

DME DME Assessment Results for HHOWE4 path HHOWE_LNCON

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Jose G-CTR Medina
Project File:	C:\Users\Jose G-CTR Medina\OneDrive - Federal Aviation Administration\Documents\01. Projects\DME EVALUATIONS\KDTW 20230125\DME Screens\Submitted\New DMEs\Possible solutions\KDTW HHOWE DME\KDTW HHOWE4 DME(2) 20240105.tgs
Output File:	C:\Users\Jose G-CTR Medina\OneDrive - Federal Aviation Administration\Documents\01. Projects\DME EVALUATIONS\KDTW 20230125\DME Screens\Submitted\New DMEs\Possible solutions\KDTW HHOWE DME\KDTW [IFPA] HHOWE4 20240116_0721 CST\HHOWE_LNCON\KDTW HHOWE4 SID HHOWE LNCON 20240116_0721 CST.pdf
Procedure Name:	HHOWE4
Software: DmeDmePlugin:	7.2.1
Date/Time:	01/16/2024 07:21 CST
Databases:	DTED LEVEL 0 MAX

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
HHOWE	WP	N42° 15' 23.1200", W082° 28' 06.0600"	10000	VNAV	200	FLY_BY	TF
LNCON	WP	N42° 14' 37.3900", W081° 31' 03.3600"	10000	VNAV	200	FLY_BY	TF

Flyability

Flight Type:	SID
Selected Airport:	KDTW [IFPA]
Climb Gradient:	None assigned
Speeds:	130 at the Runway DER
	145 at the end of the VA or VI leg
	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 HHOWE4 path HHOWE_LNCON

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
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:	Not enabled
Disabled DMEs:	None

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	CXR	N41° 31' 00.9405", W081° 09' 47.4692"	5.0 W	130	DH	IFPA	NO	Enabled	100 %	100 %
2	CRL	N42° 02' 52.8956", W083° 27' 27.2625"	3.0 W	130	DH	IFPA	NO	Enabled	100 %	100 %
3	DJB	N41° 21' 29.0339", W082° 09' 43.0873"	5.0 W	130	DH	IFPA	NO	Enabled	100 %	100 %
4	JXN	N42° 15' 33.2631", W084° 27' 30.7776"	0.0 E	130	DH	IFPA	NO	Enabled	43.5 %	43.5 %
5	DKK	N42° 29' 25.4400", W079° 16' 26.7700"	0.0 E	130	DH	IFPA	NO	Enabled	18.1 %	18.1 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	CRL	DJB	JXN	CXR		
18.5	CRL	DJB	CXR			
34.7	CXR	CRL	DJB	DKK		

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

Available DMEs by Waypoints			
Waypoint Before	Waypoint After	DME List	Suggested DMEs
HHOWE	LNCON	JXN, DKK, CXR, CRL, DJB	

DME DME Assessment Results for HHOWE4 path HHOWE_LNCON

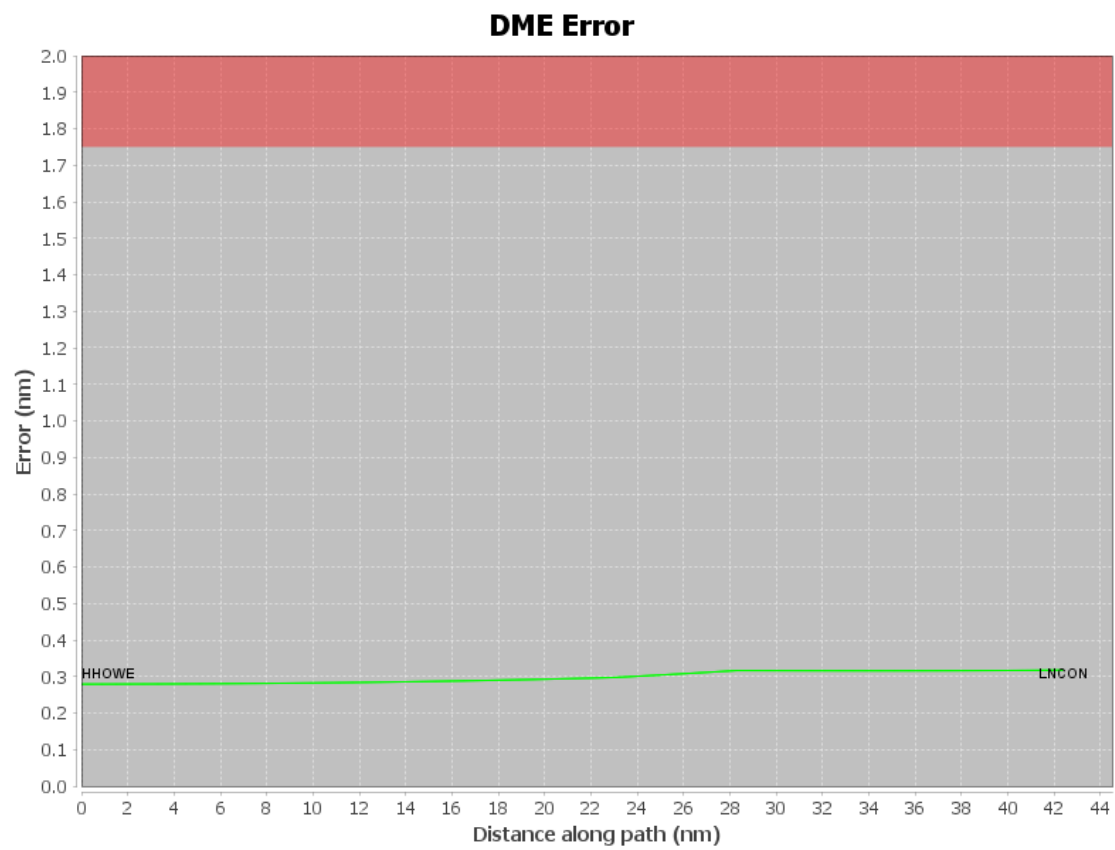
User Data Files

#	File Name
None	

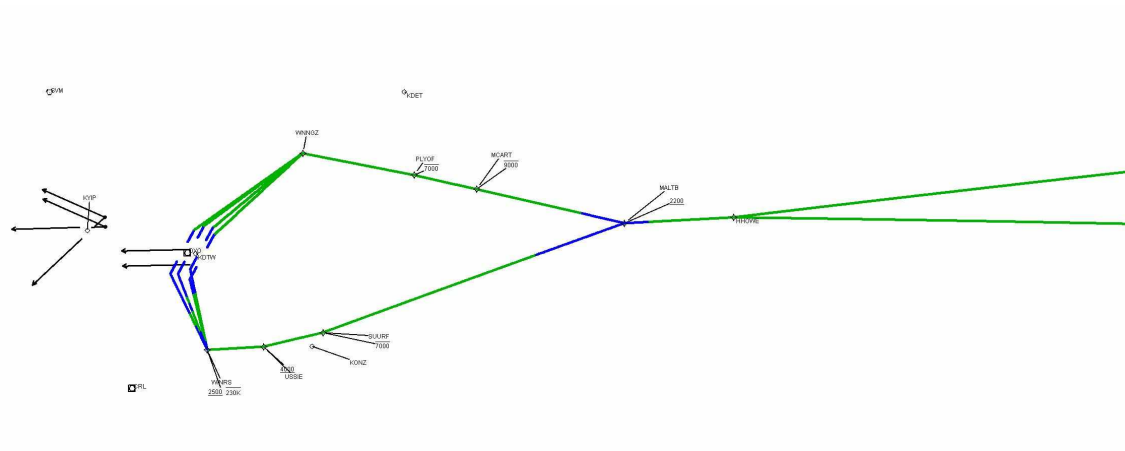
User DMEs

#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	PSI FAA 694088-6 PSI [IFPA]	N42° 42' 03.0947", W083° 31' 57.9835"	-0.0 E	40	1149.3	null	PSI FAA 694088-6	
ESV:		Bearing [True]: 77.0° to 142.0° Bearing [Mag]: 77.0° to 142.0°				Arc Distance: Out to 65.0 NM Altitude: 3900.0 to 11000.0 ft		

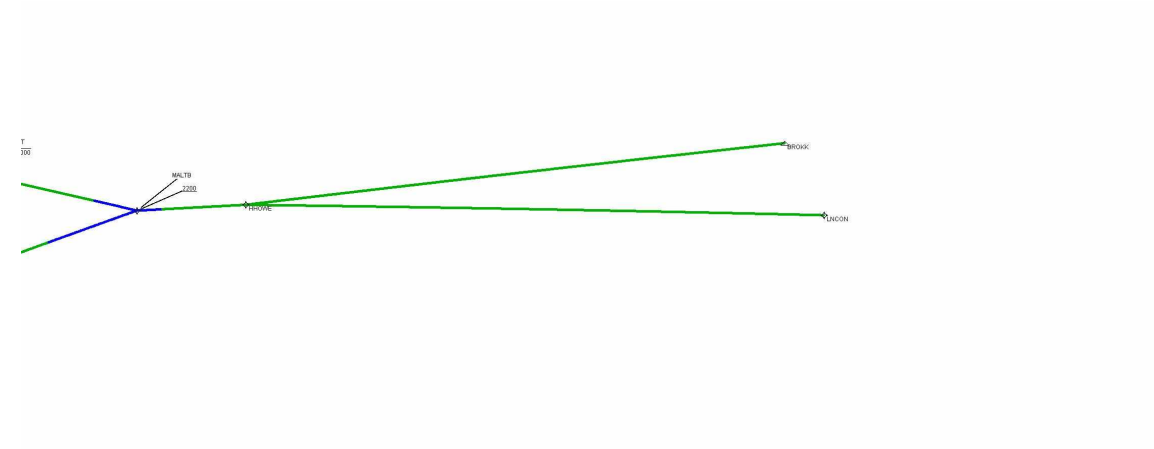
DME DME Assessment Results for HHOWE4 path HHOWE_LNCON



Graphic Depiction 1



Graphic Depiction 2



DME DME Assessment Results for HHOWE4 path KDTW:RW03L:DER_BROKK

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Jose G-CTR Medina
Project File:	C:\Users\Jose G-CTR Medina\OneDrive - Federal Aviation Administration\Documents\01. Projects\DME EVALUATIONS\KDTW 20230125\DME Screens\Submitted\New DMEs\Possible solutions\KDTW HHOWE DME\KDTW HHOWE4 DME(2) 20240105.tgs
Output File:	C:\Users\Jose G-CTR Medina\OneDrive - Federal Aviation Administration\Documents\01. Projects\DME EVALUATIONS\KDTW 20230125\DME Screens\Submitted\New DMEs\Possible solutions\KDTW HHOWE DME\KDTW [IFPA] HHOWE4 20240116_0721 CST\KDTW-RW03L-DER_BROKK\KDTW HHOWE4 SID RW03L BROKK 20240116_0721 CST.pdf
Procedure Name:	HHOWE4
Software: DmeDmePlugin:	7.2.1
Date/Time:	01/16/2024 07:21 CST
Databases:	DTED LEVEL 0 MAX

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
KDTW:RW03L:DER	WP	N42° 13' 41.8586", W083° 20' 10.1070"	631.4	VNAV	130	FLY_BY	TF
WNNGZ	WP	N42° 20' 03.7700", W083° 10' 37.5500"	2200	VNAV	200	FLY_BY	TF
PLYOF	WP	N42° 18' 27.9600", W082° 59' 36.5100"	2200	VNAV	200	FLY_BY	TF
MCART	WP	N42° 17' 26.0100", W082° 53' 27.6100"	2200	VNAV	200	FLY_BY	TF
MALTB	WP	N42° 14' 57.4800", W082° 38' 51.4800"	2200	VNAV	200	FLY_BY	TF
HHOWE	WP	N42° 15' 23.1200", W082° 28' 06.0600"	10000	VNAV	200	FLY_BY	TF
BROKK	WP	N42° 19' 53.0000", W081° 34' 54.9800"	10000	VNAV	200	FLY_BY	TF

Climb Gradient:
500.0 ft/NM up to 1146.0 ft MSL
200.0 ft/NM

DME DME Assessment Results for HHWE4 path KDTW:RW03L:DER_BROKK

Flyability	
Flight Type:	SID
Selected Airport:	KDTW [IFPA]
Climb Gradient:	500.0 ft/NM up to 1146.0 ft MSL 200.0 ft/NM
Speeds:	130 at the Runway DER
	145 at the end of the VA or VI leg
	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
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:	Not enabled
Disabled DMEs:	None

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	PSI	N42° 42' 03.0947", W083° 31' 57.9835"	-0.0 E	40	L	IFPA	NO	Enabled	24.1 %	24.3 %
2	DXO	N42° 12' 47.2904", W083° 21' 59.9878"	6.0 W	130	H	IFPA	NO	Enabled	33.2 %	33.4 %
3	CXR	N41° 31' 00.9405", W081° 09' 47.4692"	5.0 W	130	DH	IFPA	NO	Enabled	52.8 %	53.1 %
4	CRL	N42° 02' 52.8956", W083° 27' 27.2625"	3.0 W	130	DH	IFPA	NO	Enabled	91.9 %	92.5 %
5	DJB	N41° 21' 29.0339", W082° 09' 43.0873"	5.0 W	130	DH	IFPA	NO	Enabled	55.8 %	56.1 %
6	JXN	N42° 15' 33.2631", W084° 27' 30.7776"	0.0 E	130	DH	IFPA	NO	Enabled	25.8 %	26 %
7	SVM	N42° 24' 31.1055", W083° 35' 38.0455"	3.0 W	40	L	IFPA	NO	Enabled	35.8 %	36.1 %
8	DKK	N42° 29' 25.4400", W079° 16' 26.7700"	0.0 E	130	DH	IFPA	NO	Enabled	7.4 %	7.5 %

DME DME Assessment Results for HHWE4 path KDTW:RW03L:DER_BROKK

Flight Check DME Selection

Distance [NM]	Selected DMEs					Alternate
0.0						
1.0	SVM	CRL				
1.7	SVM	DXO	CRL			
5.8	SVM	CRL	PSI	DXO		
23.0	SVM	CRL				
30.4						
35.5	PSI	CRL	DXO			
35.7	CRL	DJB	DXO	PSI		
38.2	CRL	DJB	DXO	CXR		
38.7	CRL	DJB	DXO	JXN	CXR	
41.5	CRL	DJB	JXN	CXR		
59.9	CRL	DJB	CXR			
75.3	CXR	CRL	DJB	DKK		

Inertial Drift Segments

#	Start Location	End Location	Length [NM]
1	N42° 13' 43.7266", W083° 20' 08.7297"	N42° 14' 36.0296", W083° 19' 30.1563"	0.9937
2	N42° 15' 41.2712", W082° 43' 08.5339"	N42° 15' 03.2650", W082° 36' 28.0659"	5.032

Available DMEs by Waypoints

Waypoint Before	Waypoint After	DME List	Suggested DMEs
KDTW:RW03L:DER	WNNGZ	PSI, DXO, SVM, CRL	
WNNGZ	PLYOF	PSI, DXO, SVM, CRL	
PLYOF	MCART	PSI, DXO, SVM, CRL	
MCART	MALTB	PSI, DXO, SVM, CRL	
MALTB	HHWE	JXN, PSI, DXO, CRL, CXR, DJB	
HHWE	BROKK	JXN, DKK, CXR, CRL, DJB	

User Data Files

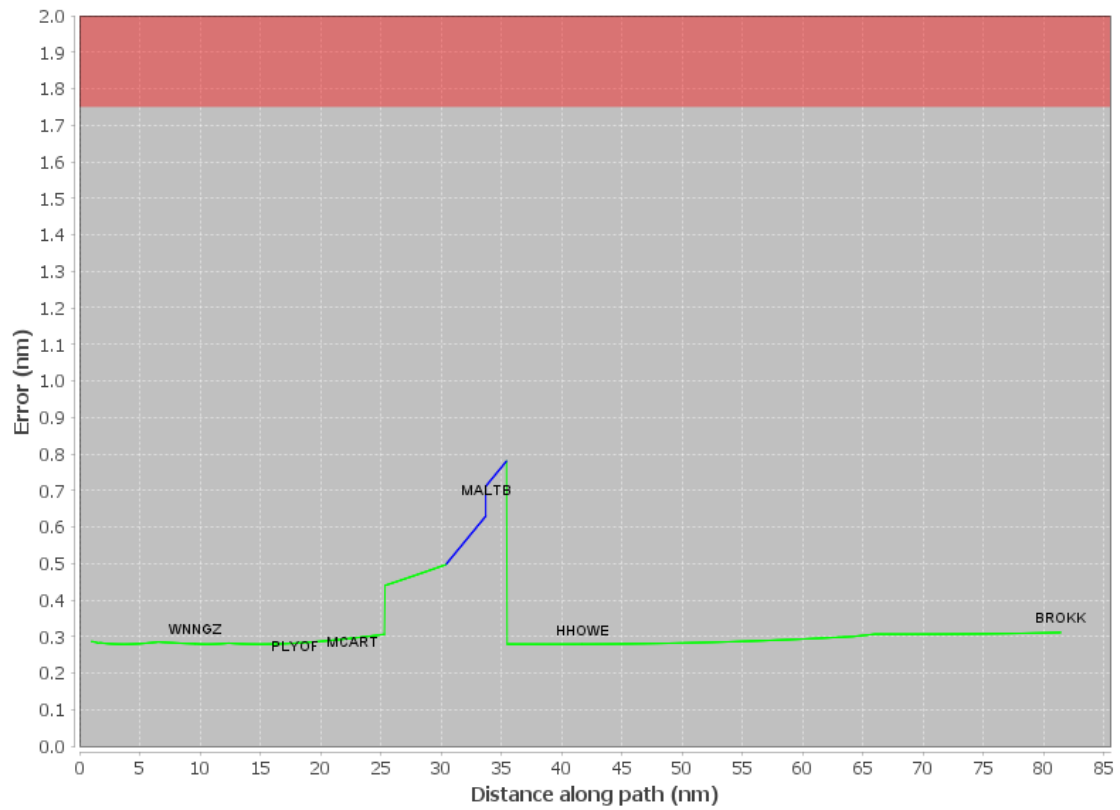
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User DMEs

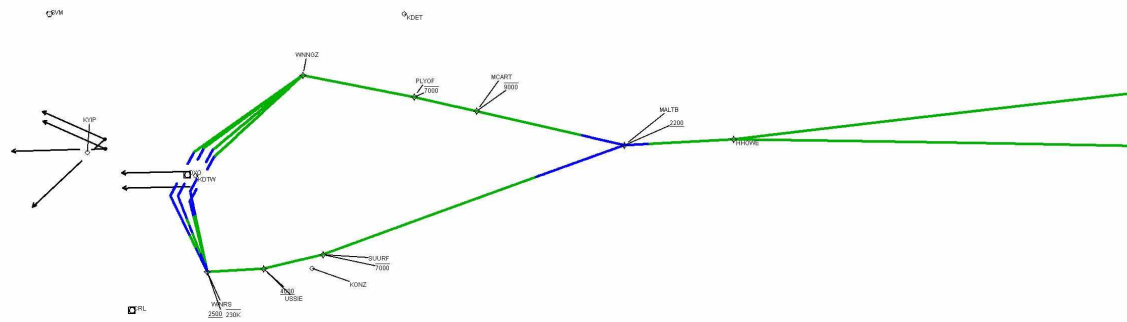
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	PSI FAA 694088-6 PSI [IFPA]	N42° 42' 03.0947", W083° 31' 57.9835"	-0.0 E	40	1149.3	null	PSI FAA 694088-6	
ESV:		Bearing [True]: 77.0° to 142.0° Bearing [Mag]: 77.0° to 142.0°				Arc Distance: Out to 65.0 NM Altitude: 3900.0 to 11000.0 ft		

DME DME Assessment Results for HHOWE4 path KDTW:RW03L:DER_BROKK

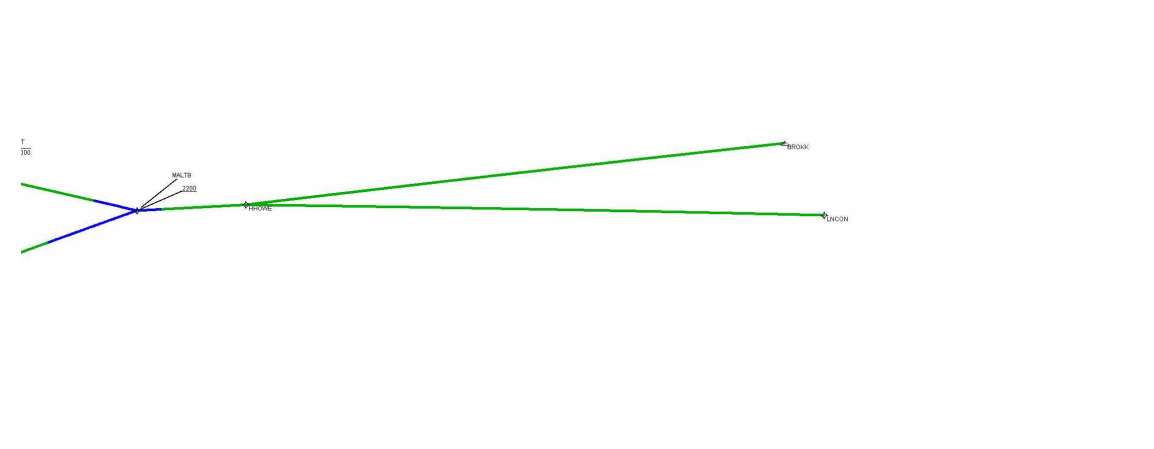
DME Error



Graphic Depiction 1



Graphic Depiction 2



DME DME Assessment Results for HHOWE4 path KDTW:RW03R:DER_WNNGZ

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Jose G-CTR Medina
Project File:	C:\Users\Jose G-CTR Medina\OneDrive - Federal Aviation Administration\Documents\01. Projects\DME EVALUATIONS\KDTW 20230125\DME Screens\Submitted\New DMEs\Possible solutions\KDTW HHOWE DME\KDTW HHOWE4 DME(2) 20240105.tgs
Output File:	C:\Users\Jose G-CTR Medina\OneDrive - Federal Aviation Administration\Documents\01. Projects\DME EVALUATIONS\KDTW 20230125\DME Screens\Submitted\New DMEs\Possible solutions\KDTW HHOWE DME\KDTW [IFPA] HHOWE4 20240116_0721 CST\KDTW-RW03R-DER_WNNGZ\KDTW HHOWE4 SID RW03R WNNGZ 20240116_0721 CST.pdf
Procedure Name:	HHOWE4
Software: DmeDmePlugin:	7.2.1
Date/Time:	01/16/2024 07:21 CST
Databases:	DTED LEVEL 0 MAX

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
KDTW:RW03R:DER	WP	N42° 13' 10.8552", W083° 20' 02.6517"	631.8	VNAV	130	FLY_BY	TF
WNNGZ	WP	N42° 20' 03.7700", W083° 10' 37.5500"	2200	VNAV	200	FLY_BY	TF
Climb Gradient: 500.0 ft/NM up to 1146.0 ft MSL 200.0 ft/NM							

Flyability

Flight Type:	SID
Selected Airport:	KDTW [IFPA]
Climb Gradient:	500.0 ft/NM up to 1146.0 ft MSL 200.0 ft/NM
Speeds:	130 at the Runway DER
	145 at the end of the VA or VI leg
	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 HHOWE4 path KDTW:RW03R:DER_WNNGZ

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
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:	Not enabled
Disabled DMEs:	None

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	PSI	N42° 42' 03.0947", W083° 31' 57.9835"	-0.0 E	40	L	IFPA	NO	Enabled	37 %	38.9 %
2	DXO	N42° 12' 47.2904", W083° 21' 59.9878"	6.0 W	130	H	IFPA	NO	Enabled	74 %	77.7 %
3	CRL	N42° 02' 52.8956", W083° 27' 27.2625"	3.0 W	130	DH	IFPA	NO	Enabled	84.8 %	89 %
4	SVM	N42° 24' 31.1055", W083° 35' 38.0455"	3.0 W	40	L	IFPA	NO	Enabled	84.8 %	89 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0						
1.0	SVM	CRL				
1.0						
1.1	SVM	CRL				
2.2	SVM	CRL	DXO			
6.0	SVM	CRL	PSI	DXO		

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N42° 13' 12.7219", W083° 20' 01.2758"	N42° 14' 04.9862", W083° 19' 22.7426"	0.9929
2	N42° 14' 04.9862", W083° 19' 22.7426"	N42° 14' 07.2466", W083° 19' 19.4421"	0.0556

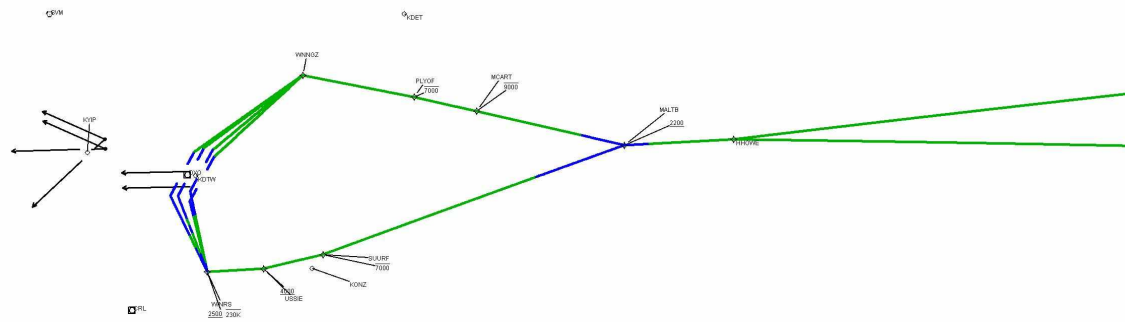
Available DMEs by Waypoints			
Waypoint Before	Waypoint After	DME List	Suggested DMEs
KDTW:RW03R:DER	WNNGZ	PSI, DXO, SVM, CRL	

DME DME Assessment Results for HHOWE4 path KDTW:RW03R:DER_WNNGZ

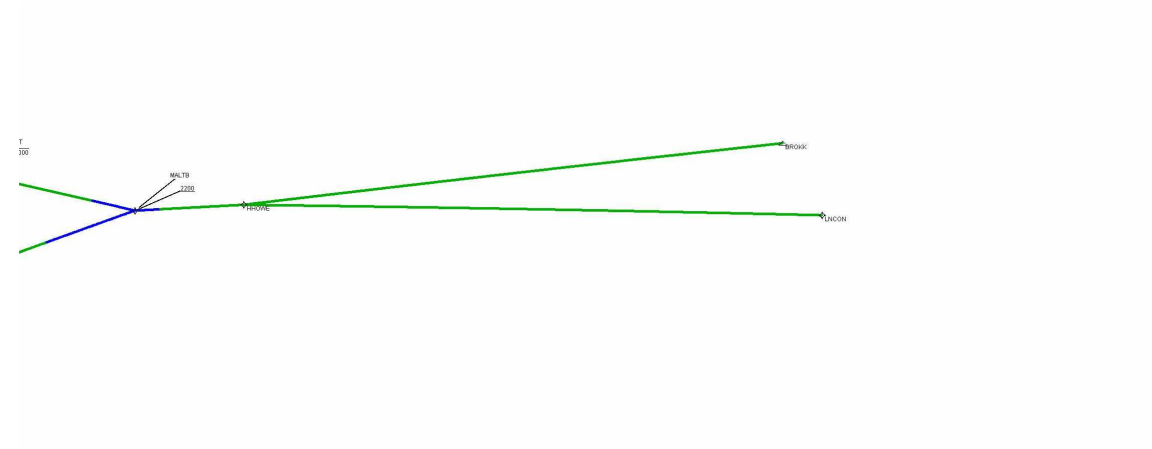
User Data Files								
#	File Name							
None								
User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	PSI FAA 694088-6 PSI [IFPA]	N42° 42' 03.0947", W083° 31' 57.9835"	-0.0 E	40	1149.3	null	PSI FAA 694088-6	
ESV:		Bearing [True]: 77.0° to 142.0° Bearing [Mag]: 77.0° to 142.0°				Arc Distance: Out to 65.0 NM Altitude: 3900.0 to 11000.0 ft		



Graphic Depiction 1



Graphic Depiction 2



DME DME Assessment Results for HHOWE4 path KDTW:RW04L:DER_WNNGZ

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Jose G-CTR Medina
Project File:	C:\Users\Jose G-CTR Medina\OneDrive - Federal Aviation Administration\Documents\01. Projects\DME EVALUATIONS\KDTW 20230125\DME Screens\Submitted\New DMEs\Possible solutions\KDTW HHOWE DME\KDTW HHOWE4 DME(2) 20240105.tgs
Output File:	C:\Users\Jose G-CTR Medina\OneDrive - Federal Aviation Administration\Documents\01. Projects\DME EVALUATIONS\KDTW 20230125\DME Screens\Submitted\New DMEs\Possible solutions\KDTW HHOWE DME\KDTW [IFPA] HHOWE4 20240116_0721 CST\KDTW-RW04L-DER_WNNGZ\KDTW HHOWE4 SID RW04L WNNGZ 20240116_0721 CST.pdf
Procedure Name:	HHOWE4
Software: DmeDmePlugin:	7.2.1
Date/Time:	01/16/2024 07:21 CST
Databases:	DTED LEVEL 0 MAX

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
KDTW:RW04L:DER	WP	N42° 13' 34.4821", W083° 21' 58.6115"	642.1	VNAV	130	FLY_BY	TF
WNNGZ	WP	N42° 20' 03.7700", W083° 10' 37.5500"	2200	VNAV	200	FLY_BY	TF
Climb Gradient: 500.0 ft/NM up to 1146.0 ft MSL 200.0 ft/NM							

Flyability

Flight Type:	SID
Selected Airport:	KDTW [IFPA]
Climb Gradient:	500.0 ft/NM up to 1146.0 ft MSL 200.0 ft/NM
Speeds:	130 at the Runway DER
	145 at the end of the VA or VI leg
	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 HHOWE4 path KDTW:RW04L:DER_WNNGZ

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
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:	Not enabled
Disabled DMEs:	None

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	PSI	N42° 42' 03.0947", W083° 31' 57.9835"	-0.0 E	40	L	IFPA	NO	Enabled	38.6 %	40.4 %
2	DXO	N42° 12' 47.2904", W083° 21' 59.9878"	6.0 W	130	H	IFPA	NO	Enabled	73.8 %	77.1 %
3	CRL	N42° 02' 52.8956", W083° 27' 27.2625"	3.0 W	130	DH	IFPA	NO	Enabled	87.1 %	90.9 %
4	SVM	N42° 24' 31.1055", W083° 35' 38.0455"	3.0 W	40	L	IFPA	NO	Enabled	87.1 %	90.9 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0						
1.0	SVM	CRL				
2.5	SVM	DXO	CRL			
6.4	SVM	CRL	PSI	DXO		

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N42° 13' 36.3771", W083° 21' 57.2160"	N42° 14' 25.6460", W083° 21' 20.9240"	0.9358

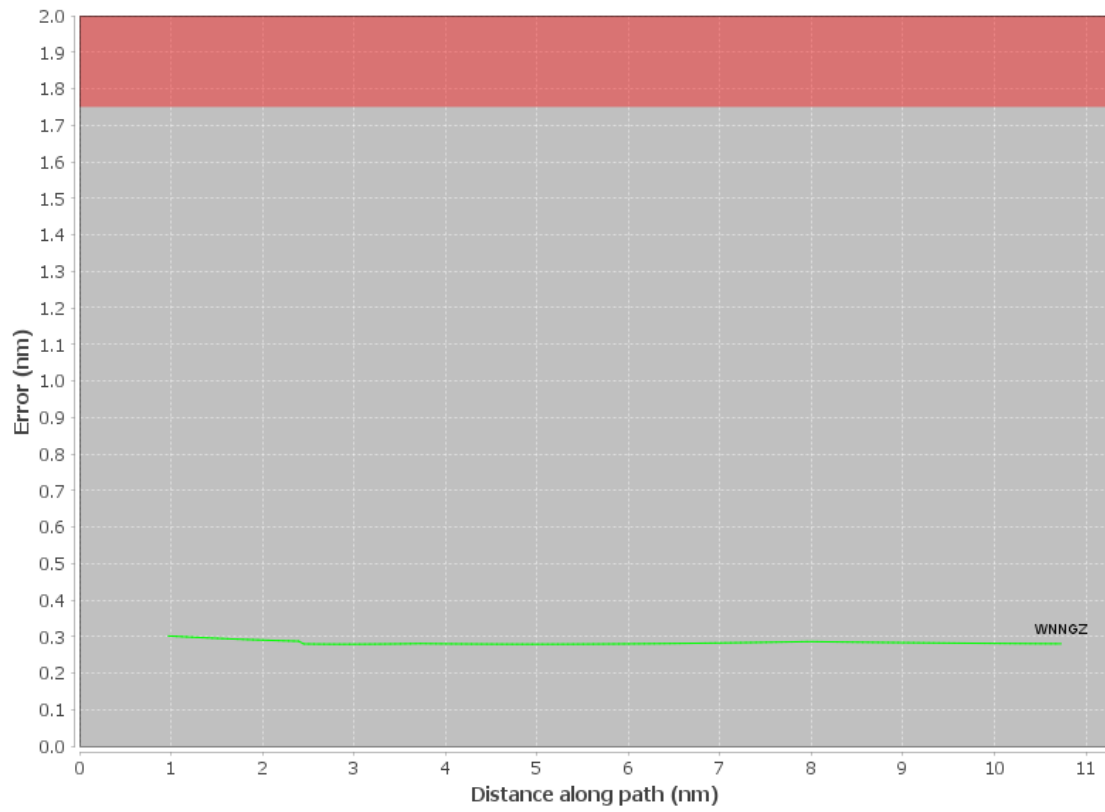
Available DMEs by Waypoints			
Waypoint Before	Waypoint After	DME List	Suggested DMEs
KDTW:RW04L:DER	WNNGZ	PSI, DXO, SVM, CRL	

DME DME Assessment Results for HHOWE4 path KDTW:RW04L:DER_WNNGZ

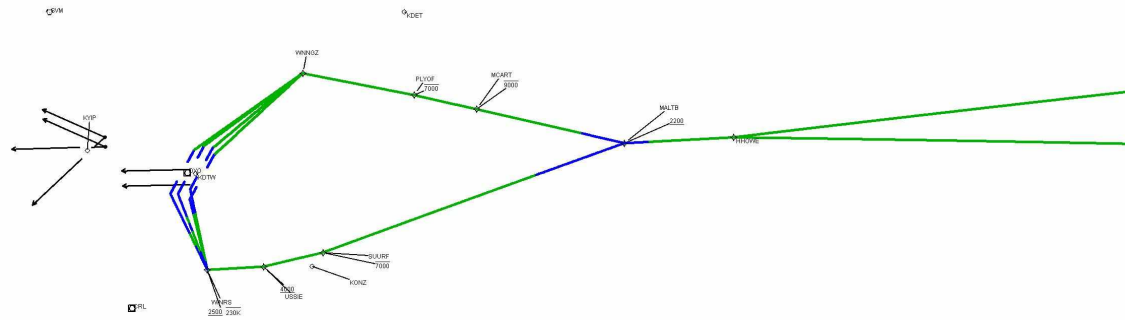
User Data Files								
#	File Name							
None								
User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	PSI FAA 694088-6 PSI [IFPA]	N42° 42' 03.0947", W083° 31' 57.9835"	-0.0 E	40	1149.3	null	PSI FAA 694088-6	
ESV:		Bearing [True]: 77.0° to 142.0° Bearing [Mag]: 77.0° to 142.0°				Arc Distance: Out to 65.0 NM Altitude: 3900.0 to 11000.0 ft		

DME DME Assessment Results for HHOWE4 path KDTW:RW04L:DER_WNNGZ

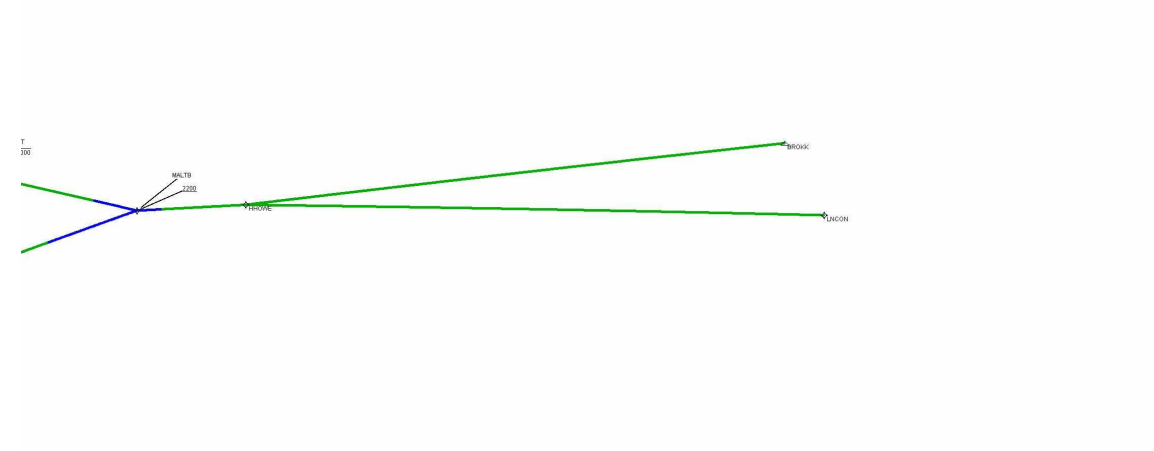
DME Error



Graphic Depiction 1



Graphic Depiction 2



DME DME Assessment Results for HHOWE4 path KDTW:RW04R:DER_WNNGZ

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Jose G-CTR Medina
Project File:	C:\Users\Jose G-CTR Medina\OneDrive - Federal Aviation Administration\Documents\01. Projects\DME EVALUATIONS\KDTW 20230125\DME Screens\Submitted\New DMEs\Possible solutions\KDTW HHOWE DME\KDTW HHOWE4 DME(2) 20240105.tgs
Output File:	C:\Users\Jose G-CTR Medina\OneDrive - Federal Aviation Administration\Documents\01. Projects\DME EVALUATIONS\KDTW 20230125\DME Screens\Submitted\New DMEs\Possible solutions\KDTW HHOWE DME\KDTW [IFPA] HHOWE4 20240116_0721 CST\KDTW-RW04R-DER_WNNGZ\KDTW HHOWE4 SID RW04R WNNGZ 20240116_0721 CST.pdf
Procedure Name:	HHOWE4
Software: DmeDmePlugin:	7.2.1
Date/Time:	01/16/2024 07:21 CST
Databases:	DTED LEVEL 0 MAX

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
KDTW:RW04R:DER	WP	N42° 13' 52.3644", W083° 20' 59.9655"	635.8	VNAV	130	FLY_BY	TF
WNNGZ	WP	N42° 20' 03.7700", W083° 10' 37.5500"	2200	VNAV	200	FLY_BY	TF
Climb Gradient: 500.0 ft/NM up to 1146.0 ft MSL 200.0 ft/NM							

Flyability

Flight Type:	SID
Selected Airport:	KDTW [IFPA]
Climb Gradient:	500.0 ft/NM up to 1146.0 ft MSL 200.0 ft/NM
Speeds:	130 at the Runway DER
	145 at the end of the VA or VI leg
	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 HHOWE4 path KDTW:RW04R:DER_WNNGZ

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
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:	Not enabled
Disabled DMEs:	None

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	PSI	N42° 42' 03.0947", W083° 31' 57.9835"	-0.0 E	40	L	IFPA	NO	Enabled	38.3 %	40.1 %
2	DXO	N42° 12' 47.2904", W083° 21' 59.9878"	6.0 W	130	H	IFPA	NO	Enabled	78.6 %	82.5 %
3	CRL	N42° 02' 52.8956", W083° 27' 27.2625"	3.0 W	130	DH	IFPA	NO	Enabled	86 %	90.1 %
4	SVM	N42° 24' 31.1055", W083° 35' 38.0455"	3.0 W	40	L	IFPA	NO	Enabled	86 %	90.1 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0						
1.0	SVM	CRL				
1.7	SVM	DXO	CRL			
6.0	SVM	CRL	PSI	DXO		

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N42° 13' 54.2167", W083° 20' 58.6004"	N42° 14' 44.2257", W083° 20' 21.7343"	0.95

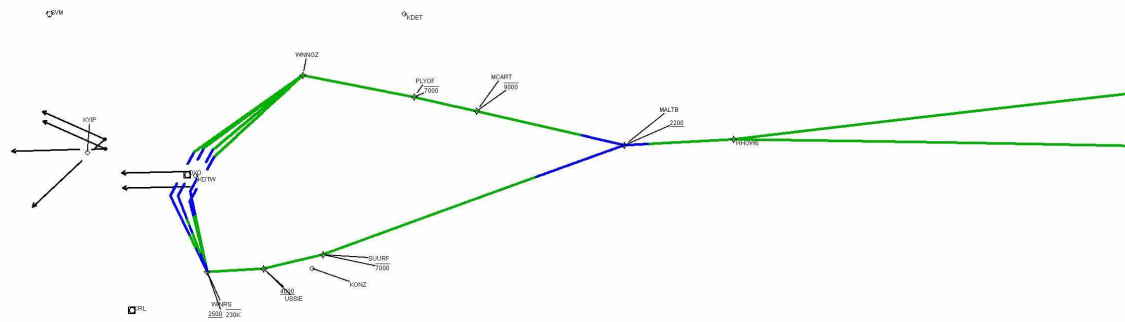
Available DMEs by Waypoints			
Waypoint Before	Waypoint After	DME List	Suggested DMEs
KDTW:RW04R:DER	WNNGZ	PSI, DXO, SVM, CRL	

DME DME Assessment Results for HHOWE4 path KDTW:RW04R:DER_WNNGZ

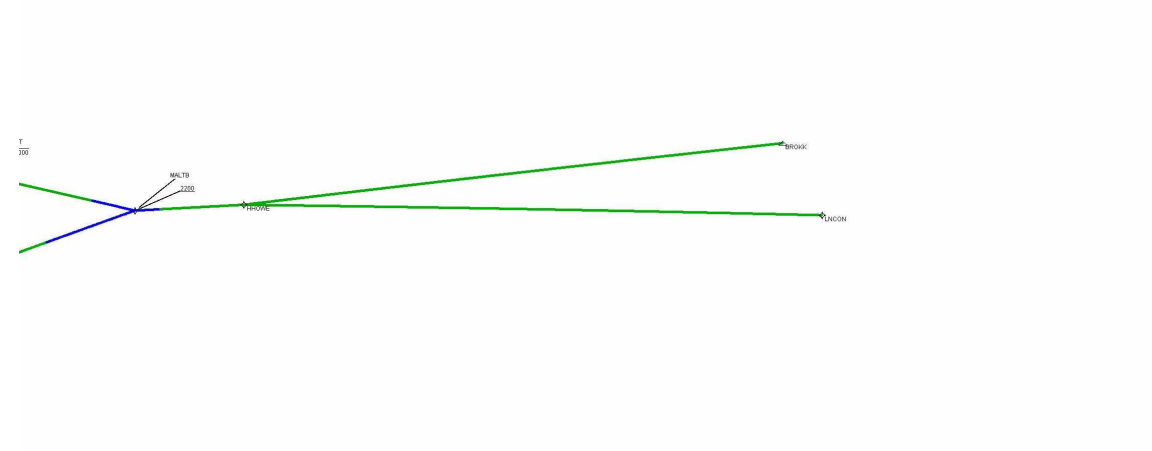
User Data Files								
#	File Name							
None								
User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	PSI FAA 694088-6 PSI [IFPA]	N42° 42' 03.0947", W083° 31' 57.9835"	-0.0 E	40	1149.3	null	PSI FAA 694088-6	
ESV:		Bearing [True]: 77.0° to 142.0° Bearing [Mag]: 77.0° to 142.0°				Arc Distance: Out to 65.0 NM Altitude: 3900.0 to 11000.0 ft		



Graphic Depiction 1



Graphic Depiction 2



DME DME Assessment Results for HHOWE4 path KDTW:RW21L:DER_MALTB

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Jose G-CTR Medina
Project File:	C:\Users\Jose G-CTR Medina\OneDrive - Federal Aviation Administration\Documents\01. Projects\DME EVALUATIONS\KDTW 20230125\DME Screens\Submitted\New DMEs\Possible solutions\KDTW HHOWE DME\KDTW HHOWE4 DME(2) 20240105.tgs
Output File:	C:\Users\Jose G-CTR Medina\OneDrive - Federal Aviation Administration\Documents\01. Projects\DME EVALUATIONS\KDTW 20230125\DME Screens\Submitted\New DMEs\Possible solutions\KDTW HHOWE DME\KDTW [IFPA] HHOWE4 20240116_0721 CST\KDTW-RW21L-DER_MALTB\KDTW HHOWE4 SID RW21L MALTB 20240116_0721 CST.pdf
Procedure Name:	HHOWE4
Software: DmeDmePlugin:	7.2.1
Date/Time:	01/16/2024 07:21 CST
Databases:	DTED LEVEL 0 MAX

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
KDTW:RW21L:DER	WP	N42° 11' 44.2115", W083° 21' 06.4868"	632.8	VNAV	130	FLY_BY	TF
WINRS	WP	N42° 05' 42.0200", W083° 20' 02.3900"	2500	VNAV	230	FLY_BY	TF
USSIE	WP	N42° 05' 56.3400", W083° 14' 27.7400"	4000	VNAV	230	FLY_BY	TF
SUURF	WP	N42° 06' 57.5100", W083° 08' 37.7600"	2200	VNAV	230	FLY_BY	TF
MALTB	WP	N42° 14' 57.4800", W082° 38' 51.4800"	2200	VNAV	200	FLY_BY	TF

Climb Gradient:
500.0 ft/NM up to 1146.0 ft MSL
200.0 ft/NM

Flyability

Flight Type:	SID
Selected Airport:	KDTW [IFPA]
Climb Gradient:	500.0 ft/NM up to 1146.0 ft MSL 200.0 ft/NM
Speeds:	130 at the Runway DER
	145 at the end of the VA or VI leg
	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 HHOWE4 path KDTW:RW21L:DER_MALTB

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
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:	Not enabled
Disabled DMEs:	None

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	PSI	N42° 42' 03.0947", W083° 31' 57.9835"	-0.0 E	40	L	IFPA	NO	Enabled	1.2 %	1.1 %
2	DXO	N42° 12' 47.2904", W083° 21' 59.9878"	6.0 W	130	H	IFPA	NO	Enabled	35.8 %	37 %
3	CRL	N42° 02' 52.8956", W083° 27' 27.2625"	3.0 W	130	DH	IFPA	NO	Enabled	72.7 %	74.1 %
4	JXN	N42° 15' 33.2631", W084° 27' 30.7776"	0.0 E	130	DH	IFPA	NO	Enabled	1.1 %	1.1 %
5	SVM	N42° 24' 31.1055", W083° 35' 38.0455"	3.0 W	40	L	IFPA	NO	Enabled	71.4 %	72.9 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0						
2.1	DXO	CRL				
2.6	SVM	CRL				
5.1	SVM	CRL	PSI			
5.5						
6.4	SVM	CRL	DXO			
10.1	DXO	CRL	SVM	JXN		
10.6	DXO	CRL	SVM			
20.2	SVM	CRL				
31.5						

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N42° 11' 42.3483", W083° 21' 07.8589"	N42° 09' 45.9768", W083° 21' 24.6038"	2.0934
2	N42° 06' 26.9609", W083° 20' 17.5215"	N42° 05' 42.0200", W083° 20' 02.3900"	0.7721
3	N42° 12' 36.5059", W082° 47' 39.9152"	N42° 14' 57.4800", W082° 38' 51.4800"	6.9518

DME DME Assessment Results for HHOWE4 path KDTW:RW21L:DER_MALTB

Available DMEs by Waypoints

Waypoint Before	Waypoint After	DME List	Suggested DMEs
KDTW:RW21L:DER	WINRS	PSI, DXO, SVM, CRL	
WINRS	USSIE	JXN, DXO, SVM, CRL	
USSIE	SUURF	JXN, DXO, SVM, CRL	
SUURF	MALTB	DXO, SVM, CRL	

User Data Files

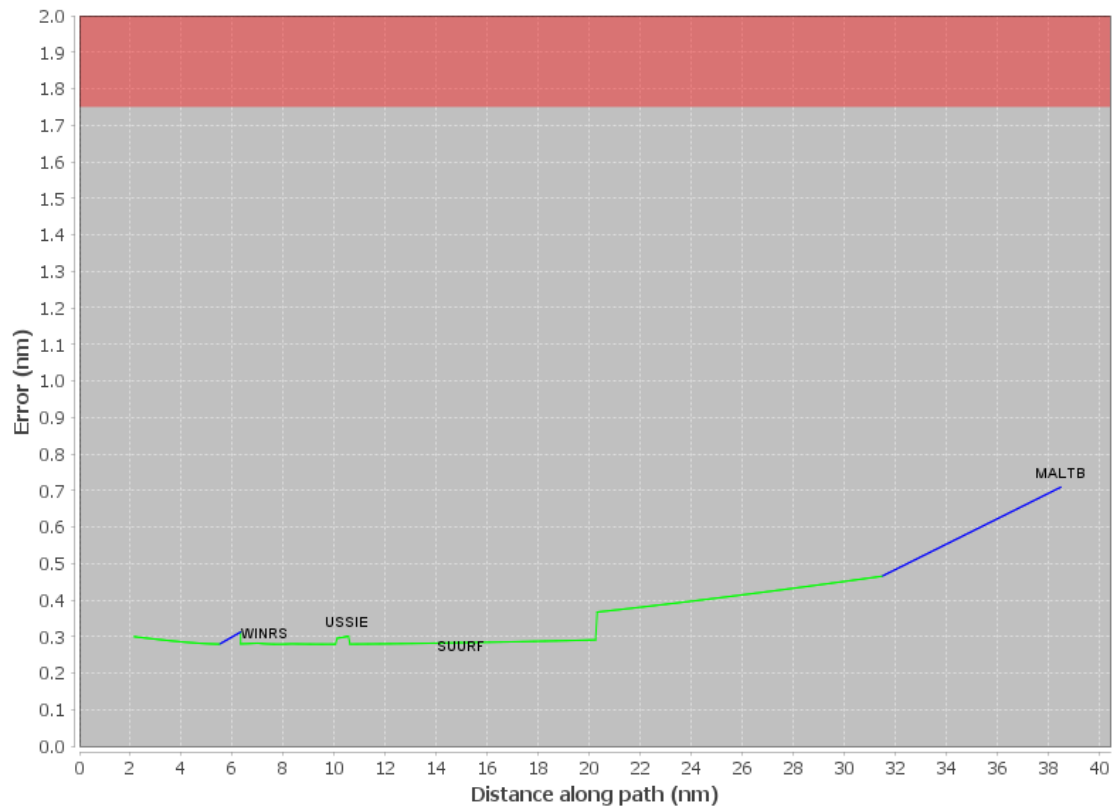
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User DMEs

#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	PSI FAA 694088-6 PSI [IFPA]	N42° 42' 03.0947", W083° 31' 57.9835"	-0.0 E	40	1149.3	null	PSI FAA 694088-6	
	ESV:	Bearing [True]: 77.0° to 142.0° Bearing [Mag]: 77.0° to 142.0°				Arc Distance: Out to 65.0 NM Altitude: 3900.0 to 11000.0 ft		

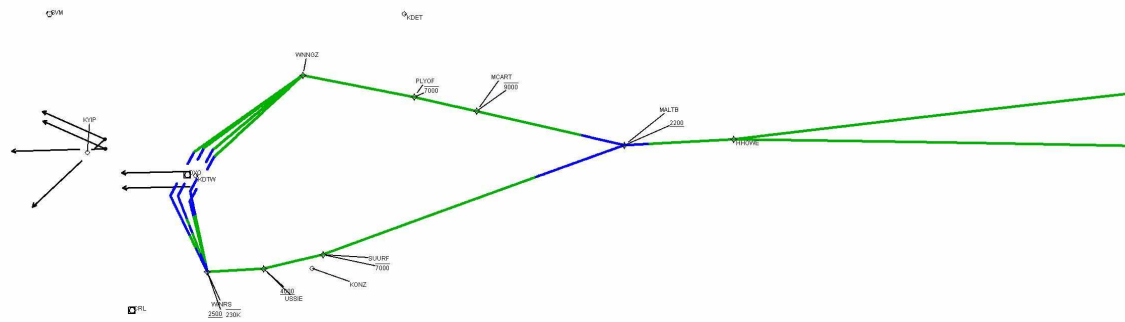
DME DME Assessment Results for HHOWE4 path KDTW:RW21L:DER_MALTB

DME Error



DME DME Assessment Results for HHOWE4 path KDTW:RW21L:DER_MALTB

Graphic Depiction 1



Graphic Depiction 2



DME DME Assessment Results for HHOWE4 path KDTW:RW21R:DER_WINRS

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Jose G-CTR Medina
Project File:	C:\Users\Jose G-CTR Medina\OneDrive - Federal Aviation Administration\Documents\01. Projects\DME EVALUATIONS\KDTW 20230125\DME Screens\Submitted\New DMEs\Possible solutions\KDTW HHOWE DME\KDTW HHOWE4 DME(2) 20240105.tgs
Output File:	C:\Users\Jose G-CTR Medina\OneDrive - Federal Aviation Administration\Documents\01. Projects\DME EVALUATIONS\KDTW 20230125\DME Screens\Submitted\New DMEs\Possible solutions\KDTW HHOWE DME\KDTW [IFPA] HHOWE4 20240116_0721 CST\KDTW-RW21R-DER_WINRS\KDTW HHOWE4 SID RW21R WINRS 20240116_0721 CST.pdf
Procedure Name:	HHOWE4
Software: DmeDmePlugin:	7.2.1
Date/Time:	01/16/2024 07:21 CST
Databases:	DTED LEVEL 0 MAX

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
KDTW:RW21R:DER	WP	N42° 12' 28.2081", W083° 21' 04.3881"	636.5	VNAV	130	FLY_BY	TF
WINRS	WP	N42° 05' 42.0200", W083° 20' 02.3900"	2500	VNAV	230	FLY_BY	TF
Climb Gradient: 500.0 ft/NM up to 1146.0 ft MSL 200.0 ft/NM							

Flyability

Flight Type:	SID
Selected Airport:	KDTW [IFPA]
Climb Gradient:	500.0 ft/NM up to 1146.0 ft MSL 200.0 ft/NM
Speeds:	130 at the Runway DER
	145 at the end of the VA or VI leg
	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 HHOWE4 path KDTW:RW21R:DER_WINRS

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
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:	Not enabled
Disabled DMEs:	None

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	PSI	N42° 42' 03.0947", W083° 31' 57.9835"	-0.0 E	40	L	IFPA	NO	Enabled	7.1 %	7.8 %
2	DXO	N42° 12' 47.2904", W083° 21' 59.9878"	6.0 W	130	H	IFPA	NO	Enabled	4.5 %	4.7 %
3	CRL	N42° 02' 52.8956", W083° 27' 27.2625"	3.0 W	130	DH	IFPA	NO	Enabled	47.9 %	51 %
4	SVM	N42° 24' 31.1055", W083° 35' 38.0455"	3.0 W	40	L	IFPA	NO	Enabled	47.9 %	51 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0						
2.8	SVM	CRL				
2.8	SVM	CRL	DXO			
3.2	SVM	CRL				
5.8	SVM	CRL	PSI			
6.4						

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N42° 12' 26.3584", W083° 21' 05.7508"	N42° 09' 51.0668", W083° 21' 14.0651"	2.747
2	N42° 06' 17.5991", W083° 20' 12.6198"	N42° 05' 42.0200", W083° 20' 02.3900"	0.6062

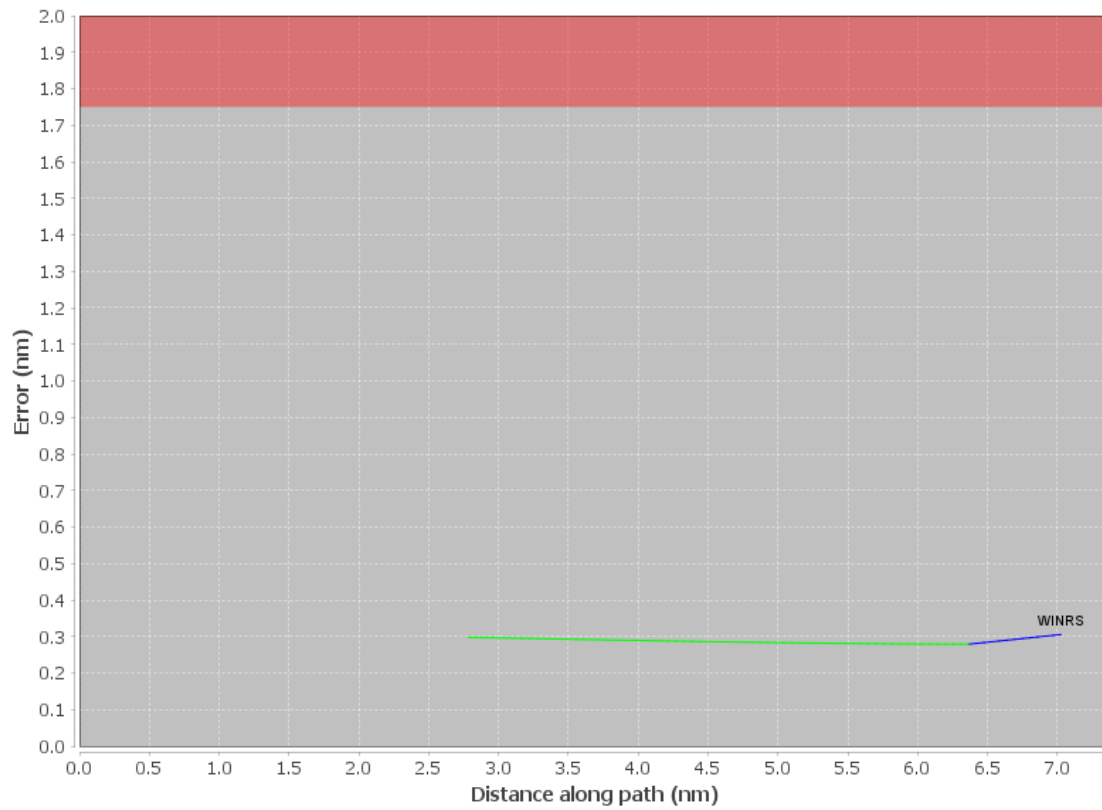
Available DMEs by Waypoints			
Waypoint Before	Waypoint After	DME List	Suggested DMEs
KDTW:RW21R:DER	WINRS	PSI, DXO, SVM, CRL	

DME DME Assessment Results for HHOWE4 path KDTW:RW21R:DER_WINRS

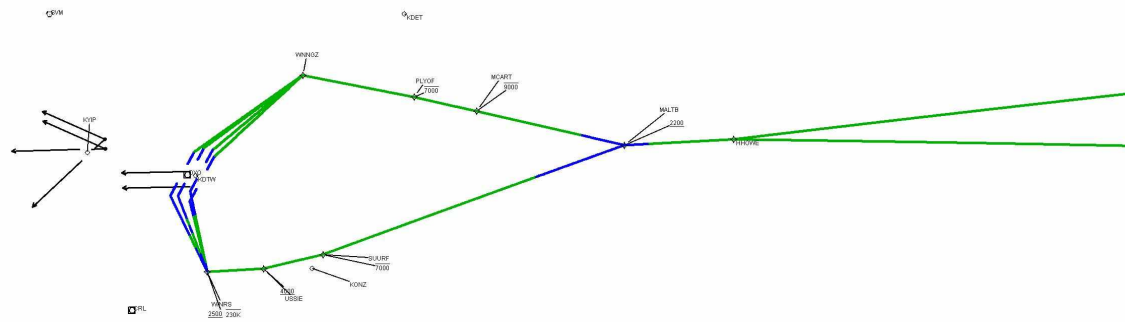
User Data Files								
#	File Name							
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User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	PSI FAA 694088-6 PSI [IFPA]	N42° 42' 03.0947", W083° 31' 57.9835"	-0.0 E	40	1149.3	null	PSI FAA 694088-6	
ESV:		Bearing [True]: 77.0° to 142.0° Bearing [Mag]: 77.0° to 142.0°				Arc Distance: Out to 65.0 NM Altitude: 3900.0 to 11000.0 ft		

DME DME Assessment Results for HHOWE4 path KDTW:RW21R:DER_WINRS

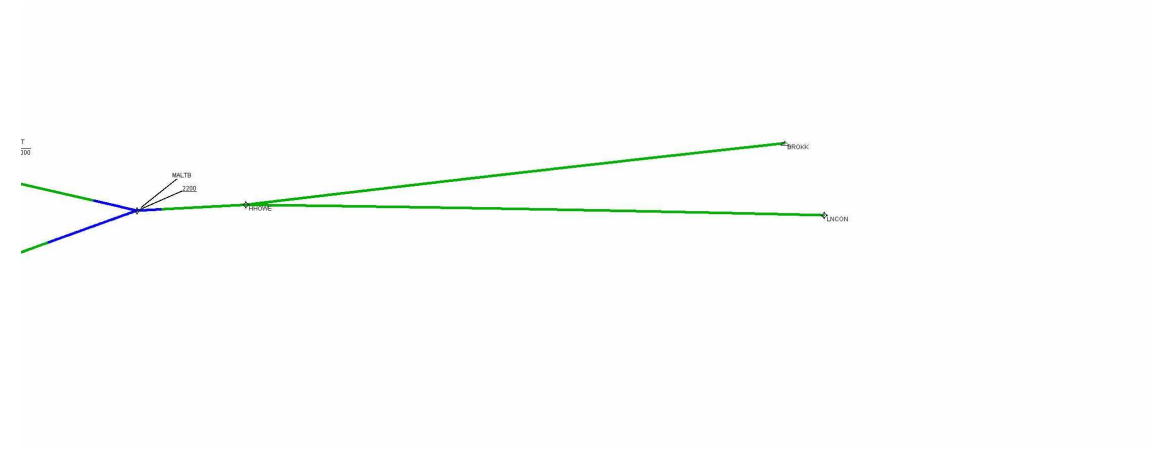
DME Error



Graphic Depiction 1



Graphic Depiction 2



DME DME Assessment Results for HHOWE4 path KDTW:RW22L:DER_WINRS

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Jose G-CTR Medina
Project File:	C:\Users\Jose G-CTR Medina\OneDrive - Federal Aviation Administration\Documents\01. Projects\DME EVALUATIONS\KDTW 20230125\DME Screens\Submitted\New DMEs\Possible solutions\KDTW HHOWE DME\KDTW HHOWE4 DME(2) 20240105.tgs
Output File:	C:\Users\Jose G-CTR Medina\OneDrive - Federal Aviation Administration\Documents\01. Projects\DME EVALUATIONS\KDTW 20230125\DME Screens\Submitted\New DMEs\Possible solutions\KDTW HHOWE DME\KDTW [IFPA] HHOWE4 20240116_0721 CST\KDTW-RW22L-DER_WINRS\KDTW HHOWE4 SID RW22L WINRS 20240116_0721 CST.pdf
Procedure Name:	HHOWE4
Software: DmeDmePlugin:	7.2.1
Date/Time:	01/16/2024 07:21 CST
Databases:	DTED LEVEL 0 MAX

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
KDTW:RW22L:DER	WP	N42° 12' 08.3656", W083° 22' 16.5697"	637	VNAV	130	FLY_BY	TF
WINRS	WP	N42° 05' 42.0200", W083° 20' 02.3900"	2500	VNAV	230	FLY_BY	TF
Climb Gradient: 500.0 ft/NM up to 1146.0 ft MSL 200.0 ft/NM							

Flyability

Flight Type:	SID
Selected Airport:	KDTW [IFPA]
Climb Gradient:	500.0 ft/NM up to 1146.0 ft MSL 200.0 ft/NM
Speeds:	130 at the Runway DER
	145 at the end of the VA or VI leg
	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 HHOWE4 path KDTW:RW22L:DER_WINRS

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
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:	Not enabled
Disabled DMEs:	None

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	PSI	N42° 42' 03.0947", W083° 31' 57.9835"	-0.0 E	40	L	IFPA	NO	Enabled	0.7 %	0.8 %
2	DXO	N42° 12' 47.2904", W083° 21' 59.9878"	6.0 W	130	H	IFPA	NO	Enabled	6 %	6.3 %
3	CRL	N42° 02' 52.8956", W083° 27' 27.2625"	3.0 W	130	DH	IFPA	NO	Enabled	27 %	28.5 %
4	SVM	N42° 24' 31.1055", W083° 35' 38.0455"	3.0 W	40	L	IFPA	NO	Enabled	21 %	22.1 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0						
2.8	DXO	CRL				
3.3						
3.9	SVM	CRL				
5.4	SVM	CRL	PSI			
5.5						

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N42° 12' 06.5174", W083° 22' 17.9303"	N42° 09' 33.1010", W083° 22' 02.9114"	2.7997
2	N42° 09' 05.3733", W083° 21' 48.4360"	N42° 08' 31.4831", W083° 21' 30.7486"	0.6057
3	N42° 07' 02.1324", W083° 20' 44.1432"	N42° 05' 42.0200", W083° 20' 02.3900"	1.4317

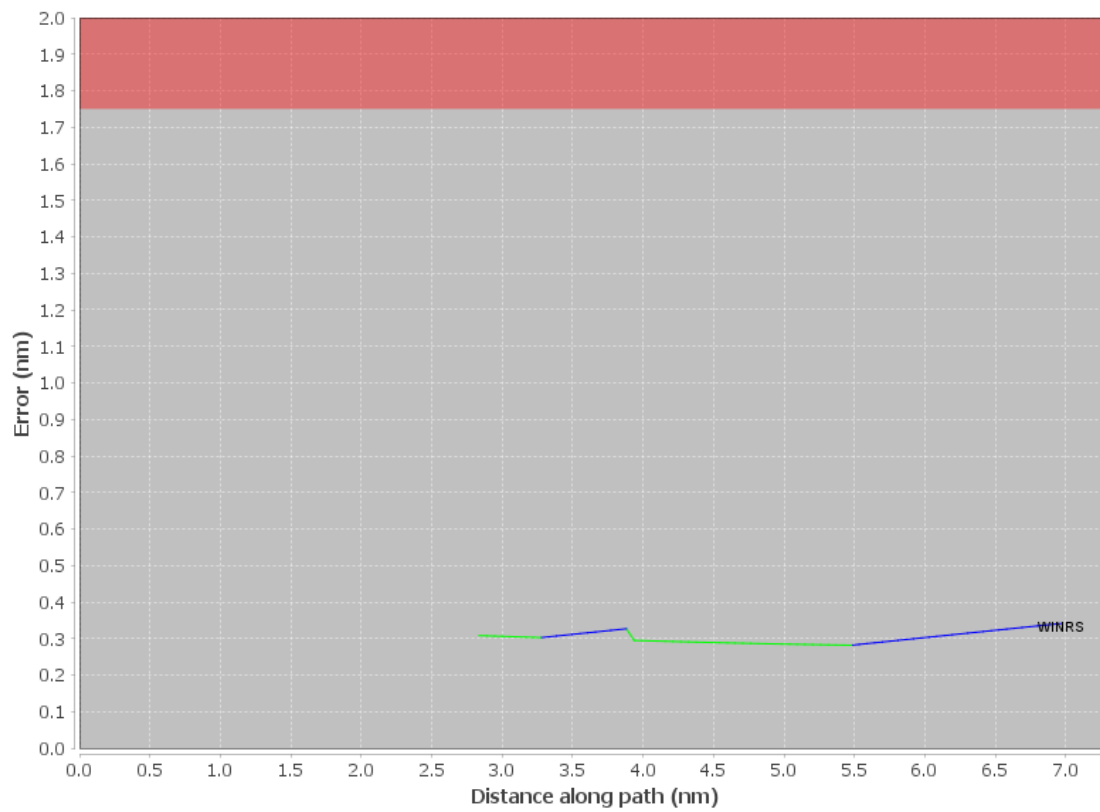
Available DMEs by Waypoints			
Waypoint Before	Waypoint After	DME List	Suggested DMEs
KDTW:RW22L:DER	WINRS	PSI, DXO, SVM, CRL	

DME DME Assessment Results for HHOWE4 path KDTW:RW22L:DER_WINRS

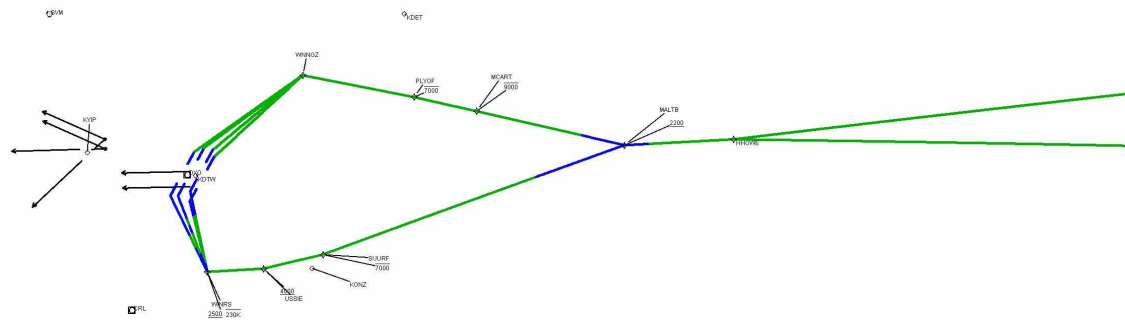
User Data Files								
#	File Name							
None								
User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	PSI FAA 694088-6 PSI [IFPA]	N42° 42' 03.0947", W083° 31' 57.9835"	-0.0 E	40	1149.3	null	PSI FAA 694088-6	
ESV:		Bearing [True]: 77.0° to 142.0° Bearing [Mag]: 77.0° to 142.0°				Arc Distance: Out to 65.0 NM Altitude: 3900.0 to 11000.0 ft		

DME DME Assessment Results for HHOWE4 path KDTW:RW22L:DER_WINRS

DME Error



Graphic Depiction 1



Graphic Depiction 2



DME DME Assessment Results for HHOWE4 path KDTW:RW22R:DER_WINRS

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Jose G-CTR Medina
Project File:	C:\Users\Jose G-CTR Medina\OneDrive - Federal Aviation Administration\Documents\01. Projects\DME EVALUATIONS\KDTW 20230125\DME Screens\Submitted\New DMEs\Possible solutions\KDTW HHOWE DME\KDTW HHOWE4 DME(2) 20240105.tgs
Output File:	C:\Users\Jose G-CTR Medina\OneDrive - Federal Aviation Administration\Documents\01. Projects\DME EVALUATIONS\KDTW 20230125\DME Screens\Submitted\New DMEs\Possible solutions\KDTW HHOWE DME\KDTW [IFPA] HHOWE4 20240116_0721 CST\KDTW-RW22R-DER_WINRS\KDTW HHOWE4 SID RW22R WINRS 20240116_0721 CST.pdf
Procedure Name:	HHOWE4
Software: DmeDmePlugin:	7.2.1
Date/Time:	01/16/2024 07:21 CST
Databases:	DTED LEVEL 0 MAX

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
KDTW:RW22R:DER	WP	N42° 12' 07.8216", W083° 23' 02.4003"	645.2	VNAV	130	FLY_BY	TF
WINRS	WP	N42° 05' 42.0200", W083° 20' 02.3900"	2500	VNAV	230	FLY_BY	TF
Climb Gradient: 500.0 ft/NM up to 1146.0 ft MSL 200.0 ft/NM							

Flyability

Flight Type:	SID
Selected Airport:	KDTW [IFPA]
Climb Gradient:	500.0 ft/NM up to 1146.0 ft MSL 200.0 ft/NM
Speeds:	130 at the Runway DER
	145 at the end of the VA or VI leg
	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 HHOWE4 path KDTW:RW22R:DER_WINRS

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
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:	Not enabled
Disabled DMEs:	None

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	CRL	N42° 02' 52.8956", W083° 27' 27.2625"	3.0 W	130	DH	IFPA	NO	Enabled	12.4 %	13.1 %
2	SVM	N42° 24' 31.1055", W083° 35' 38.0455"	3.0 W	40	L	IFPA	NO	Enabled	12.4 %	13.1 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0						
4.3	SVM	CRL				
5.2						

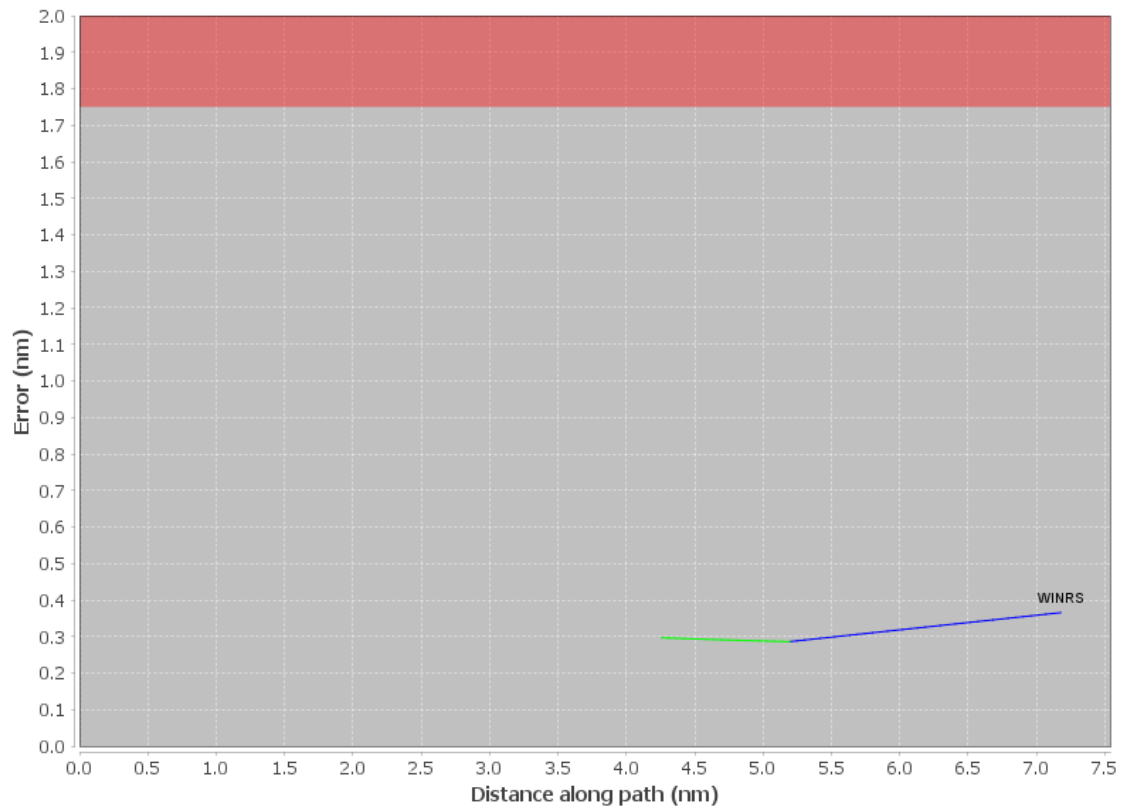
Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N42° 12' 05.9380", W083° 23' 03.7862"	N42° 08' 19.6424", W083° 21' 45.8520"	4.2192
2	N42° 07' 26.1133", W083° 21' 10.6980"	N42° 05' 42.0200", W083° 20' 02.3900"	1.9301

Available DMEs by Waypoints			
Waypoint Before	Waypoint After	DME List	Suggested DMEs
KDTW:RW22R:DER	WINRS	SVM, CRL	

User Data Files								
#	File Name							
None								
User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	PSI FAA 694088-6 PSI [IFPA]	N42° 42' 03.0947", W083° 31' 57.9835"	-0.0 E	40	1149.3	null	PSI FAA 694088-6	
ESV: Bearing [True]: 77.0° to 142.0° Bearing [Mag]: 77.0° to 142.0°						Arc Distance: Out to 65.0 NM Altitude: 3900.0 to 11000.0 ft		

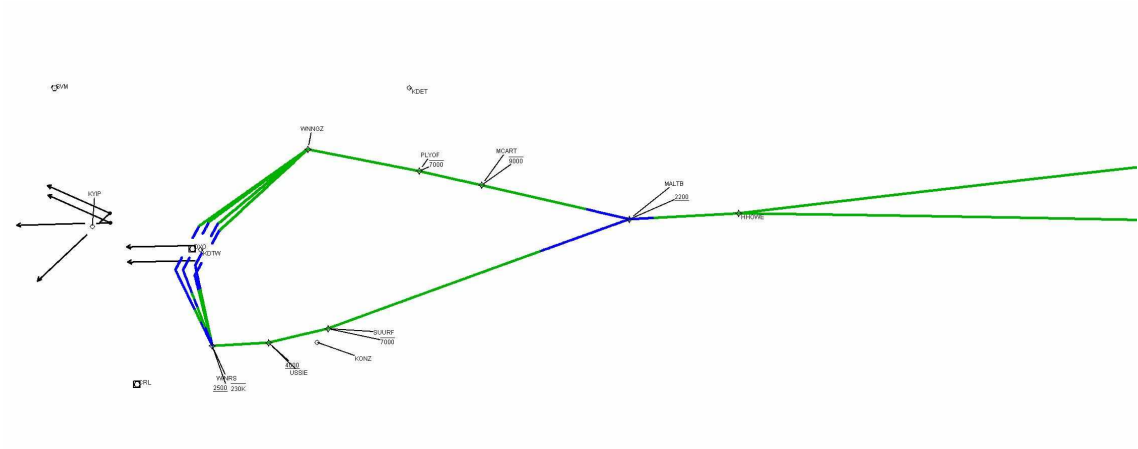
DME DME Assessment Results for HHOWE4 path KDTW:RW22R:DER_WINRS

DME Error



DME DME Assessment Results for HHOWE4 path KDTW:RW22R:DER_WINRS

Graphic Depiction 1



Graphic Depiction 2

