

DME DME Assessment Results for KRATR3 path BUWZO_NNUTT

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\PD\KRATR_TMBRS_REWORK 1-22-26\KRATR3_1-22-26\20250509_KRATR3.tgs
Output File:	C:\Users\Bob CTR Graham\Desktop\AREA NAV Projects and TARGETS Files\PD\KRATR_TMBRS_REWORK 1-22-26\KRATR3_1-22-26\KPD\ [IFPA] KRATR3 20250515_1003 MST\BUWZO_NNUTT\KPD\ KRATR3 RNAV STAR BUWZO NNUTT 20250515_1003 MST.pdf
Procedure Name:	KRATR3
Software: DmeDmePlugin:	7.5.0
Date/Time:	05/15/2025 10:03 MST
Databases:	MITRE 3DEP 3 arcsec

Failures
No Failures

Warnings
No Warnings

Informational
No Informational

Notes For Flight Check
NO NEW ESVs. CBU TACAN USED. MEA BUWZO TO HELNS LOWERED FROM 11000 TO 10000. ALL NEW ROUTES ARE WITHIN 2 NM OF EXISTING PROCEDURE.

Flight Plan							
Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	Ground Speed (kts)	Turn Type	Leg Type
BUWZO	WP	N46° 57' 08.1900", W122° 18' 34.6200"	10000	VNAV	260	FLY_BY	TF
HELNS	WP	N46° 15' 25.1000", W122° 18' 34.5800"	10000	VNAV	260	FLY_BY	TF
KRATR	WP	N46° 05' 23.5700", W122° 24' 09.9000"	10000	VNAV	260	FLY_BY	TF
HYKER	WP	N45° 55' 51.2400", W122° 29' 18.2300"	7000	VNAV	210	FLY_BY	TF
VEEGN	WP	N45° 47' 05.8320", W122° 41' 02.5889"	5000	VNAV	210	FLY_BY	TF
DOUHH	WP	N45° 44' 43.9600", W122° 44' 15.3200"	5000	VNAV	200	FLY_BY	TF
NNUTT	WP	N45° 46' 04.3200", W122° 48' 34.4900"	5000	VNAV	200	FLY_OVER	TF

Flyability	
Flight Type:	RNAV_STAR
Selected Airport:	KPDX [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 KRATR3 path BUWZO_NNUTT

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	OLM	N46° 58' 17.9000", W122° 54' 06.6000"	19.0 E	130	H		NO	Enabled	35.9 %	38 %
2	CVV	N48° 14' 40.9000", W122° 43' 27.9000"	19.0 E	130	DH		NO	Enabled	37.7 %	39.8 %
3	LTJ	N45° 42' 48.9000", W121° 06' 03.0000"	21.0 E	130	DH		NO	Enabled	64.7 %	68.2 %
4	BTG	N45° 44' 52.1197", W122° 35' 29.5316"	21.0 E	130	H		NO	Enabled	45.5 %	45.1 %
5	HQM	N46° 56' 49.3455", W124° 08' 57.3680"	19.0 E	130	H		NO	Enabled	38.4 %	40.6 %
6	CBU	N45° 35' 19.0716", W122° 36' 40.5087"	15.0 E	130	H		NO	Enabled	40.1 %	38.4 %
7	UBG	N45° 21' 11.6383", W122° 58' 41.3300"	21.0 E	130	DH		NO	Enabled	87.1 %	89 %
8	CVO	N44° 29' 58.4353", W123° 17' 37.1764"	18.0 E	130	DH		NO	Enabled	14.9 %	15.8 %
9	SEA	N47° 26' 07.3434", W122° 18' 34.6180"	19.0 E	130	H		NO	Enabled	12.5 %	13.2 %
10	IMB	N44° 38' 54.2100", W119° 42' 41.8730"	20.0 E	130	DH		NO	Enabled	6.7 %	5.7 %

DME DME Assessment Results for KRATR3 path BUWZO_NNUTT

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	OLM	SEA	HQM	CVV	UBG	
3.6	OLM	SEA	UBG	CVV		
4.5	OLM	SEA	UBG	CVV	LTJ	
5.5	OLM	SEA	HQM	UBG	CVV	
8.7	OLM	SEA	UBG	CVV	LTJ	
10.8	OLM	UBG	CVV	LTJ		
27.1	HQM	UBG	LTJ	CVV		
32.4	LTJ	UBG	HQM			
35.5	LTJ	UBG	BTG	HQM		
43.5	LTJ	UBG	BTG	HQM	CVO	
53.5	LTJ	BTG	CBU	UBG	CVO	
56.4	LTJ	BTG	CBU	UBG		
63.2						
66.2	IMB	BTG	CBU			
69.4	UBG	IMB	CBU	BTG		
70.7	UBG	IMB	CBU			
71.0						
73.6	CBU	UBG				
76.7	CBU	BTG	UBG			

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N45° 55' 28.3108", W122° 29' 49.0800"	N45° 53' 15.7852", W122° 32' 47.1866"	3.0295
2	N45° 49' 49.1960", W122° 37' 24.1534"	N45° 47' 54.3429", W122° 39' 57.7779"	2.6217

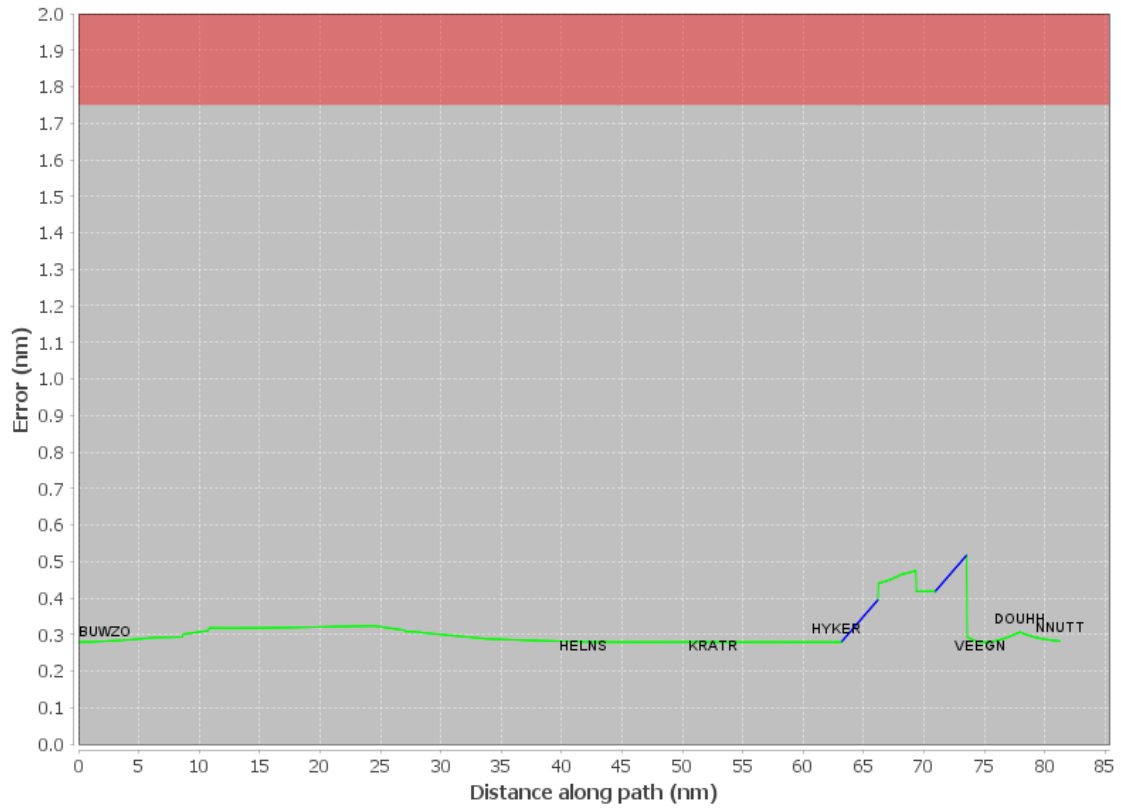
Available DMEs by Waypoints			
Waypoint Before	Waypoint After	DME List	Suggested DMEs
BUWZO	HELNS	OLM, CVV, LTJ, BTG, HQM, UBG, SEA	
HELNS	KRATR	OLM, LTJ, BTG, HQM, CBU, UBG, CVO	
KRATR	HYKER	OLM, LTJ, BTG, HQM, CBU, UBG, CVO	
HYKER	VEEGN	LTJ, BTG, CBU, UBG, IMB	
VEEGN	DOUHH	BTG, CBU, UBG	
DOUHH	NNUTT	BTG, CBU, UBG	

User Data Files	
#	File Name
1	KRATR_AUTO_ESV_3-24-22.udt
2	New Analysis.udt
3	UserDMEs_KPDX KRATR2 STAR BUWZO BATYL 20140508_0556.udt

User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	OLM FAA_753036-20 OLM	N46° 58' 17.9000", W122° 54' 06.6000"	19.0 E	130	200	113.4	OLM FAA_753036-20	
	ESV:	Bearing [True]: 153.0° to 176.0° Bearing [Mag]: 134.0° to 157.0°				Arc Distance: Out to 75.0 NM Altitude: 9900.0 to 14700.0 ft		
2	HQM FAA_740121-18 HQM	N46° 56' 49.3455", W124° 08' 57.3680"	19.0 E	130	10	117.7	HQM FAA_740121-18	
	ESV:	Bearing [True]: 88.0° to 128.0° Bearing [Mag]: 69.0° to 109.0°				Arc Distance: Out to 93.0 NM Altitude: 9500.0 to 16000.0 ft		

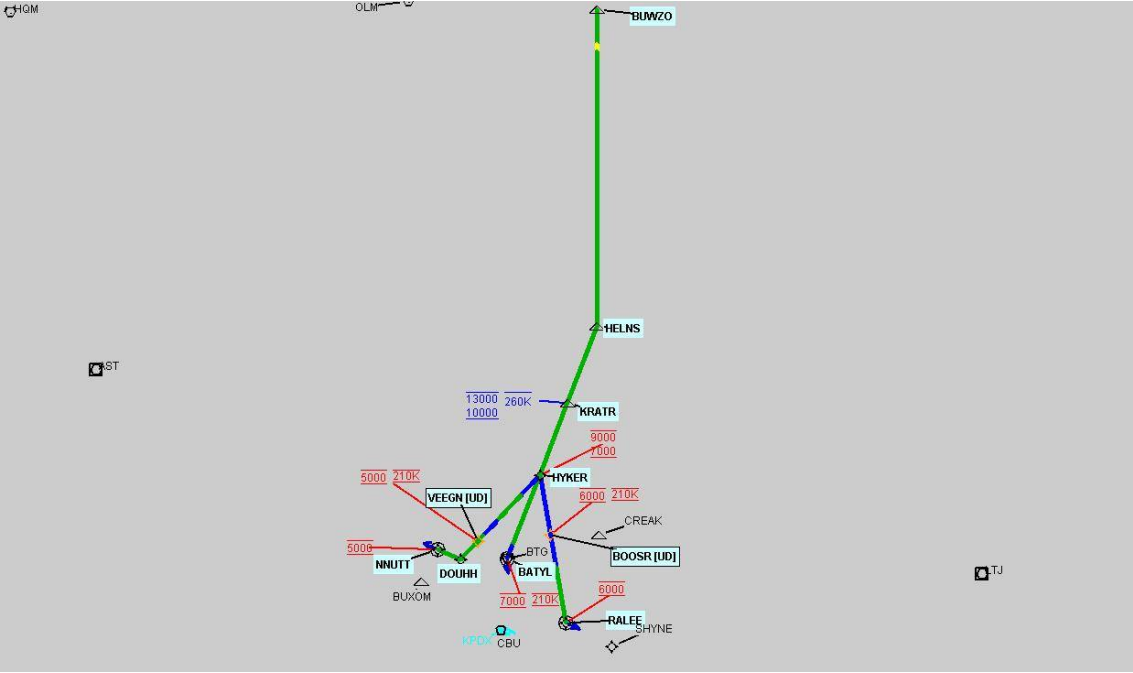
DME DME Assessment Results for KRATR3 path BUWZO_NNUTT

DME Error



DME DME Assessment Results for KRATR3 path BUWZO_NNUTT

Graphic Depiction 1



DME DME Assessment Results for KRATR3 path HYKER_BATYL

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\PD\KRATR_TMBRS_REWORK 1-22-26\KRATR3_1-22-26\20250509_KRATR3.tgs
Output File:	C:\Users\Bob CTR Graham\Desktop\AREA NAV Projects and TARGETS Files\PD\KRATR_TMBRS_REWORK 1-22-26\KRATR3_1-22-26\KPD\ [IFPA] KRATR3 20250515_1003 MST\HYKER_BATYL\KPD\ KRATR3 RNAV STAR HYKER BATYL 20250515_1003 MST.pdf
Procedure Name:	KRATR3
Software: DmeDmePlugin:	7.5.0
Date/Time:	05/15/2025 10:03 MST
Databases:	MITRE 3DEP 3 arcsec

Failures

No Failures

Warnings

No Warnings

Informational

No Informational

Notes For Flight Check

NO NEW ESVs.
 CBU TACAN USED.
 MEA BUWZO TO HELNS LOWERED FROM 11000 TO 10000.
 ALL NEW ROUTES ARE WITHIN 2 NM OF EXISTING PROCEDURE.

Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	Ground Speed (kts)	Turn Type	Leg Type
HYKER	WP	N45° 55' 51.2400", W122° 29' 18.2300"	7000	VNAV	210	FLY_BY	TF
BATYL	WP	N45° 44' 52.0400", W122° 35' 29.6100"	7000	VNAV	210	FLY_OVER	TF

Flyability

Flight Type:	RNAV_STAR
Selected Airport:	KPD\ [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 KRATR3 path HYKER_BATYL

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	LTJ	N45° 42' 48.9000", W121° 06' 03.0000"	21.0 E	130	DH		NO	Enabled	83.7 %	83.7 %
2	BTG	N45° 44' 52.1197", W122° 35' 29.5316"	21.0 E	130	H		NO	Enabled	63.5 %	63.5 %
3	CBU	N45° 35' 19.0716", W122° 36' 40.5087"	15.0 E	130	H		NO	Enabled	83.7 %	83.7 %
4	UBG	N45° 21' 11.6383", W122° 58' 41.3300"	21.0 E	130	DH		NO	Enabled	83.7 %	83.7 %
5	CVO	N44° 29' 58.4353", W123° 17' 37.1764"	18.0 E	130	DH		NO	Enabled	72.4 %	72.4 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	LTJ	CBU	BTG	UBG		
1.3	LTJ	CBU	BTG	UBG	CVO	
7.6	LTJ	CBU	UBG	CVO		
9.9						

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N45° 46' 35.9769", W122° 34' 31.2289"	N45° 44' 52.0400", W122° 35' 29.6100"	1.8618

Available DMEs by Waypoints			
Waypoint Before	Waypoint After	DME List	Suggested DMEs
HYKER	BATYL	LTJ, BTG, CBU, UBG, CVO	

DME DME Assessment Results for KRATR3 path HYKER_BATYL

User Data Files

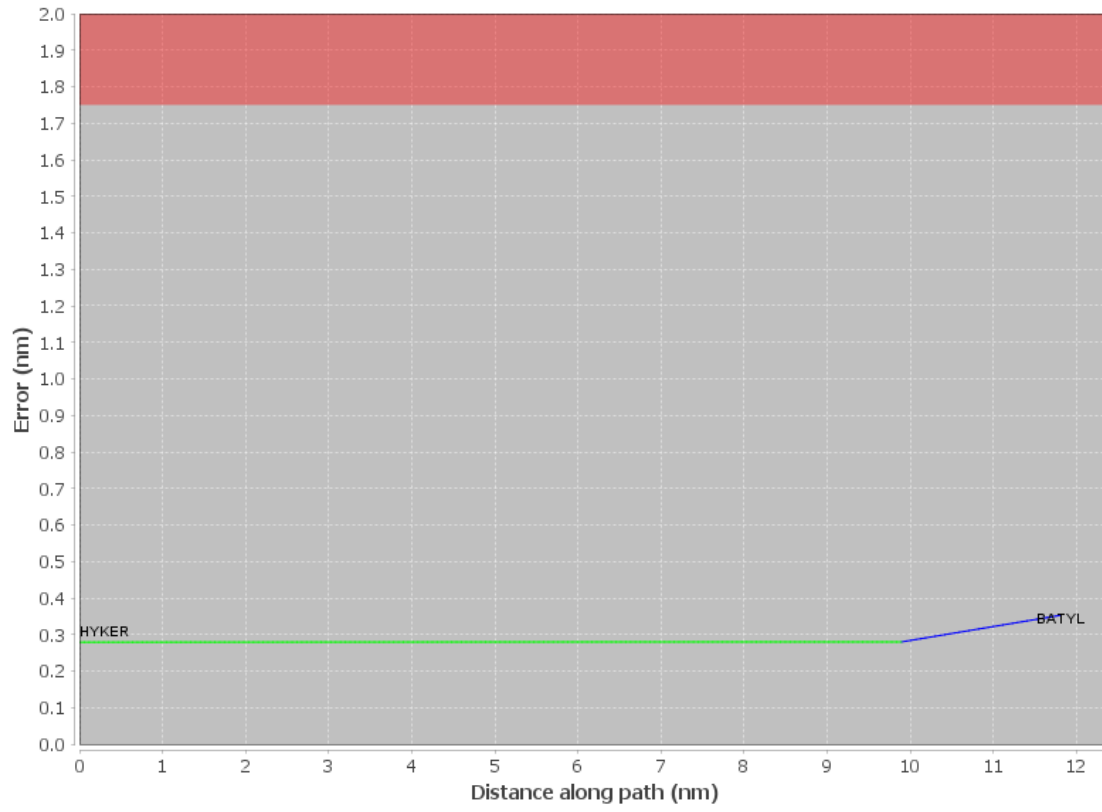
#	File Name
1	KRATR_AUTO_ESV_3-24-22.udt
2	New Analysis.udt
3	UserDMEs_KPDX KRATR2 STAR BUWZO BATYL 20140508_0556.udt

User DMEs

#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	OLM FAA_753036-20 OLM	N46° 58' 17.9000", W122° 54' 06.6000"	19.0 E	130	200	113.4	OLM FAA_753036-20	
	ESV:	Bearing [True]: 153.0° to 176.0° Bearing [Mag]: 134.0° to 157.0°				Arc Distance: Out to 75.0 NM Altitude: 9900.0 to 14700.0 ft		
2	HQM FAA_740121-18 HQM	N46° 56' 49.3455", W124° 08' 57.3680"	19.0 E	130	10	117.7	HQM FAA_740121-18	
	ESV:	Bearing [True]: 88.0° to 128.0° Bearing [Mag]: 69.0° to 109.0°				Arc Distance: Out to 93.0 NM Altitude: 9500.0 to 16000.0 ft		

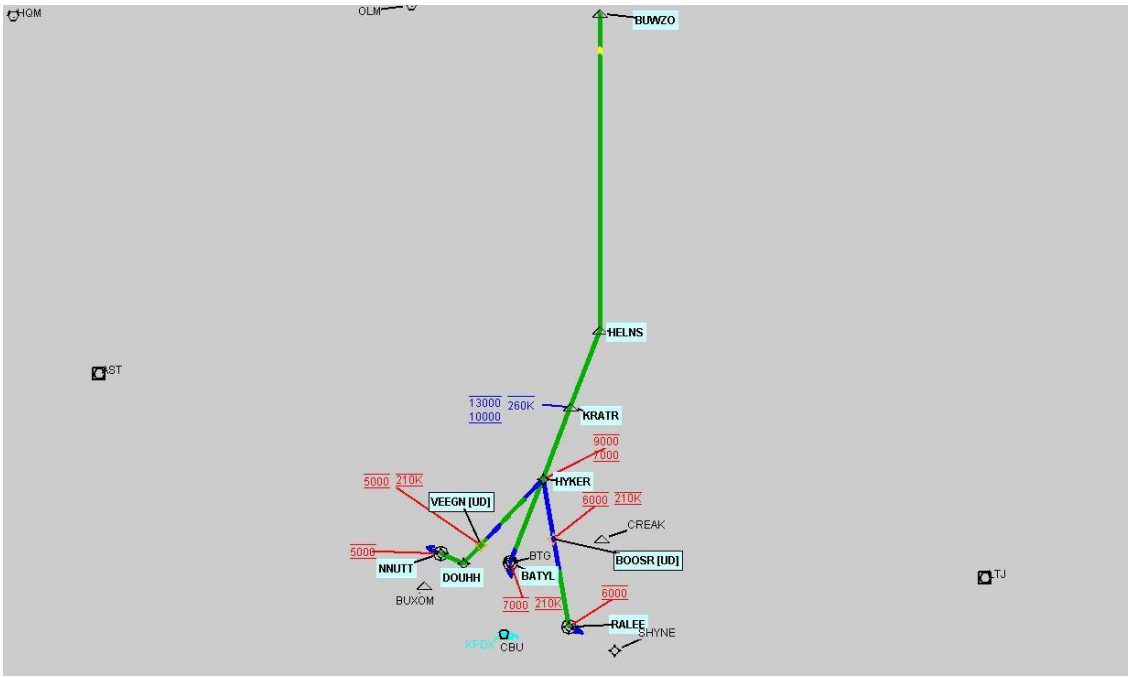
DME DME Assessment Results for KRATR3 path HYKER_BATYL

DME Error



DME DME Assessment Results for KRATR3 path HYKER_BATYL

Graphic Depiction 1



DME DME Assessment Results for KRATR3 path HYKER_RALEE

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\PD\KRATR_TMBRS_REWORK 1-22-26\KRATR3_1-22-26\20250509_KRATR3.tgs
Output File:	C:\Users\Bob CTR Graham\Desktop\AREA NAV Projects and TARGETS Files\PD\KRATR_TMBRS_REWORK 1-22-26\KRATR3_1-22-26\KPDX [IFPA] KRATR3 20250515_1003 MST\HYKER_RALEE\KPDX KRATR3 RNAV STAR HYKER RALEE 20250515_1003 MST.pdf
Procedure Name:	KRATR3
Software: DmeDmePlugin:	7.5.0
Date/Time:	05/15/2025 10:03 MST
Databases:	MITRE 3DEP 3 arcsec

Failures
No Failures

Warnings
No Warnings

Informational
No Informational

Notes For Flight Check
NO NEW ESVs. CBU TACAN USED. MEA BUWZO TO HELNS LOWERED FROM 11000 TO 10000. ALL NEW ROUTES ARE WITHIN 2 NM OF EXISTING PROCEDURE.

Flight Plan							
Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	Ground Speed (kts)	Turn Type	Leg Type
HYKER	WP	N45° 55' 51.2400", W122° 29' 18.2300"	7000	VNAV	210	FLY_BY	TF
BOOSR	WP	N45° 47' 58.4825", W122° 27' 20.3557"	6000	VNAV	210	FLY_BY	TF
RALEE	WP	N45° 36' 27.6100", W122° 24' 29.1100"	6000	VNAV	200	FLY_OVER	TF

Flyability	
Flight Type:	RNAV_STAR
Selected Airport:	KPDX [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 KRATR3 path HYKER_RALEE

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	LTJ	N45° 42' 48.9000", W121° 06' 03.0000"	21.0 E	130	DH		NO	Enabled	2.4 %	2.4 %
2	BTG	N45° 44' 52.1197", W122° 35' 29.5316"	21.0 E	130	H		NO	Enabled	40.2 %	40.2 %
3	CBU	N45° 35' 19.0716", W122° 36' 40.5087"	15.0 E	130	H		NO	Enabled	40.2 %	40.2 %
4	UBG	N45° 21' 11.6383", W122° 58' 41.3300"	21.0 E	130	DH		NO	Enabled	37.8 %	37.8 %
5	CVO	N44° 29' 58.4353", W123° 17' 37.1764"	18.0 E	130	DH		NO	Enabled	29.5 %	29.5 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	LTJ	CBU	BTG	UBG		
0.5						
12.2	CBU	BTG	UBG			
13.1	CBU	BTG				
13.5	CBU	BTG	UBG			
13.9	BTG	CVO	UBG	CBU		

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N45° 55' 20.4094", W122° 29' 10.5256"	N45° 43' 47.5796", W122° 26' 18.0264"	11.7219

Available DMEs by Waypoints			
Waypoint Before	Waypoint After	DME List	Suggested DMEs
HYKER	BOOSR	LTJ, BTG, CBU, UBG	
BOOSR	RALEE	BTG, CBU, UBG, CVO	

DME DME Assessment Results for KRATR3 path HYKER_RALEE

User Data Files

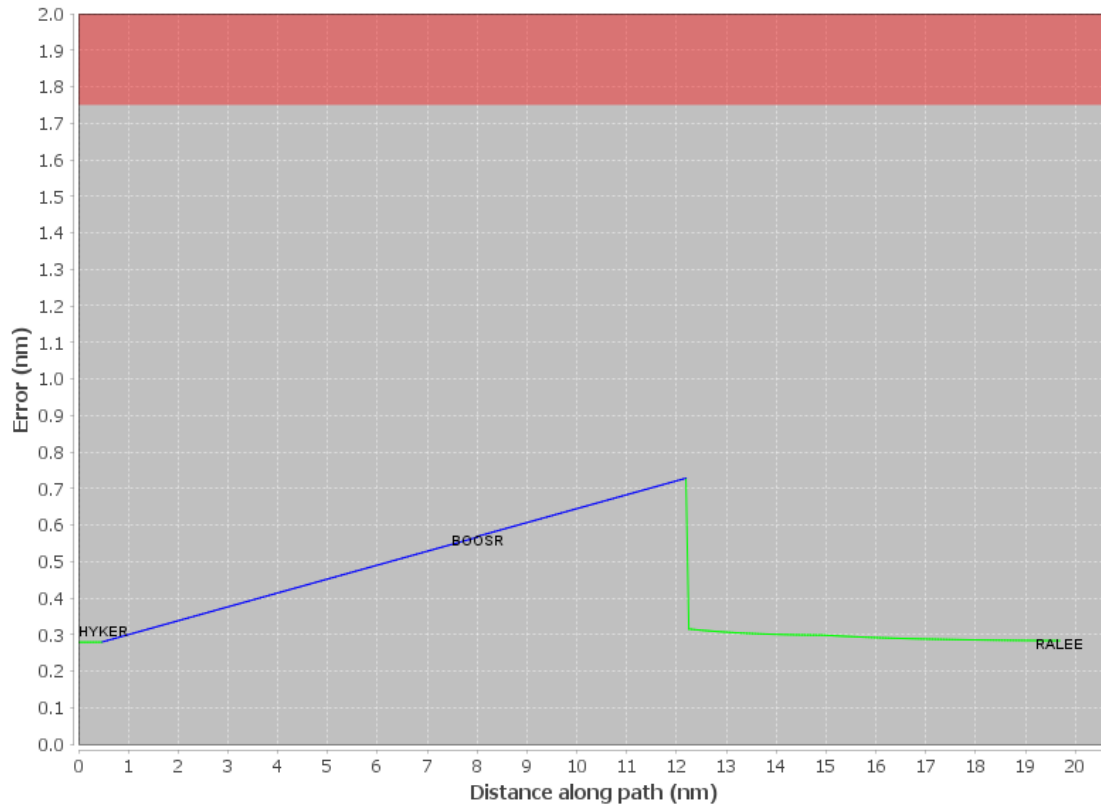
#	File Name
1	KRATR_AUTO_ESV_3-24-22.udt
2	New Analysis.udt
3	UserDMEs_KPDX KRATR2 STAR BUWZO BATYL 20140508_0556.udt

User DMEs

#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	OLM FAA_753036-20 OLM	N46° 58' 17.9000", W122° 54' 06.6000"	19.0 E	130	200	113.4	OLM FAA_753036-20	
	ESV:	Bearing [True]: 153.0° to 176.0° Bearing [Mag]: 134.0° to 157.0°				Arc Distance: Out to 75.0 NM Altitude: 9900.0 to 14700.0 ft		
2	HQM FAA_740121-18 HQM	N46° 56' 49.3455", W124° 08' 57.3680"	19.0 E	130	10	117.7	HQM FAA_740121-18	
	ESV:	Bearing [True]: 88.0° to 128.0° Bearing [Mag]: 69.0° to 109.0°				Arc Distance: Out to 93.0 NM Altitude: 9500.0 to 16000.0 ft		

DME DME Assessment Results for KRATR3 path HYKER_RALEE

DME Error



DME DME Assessment Results for KRATR3 path HYKER_RALEE

Graphic Depiction 1

