

DME DME Assessment Results for BRWNZ (RNAV) path BENJO_FRYYE

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Paul CTR Jackson
Project File:	S:\530View\ZZ4 TT TARGETs Transfer 30 days\CLE-DTW PI Final DME Screening\CLE STAR BRWNZ TWO 20181211.tgs
Output File:	C:\Users\Paul CTR Jackson\Documents\Current Projects\CLE\STAR Amend Nov 2018\BRWNZ2\KCLE BRWNZ (RNAV)_2018-12-18_0309\BENJO_FRYYE\KCLE BRWNZ (RNAV) RNAV STAR_BENJO_FRYYE_2018-12-18_0309.pdf
Procedure Name:	BRWNZ (RNAV)
Software: DmeDmePlugin:	5.5.1
Date/Time:	12/18/2018 03:09 PM CST
Databases:	DTED 0 Max

Failures

No Failures

Notes For Flight Check

None

Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	IAS (kts)	Turn Type	Leg Type
BENJO	WP	N41° 53' 08.45", W085° 12' 33.15"	15000	VNAV	280	FLY_BY	TF
COWCH	WP	N41° 56' 53.14", W084° 16' 57.02"	15000	VNAV	280	FLY_BY	TF
FRYYE	WP	N42° 00' 27.89", W083° 20' 11.22"	15000	VNAV	280	FLY_BY	TF

Flyability

Flight Type:	RNAV_STAR
Selected Airport:	KCLE
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 BRWNZ (RNAV) path BENJO_FRYYE

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:	AGC,AUW,BDF,BFD,BRD,BVT,CIP,C KB,CMK,CRI,CTW,DNV,DNY,DWN,E CB,EON,ESL,ETG,EWO,FJC,FLM,FQ M,GFL,GGT,GRV,GSH,HIC,HML,HNK ,HNN,HTO,HUO,IHD,JVL,LAN,LGA,L NR,LVZ,MIP,MKG,MNM,MSS,MXE,O DI,PLL,PLN,PMM,PNT,PWL,RBS,REC ,RKA,RST,SAM,SFK,SLK,SLT,TDT,T HS,UCA,UIN,ULW,VLA,YRK

DME DME Assessment Results for BRWNZ (RNAV) path BENJO_FRYYE

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	JXN	N42° 15' 33.26", W084° 27' 30.78"	5.0 W	40	L	AIRNAV2	NO	Enabled	77.6 %	77.6 %
2	DXO	N42° 12' 47.29", W083° 21' 59.99"	6.0 W	130	H	AIRNAV2	NO	Enabled	37.4 %	37.4 %
3	SVM	N42° 24' 31.11", W083° 35' 38.05"	3.0 W	40	L	AIRNAV2	NO	Enabled	43.6 %	43.6 %
4	VWV	N41° 27' 05.34", W083° 38' 19.30"	2.0 W	40	L	AIRNAV2	NO	Enabled	37.8 %	37.8 %
5	OKK	N40° 31' 40.01", W086° 03' 28.80"	5.0 W	130	H	AIRNAV2	NO	Enabled	16.4 %	16.4 %
6	OXI	N41° 19' 19.35", W086° 38' 57.45"	0.0 E	130	H	AIRNAV2	NO	Enabled	40 %	40 %
7	AZO	N42° 14' 13.15", W085° 33' 11.35"	1.0 W	40	L	AIRNAV2	NO	Enabled	20 %	20 %
8	LFD	N42° 03' 44.96", W084° 45' 54.48"	5.0 W	40	L	AIRNAV2	NO	Enabled	69.8 %	69.8 %
9	CRL	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	H	AIRNAV2	NO	Enabled	92.2 %	92.2 %
10	AGC	N40° 16' 43.12", W080° 02' 27.08"	9.0 W	40	L	AIRNAV2	NO	Disabled		
11	AUW	N44° 50' 48.40", W089° 35' 11.68"	2.0 E	40	L	AIRNAV2	NO	Disabled		
12	BDF	N41° 09' 35.03", W089° 35' 16.34"	0.0 E	130	H	AIRNAV2	NO	Disabled		
13	BFD	N41° 47' 10.99", W078° 37' 09.65"	7.0 W	40	L	AIRNAV2	NO	Disabled		
14	BVT	N40° 33' 22.22", W087° 04' 09.75"	1.0 E	130	H	AIRNAV2	NO	Disabled		
15	CIP	N41° 08' 46.66", W079° 27' 28.71"	6.0 W	40	L	AIRNAV2	NO	Disabled		
16	CKB	N39° 15' 11.58", W080° 16' 04.30"	4.0 W	40	L	AIRNAV2	NO	Disabled		
17	CMK	N41° 16' 48.32", W073° 34' 52.77"	12.0 W	40	L	AIRNAV2	NO	Disabled		
18	CRI	N40° 36' 44.90", W073° 53' 40.00"	11.0 W	25	T	AIRNAV2	NO	Disabled		
19	CTW	N40° 13' 45.15", W081° 28' 35.32"	7.0 W	40	L	AIRNAV2	NO	Disabled		
20	DNV	N40° 17' 37.56", W087° 33' 26.14"	2.0 E	40	L	AIRNAV2	NO	Disabled		
21	DNY	N42° 10' 41.81", W074° 57' 24.99"	11.0 W	40	L	AIRNAV2	NO	Disabled		
22	DWN	N45° 05' 14.87", W094° 27' 13.86"	7.0 E	40	L	AIRNAV2	NO	Disabled		
23	ECB	N38° 09' 30.11", W082° 54' 36.20"	2.0 W	40	L	AIRNAV2	NO	Disabled		
24	EON	N41° 16' 10.68", W087° 47' 27.79"	2.0 E	40	L	AIRNAV2	NO	Disabled		
25	ESL	N39° 13' 31.77", W078° 59' 22.20"	6.0 W	40	L	AIRNAV2	NO	Disabled		
26	ETG	N41° 12' 53.82", W078° 08' 33.92"	10.0 W	130	H	AIRNAV2	NO	Disabled		
27	EWO	N37° 37' 54.52", W085° 40' 33.16"	1.0 E	40	L	AIRNAV2	NO	Disabled		
28	FJC	N40° 43' 36.12", W075° 27' 17.12"	10.0 W	40	L	AIRNAV2	NO	Disabled		
29	FLM	N38° 38' 57.99", W084° 18' 38.17"	4.0 W	130	H	AIRNAV2	NO	Disabled		
30	FQM	N41° 20' 18.81", W076° 46' 29.52"	9.0 W	40	L	AIRNAV2	NO	Disabled		
31	GFL	N43° 20' 30.09", W073° 36' 42.32"	14.0 W	40	L	AIRNAV2	NO	Disabled		
32	GGT	N42° 47' 20.24", W075° 49' 36.29"	11.0 W	40	L	AIRNAV2	NO	Disabled		
33	GRV	N39° 38' 06.11", W079° 03' 01.90"	6.0 W	40	L	AIRNAV2	NO	Disabled		

DME DME Assessment Results for BRWNZ (RNAV) path BENJO_FRYYE

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
34	GSH	N41° 31' 30.56", W086° 01' 40.63"	0.0 E	130	H	AIRNAV2	NO	Disabled		
35	HIC	N43° 34' 29.47", W085° 42' 58.18"	1.0 W	40	L	AIRNAV2	NO	Disabled		
36	HML	N48° 52' 09.09", W097° 07' 01.51"	9.0 E	130	H	AIRNAV2	NO	Disabled		
37	HNK	N42° 03' 47.01", W075° 18' 58.62"	11.0 W	130	H	AIRNAV2	NO	Disabled		
38	HNN	N38° 45' 14.85", W082° 01' 34.20"	3.0 W	130	H	AIRNAV2	NO	Disabled		
39	HTO	N40° 55' 08.38", W072° 19' 00.14"	13.0 W	130	H	AIRNAV2	NO	Disabled		
40	HUO	N41° 24' 34.87", W074° 35' 29.74"	11.0 W	130	H	AIRNAV2	NO	Disabled		
41	IHD	N39° 58' 27.27", W079° 21' 30.12"	6.0 W	40	L	AIRNAV2	NO	Disabled		
42	JVL	N42° 33' 28.83", W089° 06' 18.93"	3.0 E	40	L	AIRNAV2	NO	Disabled		
43	LAN	N42° 43' 02.62", W084° 41' 51.03"	0.0 E	40	L	AIRNAV2	NO	Disabled		
44	LGA	N40° 47' 01.38", W073° 52' 06.96"	12.0 W	40	L	AIRNAV2	NO	Disabled		
45	LNR	N43° 17' 39.85", W090° 07' 59.33"	0.0 E	40	L	AIRNAV2	NO	Disabled		
46	LVZ	N41° 16' 22.10", W075° 41' 22.07"	10.0 W	40	L	AIRNAV2	NO	Disabled		
47	MIP	N41° 01' 24.21", W076° 39' 55.04"	9.0 W	40	L	AIRNAV2	NO	Disabled		
48	MKG	N43° 10' 09.31", W086° 02' 21.76"	1.0 W	40	L	AIRNAV2	NO	Disabled		
49	MNM	N45° 10' 48.58", W087° 38' 49.83"	0.0 E	40	L	AIRNAV2	NO	Disabled		
50	MSS	N44° 54' 51.92", W074° 43' 21.78"	14.0 W	130	H	AIRNAV2	NO	Disabled		
51	MXE	N39° 55' 04.98", W075° 40' 14.96"	9.0 W	40	L	AIRNAV2	NO	Disabled		
52	ODI	N43° 54' 44.38", W091° 28' 03.06"	1.0 E	130	H	AIRNAV2	NO	Disabled		
53	PLL	N41° 57' 56.31", W089° 31' 27.19"	3.0 E	40	L	AIRNAV2	NO	Disabled		
54	PLN	N45° 37' 50.33", W084° 39' 50.79"	6.0 W	40	L	AIRNAV2	NO	Disabled		
55	PMM	N42° 27' 57.73", W086° 06' 17.32"	0.0 E	130	H	AIRNAV2	NO	Disabled		
56	PNT	N40° 49' 16.32", W088° 44' 00.63"	3.0 E	40	L	AIRNAV2	NO	Disabled		
57	PWL	N41° 46' 11.18", W073° 36' 01.99"	12.0 W	40	L	AIRNAV2	NO	Disabled		
58	RBS	N40° 34' 54.13", W088° 09' 51.36"	2.0 E	40	L	AIRNAV2	NO	Disabled		
59	REC	N40° 32' 47.25", W078° 44' 49.28"	9.0 W	40	L	AIRNAV2	NO	Disabled		
60	RKA	N42° 27' 58.91", W075° 14' 21.51"	11.0 W	40	L	AIRNAV2	NO	Disabled		
61	RST	N43° 46' 58.45", W092° 35' 49.06"	5.0 E	40	L	AIRNAV2	NO	Disabled		
62	SAM	N38° 29' 06.68", W088° 05' 08.90"	3.0 E	40	L	AIRNAV2	NO	Disabled		
63	SFK	N41° 41' 42.91", W077° 25' 11.66"	8.0 W	40	L	AIRNAV2	NO	Disabled		
64	SLK	N44° 23' 04.42", W074° 12' 16.22"	14.0 W	40	L	AIRNAV2	NO	Disabled		
65	SLT	N41° 30' 45.93", W077° 58' 12.39"	8.0 W	130	H	AIRNAV2	NO	Disabled		
66	TDT	N41° 42' 46.91", W079° 25' 02.17"	9.0 W	40	L	AIRNAV2	NO	Disabled		

DME DME Assessment Results for BRWNZ (RNAV) path BENJO_FRYYE

DME/DME (Continued)

DMEs Used

#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
67	THS	N39° 55' 59.62", W077° 57' 03.40"	7.0 W	40	L	AIRNAV2	NO	Disabled		
68	UCA	N43° 01' 35.45", W075° 09' 52.28"	12.0 W	40	L	AIRNAV2	NO	Disabled		
69	UIN	N39° 50' 52.35", W091° 16' 44.13"	5.0 E	130	H	AIRNAV2	NO	Disabled		
70	ULW	N42° 05' 39.16", W077° 01' 28.53"	12.0 W	40	L	AIRNAV2	NO	Disabled		
71	VLA	N39° 05' 37.82", W089° 09' 44.08"	4.0 E	40	L	AIRNAV2	NO	Disabled		
72	YRK	N38° 38' 38.88", W082° 58' 42.02"	5.0 W	40	L	AIRNAV2	NO	Disabled		

Flight Check DME Selection

Distance [NM]	Selected DMEs					Alternate
0.0	AZO	LFD	OXI	CRL	OKK	
13.8	AZO	LFD	JXN	OXI	CRL	
17.0	CRL	LFD	JXN	OXI		
33.7	CRL	JXN	LFD			
43.3	SVM	JXN	CRL	LFD		
44.2	VWV	SVM	JXN	CRL	LFD	
47.0	SVM	JXN	CRL	LFD		
47.3	SVM	JXN	DXO	CRL	LFD	
58.8	SVM	JXN	VWV	CRL	DXO	
68.2	VWV	CRL	SVM	DXO		
75.2						
79.4	VWV	SVM				
81.8	VWV	CRL	DXO	SVM		

Inertial Drift Segments

#	Start Location	End Location	Length [NM]
1	N41° 49' 53.91", W082° 10' 03.16"	N41° 44' 40.64", W081° 58' 38.97"	9.9786
2	N41° 50' 33.90", W082° 06' 11.12"	N41° 49' 32.08", W081° 54' 43.32"	8.604
3	N42° 01' 09.50", W083° 30' 02.50"	N42° 00' 52.52", W083° 25' 59.74"	3.0196
4	N41° 26' 07.51", W082° 08' 15.43"	N42° 47' 04.67", W085° 29' 10.01"	169.6125
5	N42° 02' 26.06", W083° 25' 16.45"	N42° 01' 06.59", W083° 21' 51.08"	2.8671
6	N41° 35' 02.06", W082° 09' 37.02"	N41° 58' 37.27", W082° 56' 05.98"	41.9308
7	N41° 31' 54.26", W082° 09' 07.66"	N41° 57' 52.34", W082° 46' 45.45"	38.2472
8	N42° 41' 35.16", W085° 00' 41.73"	N42° 39' 45.29", W084° 51' 19.08"	7.134
9	N41° 48' 41.68", W082° 12' 18.67"	N41° 56' 53.14", W084° 16' 57.02"	93.1688
10	N41° 59' 45.07", W083° 32' 07.77"	N42° 00' 04.96", W083° 26' 37.57"	4.1038

Available DMEs by Waypoints

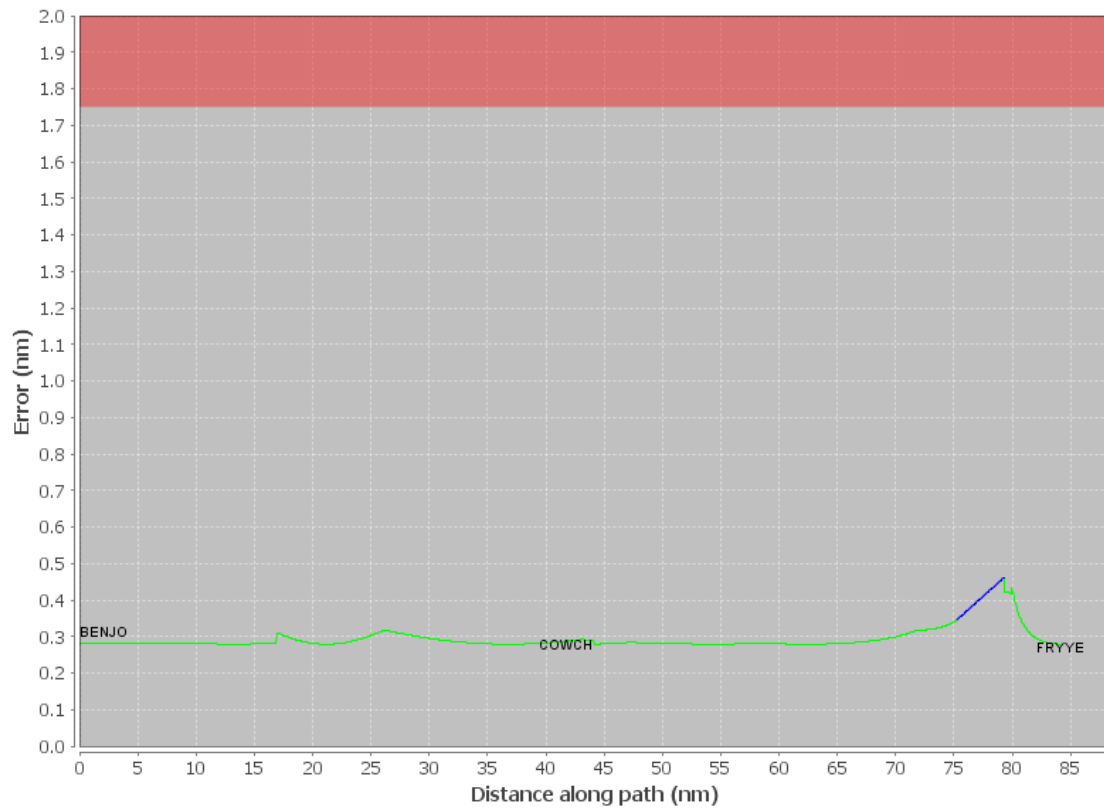
Waypoint Before	Waypoint After	DME List
BENJO	COWCH	OXI, JXN, AZO, LFD, CRL, OKK
COWCH	FRYYE	JXN, VWV, DXO, LFD, SVM, CRL

DME DME Assessment Results for BRWNZ (RNAV) path BENJO_FRYYE

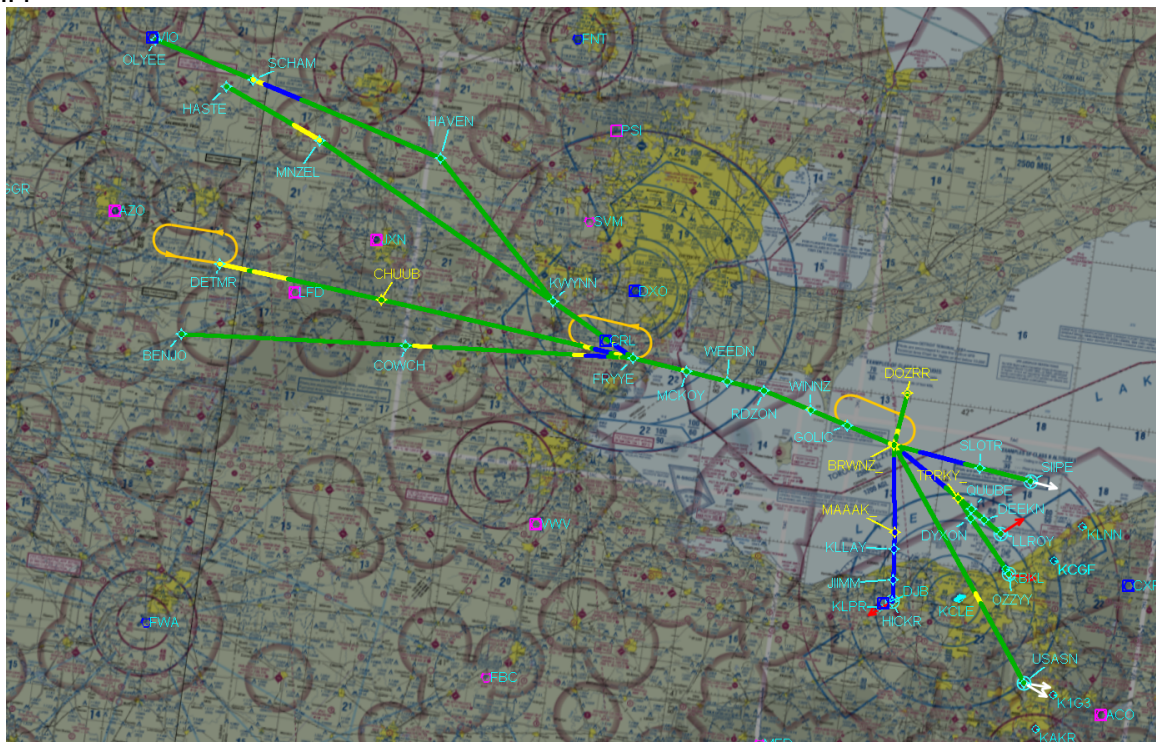
User Data Files								
#	File Name							
1	BRWNZ2.udt							
User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	UDT ESV MFD MFD [AIRNAV2]	N40° 52' 07.00", W082° 35' 27.46"	3.0 W	40	1222	108.8	UDT ESV MFD	
ESV:		Bearing [True]: 325.0° to 43.0° Bearing [Mag]: 328.0° to 46.0°				Arc Distance: Out to 80.0 NM Altitude: 6400.0 to 20000.0 ft		
2	UDT ESV OKK OKK [AIRNAV2]	N40° 31' 40.01", W086° 03' 28.80"	5.0 W	130	825	113.5	UDT ESV OKK	
ESV:		Bearing [True]: 356.0° to 50.0° Bearing [Mag]: 1.0° to 55.0°				Arc Distance: Out to 101.0 NM Altitude: 9900.0 to 20000.0 ft		
3	UDT ESV ACO ACO [AIRNAV2]	N41° 06' 28.45", W081° 12' 05.49"	4.0 W	40	1198	114.4	UDT ESV ACO	
ESV:		Bearing [True]: 303.0° to 321.0° Bearing [Mag]: 307.0° to 325.0°				Arc Distance: Out to 82.0 NM Altitude: 7700.0 to 11000.0 ft		
4	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 259.0° to 268.0° Bearing [Mag]: 262.0° to 271.0°				Arc Distance: Out to 103.0 NM Altitude: 10000.0 to 16000.0 ft		
5	UDT ESV OXI OXI [AIRNAV2]	N41° 19' 19.35", W086° 38' 57.45"	0.0 E	130	690	115.6	UDT ESV OXI	
ESV:		Bearing [True]: 0.0° to 138.0° Bearing [Mag]: 0.0° to 138.0°				Arc Distance: Out to 106.0 NM Altitude: 10000.0 to 20000.0 ft		
6	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 65.0° to 98.0° Bearing [Mag]: 68.0° to 101.0°				Arc Distance: Out to 64.0 NM Altitude: 4000.0 to 16000.0 ft		
7	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 293.0° to 5.0° Bearing [Mag]: 296.0° to 8.0°				Arc Distance: Out to 102.0 NM Altitude: 8500.0 to 16000.0 ft		
8	UDT ESV SVM SVM [AIRNAV2]	N42° 24' 31.11", W083° 35' 38.05"	3.0 W	40	955	114.3	UDT ESV SVM	
ESV:		Bearing [True]: 89.0° to 117.0° Bearing [Mag]: 92.0° to 120.0°				Arc Distance: Out to 73.0 NM Altitude: 6200.0 to 20000.0 ft		
9	UDT ESV CXR CXR [AIRNAV2]	N41° 31' 00.94", W081° 09' 47.47"	5.0 W	130	1317	112.7	UDT ESV CXR	
ESV:		Bearing [True]: 298.0° to 343.0° Bearing [Mag]: 303.0° to 348.0°				Arc Distance: Out to 73.0 NM Altitude: 6200.0 to 16000.0 ft		
10	UDT ESV DXO DXO [AIRNAV2]	N42° 12' 47.29", W083° 21' 59.99"	6.0 W	130	669.3	113.4	UDT ESV DXO	
ESV:		Bearing [True]: 279.0° to 333.0° Bearing [Mag]: 285.0° to 339.0°				Arc Distance: Out to 106.0 NM Altitude: 9700.0 to 20000.0 ft		
11	UDT ESV PSI PSI [AIRNAV2]	N42° 42' 03.09", W083° 31' 57.98"	0.0 E	40	1149	null	UDT ESV PSI	
ESV:		Bearing [True]: 128.0° to 170.0° Bearing [Mag]: 128.0° to 170.0°				Arc Distance: Out to 80.0 NM Altitude: 7400.0 to 11000.0 ft		

DME DME Assessment Results for BRWNZ (RNAV) path BENJO_FRYYE

DME Error

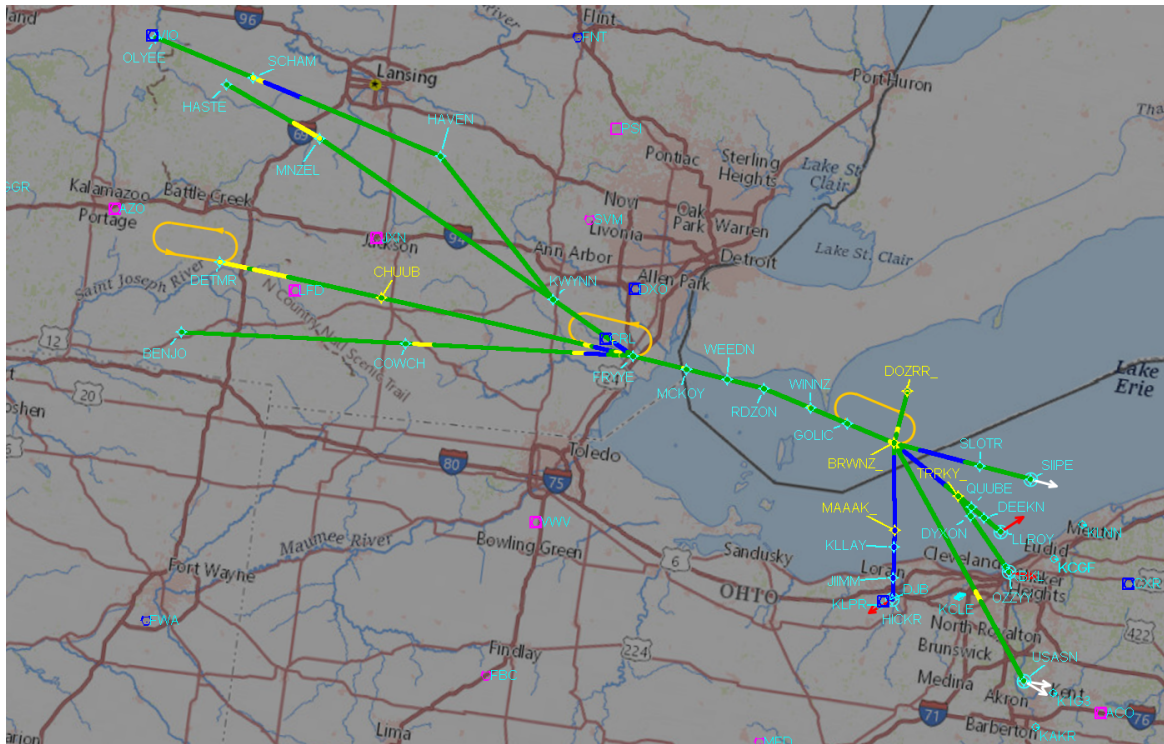


Graphic Depiction 1



DME DME Assessment Results for BRWNZ (RNAV) path BENJO_FRYYE

Graphic Depiction 2



DME DME Assessment Results for BRWNZ (RNAV) path BRWNZ__SIIPE

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Paul CTR Jackson
Project File:	S:\530View\ZZ4 TT TARGETs Transfer 30 days\CLE-DTW PI Final DME Screening\CLE STAR BRWNZ TWO 20181211.tgs
Output File:	C:\Users\Paul CTR Jackson\Documents\Current Projects\CLE\STAR Amend Nov 2018\BRWNZ2\KCLE BRWNZ (RNAV)_2018-12-18_0309\BRWNZ__SIIPE\KCLE BRWNZ (RNAV) RNAV STAR_BRWNZ__SIIPE_2018-12-18_0309.pdf
Procedure Name:	BRWNZ (RNAV)
Software: DmeDmePlugin:	5.5.1
Date/Time:	12/18/2018 03:09 PM CST
Databases:	DTED 0 Max

Failures

No Failures

Notes For Flight Check

None

Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	IAS (kts)	Turn Type	Leg Type
BRWNZ_	WP	N41° 51' 09.02", W082° 12' 47.85"	8000	VNAV	280	FLY_BY	TF
SLOTTR	WP	N41° 49' 10.66", W081° 50' 47.94"	7000	VNAV	280	FLY_BY	TF
SIIPE	WP	N41° 48' 02.30", W081° 37' 45.77"	6000	VNAV	280	FLY_OVER	TF

Flyability

Flight Type:	RNAV_STAR
Selected Airport:	KCLE
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 BRWNZ (RNAV) path BRWNZ__SIPE

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:	AGC,AUW,BDF,BFD,BRD,BVT,CIP,C KB,CMK,CRI,CTW,DNV,DNY,DWN,E CB,EON,ESL,ETG,EWO,FJC,FLM,FQ M,GFL,GGT,GRV,GSH,HIC,HML,HNK ,HNN,HTO,HUO,IHD,JVL,LAN,LGA,L NR,LVZ,MIP,MKG,MNM,MSS,MXE,O DI,PLL,PLN,PMM,PNT,PWL,RBS,REC ,RKA,RST,SAM,SFK,SLK,SLT,TDT,T HS,UCA,UIN,ULW,VLA,YRK

DME DME Assessment Results for BRWNZ (RNAV) path BRWNZ_SIIPE

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	DJB	N41° 21' 29.03", W082° 09' 43.09"	5.0 W	130	H	AIRNAV2	NO	Enabled	67 %	67 %
2	CXR	N41° 31' 00.94", W081° 09' 47.47"	5.0 W	130	H	AIRNAV2	NO	Enabled	48.4 %	48.4 %
3	PSI	N42° 42' 03.09", W083° 31' 57.98"	0.0 E	40	L	AIRNAV2	NO	Enabled		
4	JFN	N41° 45' 36.42", W080° 44' 53.20"	5.0 W	40	L	AIRNAV2	NO	Enabled		
5	MFD	N40° 52' 07.00", W082° 35' 27.46"	3.0 W	40	L	AIRNAV2	NO	Enabled	52 %	52 %
6	ACO	N41° 06' 28.45", W081° 12' 05.49"	4.0 W	40	L	AIRNAV2	NO	Enabled	18.6 %	18.6 %
7	AGC	N40° 16' 43.12", W080° 02' 27.08"	9.0 W	40	L	AIRNAV2	NO	Disabled		
8	AUW	N44° 50' 48.40", W089° 35' 11.68"	2.0 E	40	L	AIRNAV2	NO	Disabled		
9	BDF	N41° 09' 35.03", W089° 35' 16.34"	0.0 E	130	H	AIRNAV2	NO	Disabled		
10	BFD	N41° 47' 10.99", W078° 37' 09.65"	7.0 W	40	L	AIRNAV2	NO	Disabled		
11	BVT	N40° 33' 22.22", W087° 04' 09.75"	1.0 E	130	H	AIRNAV2	NO	Disabled		
12	CIP	N41° 08' 46.66", W079° 27' 28.71"	6.0 W	40	L	AIRNAV2	NO	Disabled		
13	CKB	N39° 15' 11.58", W080° 16' 04.30"	4.0 W	40	L	AIRNAV2	NO	Disabled		
14	CMK	N41° 16' 48.32", W073° 34' 52.77"	12.0 W	40	L	AIRNAV2	NO	Disabled		
15	CRI	N40° 36' 44.90", W073° 53' 40.00"	11.0 W	25	T	AIRNAV2	NO	Disabled		
16	CTW	N40° 13' 45.15", W081° 28' 35.32"	7.0 W	40	L	AIRNAV2	NO	Disabled		
17	DNV	N40° 17' 37.56", W087° 33' 26.14"	2.0 E	40	L	AIRNAV2	NO	Disabled		
18	DNY	N42° 10' 41.81", W074° 57' 24.99"	11.0 W	40	L	AIRNAV2	NO	Disabled		
19	DWN	N45° 05' 14.87", W094° 27' 13.86"	7.0 E	40	L	AIRNAV2	NO	Disabled		
20	ECB	N38° 09' 30.11", W082° 54' 36.20"	2.0 W	40	L	AIRNAV2	NO	Disabled		
21	EON	N41° 16' 10.68", W087° 47' 27.79"	2.0 E	40	L	AIRNAV2	NO	Disabled		
22	ESL	N39° 13' 31.77", W078° 59' 22.20"	6.0 W	40	L	AIRNAV2	NO	Disabled		
23	ETG	N41° 12' 53.82", W078° 08' 33.92"	10.0 W	130	H	AIRNAV2	NO	Disabled		
24	EWO	N37° 37' 54.52", W085° 40' 33.16"	1.0 E	40	L	AIRNAV2	NO	Disabled		
25	FJC	N40° 43' 36.12", W075° 27' 17.12"	10.0 W	40	L	AIRNAV2	NO	Disabled		
26	FLM	N38° 38' 57.99", W084° 18' 38.17"	4.0 W	130	H	AIRNAV2	NO	Disabled		
27	FQM	N41° 20' 18.81", W076° 46' 29.52"	9.0 W	40	L	AIRNAV2	NO	Disabled		
28	GFL	N43° 20' 30.09", W073° 36' 42.32"	14.0 W	40	L	AIRNAV2	NO	Disabled		
29	GGT	N42° 47' 20.24", W075° 49' 36.29"	11.0 W	40	L	AIRNAV2	NO	Disabled		
30	GRV	N39° 38' 06.11", W079° 03' 01.90"	6.0 W	40	L	AIRNAV2	NO	Disabled		
31	GSH	N41° 31' 30.56", W086° 01' 40.63"	0.0 E	130	H	AIRNAV2	NO	Disabled		
32	HIC	N43° 34' 29.47", W085° 42' 58.18"	1.0 W	40	L	AIRNAV2	NO	Disabled		
33	HML	N48° 52' 09.09", W097° 07' 01.51"	9.0 E	130	H	AIRNAV2	NO	Disabled		

DME DME Assessment Results for BRWNZ (RNAV) path BRWNZ_SIIPE

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
34	HNK	N42° 03' 47.01", W075° 18' 58.62"	11.0 W	130	H	AIRNAV2	NO	Disabled		
35	HNN	N38° 45' 14.85", W082° 01' 34.20"	3.0 W	130	H	AIRNAV2	NO	Disabled		
36	HTO	N40° 55' 08.38", W072° 19' 00.14"	13.0 W	130	H	AIRNAV2	NO	Disabled		
37	HUO	N41° 24' 34.87", W074° 35' 29.74"	11.0 W	130	H	AIRNAV2	NO	Disabled		
38	IHD	N39° 58' 27.27", W079° 21' 30.12"	6.0 W	40	L	AIRNAV2	NO	Disabled		
39	JVL	N42° 33' 28.83", W089° 06' 18.93"	3.0 E	40	L	AIRNAV2	NO	Disabled		
40	LAN	N42° 43' 02.62", W084° 41' 51.03"	0.0 E	40	L	AIRNAV2	NO	Disabled		
41	LGA	N40° 47' 01.38", W073° 52' 06.96"	12.0 W	40	L	AIRNAV2	NO	Disabled		
42	LNR	N43° 17' 39.85", W090° 07' 59.33"	0.0 E	40	L	AIRNAV2	NO	Disabled		
43	LVZ	N41° 16' 22.10", W075° 41' 22.07"	10.0 W	40	L	AIRNAV2	NO	Disabled		
44	MIP	N41° 01' 24.21", W076° 39' 55.04"	9.0 W	40	L	AIRNAV2	NO	Disabled		
45	MKG	N43° 10' 09.31", W086° 02' 21.76"	1.0 W	40	L	AIRNAV2	NO	Disabled		
46	MNM	N45° 10' 48.58", W087° 38' 49.83"	0.0 E	40	L	AIRNAV2	NO	Disabled		
47	MSS	N44° 54' 51.92", W074° 43' 21.78"	14.0 W	130	H	AIRNAV2	NO	Disabled		
48	MXE	N39° 55' 04.98", W075° 40' 14.96"	9.0 W	40	L	AIRNAV2	NO	Disabled		
49	ODI	N43° 54' 44.38", W091° 28' 03.06"	1.0 E	130	H	AIRNAV2	NO	Disabled		
50	PLL	N41° 57' 56.31", W089° 31' 27.19"	3.0 E	40	L	AIRNAV2	NO	Disabled		
51	PLN	N45° 37' 50.33", W084° 39' 50.79"	6.0 W	40	L	AIRNAV2	NO	Disabled		
52	PMM	N42° 27' 57.73", W086° 06' 17.32"	0.0 E	130	H	AIRNAV2	NO	Disabled		
53	PNT	N40° 49' 16.32", W088° 44' 00.63"	3.0 E	40	L	AIRNAV2	NO	Disabled		
54	PWL	N41° 46' 11.18", W073° 36' 01.99"	12.0 W	40	L	AIRNAV2	NO	Disabled		
55	RBS	N40° 34' 54.13", W088° 09' 51.36"	2.0 E	40	L	AIRNAV2	NO	Disabled		
56	REC	N40° 32' 47.25", W078° 44' 49.28"	9.0 W	40	L	AIRNAV2	NO	Disabled		
57	RKA	N42° 27' 58.91", W075° 14' 21.51"	11.0 W	40	L	AIRNAV2	NO	Disabled		
58	RST	N43° 46' 58.45", W092° 35' 49.06"	5.0 E	40	L	AIRNAV2	NO	Disabled		
59	SAM	N38° 29' 06.68", W088° 05' 08.90"	3.0 E	40	L	AIRNAV2	NO	Disabled		
60	SFK	N41° 41' 42.91", W077° 25' 11.66"	8.0 W	40	L	AIRNAV2	NO	Disabled		
61	SLK	N44° 23' 04.42", W074° 12' 16.22"	14.0 W	40	L	AIRNAV2	NO	Disabled		
62	SLT	N41° 30' 45.93", W077° 58' 12.39"	8.0 W	130	H	AIRNAV2	NO	Disabled		
63	TDT	N41° 42' 46.91", W079° 25' 02.17"	9.0 W	40	L	AIRNAV2	NO	Disabled		
64	THS	N39° 55' 59.62", W077° 57' 03.40"	7.0 W	40	L	AIRNAV2	NO	Disabled		
65	UCA	N43° 01' 35.45", W075° 09' 52.28"	12.0 W	40	L	AIRNAV2	NO	Disabled		
66	UIN	N39° 50' 52.35", W091° 16' 44.13"	5.0 E	130	H	AIRNAV2	NO	Disabled		

DME DME Assessment Results for BRWNZ (RNAV) path BRWNZ_SIIPE

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
67	ULW	N42° 05' 39.16", W077° 01' 28.53"	12.0 W	40	L	AIRNAV2	NO	Disabled		
68	VLA	N39° 05' 37.82", W089° 09' 44.08"	4.0 E	40	L	AIRNAV2	NO	Disabled		
69	YRK	N38° 38' 38.88", W082° 58' 42.02"	5.0 W	40	L	AIRNAV2	NO	Disabled		

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	ACO	MFD	PSI	DJB		
0.1	ACO	MFD	DJB			
5.0						
13.6	MFD	CXR	DJB			
22.5	DJB	CXR				
26.4	DJB	CXR	JFN			

Inertial Drift Segments				
#	Start Location	End Location	Length [NM]	
1	N41° 49' 53.91", W082° 10' 03.16"	N41° 44' 40.64", W081° 58' 38.97"	9.9786	
2	N41° 50' 33.90", W082° 06' 11.12"	N41° 49' 32.08", W081° 54' 43.32"	8.604	
3	N42° 01' 09.50", W083° 30' 02.50"	N42° 00' 52.52", W083° 25' 59.74"	3.0196	
4	N41° 26' 07.51", W082° 08' 15.43"	N42° 47' 04.67", W085° 29' 10.01"	169.6125	
5	N42° 02' 26.06", W083° 25' 16.45"	N42° 01' 06.59", W083° 21' 51.08"	2.8671	
6	N41° 35' 02.06", W082° 09' 37.02"	N41° 58' 37.27", W082° 56' 05.98"	41.9308	
7	N41° 31' 54.26", W082° 09' 07.66"	N41° 57' 52.34", W082° 46' 45.45"	38.2472	
8	N42° 41' 35.16", W085° 00' 41.73"	N42° 39' 45.29", W084° 51' 19.08"	7.134	
9	N41° 48' 41.68", W082° 12' 18.67"	N41° 56' 53.14", W084° 16' 57.02"	93.1688	
10	N41° 59' 45.07", W083° 32' 07.77"	N42° 00' 04.96", W083° 26' 37.57"	4.1038	

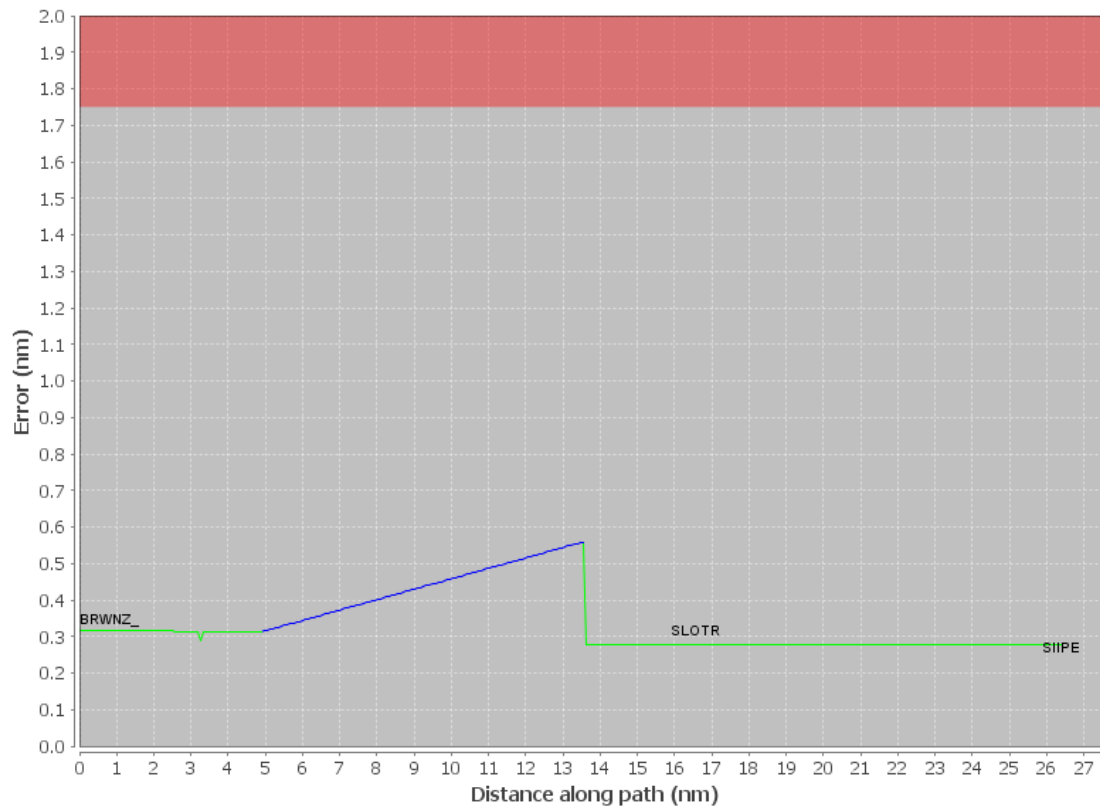
Available DMEs by Waypoints		
Waypoint Before	Waypoint After	DME List
BRWNZ_	SLOTR	PSI, MFD, CXR, ACO, DJB
SLOTR	SIIPE	JFN, MFD, CXR, DJB

DME DME Assessment Results for BRWNZ (RNAV) path BRWNZ_SIIPE

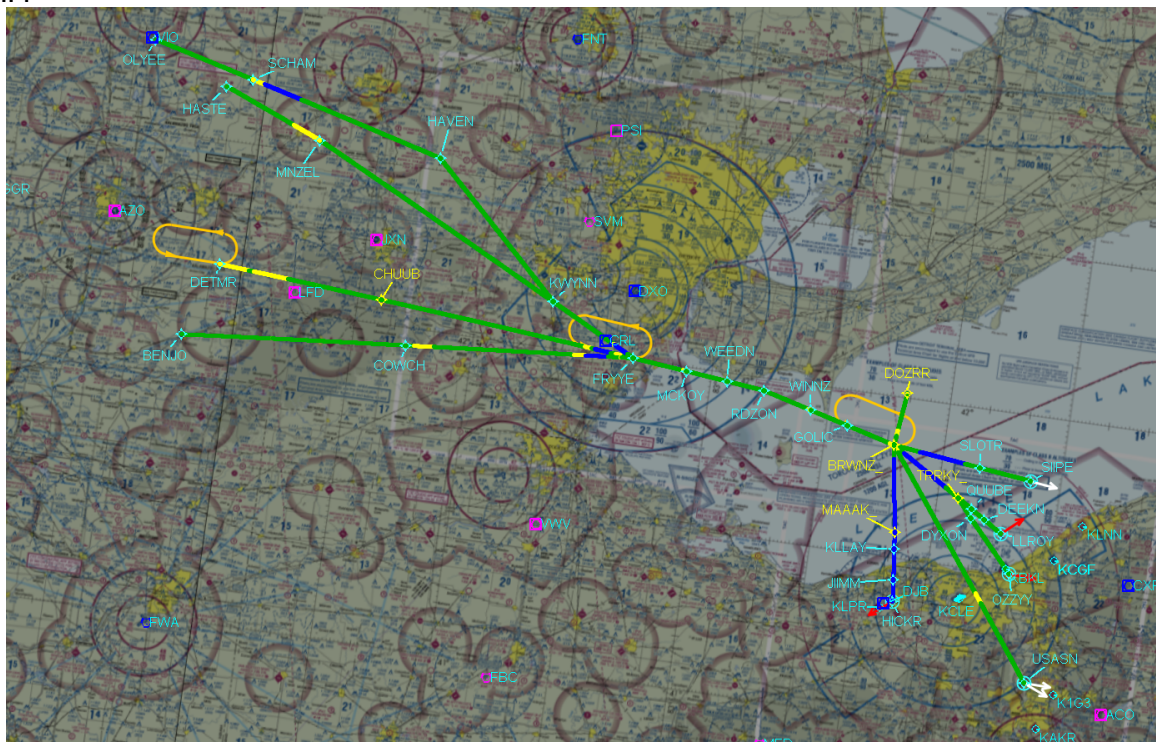
User Data Files								
#	File Name							
1	BRWNZ2.udt							
User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	UDT ESV MFD MFD [AIRNAV2]	N40° 52' 07.00", W082° 35' 27.46"	3.0 W	40	1222	108.8	UDT ESV MFD	
ESV:		Bearing [True]: 325.0° to 43.0° Bearing [Mag]: 328.0° to 46.0°				Arc Distance: Out to 80.0 NM Altitude: 6400.0 to 20000.0 ft		
2	UDT ESV OKK OKK [AIRNAV2]	N40° 31' 40.01", W086° 03' 28.80"	5.0 W	130	825	113.5	UDT ESV OKK	
ESV:		Bearing [True]: 356.0° to 50.0° Bearing [Mag]: 1.0° to 55.0°				Arc Distance: Out to 101.0 NM Altitude: 9900.0 to 20000.0 ft		
3	UDT ESV ACO ACO [AIRNAV2]	N41° 06' 28.45", W081° 12' 05.49"	4.0 W	40	1198	114.4	UDT ESV ACO	
ESV:		Bearing [True]: 303.0° to 321.0° Bearing [Mag]: 307.0° to 325.0°				Arc Distance: Out to 82.0 NM Altitude: 7700.0 to 11000.0 ft		
4	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 259.0° to 268.0° Bearing [Mag]: 262.0° to 271.0°				Arc Distance: Out to 103.0 NM Altitude: 10000.0 to 16000.0 ft		
5	UDT ESV OXI OXI [AIRNAV2]	N41° 19' 19.35", W086° 38' 57.45"	0.0 E	130	690	115.6	UDT ESV OXI	
ESV:		Bearing [True]: 0.0° to 138.0° Bearing [Mag]: 0.0° to 138.0°				Arc Distance: Out to 106.0 NM Altitude: 10000.0 to 20000.0 ft		
6	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 65.0° to 98.0° Bearing [Mag]: 68.0° to 101.0°				Arc Distance: Out to 64.0 NM Altitude: 4000.0 to 16000.0 ft		
7	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 293.0° to 5.0° Bearing [Mag]: 296.0° to 8.0°				Arc Distance: Out to 102.0 NM Altitude: 8500.0 to 16000.0 ft		
8	UDT ESV SVM SVM [AIRNAV2]	N42° 24' 31.11", W083° 35' 38.05"	3.0 W	40	955	114.3	UDT ESV SVM	
ESV:		Bearing [True]: 89.0° to 117.0° Bearing [Mag]: 92.0° to 120.0°				Arc Distance: Out to 73.0 NM Altitude: 6200.0 to 20000.0 ft		
9	UDT ESV CXR CXR [AIRNAV2]	N41° 31' 00.94", W081° 09' 47.47"	5.0 W	130	1317	112.7	UDT ESV CXR	
ESV:		Bearing [True]: 298.0° to 343.0° Bearing [Mag]: 303.0° to 348.0°				Arc Distance: Out to 73.0 NM Altitude: 6200.0 to 16000.0 ft		
10	UDT ESV DXO DXO [AIRNAV2]	N42° 12' 47.29", W083° 21' 59.99"	6.0 W	130	669.3	113.4	UDT ESV DXO	
ESV:		Bearing [True]: 279.0° to 333.0° Bearing [Mag]: 285.0° to 339.0°				Arc Distance: Out to 106.0 NM Altitude: 9700.0 to 20000.0 ft		
11	UDT ESV PSI PSI [AIRNAV2]	N42° 42' 03.09", W083° 31' 57.98"	0.0 E	40	1149	null	UDT ESV PSI	
ESV:		Bearing [True]: 128.0° to 170.0° Bearing [Mag]: 128.0° to 170.0°				Arc Distance: Out to 80.0 NM Altitude: 7400.0 to 11000.0 ft		

DME DME Assessment Results for BRWNZ (RNAV) path BRWNZ__SIPE

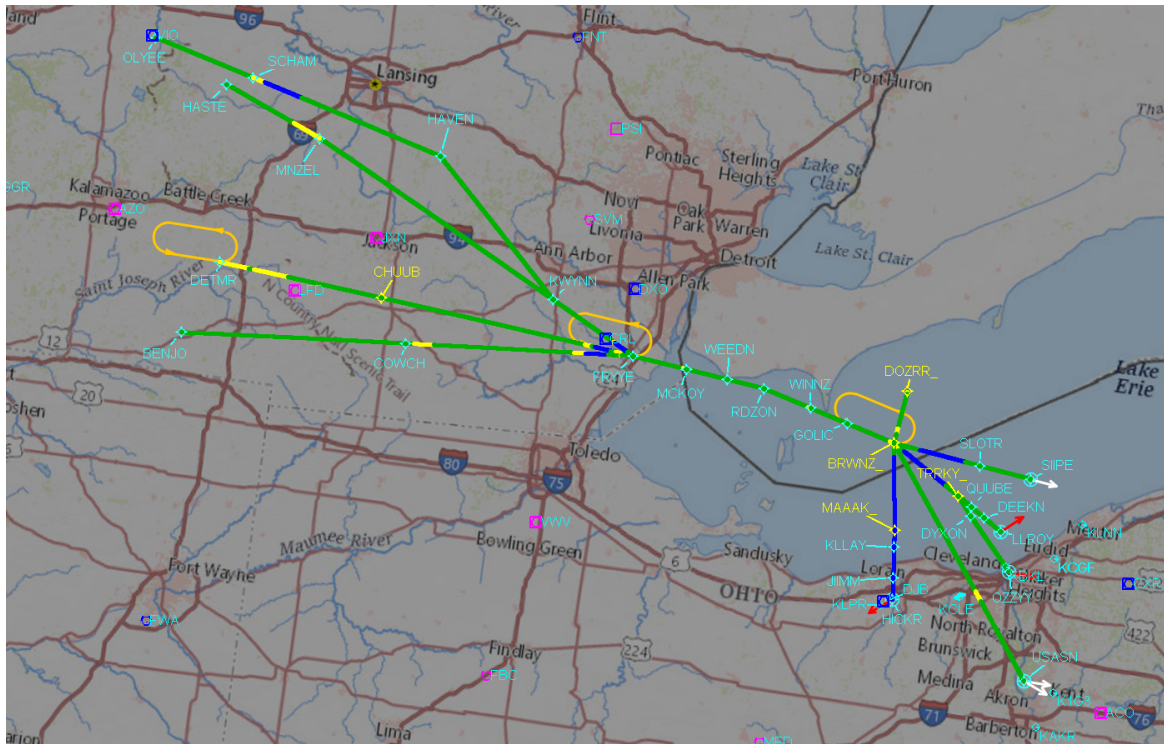
DME Error



Graphic Depiction 1



Graphic Depiction 2



DME DME Assessment Results for BRWNZ (RNAV) path BRWNZ__USASN

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Paul CTR Jackson
Project File:	S:\530View\ZZ4 TT TARGETs Transfer 30 days\CLE-DTW PI Final DME Screening\CLE STAR BRWNZ TWO 20181211.tgs
Output File:	C:\Users\Paul CTR Jackson\Documents\Current Projects\CLE\STAR Amend Nov 2018\BRWNZ2\KCLE BRWNZ (RNAV)_2018-12-18_0309\BRWNZ__USASN\KCLE BRWNZ (RNAV) RNAV STAR_BRWNZ__USASN_2018-12-18_0309.pdf
Procedure Name:	BRWNZ (RNAV)
Software: DmeDmePlugin:	5.5.1
Date/Time:	12/18/2018 03:10 PM CST
Databases:	DTED 0 Max

Failures

No Failures

Notes For Flight Check

None

Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	IAS (kts)	Turn Type	Leg Type
BRWNZ_	WP	N41° 51' 09.02", W082° 12' 47.85"	8000	VNAV	280	FLY_BY	TF
USASN	WP	N41° 10' 28.84", W081° 32' 27.68"	8000	VNAV	280	FLY_OVER	TF

Flyability

Flight Type:	RNAV_STAR
Selected Airport:	KCLE
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 BRWNZ (RNAV) path BRWNZ__USASN

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:	AGC,AUW,BDF,BFD,BRD,BVT,CIP,C KB,CMK,CRI,CTW,DNV,DNY,DWN,E CB,EON,ESL,ETG,EWO,FJC,FLM,FQ M,GFL,GGT,GRV,GSH,HIC,HML,HNK ,HNN,HTO,HUO,IHD,JVL,LAN,LGA,L NR,LVZ,MIP,MKG,MNM,MSS,MXE,O DI,PLL,PLN,PMM,PNT,PWL,RBS,REC ,RKA,RST,SAM,SFK,SLK,SLT,TDT,T HS,UCA,UIN,ULW,VLA,YRK

DME DME Assessment Results for BRWNZ (RNAV) path BRWNZ_USASN

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	DJB	N41° 21' 29.03", W082° 09' 43.09"	5.0 W	130	H	AIRNAV2	NO	Enabled	94.8 %	94.8 %
2	BSV	N40° 44' 26.54", W081° 25' 55.62"	4.0 W	40	L	AIRNAV2	NO	Enabled	25.6 %	25.6 %
3	CXR	N41° 31' 00.94", W081° 09' 47.47"	5.0 W	130	H	AIRNAV2	NO	Enabled	65.3 %	65.3 %
4	PSI	N42° 42' 03.09", W083° 31' 57.98"	0.0 E	40	L	AIRNAV2	NO	Enabled	2.9 %	2.9 %
5	MFD	N40° 52' 07.00", W082° 35' 27.46"	3.0 W	40	L	AIRNAV2	NO	Enabled	73.9 %	73.9 %
6	ACO	N41° 06' 28.45", W081° 12' 05.49"	4.0 W	40	L	AIRNAV2	NO	Enabled	100 %	100 %
7	AGC	N40° 16' 43.12", W080° 02' 27.08"	9.0 W	40	L	AIRNAV2	NO	Disabled		
8	AUW	N44° 50' 48.40", W089° 35' 11.68"	2.0 E	40	L	AIRNAV2	NO	Disabled		
9	BDF	N41° 09' 35.03", W089° 35' 16.34"	0.0 E	130	H	AIRNAV2	NO	Disabled		
10	BFD	N41° 47' 10.99", W078° 37' 09.65"	7.0 W	40	L	AIRNAV2	NO	Disabled		
11	BVT	N40° 33' 22.22", W087° 04' 09.75"	1.0 E	130	H	AIRNAV2	NO	Disabled		
12	CIP	N41° 08' 46.66", W079° 27' 28.71"	6.0 W	40	L	AIRNAV2	NO	Disabled		
13	CKB	N39° 15' 11.58", W080° 16' 04.30"	4.0 W	40	L	AIRNAV2	NO	Disabled		
14	CMK	N41° 16' 48.32", W073° 34' 52.77"	12.0 W	40	L	AIRNAV2	NO	Disabled		
15	CRI	N40° 36' 44.90", W073° 53' 40.00"	11.0 W	25	T	AIRNAV2	NO	Disabled		
16	CTW	N40° 13' 45.15", W081° 28' 35.32"	7.0 W	40	L	AIRNAV2	NO	Disabled		
17	DNV	N40° 17' 37.56", W087° 33' 26.14"	2.0 E	40	L	AIRNAV2	NO	Disabled		
18	DNY	N42° 10' 41.81", W074° 57' 24.99"	11.0 W	40	L	AIRNAV2	NO	Disabled		
19	DWN	N45° 05' 14.87", W094° 27' 13.86"	7.0 E	40	L	AIRNAV2	NO	Disabled		
20	ECB	N38° 09' 30.11", W082° 54' 36.20"	2.0 W	40	L	AIRNAV2	NO	Disabled		
21	EON	N41° 16' 10.68", W087° 47' 27.79"	2.0 E	40	L	AIRNAV2	NO	Disabled		
22	ESL	N39° 13' 31.77", W078° 59' 22.20"	6.0 W	40	L	AIRNAV2	NO	Disabled		
23	ETG	N41° 12' 53.82", W078° 08' 33.92"	10.0 W	130	H	AIRNAV2	NO	Disabled		
24	EWO	N37° 37' 54.52", W085° 40' 33.16"	1.0 E	40	L	AIRNAV2	NO	Disabled		
25	FJC	N40° 43' 36.12", W075° 27' 17.12"	10.0 W	40	L	AIRNAV2	NO	Disabled		
26	FLM	N38° 38' 57.99", W084° 18' 38.17"	4.0 W	130	H	AIRNAV2	NO	Disabled		
27	FQM	N41° 20' 18.81", W076° 46' 29.52"	9.0 W	40	L	AIRNAV2	NO	Disabled		
28	GFL	N43° 20' 30.09", W073° 36' 42.32"	14.0 W	40	L	AIRNAV2	NO	Disabled		
29	GGT	N42° 47' 20.24", W075° 49' 36.29"	11.0 W	40	L	AIRNAV2	NO	Disabled		
30	GRV	N39° 38' 06.11", W079° 03' 01.90"	6.0 W	40	L	AIRNAV2	NO	Disabled		
31	GSH	N41° 31' 30.56", W086° 01' 40.63"	0.0 E	130	H	AIRNAV2	NO	Disabled		
32	HIC	N43° 34' 29.47", W085° 42' 58.18"	1.0 W	40	L	AIRNAV2	NO	Disabled		
33	HML	N48° 52' 09.09", W097° 07' 01.51"	9.0 E	130	H	AIRNAV2	NO	Disabled		

DME DME Assessment Results for BRWNZ (RNAV) path BRWNZ_USASN

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
34	HNK	N42° 03' 47.01", W075° 18' 58.62"	11.0 W	130	H	AIRNAV2	NO	Disabled		
35	HNN	N38° 45' 14.85", W082° 01' 34.20"	3.0 W	130	H	AIRNAV2	NO	Disabled		
36	HTO	N40° 55' 08.38", W072° 19' 00.14"	13.0 W	130	H	AIRNAV2	NO	Disabled		
37	HUO	N41° 24' 34.87", W074° 35' 29.74"	11.0 W	130	H	AIRNAV2	NO	Disabled		
38	IHD	N39° 58' 27.27", W079° 21' 30.12"	6.0 W	40	L	AIRNAV2	NO	Disabled		
39	JVL	N42° 33' 28.83", W089° 06' 18.93"	3.0 E	40	L	AIRNAV2	NO	Disabled		
40	LAN	N42° 43' 02.62", W084° 41' 51.03"	0.0 E	40	L	AIRNAV2	NO	Disabled		
41	LGA	N40° 47' 01.38", W073° 52' 06.96"	12.0 W	40	L	AIRNAV2	NO	Disabled		
42	LNR	N43° 17' 39.85", W090° 07' 59.33"	0.0 E	40	L	AIRNAV2	NO	Disabled		
43	LVZ	N41° 16' 22.10", W075° 41' 22.07"	10.0 W	40	L	AIRNAV2	NO	Disabled		
44	MIP	N41° 01' 24.21", W076° 39' 55.04"	9.0 W	40	L	AIRNAV2	NO	Disabled		
45	MKG	N43° 10' 09.31", W086° 02' 21.76"	1.0 W	40	L	AIRNAV2	NO	Disabled		
46	MNM	N45° 10' 48.58", W087° 38' 49.83"	0.0 E	40	L	AIRNAV2	NO	Disabled		
47	MSS	N44° 54' 51.92", W074° 43' 21.78"	14.0 W	130	H	AIRNAV2	NO	Disabled		
48	MXE	N39° 55' 04.98", W075° 40' 14.96"	9.0 W	40	L	AIRNAV2	NO	Disabled		
49	ODI	N43° 54' 44.38", W091° 28' 03.06"	1.0 E	130	H	AIRNAV2	NO	Disabled		
50	PLL	N41° 57' 56.31", W089° 31' 27.19"	3.0 E	40	L	AIRNAV2	NO	Disabled		
51	PLN	N45° 37' 50.33", W084° 39' 50.79"	6.0 W	40	L	AIRNAV2	NO	Disabled		
52	PMM	N42° 27' 57.73", W086° 06' 17.32"	0.0 E	130	H	AIRNAV2	NO	Disabled		
53	PNT	N40° 49' 16.32", W088° 44' 00.63"	3.0 E	40	L	AIRNAV2	NO	Disabled		
54	PWL	N41° 46' 11.18", W073° 36' 01.99"	12.0 W	40	L	AIRNAV2	NO	Disabled		
55	RBS	N40° 34' 54.13", W088° 09' 51.36"	2.0 E	40	L	AIRNAV2	NO	Disabled		
56	REC	N40° 32' 47.25", W078° 44' 49.28"	9.0 W	40	L	AIRNAV2	NO	Disabled		
57	RKA	N42° 27' 58.91", W075° 14' 21.51"	11.0 W	40	L	AIRNAV2	NO	Disabled		
58	RST	N43° 46' 58.45", W092° 35' 49.06"	5.0 E	40	L	AIRNAV2	NO	Disabled		
59	SAM	N38° 29' 06.68", W088° 05' 08.90"	3.0 E	40	L	AIRNAV2	NO	Disabled		
60	SFK	N41° 41' 42.91", W077° 25' 11.66"	8.0 W	40	L	AIRNAV2	NO	Disabled		
61	SLK	N44° 23' 04.42", W074° 12' 16.22"	14.0 W	40	L	AIRNAV2	NO	Disabled		
62	SLT	N41° 30' 45.93", W077° 58' 12.39"	8.0 W	130	H	AIRNAV2	NO	Disabled		
63	TDT	N41° 42' 46.91", W079° 25' 02.17"	9.0 W	40	L	AIRNAV2	NO	Disabled		
64	THS	N39° 55' 59.62", W077° 57' 03.40"	7.0 W	40	L	AIRNAV2	NO	Disabled		
65	UCA	N43° 01' 35.45", W075° 09' 52.28"	12.0 W	40	L	AIRNAV2	NO	Disabled		
66	UIN	N39° 50' 52.35", W091° 16' 44.13"	5.0 E	130	H	AIRNAV2	NO	Disabled		

DME DME Assessment Results for BRWNZ (RNAV) path BRWNZ_USASN

DME/DME (Continued)

DMEs Used

#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
67	ULW	N42° 05' 39.16", W077° 01' 28.53"	12.0 W	40	L	AIRNAV2	NO	Disabled		
68	VLA	N39° 05' 37.82", W089° 09' 44.08"	4.0 E	40	L	AIRNAV2	NO	Disabled		
69	YRK	N38° 38' 38.88", W082° 58' 42.02"	5.0 W	40	L	AIRNAV2	NO	Disabled		

Flight Check DME Selection

Distance [NM]	Selected DMEs					Alternate
0.0	ACO	MFD	PSI	DJB		
1.6	ACO	MFD	DJB			
17.6	ACO	MFD	DJB	CXR		
25.6	ACO	DJB	CXR			
25.7	MFD	ACO	DJB	CXR		
33.7	MFD	ACO	CXR			
36.2	MFD	ACO	CXR	DJB		
37.7	BSV	CXR	DJB	ACO		

Inertial Drift Segments

#	Start Location	End Location	Length [NM]
1	N41° 49' 53.91", W082° 10' 03.16"	N41° 44' 40.64", W081° 58' 38.97"	9.9786
2	N41° 50' 33.90", W082° 06' 11.12"	N41° 49' 32.08", W081° 54' 43.32"	8.604
3	N42° 01' 09.50", W083° 30' 02.50"	N42° 00' 52.52", W083° 25' 59.74"	3.0196
4	N41° 26' 07.51", W082° 08' 15.43"	N42° 47' 04.67", W085° 29' 10.01"	169.6125
5	N42° 02' 26.06", W083° 25' 16.45"	N42° 01' 06.59", W083° 21' 51.08"	2.8671
6	N41° 35' 02.06", W082° 09' 37.02"	N41° 58' 37.27", W082° 56' 05.98"	41.9308
7	N41° 31' 54.26", W082° 09' 07.66"	N41° 57' 52.34", W082° 46' 45.45"	38.2472
8	N42° 41' 35.16", W085° 00' 41.73"	N42° 39' 45.29", W084° 51' 19.08"	7.134
9	N41° 48' 41.68", W082° 12' 18.67"	N41° 56' 53.14", W084° 16' 57.02"	93.1688
10	N41° 59' 45.07", W083° 32' 07.77"	N42° 00' 04.96", W083° 26' 37.57"	4.1038

Available DMEs by Waypoints

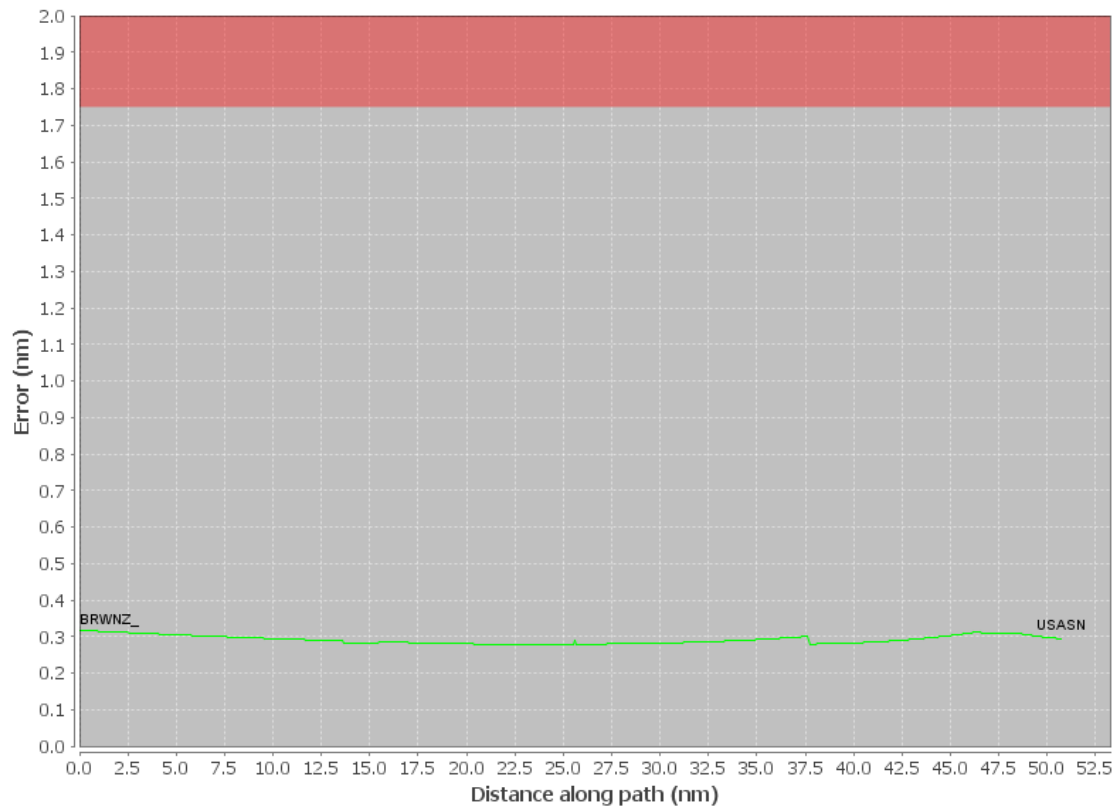
Waypoint Before	Waypoint After	DME List
BRWNZ_	USASN	BSV, PSI, MFD, CXR, ACO, DJB

DME DME Assessment Results for BRWNZ (RNAV) path BRWNZ_USASN

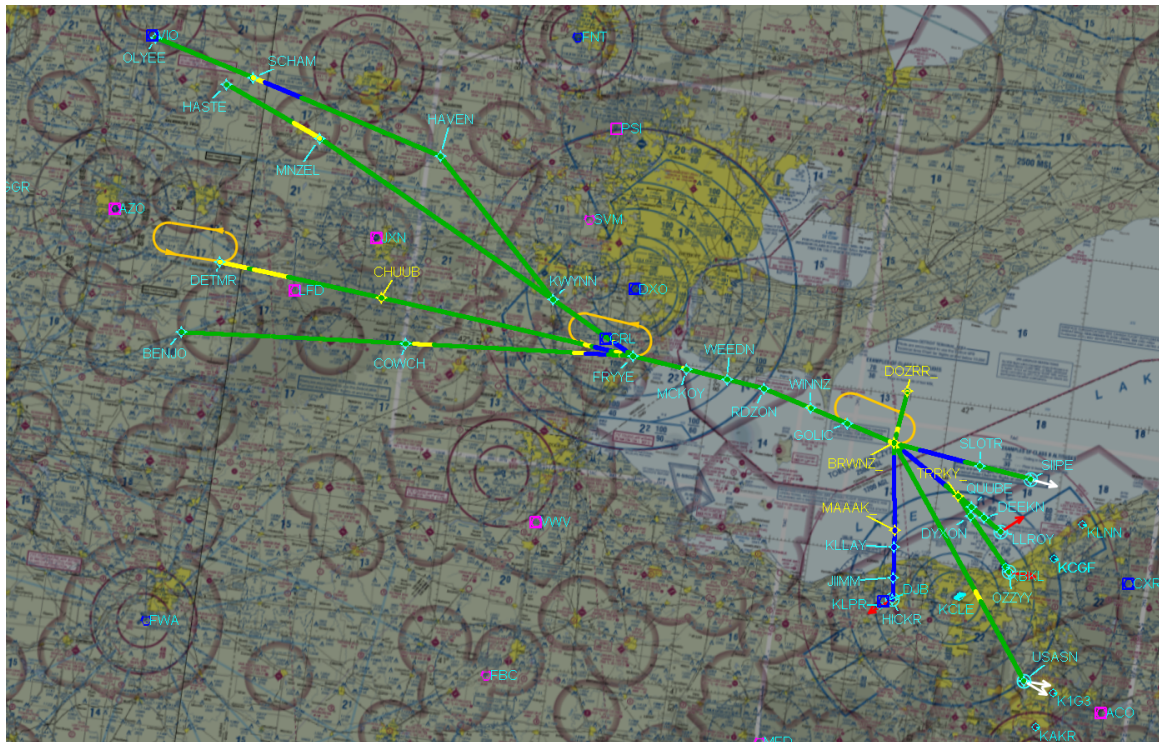
User Data Files								
#	File Name							
1	BRWNZ2.udt							
User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	UDT ESV MFD MFD [AIRNAV2]	N40° 52' 07.00", W082° 35' 27.46"	3.0 W	40	1222	108.8	UDT ESV MFD	
ESV:		Bearing [True]: 325.0° to 43.0° Bearing [Mag]: 328.0° to 46.0°				Arc Distance: Out to 80.0 NM Altitude: 6400.0 to 20000.0 ft		
2	UDT ESV OKK OKK [AIRNAV2]	N40° 31' 40.01", W086° 03' 28.80"	5.0 W	130	825	113.5	UDT ESV OKK	
ESV:		Bearing [True]: 356.0° to 50.0° Bearing [Mag]: 1.0° to 55.0°				Arc Distance: Out to 101.0 NM Altitude: 9900.0 to 20000.0 ft		
3	UDT ESV ACO ACO [AIRNAV2]	N41° 06' 28.45", W081° 12' 05.49"	4.0 W	40	1198	114.4	UDT ESV ACO	
ESV:		Bearing [True]: 303.0° to 321.0° Bearing [Mag]: 307.0° to 325.0°				Arc Distance: Out to 82.0 NM Altitude: 7700.0 to 11000.0 ft		
4	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 259.0° to 268.0° Bearing [Mag]: 262.0° to 271.0°				Arc Distance: Out to 103.0 NM Altitude: 10000.0 to 16000.0 ft		
5	UDT ESV OXI OXI [AIRNAV2]	N41° 19' 19.35", W086° 38' 57.45"	0.0 E	130	690	115.6	UDT ESV OXI	
ESV:		Bearing [True]: 0.0° to 138.0° Bearing [Mag]: 0.0° to 138.0°				Arc Distance: Out to 106.0 NM Altitude: 10000.0 to 20000.0 ft		
6	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 65.0° to 98.0° Bearing [Mag]: 68.0° to 101.0°				Arc Distance: Out to 64.0 NM Altitude: 4000.0 to 16000.0 ft		
7	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 293.0° to 5.0° Bearing [Mag]: 296.0° to 8.0°				Arc Distance: Out to 102.0 NM Altitude: 8500.0 to 16000.0 ft		
8	UDT ESV SVM SVM [AIRNAV2]	N42° 24' 31.11", W083° 35' 38.05"	3.0 W	40	955	114.3	UDT ESV SVM	
ESV:		Bearing [True]: 89.0° to 117.0° Bearing [Mag]: 92.0° to 120.0°				Arc Distance: Out to 73.0 NM Altitude: 6200.0 to 20000.0 ft		
9	UDT ESV CXR CXR [AIRNAV2]	N41° 31' 00.94", W081° 09' 47.47"	5.0 W	130	1317	112.7	UDT ESV CXR	
ESV:		Bearing [True]: 298.0° to 343.0° Bearing [Mag]: 303.0° to 348.0°				Arc Distance: Out to 73.0 NM Altitude: 6200.0 to 16000.0 ft		
10	UDT ESV DXO DXO [AIRNAV2]	N42° 12' 47.29", W083° 21' 59.99"	6.0 W	130	669.3	113.4	UDT ESV DXO	
ESV:		Bearing [True]: 279.0° to 333.0° Bearing [Mag]: 285.0° to 339.0°				Arc Distance: Out to 106.0 NM Altitude: 9700.0 to 20000.0 ft		
11	UDT ESV PSI PSI [AIRNAV2]	N42° 42' 03.09", W083° 31' 57.98"	0.0 E	40	1149	null	UDT ESV PSI	
ESV:		Bearing [True]: 128.0° to 170.0° Bearing [Mag]: 128.0° to 170.0°				Arc Distance: Out to 80.0 NM Altitude: 7400.0 to 11000.0 ft		

DME DME Assessment Results for BRWNZ (RNAV) path BRWNZ__USASN

DME Error

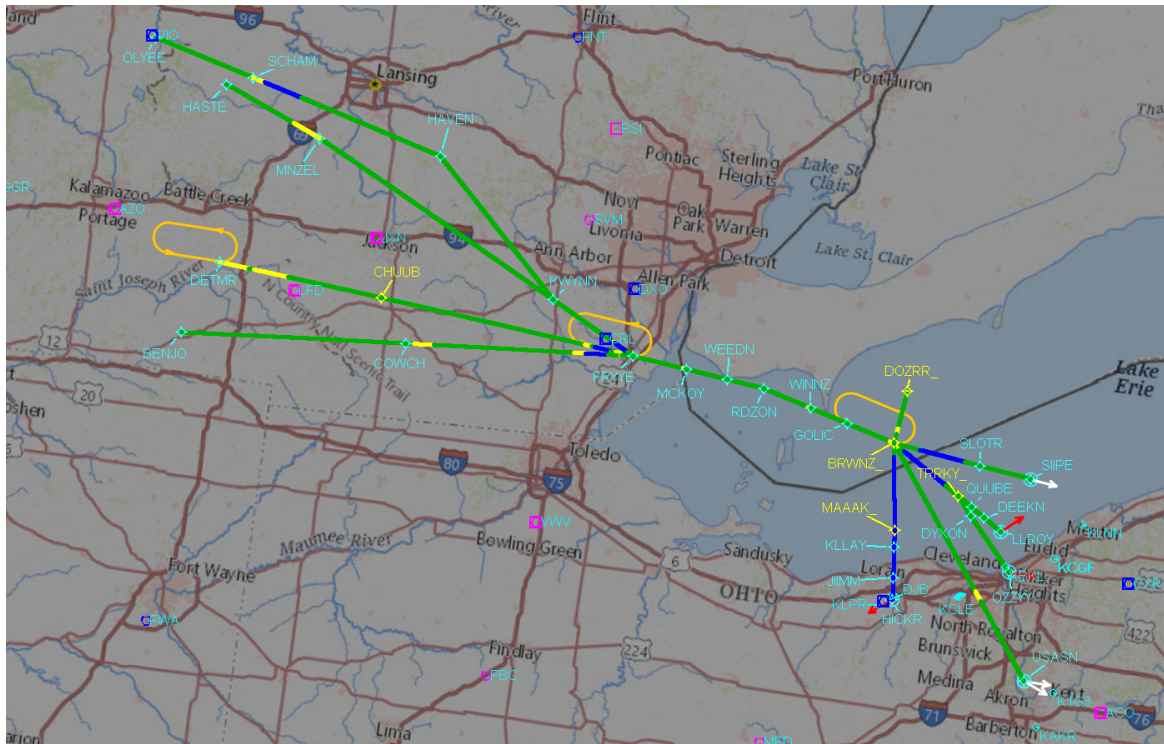


Graphic Depiction 1



DME DME Assessment Results for BRWNZ (RNAV) path BRWNZ_USASN

Graphic Depiction 2



DME DME Assessment Results for BRWNZ (RNAV) path DETMR_FRYYE

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Paul CTR Jackson
Project File:	S:\530View\ZZ4 TT TARGETs Transfer 30 days\CLE-DTW PI Final DME Screening\CLE STAR BRWNZ TWO 20181211.tgs
Output File:	C:\Users\Paul CTR Jackson\Documents\Current Projects\CLE\STAR Amend Nov 2018\BRWNZ2\KCLE BRWNZ (RNAV)_2018-12-18_0309\DETMF_FRYYE\KCLE BRWNZ (RNAV) RNAV STAR_DETMF_FRYYE_2018-12-18_0309.pdf
Procedure Name:	BRWNZ (RNAV)
Software: DmeDmePlugin:	5.5.1
Date/Time:	12/18/2018 03:09 PM CST
Databases:	DTED 0 Max

Failures

No Failures

Notes For Flight Check

None

Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	IAS (kts)	Turn Type	Leg Type
DETMF	WP	N42° 07' 08.54", W085° 05' 38.99"	15000	VNAV	280	FLY_BY	TF
CHUUB	WP	N42° 04' 43.37", W084° 24' 21.31"	15000	VNAV	280	FLY_BY	TF
FRYYE	WP	N42° 00' 27.89", W083° 20' 11.22"	15000	VNAV	280	FLY_BY	TF

Flyability

Flight Type:	RNAV_STAR
Selected Airport:	KCLE
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 BRWNZ (RNAV) path DETMR_FRYYE

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:	AGC,AUW,BDF,BFD,BRD,BVT,CIP,C KB,CMK,CRI,CTW,DNV,DNY,DWN,E CB,EON,ESL,ETG,EWO,FJC,FLM,FQ M,GFL,GGT,GRV,GSH,HIC,HML,HNK ,HNN,HTO,HUO,IHD,JVL,LAN,LGA,L NR,LVZ,MIP,MKG,MNM,MSS,MXE,O DI,PLL,PLN,PMM,PNT,PWL,RBS,REC ,RKA,RST,SAM,SFK,SLK,SLT,TDT,T HS,UCA,UIN,ULW,VLA,YRK

DME DME Assessment Results for BRWNZ (RNAV) path DETMR_FRYYE

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	JXN	N42° 15' 33.26", W084° 27' 30.78"	5.0 W	40	L	AIRNAV2	NO	Enabled	78.3 %	78.3 %
2	DXO	N42° 12' 47.29", W083° 21' 59.99"	6.0 W	130	H	AIRNAV2	NO	Enabled	44.6 %	44.6 %
3	SVM	N42° 24' 31.11", W083° 35' 38.05"	3.0 W	40	L	AIRNAV2	NO	Enabled	51 %	51 %
4	VWV	N41° 27' 05.34", W083° 38' 19.30"	2.0 W	40	L	AIRNAV2	NO	Enabled	22.3 %	22.3 %
5	OXI	N41° 19' 19.35", W086° 38' 57.45"	0.0 E	130	H	AIRNAV2	NO	Enabled	21.8 %	21.8 %
6	AZO	N42° 14' 13.15", W085° 33' 11.35"	1.0 W	40	L	AIRNAV2	NO	Enabled	22.9 %	22.9 %
7	LFD	N42° 03' 44.96", W084° 45' 54.48"	5.0 W	40	L	AIRNAV2	NO	Enabled	54.7 %	54.7 %
8	MFD	N40° 52' 07.00", W082° 35' 27.46"	3.0 W	40	L	AIRNAV2	NO	Enabled	0.1 %	0.1 %
9	CRL	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	H	AIRNAV2	NO	Enabled	89 %	89 %
10	AGC	N40° 16' 43.12", W080° 02' 27.08"	9.0 W	40	L	AIRNAV2	NO	Disabled		
11	AUW	N44° 50' 48.40", W089° 35' 11.68"	2.0 E	40	L	AIRNAV2	NO	Disabled		
12	BDF	N41° 09' 35.03", W089° 35' 16.34"	0.0 E	130	H	AIRNAV2	NO	Disabled		
13	BFD	N41° 47' 10.99", W078° 37' 09.65"	7.0 W	40	L	AIRNAV2	NO	Disabled		
14	BVT	N40° 33' 22.22", W087° 04' 09.75"	1.0 E	130	H	AIRNAV2	NO	Disabled		
15	CIP	N41° 08' 46.66", W079° 27' 28.71"	6.0 W	40	L	AIRNAV2	NO	Disabled		
16	CKB	N39° 15' 11.58", W080° 16' 04.30"	4.0 W	40	L	AIRNAV2	NO	Disabled		
17	CMK	N41° 16' 48.32", W073° 34' 52.77"	12.0 W	40	L	AIRNAV2	NO	Disabled		
18	CRI	N40° 36' 44.90", W073° 53' 40.00"	11.0 W	25	T	AIRNAV2	NO	Disabled		
19	CTW	N40° 13' 45.15", W081° 28' 35.32"	7.0 W	40	L	AIRNAV2	NO	Disabled		
20	DNV	N40° 17' 37.56", W087° 33' 26.14"	2.0 E	40	L	AIRNAV2	NO	Disabled		
21	DNY	N42° 10' 41.81", W074° 57' 24.99"	11.0 W	40	L	AIRNAV2	NO	Disabled		
22	DWN	N45° 05' 14.87", W094° 27' 13.86"	7.0 E	40	L	AIRNAV2	NO	Disabled		
23	ECB	N38° 09' 30.11", W082° 54' 36.20"	2.0 W	40	L	AIRNAV2	NO	Disabled		
24	EON	N41° 16' 10.68", W087° 47' 27.79"	2.0 E	40	L	AIRNAV2	NO	Disabled		
25	ESL	N39° 13' 31.77", W078° 59' 22.20"	6.0 W	40	L	AIRNAV2	NO	Disabled		
26	ETG	N41° 12' 53.82", W078° 08' 33.92"	10.0 W	130	H	AIRNAV2	NO	Disabled		
27	EWO	N37° 37' 54.52", W085° 40' 33.16"	1.0 E	40	L	AIRNAV2	NO	Disabled		
28	FJC	N40° 43' 36.12", W075° 27' 17.12"	10.0 W	40	L	AIRNAV2	NO	Disabled		
29	FLM	N38° 38' 57.99", W084° 18' 38.17"	4.0 W	130	H	AIRNAV2	NO	Disabled		
30	FQM	N41° 20' 18.81", W076° 46' 29.52"	9.0 W	40	L	AIRNAV2	NO	Disabled		
31	GFL	N43° 20' 30.09", W073° 36' 42.32"	14.0 W	40	L	AIRNAV2	NO	Disabled		
32	GGT	N42° 47' 20.24", W075° 49' 36.29"	11.0 W	40	L	AIRNAV2	NO	Disabled		
33	GRV	N39° 38' 06.11", W079° 03' 01.90"	6.0 W	40	L	AIRNAV2	NO	Disabled		

DME DME Assessment Results for BRWNZ (RNAV) path DETMR_FRYYE

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
34	GSH	N41° 31' 30.56", W086° 01' 40.63"	0.0 E	130	H	AIRNAV2	NO	Disabled		
35	HIC	N43° 34' 29.47", W085° 42' 58.18"	1.0 W	40	L	AIRNAV2	NO	Disabled		
36	HML	N48° 52' 09.09", W097° 07' 01.51"	9.0 E	130	H	AIRNAV2	NO	Disabled		
37	HNK	N42° 03' 47.01", W075° 18' 58.62"	11.0 W	130	H	AIRNAV2	NO	Disabled		
38	HNN	N38° 45' 14.85", W082° 01' 34.20"	3.0 W	130	H	AIRNAV2	NO	Disabled		
39	HTO	N40° 55' 08.38", W072° 19' 00.14"	13.0 W	130	H	AIRNAV2	NO	Disabled		
40	HUO	N41° 24' 34.87", W074° 35' 29.74"	11.0 W	130	H	AIRNAV2	NO	Disabled		
41	IHD	N39° 58' 27.27", W079° 21' 30.12"	6.0 W	40	L	AIRNAV2	NO	Disabled		
42	JVL	N42° 33' 28.83", W089° 06' 18.93"	3.0 E	40	L	AIRNAV2	NO	Disabled		
43	LAN	N42° 43' 02.62", W084° 41' 51.03"	0.0 E	40	L	AIRNAV2	NO	Disabled		
44	LGA	N40° 47' 01.38", W073° 52' 06.96"	12.0 W	40	L	AIRNAV2	NO	Disabled		
45	LNR	N43° 17' 39.85", W090° 07' 59.33"	0.0 E	40	L	AIRNAV2	NO	Disabled		
46	LVZ	N41° 16' 22.10", W075° 41' 22.07"	10.0 W	40	L	AIRNAV2	NO	Disabled		
47	MIP	N41° 01' 24.21", W076° 39' 55.04"	9.0 W	40	L	AIRNAV2	NO	Disabled		
48	MKG	N43° 10' 09.31", W086° 02' 21.76"	1.0 W	40	L	AIRNAV2	NO	Disabled		
49	MNM	N45° 10' 48.58", W087° 38' 49.83"	0.0 E	40	L	AIRNAV2	NO	Disabled		
50	MSS	N44° 54' 51.92", W074° 43' 21.78"	14.0 W	130	H	AIRNAV2	NO	Disabled		
51	MXE	N39° 55' 04.98", W075° 40' 14.96"	9.0 W	40	L	AIRNAV2	NO	Disabled		
52	ODI	N43° 54' 44.38", W091° 28' 03.06"	1.0 E	130	H	AIRNAV2	NO	Disabled		
53	PLL	N41° 57' 56.31", W089° 31' 27.19"	3.0 E	40	L	AIRNAV2	NO	Disabled		
54	PLN	N45° 37' 50.33", W084° 39' 50.79"	6.0 W	40	L	AIRNAV2	NO	Disabled		
55	PMM	N42° 27' 57.73", W086° 06' 17.32"	0.0 E	130	H	AIRNAV2	NO	Disabled		
56	PNT	N40° 49' 16.32", W088° 44' 00.63"	3.0 E	40	L	AIRNAV2	NO	Disabled		
57	PWL	N41° 46' 11.18", W073° 36' 01.99"	12.0 W	40	L	AIRNAV2	NO	Disabled		
58	RBS	N40° 34' 54.13", W088° 09' 51.36"	2.0 E	40	L	AIRNAV2	NO	Disabled		
59	REC	N40° 32' 47.25", W078° 44' 49.28"	9.0 W	40	L	AIRNAV2	NO	Disabled		
60	RKA	N42° 27' 58.91", W075° 14' 21.51"	11.0 W	40	L	AIRNAV2	NO	Disabled		
61	RST	N43° 46' 58.45", W092° 35' 49.06"	5.0 E	40	L	AIRNAV2	NO	Disabled		
62	SAM	N38° 29' 06.68", W088° 05' 08.90"	3.0 E	40	L	AIRNAV2	NO	Disabled		
63	SFK	N41° 41' 42.91", W077° 25' 11.66"	8.0 W	40	L	AIRNAV2	NO	Disabled		
64	SLK	N44° 23' 04.42", W074° 12' 16.22"	14.0 W	40	L	AIRNAV2	NO	Disabled		
65	SLT	N41° 30' 45.93", W077° 58' 12.39"	8.0 W	130	H	AIRNAV2	NO	Disabled		
66	TDT	N41° 42' 46.91", W079° 25' 02.17"	9.0 W	40	L	AIRNAV2	NO	Disabled		

DME DME Assessment Results for BRWNZ (RNAV) path DETMR_FRYYE

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
67	THS	N39° 55' 59.62", W077° 57' 03.40"	7.0 W	40	L	AIRNAV2	NO	Disabled		
68	UCA	N43° 01' 35.45", W075° 09' 52.28"	12.0 W	40	L	AIRNAV2	NO	Disabled		
69	UIN	N39° 50' 52.35", W091° 16' 44.13"	5.0 E	130	H	AIRNAV2	NO	Disabled		
70	ULW	N42° 05' 39.16", W077° 01' 28.53"	12.0 W	40	L	AIRNAV2	NO	Disabled		
71	VLA	N39° 05' 37.82", W089° 09' 44.08"	4.0 E	40	L	AIRNAV2	NO	Disabled		
72	YRK	N38° 38' 38.88", W082° 58' 42.02"	5.0 W	40	L	AIRNAV2	NO	Disabled		

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	OXI	AZO	LFD	JXN	CRL	
5.5	OXI	AZO				
6.5	OXI	LFD	JXN	AZO	CRL	
12.2	LFD	JXN	AZO			
13.0	OXI	AZO				
15.0	CRL	JXN	OXI	AZO		
17.4	AZO	JXN	CRL	LFD	OXI	
18.1	CRL	JXN	LFD			
18.6	CRL	JXN				
18.7	AZO	JXN	CRL	LFD	OXI	
18.8	CRL	JXN				
24.4	CRL	JXN	LFD			
35.5	SVM	JXN	LFD	CRL		
39.6	SVM	JXN	DXO	LFD	CRL	
54.6	SVM	JXN	CRL	DXO		
57.6	SVM	JXN	VWV	CRL	DXO	
65.0	VWV	CRL	SVM	DXO		
70.9	SVM	DXO				
71.5						
74.5	VWV	SVM				
75.4	MFD	VWV	DXO	SVM		
75.6	VWV	CRL	DXO	SVM		

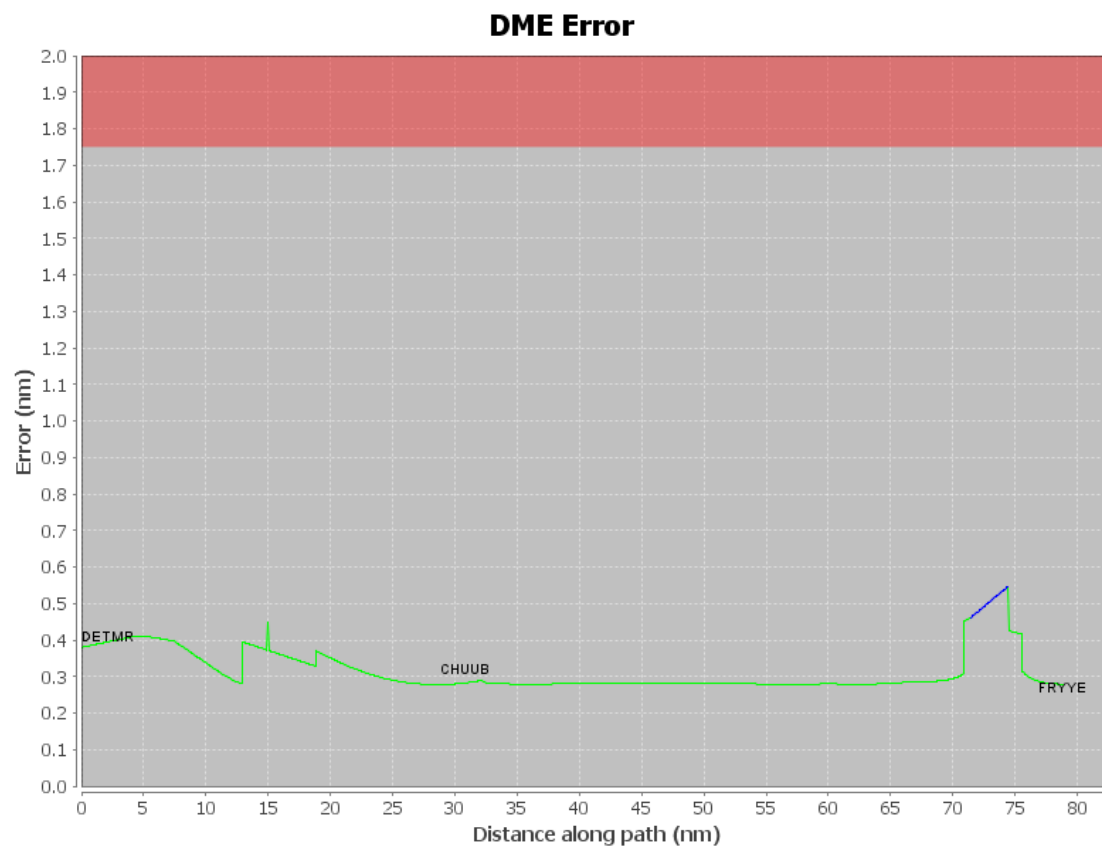
Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N41° 49' 53.91", W082° 10' 03.16"	N41° 44' 40.64", W081° 58' 38.97"	9.9786
2	N41° 50' 33.90", W082° 06' 11.12"	N41° 49' 32.08", W081° 54' 43.32"	8.604
3	N42° 01' 09.50", W083° 30' 02.50"	N42° 00' 52.52", W083° 25' 59.74"	3.0196
4	N41° 26' 07.51", W082° 08' 15.43"	N42° 47' 04.67", W085° 29' 10.01"	169.6125
5	N42° 02' 26.06", W083° 25' 16.45"	N42° 01' 06.59", W083° 21' 51.08"	2.8671
6	N41° 35' 02.06", W082° 09' 37.02"	N41° 58' 37.27", W082° 56' 05.98"	41.9308
7	N41° 31' 54.26", W082° 09' 07.66"	N41° 57' 52.34", W082° 46' 45.45"	38.2472
8	N42° 41' 35.16", W085° 00' 41.73"	N42° 39' 45.29", W084° 51' 19.08"	7.134
9	N41° 48' 41.68", W082° 12' 18.67"	N41° 56' 53.14", W084° 16' 57.02"	93.1688
10	N41° 59' 45.07", W083° 32' 07.77"	N42° 00' 04.96", W083° 26' 37.57"	4.1038

Available DMEs by Waypoints		
Waypoint Before	Waypoint After	DME List
DETMR	CHUUB	JXN, OXI, AZO, LFD, CRL
CHUUB	FRYYE	JXN, VWV, DXO, MFD, LFD, SVM, CRL

DME DME Assessment Results for BRWNZ (RNAV) path DETMR_FRYYE

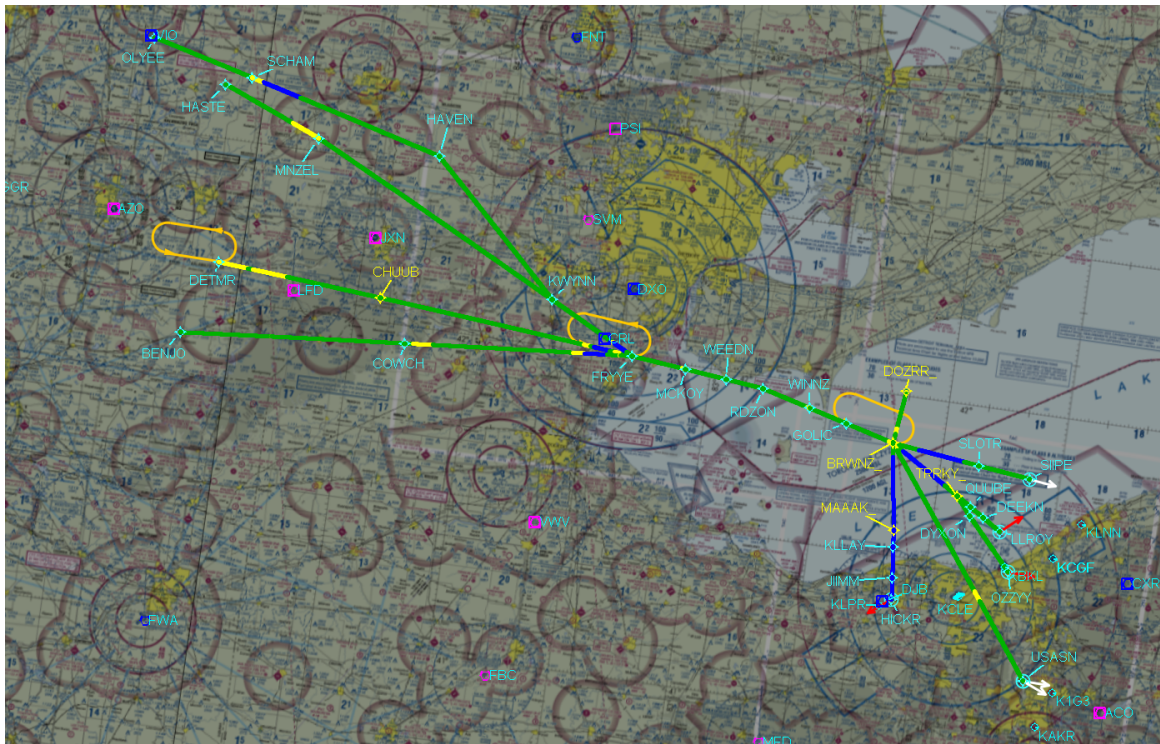
User Data Files								
#	File Name							
1	BRWNZ2.udt							
User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	UDT ESV MFD MFD [AIRNAV2]	N40° 52' 07.00", W082° 35' 27.46"	3.0 W	40	1222	108.8	UDT ESV MFD	
ESV:		Bearing [True]: 325.0° to 43.0° Bearing [Mag]: 328.0° to 46.0°				Arc Distance: Out to 80.0 NM Altitude: 6400.0 to 20000.0 ft		
2	UDT ESV OKK OKK [AIRNAV2]	N40° 31' 40.01", W086° 03' 28.80"	5.0 W	130	825	113.5	UDT ESV OKK	
ESV:		Bearing [True]: 356.0° to 50.0° Bearing [Mag]: 1.0° to 55.0°				Arc Distance: Out to 101.0 NM Altitude: 9900.0 to 20000.0 ft		
3	UDT ESV ACO ACO [AIRNAV2]	N41° 06' 28.45", W081° 12' 05.49"	4.0 W	40	1198	114.4	UDT ESV ACO	
ESV:		Bearing [True]: 303.0° to 321.0° Bearing [Mag]: 307.0° to 325.0°				Arc Distance: Out to 82.0 NM Altitude: 7700.0 to 11000.0 ft		
4	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 259.0° to 268.0° Bearing [Mag]: 262.0° to 271.0°				Arc Distance: Out to 103.0 NM Altitude: 10000.0 to 16000.0 ft		
5	UDT ESV OXI OXI [AIRNAV2]	N41° 19' 19.35", W086° 38' 57.45"	0.0 E	130	690	115.6	UDT ESV OXI	
ESV:		Bearing [True]: 0.0° to 138.0° Bearing [Mag]: 0.0° to 138.0°				Arc Distance: Out to 106.0 NM Altitude: 10000.0 to 20000.0 ft		
6	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 65.0° to 98.0° Bearing [Mag]: 68.0° to 101.0°				Arc Distance: Out to 64.0 NM Altitude: 4000.0 to 16000.0 ft		
7	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 293.0° to 5.0° Bearing [Mag]: 296.0° to 8.0°				Arc Distance: Out to 102.0 NM Altitude: 8500.0 to 16000.0 ft		
8	UDT ESV SVM SVM [AIRNAV2]	N42° 24' 31.11", W083° 35' 38.05"	3.0 W	40	955	114.3	UDT ESV SVM	
ESV:		Bearing [True]: 89.0° to 117.0° Bearing [Mag]: 92.0° to 120.0°				Arc Distance: Out to 73.0 NM Altitude: 6200.0 to 20000.0 ft		
9	UDT ESV CXR CXR [AIRNAV2]	N41° 31' 00.94", W081° 09' 47.47"	5.0 W	130	1317	112.7	UDT ESV CXR	
ESV:		Bearing [True]: 298.0° to 343.0° Bearing [Mag]: 303.0° to 348.0°				Arc Distance: Out to 73.0 NM Altitude: 6200.0 to 16000.0 ft		
10	UDT ESV DXO DXO [AIRNAV2]	N42° 12' 47.29", W083° 21' 59.99"	6.0 W	130	669.3	113.4	UDT ESV DXO	
ESV:		Bearing [True]: 279.0° to 333.0° Bearing [Mag]: 285.0° to 339.0°				Arc Distance: Out to 106.0 NM Altitude: 9700.0 to 20000.0 ft		
11	UDT ESV PSI PSI [AIRNAV2]	N42° 42' 03.09", W083° 31' 57.98"	0.0 E	40	1149	null	UDT ESV PSI	
ESV:		Bearing [True]: 128.0° to 170.0° Bearing [Mag]: 128.0° to 170.0°				Arc Distance: Out to 80.0 NM Altitude: 7400.0 to 11000.0 ft		

DME DME Assessment Results for BRWNZ (RNAV) path DETMR_FRYYE



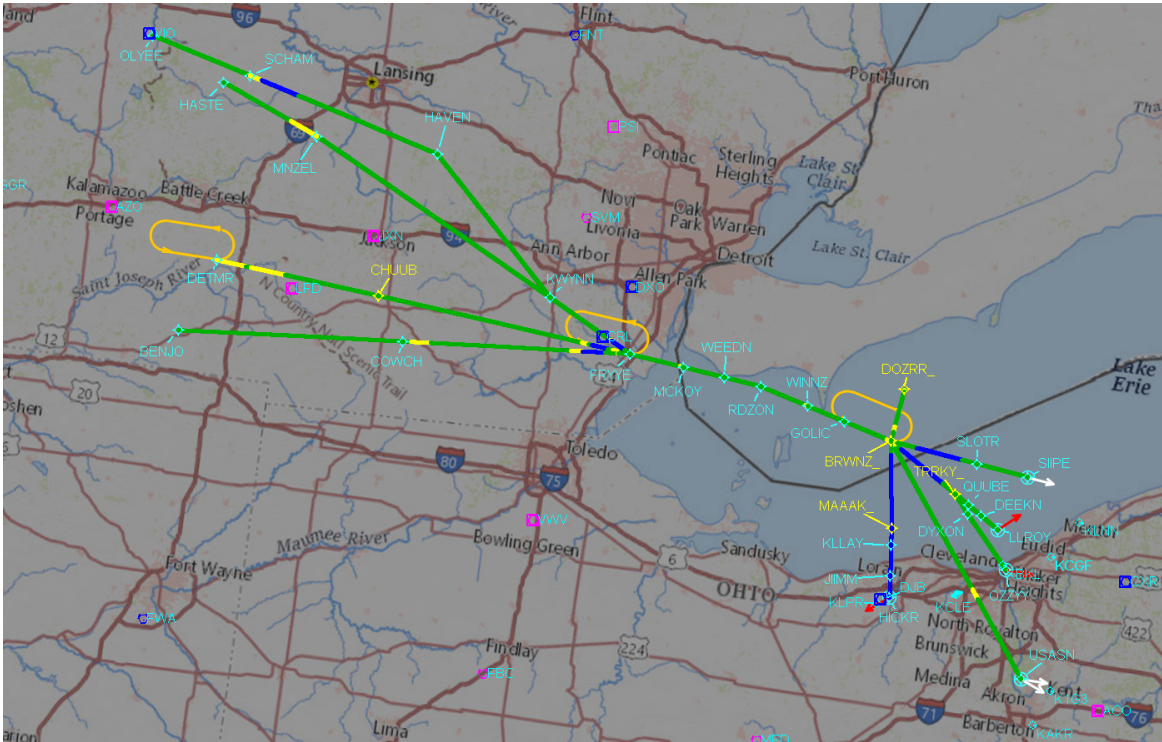
DME DME Assessment Results for BRWNZ (RNAV) path DETMR_FRYYE

Graphic Depiction 1



DME DME Assessment Results for BRWNZ (RNAV) path DETMR_FRYYE

Graphic Depiction 2



DME DME Assessment Results for BRWNZ (RNAV) path DOZRR__LLROY

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Paul CTR Jackson
Project File:	S:\530View\ZZ4 TT TARGETs Transfer 30 days\CLE-DTW PI Final DME Screening\CLE STAR BRWNZ TWO 20181211.tgs
Output File:	C:\Users\Paul CTR Jackson\Documents\Current Projects\CLE\STAR Amend Nov 2018\BRWNZ2\KCLE BRWNZ (RNAV)_2018-12-18_0309\DOZRR__LLROY\KCLE BRWNZ (RNAV) RNAV STAR_DOZRR__LLROY_2018-12-18_0309.pdf
Procedure Name:	BRWNZ (RNAV)
Software: DmeDmePlugin:	5.5.1
Date/Time:	12/18/2018 03:09 PM CST
Databases:	DTED 0 Max

Failures

No Failures

Notes For Flight Check

None

Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	IAS (kts)	Turn Type	Leg Type
DOZRR_	WP	N42° 01' 05.17", W082° 11' 13.94"	8000	VNAV	280	FLY_BY	TF
BRWNZ_	WP	N41° 51' 09.02", W082° 12' 47.85"	8000	VNAV	280	FLY_BY	TF
TRRKY_	WP	N41° 43' 00.84", W081° 55' 01.90"	6000	VNAV	280	FLY_BY	TF
QUUBE	WP	N41° 41' 19.29", W081° 51' 29.06"	5000	VNAV	280	FLY_BY	TF
DEEKN	WP	N41° 39' 39.34", W081° 47' 53.74"	4000	VNAV	280	FLY_BY	TF
LLROY	WP	N41° 37' 30.61", W081° 43' 22.58"	4000	VNAV	210	FLY_OVER	TF

Flyability

Flight Type:	RNAV_STAR
Selected Airport:	KCLE
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 BRWNZ (RNAV) path DOZRR__LLROY

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:	AGC,AUW,BDF,BFD,BRD,BVT,CIP,C KB,CMK,CRI,CTW,DNV,DNY,DWN,E CB,EON,ESL,ETG,EWO,FJC,FLM,FQ M,GFL,GGT,GRV,GSH,HIC,HML,HNK ,HNN,HTO,HUO,IHD,JVL,LAN,LGA,L NR,LVZ,MIP,MKG,MNM,MSS,MXE,O DI,PLL,PLN,PMM,PNT,PWL,RBS,REC ,RKA,RST,SAM,SFK,SLK,SLT,TDT,T HS,UCA,UIN,ULW,VLA,YRK

DME DME Assessment Results for BRWNZ (RNAV) path DOZRR_LLROY

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	DJB	N41° 21' 29.03", W082° 09' 43.09"	5.0 W	130	H	AIRNAV2	NO	Enabled	71.7 %	71.7 %
2	CXR	N41° 31' 00.94", W081° 09' 47.47"	5.0 W	130	H	AIRNAV2	NO	Enabled	49 %	49 %
3	SVM	N42° 24' 31.11", W083° 35' 38.05"	3.0 W	40	L	AIRNAV2	NO	Enabled	22.7 %	22.7 %
4	PSI	N42° 42' 03.09", W083° 31' 57.98"	0.0 E	40	L	AIRNAV2	NO	Enabled	7.1 %	7.1 %
5	MFD	N40° 52' 07.00", W082° 35' 27.46"	3.0 W	40	L	AIRNAV2	NO	Enabled	34.3 %	34.4 %
6	ACO	N41° 06' 28.45", W081° 12' 05.49"	4.0 W	40	L	AIRNAV2	NO	Enabled	22.7 %	22.7 %
7	CRL	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	H	AIRNAV2	NO	Enabled	17.7 %	17.7 %
8	AGC	N40° 16' 43.12", W080° 02' 27.08"	9.0 W	40	L	AIRNAV2	NO	Disabled		
9	AUW	N44° 50' 48.40", W089° 35' 11.68"	2.0 E	40	L	AIRNAV2	NO	Disabled		
10	BDF	N41° 09' 35.03", W089° 35' 16.34"	0.0 E	130	H	AIRNAV2	NO	Disabled		
11	BFD	N41° 47' 10.99", W078° 37' 09.65"	7.0 W	40	L	AIRNAV2	NO	Disabled		
12	BVT	N40° 33' 22.22", W087° 04' 09.75"	1.0 E	130	H	AIRNAV2	NO	Disabled		
13	CIP	N41° 08' 46.66", W079° 27' 28.71"	6.0 W	40	L	AIRNAV2	NO	Disabled		
14	CKB	N39° 15' 11.58", W080° 16' 04.30"	4.0 W	40	L	AIRNAV2	NO	Disabled		
15	CMK	N41° 16' 48.32", W073° 34' 52.77"	12.0 W	40	L	AIRNAV2	NO	Disabled		
16	CRI	N40° 36' 44.90", W073° 53' 40.00"	11.0 W	25	T	AIRNAV2	NO	Disabled		
17	CTW	N40° 13' 45.15", W081° 28' 35.32"	7.0 W	40	L	AIRNAV2	NO	Disabled		
18	DNV	N40° 17' 37.56", W087° 33' 26.14"	2.0 E	40	L	AIRNAV2	NO	Disabled		
19	DNY	N42° 10' 41.81", W074° 57' 24.99"	11.0 W	40	L	AIRNAV2	NO	Disabled		
20	DWN	N45° 05' 14.87", W094° 27' 13.86"	7.0 E	40	L	AIRNAV2	NO	Disabled		
21	ECB	N38° 09' 30.11", W082° 54' 36.20"	2.0 W	40	L	AIRNAV2	NO	Disabled		
22	EON	N41° 16' 10.68", W087° 47' 27.79"	2.0 E	40	L	AIRNAV2	NO	Disabled		
23	ESL	N39° 13' 31.77", W078° 59' 22.20"	6.0 W	40	L	AIRNAV2	NO	Disabled		
24	ETG	N41° 12' 53.82", W078° 08' 33.92"	10.0 W	130	H	AIRNAV2	NO	Disabled		
25	EWO	N37° 37' 54.52", W085° 40' 33.16"	1.0 E	40	L	AIRNAV2	NO	Disabled		
26	FJC	N40° 43' 36.12", W075° 27' 17.12"	10.0 W	40	L	AIRNAV2	NO	Disabled		
27	FLM	N38° 38' 57.99", W084° 18' 38.17"	4.0 W	130	H	AIRNAV2	NO	Disabled		
28	FQM	N41° 20' 18.81", W076° 46' 29.52"	9.0 W	40	L	AIRNAV2	NO	Disabled		
29	GFL	N43° 20' 30.09", W073° 36' 42.32"	14.0 W	40	L	AIRNAV2	NO	Disabled		
30	GGT	N42° 47' 20.24", W075° 49' 36.29"	11.0 W	40	L	AIRNAV2	NO	Disabled		
31	GRV	N39° 38' 06.11", W079° 03' 01.90"	6.0 W	40	L	AIRNAV2	NO	Disabled		
32	GSH	N41° 31' 30.56", W086° 01' 40.63"	0.0 E	130	H	AIRNAV2	NO	Disabled		
33	HIC	N43° 34' 29.47", W085° 42' 58.18"	1.0 W	40	L	AIRNAV2	NO	Disabled		

DME DME Assessment Results for BRWNZ (RNAV) path DOZRR_LLROY

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
34	HML	N48° 52' 09.09", W097° 07' 01.51"	9.0 E	130	H	AIRNAV2	NO	Disabled		
35	HNK	N42° 03' 47.01", W075° 18' 58.62"	11.0 W	130	H	AIRNAV2	NO	Disabled		
36	HNN	N38° 45' 14.85", W082° 01' 34.20"	3.0 W	130	H	AIRNAV2	NO	Disabled		
37	HTO	N40° 55' 08.38", W072° 19' 00.14"	13.0 W	130	H	AIRNAV2	NO	Disabled		
38	HUO	N41° 24' 34.87", W074° 35' 29.74"	11.0 W	130	H	AIRNAV2	NO	Disabled		
39	IHD	N39° 58' 27.27", W079° 21' 30.12"	6.0 W	40	L	AIRNAV2	NO	Disabled		
40	JVL	N42° 33' 28.83", W089° 06' 18.93"	3.0 E	40	L	AIRNAV2	NO	Disabled		
41	LAN	N42° 43' 02.62", W084° 41' 51.03"	0.0 E	40	L	AIRNAV2	NO	Disabled		
42	LGA	N40° 47' 01.38", W073° 52' 06.96"	12.0 W	40	L	AIRNAV2	NO	Disabled		
43	LNR	N43° 17' 39.85", W090° 07' 59.33"	0.0 E	40	L	AIRNAV2	NO	Disabled		
44	LVZ	N41° 16' 22.10", W075° 41' 22.07"	10.0 W	40	L	AIRNAV2	NO	Disabled		
45	MIP	N41° 01' 24.21", W076° 39' 55.04"	9.0 W	40	L	AIRNAV2	NO	Disabled		
46	MKG	N43° 10' 09.31", W086° 02' 21.76"	1.0 W	40	L	AIRNAV2	NO	Disabled		
47	MNM	N45° 10' 48.58", W087° 38' 49.83"	0.0 E	40	L	AIRNAV2	NO	Disabled		
48	MSS	N44° 54' 51.92", W074° 43' 21.78"	14.0 W	130	H	AIRNAV2	NO	Disabled		
49	MXE	N39° 55' 04.98", W075° 40' 14.96"	9.0 W	40	L	AIRNAV2	NO	Disabled		
50	ODI	N43° 54' 44.38", W091° 28' 03.06"	1.0 E	130	H	AIRNAV2	NO	Disabled		
51	PLL	N41° 57' 56.31", W089° 31' 27.19"	3.0 E	40	L	AIRNAV2	NO	Disabled		
52	PLN	N45° 37' 50.33", W084° 39' 50.79"	6.0 W	40	L	AIRNAV2	NO	Disabled		
53	PMM	N42° 27' 57.73", W086° 06' 17.32"	0.0 E	130	H	AIRNAV2	NO	Disabled		
54	PNT	N40° 49' 16.32", W088° 44' 00.63"	3.0 E	40	L	AIRNAV2	NO	Disabled		
55	PWL	N41° 46' 11.18", W073° 36' 01.99"	12.0 W	40	L	AIRNAV2	NO	Disabled		
56	RBS	N40° 34' 54.13", W088° 09' 51.36"	2.0 E	40	L	AIRNAV2	NO	Disabled		
57	REC	N40° 32' 47.25", W078° 44' 49.28"	9.0 W	40	L	AIRNAV2	NO	Disabled		
58	RKA	N42° 27' 58.91", W075° 14' 21.51"	11.0 W	40	L	AIRNAV2	NO	Disabled		
59	RST	N43° 46' 58.45", W092° 35' 49.06"	5.0 E	40	L	AIRNAV2	NO	Disabled		
60	SAM	N38° 29' 06.68", W088° 05' 08.90"	3.0 E	40	L	AIRNAV2	NO	Disabled		
61	SFK	N41° 41' 42.91", W077° 25' 11.66"	8.0 W	40	L	AIRNAV2	NO	Disabled		
62	SLK	N44° 23' 04.42", W074° 12' 16.22"	14.0 W	40	L	AIRNAV2	NO	Disabled		
63	SLT	N41° 30' 45.93", W077° 58' 12.39"	8.0 W	130	H	AIRNAV2	NO	Disabled		
64	TDT	N41° 42' 46.91", W079° 25' 02.17"	9.0 W	40	L	AIRNAV2	NO	Disabled		
65	THS	N39° 55' 59.62", W077° 57' 03.40"	7.0 W	40	L	AIRNAV2	NO	Disabled		
66	UCA	N43° 01' 35.45", W075° 09' 52.28"	12.0 W	40	L	AIRNAV2	NO	Disabled		

DME DME Assessment Results for BRWNZ (RNAV) path DOZRR_LLROY

DME/DME (Continued)

DMEs Used

#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
67	UIN	N39° 50' 52.35", W091° 16' 44.13"	5.0 E	130	H	AIRNAV2	NO	Disabled		
68	ULW	N42° 05' 39.16", W077° 01' 28.53"	12.0 W	40	L	AIRNAV2	NO	Disabled		
69	VLA	N39° 05' 37.82", W089° 09' 44.08"	4.0 E	40	L	AIRNAV2	NO	Disabled		
70	YRK	N38° 38' 38.88", W082° 58' 42.02"	5.0 W	40	L	AIRNAV2	NO	Disabled		

Flight Check DME Selection

Distance [NM]	Selected DMEs					Alternate
0.0	SVM	MFD	CRL	CXR		
0.1	CRL	DJB	SVM	MFD	CXR	
4.2	CRL	DJB	SVM	MFD	ACO	
6.4	SVM	MFD	DJB	ACO		
7.2	SVM	MFD	PSI	DJB	ACO	
8.2	ACO	MFD	DJB			
10.1	ACO	MFD	PSI	DJB		
11.7	ACO	MFD	DJB			
12.4						
22.4	DJB	CXR	MFD			
22.5	DJB	CXR				

Inertial Drift Segments

#	Start Location	End Location	Length [NM]
1	N41° 49' 53.91", W082° 10' 03.16"	N41° 44' 40.64", W081° 58' 38.97"	9.9786
2	N41° 50' 33.90", W082° 06' 11.12"	N41° 49' 32.08", W081° 54' 43.32"	8.604
3	N42° 01' 09.50", W083° 30' 02.50"	N42° 00' 52.52", W083° 25' 59.74"	3.0196
4	N41° 26' 07.51", W082° 08' 15.43"	N42° 47' 04.67", W085° 29' 10.01"	169.6125
5	N42° 02' 26.06", W083° 25' 16.45"	N42° 01' 06.59", W083° 21' 51.08"	2.8671
6	N41° 35' 02.06", W082° 09' 37.02"	N41° 58' 37.27", W082° 56' 05.98"	41.9308
7	N41° 31' 54.26", W082° 09' 07.66"	N41° 57' 52.34", W082° 46' 45.45"	38.2472
8	N42° 41' 35.16", W085° 00' 41.73"	N42° 39' 45.29", W084° 51' 19.08"	7.134
9	N41° 48' 41.68", W082° 12' 18.67"	N41° 56' 53.14", W084° 16' 57.02"	93.1688
10	N41° 59' 45.07", W083° 32' 07.77"	N42° 00' 04.96", W083° 26' 37.57"	4.1038

Available DMEs by Waypoints

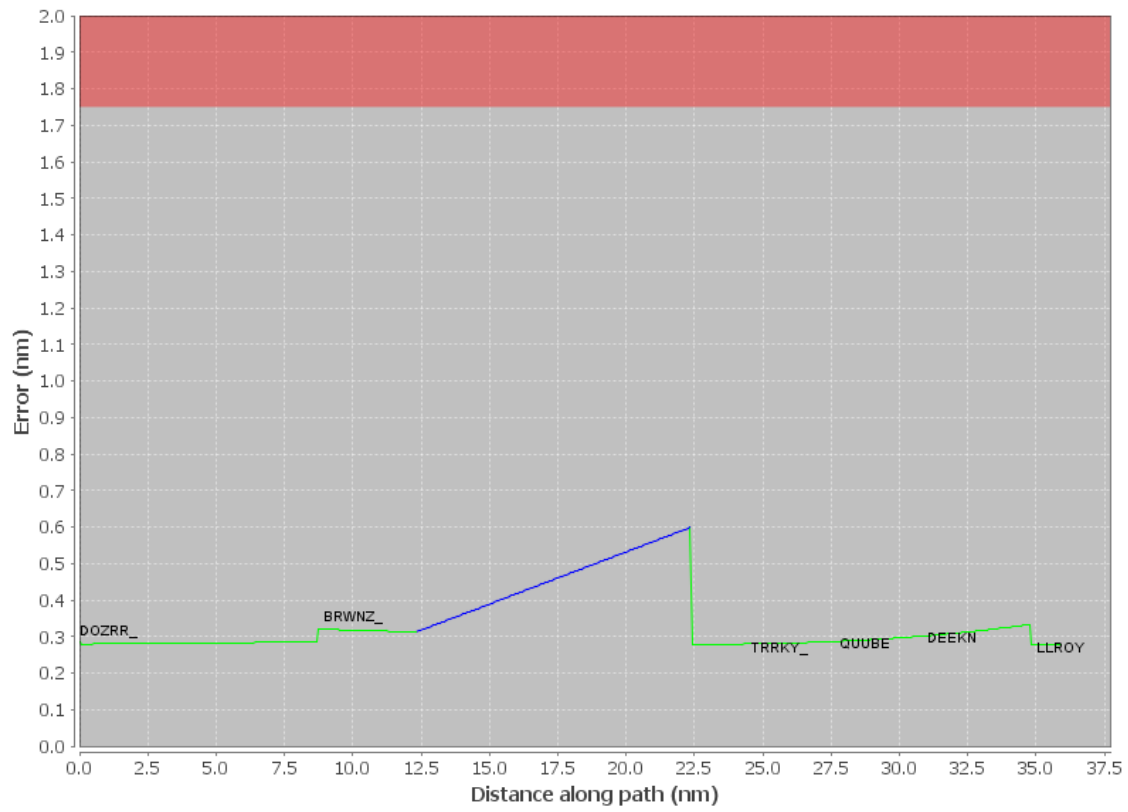
Waypoint Before	Waypoint After	DME List
DOZRR_	BRWNZ_	PSI, MFD, SVM, CRL, CXR, DJB, ACO
BRWNZ_	TRRKY_	PSI, MFD, CXR, ACO, DJB
TRRKY_	QUUBE	CXR, DJB
QUUBE	DEEKN	CXR, DJB
DEEKN	LLROY	CXR, DJB

DME DME Assessment Results for BRWNZ (RNAV) path DOZRR_LLROY

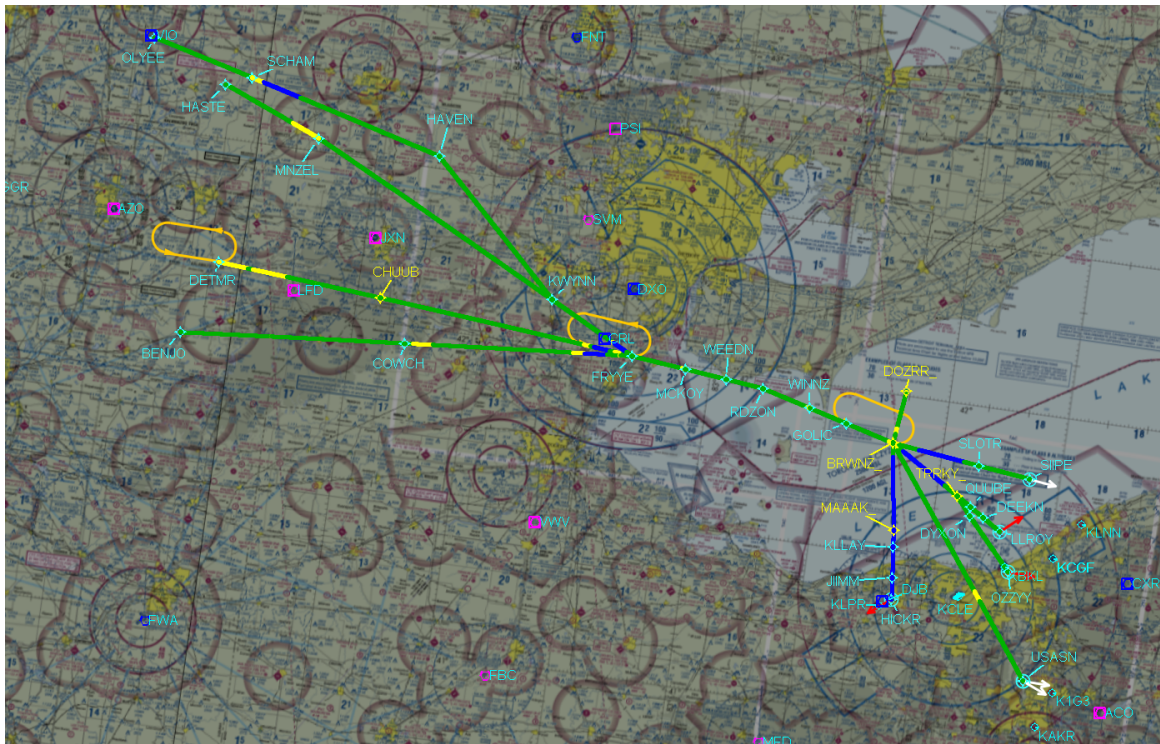
User Data Files								
#	File Name							
1	BRWNZ2.udt							
User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	UDT ESV MFD MFD [AIRNAV2]	N40° 52' 07.00", W082° 35' 27.46"	3.0 W	40	1222	108.8	UDT ESV MFD	
ESV:		Bearing [True]: 325.0° to 43.0° Bearing [Mag]: 328.0° to 46.0°				Arc Distance: Out to 80.0 NM Altitude: 6400.0 to 20000.0 ft		
2	UDT ESV OKK OKK [AIRNAV2]	N40° 31' 40.01", W086° 03' 28.80"	5.0 W	130	825	113.5	UDT ESV OKK	
ESV:		Bearing [True]: 356.0° to 50.0° Bearing [Mag]: 1.0° to 55.0°				Arc Distance: Out to 101.0 NM Altitude: 9900.0 to 20000.0 ft		
3	UDT ESV ACO ACO [AIRNAV2]	N41° 06' 28.45", W081° 12' 05.49"	4.0 W	40	1198	114.4	UDT ESV ACO	
ESV:		Bearing [True]: 303.0° to 321.0° Bearing [Mag]: 307.0° to 325.0°				Arc Distance: Out to 82.0 NM Altitude: 7700.0 to 11000.0 ft		
4	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 259.0° to 268.0° Bearing [Mag]: 262.0° to 271.0°				Arc Distance: Out to 103.0 NM Altitude: 10000.0 to 16000.0 ft		
5	UDT ESV OXI OXI [AIRNAV2]	N41° 19' 19.35", W086° 38' 57.45"	0.0 E	130	690	115.6	UDT ESV OXI	
ESV:		Bearing [True]: 0.0° to 138.0° Bearing [Mag]: 0.0° to 138.0°				Arc Distance: Out to 106.0 NM Altitude: 10000.0 to 20000.0 ft		
6	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 65.0° to 98.0° Bearing [Mag]: 68.0° to 101.0°				Arc Distance: Out to 64.0 NM Altitude: 4000.0 to 16000.0 ft		
7	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 293.0° to 5.0° Bearing [Mag]: 296.0° to 8.0°				Arc Distance: Out to 102.0 NM Altitude: 8500.0 to 16000.0 ft		
8	UDT ESV SVM SVM [AIRNAV2]	N42° 24' 31.11", W083° 35' 38.05"	3.0 W	40	955	114.3	UDT ESV SVM	
ESV:		Bearing [True]: 89.0° to 117.0° Bearing [Mag]: 92.0° to 120.0°				Arc Distance: Out to 73.0 NM Altitude: 6200.0 to 20000.0 ft		
9	UDT ESV CXR CXR [AIRNAV2]	N41° 31' 00.94", W081° 09' 47.47"	5.0 W	130	1317	112.7	UDT ESV CXR	
ESV:		Bearing [True]: 298.0° to 343.0° Bearing [Mag]: 303.0° to 348.0°				Arc Distance: Out to 73.0 NM Altitude: 6200.0 to 16000.0 ft		
10	UDT ESV DXO DXO [AIRNAV2]	N42° 12' 47.29", W083° 21' 59.99"	6.0 W	130	669.3	113.4	UDT ESV DXO	
ESV:		Bearing [True]: 279.0° to 333.0° Bearing [Mag]: 285.0° to 339.0°				Arc Distance: Out to 106.0 NM Altitude: 9700.0 to 20000.0 ft		
11	UDT ESV PSI PSI [AIRNAV2]	N42° 42' 03.09", W083° 31' 57.98"	0.0 E	40	1149	null	UDT ESV PSI	
ESV:		Bearing [True]: 128.0° to 170.0° Bearing [Mag]: 128.0° to 170.0°				Arc Distance: Out to 80.0 NM Altitude: 7400.0 to 11000.0 ft		

DME DME Assessment Results for BRWNZ (RNAV) path DOZRR__LLROY

DME Error

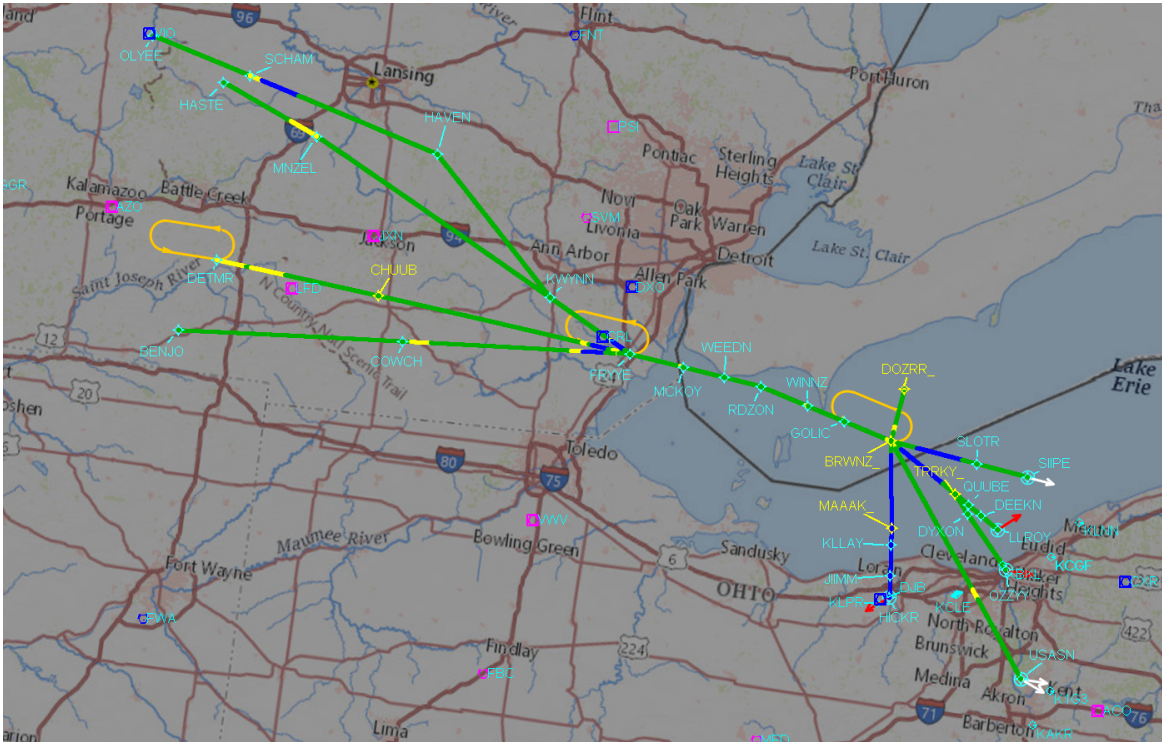


Graphic Depiction 1



DME DME Assessment Results for BRWNZ (RNAV) path DOZRR_LLROY

Graphic Depiction 2



DME DME Assessment Results for BRWNZ (RNAV) path HASTE_KWYNN

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Paul CTR Jackson
Project File:	S:\530View\ZZ4 TT TARGETs Transfer 30 days\CLE-DTW PI Final DME Screening\CLE STAR BRWNZ TWO 20181211.tgs
Output File:	C:\Users\Paul CTR Jackson\Documents\Current Projects\CLE\STAR Amend Nov 2018\BRWNZ2\KCLE BRWNZ (RNAV)_2018-12-18_0309\HASTE_KWYNN\KCLE BRWNZ (RNAV) RNAV STAR_HASTE_KWYNN_2018-12-18_0309.pdf
Procedure Name:	BRWNZ (RNAV)
Software: DmeDmePlugin:	5.5.1
Date/Time:	12/18/2018 03:09 PM CST
Databases:	DTED 0 Max

Failures

No Failures

Notes For Flight Check

None

Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	IAS (kts)	Turn Type	Leg Type
HASTE	WP	N42° 40' 15.43", W085° 10' 02.50"	15000	VNAV	280	FLY_BY	TF
MNZEL	WP	N42° 32' 40.02", W084° 45' 05.69"	15000	VNAV	280	FLY_BY	TF
KWYNN	WP	N42° 08' 49.08", W083° 41' 52.01"	15000	VNAV	280	FLY_BY	TF

Flyability

Flight Type:	RNAV_STAR
Selected Airport:	KCLE
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 BRWNZ (RNAV) path HASTE_KWYNN

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:	AGC,AUW,BDF,BFD,BRD,BVT,CIP,C KB,CMK,CRI,CTW,DNV,DNY,DWN,E CB,EON,ESL,ETG,EWO,FJC,FLM,FQ M,GFL,GGT,GRV,GSH,HIC,HML,HNK ,HNN,HTO,HUO,IHD,JVL,LAN,LGA,L NR,LVZ,MIP,MKG,MNM,MSS,MXE,O DI,PLL,PLN,PMM,PNT,PWL,RBS,REC ,RKA,RST,SAM,SFK,SLK,SLT,TDT,T HS,UCA,UIN,ULW,VLA,YRK

DME DME Assessment Results for BRWNZ (RNAV) path HASTE_KWYNN

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	VIO	N42° 47' 12.18", W085° 29' 49.46"	4.0 W	130	H	AIRNAV2	NO	Enabled	32.5 %	32.5 %
2	DXO	N42° 12' 47.29", W083° 21' 59.99"	6.0 W	130	H	AIRNAV2	NO	Enabled	72.8 %	72.8 %
3	JXN	N42° 15' 33.26", W084° 27' 30.78"	5.0 W	40	L	AIRNAV2	NO	Enabled	88 %	88 %
4	SVM	N42° 24' 31.11", W083° 35' 38.05"	3.0 W	40	L	AIRNAV2	NO	Enabled	51.9 %	51.9 %
5	PSI	N42° 42' 03.09", W083° 31' 57.98"	0.0 E	40	L	AIRNAV2	NO	Enabled	33.6 %	33.6 %
6	AZO	N42° 14' 13.15", W085° 33' 11.35"	1.0 W	40	L	AIRNAV2	NO	Enabled	27.4 %	27.4 %
7	LFD	N42° 03' 44.96", W084° 45' 54.48"	5.0 W	40	L	AIRNAV2	NO	Enabled	74 %	74 %
8	CRL	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	H	AIRNAV2	NO	Enabled	80.1 %	80.1 %
9	AGC	N40° 16' 43.12", W080° 02' 27.08"	9.0 W	40	L	AIRNAV2	NO	Disabled		
10	AUW	N44° 50' 48.40", W089° 35' 11.68"	2.0 E	40	L	AIRNAV2	NO	Disabled		
11	BDF	N41° 09' 35.03", W089° 35' 16.34"	0.0 E	130	H	AIRNAV2	NO	Disabled		
12	BFD	N41° 47' 10.99", W078° 37' 09.65"	7.0 W	40	L	AIRNAV2	NO	Disabled		
13	BVT	N40° 33' 22.22", W087° 04' 09.75"	1.0 E	130	H	AIRNAV2	NO	Disabled		
14	CIP	N41° 08' 46.66", W079° 27' 28.71"	6.0 W	40	L	AIRNAV2	NO	Disabled		
15	CKB	N39° 15' 11.58", W080° 16' 04.30"	4.0 W	40	L	AIRNAV2	NO	Disabled		
16	CMK	N41° 16' 48.32", W073° 34' 52.77"	12.0 W	40	L	AIRNAV2	NO	Disabled		
17	CRI	N40° 36' 44.90", W073° 53' 40.00"	11.0 W	25	T	AIRNAV2	NO	Disabled		
18	CTW	N40° 13' 45.15", W081° 28' 35.32"	7.0 W	40	L	AIRNAV2	NO	Disabled		
19	DNV	N40° 17' 37.56", W087° 33' 26.14"	2.0 E	40	L	AIRNAV2	NO	Disabled		
20	DNY	N42° 10' 41.81", W074° 57' 24.99"	11.0 W	40	L	AIRNAV2	NO	Disabled		
21	DWN	N45° 05' 14.87", W094° 27' 13.86"	7.0 E	40	L	AIRNAV2	NO	Disabled		
22	ECB	N38° 09' 30.11", W082° 54' 36.20"	2.0 W	40	L	AIRNAV2	NO	Disabled		
23	EON	N41° 16' 10.68", W087° 47' 27.79"	2.0 E	40	L	AIRNAV2	NO	Disabled		
24	ESL	N39° 13' 31.77", W078° 59' 22.20"	6.0 W	40	L	AIRNAV2	NO	Disabled		
25	ETG	N41° 12' 53.82", W078° 08' 33.92"	10.0 W	130	H	AIRNAV2	NO	Disabled		
26	EWO	N37° 37' 54.52", W085° 40' 33.16"	1.0 E	40	L	AIRNAV2	NO	Disabled		
27	FJC	N40° 43' 36.12", W075° 27' 17.12"	10.0 W	40	L	AIRNAV2	NO	Disabled		
28	FLM	N38° 38' 57.99", W084° 18' 38.17"	4.0 W	130	H	AIRNAV2	NO	Disabled		
29	FQM	N41° 20' 18.81", W076° 46' 29.52"	9.0 W	40	L	AIRNAV2	NO	Disabled		
30	GFL	N43° 20' 30.09", W073° 36' 42.32"	14.0 W	40	L	AIRNAV2	NO	Disabled		
31	GGT	N42° 47' 20.24", W075° 49' 36.29"	11.0 W	40	L	AIRNAV2	NO	Disabled		
32	GRV	N39° 38' 06.11", W079° 03' 01.90"	6.0 W	40	L	AIRNAV2	NO	Disabled		
33	GSH	N41° 31' 30.56", W086° 01' 40.63"	0.0 E	130	H	AIRNAV2	NO	Disabled		

DME DME Assessment Results for BRWNZ (RNAV) path HASTE_KWYNN

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
34	HIC	N43° 34' 29.47", W085° 42' 58.18"	1.0 W	40	L	AIRNAV2	NO	Disabled		
35	HML	N48° 52' 09.09", W097° 07' 01.51"	9.0 E	130	H	AIRNAV2	NO	Disabled		
36	HNK	N42° 03' 47.01", W075° 18' 58.62"	11.0 W	130	H	AIRNAV2	NO	Disabled		
37	HNN	N38° 45' 14.85", W082° 01' 34.20"	3.0 W	130	H	AIRNAV2	NO	Disabled		
38	HTO	N40° 55' 08.38", W072° 19' 00.14"	13.0 W	130	H	AIRNAV2	NO	Disabled		
39	HUO	N41° 24' 34.87", W074° 35' 29.74"	11.0 W	130	H	AIRNAV2	NO	Disabled		
40	IHD	N39° 58' 27.27", W079° 21' 30.12"	6.0 W	40	L	AIRNAV2	NO	Disabled		
41	JVL	N42° 33' 28.83", W089° 06' 18.93"	3.0 E	40	L	AIRNAV2	NO	Disabled		
42	LAN	N42° 43' 02.62", W084° 41' 51.03"	0.0 E	40	L	AIRNAV2	NO	Disabled		
43	LGA	N40° 47' 01.38", W073° 52' 06.96"	12.0 W	40	L	AIRNAV2	NO	Disabled		
44	LNR	N43° 17' 39.85", W090° 07' 59.33"	0.0 E	40	L	AIRNAV2	NO	Disabled		
45	LVZ	N41° 16' 22.10", W075° 41' 22.07"	10.0 W	40	L	AIRNAV2	NO	Disabled		
46	MIP	N41° 01' 24.21", W076° 39' 55.04"	9.0 W	40	L	AIRNAV2	NO	Disabled		
47	MKG	N43° 10' 09.31", W086° 02' 21.76"	1.0 W	40	L	AIRNAV2	NO	Disabled		
48	MNM	N45° 10' 48.58", W087° 38' 49.83"	0.0 E	40	L	AIRNAV2	NO	Disabled		
49	MSS	N44° 54' 51.92", W074° 43' 21.78"	14.0 W	130	H	AIRNAV2	NO	Disabled		
50	MXE	N39° 55' 04.98", W075° 40' 14.96"	9.0 W	40	L	AIRNAV2	NO	Disabled		
51	ODI	N43° 54' 44.38", W091° 28' 03.06"	1.0 E	130	H	AIRNAV2	NO	Disabled		
52	PLL	N41° 57' 56.31", W089° 31' 27.19"	3.0 E	40	L	AIRNAV2	NO	Disabled		
53	PLN	N45° 37' 50.33", W084° 39' 50.79"	6.0 W	40	L	AIRNAV2	NO	Disabled		
54	PMM	N42° 27' 57.73", W086° 06' 17.32"	0.0 E	130	H	AIRNAV2	NO	Disabled		
55	PNT	N40° 49' 16.32", W088° 44' 00.63"	3.0 E	40	L	AIRNAV2	NO	Disabled		
56	PWL	N41° 46' 11.18", W073° 36' 01.99"	12.0 W	40	L	AIRNAV2	NO	Disabled		
57	RBS	N40° 34' 54.13", W088° 09' 51.36"	2.0 E	40	L	AIRNAV2	NO	Disabled		
58	REC	N40° 32' 47.25", W078° 44' 49.28"	9.0 W	40	L	AIRNAV2	NO	Disabled		
59	RKA	N42° 27' 58.91", W075° 14' 21.51"	11.0 W	40	L	AIRNAV2	NO	Disabled		
60	RST	N43° 46' 58.45", W092° 35' 49.06"	5.0 E	40	L	AIRNAV2	NO	Disabled		
61	SAM	N38° 29' 06.68", W088° 05' 08.90"	3.0 E	40	L	AIRNAV2	NO	Disabled		
62	SFK	N41° 41' 42.91", W077° 25' 11.66"	8.0 W	40	L	AIRNAV2	NO	Disabled		
63	SLK	N44° 23' 04.42", W074° 12' 16.22"	14.0 W	40	L	AIRNAV2	NO	Disabled		
64	SLT	N41° 30' 45.93", W077° 58' 12.39"	8.0 W	130	H	AIRNAV2	NO	Disabled		
65	TDT	N41° 42' 46.91", W079° 25' 02.17"	9.0 W	40	L	AIRNAV2	NO	Disabled		
66	THS	N39° 55' 59.62", W077° 57' 03.40"	7.0 W	40	L	AIRNAV2	NO	Disabled		

DME DME Assessment Results for BRWNZ (RNAV) path HASTE_KWYNN

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
67	UCA	N43° 01' 35.45", W075° 09' 52.28"	12.0 W	40	L	AIRNAV2	NO	Disabled		
68	UIN	N39° 50' 52.35", W091° 16' 44.13"	5.0 E	130	H	AIRNAV2	NO	Disabled		
69	ULW	N42° 05' 39.16", W077° 01' 28.53"	12.0 W	40	L	AIRNAV2	NO	Disabled		
70	VLA	N39° 05' 37.82", W089° 09' 44.08"	4.0 E	40	L	AIRNAV2	NO	Disabled		
71	YRK	N38° 38' 38.88", W082° 58' 42.02"	5.0 W	40	L	AIRNAV2	NO	Disabled		

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	VIO	AZO	CRL	DXO		
1.3	AZO	JXN	VIO	CRL	DXO	
5.6	AZO	JXN	VIO	LFD		
19.9	DXO	LFD	VIO	CRL	JXN	
23.7	DXO	LFD	CRL	JXN		
34.7	SVM	JXN	CRL	LFD	DXO	
41.1	CRL	JXN	LFD	SVM		
42.2	CRL	JXN	LFD			
42.4	CRL	JXN	LFD	SVM		
46.3	CRL	LFD	JXN	DXO	SVM	
47.0	CRL	LFD	DXO	SVM		
48.1	CRL	PSI	LFD	DXO	SVM	
58.8	CRL	PSI	DXO	SVM	JXN	

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N41° 49' 53.91", W082° 10' 03.16"	N41° 44' 40.64", W081° 58' 38.97"	9.9786
2	N41° 50' 33.90", W082° 06' 11.12"	N41° 49' 32.08", W081° 54' 43.32"	8.604
3	N42° 01' 09.50", W083° 30' 02.50"	N42° 00' 52.52", W083° 25' 59.74"	3.0196
4	N41° 26' 07.51", W082° 08' 15.43"	N42° 47' 04.67", W085° 29' 10.01"	169.6125
5	N42° 02' 26.06", W083° 25' 16.45"	N42° 01' 06.59", W083° 21' 51.08"	2.8671
6	N41° 35' 02.06", W082° 09' 37.02"	N41° 58' 37.27", W082° 56' 05.98"	41.9308
7	N41° 31' 54.26", W082° 09' 07.66"	N41° 57' 52.34", W082° 46' 45.45"	38.2472
8	N42° 41' 35.16", W085° 00' 41.73"	N42° 39' 45.29", W084° 51' 19.08"	7.134
9	N41° 48' 41.68", W082° 12' 18.67"	N41° 56' 53.14", W084° 16' 57.02"	93.1688
10	N41° 59' 45.07", W083° 32' 07.77"	N42° 00' 04.96", W083° 26' 37.57"	4.1038

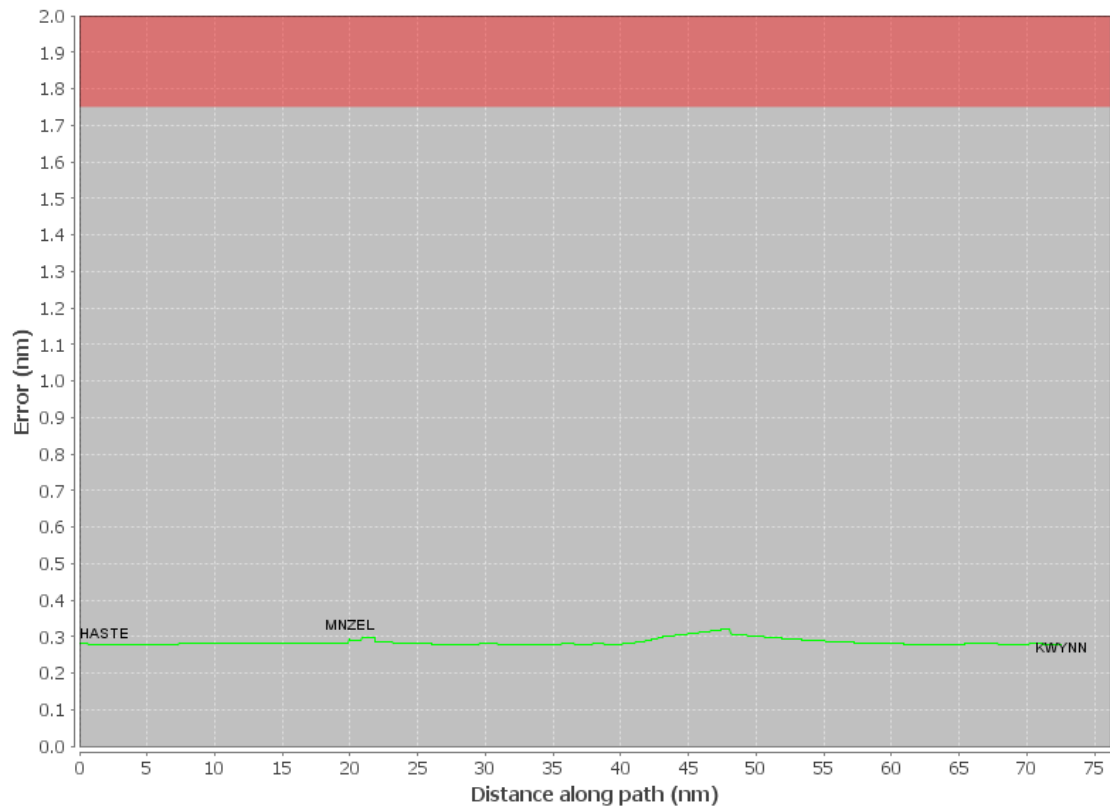
Available DMEs by Waypoints		
Waypoint Before	Waypoint After	DME List
HASTE	MNZEL	JXN, AZO, DXO, LFD, CRL, VIO
MNZEL	KWYNN	JXN, PSI, DXO, LFD, SVM, CRL, VIO

DME DME Assessment Results for BRWNZ (RNAV) path HASTE_KWYNN

User Data Files								
#	File Name							
1	BRWNZ2.udt							
User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	UDT ESV MFD MFD [AIRNAV2]	N40° 52' 07.00", W082° 35' 27.46"	3.0 W	40	1222	108.8	UDT ESV MFD	
ESV:		Bearing [True]: 325.0° to 43.0° Bearing [Mag]: 328.0° to 46.0°				Arc Distance: Out to 80.0 NM Altitude: 6400.0 to 20000.0 ft		
2	UDT ESV OKK OKK [AIRNAV2]	N40° 31' 40.01", W086° 03' 28.80"	5.0 W	130	825	113.5	UDT ESV OKK	
ESV:		Bearing [True]: 356.0° to 50.0° Bearing [Mag]: 1.0° to 55.0°				Arc Distance: Out to 101.0 NM Altitude: 9900.0 to 20000.0 ft		
3	UDT ESV ACO ACO [AIRNAV2]	N41° 06' 28.45", W081° 12' 05.49"	4.0 W	40	1198	114.4	UDT ESV ACO	
ESV:		Bearing [True]: 303.0° to 321.0° Bearing [Mag]: 307.0° to 325.0°				Arc Distance: Out to 82.0 NM Altitude: 7700.0 to 11000.0 ft		
4	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 259.0° to 268.0° Bearing [Mag]: 262.0° to 271.0°				Arc Distance: Out to 103.0 NM Altitude: 10000.0 to 16000.0 ft		
5	UDT ESV OXI OXI [AIRNAV2]	N41° 19' 19.35", W086° 38' 57.45"	0.0 E	130	690	115.6	UDT ESV OXI	
ESV:		Bearing [True]: 0.0° to 138.0° Bearing [Mag]: 0.0° to 138.0°				Arc Distance: Out to 106.0 NM Altitude: 10000.0 to 20000.0 ft		
6	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 65.0° to 98.0° Bearing [Mag]: 68.0° to 101.0°				Arc Distance: Out to 64.0 NM Altitude: 4000.0 to 16000.0 ft		
7	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 293.0° to 5.0° Bearing [Mag]: 296.0° to 8.0°				Arc Distance: Out to 102.0 NM Altitude: 8500.0 to 16000.0 ft		
8	UDT ESV SVM SVM [AIRNAV2]	N42° 24' 31.11", W083° 35' 38.05"	3.0 W	40	955	114.3	UDT ESV SVM	
ESV:		Bearing [True]: 89.0° to 117.0° Bearing [Mag]: 92.0° to 120.0°				Arc Distance: Out to 73.0 NM Altitude: 6200.0 to 20000.0 ft		
9	UDT ESV CXR CXR [AIRNAV2]	N41° 31' 00.94", W081° 09' 47.47"	5.0 W	130	1317	112.7	UDT ESV CXR	
ESV:		Bearing [True]: 298.0° to 343.0° Bearing [Mag]: 303.0° to 348.0°				Arc Distance: Out to 73.0 NM Altitude: 6200.0 to 16000.0 ft		
10	UDT ESV DXO DXO [AIRNAV2]	N42° 12' 47.29", W083° 21' 59.99"	6.0 W	130	669.3	113.4	UDT ESV DXO	
ESV:		Bearing [True]: 279.0° to 333.0° Bearing [Mag]: 285.0° to 339.0°				Arc Distance: Out to 106.0 NM Altitude: 9700.0 to 20000.0 ft		
11	UDT ESV PSI PSI [AIRNAV2]	N42° 42' 03.09", W083° 31' 57.98"	0.0 E	40	1149	null	UDT ESV PSI	
ESV:		Bearing [True]: 128.0° to 170.0° Bearing [Mag]: 128.0° to 170.0°				Arc Distance: Out to 80.0 NM Altitude: 7400.0 to 11000.0 ft		

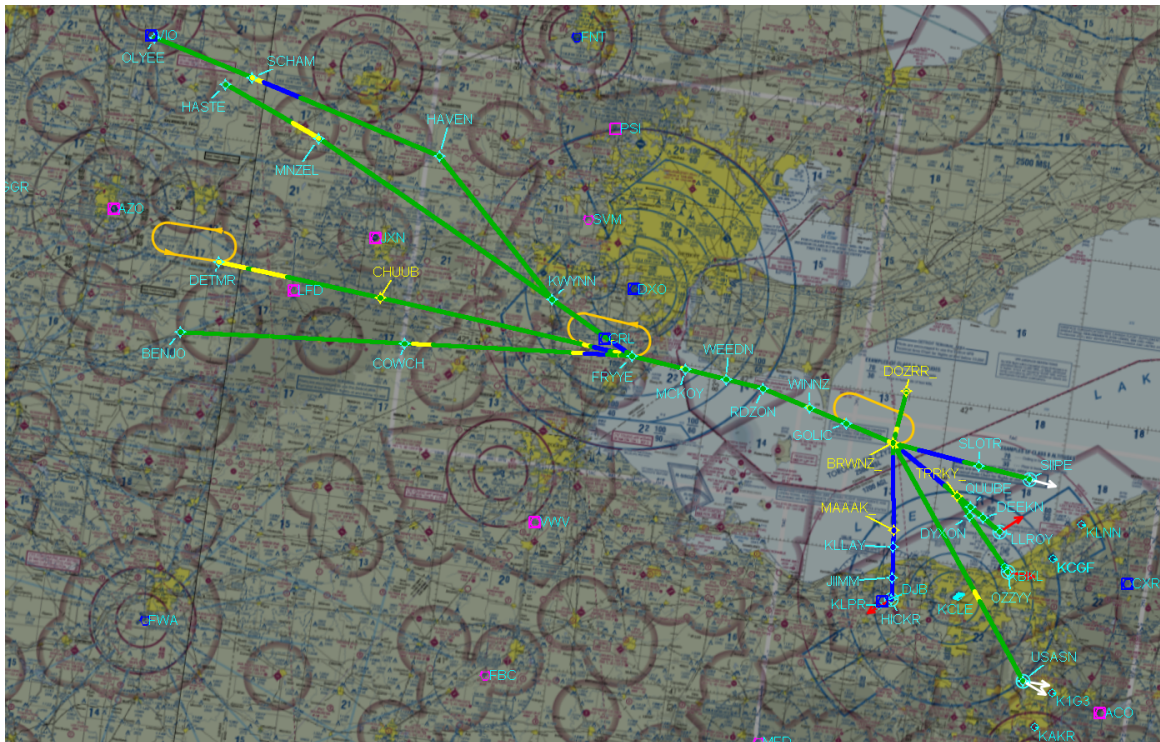
DME DME Assessment Results for BRWNZ (RNAV) path HASTE_KWYNN

DME Error

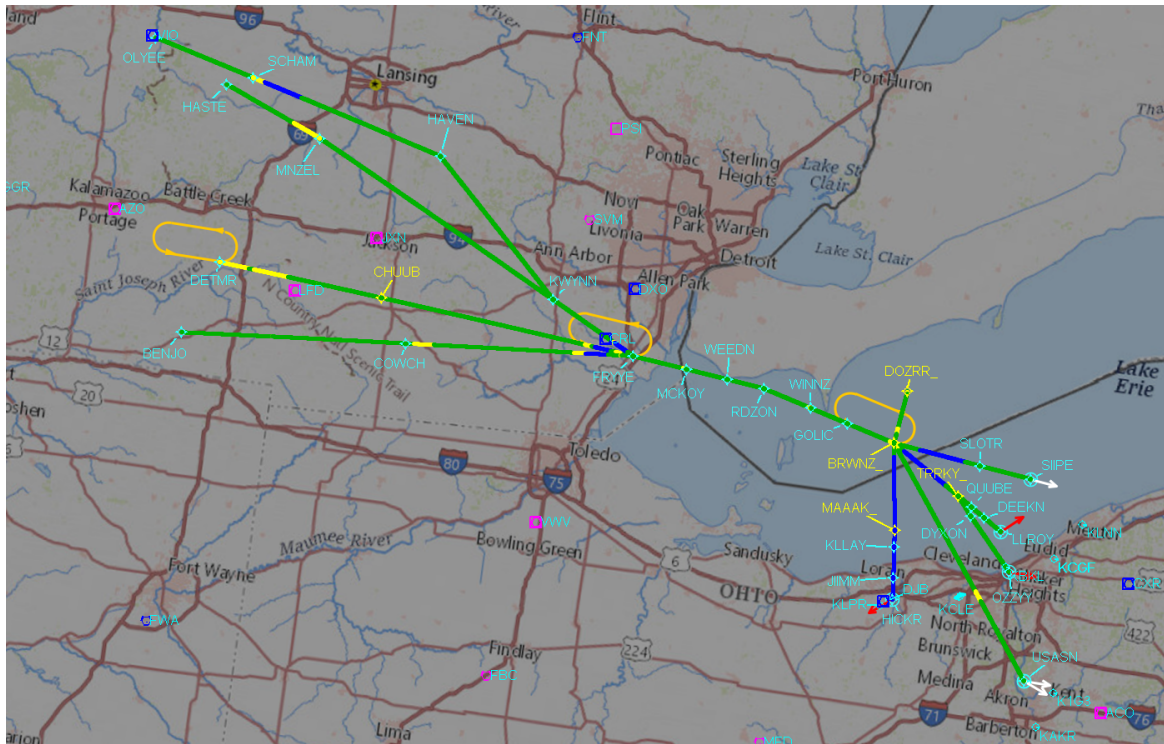


DME DME Assessment Results for BRWNZ (RNAV) path HASTE_KWYNN

Graphic Depiction 1



Graphic Depiction 2



DME DME Assessment Results for BRWNZ (RNAV) path OLYEE_HICKR

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Paul CTR Jackson
Project File:	S:\530View\ZZ4 TT TARGETs Transfer 30 days\CLE-DTW PI Final DME Screening\CLE STAR BRWNZ TWO 20181211.tgs
Output File:	C:\Users\Paul CTR Jackson\Documents\Current Projects\CLE\STAR Amend Nov 2018\BRWNZ2\KCLE BRWNZ (RNAV)_2018-12-18_0309\OLYEE_HICKR\KCLE BRWNZ (RNAV) RNAV STAR_OLYEE_HICKR_2018-12-18_0309.pdf
Procedure Name:	BRWNZ (RNAV)
Software: DmeDmePlugin:	5.5.1
Date/Time:	12/18/2018 03:09 PM CST
Databases:	DTED 0 Max

Failures

No Failures

Notes For Flight Check

None

Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	IAS (kts)	Turn Type	Leg Type
OLYEE	WP	N42° 47' 04.67", W085° 29' 10.01"	15000	VNAV	280	FLY_BY	TF
SCHAM	WP	N42° 42' 09.63", W085° 03' 39.20"	15000	VNAV	280	FLY_BY	TF
HAVEN	WP	N42° 32' 29.24", W084° 14' 48.81"	15000	VNAV	280	FLY_BY	TF
KWYNN	WP	N42° 08' 49.08", W083° 41' 52.01"	15000	VNAV	280	FLY_BY	TF
FRYYE	WP	N42° 00' 27.89", W083° 20' 11.22"	15000	VNAV	280	FLY_BY	TF
MCKOY	WP	N41° 59' 26.14", W083° 06' 30.86"	10000	VNAV	280	FLY_BY	TF
WEEDN	WP	N41° 58' 37.27", W082° 56' 05.98"	10000	VNAV	280	FLY_BY	TF
RDZON	WP	N41° 57' 52.34", W082° 46' 45.45"	10000	VNAV	280	FLY_BY	TF
WINNZ	WP	N41° 55' 26.66", W082° 34' 29.63"	8000	VNAV	280	FLY_BY	TF
GOLIC	WP	N41° 53' 34.65", W082° 25' 03.86"	8000	VNAV	280	FLY_BY	TF
BRWNZ_	WP	N41° 51' 09.02", W082° 12' 47.85"	8000	VNAV	280	FLY_BY	TF
MAAAK_	WP	N41° 35' 02.06", W082° 09' 37.02"	6000	VNAV	280	FLY_BY	TF
KLLAY	WP	N41° 31' 54.26", W082° 09' 07.66"	5000	VNAV	280	FLY_BY	TF
JIIMM	WP	N41° 26' 07.51", W082° 08' 15.43"	4000	VNAV	280	FLY_BY	TF
HICKR	WP	N41° 22' 08.00", W082° 07' 43.36"	4000	VNAV	210	FLY_OVER	TF

DME DME Assessment Results for BRWNZ (RNAV) path OLYEE_HICKR

Flyability	
Flight Type:	RNAV_STAR
Selected Airport:	KCLE
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
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:	AGC,AUW,BDF,BFD,BRD,BVT,CIP,C KB,CMK,CRI,CTW,DNV,DNY,DWN,E CB,EON,ESL,ETG,EWO,FJC,FLM,FQ M,GFL,GGT,GRV,GSH,HIC,HML,HNK ,HNN,HTO,HUO,IHD,JVL,LAN,LGA,L NR,LVZ,MIP,MKG,MNM,MSS,MXE,O DI,PLL,PLN,PMM,PNT,PWL,RBS,REC ,RKA,RST,SAM,SFK,SLK,SLT,TDT,T HS,UCA,UIN,ULW,VLA,YRK

DME DME Assessment Results for BRWNZ (RNAV) path OLYEE_HICKR

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	FNT	N42° 58' 00.38", W083° 44' 49.08"	6.0 W	130	H	AIRNAV2	NO	Enabled	9.1 %	9.1 %
2	DXO	N42° 12' 47.29", W083° 21' 59.99"	6.0 W	130	H	AIRNAV2	NO	Enabled	61.3 %	61.3 %
3	PSI	N42° 42' 03.09", W083° 31' 57.98"	0.0 E	40	L	AIRNAV2	NO	Enabled	46.9 %	46.9 %
4	AZO	N42° 14' 13.15", W085° 33' 11.35"	1.0 W	40	L	AIRNAV2	NO	Enabled	11.4 %	11.4 %
5	LFD	N42° 03' 44.96", W084° 45' 54.48"	5.0 W	40	L	AIRNAV2	NO	Enabled	14.5 %	14.5 %
6	MFD	N40° 52' 07.00", W082° 35' 27.46"	3.0 W	40	L	AIRNAV2	NO	Enabled	25.7 %	25.7 %
7	ACO	N41° 06' 28.45", W081° 12' 05.49"	4.0 W	40	L	AIRNAV2	NO	Enabled	11 %	11 %
8	VIO	N42° 47' 12.18", W085° 29' 49.46"	4.0 W	130	H	AIRNAV2	NO	Enabled	15.6 %	15.6 %
9	DJB	N41° 21' 29.03", W082° 09' 43.09"	5.0 W	130	H	AIRNAV2	NO	Enabled	5.7 %	5.7 %
10	JXN	N42° 15' 33.26", W084° 27' 30.78"	5.0 W	40	L	AIRNAV2	NO	Enabled	35.6 %	35.5 %
11	SVM	N42° 24' 31.11", W083° 35' 38.05"	3.0 W	40	L	AIRNAV2	NO	Enabled	30.9 %	30.9 %
12	VWV	N41° 27' 05.34", W083° 38' 19.30"	2.0 W	40	L	AIRNAV2	NO	Enabled	0.7 %	0.7 %
13	OXI	N41° 19' 19.35", W086° 38' 57.45"	0.0 E	130	H	AIRNAV2	NO	Enabled	0.4 %	0.4 %
14	CRL	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	H	AIRNAV2	NO	Enabled	61.4 %	61.4 %
15	AGC	N40° 16' 43.12", W080° 02' 27.08"	9.0 W	40	L	AIRNAV2	NO	Disabled		
16	AUW	N44° 50' 48.40", W089° 35' 11.68"	2.0 E	40	L	AIRNAV2	NO	Disabled		
17	BDF	N41° 09' 35.03", W089° 35' 16.34"	0.0 E	130	H	AIRNAV2	NO	Disabled		
18	BFD	N41° 47' 10.99", W078° 37' 09.65"	7.0 W	40	L	AIRNAV2	NO	Disabled		
19	BVT	N40° 33' 22.22", W087° 04' 09.75"	1.0 E	130	H	AIRNAV2	NO	Disabled		
20	CIP	N41° 08' 46.66", W079° 27' 28.71"	6.0 W	40	L	AIRNAV2	NO	Disabled		
21	CKB	N39° 15' 11.58", W080° 16' 04.30"	4.0 W	40	L	AIRNAV2	NO	Disabled		
22	CMK	N41° 16' 48.32", W073° 34' 52.77"	12.0 W	40	L	AIRNAV2	NO	Disabled		
23	CRI	N40° 36' 44.90", W073° 53' 40.00"	11.0 W	25	T	AIRNAV2	NO	Disabled		
24	CTW	N40° 13' 45.15", W081° 28' 35.32"	7.0 W	40	L	AIRNAV2	NO	Disabled		
25	DNV	N40° 17' 37.56", W087° 33' 26.14"	2.0 E	40	L	AIRNAV2	NO	Disabled		
26	DNY	N42° 10' 41.81", W074° 57' 24.99"	11.0 W	40	L	AIRNAV2	NO	Disabled		
27	DWN	N45° 05' 14.87", W094° 27' 13.86"	7.0 E	40	L	AIRNAV2	NO	Disabled		
28	ECB	N38° 09' 30.11", W082° 54' 36.20"	2.0 W	40	L	AIRNAV2	NO	Disabled		
29	EON	N41° 16' 10.68", W087° 47' 27.79"	2.0 E	40	L	AIRNAV2	NO	Disabled		
30	ESL	N39° 13' 31.77", W078° 59' 22.20"	6.0 W	40	L	AIRNAV2	NO	Disabled		
31	ETG	N41° 12' 53.82", W078° 08' 33.92"	10.0 W	130	H	AIRNAV2	NO	Disabled		
32	EWO	N37° 37' 54.52", W085° 40' 33.16"	1.0 E	40	L	AIRNAV2	NO	Disabled		
33	FJC	N40° 43' 36.12", W075° 27' 17.12"	10.0 W	40	L	AIRNAV2	NO	Disabled		

DME DME Assessment Results for BRWNZ (RNAV) path OLYEE_HICKR

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
34	FLM	N38° 38' 57.99", W084° 18' 38.17"	4.0 W	130	H	AIRNAV2	NO	Disabled		
35	FQM	N41° 20' 18.81", W076° 46' 29.52"	9.0 W	40	L	AIRNAV2	NO	Disabled		
36	GFL	N43° 20' 30.09", W073° 36' 42.32"	14.0 W	40	L	AIRNAV2	NO	Disabled		
37	GGT	N42° 47' 20.24", W075° 49' 36.29"	11.0 W	40	L	AIRNAV2	NO	Disabled		
38	GRV	N39° 38' 06.11", W079° 03' 01.90"	6.0 W	40	L	AIRNAV2	NO	Disabled		
39	GSH	N41° 31' 30.56", W086° 01' 40.63"	0.0 E	130	H	AIRNAV2	NO	Disabled		
40	HIC	N43° 34' 29.47", W085° 42' 58.18"	1.0 W	40	L	AIRNAV2	NO	Disabled		
41	HML	N48° 52' 09.09", W097° 07' 01.51"	9.0 E	130	H	AIRNAV2	NO	Disabled		
42	HNK	N42° 03' 47.01", W075° 18' 58.62"	11.0 W	130	H	AIRNAV2	NO	Disabled		
43	HNN	N38° 45' 14.85", W082° 01' 34.20"	3.0 W	130	H	AIRNAV2	NO	Disabled		
44	HTO	N40° 55' 08.38", W072° 19' 00.14"	13.0 W	130	H	AIRNAV2	NO	Disabled		
45	HUO	N41° 24' 34.87", W074° 35' 29.74"	11.0 W	130	H	AIRNAV2	NO	Disabled		
46	IHD	N39° 58' 27.27", W079° 21' 30.12"	6.0 W	40	L	AIRNAV2	NO	Disabled		
47	JVL	N42° 33' 28.83", W089° 06' 18.93"	3.0 E	40	L	AIRNAV2	NO	Disabled		
48	LAN	N42° 43' 02.62", W084° 41' 51.03"	0.0 E	40	L	AIRNAV2	NO	Disabled		
49	LGA	N40° 47' 01.38", W073° 52' 06.96"	12.0 W	40	L	AIRNAV2	NO	Disabled		
50	LNR	N43° 17' 39.85", W090° 07' 59.33"	0.0 E	40	L	AIRNAV2	NO	Disabled		
51	LVZ	N41° 16' 22.10", W075° 41' 22.07"	10.0 W	40	L	AIRNAV2	NO	Disabled		
52	MIP	N41° 01' 24.21", W076° 39' 55.04"	9.0 W	40	L	AIRNAV2	NO	Disabled		
53	MKG	N43° 10' 09.31", W086° 02' 21.76"	1.0 W	40	L	AIRNAV2	NO	Disabled		
54	MNM	N45° 10' 48.58", W087° 38' 49.83"	0.0 E	40	L	AIRNAV2	NO	Disabled		
55	MSS	N44° 54' 51.92", W074° 43' 21.78"	14.0 W	130	H	AIRNAV2	NO	Disabled		
56	MXE	N39° 55' 04.98", W075° 40' 14.96"	9.0 W	40	L	AIRNAV2	NO	Disabled		
57	ODI	N43° 54' 44.38", W091° 28' 03.06"	1.0 E	130	H	AIRNAV2	NO	Disabled		
58	PLL	N41° 57' 56.31", W089° 31' 27.19"	3.0 E	40	L	AIRNAV2	NO	Disabled		
59	PLN	N45° 37' 50.33", W084° 39' 50.79"	6.0 W	40	L	AIRNAV2	NO	Disabled		
60	PMM	N42° 27' 57.73", W086° 06' 17.32"	0.0 E	130	H	AIRNAV2	NO	Disabled		
61	PNT	N40° 49' 16.32", W088° 44' 00.63"	3.0 E	40	L	AIRNAV2	NO	Disabled		
62	PWL	N41° 46' 11.18", W073° 36' 01.99"	12.0 W	40	L	AIRNAV2	NO	Disabled		
63	RBS	N40° 34' 54.13", W088° 09' 51.36"	2.0 E	40	L	AIRNAV2	NO	Disabled		
64	REC	N40° 32' 47.25", W078° 44' 49.28"	9.0 W	40	L	AIRNAV2	NO	Disabled		
65	RKA	N42° 27' 58.91", W075° 14' 21.51"	11.0 W	40	L	AIRNAV2	NO	Disabled		
66	RST	N43° 46' 58.45", W092° 35' 49.06"	5.0 E	40	L	AIRNAV2	NO	Disabled		

DME DME Assessment Results for BRWNZ (RNAV) path OLYEE_HICKR

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
67	SAM	N38° 29' 06.68", W088° 05' 08.90"	3.0 E	40	L	AIRNAV2	NO	Disabled		
68	SFK	N41° 41' 42.91", W077° 25' 11.66"	8.0 W	40	L	AIRNAV2	NO	Disabled		
69	SLK	N44° 23' 04.42", W074° 12' 16.22"	14.0 W	40	L	AIRNAV2	NO	Disabled		
70	SLT	N41° 30' 45.93", W077° 58' 12.39"	8.0 W	130	H	AIRNAV2	NO	Disabled		
71	TDT	N41° 42' 46.91", W079° 25' 02.17"	9.0 W	40	L	AIRNAV2	NO	Disabled		
72	THS	N39° 55' 59.62", W077° 57' 03.40"	7.0 W	40	L	AIRNAV2	NO	Disabled		
73	UCA	N43° 01' 35.45", W075° 09' 52.28"	12.0 W	40	L	AIRNAV2	NO	Disabled		
74	UIN	N39° 50' 52.35", W091° 16' 44.13"	5.0 E	130	H	AIRNAV2	NO	Disabled		
75	ULW	N42° 05' 39.16", W077° 01' 28.53"	12.0 W	40	L	AIRNAV2	NO	Disabled		
76	VLA	N39° 05' 37.82", W089° 09' 44.08"	4.0 E	40	L	AIRNAV2	NO	Disabled		
77	YRK	N38° 38' 38.88", W082° 58' 42.02"	5.0 W	40	L	AIRNAV2	NO	Disabled		

DME DME Assessment Results for BRWNZ (RNAV) path OLYEE_HICKR

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	DXO	AZO	CRL	OXI		
0.9	DXO	AZO	CRL			
2.6	VIO	AZO	DXO	CRL		
19.3	AZO	JXN	VIO			
20.5	AZO	JXN	VIO	LFD		
21.7						
28.8	VIO	LFD	DXO	CRL		
30.2	VIO	LFD	DXO	CRL	JXN	
39.4	DXO	LFD	CRL	JXN		
47.0	DXO	LFD	SVM	CRL	JXN	
50.9	SVM	JXN	LFD	FNT		
51.0	SVM	JXN	LFD	PSI	FNT	
55.4	SVM	JXN	FNT	PSI		
59.7	CRL	JXN	FNT	DXO	SVM	PSI
62.4	FNT	DXO	JXN	SVM	PSI	
68.3	CRL	PSI	JXN	DXO	SVM	
95.4	CRL	PSI	DXO	SVM		
97.5	CRL	DXO	SVM			
100.1	SVM	DXO				
104.3	MFD	DXO	VWV	SVM		
104.7						
107.6	CRL	DXO				
109.0	VWV	CRL	DXO	SVM		
109.5	CRL	DXO				
113.7	MFD	CRL	DXO			
117.2	PSI	CRL	MFD	DXO		
118.4	VWV	SVM	DXO	CRL		
119.0	MFD	CRL	PSI	DXO		
120.5	MFD	CRL	PSI			
126.2	MFD	CRL	PSI	DXO		
141.8	MFD	CRL	DXO	ACO	PSI	
143.5	ACO	MFD	PSI			
152.2	ACO	MFD	PSI	DJB		
160.3	ACO	MFD	DJB			
162.7						

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N41° 49' 53.91", W082° 10' 03.16"	N41° 44' 40.64", W081° 58' 38.97"	9.9786
2	N41° 50' 33.90", W082° 06' 11.12"	N41° 49' 32.08", W081° 54' 43.32"	8.604
3	N42° 01' 09.50", W083° 30' 02.50"	N42° 00' 52.52", W083° 25' 59.74"	3.0196
4	N41° 26' 07.51", W082° 08' 15.43"	N42° 47' 04.67", W085° 29' 10.01"	169.6125
5	N42° 02' 26.06", W083° 25' 16.45"	N42° 01' 06.59", W083° 21' 51.08"	2.8671
6	N41° 35' 02.06", W082° 09' 37.02"	N41° 58' 37.27", W082° 56' 05.98"	41.9308
7	N41° 31' 54.26", W082° 09' 07.66"	N41° 57' 52.34", W082° 46' 45.45"	38.2472
8	N42° 41' 35.16", W085° 00' 41.73"	N42° 39' 45.29", W084° 51' 19.08"	7.134
9	N41° 48' 41.68", W082° 12' 18.67"	N41° 56' 53.14", W084° 16' 57.02"	93.1688
10	N41° 59' 45.07", W083° 32' 07.77"	N42° 00' 04.96", W083° 26' 37.57"	4.1038

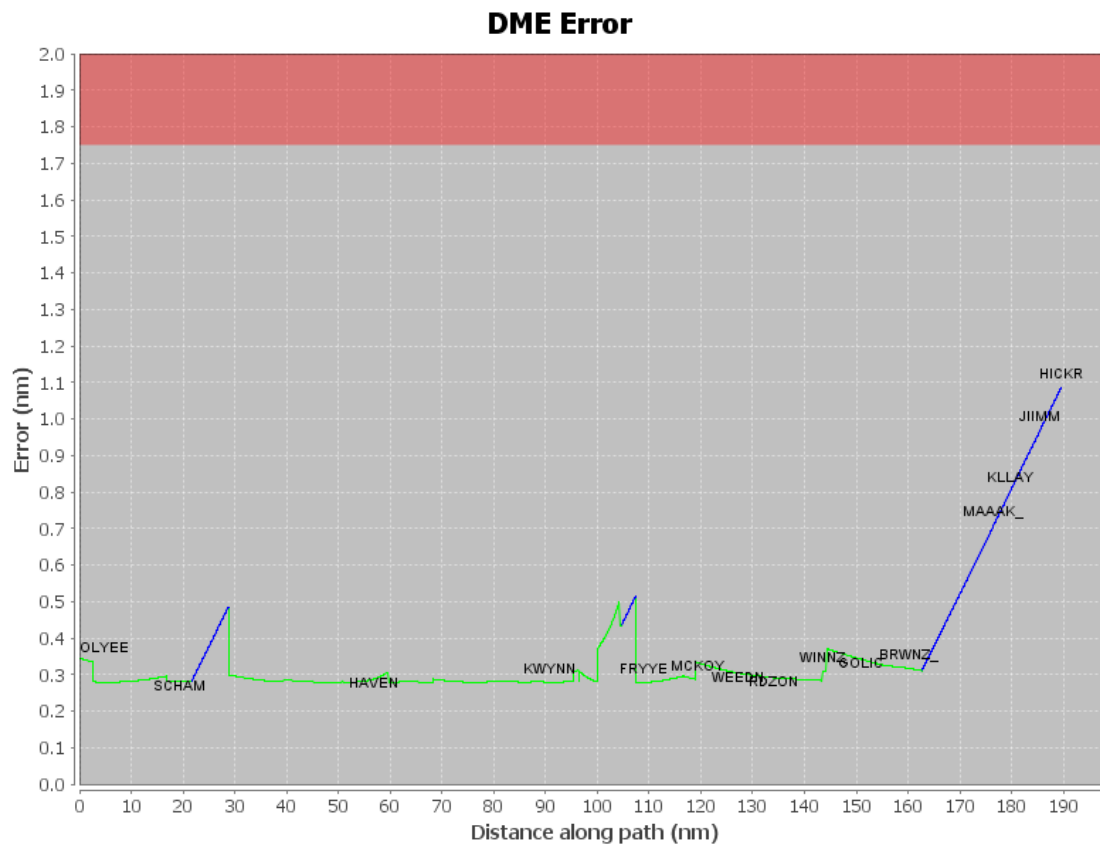
DME DME Assessment Results for BRWNZ (RNAV) path OLYEE_HICKR

Available DMEs by Waypoints		
Waypoint Before	Waypoint After	DME List
OLYEE	SCHAM	OXI, JXN, AZO, DXO, CRL, VIO
SCHAM	HAVEN	JXN, AZO, PSI, DXO, LFD, SVM, CRL, VIO, FNT
HAVEN	KWYNN	JXN, PSI, DXO, SVM, CRL, FNT
KWYNN	FRYYE	JXN, VWV, PSI, DXO, MFD, SVM, CRL
FRYYE	MCKOY	VWV, PSI, DXO, MFD, SVM, CRL
MCKOY	WEEDN	PSI, DXO, MFD, CRL
WEEDN	RDZON	PSI, MFD, DXO, CRL
RDZON	WINNZ	PSI, MFD, DXO, CRL, ACO, DJB
WINNZ	GOLIC	PSI, MFD, ACO
GOLIC	BRWNZ_	PSI, MFD, ACO, DJB
BRWNZ_	MAAAK_	MFD, ACO, DJB
MAAAK_	KLLAY	
KLLAY	JIIMM	
JIIMM	HICKR	

DME DME Assessment Results for BRWNZ (RNAV) path OLYEE_HICKR

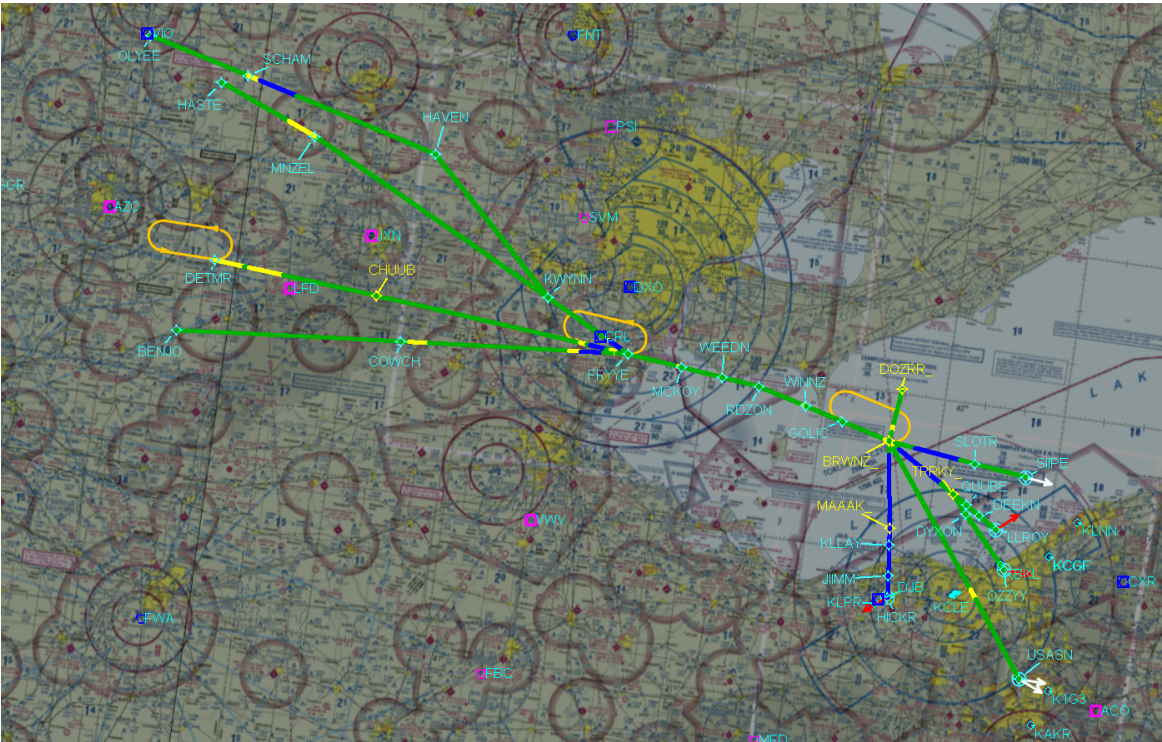
User Data Files								
#	File Name							
1	BRWNZ2.udt							
User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	UDT ESV MFD MFD [AIRNAV2]	N40° 52' 07.00", W082° 35' 27.46"	3.0 W	40	1222	108.8	UDT ESV MFD	
ESV:		Bearing [True]: 325.0° to 43.0° Bearing [Mag]: 328.0° to 46.0°				Arc Distance: Out to 80.0 NM Altitude: 6400.0 to 20000.0 ft		
2	UDT ESV OKK OKK [AIRNAV2]	N40° 31' 40.01", W086° 03' 28.80"	5.0 W	130	825	113.5	UDT ESV OKK	
ESV:		Bearing [True]: 356.0° to 50.0° Bearing [Mag]: 1.0° to 55.0°				Arc Distance: Out to 101.0 NM Altitude: 9900.0 to 20000.0 ft		
3	UDT ESV ACO ACO [AIRNAV2]	N41° 06' 28.45", W081° 12' 05.49"	4.0 W	40	1198	114.4	UDT ESV ACO	
ESV:		Bearing [True]: 303.0° to 321.0° Bearing [Mag]: 307.0° to 325.0°				Arc Distance: Out to 82.0 NM Altitude: 7700.0 to 11000.0 ft		
4	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 259.0° to 268.0° Bearing [Mag]: 262.0° to 271.0°				Arc Distance: Out to 103.0 NM Altitude: 10000.0 to 16000.0 ft		
5	UDT ESV OXI OXI [AIRNAV2]	N41° 19' 19.35", W086° 38' 57.45"	0.0 E	130	690	115.6	UDT ESV OXI	
ESV:		Bearing [True]: 0.0° to 138.0° Bearing [Mag]: 0.0° to 138.0°				Arc Distance: Out to 106.0 NM Altitude: 10000.0 to 20000.0 ft		
6	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 65.0° to 98.0° Bearing [Mag]: 68.0° to 101.0°				Arc Distance: Out to 64.0 NM Altitude: 4000.0 to 16000.0 ft		
7	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 293.0° to 5.0° Bearing [Mag]: 296.0° to 8.0°				Arc Distance: Out to 102.0 NM Altitude: 8500.0 to 16000.0 ft		
8	UDT ESV SVM SVM [AIRNAV2]	N42° 24' 31.11", W083° 35' 38.05"	3.0 W	40	955	114.3	UDT ESV SVM	
ESV:		Bearing [True]: 89.0° to 117.0° Bearing [Mag]: 92.0° to 120.0°				Arc Distance: Out to 73.0 NM Altitude: 6200.0 to 20000.0 ft		
9	UDT ESV CXR CXR [AIRNAV2]	N41° 31' 00.94", W081° 09' 47.47"	5.0 W	130	1317	112.7	UDT ESV CXR	
ESV:		Bearing [True]: 298.0° to 343.0° Bearing [Mag]: 303.0° to 348.0°				Arc Distance: Out to 73.0 NM Altitude: 6200.0 to 16000.0 ft		
10	UDT ESV DXO DXO [AIRNAV2]	N42° 12' 47.29", W083° 21' 59.99"	6.0 W	130	669.3	113.4	UDT ESV DXO	
ESV:		Bearing [True]: 279.0° to 333.0° Bearing [Mag]: 285.0° to 339.0°				Arc Distance: Out to 106.0 NM Altitude: 9700.0 to 20000.0 ft		
11	UDT ESV PSI PSI [AIRNAV2]	N42° 42' 03.09", W083° 31' 57.98"	0.0 E	40	1149	null	UDT ESV PSI	
ESV:		Bearing [True]: 128.0° to 170.0° Bearing [Mag]: 128.0° to 170.0°				Arc Distance: Out to 80.0 NM Altitude: 7400.0 to 11000.0 ft		

DME DME Assessment Results for BRWNZ (RNAV) path OLYEE_HICKR



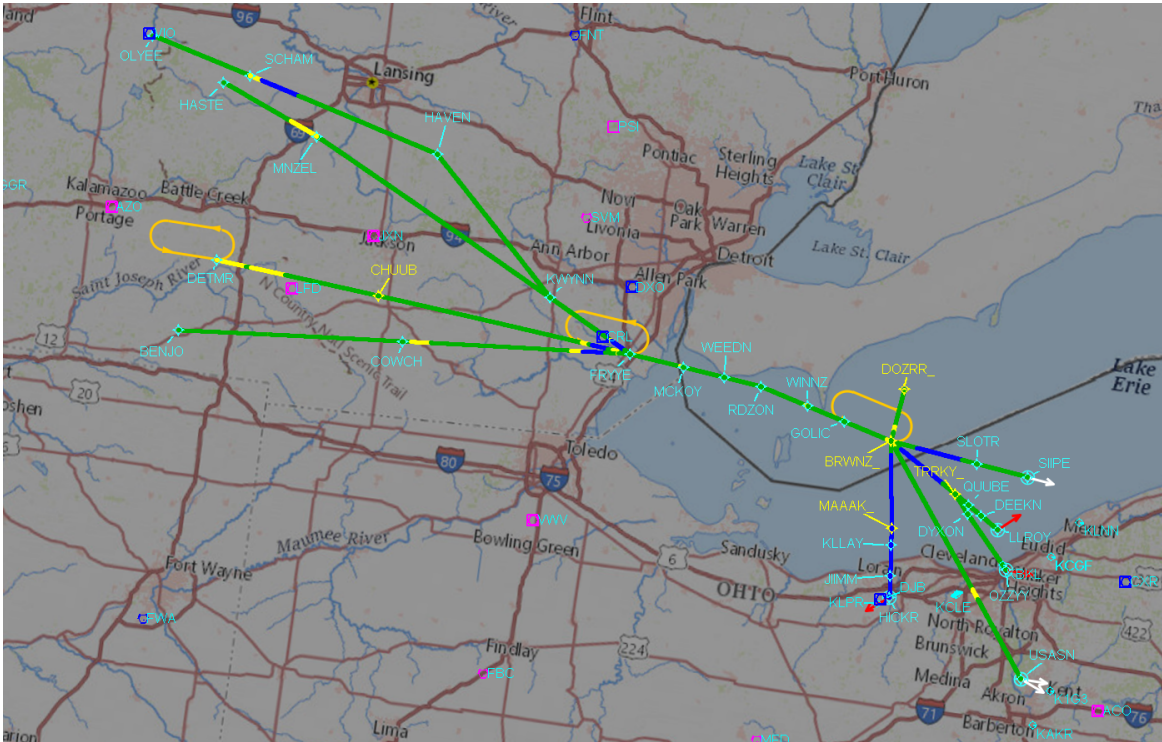
DME DME Assessment Results for BRWNZ (RNAV) path OLYEE_HICKR

Graphic Depiction 1



DME DME Assessment Results for BRWNZ (RNAV) path OLYEE_HICKR

Graphic Depiction 2



DME DME Assessment Results for BRWNZ (RNAV) path TRRKY__OZZYY

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Paul CTR Jackson
Project File:	S:\530View\ZZ4 TT TARGETs Transfer 30 days\CLE-DTW PI Final DME Screening\CLE STAR BRWNZ TWO 20181211.tgs
Output File:	C:\Users\Paul CTR Jackson\Documents\Current Projects\CLE\STAR Amend Nov 2018\BRWNZ2\KCLE BRWNZ (RNAV)_2018-12-18_0309\TRRKY__OZZYY\KCLE BRWNZ (RNAV) RNAV STAR_TRRKY__OZZYY_2018-12-18_0309.pdf
Procedure Name:	BRWNZ (RNAV)
Software: DmeDmePlugin:	5.5.1
Date/Time:	12/18/2018 03:10 PM CST
Databases:	DTED 0 Max

Failures

No Failures

Notes For Flight Check

None

Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	IAS (kts)	Turn Type	Leg Type
TRRKY_	WP	N41° 43' 00.84", W081° 55' 01.90"	6000	VNAV	280	FLY_BY	TF
DYXON	WP	N41° 39' 37.69", W081° 51' 18.72"	5000	VNAV	280	FLY_BY	TF
OZZYY	WP	N41° 30' 18.32", W081° 39' 56.47"	5000	VNAV	210	FLY_OVER	TF

Flyability

Flight Type:	RNAV_STAR
Selected Airport:	KCLE
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 BRWNZ (RNAV) path TRRKY__OZZYY

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:	AGC,AUW,BDF,BFD,BRD,BVT,CIP,C KB,CMK,CRI,CTW,DNV,DNY,DWN,E CB,EON,ESL,ETG,EWO,FJC,FLM,FQ M,GFL,GGT,GRV,GSH,HIC,HML,HNK ,HNN,HTO,HUO,IHD,JVL,LAN,LGA,L NR,LVZ,MIP,MKG,MNM,MSS,MXE,O DI,PLL,PLN,PMM,PNT,PWL,RBS,REC ,RKA,RST,SAM,SFK,SLK,SLT,TDT,T HS,UCA,UIN,ULW,VLA,YRK

DME DME Assessment Results for BRWNZ (RNAV) path TRRKY_OZZYY

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	DJB	N41° 21' 29.03", W082° 09' 43.09"	5.0 W	130	H	AIRNAV2	NO	Enabled	100 %	100 %
2	CXR	N41° 31' 00.94", W081° 09' 47.47"	5.0 W	130	H	AIRNAV2	NO	Enabled	100 %	100 %
3	ACO	N41° 06' 28.45", W081° 12' 05.49"	4.0 W	40	L	AIRNAV2	NO	Enabled	46.9 %	46.9 %
4	AGC	N40° 16' 43.12", W080° 02' 27.08"	9.0 W	40	L	AIRNAV2	NO	Disabled		
5	AUW	N44° 50' 48.40", W089° 35' 11.68"	2.0 E	40	L	AIRNAV2	NO	Disabled		
6	BDF	N41° 09' 35.03", W089° 35' 16.34"	0.0 E	130	H	AIRNAV2	NO	Disabled		
7	BFD	N41° 47' 10.99", W078° 37' 09.65"	7.0 W	40	L	AIRNAV2	NO	Disabled		
8	BVT	N40° 33' 22.22", W087° 04' 09.75"	1.0 E	130	H	AIRNAV2	NO	Disabled		
9	CIP	N41° 08' 46.66", W079° 27' 28.71"	6.0 W	40	L	AIRNAV2	NO	Disabled		
10	CKB	N39° 15' 11.58", W080° 16' 04.30"	4.0 W	40	L	AIRNAV2	NO	Disabled		
11	CMK	N41° 16' 48.32", W073° 34' 52.77"	12.0 W	40	L	AIRNAV2	NO	Disabled		
12	CRI	N40° 36' 44.90", W073° 53' 40.00"	11.0 W	25	T	AIRNAV2	NO	Disabled		
13	CTW	N40° 13' 45.15", W081° 28' 35.32"	7.0 W	40	L	AIRNAV2	NO	Disabled		
14	DNV	N40° 17' 37.56", W087° 33' 26.14"	2.0 E	40	L	AIRNAV2	NO	Disabled		
15	DNY	N42° 10' 41.81", W074° 57' 24.99"	11.0 W	40	L	AIRNAV2	NO	Disabled		
16	DWN	N45° 05' 14.87", W094° 27' 13.86"	7.0 E	40	L	AIRNAV2	NO	Disabled		
17	ECB	N38° 09' 30.11", W082° 54' 36.20"	2.0 W	40	L	AIRNAV2	NO	Disabled		
18	EON	N41° 16' 10.68", W087° 47' 27.79"	2.0 E	40	L	AIRNAV2	NO	Disabled		
19	ESL	N39° 13' 31.77", W078° 59' 22.20"	6.0 W	40	L	AIRNAV2	NO	Disabled		
20	ETG	N41° 12' 53.82", W078° 08' 33.92"	10.0 W	130	H	AIRNAV2	NO	Disabled		
21	EWO	N37° 37' 54.52", W085° 40' 33.16"	1.0 E	40	L	AIRNAV2	NO	Disabled		
22	FJC	N40° 43' 36.12", W075° 27' 17.12"	10.0 W	40	L	AIRNAV2	NO	Disabled		
23	FLM	N38° 38' 57.99", W084° 18' 38.17"	4.0 W	130	H	AIRNAV2	NO	Disabled		
24	FQM	N41° 20' 18.81", W076° 46' 29.52"	9.0 W	40	L	AIRNAV2	NO	Disabled		
25	GFL	N43° 20' 30.09", W073° 36' 42.32"	14.0 W	40	L	AIRNAV2	NO	Disabled		
26	GGT	N42° 47' 20.24", W075° 49' 36.29"	11.0 W	40	L	AIRNAV2	NO	Disabled		
27	GRV	N39° 38' 06.11", W079° 03' 01.90"	6.0 W	40	L	AIRNAV2	NO	Disabled		
28	GSH	N41° 31' 30.56", W086° 01' 40.63"	0.0 E	130	H	AIRNAV2	NO	Disabled		
29	HIC	N43° 34' 29.47", W085° 42' 58.18"	1.0 W	40	L	AIRNAV2	NO	Disabled		
30	HML	N48° 52' 09.09", W097° 07' 01.51"	9.0 E	130	H	AIRNAV2	NO	Disabled		
31	HNK	N42° 03' 47.01", W075° 18' 58.62"	11.0 W	130	H	AIRNAV2	NO	Disabled		
32	HNN	N38° 45' 14.85", W082° 01' 34.20"	3.0 W	130	H	AIRNAV2	NO	Disabled		
33	HTO	N40° 55' 08.38", W072° 19' 00.14"	13.0 W	130	H	AIRNAV2	NO	Disabled		

DME DME Assessment Results for BRWNZ (RNAV) path TRRKY_OZZYY

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
34	HUO	N41° 24' 34.87", W074° 35' 29.74"	11.0 W	130	H	AIRNAV2	NO	Disabled		
35	IHD	N39° 58' 27.27", W079° 21' 30.12"	6.0 W	40	L	AIRNAV2	NO	Disabled		
36	JVL	N42° 33' 28.83", W089° 06' 18.93"	3.0 E	40	L	AIRNAV2	NO	Disabled		
37	LAN	N42° 43' 02.62", W084° 41' 51.03"	0.0 E	40	L	AIRNAV2	NO	Disabled		
38	LGA	N40° 47' 01.38", W073° 52' 06.96"	12.0 W	40	L	AIRNAV2	NO	Disabled		
39	LNR	N43° 17' 39.85", W090° 07' 59.33"	0.0 E	40	L	AIRNAV2	NO	Disabled		
40	LVZ	N41° 16' 22.10", W075° 41' 22.07"	10.0 W	40	L	AIRNAV2	NO	Disabled		
41	MIP	N41° 01' 24.21", W076° 39' 55.04"	9.0 W	40	L	AIRNAV2	NO	Disabled		
42	MKG	N43° 10' 09.31", W086° 02' 21.76"	1.0 W	40	L	AIRNAV2	NO	Disabled		
43	MNM	N45° 10' 48.58", W087° 38' 49.83"	0.0 E	40	L	AIRNAV2	NO	Disabled		
44	MSS	N44° 54' 51.92", W074° 43' 21.78"	14.0 W	130	H	AIRNAV2	NO	Disabled		
45	MXE	N39° 55' 04.98", W075° 40' 14.96"	9.0 W	40	L	AIRNAV2	NO	Disabled		
46	ODI	N43° 54' 44.38", W091° 28' 03.06"	1.0 E	130	H	AIRNAV2	NO	Disabled		
47	PLL	N41° 57' 56.31", W089° 31' 27.19"	3.0 E	40	L	AIRNAV2	NO	Disabled		
48	PLN	N45° 37' 50.33", W084° 39' 50.79"	6.0 W	40	L	AIRNAV2	NO	Disabled		
49	PMM	N42° 27' 57.73", W086° 06' 17.32"	0.0 E	130	H	AIRNAV2	NO	Disabled		
50	PNT	N40° 49' 16.32", W088° 44' 00.63"	3.0 E	40	L	AIRNAV2	NO	Disabled		
51	PWL	N41° 46' 11.18", W073° 36' 01.99"	12.0 W	40	L	AIRNAV2	NO	Disabled		
52	RBS	N40° 34' 54.13", W088° 09' 51.36"	2.0 E	40	L	AIRNAV2	NO	Disabled		
53	REC	N40° 32' 47.25", W078° 44' 49.28"	9.0 W	40	L	AIRNAV2	NO	Disabled		
54	RKA	N42° 27' 58.91", W075° 14' 21.51"	11.0 W	40	L	AIRNAV2	NO	Disabled		
55	RST	N43° 46' 58.45", W092° 35' 49.06"	5.0 E	40	L	AIRNAV2	NO	Disabled		
56	SAM	N38° 29' 06.68", W088° 05' 08.90"	3.0 E	40	L	AIRNAV2	NO	Disabled		
57	SFK	N41° 41' 42.91", W077° 25' 11.66"	8.0 W	40	L	AIRNAV2	NO	Disabled		
58	SLK	N44° 23' 04.42", W074° 12' 16.22"	14.0 W	40	L	AIRNAV2	NO	Disabled		
59	SLT	N41° 30' 45.93", W077° 58' 12.39"	8.0 W	130	H	AIRNAV2	NO	Disabled		
60	TDT	N41° 42' 46.91", W079° 25' 02.17"	9.0 W	40	L	AIRNAV2	NO	Disabled		
61	THS	N39° 55' 59.62", W077° 57' 03.40"	7.0 W	40	L	AIRNAV2	NO	Disabled		
62	UCA	N43° 01' 35.45", W075° 09' 52.28"	12.0 W	40	L	AIRNAV2	NO	Disabled		
63	UIN	N39° 50' 52.35", W091° 16' 44.13"	5.0 E	130	H	AIRNAV2	NO	Disabled		
64	ULW	N42° 05' 39.16", W077° 01' 28.53"	12.0 W	40	L	AIRNAV2	NO	Disabled		
65	VLA	N39° 05' 37.82", W089° 09' 44.08"	4.0 E	40	L	AIRNAV2	NO	Disabled		
66	YRK	N38° 38' 38.88", W082° 58' 42.02"	5.0 W	40	L	AIRNAV2	NO	Disabled		

DME DME Assessment Results for BRWNZ (RNAV) path TRRKY__OZZYY

Flight Check DME Selection

Distance [NM]	Selected DMEs					Alternate
0.0	DJB	CXR				
9.0	ACO	DJB	CXR			

Inertial Drift Segments

#	Start Location	End Location	Length [NM]
1	N41° 49' 53.91", W082° 10' 03.16"	N41° 44' 40.64", W081° 58' 38.97"	9.9786
2	N41° 50' 33.90", W082° 06' 11.12"	N41° 49' 32.08", W081° 54' 43.32"	8.604
3	N42° 01' 09.50", W083° 30' 02.50"	N42° 00' 52.52", W083° 25' 59.74"	3.0196
4	N41° 26' 07.51", W082° 08' 15.43"	N42° 47' 04.67", W085° 29' 10.01"	169.6125
5	N42° 02' 26.06", W083° 25' 16.45"	N42° 01' 06.59", W083° 21' 51.08"	2.8671
6	N41° 35' 02.06", W082° 09' 37.02"	N41° 58' 37.27", W082° 56' 05.98"	41.9308
7	N41° 31' 54.26", W082° 09' 07.66"	N41° 57' 52.34", W082° 46' 45.45"	38.2472
8	N42° 41' 35.16", W085° 00' 41.73"	N42° 39' 45.29", W084° 51' 19.08"	7.134
9	N41° 48' 41.68", W082° 12' 18.67"	N41° 56' 53.14", W084° 16' 57.02"	93.1688
10	N41° 59' 45.07", W083° 32' 07.77"	N42° 00' 04.96", W083° 26' 37.57"	4.1038

Available DMEs by Waypoints

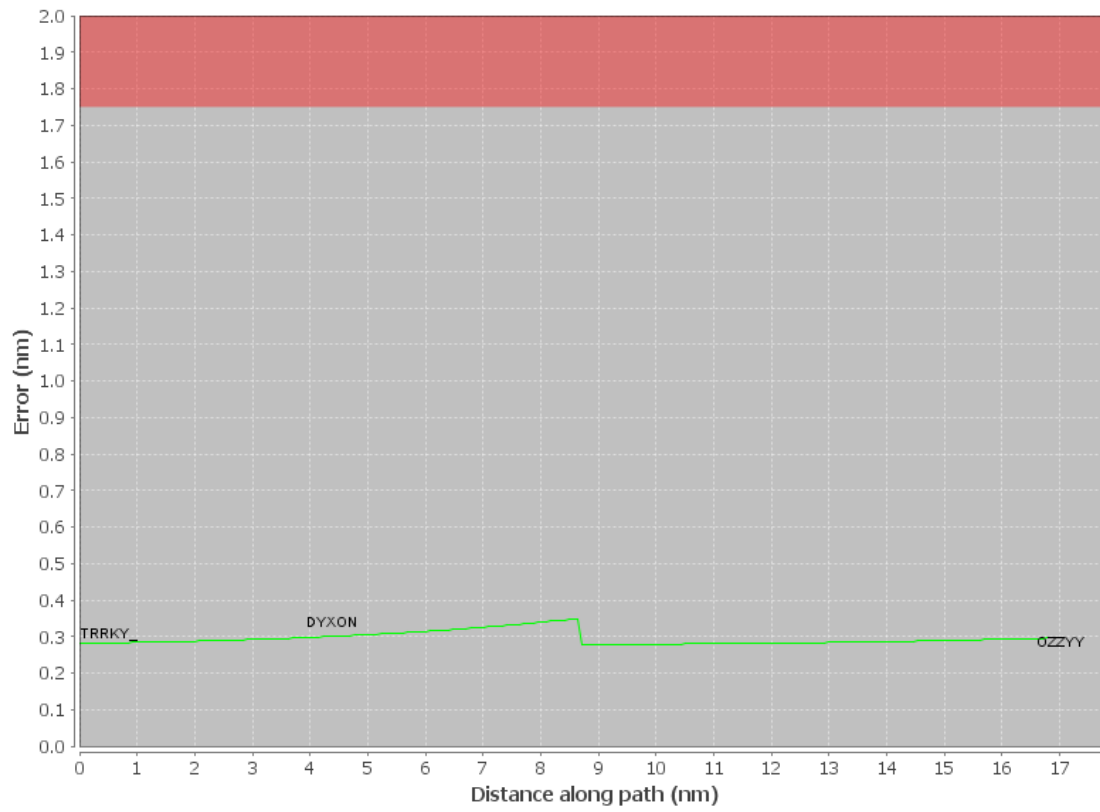
Waypoint Before	Waypoint After	DME List
TRRKY__	DYXON	CXR, DJB
DYXON	OZZYY	CXR, DJB, ACO

DME DME Assessment Results for BRWNZ (RNAV) path TRRKY_OZZYY

User Data Files								
#	File Name							
1	BRWNZ2.udt							
User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	UDT ESV MFD MFD [AIRNAV2]	N40° 52' 07.00", W082° 35' 27.46"	3.0 W	40	1222	108.8	UDT ESV MFD	
ESV:		Bearing [True]: 325.0° to 43.0° Bearing [Mag]: 328.0° to 46.0°				Arc Distance: Out to 80.0 NM Altitude: 6400.0 to 20000.0 ft		
2	UDT ESV OKK OKK [AIRNAV2]	N40° 31' 40.01", W086° 03' 28.80"	5.0 W	130	825	113.5	UDT ESV OKK	
ESV:		Bearing [True]: 356.0° to 50.0° Bearing [Mag]: 1.0° to 55.0°				Arc Distance: Out to 101.0 NM Altitude: 9900.0 to 20000.0 ft		
3	UDT ESV ACO ACO [AIRNAV2]	N41° 06' 28.45", W081° 12' 05.49"	4.0 W	40	1198	114.4	UDT ESV ACO	
ESV:		Bearing [True]: 303.0° to 321.0° Bearing [Mag]: 307.0° to 325.0°				Arc Distance: Out to 82.0 NM Altitude: 7700.0 to 11000.0 ft		
4	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 259.0° to 268.0° Bearing [Mag]: 262.0° to 271.0°				Arc Distance: Out to 103.0 NM Altitude: 10000.0 to 16000.0 ft		
5	UDT ESV OXI OXI [AIRNAV2]	N41° 19' 19.35", W086° 38' 57.45"	0.0 E	130	690	115.6	UDT ESV OXI	
ESV:		Bearing [True]: 0.0° to 138.0° Bearing [Mag]: 0.0° to 138.0°				Arc Distance: Out to 106.0 NM Altitude: 10000.0 to 20000.0 ft		
6	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 65.0° to 98.0° Bearing [Mag]: 68.0° to 101.0°				Arc Distance: Out to 64.0 NM Altitude: 4000.0 to 16000.0 ft		
7	UDT ESV CRL CRL [AIRNAV2]	N42° 02' 52.90", W083° 27' 27.26"	3.0 W	130	652.9	115.7	UDT ESV CRL	
ESV:		Bearing [True]: 293.0° to 5.0° Bearing [Mag]: 296.0° to 8.0°				Arc Distance: Out to 102.0 NM Altitude: 8500.0 to 16000.0 ft		
8	UDT ESV SVM SVM [AIRNAV2]	N42° 24' 31.11", W083° 35' 38.05"	3.0 W	40	955	114.3	UDT ESV SVM	
ESV:		Bearing [True]: 89.0° to 117.0° Bearing [Mag]: 92.0° to 120.0°				Arc Distance: Out to 73.0 NM Altitude: 6200.0 to 20000.0 ft		
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ESV:		Bearing [True]: 298.0° to 343.0° Bearing [Mag]: 303.0° to 348.0°				Arc Distance: Out to 73.0 NM Altitude: 6200.0 to 16000.0 ft		
10	UDT ESV DXO DXO [AIRNAV2]	N42° 12' 47.29", W083° 21' 59.99"	6.0 W	130	669.3	113.4	UDT ESV DXO	
ESV:		Bearing [True]: 279.0° to 333.0° Bearing [Mag]: 285.0° to 339.0°				Arc Distance: Out to 106.0 NM Altitude: 9700.0 to 20000.0 ft		
11	UDT ESV PSI PSI [AIRNAV2]	N42° 42' 03.09", W083° 31' 57.98"	0.0 E	40	1149	null	UDT ESV PSI	
ESV:		Bearing [True]: 128.0° to 170.0° Bearing [Mag]: 128.0° to 170.0°				Arc Distance: Out to 80.0 NM Altitude: 7400.0 to 11000.0 ft		

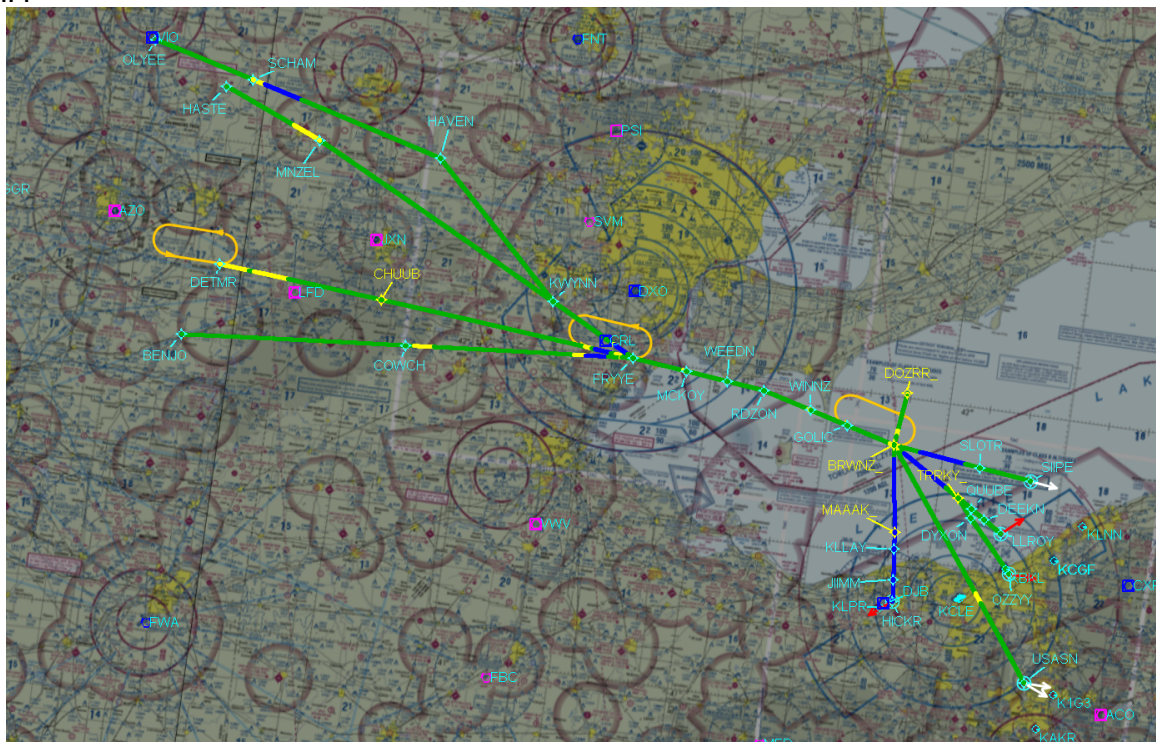
DME DME Assessment Results for BRWNZ (RNAV) path TRRKY__OZZYY

DME Error



DME DME Assessment Results for BRWNZ (RNAV) path TRRKY__OZZYY

Graphic Depiction 1



DME DME Assessment Results for BRWNZ (RNAV) path TRRKY__OZZYY

Graphic Depiction 2

