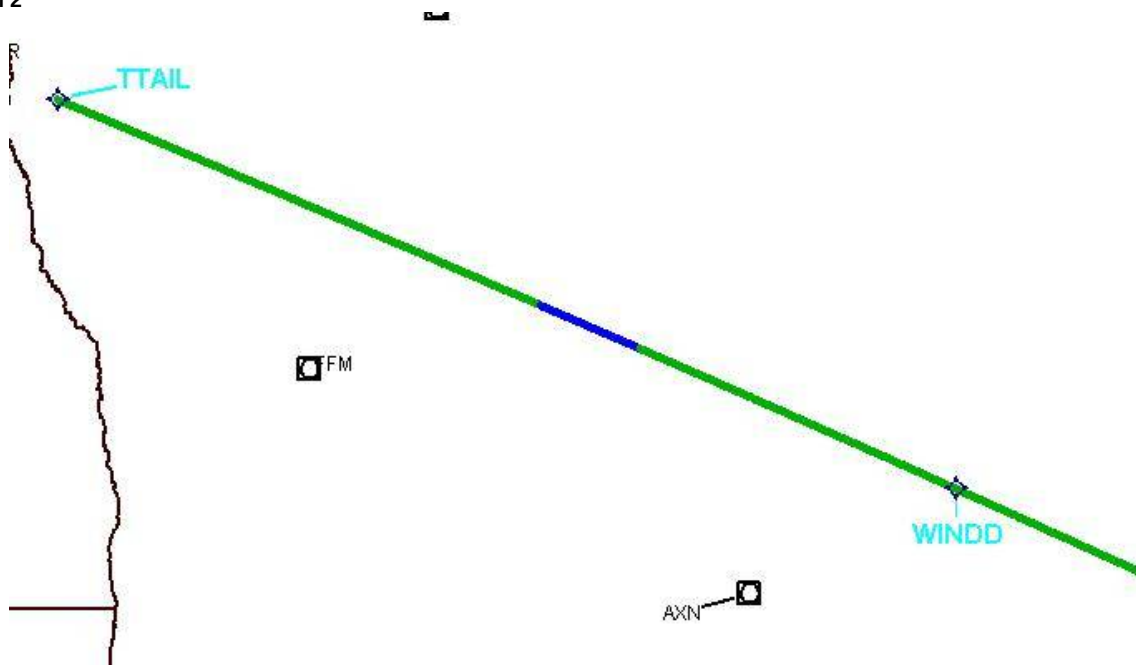
DME DME Assessment Results for BAINY4 path HHOGS_MILAC

Graphic Depiction 1



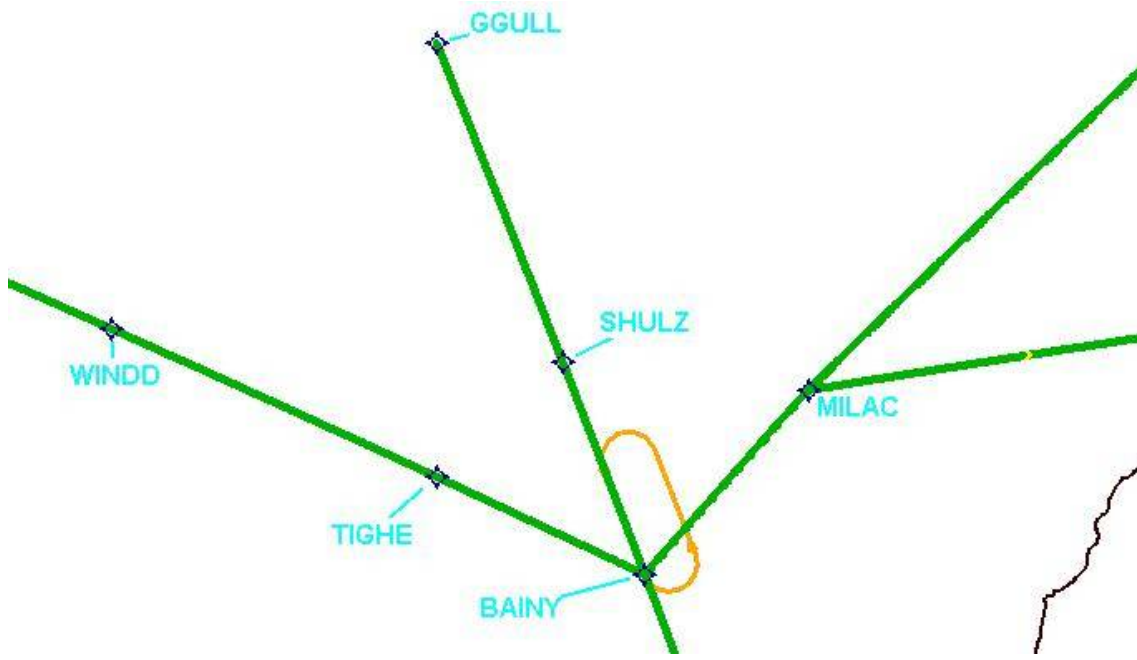
DME DME Assessment Results for BAINY4 path HHOGS_MILAC

Graphic Depiction 2



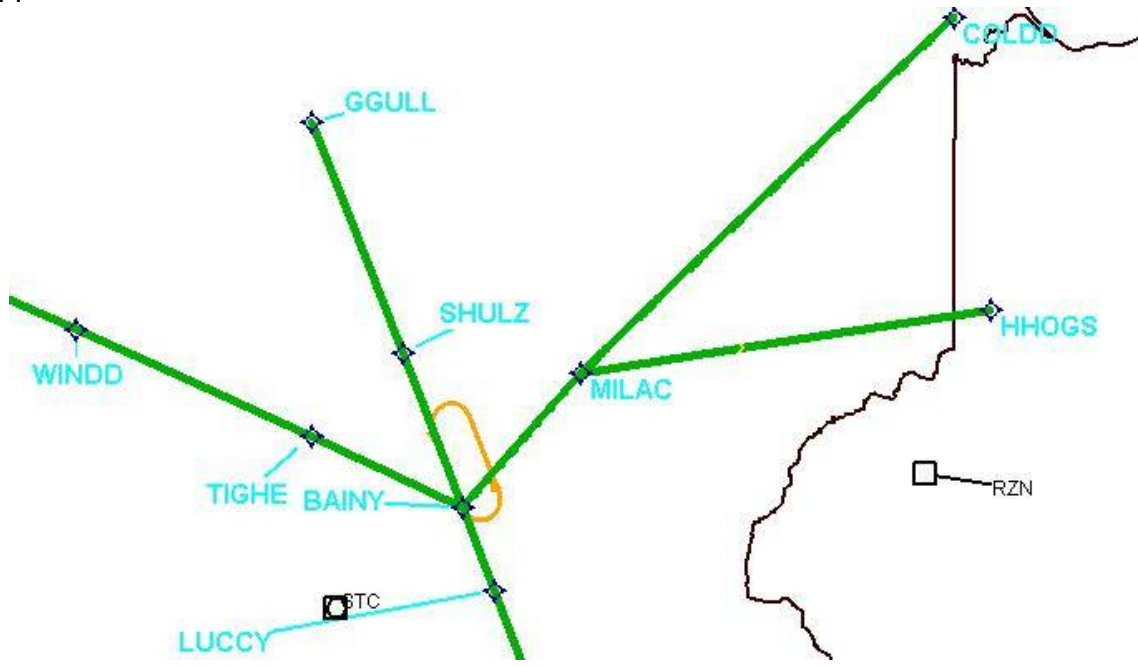
DME DME Assessment Results for BAINY4 path HHOGS_MILAC

Graphic Depiction 3



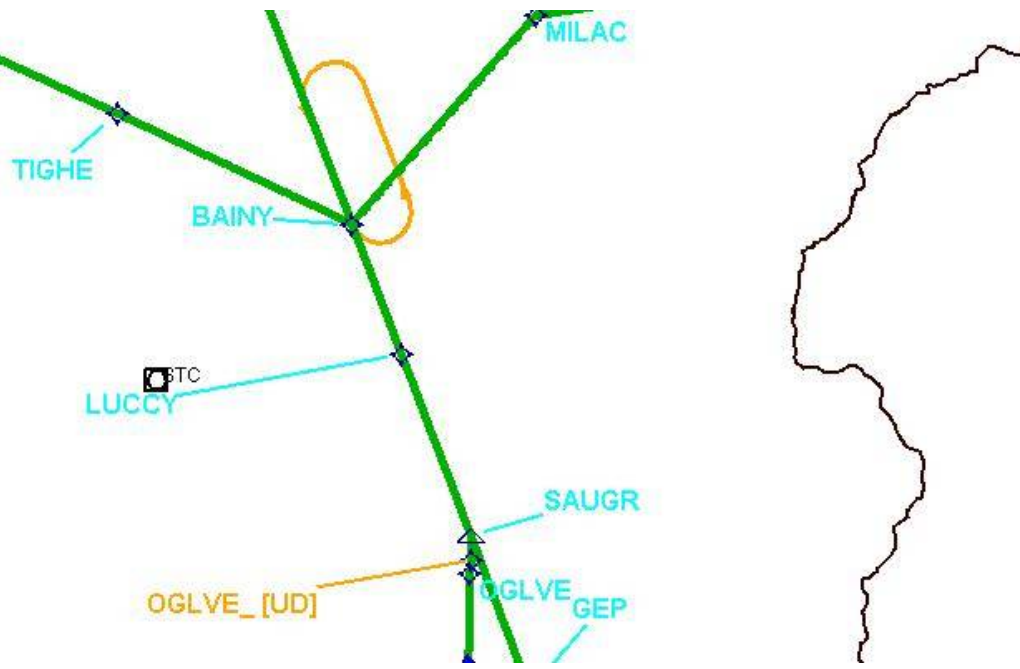
DME DME Assessment Results for BAINY4 path HHOGS_MILAC

Graphic Depiction 4

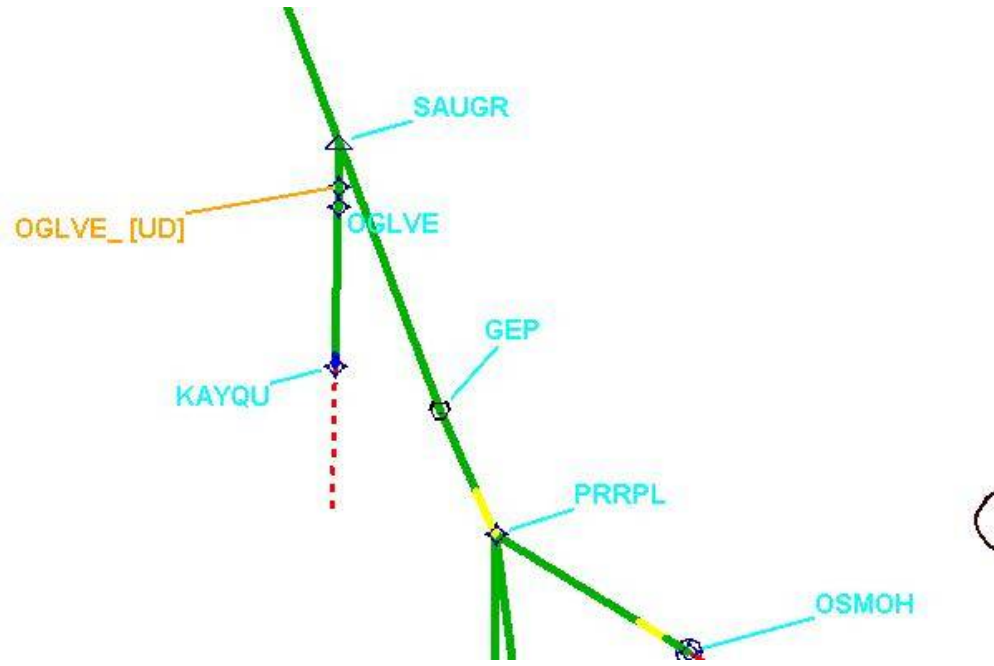


DME DME Assessment Results for BAINY4 path HHOGS_MILAC

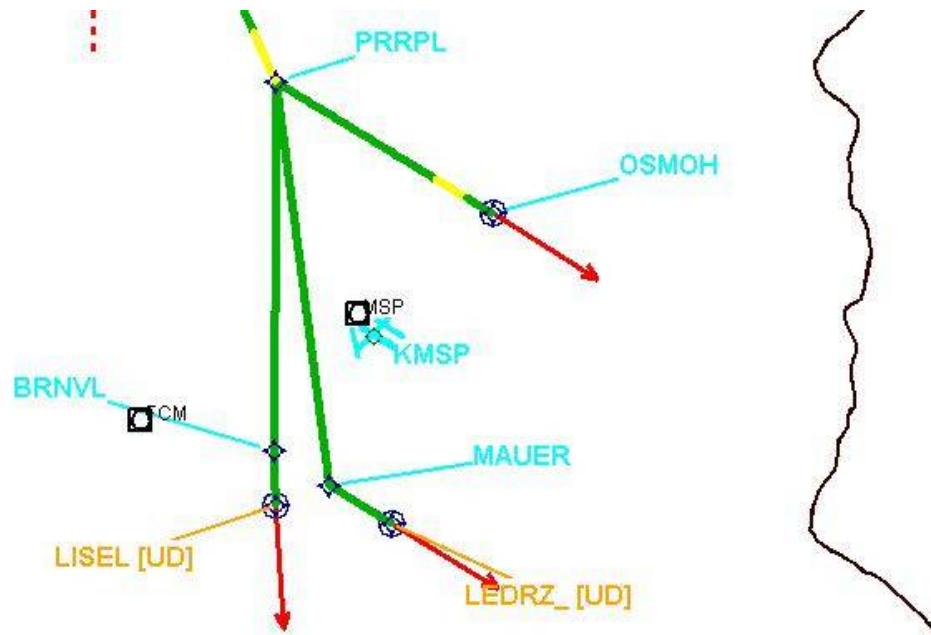
Graphic Depiction 5



DME DME Assessment Results for BAINY4 path HHOGS_MILAC



DME DME Assessment Results for BAINY4 path HHOGS_MILAC



DME DME Assessment Results for BAINY4 path PRRPL_LISEL

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Lisa A-CTR Thrysoe
Project File:	C:\Users\Lisa A-CTR Thrysoe\OneDrive - Federal Aviation Administration\Desktop\DME DME Screening\KMSP\KMSP BAINY FOUR STAR\KMSP STAR BAINY FOUR DME 241203.tgs
Output File:	C:\Users\Lisa A-CTR Thrysoe\OneDrive - Federal Aviation Administration\Desktop\DME DME Screening\KMSP\KMSP BAINY FOUR STAR\KMSP [IFPA] BAINY4 20241203_1454 EST\PRRPL_LISEL\KMSP BAINY4 RNAV STAR PRRPL LISEL 20241203_1454 EST.pdf
Procedure Name:	BAINY4
Software: DmeDmePlugin:	7.4.1
Date/Time:	12/03/2024 14:54 EST
Databases:	MITRE 3DEP 3 arcsec

Failures

No Failures

Warnings

No Warnings

Informational

No Informational

Notes For Flight Check

None

Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	Ground Speed (kts)	Turn Type	Leg Type
PRRPL	WP	N45° 03' 08.4800", W093° 18' 53.0600"	9000	VNAV	250	FLY_BY	TF
BRNVL	WP	N44° 48' 16.3800", W093° 18' 59.4400"	8000	VNAV	210	FLY_BY	TF
LISEL	WP	N44° 46' 05.4709", W093° 18' 55.9139"	8000	VNAV	210	FLY_OVER	TF

Flyability

Flight Type:	RNAV_STAR
Selected Airport:	KMSP [IFPA]
Climb Gradient:	None assigned
Speeds:	200 Ground Speed to 11000 FT
	240 Ground Speed to 18000 FT
	260 Ground Speed to 24000 FT
	340 Ground Speed above 24000 FT
Descent During a Turn:	Allowed
VNAV Mode:	Flight Plan

DME DME Assessment Results for BAINY4 path PRRPL_LISEL

DME/DME	
RNP:	RNP 2
Flight Mode:	Manual
Line of Sight (DTED Level 0 Max):	Evaluated
Inertial Drift:	Enabled
Initial Drift:	0.558 NM
INS Drift Rate:	8.0 NM/Hour
Range Mode:	OSV
RNP Edges:	Evaluated
Min DME Range:	3.0 NM
DME Types:	DME, VOR-DME, VORTAC, TACAN
DME Include Angles:	30 to 150
Critical DMEs:	Allowed
DoD Facilities:	Not included
Foreign Facilities:	Not included
High DMEs:	Included
Low DMEs:	Included
Terminal DMEs:	Included
Flight Check DMEs:	Not selected
Higher Altitudes:	Not Evaluated
Near Maximum Altitude:	Not Evaluated
Automatic ESVs:	Enabled
Disabled DMEs:	None

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	RWF	N44° 28' 02.1854", W095° 07' 41.6276"	7.0 E	130	DH		NO	Enabled	100 %	100 %
2	FCM	N44° 49' 31.2603", W093° 26' 33.6793"	1.0 E	40	L		NO	Enabled	68 %	68.8 %
3	FNX	N43° 38' 15.9200", W094° 24' 47.5100"	0.0 E	130	DH		NO	Enabled	50.1 %	48.9 %
4	FGT	N44° 37' 51.4303", W093° 10' 55.3911"	6.0 E	130	H		NO	Enabled	100 %	100 %
5	GEP	N45° 08' 44.4656", W093° 22' 23.4514"	6.0 E	130	H		NO	Enabled	100 %	100 %
6	MSP	N44° 53' 47.3958", W093° 14' 11.5137"	2.0 E	40	L		NO	Enabled	41.9 %	42 %

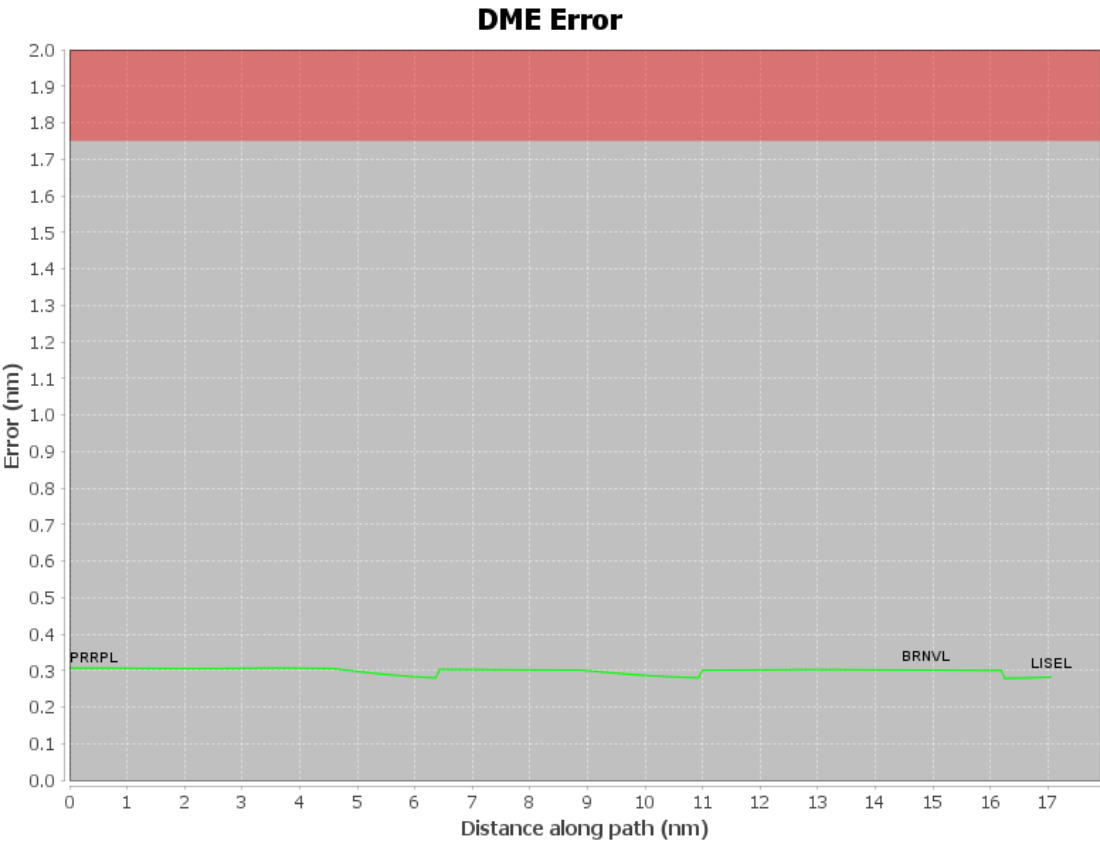
Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	RWF	GEP	MSP	FGT	FCM	
6.4	RWF	FGT	GEP	FCM		
8.7	RWF	FGT	FCM	GEP	FNX	
11.0	RWF	FGT	GEP	FNX		
16.2	FCM	MSP	RWF	GEP	FNX	FGT

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]

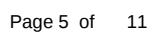
Available DMEs by Waypoints			
Waypoint Before	Waypoint After	DME List	Suggested DMEs
PRRPL	BRNVL	RWF, FCM, FNX, FGT, GEP, MSP	
BRNVL	LISEL	RWF, FNX, FCM, FGT, GEP, MSP	

DME DME Assessment Results for BAINY4 path PRRPL_LISEL

User Data Files								
#	File Name							
1	New Analysis.udt							
User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	MSP FAA 830748-25 MSP	N44° 53' 47.3958", W093° 14' 11.5137"	2.0 E	40	831.6	115.3	MSP FAA 830748-25	
ESV:		Bearing [True]: 314.0° to 12.0° Bearing [Mag]: 312.0° to 10.0°				Arc Distance: Out to 89.0 NM Altitude: 7900.0 to 20000.0 ft		
2	GEP GEP	N45° 08' 44.4656", W093° 22' 23.4514"	6.0 E	130	877.3	117.3	GEP	
ESV:		Bearing [True]: 27.0° to 37.0° Bearing [Mag]: 21.0° to 31.0°				Arc Distance: Out to 75.0 NM Altitude: 10900.0 to 15400.0 ft		
3	GPZ FAA 795355-4 GPZ	N47° 09' 48.3971", W093° 29' 20.1570"	6.0 E	40	1359	111.4	GPZ FAA 795355-4	
ESV:		Bearing [True]: 114.0° to 183.0° Bearing [Mag]: 108.0° to 177.0°				Arc Distance: Out to 65.0 NM Altitude: 6400.0 to 24100.0 ft		
4	DLH FAA 704109-33 DLH	N46° 48' 07.7897", W092° 12' 10.3291"	5.0 E	130	1427.9	112.6	DLH FAA 704109-33	
ESV:		Bearing [True]: 183.0° to 232.0° Bearing [Mag]: 178.0° to 227.0°				Arc Distance: Out to 69.0 NM Altitude: 6000.0 to 16000.0 ft		
5	DWN FAA 703966-20 DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	1130	109.0	DWN FAA 703966-20	
ESV:		Bearing [True]: 319.0° to 82.0° Bearing [Mag]: 319.0° to 82.0°				Arc Distance: Out to 65.0 NM Altitude: 4200.0 to 20000.0 ft		
6	DWN DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	1130	109.0	DWN	
ESV:		Bearing [True]: 51.0° to 58.0° Bearing [Mag]: 51.0° to 58.0°				Arc Distance: Out to 117.0 NM Altitude: 10900.0 to 19200.0 ft		
7	GPZ GPZ	N47° 09' 48.3971", W093° 29' 20.1570"	6.0 E	40	1359	111.4	GPZ	
ESV:		Bearing [True]: 136.0° to 151.0° Bearing [Mag]: 130.0° to 145.0°				Arc Distance: Out to 85.0 NM Altitude: 10900.0 to 19400.0 ft		
8	DWN FAA 703966-21 DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	1130	109.0	DWN FAA 703966-21	
ESV:		Bearing [True]: 319.0° to 82.0° Bearing [Mag]: 319.0° to 82.0°				Arc Distance: Out to 89.0 NM Altitude: 8200.0 to 20000.0 ft		
9	GEP FAA 704267-63 GEP	N45° 08' 44.4656", W093° 22' 23.4514"	6.0 E	130	877.3	117.3	GEP FAA 704267-63	
ESV:		Bearing [True]: 331.0° to 348.0° Bearing [Mag]: 325.0° to 342.0°				Arc Distance: Out to 90.0 NM Altitude: 6000.0 to 15400.0 ft		
10	PKD FAA 765984-9 PKD	N46° 53' 53.1091", W095° 04' 15.6354"	0.0 E	40	1471.6	110.6	PKD FAA 765984-9	
ESV:		Bearing [True]: 218.0° to 264.0° Bearing [Mag]: 218.0° to 264.0°				Arc Distance: Out to 71.0 NM Altitude: 10000.0 to 11000.0 ft		

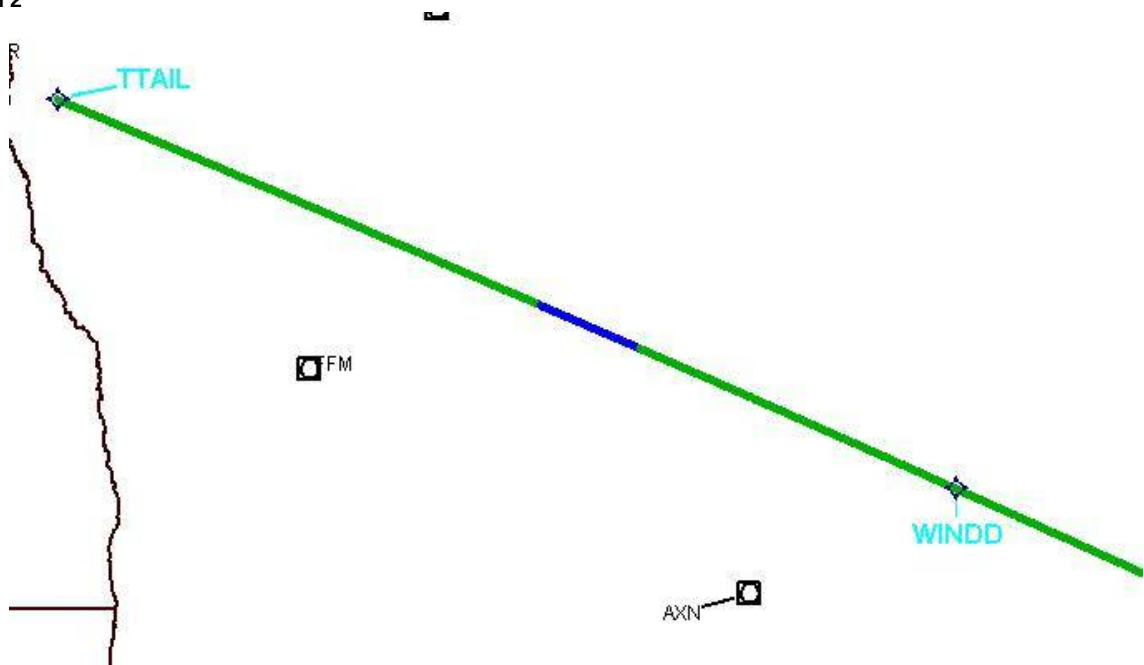


Graphic Depiction 1

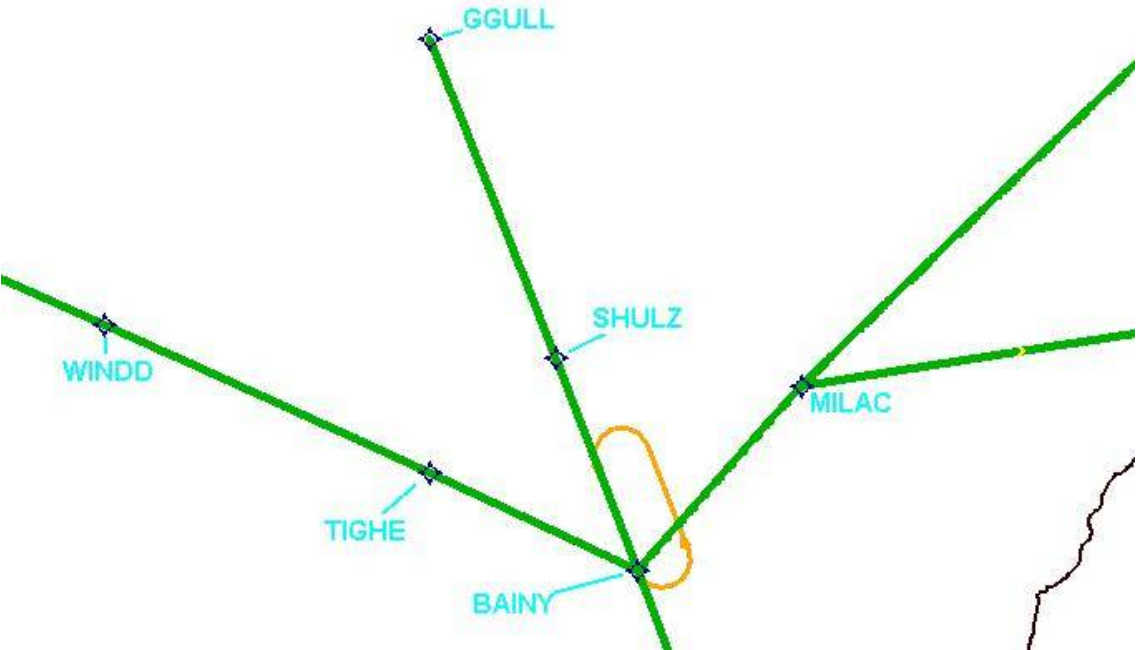


DME DME Assessment Results for BAINY4 path PRRPL_LISEL

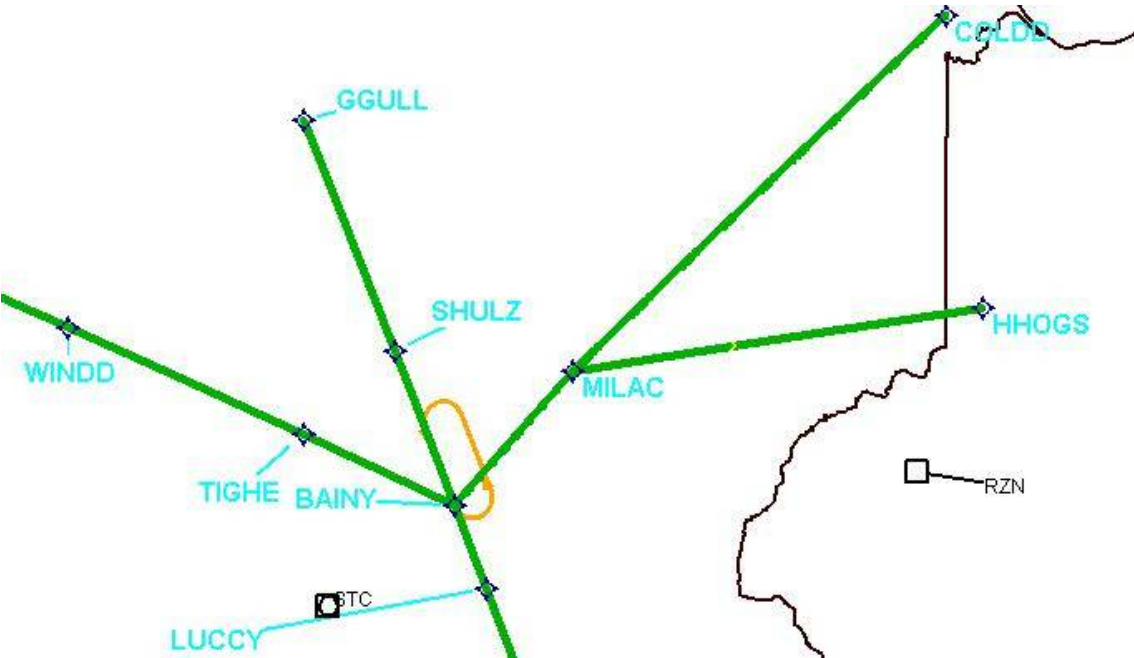
Graphic Depiction 2



Graphic Depiction 3

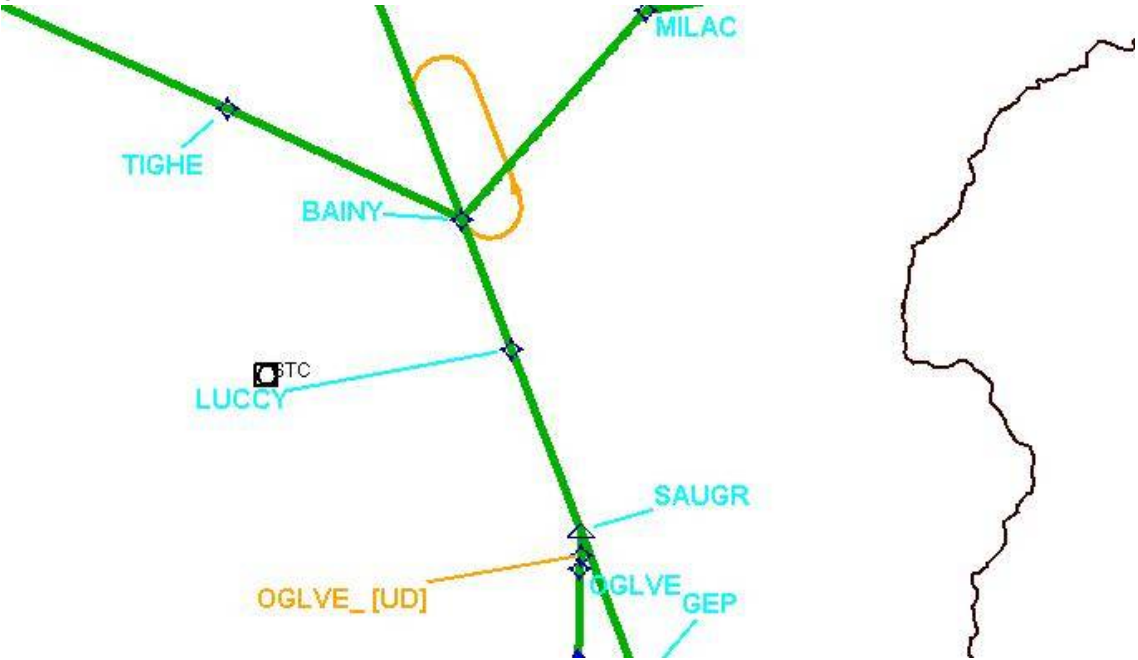


Graphic Depiction 4

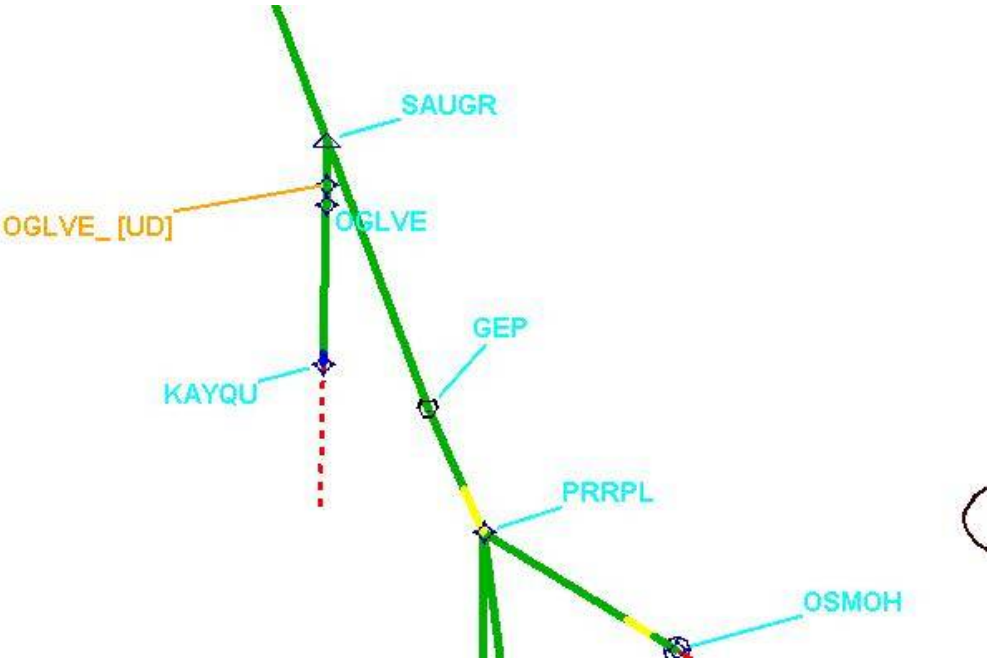


DME DME Assessment Results for BAINY4 path PRRPL_LISEL

Graphic Depiction 5

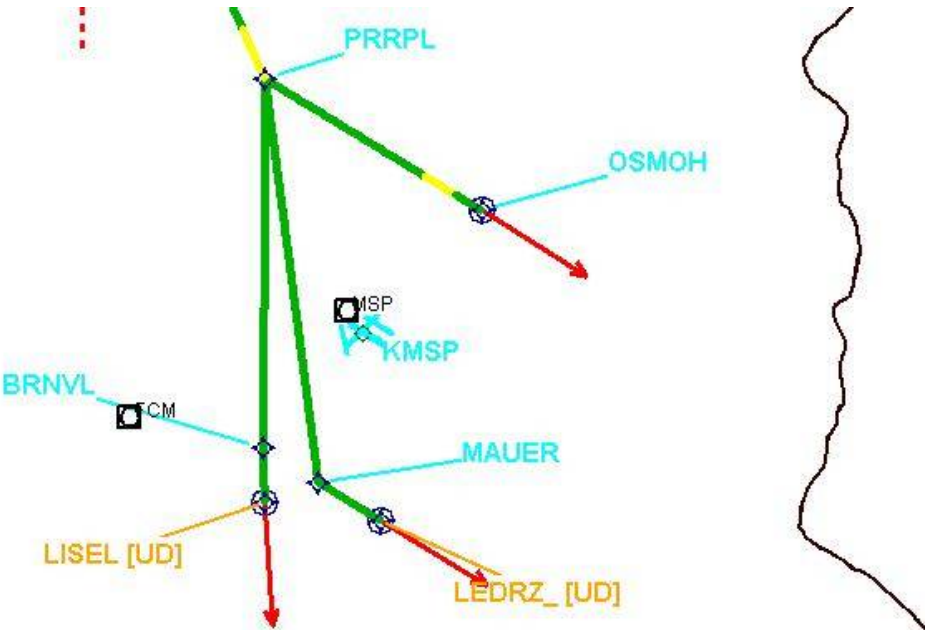


Graphic Depiction 6



DME DME Assessment Results for BAINY4 path PRRPL_LISEL

Graphic Depiction 7



DME DME Assessment Results for BAINY4 path PRRPL_OSMOH

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Lisa A-CTR Thrysoe
Project File:	C:\Users\Lisa A-CTR Thrysoe\OneDrive - Federal Aviation Administration\Desktop\DME DME Screening\KMSP\KMSP BAINY FOUR STAR\KMSP STAR BAINY FOUR DME 241203.tgs
Output File:	C:\Users\Lisa A-CTR Thrysoe\OneDrive - Federal Aviation Administration\Desktop\DME DME Screening\KMSP\KMSP BAINY FOUR STAR\KMSP [IFPA] BAINY4 20241203_1454 EST\PRRPL_OSMOH\KMSP BAINY4 RNAV STAR PRRPL OSMOH 20241203_1454 EST.pdf
Procedure Name:	BAINY4
Software: DmeDmePlugin:	7.4.1
Date/Time:	12/03/2024 14:54 EST
Databases:	MITRE 3DEP 3 arcsec

Failures

No Failures

Warnings

No Warnings

Informational

No Informational

Notes For Flight Check

None

Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	Ground Speed (kts)	Turn Type	Leg Type
PRRPL	WP	N45° 03' 08.4800", W093° 18' 53.0600"	9000	VNAV	250	FLY_BY	TF
OSMOH	WP	N44° 57' 49.9500", W093° 06' 34.2500"	8000	VNAV	210	FLY_OVER	TF

Flyability

Flight Type:	RNAV STAR
Selected Airport:	KMSP [IFPA]
Climb Gradient:	None assigned
Speeds:	200 Ground Speed to 11000 FT
	240 Ground Speed to 18000 FT
	260 Ground Speed to 24000 FT
	340 Ground Speed above 24000 FT
Descent During a Turn:	Allowed
VNAV Mode:	Flight Plan

DME DME Assessment Results for BAINY4 path PRRPL_OSMOH

DME/DME	
RNP:	RNP 2
Flight Mode:	Manual
Line of Sight (DTED Level 0 Max):	Evaluated
Inertial Drift:	Enabled
Initial Drift:	0.558 NM
INS Drift Rate:	8.0 NM/Hour
Range Mode:	OSV
RNP Edges:	Evaluated
Min DME Range:	3.0 NM
DME Types:	DME, VOR-DME, VORTAC, TACAN
DME Include Angles:	30 to 150
Critical DMEs:	Allowed
DoD Facilities:	Not included
Foreign Facilities:	Not included
High DMEs:	Included
Low DMEs:	Included
Terminal DMEs:	Included
Flight Check DMEs:	Not selected
Higher Altitudes:	Not Evaluated
Near Maximum Altitude:	Not Evaluated
Automatic ESVs:	Enabled
Disabled DMEs:	None

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	RWF	N44° 28' 02.1854", W095° 07' 41.6276"	7.0 E	130	DH		NO	Enabled	87.2 %	87.2 %
2	FCM	N44° 49' 31.2603", W093° 26' 33.6793"	1.0 E	40	L		NO	Enabled	100 %	100 %
3	FGT	N44° 37' 51.4303", W093° 10' 55.3911"	6.0 E	130	H		NO	Enabled	100 %	100 %
4	GEP	N45° 08' 44.4656", W093° 22' 23.4514"	6.0 E	130	H		NO	Enabled	100 %	100 %
5	MSP	N44° 53' 47.3958", W093° 14' 11.5137"	2.0 E	40	L		NO	Enabled	73.6 %	73.6 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	RWF	GEP	MSP	FGT	FCM	
5.8	FCM	GEP	RWF	FGT		
7.6	FCM	GEP	MSP	RWF	FGT	
9.0	FCM	GEP	FGT			
9.7	GEP	MSP	FCM	FGT		

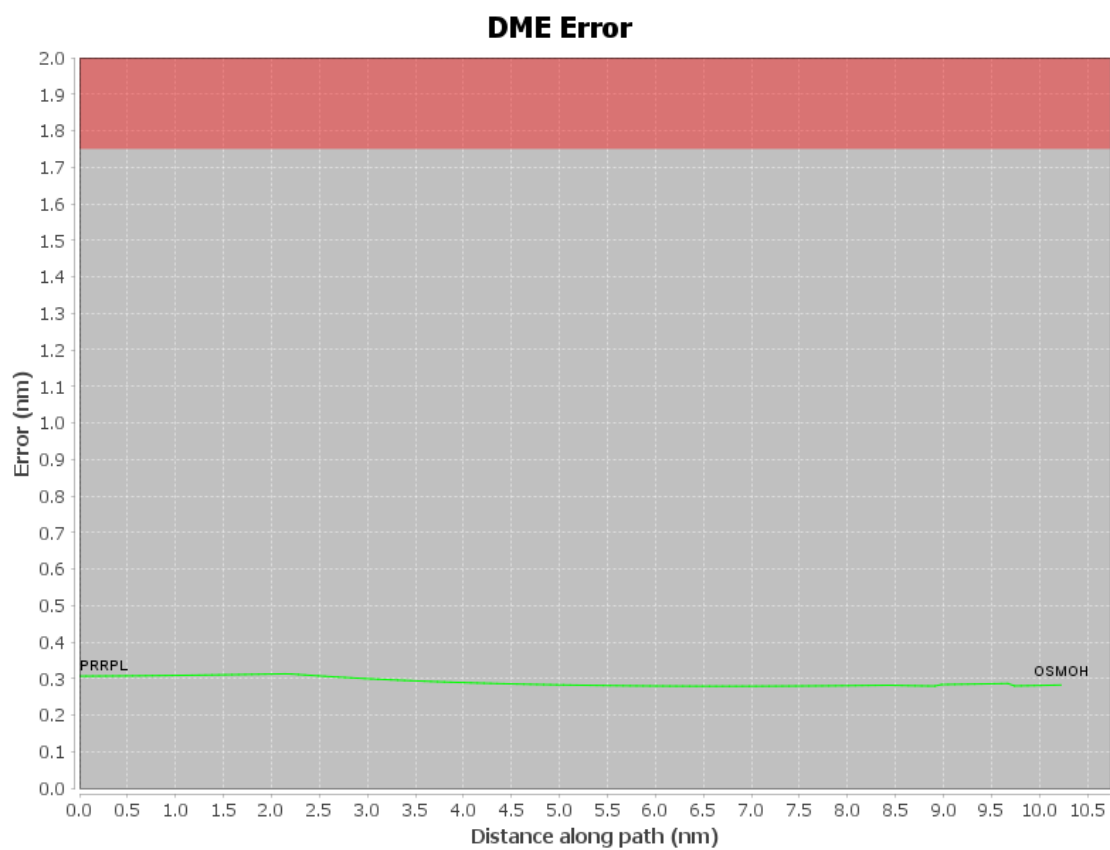
Inertial Drift Segments			
#	Start Location	End Location	Length [NM]

Available DMEs by Waypoints			
Waypoint Before	Waypoint After	DME List	Suggested DMEs
PRRPL	OSMOH	RWF, FCM, FGT, GEP, MSP	

DME DME Assessment Results for BAINY4 path PRRPL_OSMOH

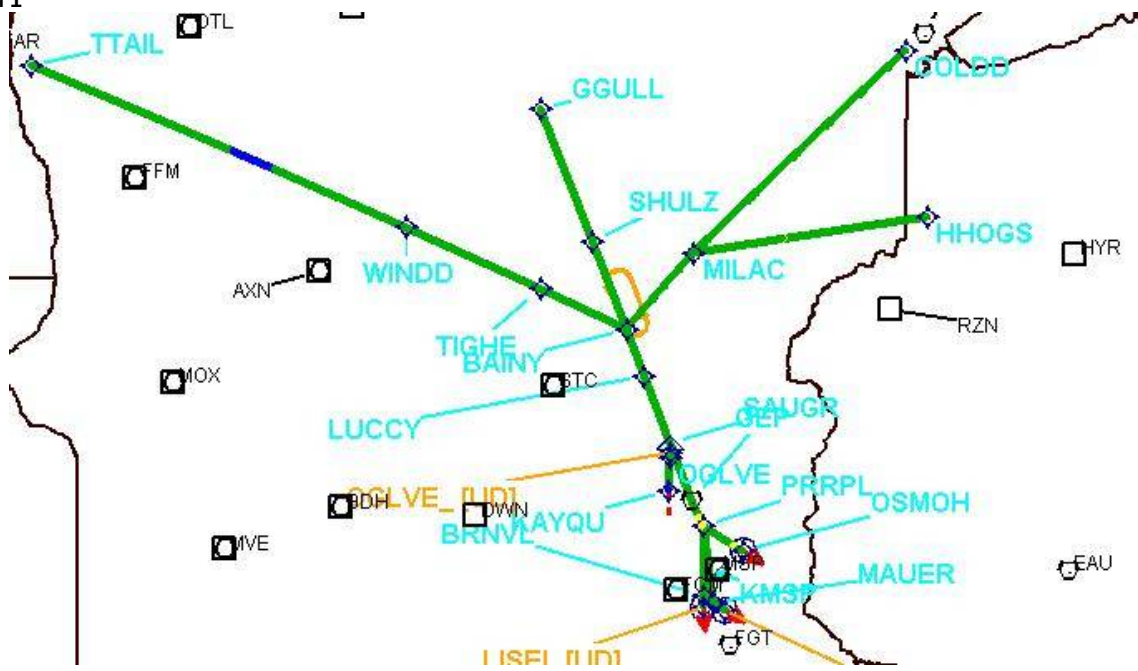
User Data Files								
#	File Name							
1	New Analysis.udt							
User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	MSP FAA 830748-25 MSP	N44° 53' 47.3958", W093° 14' 11.5137"	2.0 E	40	831.6	115.3	MSP FAA 830748-25	
ESV:		Bearing [True]: 314.0° to 12.0° Bearing [Mag]: 312.0° to 10.0°				Arc Distance: Out to 89.0 NM Altitude: 7900.0 to 20000.0 ft		
2	GEP GEP	N45° 08' 44.4656", W093° 22' 23.4514"	6.0 E	130	877.3	117.3	GEP	
ESV:		Bearing [True]: 27.0° to 37.0° Bearing [Mag]: 21.0° to 31.0°				Arc Distance: Out to 75.0 NM Altitude: 10900.0 to 15400.0 ft		
3	GPZ FAA 795355-4 GPZ	N47° 09' 48.3971", W093° 29' 20.1570"	6.0 E	40	1359	111.4	GPZ FAA 795355-4	
ESV:		Bearing [True]: 114.0° to 183.0° Bearing [Mag]: 108.0° to 177.0°				Arc Distance: Out to 65.0 NM Altitude: 6400.0 to 24100.0 ft		
4	DLH FAA 704109-33 DLH	N46° 48' 07.7897", W092° 12' 10.3291"	5.0 E	130	1427.9	112.6	DLH FAA 704109-33	
ESV:		Bearing [True]: 183.0° to 232.0° Bearing [Mag]: 178.0° to 227.0°				Arc Distance: Out to 69.0 NM Altitude: 6000.0 to 16000.0 ft		
5	DWN FAA 703966-20 DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	1130	109.0	DWN FAA 703966-20	
ESV:		Bearing [True]: 319.0° to 82.0° Bearing [Mag]: 319.0° to 82.0°				Arc Distance: Out to 65.0 NM Altitude: 4200.0 to 20000.0 ft		
6	DWN DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	1130	109.0	DWN	
ESV:		Bearing [True]: 51.0° to 58.0° Bearing [Mag]: 51.0° to 58.0°				Arc Distance: Out to 117.0 NM Altitude: 10900.0 to 19200.0 ft		
7	GPZ GPZ	N47° 09' 48.3971", W093° 29' 20.1570"	6.0 E	40	1359	111.4	GPZ	
ESV:		Bearing [True]: 136.0° to 151.0° Bearing [Mag]: 130.0° to 145.0°				Arc Distance: Out to 85.0 NM Altitude: 10900.0 to 19400.0 ft		
8	DWN FAA 703966-21 DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	1130	109.0	DWN FAA 703966-21	
ESV:		Bearing [True]: 319.0° to 82.0° Bearing [Mag]: 319.0° to 82.0°				Arc Distance: Out to 89.0 NM Altitude: 8200.0 to 20000.0 ft		
9	GEP FAA 704267-63 GEP	N45° 08' 44.4656", W093° 22' 23.4514"	6.0 E	130	877.3	117.3	GEP FAA 704267-63	
ESV:		Bearing [True]: 331.0° to 348.0° Bearing [Mag]: 325.0° to 342.0°				Arc Distance: Out to 90.0 NM Altitude: 6000.0 to 15400.0 ft		
10	PKD FAA 765984-9 PKD	N46° 53' 53.1091", W095° 04' 15.6354"	0.0 E	40	1471.6	110.6	PKD FAA 765984-9	
ESV:		Bearing [True]: 218.0° to 264.0° Bearing [Mag]: 218.0° to 264.0°				Arc Distance: Out to 71.0 NM Altitude: 10000.0 to 11000.0 ft		

DME DME Assessment Results for BAINY4 path PRRPL_OSMOH



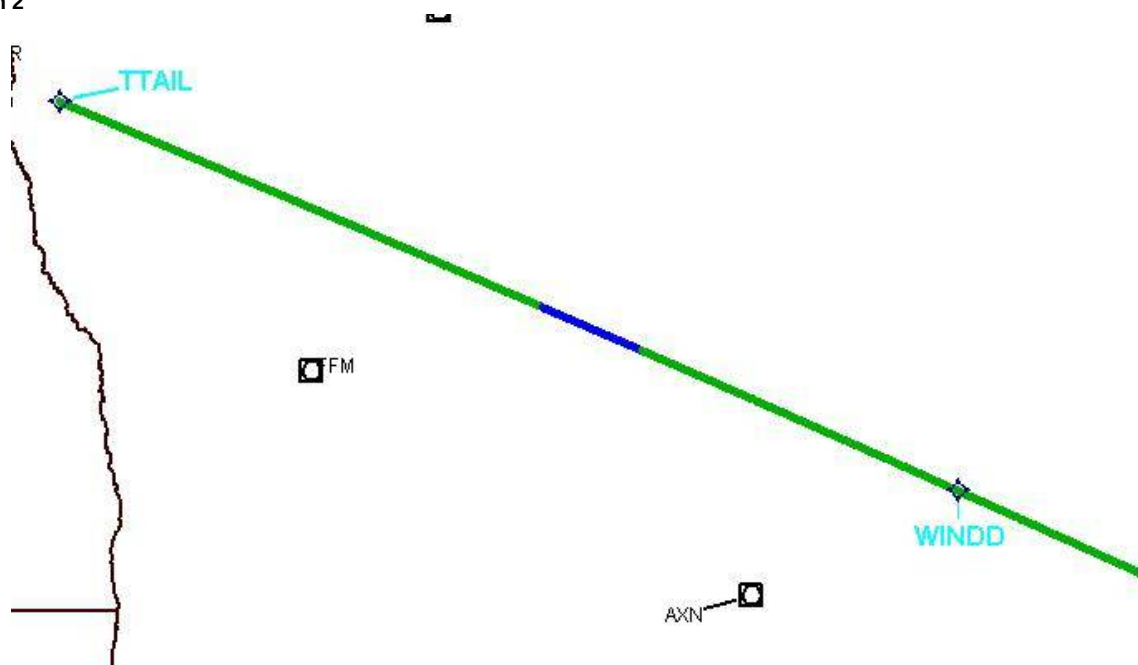
DME DME Assessment Results for BAINY4 path PRRPL_OSMOH

Graphic Depiction 1



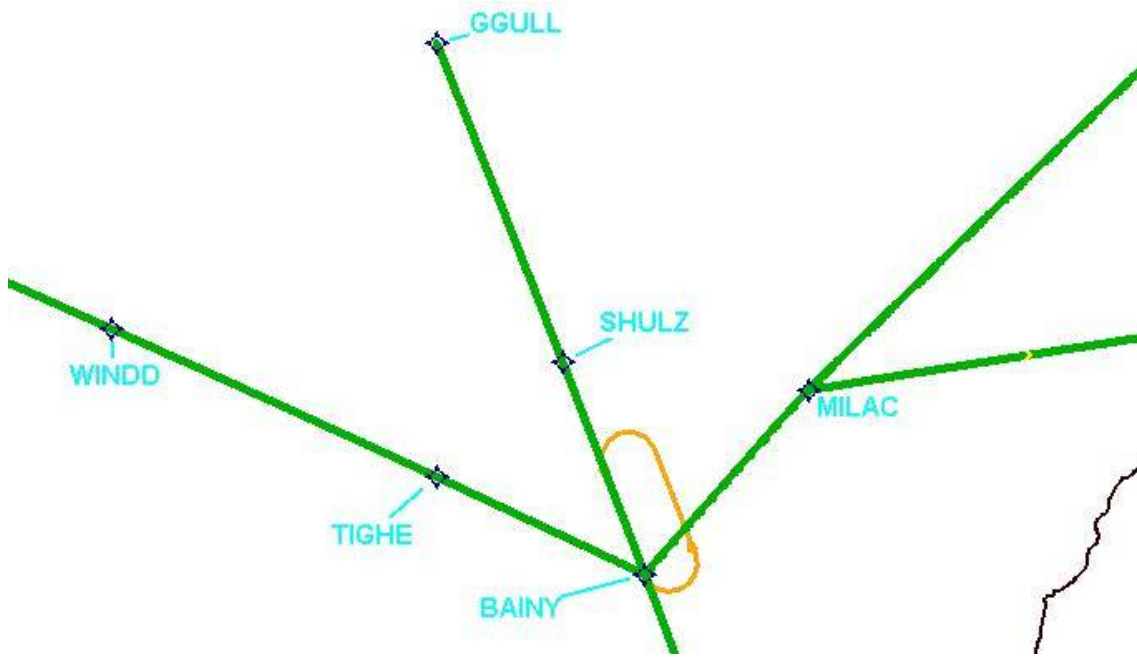
DME DME Assessment Results for BAINY4 path PRRPL_OSMOH

Graphic Depiction 2



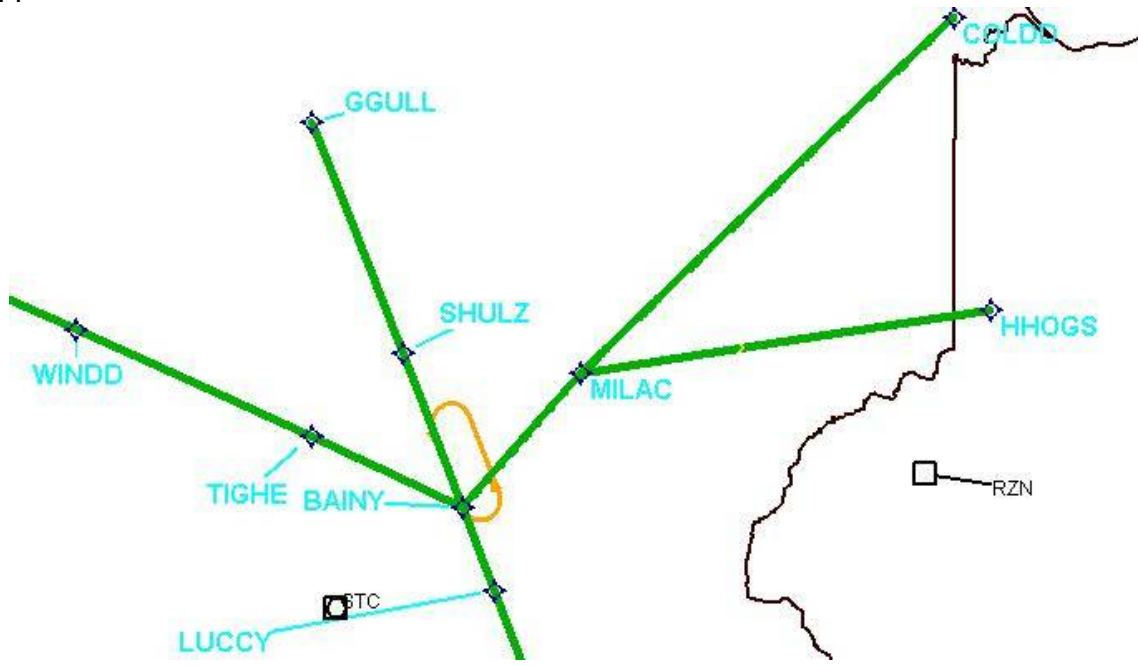
DME DME Assessment Results for BAINY4 path PRRPL_OSMOH

Graphic Depiction 3



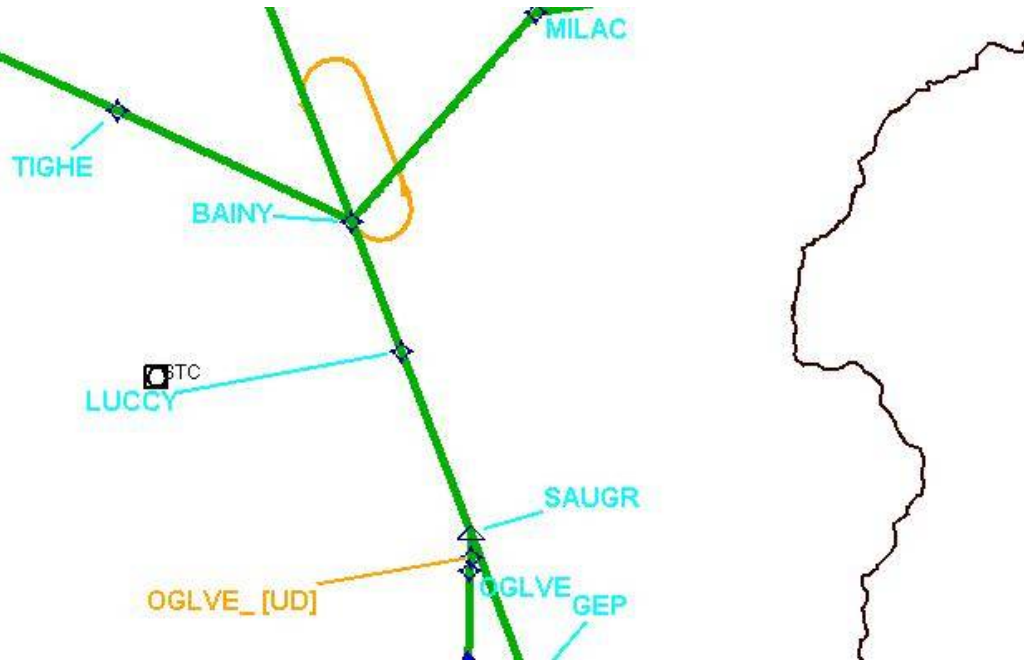
DME DME Assessment Results for BAINY4 path PRRPL_OSMOH

Graphic Depiction 4



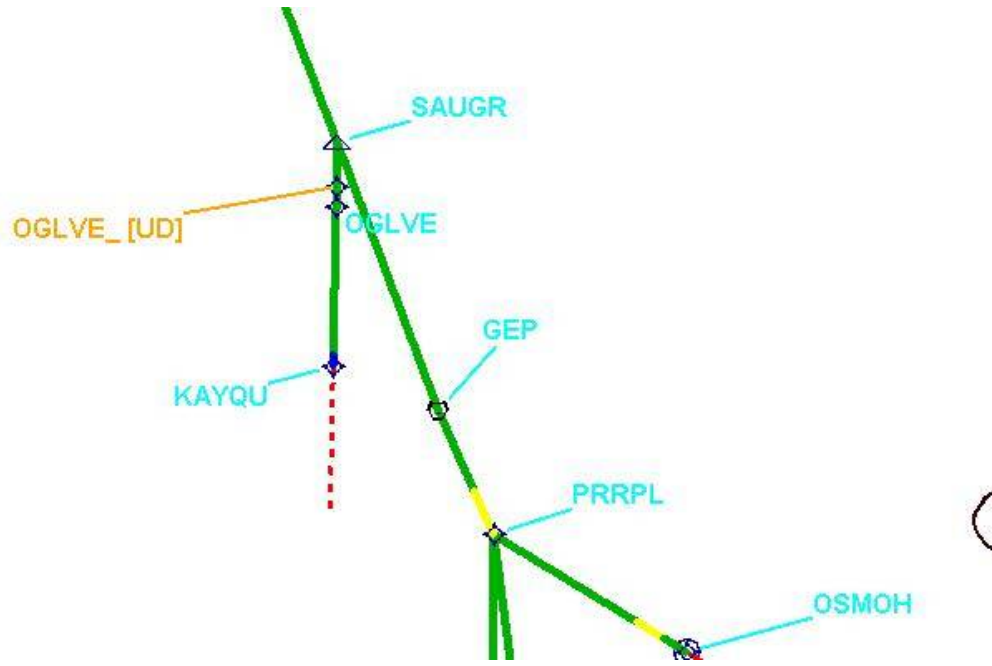
DME DME Assessment Results for BAINY4 path PRRPL_OSMOH

Graphic Depiction 5



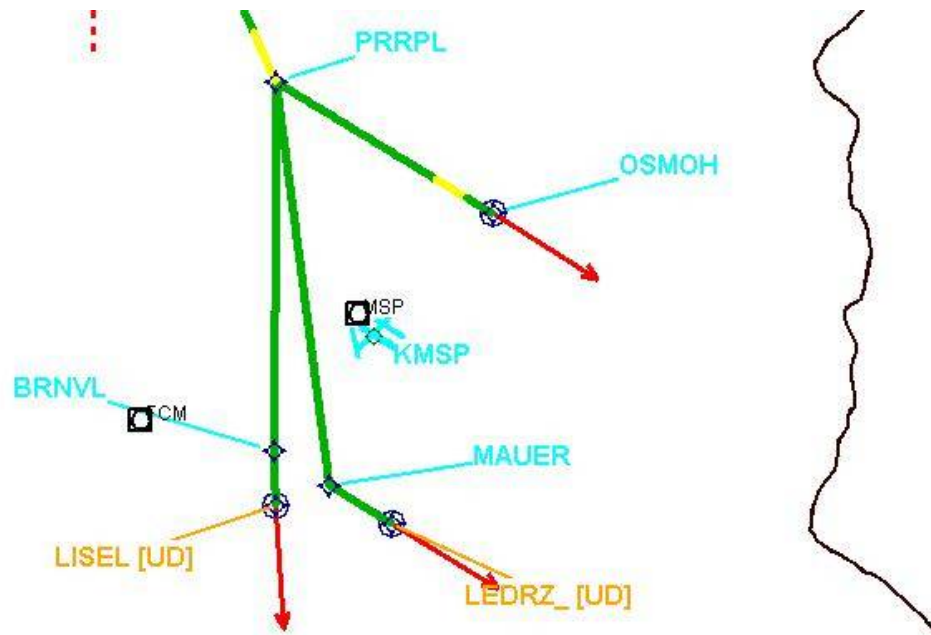
DME DME Assessment Results for BAINY4 path PRRPL_OSMOH

Graphic Depiction 6



DME DME Assessment Results for BAINY4 path PRRPL_OSMOH

Graphic Depiction 7



DME DME Assessment Results for BAINY4 path SAUGR_KAYQU

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Lisa A-CTR Thrysoe
Project File:	C:\Users\Lisa A-CTR Thrysoe\OneDrive - Federal Aviation Administration\Desktop\DME DME Screening\KMSP\KMSP BAINY FOUR STAR\KMSP STAR BAINY FOUR DME 241203.tgs
Output File:	C:\Users\Lisa A-CTR Thrysoe\OneDrive - Federal Aviation Administration\Desktop\DME DME Screening\KMSP\KMSP BAINY FOUR STAR\KMSP [IFPA] BAINY4 20241203_1454 EST\SAUGR_KAYQU\KMSP BAINY4 RNAV STAR SAUGR KAYQU 20241203_1454 EST.pdf
Procedure Name:	BAINY4
Software: DmeDmePlugin:	7.4.1
Date/Time:	12/03/2024 14:54 EST
Databases:	MITRE 3DEP 3 arcsec

Failures

No Failures

Warnings

No Warnings

Informational

No Informational

Notes For Flight Check

None

Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	Ground Speed (kts)	Turn Type	Leg Type
SAUGR	WP	N45° 20' 54.4500", W093° 28' 52.2100"	10000	VNAV	280	FLY_BY	TF
OGLVE_	WP	N45° 18' 53.6521", W093° 28' 55.2742"	8000	VNAV	280	FLY_BY	TF
KAYQU	WP	N45° 10' 47.8300", W093° 29' 09.5900"	7000	VNAV	210	FLY_BY	TF

Flyability

Flight Type:	RNAV_STAR
Selected Airport:	KMSP [IFPA]
Climb Gradient:	None assigned
Speeds:	200 Ground Speed to 11000 FT
	240 Ground Speed to 18000 FT
	260 Ground Speed to 24000 FT
	340 Ground Speed above 24000 FT
Descent During a Turn:	Allowed
VNAV Mode:	Flight Plan

DME DME Assessment Results for BAINY4 path SAUGR_KAYQU

DME/DME	
RNP:	RNP 2
Flight Mode:	Manual
Line of Sight (DTED Level 0 Max):	Evaluated
Inertial Drift:	Enabled
Initial Drift:	0.558 NM
INS Drift Rate:	8.0 NM/Hour
Range Mode:	OSV
RNP Edges:	Evaluated
Min DME Range:	3.0 NM
DME Types:	DME, VOR-DME, VORTAC, TACAN
DME Include Angles:	30 to 150
Critical DMEs:	Allowed
DoD Facilities:	Not included
Foreign Facilities:	Not included
High DMEs:	Included
Low DMEs:	Included
Terminal DMEs:	Included
Flight Check DMEs:	Not selected
Higher Altitudes:	Not Evaluated
Near Maximum Altitude:	Not Evaluated
Automatic ESVs:	Enabled
Disabled DMEs:	None

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	RWF	N44° 28' 02.1854", W095° 07' 41.6276"	7.0 E	130	DH		NO	Enabled	28.3 %	28.3 %
2	FCM	N44° 49' 31.2603", W093° 26' 33.6793"	1.0 E	40	L		NO	Enabled	93.9 %	93.9 %
3	FGT	N44° 37' 51.4303", W093° 10' 55.3911"	6.0 E	130	H		NO	Enabled	25.9 %	25.9 %
4	GEP	N45° 08' 44.4656", W093° 22' 23.4514"	6.0 E	130	H		NO	Enabled	89.3 %	89.3 %
5	AXN	N45° 57' 30.1977", W095° 13' 57.4854"	7.0 E	130	DH		NO	Enabled	28.3 %	28.3 %
6	DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	L		NO	Enabled	64.8 %	64.8 %
7	MSP	N44° 53' 47.3958", W093° 14' 11.5137"	2.0 E	40	L		NO	Enabled	93.9 %	93.9 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	RWF	MSP	GEP	FCM	AXN	
2.9	DWN	MSP	GEP	FCM		
6.9	DWN	FGT	FCM	MSP	GEP	
9.1	DWN	FCM	FGT	MSP		
9.6						

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N45° 11' 20.2185", W093° 29' 08.6377"	N45° 10' 47.8300", W093° 29' 09.5900"	0.54

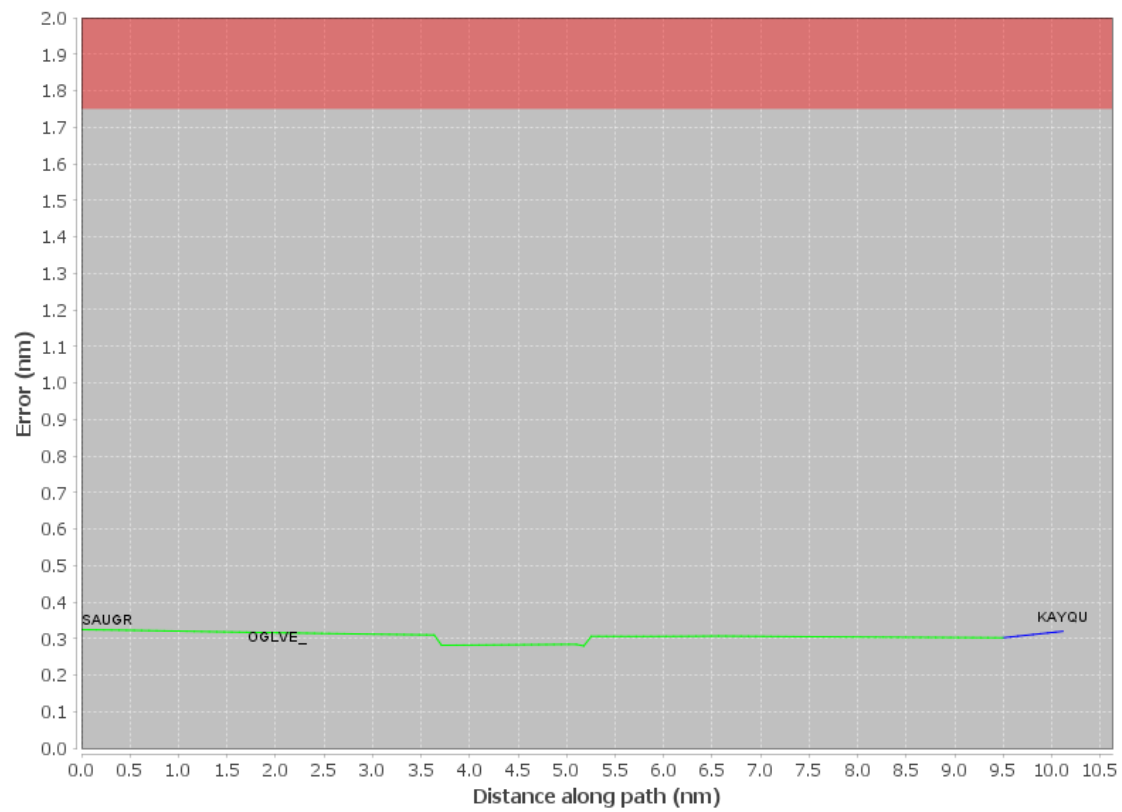
Available DMEs by Waypoints			
Waypoint Before	Waypoint After	DME List	Suggested DMEs
SAUGR	OGLVE_	RWF, FCM, GEP, AXN, MSP	
OGLVE_	KAYQU	RWF, FCM, FGT, GEP, AXN, DWN, MSP	

DME DME Assessment Results for BAINY4 path SAUGR_KAYQU

User Data Files								
#	File Name							
1	New Analysis.udt							
User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	MSP FAA 830748-25 MSP	N44° 53' 47.3958", W093° 14' 11.5137"	2.0 E	40	831.6	115.3	MSP FAA 830748-25	
ESV:		Bearing [True]: 314.0° to 12.0° Bearing [Mag]: 312.0° to 10.0°				Arc Distance: Out to 89.0 NM Altitude: 7900.0 to 20000.0 ft		
2	GEP GEP	N45° 08' 44.4656", W093° 22' 23.4514"	6.0 E	130	877.3	117.3	GEP	
ESV:		Bearing [True]: 27.0° to 37.0° Bearing [Mag]: 21.0° to 31.0°				Arc Distance: Out to 75.0 NM Altitude: 10900.0 to 15400.0 ft		
3	GPZ FAA 795355-4 GPZ	N47° 09' 48.3971", W093° 29' 20.1570"	6.0 E	40	1359	111.4	GPZ FAA 795355-4	
ESV:		Bearing [True]: 114.0° to 183.0° Bearing [Mag]: 108.0° to 177.0°				Arc Distance: Out to 65.0 NM Altitude: 6400.0 to 24100.0 ft		
4	DLH FAA 704109-33 DLH	N46° 48' 07.7897", W092° 12' 10.3291"	5.0 E	130	1427.9	112.6	DLH FAA 704109-33	
ESV:		Bearing [True]: 183.0° to 232.0° Bearing [Mag]: 178.0° to 227.0°				Arc Distance: Out to 69.0 NM Altitude: 6000.0 to 16000.0 ft		
5	DWN FAA 703966-20 DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	1130	109.0	DWN FAA 703966-20	
ESV:		Bearing [True]: 319.0° to 82.0° Bearing [Mag]: 319.0° to 82.0°				Arc Distance: Out to 65.0 NM Altitude: 4200.0 to 20000.0 ft		
6	DWN DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	1130	109.0	DWN	
ESV:		Bearing [True]: 51.0° to 58.0° Bearing [Mag]: 51.0° to 58.0°				Arc Distance: Out to 117.0 NM Altitude: 10900.0 to 19200.0 ft		
7	GPZ GPZ	N47° 09' 48.3971", W093° 29' 20.1570"	6.0 E	40	1359	111.4	GPZ	
ESV:		Bearing [True]: 136.0° to 151.0° Bearing [Mag]: 130.0° to 145.0°				Arc Distance: Out to 85.0 NM Altitude: 10900.0 to 19400.0 ft		
8	DWN FAA 703966-21 DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	1130	109.0	DWN FAA 703966-21	
ESV:		Bearing [True]: 319.0° to 82.0° Bearing [Mag]: 319.0° to 82.0°				Arc Distance: Out to 89.0 NM Altitude: 8200.0 to 20000.0 ft		
9	GEP FAA 704267-63 GEP	N45° 08' 44.4656", W093° 22' 23.4514"	6.0 E	130	877.3	117.3	GEP FAA 704267-63	
ESV:		Bearing [True]: 331.0° to 348.0° Bearing [Mag]: 325.0° to 342.0°				Arc Distance: Out to 90.0 NM Altitude: 6000.0 to 15400.0 ft		
10	PKD FAA 765984-9 PKD	N46° 53' 53.1091", W095° 04' 15.6354"	0.0 E	40	1471.6	110.6	PKD FAA 765984-9	
ESV:		Bearing [True]: 218.0° to 264.0° Bearing [Mag]: 218.0° to 264.0°				Arc Distance: Out to 71.0 NM Altitude: 10000.0 to 11000.0 ft		

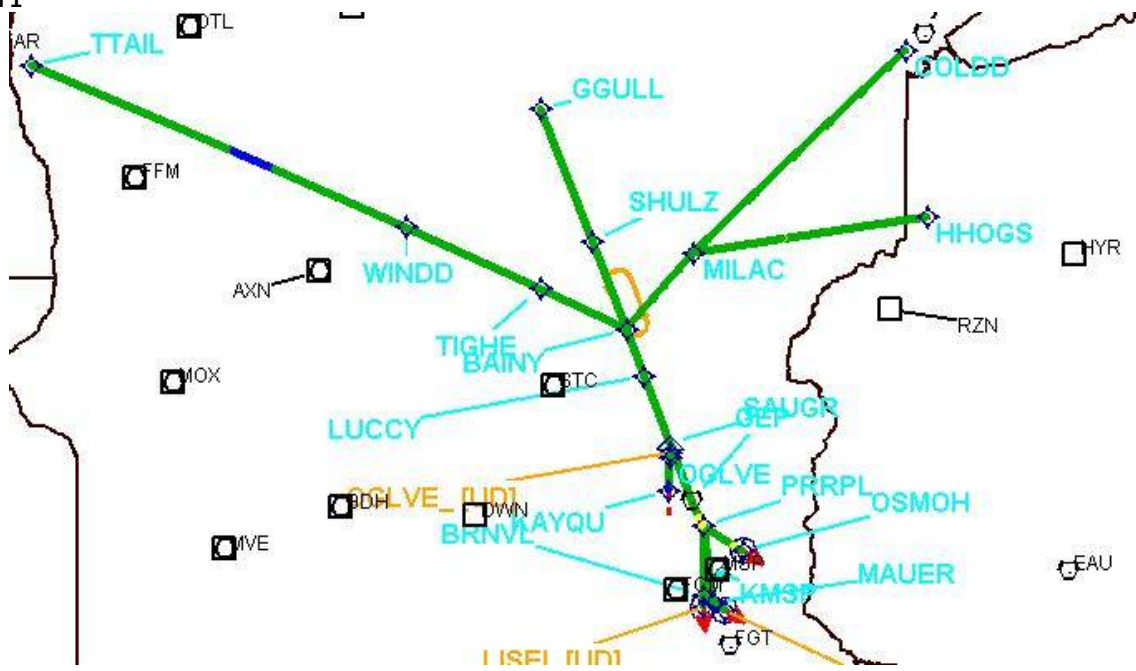
DME DME Assessment Results for BAINY4 path SAUGR_KAYQU

DME Error



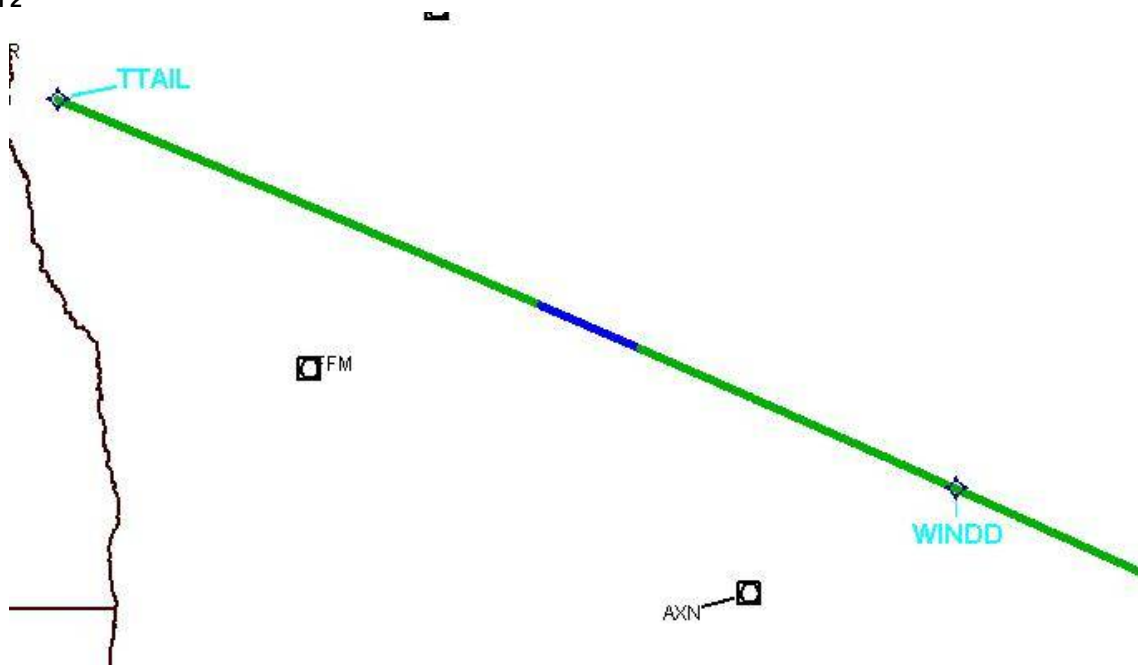
DME DME Assessment Results for BAINY4 path SAUGR_KAYQU

Graphic Depiction 1



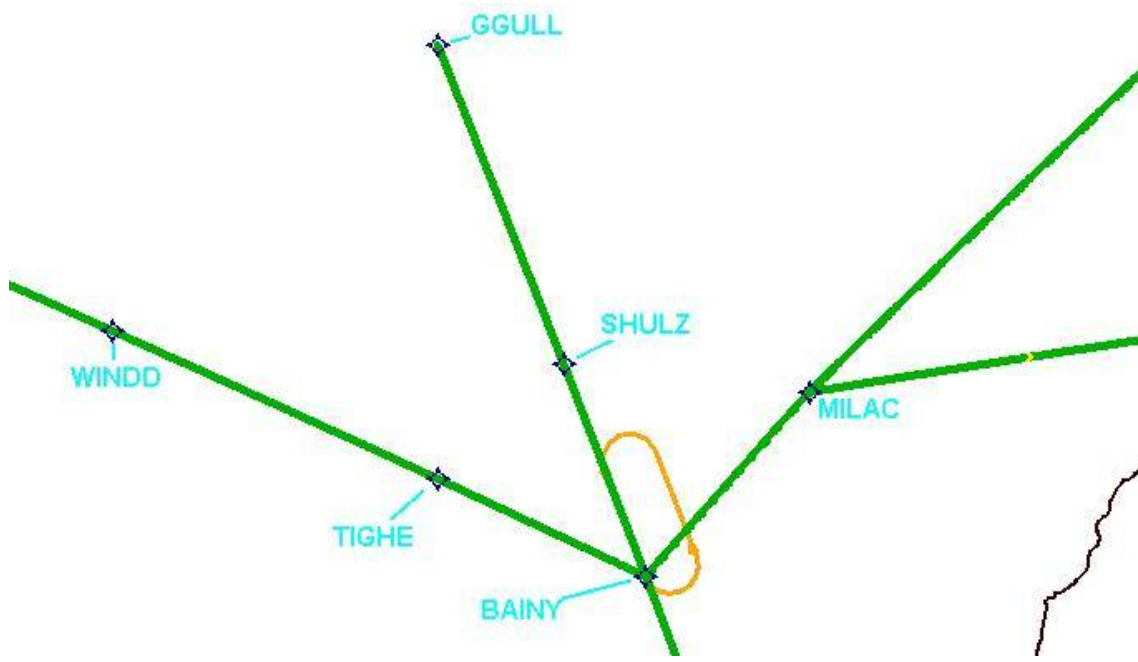
DME DME Assessment Results for BAINY4 path SAUGR_KAYQU

Graphic Depiction 2



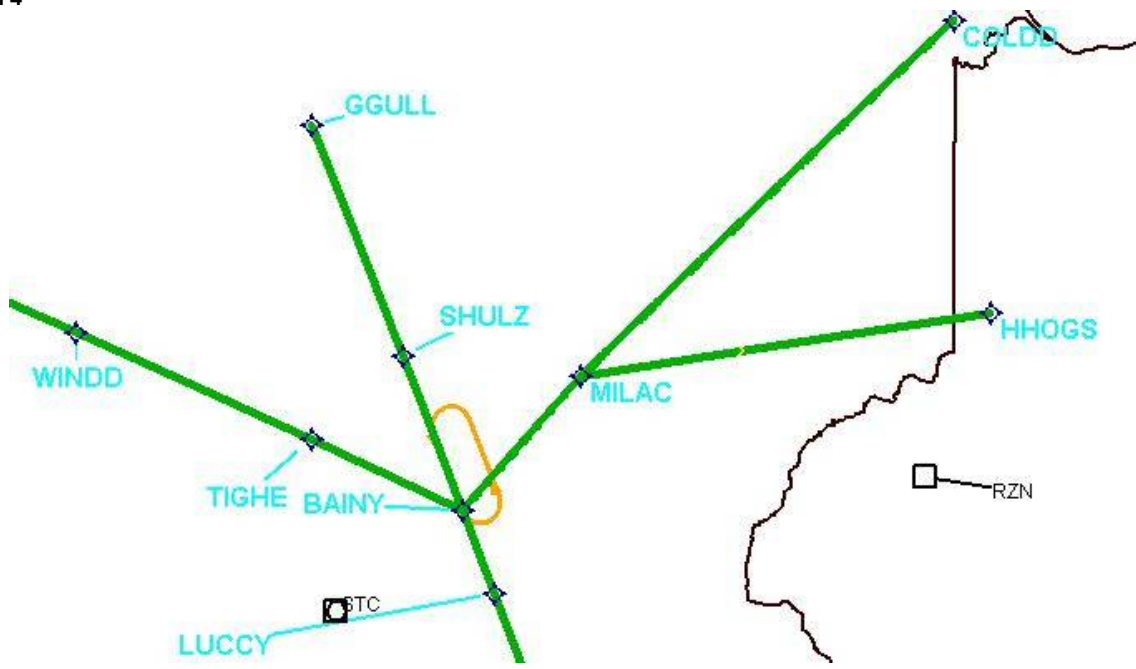
DME DME Assessment Results for BAINY4 path SAUGR_KAYQU

Graphic Depiction 3



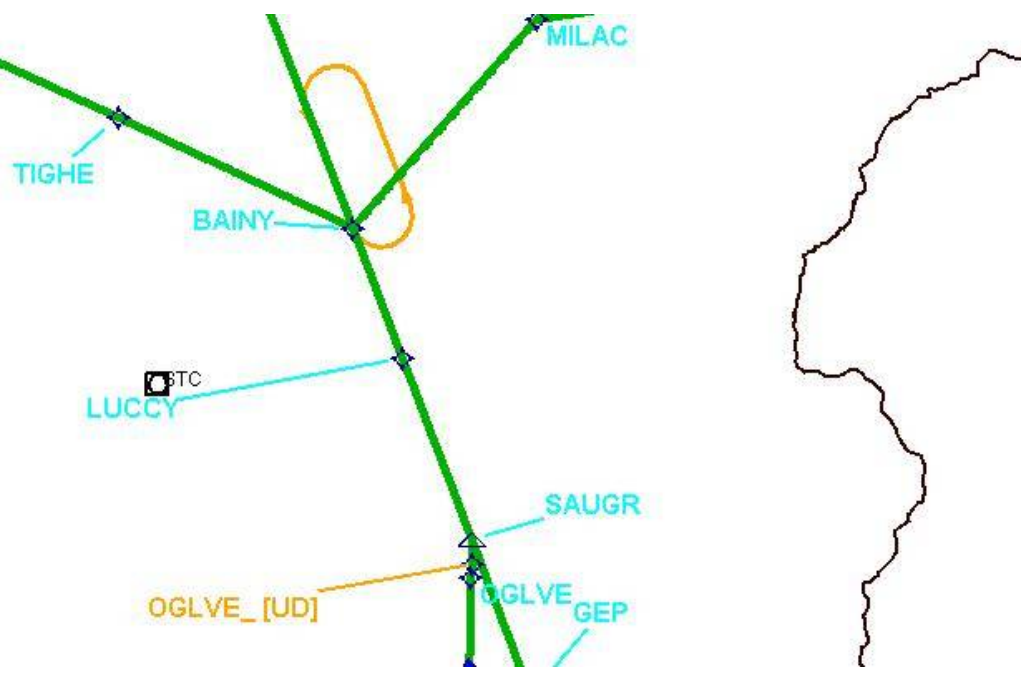
DME DME Assessment Results for BAINY4 path SAUGR_KAYQU

Graphic Depiction 4



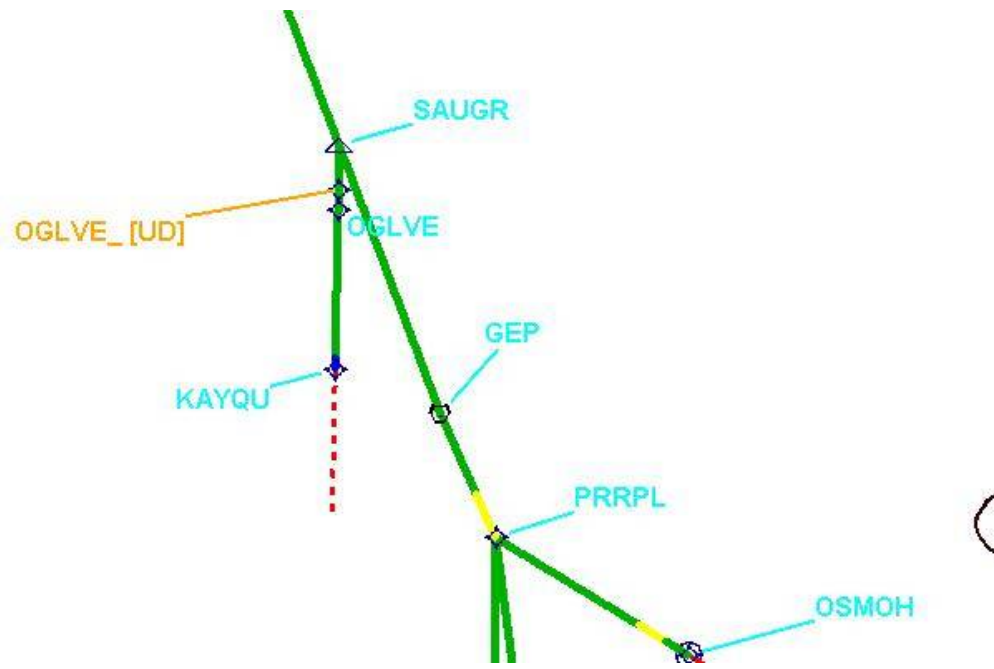
DME DME Assessment Results for BAINY4 path SAUGR_KAYQU

Graphic Depiction 5



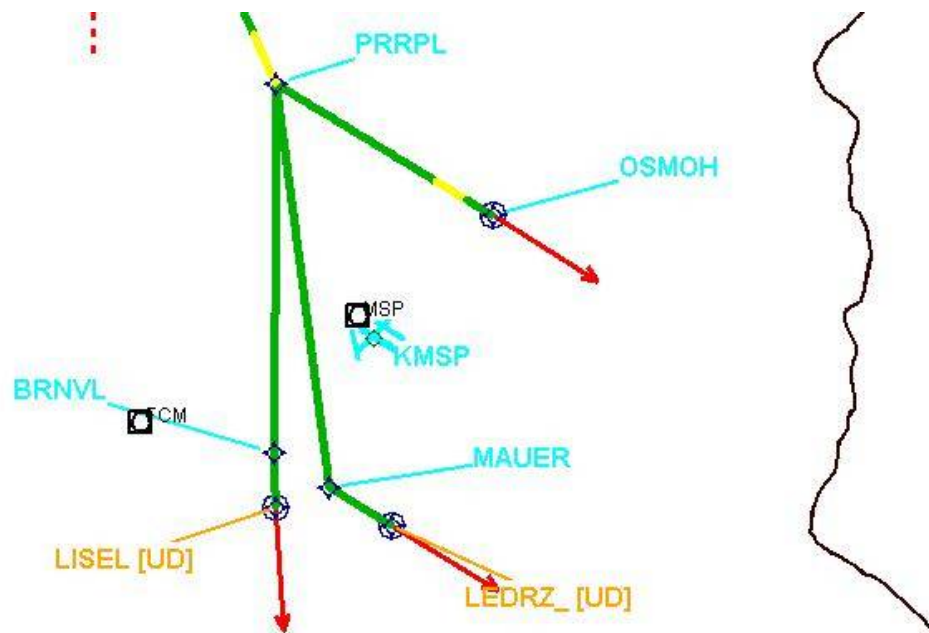
DME DME Assessment Results for BAINY4 path SAUGR_KAYQU

Graphic Depiction 6



DME DME Assessment Results for BAINY4 path SAUGR_KAYQU

Graphic Depiction 7



DME DME Assessment Results for BAINY4 path TTAIL_LEDZRZ_

Results Summary	
Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Lisa A-CTR Thrysoe
Project File:	C:\Users\Lisa A-CTR Thrysoe\OneDrive - Federal Aviation Administration\Desktop\DME DME Screening\KMSP\STARS\KMSP BAINY FOUR STAR\KMSP STAR BAINY FOUR DME 241203.tgs
Output File:	C:\Users\Lisa A-CTR Thrysoe\OneDrive - Federal Aviation Administration\Desktop\DME DME Screening\KMSP\STARS\KMSP BAINY FOUR STAR\KMSP [IFPA] BAINY4 20250401_0713 EDT\TTAIL_LEDZRZ_KMSP BAINY4 RNAV STAR TTAIL LEDZRZ_20250401_0713 EDT.pdf
Procedure Name:	BAINY4
Software: DmeDmePlugin:	7.4.1
Date/Time:	04/01/2025 07:13 EDT
Databases:	MITRE 3DEP 3 arcsec

Failures
No Failures

Warnings
No Warnings

Informational
No Informational

Notes For Flight Check
None

Flight Plan							
Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	Ground Speed (kts)	Turn Type	Leg Type
TTAIL	WP	N46° 41' 28.0000", W096° 41' 09.0000"	11000	VNAV	280	FLY_BY	TF
WINDD	WP	N46° 06' 51.7500", W094° 48' 16.8600"	10000	VNAV	280	FLY_BY	TF
TIGHE	WP	N45° 53' 49.2000", W094° 07' 46.9600"	10000	VNAV	280	FLY_BY	TF
BAINY	WP	N45° 45' 13.0000", W093° 41' 58.0000"	10000	VNAV	280	FLY_BY	TF
LUCCY	WP	N45° 35' 04.4100", W093° 36' 32.4800"	10000	VNAV	280	FLY_BY	TF
SAUGR	WP	N45° 20' 54.4500", W093° 28' 52.2100"	10000	VNAV	280	FLY_BY	TF
GEP	WP	N45° 08' 44.4656", W093° 22' 23.4514"	10000	VNAV	250	FLY_BY	TF
PRRPL	WP	N45° 03' 08.4800", W093° 18' 53.0600"	9000	VNAV	250	FLY_BY	TF
MAUER	WP	N44° 46' 54.1800", W093° 15' 51.4200"	8000	VNAV	210	FLY_BY	TF
LEDZRZ_	WP	N44° 45' 20.1127", W093° 12' 15.6913"	8000	VNAV	210	FLY_OVER	TF

DME DME Assessment Results for BAINY4 path TTAIL_LEDZ_

Flyability	
Flight Type:	RNAV STAR
Selected Airport:	KMSP [IFPA]
Climb Gradient:	None assigned
Speeds:	200 Ground Speed to 11000 FT
	240 Ground Speed to 18000 FT
	260 Ground Speed to 24000 FT
	340 Ground Speed above 24000 FT
Descent During a Turn:	Allowed
VNAV Mode:	Flight Plan

DME/DME	
RNP:	RNP 2
Flight Mode:	Manual
Line of Sight (DTED Level 0 Max):	Evaluated
Inertial Drift:	Enabled
Initial Drift:	0.558 NM
INS Drift Rate:	8.0 NM/Hour
Range Mode:	OSV
RNP Edges:	Evaluated
Min DME Range:	3.0 NM
DME Types:	DME, VOR-DME, VORTAC, TACAN
DME Include Angles:	30 to 150
Critical DMEs:	Allowed
DoD Facilities:	Not included
Foreign Facilities:	Not included
High DMEs:	Included
Low DMEs:	Included
Terminal DMEs:	Included
Flight Check DMEs:	Not selected
Higher Altitudes:	Not Evaluated
Near Maximum Altitude:	Not Evaluated
Automatic ESVs:	Enabled
Disabled DMEs:	None

DME DME Assessment Results for BAINY4 path TTAIL_LEDZ

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	RWF	N44° 28' 02.1854", W095° 07' 41.6276"	7.0 E	130	DH		NO	Enabled	62.6 %	61.9 %
2	STC	N45° 32' 57.5050", W094° 03' 30.9591"	3.0 E	25	T		NO	Enabled	18.6 %	18.9 %
3	PKD	N46° 53' 53.1091", W095° 04' 15.6354"	0.0 E	40	L		NO	Enabled	22.3 %	22.7 %
4	MSP	N44° 53' 47.0000", W093° 14' 12.0000"	0.0 E	130	DH		NO	Enabled	59.9 %	59.5 %
5	ABR	N45° 25' 02.4840", W098° 22' 07.3906"	7.0 E	130	DH		NO	Enabled	0.5 %	0.5 %
6	FCM	N44° 49' 31.2603", W093° 26' 33.6793"	1.0 E	40	L		NO	Enabled	24.3 %	23 %
7	FNX	N43° 38' 15.9267", W094° 24' 47.5134"	0.0 E	130	DH		NO	Enabled	6.8 %	6.1 %
8	RST	N43° 46' 58.4501", W092° 35' 49.0560"	5.0 E	130	DH		NO	Enabled	22 %	20.6 %
9	FGT	N44° 37' 51.4303", W093° 10' 55.3911"	6.0 E	130	H		NO	Enabled	17.9 %	16.5 %
10	GEP	N45° 08' 44.4656", W093° 22' 23.4514"	6.0 E	130	H		NO	Enabled	30 %	28.9 %
11	FAR	N46° 45' 12.0129", W096° 51' 04.7483"	9.0 E	130	DH		NO	Enabled	37.8 %	38.5 %
12	AXN	N45° 57' 30.1977", W095° 13' 57.4854"	7.0 E	130	DH		NO	Enabled	83.6 %	84.9 %
13	DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	L		NO	Enabled	10.4 %	10.5 %
14	DTL	N46° 49' 31.8854", W095° 53' 14.3617"	2.0 E	25	T		NO	Enabled	4.7 %	4.8 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	ABR	FAR	AXN	PKD		
1.1	PKD	AXN				
13.8	PKD	AXN	FAR			
22.1	DTL	AXN	FAR	PKD		
31.9	PKD	AXN	FAR			
45.7						
55.2	FAR	AXN				
55.3	FAR	AXN	DWN			
76.6	FAR	AXN	RWF			
76.9	FAR	AXN	MSP	RWF		
99.9	RWF	AXN	MSP			
115.6	STC	AXN	RWF	MSP		
136.6	STC	MSP	GEP	AXN	RWF	
153.7	RWF	MSP	GEP	AXN		
154.9	FCM	AXN	RWF	MSP	GEP	
172.2	RWF	MSP	FGT	RST	FCM	AXN
180.3	RWF	GEP	MSP	FGT	RST	FCM
189.1	RWF	GEP	FGT	FCM	RST	

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N46° 23' 11.0159", W095° 40' 27.9323"	N46° 19' 19.3909", W095° 27' 57.5844"	9.484

DME DME Assessment Results for BAINY4 path TTAIL_LEDZR_

Available DMEs by Waypoints

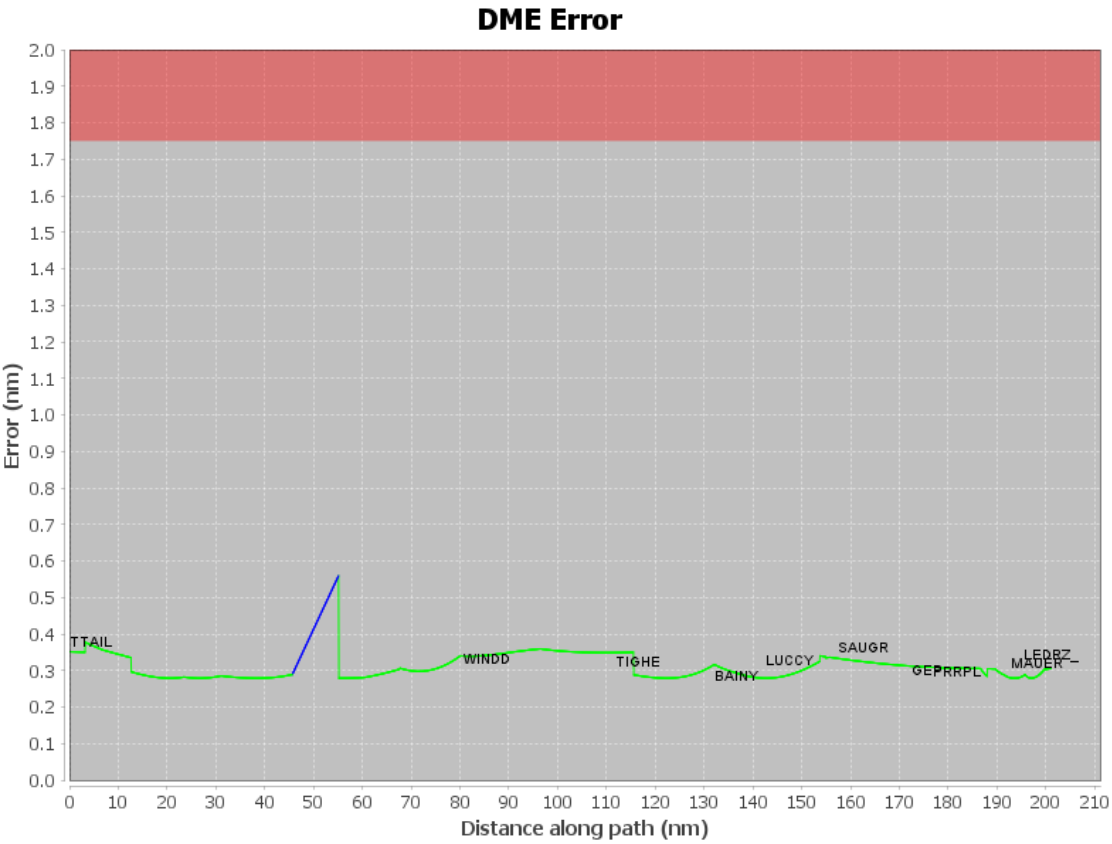
Waypoint Before	Waypoint After	DME List	Suggested DMEs
TTAIL	WINDD	RWF, ABR, FAR, AXN, PKD, DWN, MSP, DTL	
WINDD	TIGHE	RWF, STC, FAR, AXN, MSP	
TIGHE	BAINY	RWF, STC, AXN, MSP	
BAINY	LUCCY	RWF, STC, GEP, AXN, MSP	
LUCCY	SAUGR	RWF, FCM, RST, STC, GEP, AXN, MSP	
SAUGR	GEP	RWF, FCM, FNX, RST, FGT, GEP, AXN, MSP	
GEP	PRRPL	RWF, FNX, FCM, FGT, RST, GEP, AXN, MSP	
PRRPL	MAUER	RWF, FCM, FNX, FGT, RST, GEP, MSP	
MAUER	LEDZR_	RWF, FNX, FCM, FGT, RST, GEP, MSP	

User Data Files

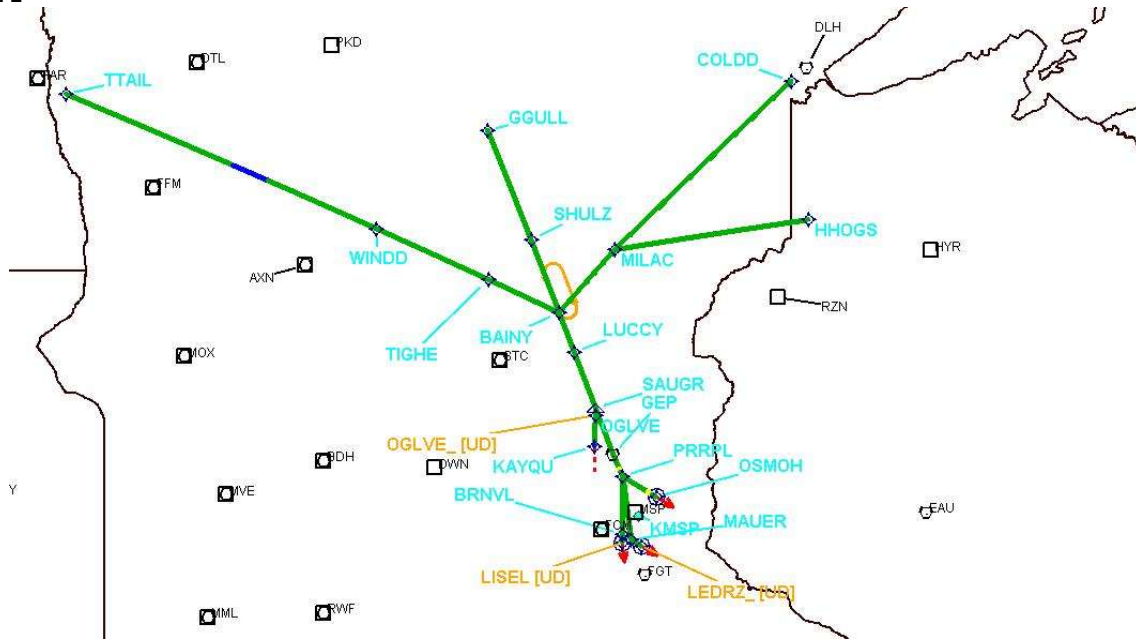
#	File Name
1	New Analysis.udt

User DMEs

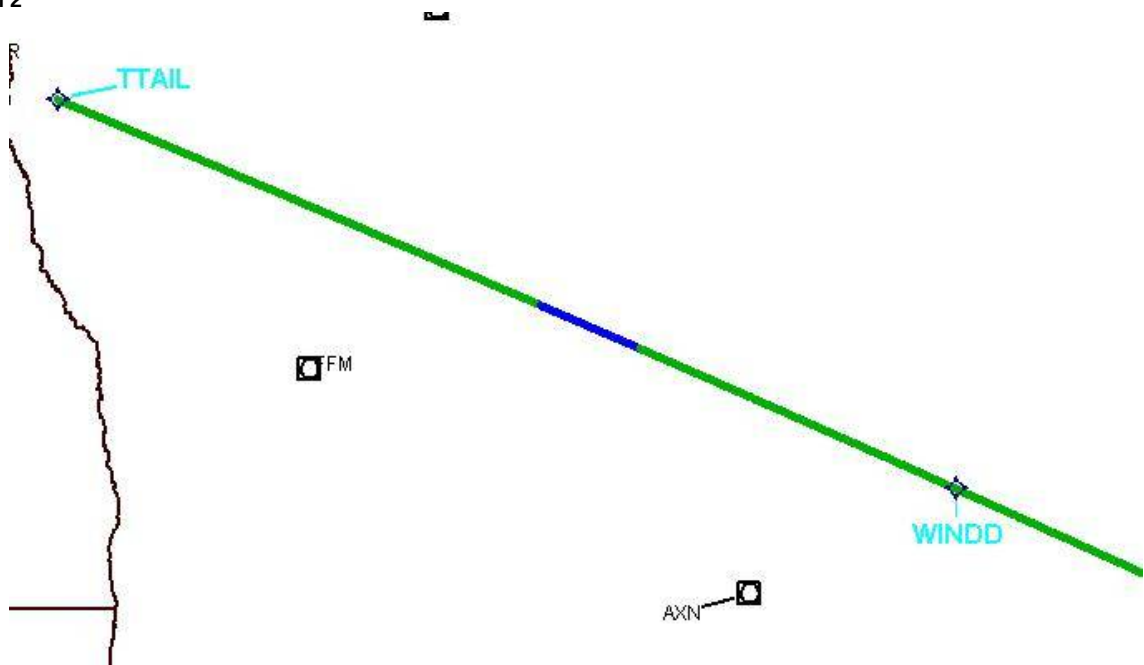
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	DWN FAA 703966-21 DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	1130	109.0	DWN FAA 703966-21	
ESV:		Bearing [True]: 319.0° to 82.0° Bearing [Mag]: 319.0° to 82.0°				Arc Distance: Out to 89.0 NM Altitude: 8200.0 to 20000.0 ft		
2	DWN FAA 703966-20 DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	1130	109.0	DWN FAA 703966-20	
ESV:		Bearing [True]: 319.0° to 82.0° Bearing [Mag]: 319.0° to 82.0°				Arc Distance: Out to 65.0 NM Altitude: 4200.0 to 20000.0 ft		
3	GEP FAA 704267-63 GEP	N45° 08' 44.4656", W093° 22' 23.4514"	6.0 E	130	877.3	117.3	GEP FAA 704267-63	
ESV:		Bearing [True]: 331.0° to 348.0° Bearing [Mag]: 325.0° to 342.0°				Arc Distance: Out to 90.0 NM Altitude: 6000.0 to 15400.0 ft		
4	GPZ FAA 795355-4 GPZ	N47° 09' 48.3971", W093° 29' 20.1570"	6.0 E	40	1359	111.4	GPZ FAA 795355-4	
ESV:		Bearing [True]: 114.0° to 183.0° Bearing [Mag]: 108.0° to 177.0°				Arc Distance: Out to 65.0 NM Altitude: 6400.0 to 24100.0 ft		
5	DWN DWN	N45° 05' 14.8650", W094° 27' 13.8590"	0.0 E	40	1130	109.0	DWN	
ESV:		Bearing [True]: 51.0° to 58.0° Bearing [Mag]: 51.0° to 58.0°				Arc Distance: Out to 117.0 NM Altitude: 10900.0 to 19200.0 ft		
6	GEP GEP	N45° 08' 44.4656", W093° 22' 23.4514"	6.0 E	130	877.3	117.3	GEP	
ESV:		Bearing [True]: 27.0° to 37.0° Bearing [Mag]: 21.0° to 31.0°				Arc Distance: Out to 75.0 NM Altitude: 10900.0 to 15400.0 ft		
7	PKD FAA 765984-9 PKD	N46° 53' 53.1091", W095° 04' 15.6354"	0.0 E	40	1471.6	110.6	PKD FAA 765984-9	
ESV:		Bearing [True]: 218.0° to 264.0° Bearing [Mag]: 218.0° to 264.0°				Arc Distance: Out to 71.0 NM Altitude: 10000.0 to 11000.0 ft		
8	DLH FAA 704109-33 DLH	N46° 48' 07.7897", W092° 12' 10.3291"	5.0 E	130	1427.9	112.6	DLH FAA 704109-33	
ESV:		Bearing [True]: 183.0° to 232.0° Bearing [Mag]: 178.0° to 227.0°				Arc Distance: Out to 69.0 NM Altitude: 6000.0 to 16000.0 ft		
9	GPZ GPZ	N47° 09' 48.3971", W093° 29' 20.1570"	6.0 E	40	1359	111.4	GPZ	
ESV:		Bearing [True]: 136.0° to 151.0° Bearing [Mag]: 130.0° to 145.0°				Arc Distance: Out to 85.0 NM Altitude: 10900.0 to 19400.0 ft		



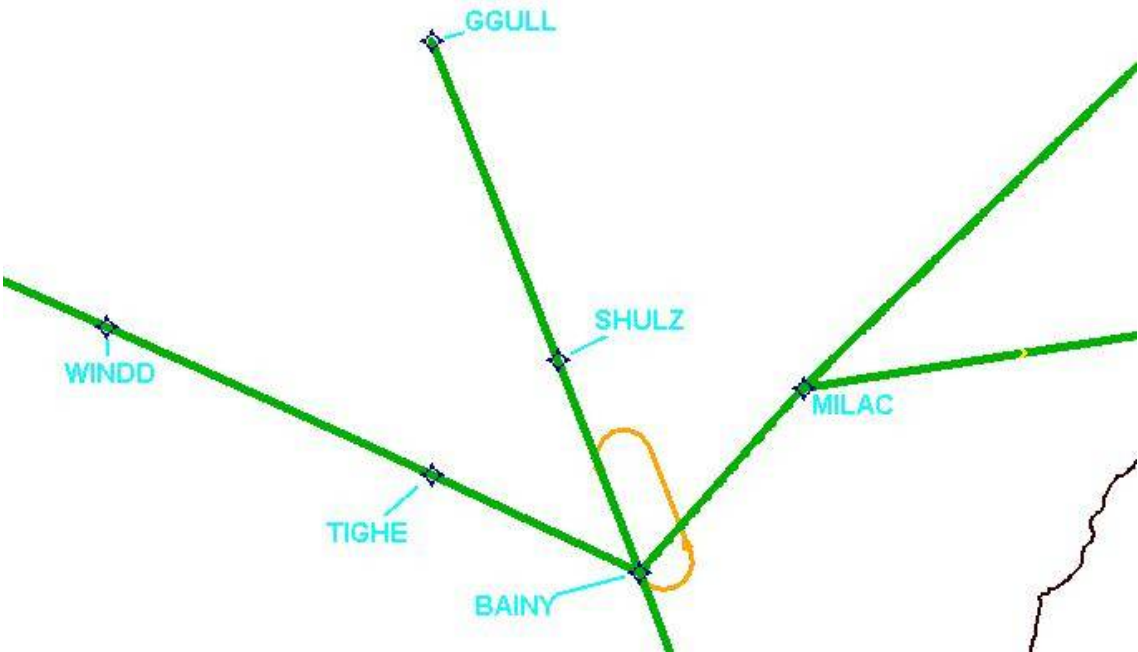
Graphic Depiction 1



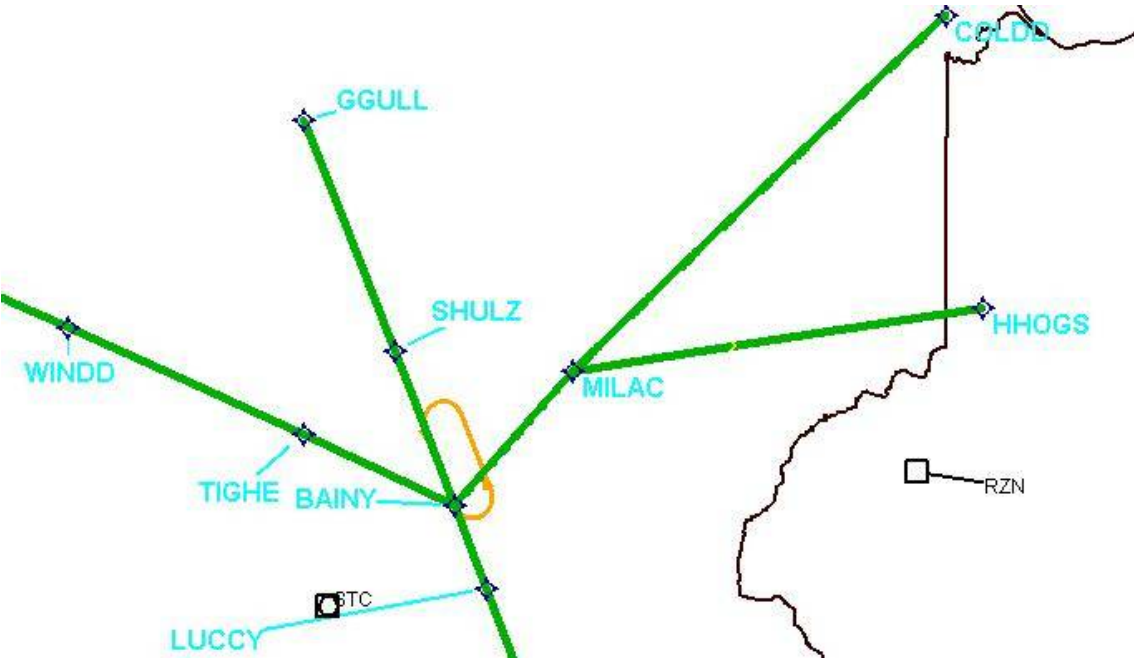
Graphic Depiction 2



Graphic Depiction 3

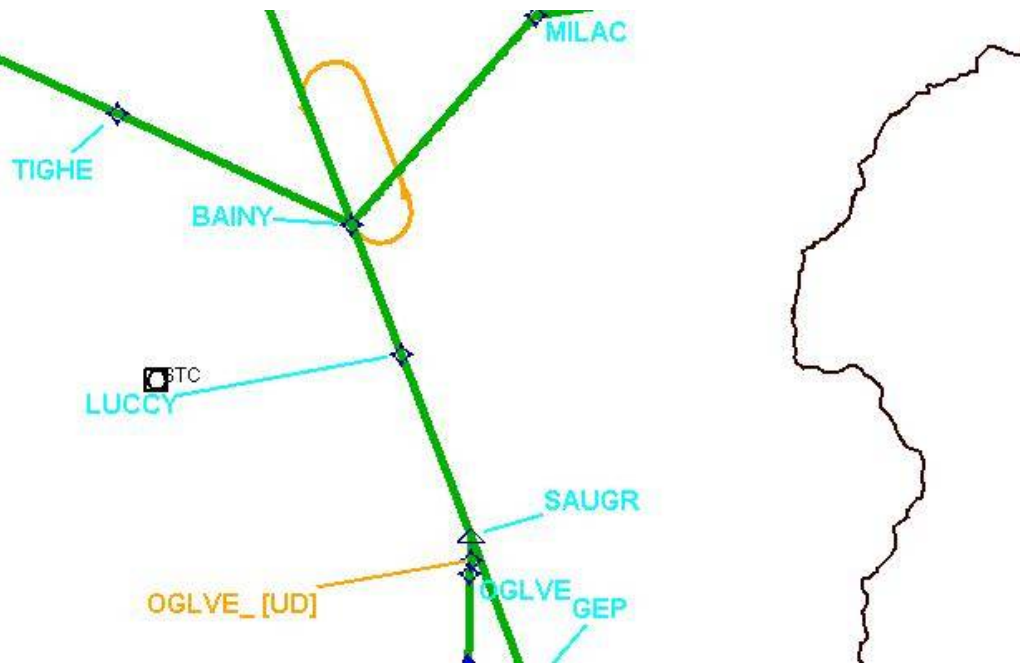


Graphic Depiction 4

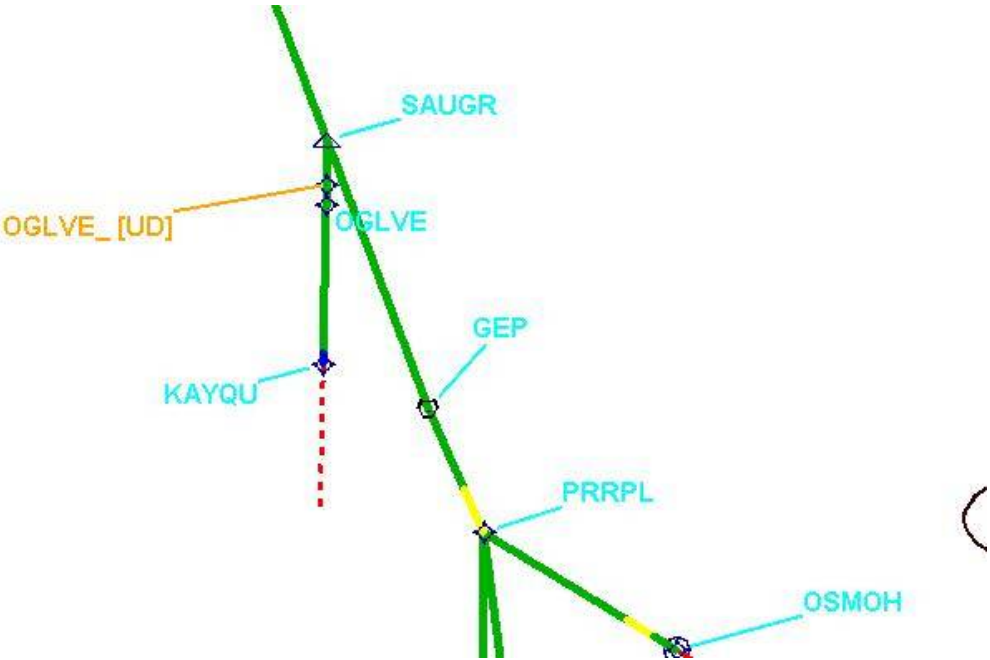


DME DME Assessment Results for BAINY4 path TTAIL_LEDZ_

Graphic Depiction 5



Graphic Depiction 6



Graphic Depiction 7

