

DME DME Assessment Results for HAWKZ8 path LATAY_HAWKZ

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Bob CTR Graham
Project File:	C:\Users\Bob CTR Graham\Desktop\AREA NAV Projects and TARGETS Files\SEA 2023\HAWKZ8_P00033400_7-11-24\TARGETS\20231128_HAWKZ8.tgs
Output File:	C:\Users\Bob CTR Graham\Desktop\AREA NAV Projects and TARGETS Files\SEA 2023\HAWKZ8_P00033400_7-11-24\FINAL DOCS\KSEA [IFPA] HAWKZ8 20231128_1251 MST\LATAY_HAWKZ\KSEA HAWKZ8 RNAV STAR LATAY HAWKZ 20231128_1251 MST.pdf
Procedure Name:	HAWKZ8
Software: DmeDmePlugin:	7.2.1
Date/Time:	11/28/2023 12:51 MST
Databases:	DTED LEVEL 0 MAX

Failures

No Failures

Warnings

No Warnings

Informational

No Informational

Notes For Flight Check

None

Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	Ground Speed (kts)	Turn Type	Leg Type
LATAY	WP	N46° 24' 28.2800", W125° 04' 18.5200"	12000	VNAV	270	FLY_BY	TF
AAYRR	WP	N46° 38' 48.5500", W123° 43' 20.6000"	12000	VNAV	270	FLY_BY	TF
HAWKZ	WP	N46° 47' 04.9300", W122° 44' 20.2900"	10000	VNAV	270	FLY_BY	TF

Flyability

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

DME DME Assessment Results for HAWKZ8 path LATAY_HAWKZ

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

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	CVV	N48° 14' 40.9000", W122° 43' 27.9000"	19.0 E	130	DH	IFPA	NO	Enabled	23.3 %	23.3 %
2	SEA	N47° 26' 07.3434", W122° 18' 34.6180"	19.0 E	130	H	IFPA	NO	Enabled	3 %	3 %
3	TOU	N48° 17' 59.6370", W124° 37' 37.3560"	22.0 E	130	H	IFPA	NO	Enabled	16.1 %	16.1 %
4	AST	N46° 09' 42.1135", W123° 52' 49.3557"	15.0 E	40	L	IFPA	NO	Enabled	68.1 %	68.1 %
5	HQM	N46° 56' 49.3455", W124° 08' 57.3680"	19.0 E	130	H	IFPA	NO	Enabled	97.1 %	97.1 %
6	OLM	N46° 58' 17.9000", W122° 54' 06.6000"	19.0 E	130	H	IFPA	NO	Enabled	74.1 %	74.1 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	HQM	AST	TOU			
14.2	TOU	AST				
14.4	AST	HQM	TOU			
15.7	TOU	HQM				
16.0						
18.5	HQM	AST				
25.6	HQM	AST	OLM			
70.5	OLM	HQM				
76.1	HQM	OLM	CVV			
96.2	SEA	HQM	CVV	OLM		

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N46° 28' 33.1148", W124° 41' 52.6877"	N46° 29' 10.4775", W124° 38' 24.8556"	2.4734

DME DME Assessment Results for HAWKZ8 path LATAY_HAWKZ

Available DMEs by Waypoints

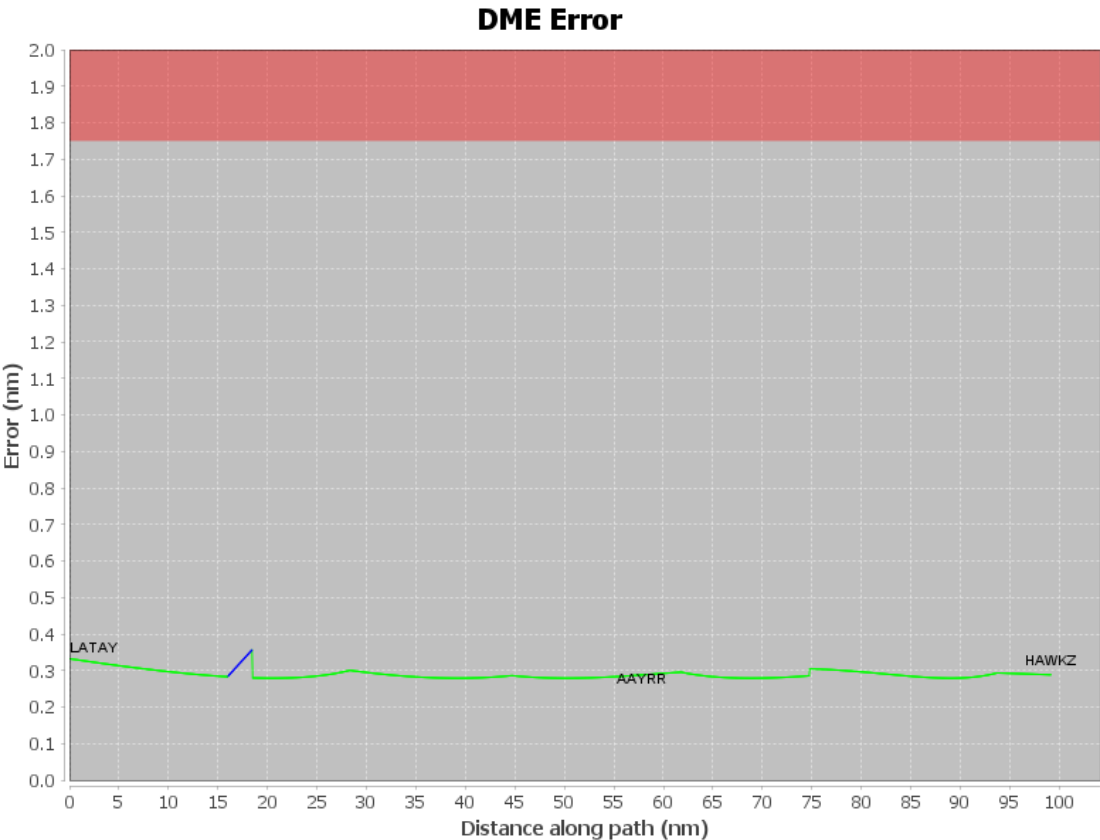
Waypoint Before	Waypoint After	DME List	Suggested DMEs
LATAY	AAYRR	OLM, AST, HQM, TOU	
AAYRR	HAWKZ	OLM, AST, CVV, HQM, SEA	

User Data Files

#	File Name
1	New Analysis.udt
2	UserDMEs_KSEA HAWKZ4 STAR KRIEG RAYUU 20140515_1700.udt

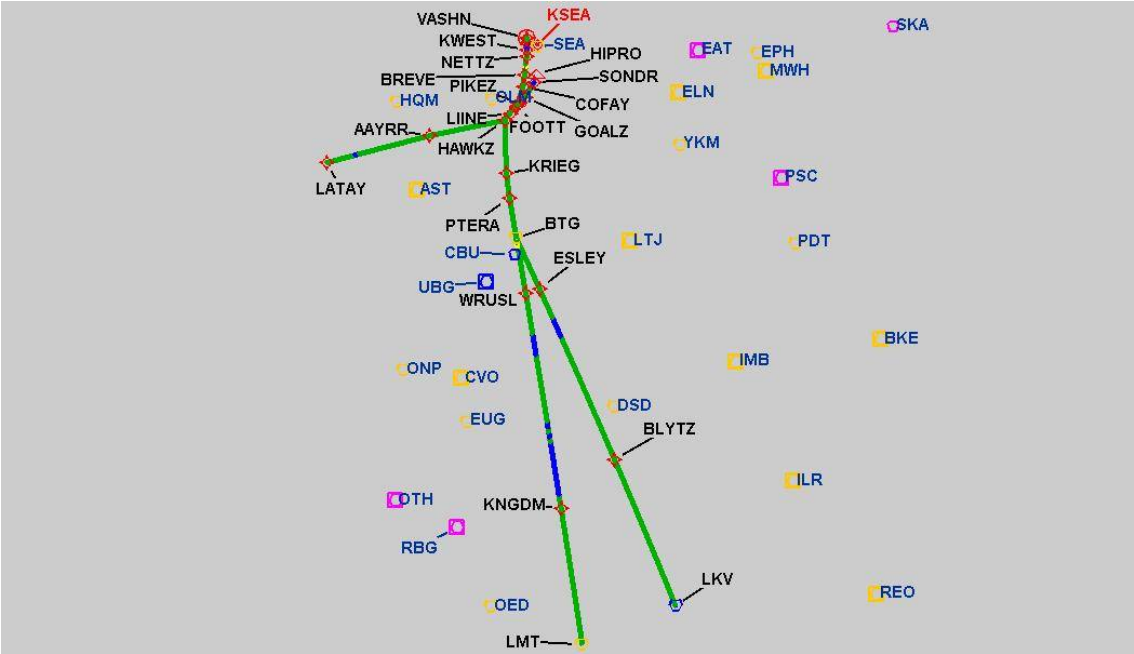
User DMEs

#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	HQM FAA 740121-30 HQM [IFPA]	N46° 56' 49.3455", W124° 08' 57.3680"	19.0 E	130	10	117.7	HQM FAA 740121-30	
ESV:		Bearing [True]: 216.0° to 237.0° Bearing [Mag]: 197.0° to 218.0°				Arc Distance: Out to 52.0 NM Altitude: 12000.0 to 16000.0 ft		
2	UDT ESV SEA SEA [IFPA]	N47° 26' 07.3434", W122° 18' 34.6180"	19.0 E	130	348.4	116.8	UDT ESV SEA	
ESV:		Bearing [True]: 185.0° to 211.0° Bearing [Mag]: 166.0° to 192.0°				Arc Distance: Out to 91.0 NM Altitude: 10000.0 to 16000.0 ft		
3	TOU TOU [IFPA]	N48° 17' 59.6370", W124° 37' 37.3560"	22.0 E	130	1650	112.2	TOU	
ESV:		Bearing [True]: 181.0° to 191.0° Bearing [Mag]: 159.0° to 169.0°				Arc Distance: Out to 119.0 NM Altitude: 11900.0 to 19700.0 ft		
4	UDT ESV HQM HQM [IFPA]	N46° 56' 49.3455", W124° 08' 57.3680"	19.0 E	130	10	117.7	UDT ESV HQM	
ESV:		Bearing [True]: 63.0° to 136.0° Bearing [Mag]: 44.0° to 117.0°				Arc Distance: Out to 88.0 NM Altitude: 7100.0 to 16000.0 ft		
5	OLM OLM [IFPA]	N46° 58' 17.9000", W122° 54' 06.6000"	19.0 E	130	200	113.4	OLM	
ESV:		Bearing [True]: 234.0° to 251.0° Bearing [Mag]: 215.0° to 232.0°				Arc Distance: Out to 71.0 NM Altitude: 11700.0 to 14700.0 ft		
6	AST FAA 820932-10 AST [IFPA]	N46° 09' 42.1135", W123° 52' 49.3557"	15.0 E	40	10.6	114.0	AST FAA 820932-10	
ESV:		Bearing [True]: 282.0° to 303.0° Bearing [Mag]: 267.0° to 288.0°				Arc Distance: Out to 54.0 NM Altitude: 11900.0 to 20000.0 ft		



DME DME Assessment Results for HAWKZ8 path LATAY_HAWKZ

Graphic Depiction 1



DME DME Assessment Results for HAWKZ8 path LIINE_SONDR

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Bob CTR Graham
Project File:	C:\Users\Bob CTR Graham\Desktop\AREA NAV Projects and TARGETS Files\SEA 2023\HAWKZ8_P00033400_7-11-24\TARGETS\20231128_HAWKZ8.tgs
Output File:	C:\Users\Bob CTR Graham\Desktop\AREA NAV Projects and TARGETS Files\SEA 2023\HAWKZ8_P00033400_7-11-24\FINAL DOCS\KSEA [IFPA] HAWKZ8 20231128_1251_MST\LIINE_SONDR\KSEA HAWKZ8 RNAV STAR LIINE SONDR 20231128_1251_MST.pdf
Procedure Name:	HAWKZ8
Software: DmeDmePlugin:	7.2.1
Date/Time:	11/28/2023 12:51 MST
Databases:	DTED LEVEL 0 MAX

Failures

No Failures

Warnings

No Warnings

Informational

No Informational

Notes For Flight Check

None

Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	Ground Speed (kts)	Turn Type	Leg Type
LIINE	WP	N46° 50' 39.1900", W122° 40' 06.6200"	10000	VNAV	270	FLY_BY	TF
FOOTT	WP	N46° 54' 29.8300", W122° 34' 48.9300"	10000	VNAV	250	FLY_BY	TF
GOALZ	WP	N46° 58' 56.8400", W122° 28' 06.6000"	9000	VNAV	230	FLY_BY	TF
SONDR	WP	N47° 07' 25.6900", W122° 20' 56.3000"	6000	VNAV	230	FLY_BY	TF

Flyability

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

DME DME Assessment Results for HAWKZ8 path LIINE_SONDR

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

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	CVV	N48° 14' 40.9000", W122° 43' 27.9000"	19.0 E	130	DH	IFPA	NO	Enabled	91.5 %	92 %
2	SEA	N47° 26' 07.3434", W122° 18' 34.6180"	19.0 E	130	H	IFPA	NO	Enabled	91.5 %	92 %
3	OLM	N46° 58' 17.9000", W122° 54' 06.6000"	19.0 E	130	H	IFPA	NO	Enabled	91.5 %	92 %
4	HQM	N46° 56' 49.3455", W124° 08' 57.3680"	19.0 E	130	H	IFPA	NO	Enabled	61 %	62.6 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	SEA	OLM	HQM	CVV		
6.9	SEA	OLM	CVV			
8.8	SEA	OLM	HQM	CVV		
15.5	CVV	OLM	SEA			
19.8						

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N47° 05' 59.8127", W122° 22' 09.1078"	N47° 07' 25.6900", W122° 20' 56.3000"	1.6545

Available DMEs by Waypoints			
Waypoint Before	Waypoint After	DME List	Suggested DMEs
LIINE	FOOTT	OLM, CVV, HQM, SEA	
FOOTT	GOALZ	OLM, CVV, HQM, SEA	
GOALZ	SONDR	OLM, CVV, HQM, SEA	

DME DME Assessment Results for HAWKZ8 path LIINE_SONDR

User Data Files

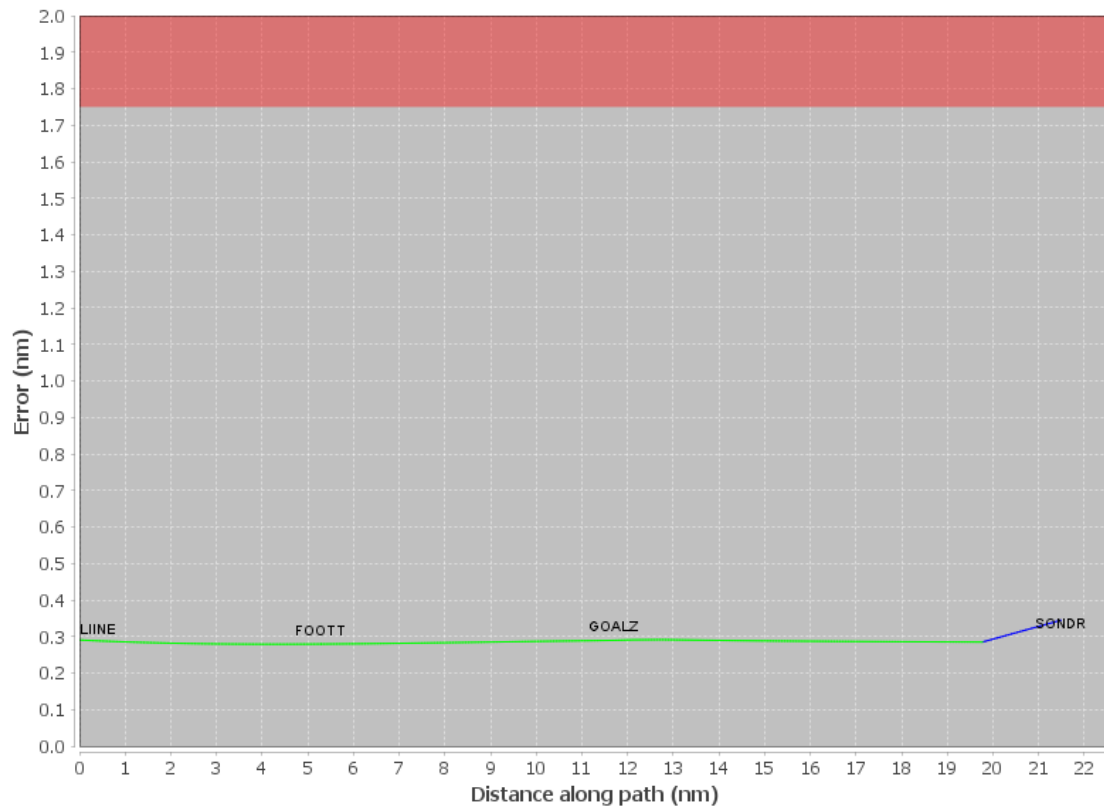
#	File Name
1	New Analysis.udt
2	UserDMEs_KSEA HAWKZ4 STAR KRIEG RAYUU 20140515_1700.udt

User DMEs

#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	HQM FAA 740121-30 HQM [IFPA]	N46° 56' 49.3455", W124° 08' 57.3680"	19.0 E	130	10	117.7	HQM FAA 740121-30	
ESV:		Bearing [True]: 216.0° to 237.0° Bearing [Mag]: 197.0° to 218.0°				Arc Distance: Out to 52.0 NM Altitude: 12000.0 to 16000.0 ft		
2	UDT ESV SEA SEA [IFPA]	N47° 26' 07.3434", W122° 18' 34.6180"	19.0 E	130	348.4	116.8	UDT ESV SEA	
ESV:		Bearing [True]: 185.0° to 211.0° Bearing [Mag]: 166.0° to 192.0°				Arc Distance: Out to 91.0 NM Altitude: 10000.0 to 16000.0 ft		
3	TOU TOU [IFPA]	N48° 17' 59.6370", W124° 37' 37.3560"	22.0 E	130	1650	112.2	TOU	
ESV:		Bearing [True]: 181.0° to 191.0° Bearing [Mag]: 159.0° to 169.0°				Arc Distance: Out to 119.0 NM Altitude: 11900.0 to 19700.0 ft		
4	UDT ESV HQM HQM [IFPA]	N46° 56' 49.3455", W124° 08' 57.3680"	19.0 E	130	10	117.7	UDT ESV HQM	
ESV:		Bearing [True]: 63.0° to 136.0° Bearing [Mag]: 44.0° to 117.0°				Arc Distance: Out to 88.0 NM Altitude: 7100.0 to 16000.0 ft		
5	OLM OLM [IFPA]	N46° 58' 17.9000", W122° 54' 06.6000"	19.0 E	130	200	113.4	OLM	
ESV:		Bearing [True]: 234.0° to 251.0° Bearing [Mag]: 215.0° to 232.0°				Arc Distance: Out to 71.0 NM Altitude: 11700.0 to 14700.0 ft		
6	AST FAA 820932-10 AST [IFPA]	N46° 09' 42.1135", W123° 52' 49.3557"	15.0 E	40	10.6	114.0	AST FAA 820932-10	
ESV:		Bearing [True]: 282.0° to 303.0° Bearing [Mag]: 267.0° to 288.0°				Arc Distance: Out to 54.0 NM Altitude: 11900.0 to 20000.0 ft		

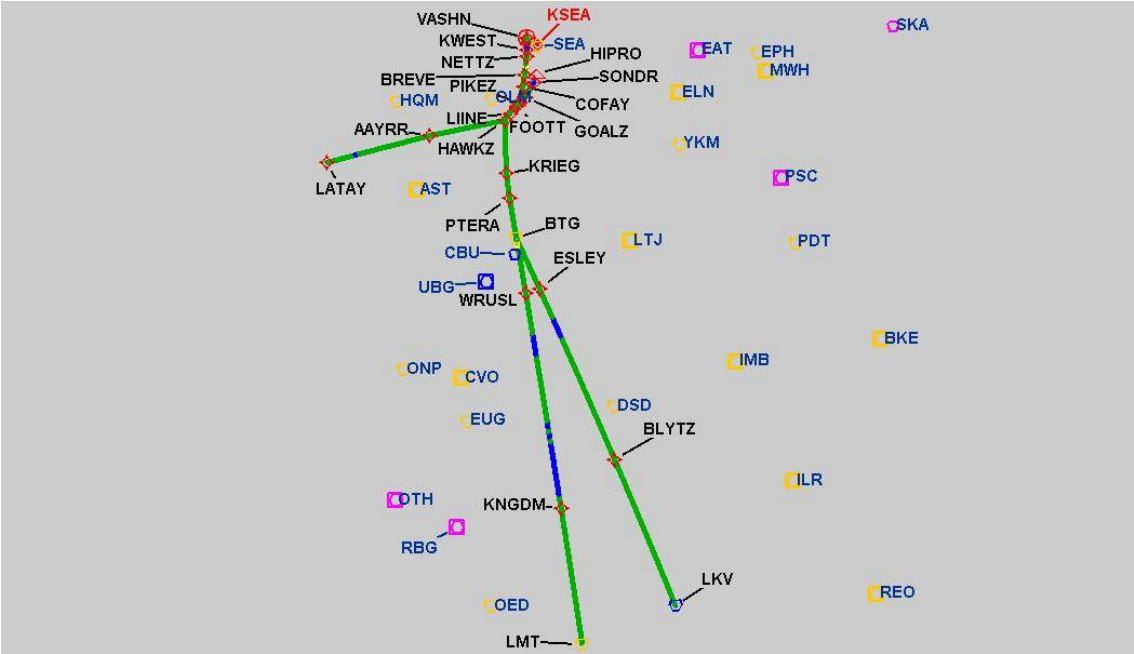
DME DME Assessment Results for HAWKZ8 path LIINE_SONDR

DME Error



DME DME Assessment Results for HAWKZ8 path LIINE_SONDR

Graphic Depiction 1



DME DME Assessment Results for HAWKZ8 path LKV_VASHN

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Bob CTR Graham
Project File:	C:\Users\Bob CTR Graham\Desktop\AREA NAV Projects and TARGETS Files\SEA 2023\HAWKZ8_P00033400_7-11-24\TARGETS\20231128_HAWKZ8.tgs
Output File:	C:\Users\Bob CTR Graham\Desktop\AREA NAV Projects and TARGETS Files\SEA 2023\HAWKZ8_P00033400_7-11-24\FINAL DOCS\KSEA [IFPA] HAWKZ8 20231128_1251 MST\LKV_VASHN\KSEA HAWKZ8 RNAV STAR LKV VASHN 20231128_1251 MST.pdf
Procedure Name:	HAWKZ8
Software: DmeDmePlugin:	7.2.1
Date/Time:	11/28/2023 12:51 MST
Databases:	DTED LEVEL 0 MAX

Failures

No Failures

Warnings

No Warnings

Informational

No Informational

Notes For Flight Check

None

Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	Ground Speed (kts)	Turn Type	Leg Type
LKV	WP	N42° 29' 34.2352", W120° 30' 25.5759"	24000	VNAV	270	FLY_BY	TF
BLYTZ	WP	N43° 47' 02.9400", W121° 18' 13.8300"	24000	VNAV	270	FLY_BY	TF
ESLEY	WP	N45° 17' 46.2600", W122° 17' 11.9300"	13000	VNAV	270	FLY_BY	TF
BTG	WP	N45° 44' 52.1197", W122° 35' 29.5316"	12000	VNAV	270	FLY_BY	TF
PTERA	WP	N46° 05' 39.5200", W122° 40' 38.8900"	10000	VNAV	270	FLY_BY	TF
KRIEG	WP	N46° 19' 12.7500", W122° 43' 19.9400"	10000	VNAV	270	FLY_BY	TF
HAWKZ	WP	N46° 47' 04.9300", W122° 44' 20.2900"	10000	VNAV	270	FLY_BY	TF
LIINE	WP	N46° 50' 39.1900", W122° 40' 06.6200"	10000	VNAV	270	FLY_BY	TF
PIKEZ	WP	N46° 56' 15.9400", W122° 33' 43.2700"	12000	VNAV	250	FLY_BY	TF
COFAY	WP	N47° 04' 43.8300", W122° 30' 01.5700"	10000	VNAV	250	FLY_BY	TF
BREVE	WP	N47° 11' 23.7400", W122° 28' 48.4600"	10000	VNAV	250	FLY_BY	TF
NETTZ	WP	N47° 21' 09.0000", W122° 27' 19.0000"	8000	VNAV	230	FLY_BY	TF
KWEST	WP	N47° 24' 32.8900", W122° 27' 19.1400"	7000	VNAV	230	FLY_BY	TF
VASHN	WP	N47° 30' 41.4100", W122° 27' 19.3200"	6000	VNAV	210	FLY_OVER	TF

DME DME Assessment Results for HAWKZ8 path LKV_VASHN

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

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

DME DME Assessment Results for HAWKZ8 path LKV_VASHN

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	CVV	N48° 14' 40.9000", W122° 43' 27.9000"	19.0 E	130	DH	IFPA	NO	Enabled	20.2 %	19.7 %
2	SEA	N47° 26' 07.3434", W122° 18' 34.6180"	19.0 E	130	H	IFPA	NO	Enabled	28.1 %	27.6 %
3	DSD	N44° 15' 09.9388", W121° 18' 12.7884"	18.0 E	130	H	IFPA	NO	Enabled	44.9 %	45.4 %
4	OED	N42° 28' 46.4672", W122° 54' 46.5608"	19.0 E	130	H	IFPA	NO	Enabled	28.3 %	28.6 %
5	LKV	N42° 29' 34.2352", W120° 30' 25.5759"	19.0 E	130	H	IFPA	NO	Enabled	25.8 %	26 %
6	CBU	N45° 35' 19.0716", W122° 36' 40.5087"	15.0 E	130	H	IFPA	NO	Enabled	21.9 %	22.1 %
7	UBG	N45° 21' 11.6383", W122° 58' 41.3300"	21.0 E	130	H	IFPA	NO	Enabled	22.4 %	22.7 %
8	HQM	N46° 56' 49.3455", W124° 08' 57.3680"	19.0 E	130	H	IFPA	NO	Enabled	25.7 %	25.3 %
9	OLM	N46° 58' 17.9000", W122° 54' 06.6000"	19.0 E	130	H	IFPA	NO	Enabled	20.9 %	20.4 %
10	EUG	N44° 07' 15.2343", W123° 13' 22.1925"	15.0 E	130	H	IFPA	NO	Enabled	22.5 %	22.8 %
11	CVO	N44° 29' 58.4353", W123° 17' 37.1764"	18.0 E	130	DH	IFPA	NO	Enabled	56.1 %	56.7 %
12	FJS	N41° 26' 58.8090", W122° 48' 23.2110"	19.0 E	130	H	IFPA	NO	Enabled	4.4 %	4.4 %
13	BTG	N45° 44' 52.1197", W122° 35' 29.5316"	21.0 E	130	H	IFPA	NO	Enabled	25.1 %	25.4 %
14	REO	N42° 35' 25.9750", W117° 52' 05.3470"	19.0 E	130	H	IFPA	NO	Enabled	3.5 %	3.5 %
15	PAE	N47° 55' 12.0312", W122° 16' 41.8197"	20.0 E	40	L	IFPA	NO	Enabled	3.3 %	3 %
16	IMB	N44° 38' 54.2100", W119° 42' 41.8730"	20.0 E	130	DH	IFPA	NO	Enabled	43.1 %	43.6 %
17	ILR	N43° 35' 35.2413", W118° 57' 18.1773"	18.0 E	130	DH	IFPA	NO	Enabled	30.4 %	30.8 %
18	LTJ	N45° 42' 48.9000", W121° 06' 03.0000"	21.0 E	130	DH	IFPA	NO	Enabled	54 %	54.5 %

DME DME Assessment Results for HAWKZ8 path LKV_VASHN

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	DSD	OED	ILR	REO		
4.5	ILR	LKV	DSD	OED	REO	
11.5	ILR	LKV	OED	DSD	IMB	
89.1	DSD	EUG	CVO	ILR	LTJ	IMB
99.8	DSD	CVO	EUG	LTJ	IMB	
103.3	DSD	CVO	LTJ	IMB		
147.5	IMB	LTJ	CVO			
149.9	CVO	LTJ				
156.6						
167.8	CBU	CVO	LTJ			
168.5	CBU	CVO				
173.0	CBU	CVO	UBG			
175.1	CBU	LTJ	CVO	UBG		
175.3	CBU	LTJ	CVO	BTG	UBG	
203.9	BTG	UBG	LTJ	CVO		
209.7	CVO	LTJ	CBU	UBG		
210.7	CBU	LTJ	CVO	BTG	UBG	
212.0	CBU	LTJ	CVO	UBG		
219.0	CBU	LTJ	BTG	UBG	CVO	
226.5	CBU	LTJ	BTG	CVO		
227.9	CBU	LTJ	BTG	SEA	CVO	
242.1	SEA	LTJ	CBU	HQM	BTG	
245.4	SEA	LTJ	HQM	BTG		
250.5	SEA	HQM	LTJ	BTG	OLM	
252.2	SEA	HQM	BTG	OLM		
253.7	SEA	HQM	BTG	OLM	CVV	
254.5	SEA	HQM	OLM	CVV		
261.2	SEA	HQM	LTJ	OLM	CVV	
270.0	SEA	HQM	CVV	OLM		
285.9	SEA	OLM	CVV	LTJ		
291.2	SEA	OLM	HQM	CVV		
309.6	CVV	OLM	SEA	PAE		
310.2	HQM	CVV	PAE	OLM		
312.3	HQM	CVV	PAE	OLM	SEA	
316.6	CVV	SEA	PAE	OLM		
316.8	CVV	SEA				
317.2	CVV	SEA	PAE			
317.5						
322.2	SEA	PAE				

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N44° 52' 03.0356", W122° 00' 07.9683"	N45° 02' 10.0563", W122° 06' 48.7034"	11.1746
2	N47° 23' 51.3570", W122° 27' 19.1115"	N47° 28' 28.4396", W122° 27' 19.2550"	4.6202

DME DME Assessment Results for HAWKZ8 path LKV_VASHN

Available DMEs by Waypoints

Waypoint Before	Waypoint After	DME List	Suggested DMEs
LKV	BLYTZ	LTJ, DSD, LKV, EUG, UBG, REO, CVO, ILR, FJS, OED, IMB	
BLYTZ	ESLEY	LTJ, DSD, BTG, EUG, LKV, CBU, UBG, CVO, ILR, IMB, OED	
ESLEY	BTG	LTJ, BTG, CBU, UBG, CVO	
BTG	PTERA	LTJ, BTG, HQM, CBU, UBG, CVO, SEA	
PTERA	KRIEG	LTJ, BTG, HQM, CBU, CVO, SEA	
KRIEG	HAWKZ	OLM, CVV, LTJ, BTG, HQM, SEA	
HAWKZ	LIINE	OLM, CVV, HQM, SEA	
LIINE	PIKEZ	OLM, CVV, LTJ, HQM, SEA	
PIKEZ	COFAY	OLM, CVV, LTJ, HQM, SEA	
COFAY	BREVE	OLM, CVV, HQM, SEA	
BREVE	NETTZ	OLM, CVV, HQM, PAE, SEA	
NETTZ	KWEST	OLM, CVV, HQM, PAE, SEA	
KWEST	VASHN	PAE, SEA	

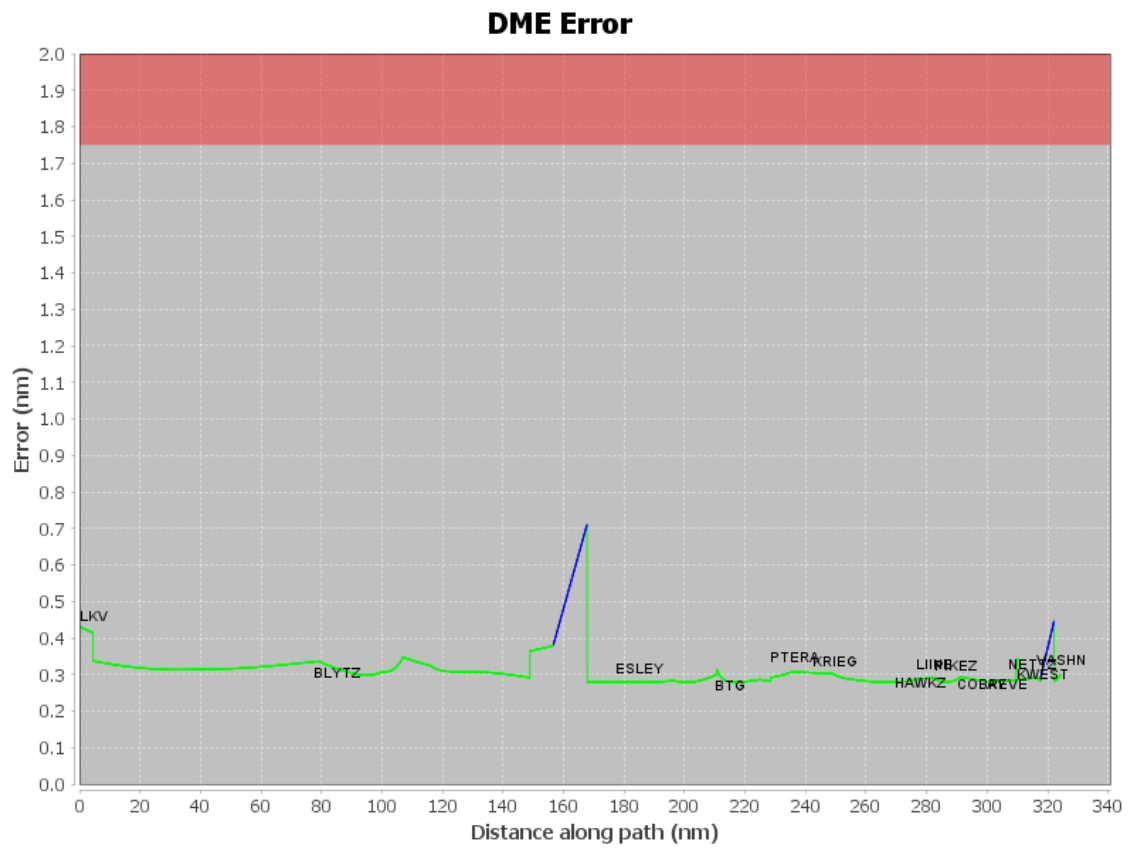
User Data Files

#	File Name
1	New Analysis.udt
2	UserDMEs_KSEA HAWKZ4 STAR KRIEG RAYUU 20140515_1700.udt

User DMEs

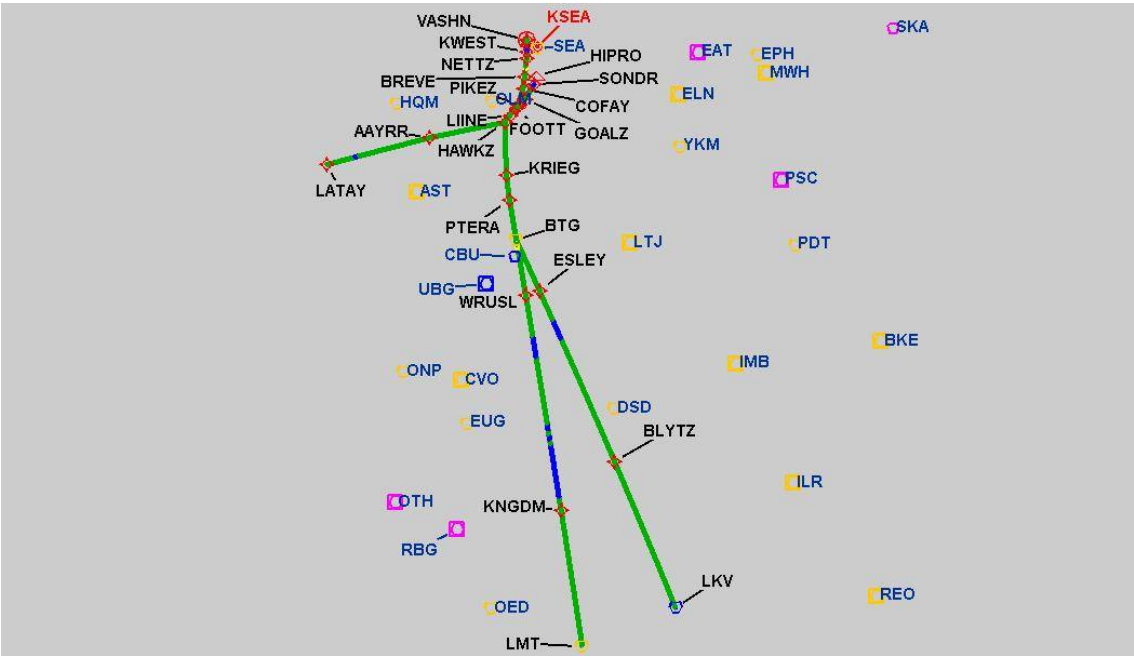
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	HQM FAA 740121-30 HQM [IFPA]	N46° 56' 49.3455", W124° 08' 57.3680"	19.0 E	130	10	117.7	HQM FAA 740121-30	
ESV:		Bearing [True]: 216.0° to 237.0° Bearing [Mag]: 197.0° to 218.0°				Arc Distance: Out to 52.0 NM Altitude: 12000.0 to 16000.0 ft		
2	UDT ESV SEA SEA [IFPA]	N47° 26' 07.3434", W122° 18' 34.6180"	19.0 E	130	348.4	116.8	UDT ESV SEA	
ESV:		Bearing [True]: 185.0° to 211.0° Bearing [Mag]: 166.0° to 192.0°				Arc Distance: Out to 91.0 NM Altitude: 10000.0 to 16000.0 ft		
3	TOU TOU [IFPA]	N48° 17' 59.6370", W124° 37' 37.3560"	22.0 E	130	1650	112.2	TOU	
ESV:		Bearing [True]: 181.0° to 191.0° Bearing [Mag]: 159.0° to 169.0°				Arc Distance: Out to 119.0 NM Altitude: 11900.0 to 19700.0 ft		
4	UDT ESV HQM HQM [IFPA]	N46° 56' 49.3455", W124° 08' 57.3680"	19.0 E	130	10	117.7	UDT ESV HQM	
ESV:		Bearing [True]: 63.0° to 136.0° Bearing [Mag]: 44.0° to 117.0°				Arc Distance: Out to 88.0 NM Altitude: 7100.0 to 16000.0 ft		
5	OLM OLM [IFPA]	N46° 58' 17.9000", W122° 54' 06.6000"	19.0 E	130	200	113.4	OLM	
ESV:		Bearing [True]: 234.0° to 251.0° Bearing [Mag]: 215.0° to 232.0°				Arc Distance: Out to 71.0 NM Altitude: 11700.0 to 14700.0 ft		
6	AST FAA 820932-10 AST [IFPA]	N46° 09' 42.1135", W123° 52' 49.3557"	15.0 E	40	10.6	114.0	AST FAA 820932-10	
ESV:		Bearing [True]: 282.0° to 303.0° Bearing [Mag]: 267.0° to 288.0°				Arc Distance: Out to 54.0 NM Altitude: 11900.0 to 20000.0 ft		

DME DME Assessment Results for HAWKZ8 path LKV_VASHN



DME DME Assessment Results for HAWKZ8 path LKV_VASHN

Graphic Depiction 1



DME DME Assessment Results for HAWKZ8 path LMT_BTG

Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Bob CTR Graham
Project File:	C:\Users\Bob CTR Graham\Desktop\AREA NAV Projects and TARGETS Files\SEA 2023\HAWKZ8_P00033400_7-11-24\TARGETS\20231128_HAWKZ8.tgs
Output File:	C:\Users\Bob CTR Graham\Desktop\AREA NAV Projects and TARGETS Files\SEA 2023\HAWKZ8_P00033400_7-11-24\FINAL DOCS\KSEA [IFPA] HAWKZ8 20231128_1251 MST\LMT_BTG\KSEA HAWKZ8 RNAV STAR LMT BTG 20231128_1251 MST.pdf
Procedure Name:	HAWKZ8
Software: DmeDmePlugin:	7.2.1
Date/Time:	11/28/2023 12:51 MST
Databases:	DTED LEVEL 0 MAX

Failures

No Failures

Warnings

No Warnings

Informational

No Informational

Notes For Flight Check

None

Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	Ground Speed (kts)	Turn Type	Leg Type
LMT	WP	N42° 09' 11.3097", W121° 43' 39.1018"	20000	VNAV	270	FLY_BY	TF
KNGDM	WP	N43° 21' 10.6500", W122° 00' 15.3000"	20000	VNAV	270	FLY_BY	TF
WRUSL	WP	N45° 15' 20.4000", W122° 28' 00.3700"	14000	VNAV	270	FLY_BY	TF
BTG	WP	N45° 44' 52.1197", W122° 35' 29.5316"	12000	VNAV	270	FLY_BY	TF

Flyability

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

DME DME Assessment Results for HAWKZ8 path LMT_BTG

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

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	EUG	N44° 07' 15.2343", W123° 13' 22.1925"	15.0 E	130	H	IFPA	NO	Enabled	29.5 %	29.5 %
2	CVO	N44° 29' 58.4353", W123° 17' 37.1764"	18.0 E	130	DH	IFPA	NO	Enabled	65.7 %	65.7 %
3	FJS	N41° 26' 58.8090", W122° 48' 23.2110"	19.0 E	130	H	IFPA	NO	Enabled	21.7 %	21.7 %
4	RBL	N40° 05' 56.0750", W122° 14' 10.8614"	18.0 E	130	H	IFPA	NO	Enabled	1.5 %	1.5 %
5	BTG	N45° 44' 52.1197", W122° 35' 29.5316"	21.0 E	130	H	IFPA	NO	Enabled	16.8 %	16.8 %
6	OED	N42° 28' 46.4672", W122° 54' 46.5608"	19.0 E	130	H	IFPA	NO	Enabled	36.4 %	36.4 %
7	DSD	N44° 15' 09.9388", W121° 18' 12.7884"	18.0 E	130	H	IFPA	NO	Enabled	20.4 %	20.4 %
8	CBU	N45° 35' 19.0716", W122° 36' 40.5087"	15.0 E	130	H	IFPA	NO	Enabled	19.8 %	19.8 %
9	LMT	N42° 09' 11.3097", W121° 43' 39.1018"	17.0 E	130	H	IFPA	NO	Enabled	6.2 %	6.2 %
10	UBG	N45° 21' 11.6383", W122° 58' 41.3300"	21.0 E	130	H	IFPA	NO	Enabled	25.3 %	25.3 %
11	IMB	N44° 38' 54.2100", W119° 42' 41.8730"	20.0 E	130	DH	IFPA	NO	Enabled	2.8 %	2.8 %
12	LTJ	N45° 42' 48.9000", W121° 06' 03.0000"	21.0 E	130	DH	IFPA	NO	Enabled	38.3 %	38.3 %

DME DME Assessment Results for HAWKZ8 path LMT_BTG

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	FJS	OED	RBL			
3.4	FJS	OED				
6.1	LMT	OED	FJS			
6.8	LMT	OED	FJS	EUG		
10.5	LMT	OED	FJS			
18.7	LMT	OED	FJS	EUG		
19.6	FJS	OED	EUG			
29.3	EUG	OED	FJS	CVO		
31.0	DSD	OED	EUG	CVO	FJS	
47.6	EUG	OED	CVO	DSD		
70.8	EUG	OED	DSD	CVO	UBG	
74.1	EUG	OED	DSD	CVO	IMB	
75.8	EUG	OED	CVO	IMB		
77.8	EUG	OED	CVO			
79.8						
108.3	CVO	LTJ				
110.8						
113.9	CVO	LTJ				
116.7						
119.5	CVO	LTJ				
155.5						
166.6	CVO	UBG				
170.2	CVO	UBG	CBU			
176.2	CVO	UBG	LTJ	CBU		
179.1	CVO	UBG	CBU	LTJ	BTG	
207.1	BTG	LTJ	UBG	CVO		
210.1	BTG	LTJ	CVO			
210.1	BTG	LTJ	CVO	UBG		
212.2	BTG	LTJ	CVO	CBU	UBG	
215.9	CBU	LTJ	CVO	UBG		

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N43° 27' 54.0837", W122° 01' 50.3849"	N43° 55' 58.4261", W122° 08' 31.2768"	28.4843
2	N43° 58' 24.6728", W122° 09' 06.3871"	N44° 01' 26.3677", W122° 09' 50.0758"	3.0733
3	N44° 04' 14.7622", W122° 10' 30.6340"	N44° 07' 03.1514", W122° 11' 11.2561"	2.8484
4	N44° 42' 29.7028", W122° 19' 49.9690"	N44° 53' 25.2115", W122° 22' 32.0349"	11.0939

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WRUSL	BTG	LTJ, BTG, CBU, UBG, CVO	

DME DME Assessment Results for HAWKZ8 path LMT_BTG

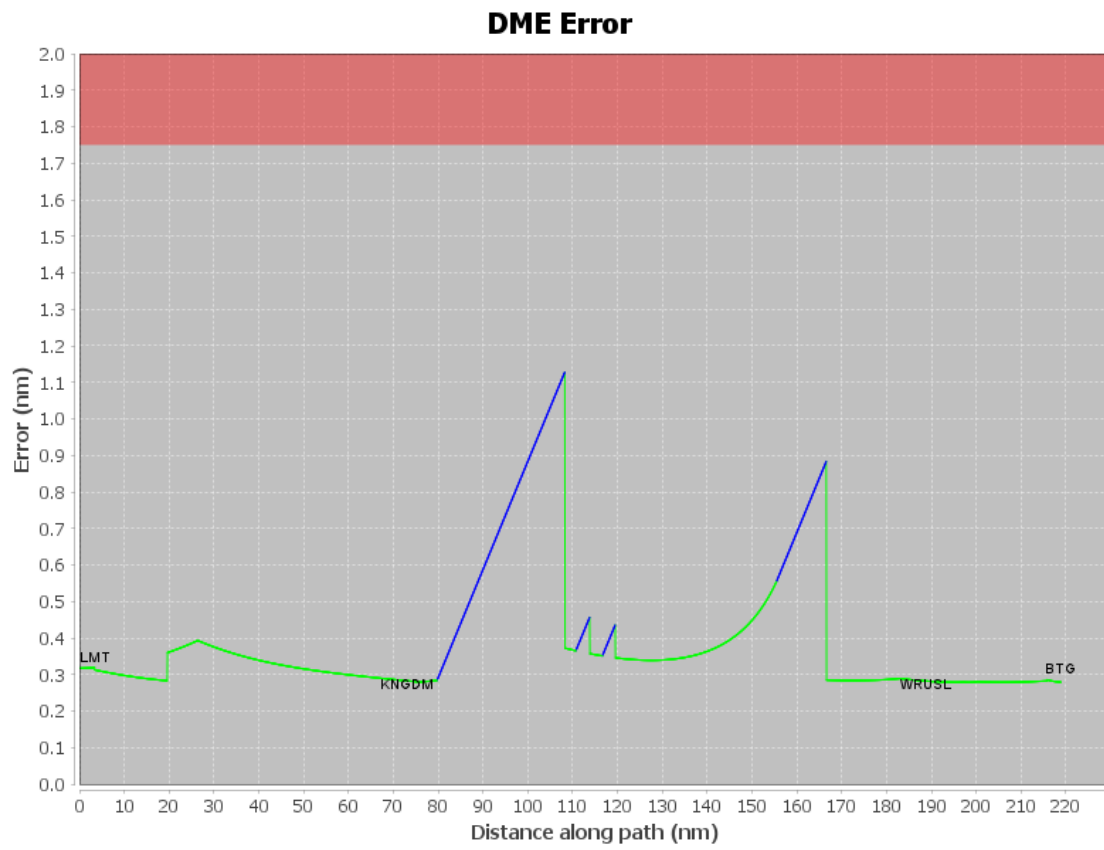
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DME DME Assessment Results for HAWKZ8 path LMT_BTG

Graphic Depiction 1

