

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (RNP) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.
Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>		
BWI	RNAV (RNP) Z RWY 33L	4	BALTIMORE	MD		
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
143	143	RNAV (RNP) Z RWY 33L	3B	09/08/2022	11W	2000
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
RNAV		5 SEPTEMBER 2024	ROUTINE			

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
KOOLZ	IAF	SPLAT		TF	FB	1.00	008.26	9.05	2400
JANNS	IAF	SPLAT		TF	FB	1.00	335.31	5.55	2400
KEEYY	IF	LABPI		TF	FB	1.00	212.63	6.03	3200
LABPI		GRAFE		RF	FB	1.00	(2.50 NM RADIUS CW (CFFHN))	5.35	1500
SPLAT	IF	GRAFE		TF	FB	1.00	335.25	3.11	1500
GRAFE	PFAF	RW33L	MAP	TF	FO	0.30	335.25	4.12	
RW33L	MAP	496 MSL		CA			335.25		
496 MSL		BMORE		DF	FO	1.00			3000

MISSED APPROACH

MAP:

RNP: DA

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT BMORE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE		OUTBOUND		FT WITHIN		MILES OF		(IAF)					
2. PROFILE STARTS AT GRAFE														
3. FAC: 335.25	PFAF: GRAFE				DIST PFAF TO MAP:			DIST PFAF TO THLD:						
4. MIN ALT: GRAFE 1500														
5. DIST TO THLD FROM PFAF:	4.12	MM:		IM:		150 HAT:		353 HAT:		0.97	GS ANT:			
6. MIN GP INCPT: 1500	GP ALT AT PFAF: GRAFE 1500						OM:				MM:		IM:	
7. GP ANGLE: 3.00	34:1: IS CLEAR		20:1: IS CLEAR		TCH: 55.4									
8. MSA FROM: RW33L 2600														



PBN REQUIREMENTS NOTE:

RNP APCH-GPS. FROM KEEYY: RF.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -11°C OR ABOVE 54°C.
CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.30 ALL CATS VISIBILITY TO RVR 5500.
CHART SPEED ICON IN PLANVIEW AT KOOLZ: MAX 210 KIAS.
CHART SPEED ICON IN PLANVIEW AT JANNS: MAX 210 KIAS.
CHART SPEED ICON IN PLANVIEW AT KEEYY: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

HOLD NW, RT, 155.10 INBOUND.
CHART MANDATORY 5000 AT KOOLZ.
CHART AT OR ABOVE 4000 AT JANNS.
CHART MANDATORY 4000 AT KEEYY.

MINIMUMS:

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT

ALTERNATE: NA ☐ STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
AUTHORIZATION REQUIRED															
RNP 0.30 DA	496	3000	353	496	3000	353	496	3000	353	496	3000	353			

CHANGES - REASONS

1. TERMINAL ROUTES: REMOVED JETNA TO LIYCO, LIYCO TO MILRE, AND MILRE TO GRAFE SEGMENTS – REPLACED PER FPT REQUEST TO MEET NOISE ABATEMENT REQUIREMENTS.
2. TERMINAL ROUTES: ADDED KOOLZ TO SPLAT SEGMENT -REPLACED REMOVED SEGMENTS PER FPT REQUEST TO MEET NOISE ABATEMENT REQUIREMENTS.
3. TERMINAL ROUTES: ADDED CA LEG TO 496 MSL – MISSED APPROACH SEGMENT CHANGED FROM RNP TO RNAV.
4. MISSED APPROACH INSTRUCTIONS: UPDATED FROM “CLIMB TO 3000 ON TRACK 335 TO BMORE AND HOLD” TO “CLIMB TO 3000 DIRECT BMORE AND HOLD” - MISSED APPROACH SEGMENT CHANGED FROM RNP TO RNAV.
5. PROFILE LINE 7: UPDATED TCH FROM “55.2” TO “55.4” – NEW DESIGN TCH.
6. PROFILE LINE 7: ADDED 20:1 IS CLEAR – IAW 8260.19J 8-6-7.
7. MSA: UPDATED MSA FROM: FROM “RW33L 2800” TO “RW33L 2600” – UPDATED OBSTACLE EVALUATION, NEW CONTROLLING OBSTACLE.
8. EQUIPMENT REQUIREMENT NOTES: UPDATED FROM “RNP APCH - GPS” TO “RNP APCH - GPS. FROM KEEYY: RF” – IAW 826019J 8-6-8.
9. NOTES: ADDED “CHART SPEED ICON IN PLANVIEW AT KOOLZ: MAX 210 KIAS” AND REMOVED “CHART PLANVIEW NOTE AT JETNA: MAX 210 KIAS” – TO MEET LEG LENGTH REQUIREMENTS, IAW 8260.19J 8-6-9.
10. NOTES: REMOVED “CHART PLANVIEW NOTE ADJACENT TO JETNA: RF REQUIRED,” “CHART PLANVIEW NOTE ADJACENT TO KEEYY: RF REQUIRED,” “CHART PLANVIEW NOTE AT JETNA: (RNP 0.30),” AND “CHART PLANVIEW NOTE ADJACENT JANNS: RADAR REQUIRED FOR PROCEDURE ENTRY AT JANNS” – NO LONGER REQUIRED.
11. NOTES: UPDATED FROM “CHART NOTE: FOR INOPERATIVE MALSR, INCREASE RNP 0.30 ALL CATS VISIBILITY TO RVR 5700” TO “CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.30 VISIBILITY ALL CATS TO RVR 5500” – UPDATED AND MOVED TO PART C: GENERAL REMARKS.
12. NOTES: UPDATED CHART NOTE FROM “FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -12°C OR ABOVE 54°C” TO “FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -11°C OR ABOVE 54°C.” – NEW FIVE-YEAR HISTORICAL TEMPS.
13. ADDITIONAL FLIGHT DATA: REMOVED “#TCH: 187.4 MSL (DO NOT CHART),” “CHART MINIMUM 6000 AT JETNA,” “CHART TDZE 143,” “ROUTE TYPE: A,H,” “ROUTE TYPE QUALIFIER 1. F” AND “ROUTE TYPE QUALIFIER 2. S” – NO LONGER REQUIRED.
14. ADDITIONAL FLIGHT DATA: REMOVED “DISTANCE TO THLD FROM 353 HAT: 0.93 NM” – UPDATED TO “353 HAT: 0.97” AND MOVED TO PROFILE LINE 5 – IAW 8260.19J 8-6-7.
15. ADDITIONAL FLIGHT DATA: ADDED “CHART MANDATORY 5000 AT KOOLZ” AND UPDATED NOTE FROM “CHART MINIMUM 4000 AT JANNS” TO “CHART AT OR ABOVE 4000 AT JANNS” – REQUIRED DUE TO CONNECTING STARS.
16. MINIMUMS: UPDATED RNP 0.30 DA VISIBILITY FROM “3400” TO “3000” – IAW 8260.3E TABLE 3-3-1.



COORDINATED WITH:

A4A

X

ALPA

X

AOPA

X

APA

X

HAI

NBAA

X

OTHER: ZDC, POTOMAC APP CON, BWI ATCT, AMGR.

FLIGHT CHECKED BY

MICHAEL G CAMPBELL

Digitally signed by

ERIC N SUSKI

Jul 25, 2024

OFFICE

FPO

DATE

07/23/2024

DEVELOPED BY

ERIC N SUSKI (JUDITH TUTTLE)

Digitally signed by

ERIC N SUSKI

Jun 13, 2024

OFFICE

AJV-A431

DATE

06/07/2024

APPROVED BY

ERIC N SUSKI

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ERIC N SUSKI

Jun 13, 2024

OFFICE

AJV-A431

DATE

TITLE

MANAGER

