

DME DME Assessment Results for JOOLS1 path CHPTR_WHDRW

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Erik J-CTR John
Project File:	C:\Users\Erik J-CTR John\OneDrive - Federal Aviation Administration\Desktop\RNAV Projects\RNAV Projects 2022\KCLT STARS\JOOLS STAR\KCLT JOOLS (RNAV) STAR 20220706 DME.tgs
Output File:	C:\Users\Erik J-CTR John\OneDrive - Federal Aviation Administration\Desktop\KCLT [IFPA] JOOLS1 20220707_0955 EDT\CHPTR_WHDRW\KCLT JOOLS1 RNAV STAR CHPTR WHDRW 20220707_0955 EDT.pdf
Procedure Name:	JOOLS1
Software: DmeDmePlugin:	6.5.1
Date/Time:	07/07/2022 09:55 EDT
Databases:	DTED 0

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
CHPTR	WP	N34° 35' 34.780", W081° 26' 44.420"	4000	VNAV	200	FLY_BY	TF
WHDRW	WP	N34° 49' 43.820", W081° 15' 06.330"	4000	VNAV	200	FLY_OVER	TF

Flyability

Flight Type:	RNAV_STAR
Selected Airport:	KCLT [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 JOOLS1 path CHPTR_WHDRW

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:	Not Allowed
DoD Facilities:	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	SPA	N35° 02' 01.053", W081° 55' 37.236"	2.0 W	130	H	IFPA	NO	Enabled	100 %	100 %
2	CTF	N34° 39' 01.793", W080° 16' 29.699"	3.0 W	130	DH	IFPA	NO	Enabled	100 %	100 %
3	CAE	N33° 51' 26.100", W081° 03' 14.050"	2.0 W	130	H	IFPA	NO	Enabled	100 %	100 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	CAE	CTF	SPA			

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

Available DMEs by Waypoints			
Waypoint Before	Waypoint After	DME List	Suggested DMEs
CHPTR	WHDRW	CTF, SPA, CAE	

DME DME Assessment Results for JOOLS1 path CHPTR_WHDRW

User Data Files

#	File Name
	None

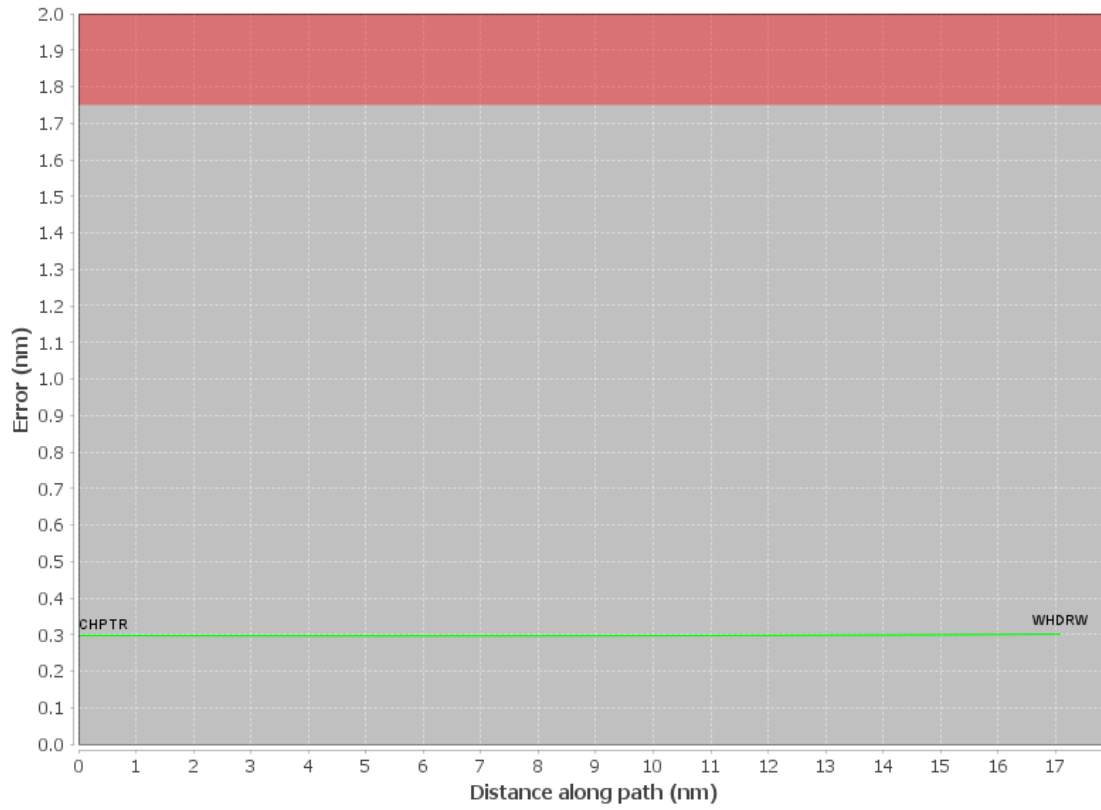
None

User DMEs

#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	RMG FAA 755481-6 RMG [IFPA]	N34° 09' 45.234", W085° 07' 09.866"	1.0 E	130	1147.8	115.4	RMG FAA 755481-6	
	ESV:	Bearing [True]: 30.0 to 150.0 Bearing [Mag]: 29.0 to 149.0				Arc Distance: Out to 80.0 NM Altitude: 4000.0 to 14000.0 ft		
2	MCN FAA 704164-2 MCN [IFPA]	N32° 41' 28.266", W083° 38' 49.860"	1.0 E	130	344.4	114.2	MCN FAA 704164-2	
	ESV:	Bearing [True]: 295.0 to 345.0 Bearing [Mag]: 294.0 to 344.0				Arc Distance: Out to 80.0 NM Altitude: 4000.0 to 14000.0 ft		
3	ODF FAA 090551-9 ODF [IFPA]	N34° 41' 45.142", W083° 17' 51.580"	0.0 E	130	1700	113.4	ODF FAA 090551-9	
	ESV:	Bearing [True]: 200.0 to 255.0 Bearing [Mag]: 200.0 to 255.0				Arc Distance: Out to 95.0 NM Altitude: 8000.0 to 14000.0 ft		
4	CAE FAA 704182-40 CAE [IFPA]	N33° 51' 26.100", W081° 03' 14.050"	2.0 W	130	404.1	114.7	CAE FAA 704182-40	
	ESV:	Bearing [True]: 217.0 to 50.0 Bearing [Mag]: 219.0 to 52.0				Arc Distance: Out to 65.0 NM Altitude: 4000.0 to 18000.0 ft		
5	ODF FAA 090551-6 ODF [IFPA]	N34° 41' 45.142", W083° 17' 51.580"	0.0 E	130	1700	113.4	ODF FAA 090551-6	
	ESV:	Bearing [True]: 134.0 to 210.0 Bearing [Mag]: 134.0 to 210.0				Arc Distance: Out to 110.0 NM Altitude: 8000.0 to 18000.0 ft		

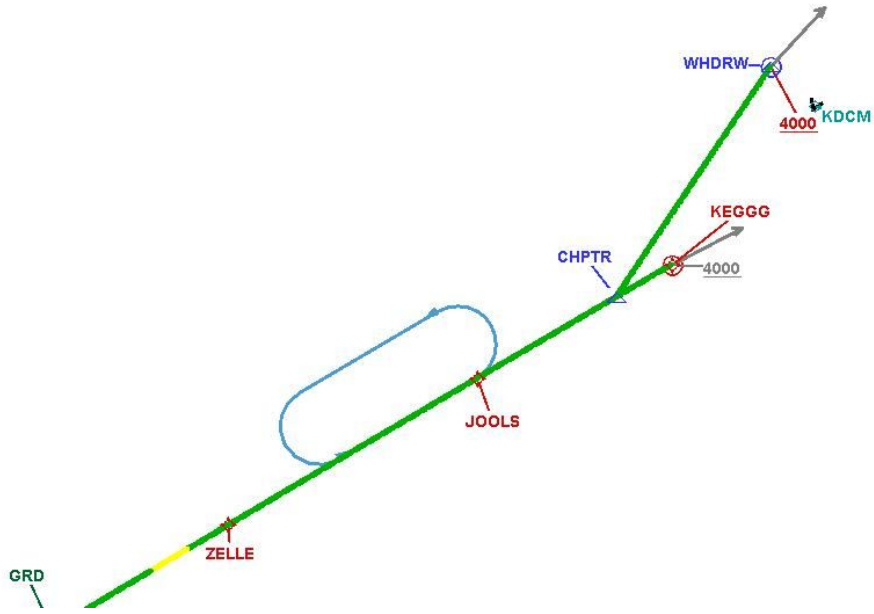
DME DME Assessment Results for JOOLS1 path CHPTR_WHDRW

DME Error



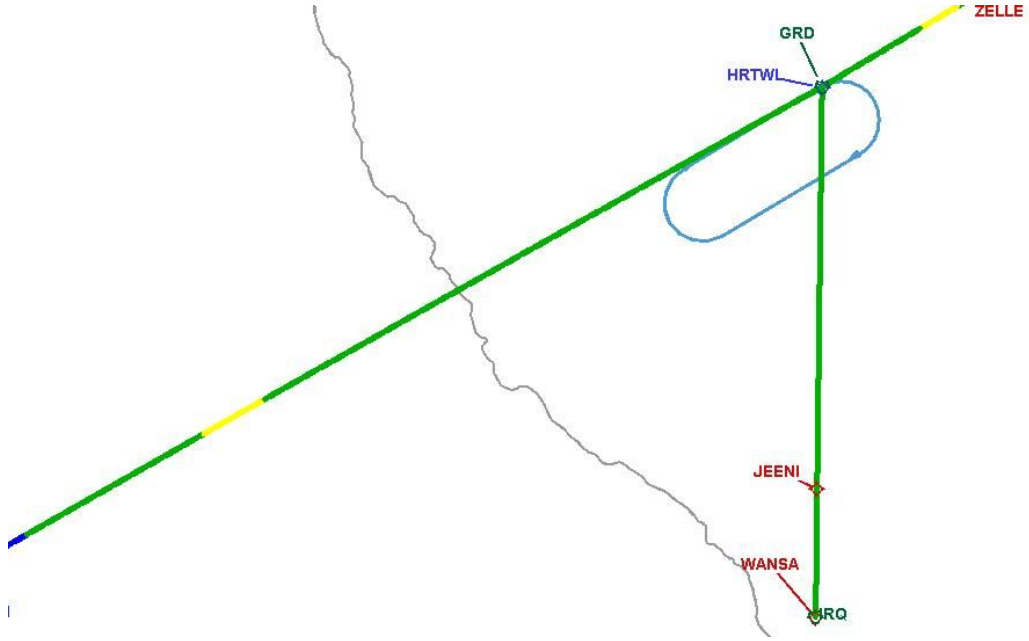
DME DME Assessment Results for JOOLS1 path CHPTR_WHDRW

Graphic Depiction 1



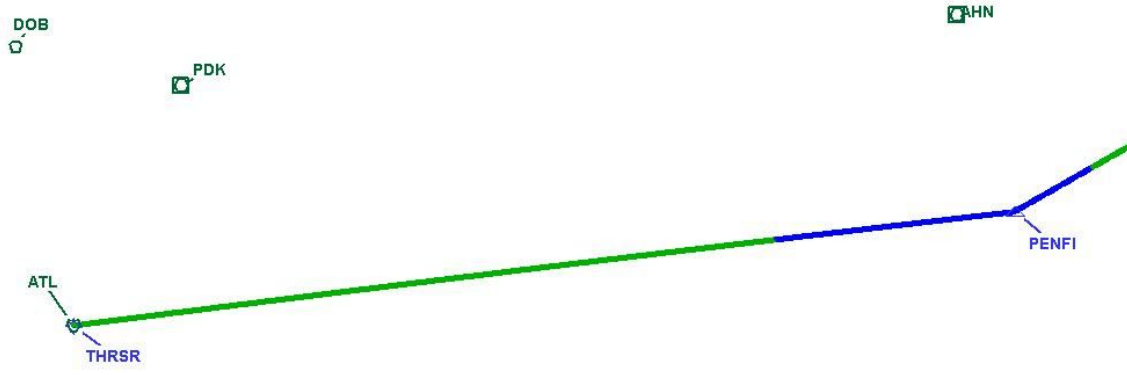
DME DME Assessment Results for JOOLS1 path CHPTR_WHDRW

Graphic Depiction 2



DME DME Assessment Results for JOOLS1 path CHPTR_WHDRW

Graphic Depiction 3



DME DME Assessment Results for JOOLS1 path HRTWL_WANSA

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Erik J-CTR John
Project File:	C:\Users\Erik J-CTR John\OneDrive - Federal Aviation Administration\Desktop\RNAV Projects\RNAV Projects 2022\KCLT STARS\JOOLS STAR\KCLT JOOLS (RNAV) STAR 20220706 DME.tgs
Output File:	C:\Users\Erik J-CTR John\OneDrive - Federal Aviation Administration\Desktop\KCLT [IFPA] JOOLS1 20220707_0955 EDT\HRTWL_WANSA\KCLT JOOLS1 RNAV STAR HRTWL WANSA 20220707_0955 EDT.pdf
Procedure Name:	JOOLS1
Software: DmeDmePlugin:	6.5.1
Date/Time:	07/07/2022 09:55 EDT
Databases:	DTED 0

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
HRTWL	WP	N34° 15' 05.330", W082° 09' 15.550"	11000	VNAV	200	FLY_BY	TF
JEENI	WP	N33° 50' 21.720", W082° 09' 38.110"	11000	VNAV	200	FLY_BY	TF
WANSA	WP	N33° 42' 26.100", W082° 09' 43.990"	11000	VNAV	200	FLY_BY	TF

Flyability

Flight Type:	RNAV_STAR
Selected Airport:	KCLT [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 JOOLS1 path HRTWL_WANSA

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:	Not Allowed
DoD Facilities:	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	GRD	N34° 15' 05.638", W082° 09' 14.936"	1.0 W	130	H	IFPA	NO	Enabled	86.9 %	86.9 %
2	CTF	N34° 39' 01.793", W080° 16' 29.699"	3.0 W	130	DH	IFPA	NO	Enabled	100 %	100 %
3	ELW	N34° 25' 09.070", W082° 47' 04.861"	0.0 E	40	L	IFPA	NO	Enabled	27.4 %	27.4 %
4	ODF	N34° 41' 45.142", W083° 17' 51.580"	0.0 E	130	H	IFPA	NO	Enabled	0.3 %	0.3 %
5	CAE	N33° 51' 26.100", W081° 03' 14.050"	2.0 W	130	H	IFPA	NO	Enabled	72.4 %	72.4 %
6	IRQ	N33° 42' 26.472", W082° 09' 43.432"	4.0 W	130	H	IFPA	NO	Enabled	90.7 %	90.7 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
-20.5	ELW	IRQ	CTF			
-15.8	ELW	GRD	IRQ	CTF		
0.0	CAE	IRQ	GRD	CTF		
4.9	CAE	IRQ	GRD	CTF		
7.7	CAE	GRD	CTF			
7.9	CAE	GRD	ODF	CTF		

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

Available DMEs by Waypoints			
Waypoint Before	Waypoint After	DME List	Suggested DMEs
HRTWL	JEENI	ELW, CTF, CAE, GRD, IRQ	
JEENI	WANSA	ODF, CTF, CAE, GRD, IRQ	

DME DME Assessment Results for JOOLS1 path HRTWL_WANSA

User Data Files

#	File Name
None	

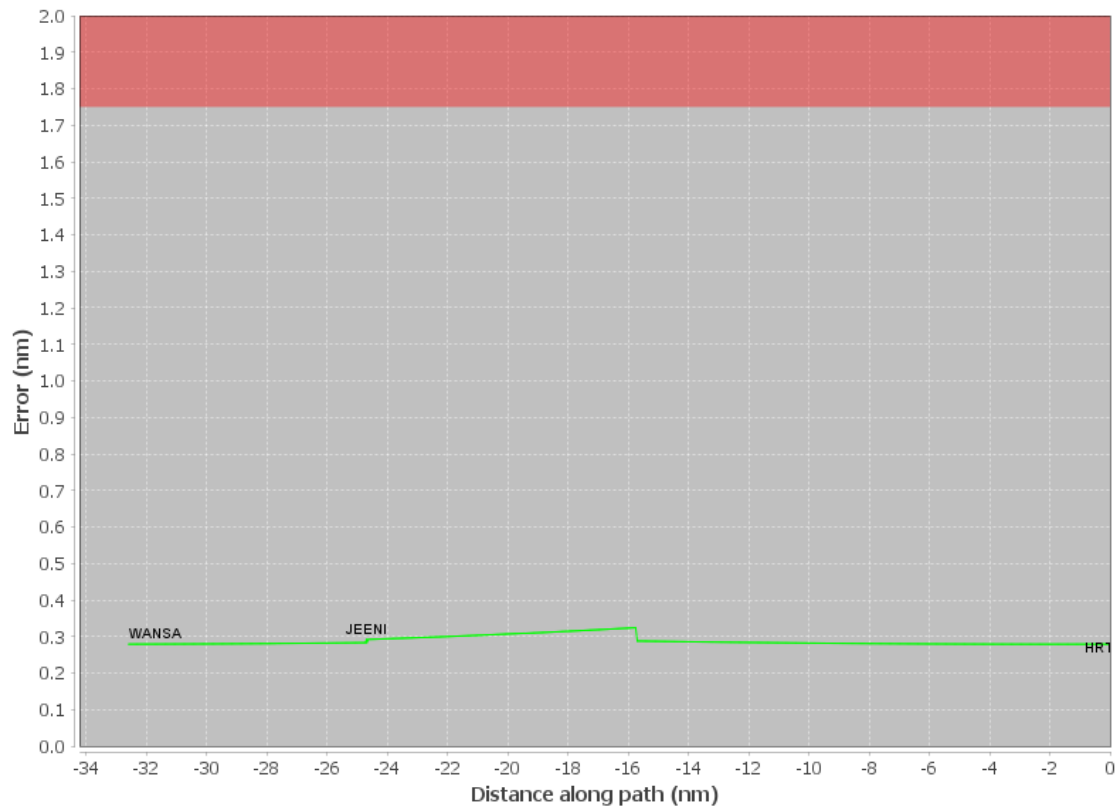
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User DMEs

#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	RMG FAA 755481-6 RMG [IFPA]	N34° 09' 45.234", W085° 07' 09.866"	1.0 E	130	1147.8	115.4	RMG FAA 755481-6	
	ESV:	Bearing [True]: 30.0 to 150.0 Bearing [Mag]: 29.0 to 149.0				Arc Distance: Out to 80.0 NM Altitude: 4000.0 to 14000.0 ft		
2	MCN FAA 704164-2 MCN [IFPA]	N32° 41' 28.266", W083° 38' 49.860"	1.0 E	130	344.4	114.2	MCN FAA 704164-2	
	ESV:	Bearing [True]: 295.0 to 345.0 Bearing [Mag]: 294.0 to 344.0				Arc Distance: Out to 80.0 NM Altitude: 4000.0 to 14000.0 ft		
3	ODF FAA 090551-9 ODF [IFPA]	N34° 41' 45.142", W083° 17' 51.580"	0.0 E	130	1700	113.4	ODF FAA 090551-9	
	ESV:	Bearing [True]: 200.0 to 255.0 Bearing [Mag]: 200.0 to 255.0				Arc Distance: Out to 95.0 NM Altitude: 8000.0 to 14000.0 ft		
4	CAE FAA 704182-40 CAE [IFPA]	N33° 51' 26.100", W081° 03' 14.050"	2.0 W	130	404.1	114.7	CAE FAA 704182-40	
	ESV:	Bearing [True]: 217.0 to 50.0 Bearing [Mag]: 219.0 to 52.0				Arc Distance: Out to 65.0 NM Altitude: 4000.0 to 18000.0 ft		
5	ODF FAA 090551-6 ODF [IFPA]	N34° 41' 45.142", W083° 17' 51.580"	0.0 E	130	1700	113.4	ODF FAA 090551-6	
	ESV:	Bearing [True]: 134.0 to 210.0 Bearing [Mag]: 134.0 to 210.0				Arc Distance: Out to 110.0 NM Altitude: 8000.0 to 18000.0 ft		

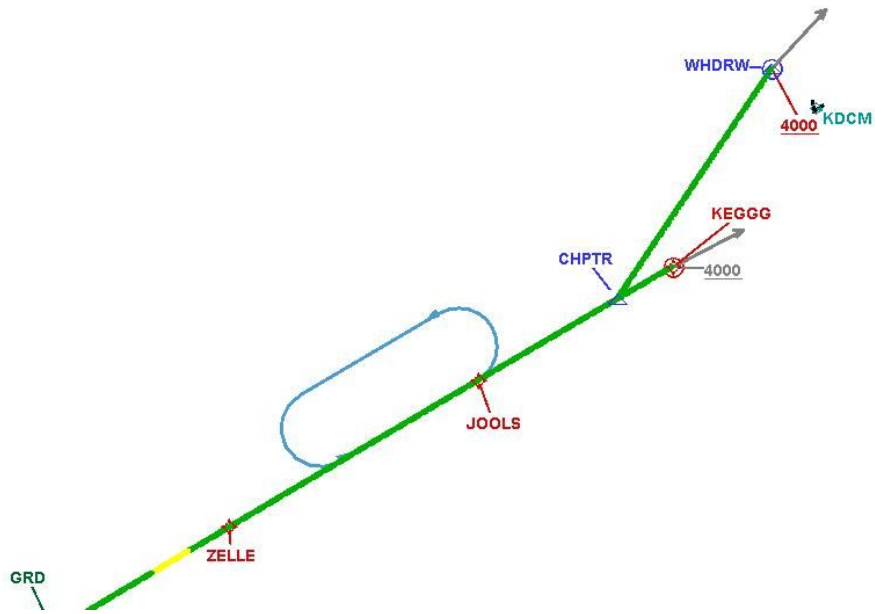
DME DME Assessment Results for JOOLS1 path HRTWL_WANSA

DME Error



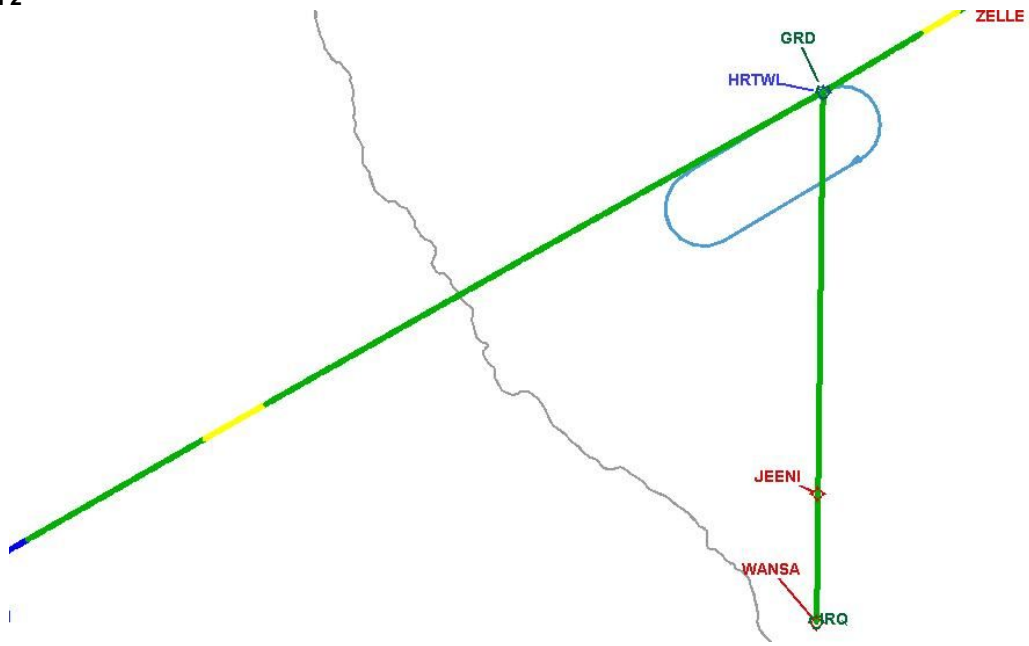
DME DME Assessment Results for JOOLS1 path HRTWL_WANSA

Graphic Depiction 1



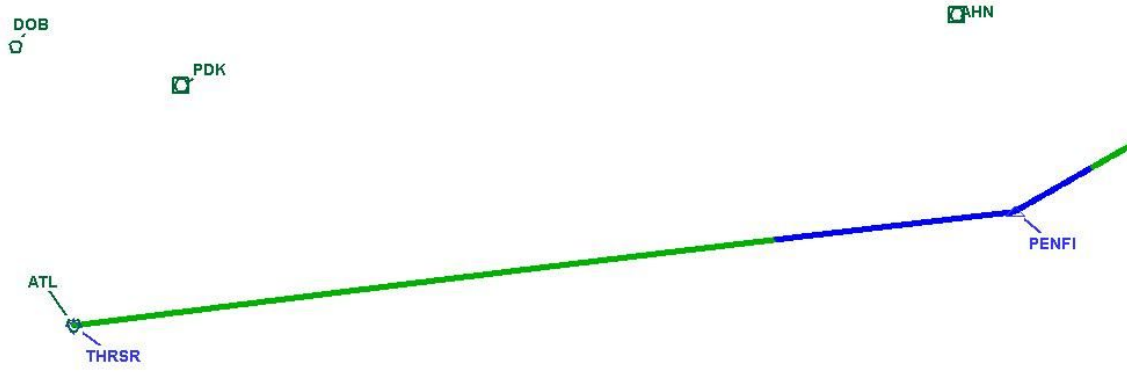
DME DME Assessment Results for JOOLS1 path HRTWL_WANSA

Graphic Depiction 2



DME DME Assessment Results for JOOLS1 path HRTWL_WANSA

Graphic Depiction 3



DME DME Assessment Results for JOOLS1 path JOOLS_THRSR

Results Summary	
Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Erik J-CTR John
Project File:	C:\Users\Erik J-CTR John\OneDrive - Federal Aviation Administration\Desktop\RNAV Projects\RNAV Projects 2022\KCLT STARS\JOOLS STAR\KCLT JOOLS (RNAV) STAR 20220706 DME.tgs
Output File:	C:\Users\Erik J-CTR John\OneDrive - Federal Aviation Administration\Desktop\KCLT [IFPA] JOOLS1 20220707_0955 EDT\JOOLS_THRSR\KCLT JOOLS1 RNAV STAR JOOLS THRSR 20220707_0955 EDT.pdf
Procedure Name:	JOOLS1
Software: DmeDmePlugin:	6.5.1
Date/Time:	07/07/2022 09:55 EDT
Databases:	DTED 0

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
JOOLS	WP	N34° 30' 34.010", W081° 37' 13.320"	11000	VNAV	200	FLY_BY	TF
ZELLE	WP	N34° 21' 32.780", W081° 55' 57.140"	11000	VNAV	200	FLY_BY	TF
HRTWL	WP	N34° 15' 05.330", W082° 09' 15.550"	11000	VNAV	200	FLY_BY	TF
PENFI	WP	N33° 44' 45.980", W083° 15' 06.140"	11000	VNAV	200	FLY_BY	TF
THRSR	WP	N33° 37' 45.260", W084° 26' 06.360"	11000	VNAV	200	FLY_BY	TF

Flyability	
Flight Type:	RNAV_STAR
Selected Airport:	KCLT [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 JOOLS1 path JOOLS_THRSR

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:	Not Allowed
DoD Facilities:	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	PDK	N33° 52' 32.274", W084° 17' 55.730"	5.0 W	40	L	IFPA	NO	Enabled	29.1 %	29 %
2	ATL	N33° 37' 44.676", W084° 26' 06.234"	5.0 W	130	H	IFPA	NO	Enabled	22.9 %	22.8 %
3	GRD	N34° 15' 05.638", W082° 09' 14.936"	1.0 W	130	H	IFPA	NO	Enabled	38 %	38 %
4	SPA	N35° 02' 01.053", W081° 55' 37.236"	2.0 W	130	H	IFPA	NO	Enabled	4.5 %	4.5 %
5	CTF	N34° 39' 01.793", W080° 16' 29.699"	3.0 W	130	DH	IFPA	NO	Enabled	32.6 %	32.6 %
6	AHN	N33° 56' 51.337", W083° 19' 29.132"	0.0 E	40	L	IFPA	NO	Enabled	37.5 %	37.5 %
7	ELW	N34° 25' 09.070", W082° 47' 04.861"	0.0 E	40	L	IFPA	NO	Enabled	39.2 %	39.3 %
8	ODF	N34° 41' 45.142", W083° 17' 51.580"	0.0 E	130	H	IFPA	NO	Enabled	40.6 %	40.6 %
9	CAE	N33° 51' 26.100", W081° 03' 14.050"	2.0 W	130	H	IFPA	NO	Enabled	20.5 %	20.5 %
10	MCN	N32° 41' 28.266", W083° 38' 49.860"	1.0 E	130	H	IFPA	NO	Enabled	15.2 %	15.2 %
11	RMG	N34° 09' 45.234", W085° 07' 09.866"	1.0 E	130	H	IFPA	NO	Enabled	25.9 %	25.9 %
12	IRQ	N33° 42' 26.472", W082° 09' 43.432"	4.0 W	130	H	IFPA	NO	Enabled	35.1 %	35.1 %

DME DME Assessment Results for JOOLS1 path JOOLS_THRSR

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
-11.0	CAE	GRD	CTF	SPA		
0.0	CAE	GRD	CTF			
2.9	CAE	GRD	CTF			
5.6	ELW	IRQ	CTF	GRD		
6.5	CAE	IRQ	CTF			
12.8	ELW	IRQ	CAE	CTF		
16.2	CAE	IRQ	ELW	CTF		
18.2	ELW	IRQ	CTF			
31.9	GRD	IRQ	ELW	CTF		
35.4	ELW	GRD	IRQ			
35.9	ELW	GRD	IRQ	ODF		
52.3	AHN	ELW	IRQ	GRD		
52.6	ODF	GRD	AHN	ELW		
52.8	AHN	ELW	IRQ	GRD		
56.9	ELW	IRQ	AHN	ODF		
63.9	AHN	ELW	ODF			
69.8	ODF	AHN				
75.3						
90.5						
95.0	ODF	PDK	AHN			
95.4	ODF	PDK	ATL	AHN		
111.7	ODF	RMG	PDK	AHN	ATL	
130.0	ATL	PDK	ODF	RMG	MCN	
135.0	RMG	PDK	ODF	MCN		

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N33° 44' 45.980", W083° 15' 06.140"	N33° 47' 28.982", W083° 09' 17.179"	5.5553
2	N33° 43' 02.908", W083° 33' 10.130"	N33° 44' 45.980", W083° 15' 06.140"	15.1647

Available DMEs by Waypoints			
Waypoint Before	Waypoint After	DME List	Suggested DMEs
JOOLS	ZELLE	CTF, SPA, CAE, GRD	
ZELLE	HRTWL	ELW, CTF, CAE, GRD, IRQ	
HRTWL	PENFI	ODF, ELW, CTF, CAE, AHN, GRD, IRQ	
PENFI	THRSR	ODF, PDK, AHN, MCN, ATL, RMG	

DME DME Assessment Results for JOOLS1 path JOOLS_THRSR

User Data Files

#	File Name
None	

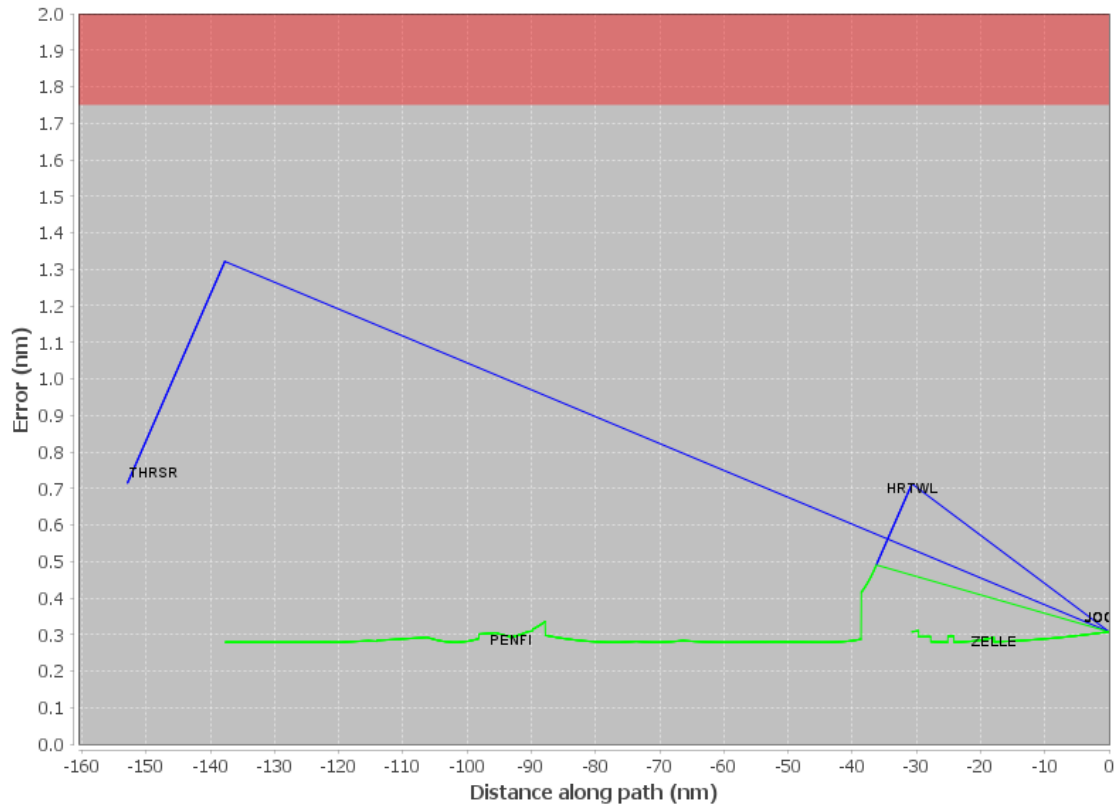
None

User DMEs

#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	RMG FAA 755481-6 RMG [IFPA]	N34° 09' 45.234", W085° 07' 09.866"	1.0 E	130	1147.8	115.4	RMG FAA 755481-6	
ESV:		Bearing [True]: 30.0 to 150.0 Bearing [Mag]: 29.0 to 149.0				Arc Distance: Out to 80.0 NM Altitude: 4000.0 to 14000.0 ft		
2	MCN FAA 704164-2 MCN [IFPA]	N32° 41' 28.266", W083° 38' 49.860"	1.0 E	130	344.4	114.2	MCN FAA 704164-2	
ESV:		Bearing [True]: 295.0 to 345.0 Bearing [Mag]: 294.0 to 344.0				Arc Distance: Out to 80.0 NM Altitude: 4000.0 to 14000.0 ft		
3	ODF FAA 090551-9 ODF [IFPA]	N34° 41' 45.142", W083° 17' 51.580"	0.0 E	130	1700	113.4	ODF FAA 090551-9	
ESV:		Bearing [True]: 200.0 to 255.0 Bearing [Mag]: 200.0 to 255.0				Arc Distance: Out to 95.0 NM Altitude: 8000.0 to 14000.0 ft		
4	CAE FAA 704182-40 CAE [IFPA]	N33° 51' 26.100", W081° 03' 14.050"	2.0 W	130	404.1	114.7	CAE FAA 704182-40	
ESV:		Bearing [True]: 217.0 to 50.0 Bearing [Mag]: 219.0 to 52.0				Arc Distance: Out to 65.0 NM Altitude: 4000.0 to 18000.0 ft		
5	ODF FAA 090551-6 ODF [IFPA]	N34° 41' 45.142", W083° 17' 51.580"	0.0 E	130	1700	113.4	ODF FAA 090551-6	
ESV:		Bearing [True]: 134.0 to 210.0 Bearing [Mag]: 134.0 to 210.0				Arc Distance: Out to 110.0 NM Altitude: 8000.0 to 18000.0 ft		

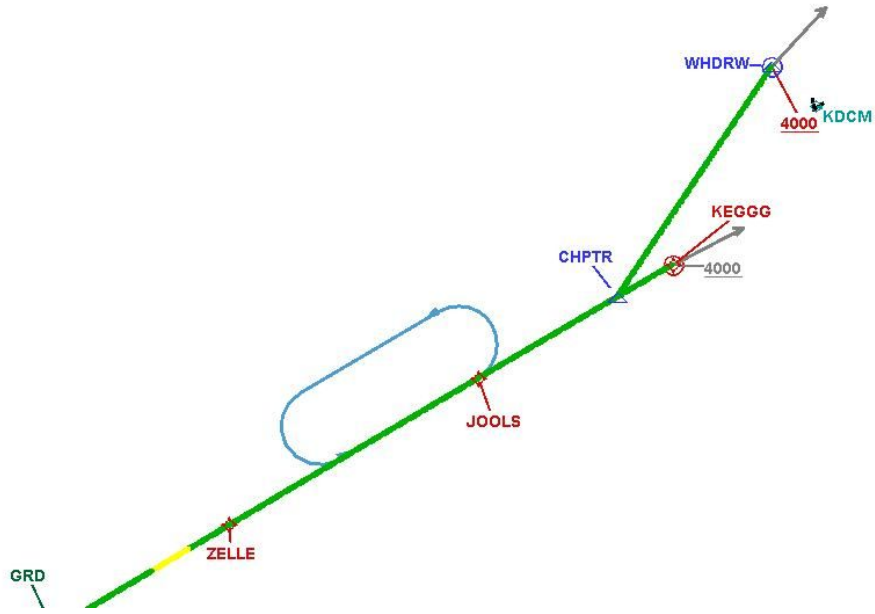
DME DME Assessment Results for JOOLS1 path JOOLS_THRSR

DME Error



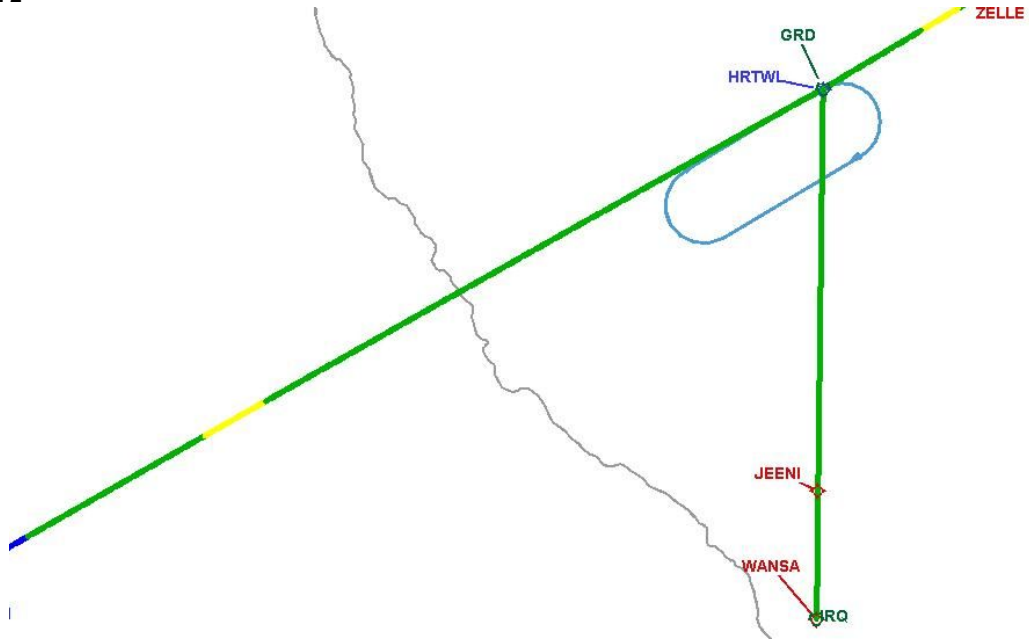
DME DME Assessment Results for JOOLS1 path JOOLS_THRSR

Graphic Depiction 1



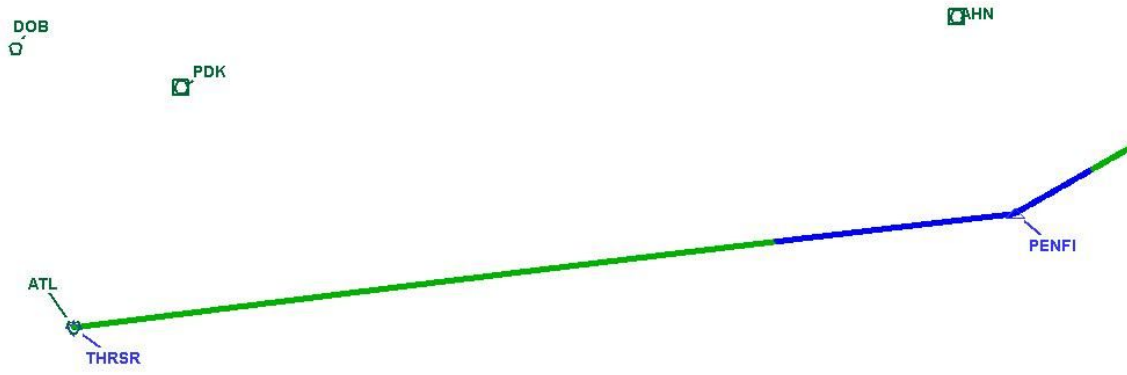
DME DME Assessment Results for JOOLS1 path JOOLS_THRSR

Graphic Depiction 2



DME DME Assessment Results for JOOLS1 path JOOLS_THRSR

Graphic Depiction 3



DME DME Assessment Results for JOOLS1 path THRSR_KEGGG

Results Summary	
Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Erik J-CTR John
Project File:	C:\Users\Erik J-CTR John\OneDrive - Federal Aviation Administration\Desktop\RNAV Projects\RNAV Projects 2022\KCLT STARS\JOOLS STAR\KCLT JOOLS (RNAV) STAR 20220706 DME.tgs
Output File:	C:\Users\Erik J-CTR John\OneDrive - Federal Aviation Administration\Desktop\KCLT [IFPA] JOOLS1 20220707_0955 EDT\THRSR_KEGGG\KCLT JOOLS1 RNAV STAR THRSR_KEGGG 20220707_0955 EDT.pdf
Procedure Name:	JOOLS1
Software: DmeDmePlugin:	6.5.1
Date/Time:	07/07/2022 09:55 EDT
Databases:	DTED 0

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
THRSR	WP	N33° 37' 45.260", W084° 26' 06.360"	11000	VNAV	200	FLY_BY	TF
PENFI	WP	N33° 44' 45.980", W083° 15' 06.140"	11000	VNAV	200	FLY_BY	TF
HRTWL	WP	N34° 15' 05.330", W082° 09' 15.550"	11000	VNAV	200	FLY_BY	TF
ZELLE	WP	N34° 21' 32.780", W081° 55' 57.140"	11000	VNAV	200	FLY_BY	TF
JOOLS	WP	N34° 30' 34.010", W081° 37' 13.320"	11000	VNAV	200	FLY_BY	TF
CHPTR	WP	N34° 35' 34.780", W081° 26' 44.420"	4000	VNAV	200	FLY_BY	TF
KEGGG	WP	N34° 37' 34.840", W081° 22' 32.510"	4000	VNAV	200	FLY_OVER	TF

Flyability	
Flight Type:	RNAV_STAR
Selected Airport:	KCLT [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 JOOLS1 path THRSR_KEGGG

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:	Not Allowed
DoD Facilities:	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	PDK	N33° 52' 32.274", W084° 17' 55.730"	5.0 W	40	L	IFPA	NO	Enabled	26.6 %	26.6 %
2	ATL	N33° 37' 44.676", W084° 26' 06.234"	5.0 W	130	H	IFPA	NO	Enabled	20.9 %	20.9 %
3	GRD	N34° 15' 05.638", W082° 09' 14.936"	1.0 W	130	H	IFPA	NO	Enabled	40.3 %	40.3 %
4	SPA	N35° 02' 01.053", W081° 55' 37.236"	2.0 W	130	H	IFPA	NO	Enabled	11.7 %	11.7 %
5	CTF	N34° 39' 01.793", W080° 16' 29.699"	3.0 W	130	DH	IFPA	NO	Enabled	38.3 %	38.3 %
6	AHN	N33° 56' 51.337", W083° 19' 29.132"	0.0 E	40	L	IFPA	NO	Enabled	34.4 %	34.4 %
7	ODF	N34° 41' 45.142", W083° 17' 51.580"	0.0 E	130	H	IFPA	NO	Enabled	37.2 %	37.2 %
8	ELW	N34° 25' 09.070", W082° 47' 04.861"	0.0 E	40	L	IFPA	NO	Enabled	35.9 %	36 %
9	MCN	N32° 41' 28.266", W083° 38' 49.860"	1.0 E	130	H	IFPA	NO	Enabled	13.9 %	13.9 %
10	RMG	N34° 09' 45.234", W085° 07' 09.866"	1.0 E	130	H	IFPA	NO	Enabled	23.7 %	23.7 %
11	CAE	N33° 51' 26.100", W081° 03' 14.050"	2.0 W	130	H	IFPA	NO	Enabled	27.2 %	27.2 %
12	IRQ	N33° 42' 26.472", W082° 09' 43.432"	4.0 W	130	H	IFPA	NO	Enabled	32.1 %	32.1 %

DME DME Assessment Results for JOOLS1 path THRSR_KEGGG

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	RMG	PDK	ODF	MCN		
4.9	ATL	PDK	ODF	RMG	MCN	
23.3	ODF	RMG	PDK	AHN	ATL	
39.6	ODF	PDK	ATL	AHN		
39.9	ODF	PDK	AHN			
44.5						
65.2	ODF	AHN				
71.0	AHN	ELW	ODF			
78.0	ELW	IRQ	AHN	ODF		
82.2	AHN	ELW	IRQ	GRD		
82.4	ODF	GRD	AHN	ELW		
82.7	AHN	ELW	IRQ	GRD		
99.0	ELW	GRD	IRQ	ODF		
99.5	ELW	GRD	IRQ			
103.0	GRD	IRQ	ELW	CTF		
116.8	ELW	IRQ	CTF			
118.8	CAE	IRQ	ELW	CTF		
128.5	CAE	IRQ	CTF			
129.4	ELW	IRQ	CTF	GRD		
132.1	CAE	GRD	CTF			
146.0	CAE	GRD	CTF	SPA		
162.1	CAE	CTF	SPA			
165.5	CAE	CTF				

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N33° 43' 02.908", W083° 33' 10.130"	N33° 47' 28.982", W083° 09' 17.179"	20.6799

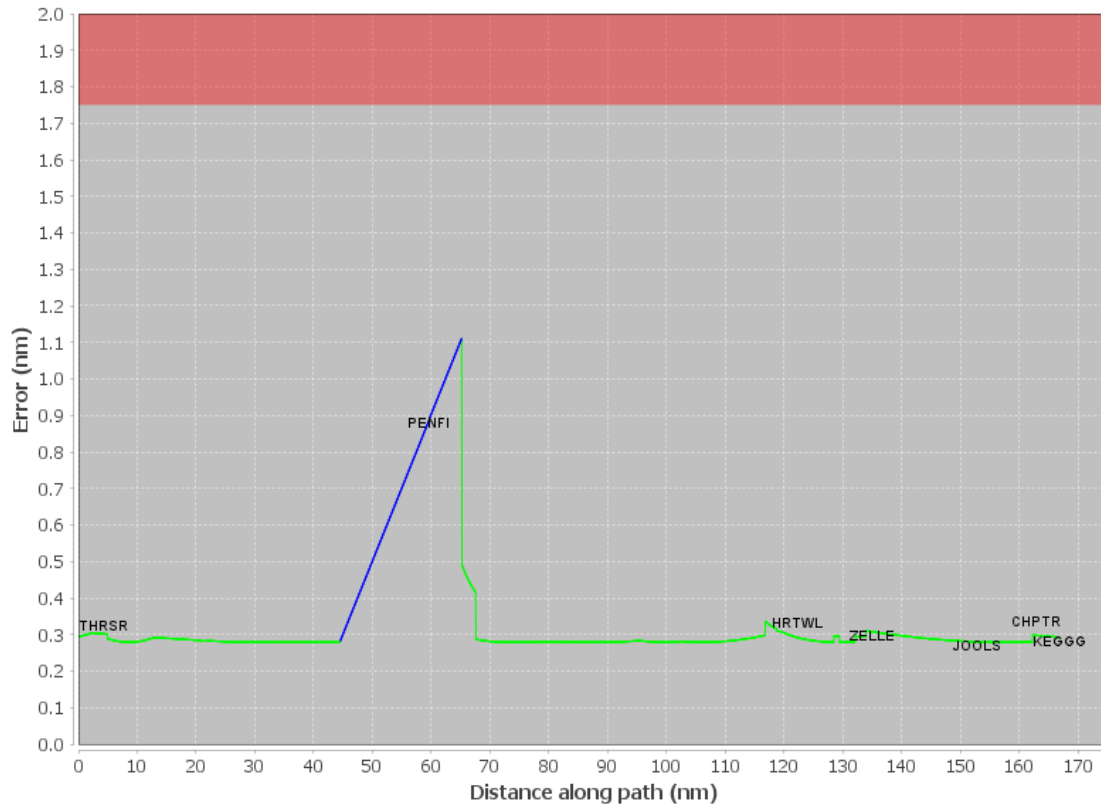
Available DMEs by Waypoints			
Waypoint Before	Waypoint After	DME List	Suggested DMEs
THRSR	PENFI	ODF, PDK, AHN, MCN, ATL, RMG	
PENFI	HRTWL	ODF, ELW, CTF, CAE, AHN, GRD, IRQ	
HRTWL	ZELLE	ELW, CTF, CAE, GRD, IRQ	
ZELLE	JOOLS	CTF, SPA, CAE, GRD	
JOOLS	CHPTR	CTF, SPA, CAE, GRD	
CHPTR	KEGGG	CTF, SPA, CAE	

DME DME Assessment Results for JOOLS1 path THRSR_KEGGG

User Data Files								
#	File Name							
None								
User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	RMG FAA 755481-6 RMG [IFPA]	N34° 09' 45.234", W085° 07' 09.866"	1.0 E	130	1147.8	115.4	RMG FAA 755481-6	
ESV:		Bearing [True]: 30.0 to 150.0 Bearing [Mag]: 29.0 to 149.0				Arc Distance: Out to 80.0 NM Altitude: 4000.0 to 14000.0 ft		
2	MCN FAA 704164-2 MCN [IFPA]	N32° 41' 28.266", W083° 38' 49.860"	1.0 E	130	344.4	114.2	MCN FAA 704164-2	
ESV:		Bearing [True]: 295.0 to 345.0 Bearing [Mag]: 294.0 to 344.0				Arc Distance: Out to 80.0 NM Altitude: 4000.0 to 14000.0 ft		
3	ODF FAA 090551-9 ODF [IFPA]	N34° 41' 45.142", W083° 17' 51.580"	0.0 E	130	1700	113.4	ODF FAA 090551-9	
ESV:		Bearing [True]: 200.0 to 255.0 Bearing [Mag]: 200.0 to 255.0				Arc Distance: Out to 95.0 NM Altitude: 8000.0 to 14000.0 ft		
4	CAE FAA 704182-40 CAE [IFPA]	N33° 51' 26.100", W081° 03' 14.050"	2.0 W	130	404.1	114.7	CAE FAA 704182-40	
ESV:		Bearing [True]: 217.0 to 50.0 Bearing [Mag]: 219.0 to 52.0				Arc Distance: Out to 65.0 NM Altitude: 4000.0 to 18000.0 ft		
5	ODF FAA 090551-6 ODF [IFPA]	N34° 41' 45.142", W083° 17' 51.580"	0.0 E	130	1700	113.4	ODF FAA 090551-6	
ESV:		Bearing [True]: 134.0 to 210.0 Bearing [Mag]: 134.0 to 210.0				Arc Distance: Out to 110.0 NM Altitude: 8000.0 to 18000.0 ft		

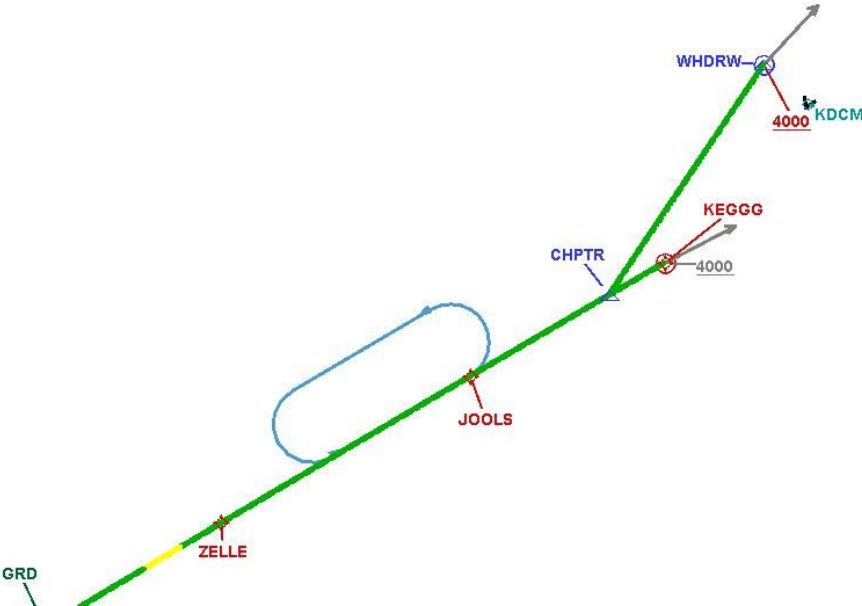
DME DME Assessment Results for JOOLS1 path THRSR_KEGGG

DME Error



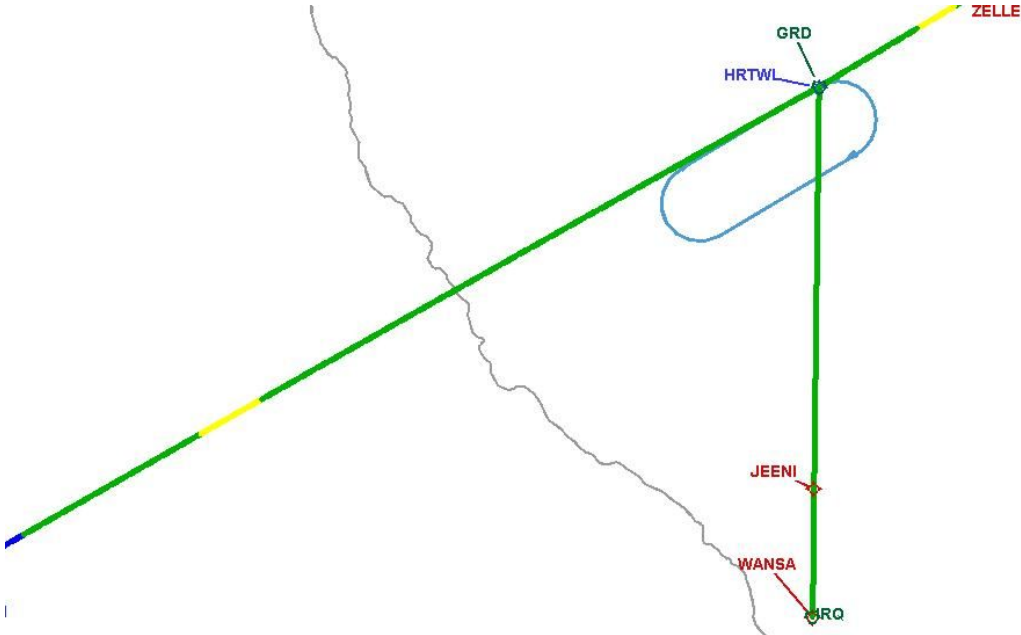
DME DME Assessment Results for JOOLS1 path THRSR_KEGGG

Graphic Depiction 1



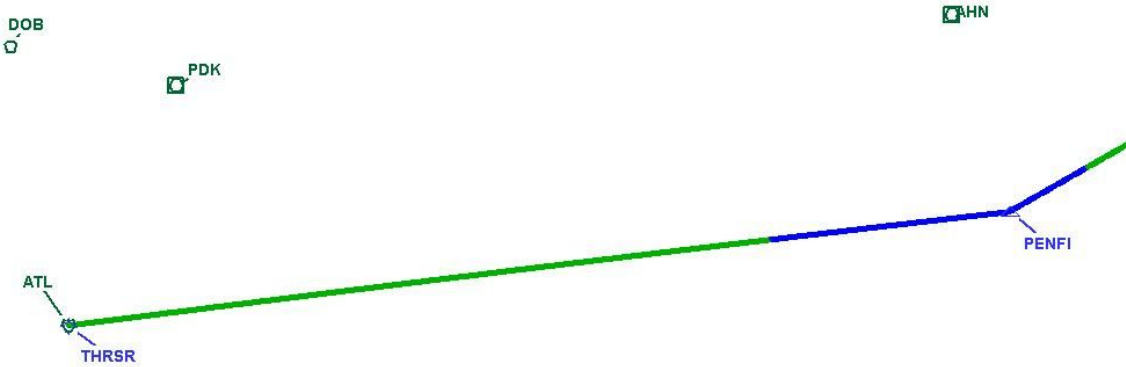
DME DME Assessment Results for JOOLS1 path THRSR_KEGGG

Graphic Depiction 2



DME DME Assessment Results for JOOLS1 path THRSR_KEGGG

Graphic Depiction 3



DME DME Assessment Results for JOOLS1 path WANSА_HRTWL

Results Summary	
Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Erik J-CTR John
Project File:	C:\Users\Erik J-CTR John\OneDrive - Federal Aviation Administration\Desktop\RNAV Projects\RNAV Projects 2022\KCLT STARS\JOOLS STAR\KCLT JOOLS (RNAV) STAR 20220706 DME.tgs
Output File:	C:\Users\Erik J-CTR John\OneDrive - Federal Aviation Administration\Desktop\KCLT [IFPA] JOOLS1 20220707_0955 EDT\WANSА_HRTWL\KCLT JOOLS1 RNAV STAR WANSА_HRTWL 20220707_0955 EDT.pdf
Procedure Name:	JOOLS1
Software: DmeDmePlugin:	6.5.1
Date/Time:	07/07/2022 09:55 EDT
Databases:	DTED 0

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
WANSА	WP	N33° 42' 26.100", W082° 09' 43.990"	11000	VNAV	200	FLY_BY	TF
JEENI	WP	N33° 50' 21.720", W082° 09' 38.110"	11000	VNAV	200	FLY_BY	TF
HRTWL	WP	N34° 15' 05.330", W082° 09' 15.550"	11000	VNAV	200	FLY_BY	TF

Flyability	
Flight Type:	RNAV_STAR
Selected Airport:	KCLT [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 JOOLS1 path WANSA_HRTWL

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:	Not Allowed
DoD Facilities:	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	GRD	N34° 15' 05.638", W082° 09' 14.936"	1.0 W	130	H	IFPA	NO	Enabled	86.9 %	86.9 %
2	CTF	N34° 39' 01.793", W080° 16' 29.699"	3.0 W	130	DH	IFPA	NO	Enabled	100 %	100 %
3	ODF	N34° 41' 45.142", W083° 17' 51.580"	0.0 E	130	H	IFPA	NO	Enabled	0.3 %	0.3 %
4	ELW	N34° 25' 09.070", W082° 47' 04.861"	0.0 E	40	L	IFPA	NO	Enabled	27.4 %	27.4 %
5	CAE	N33° 51' 26.100", W081° 03' 14.050"	2.0 W	130	H	IFPA	NO	Enabled	72.4 %	72.4 %
6	IRQ	N33° 42' 26.472", W082° 09' 43.432"	4.0 W	130	H	IFPA	NO	Enabled	90.7 %	90.7 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	CAE	GRD	ODF	CTF		
0.2	CAE	GRD	CTF			
3.0	CAE	IRQ	GRD	CTF		
23.7	ELW	GRD	IRQ	CTF		
28.4	ELW	IRQ	CTF			

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

Available DMEs by Waypoints			
Waypoint Before	Waypoint After	DME List	Suggested DMEs
WANSA	JEENI	ODF, CTF, CAE, GRD, IRQ	
JEENI	HRTWL	ELW, CTF, CAE, GRD, IRQ	

DME DME Assessment Results for JOOLS1 path WANSA_HRTWL

User Data Files

#	File Name
None	

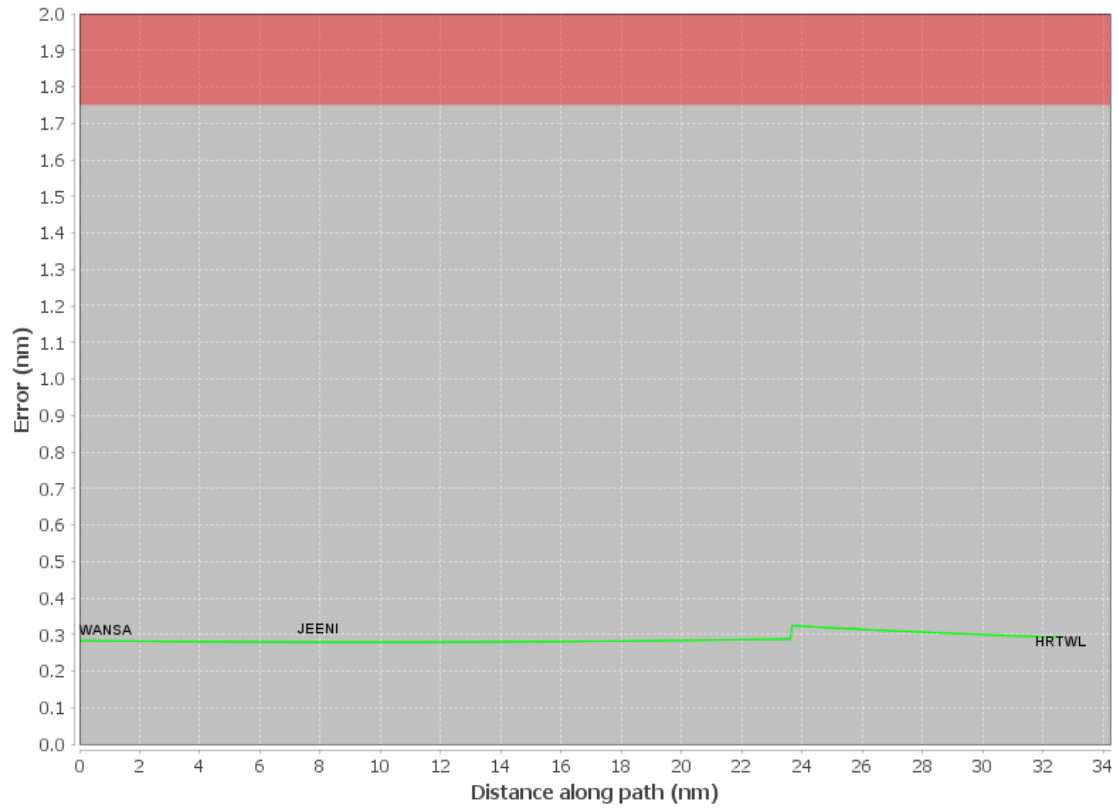
None

User DMEs

#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	RMG FAA 755481-6 RMG [IFPA]	N34° 09' 45.234", W085° 07' 09.866"	1.0 E	130	1147.8	115.4	RMG FAA 755481-6	
ESV:		Bearing [True]: 30.0 to 150.0 Bearing [Mag]: 29.0 to 149.0				Arc Distance: Out to 80.0 NM Altitude: 4000.0 to 14000.0 ft		
2	MCN FAA 704164-2 MCN [IFPA]	N32° 41' 28.266", W083° 38' 49.860"	1.0 E	130	344.4	114.2	MCN FAA 704164-2	
ESV:		Bearing [True]: 295.0 to 345.0 Bearing [Mag]: 294.0 to 344.0				Arc Distance: Out to 80.0 NM Altitude: 4000.0 to 14000.0 ft		
3	ODF FAA 090551-9 ODF [IFPA]	N34° 41' 45.142", W083° 17' 51.580"	0.0 E	130	1700	113.4	ODF FAA 090551-9	
ESV:		Bearing [True]: 200.0 to 255.0 Bearing [Mag]: 200.0 to 255.0				Arc Distance: Out to 95.0 NM Altitude: 8000.0 to 14000.0 ft		
4	CAE FAA 704182-40 CAE [IFPA]	N33° 51' 26.100", W081° 03' 14.050"	2.0 W	130	404.1	114.7	CAE FAA 704182-40	
ESV:		Bearing [True]: 217.0 to 50.0 Bearing [Mag]: 219.0 to 52.0				Arc Distance: Out to 65.0 NM Altitude: 4000.0 to 18000.0 ft		
5	ODF FAA 090551-6 ODF [IFPA]	N34° 41' 45.142", W083° 17' 51.580"	0.0 E	130	1700	113.4	ODF FAA 090551-6	
ESV:		Bearing [True]: 134.0 to 210.0 Bearing [Mag]: 134.0 to 210.0				Arc Distance: Out to 110.0 NM Altitude: 8000.0 to 18000.0 ft		

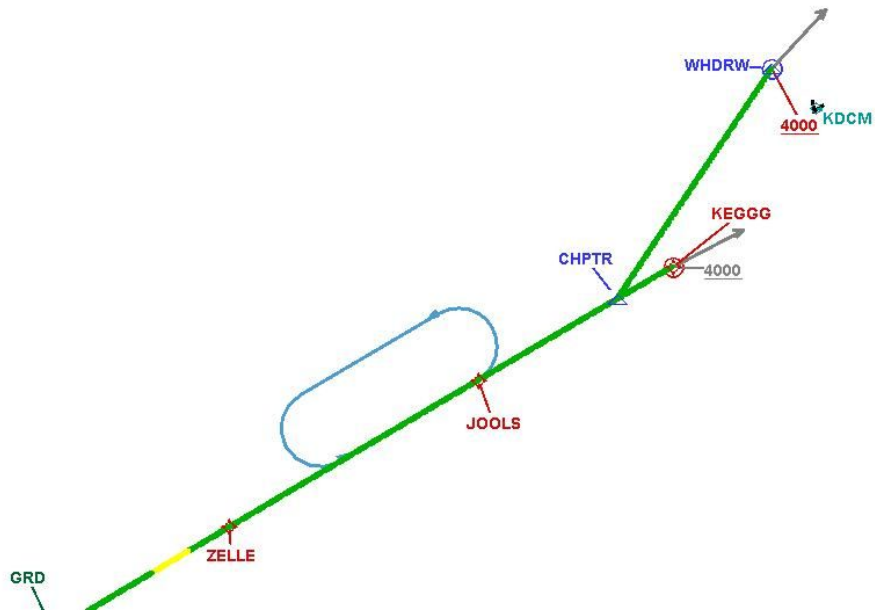
DME DME Assessment Results for JOOLS1 path WANSА_HRTWL

DME Error



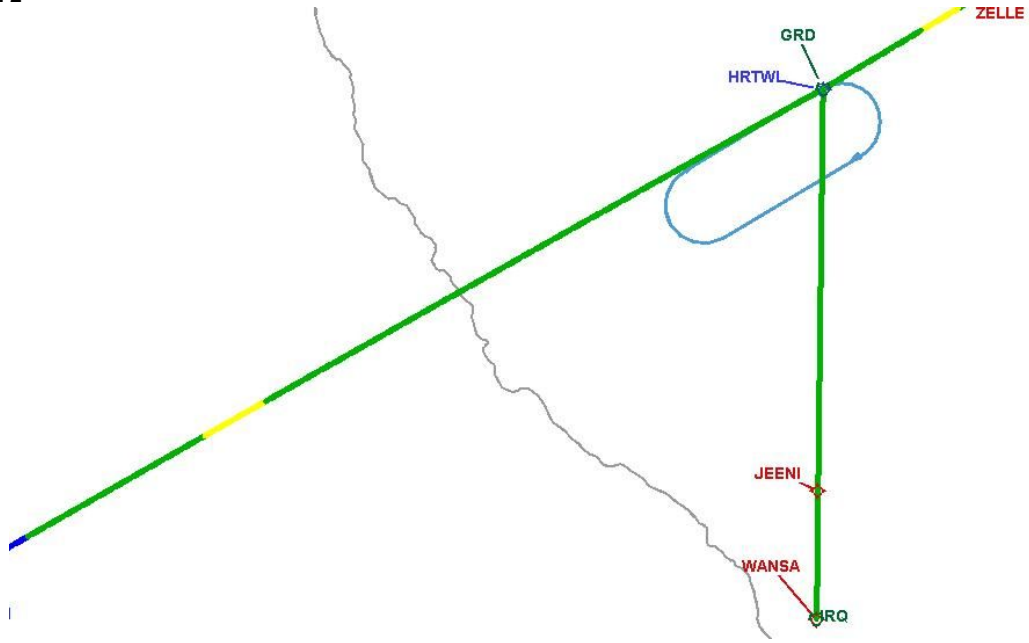
DME DME Assessment Results for JOOLS1 path WANSA_HRTWL

Graphic Depiction 1



DME DME Assessment Results for JOOLS1 path WANSА_HRTWL

Graphic Depiction 2



DME DME Assessment Results for JOOLS1 path WANSA_HRTWL

Graphic Depiction 3

