

**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> IAD	<u>PROCEDURE NAME</u> RNAV (RNP) Z RWY 1R	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> WASHINGTON	<u>STATE</u> DC
<u>AIRPORT ELEVATION</u> 312	<u>TDZE</u> 312	<u>SUPERSEDED</u> RNAV (RNP) Z RWY 1R	<u>DATED</u> 03/08/2012	<u>MAG VAR</u> 10W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ORIGINAL/AMENDMENT</u> ORIG-D	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>EPOCH YEAR</u> 2000
		<u>ACTUAL EFFECTIVE DATE</u> 16 MAY 2024	<u>CANCEL/SUSPEND</u>	

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>
GNATZ	IAF	GRASK		TF	FB	1.00	098.62	7.41	5000
GRASK		LAZER		TF	FB	1.00	086.40	5.30	4000
LAZER		TWOOT		TF	FB	1.00	062.15	6.86	4000
TWOOT	IAF	ESTYN		TF	FB	1.00	010.67	3.29	3000
ESPNN	IAF	ELLLA		TF	FB	1.00	010.66	3.71	7000
ELLLA		FAWLR		TF	FB	1.00	010.66	3.10	6000
FAWLR	IAF	TREAA		TF	FB	1.00	010.67	3.76	5000
HUFFF	IAF	JMATZ		TF	FB	1.00	098.32	8.86	6000
TREAA		TWOOT		TF	FB	1.00	010.66	3.11	4000
JMATZ		LAWWS		TF	FB	1.00	089.53	5.62	6000
LAWWS		FAWLR		TF	FB	1.00	074.56	4.62	6000
ESTYN	IF	EDSCO		TF	FB	1.00	010.67	3.15	2000
EDSCO		WAXIN		TF	FB	1.00	010.66	1.57	1500
WAXIN	PFAF	RW01R	MAP	TF	FO	0.30	010.67	3.56	
RW01R	MAP	800 MSL		CA			010.67		800
800 MSL		JCOBY		DF	FO	1.00			3000

MISSED APPROACH

MAP:
RNP: DA

MISSED APPROACH INSTRUCTIONS:
CLIMB TO 800 THEN CLIMBING RIGHT TURN TO 3000 DIRECT JCOBY AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1.	PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)									
2.	PROFILE STARTS AT TWOOT														
3.	FAC:	010.67	FAF:	WAXIN	DIST FAF TO MAP:	DIST FAF TO THLD:									
4.	MIN ALT: TWOOT 4000, ESTYN 3000, EDSCO 2000, WAXIN 1500														
5.	DIST TO THLD FROM PFAF:	3.56	MM:	IM:	150 HAT:	313 HAT:	0.81	GS ANT:							
6.	MIN GP INCPT:	1500	GP ALT AT PFAF:	WAXIN 1500	OM:	MM:	IM:								
7.	GP ANGLE:	3.00	34:1:	IS CLEAR	20:1:	IS CLEAR	TCH:	55.2							
8.	MSA FROM: RW01R 3500														

PBN REQUIREMENTS NOTE:

RNP AR APCH - GPS.

NOTES:

CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -13°C OR ABOVE 54°C.
CHART NOTE: FOR INOPERTIVE ALS, INCREASE RNP 0.11 ALL CATS VISIBILITY TO RVR 4500.
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.
CHART NOTE: R-6608A AND R-6608B

ADDITIONAL FLIGHT DATA:

HOLD W, LT, 096.17 INBOUND.
CHART AT OR ABOVE 5000 AT GNATZ.
CHART AT OR ABOVE 7000 AT ESPNN.
CHART AT OR ABOVE 6000 AT HUFFF.

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 0.11 DA	625	2400	313	625	2400	313	625	2400	313	625	2400	313			
RNP 0.30 DA	770	4500	458	770	4500	458	770	4500	458	770	4500	458			



CHANGES - REASONS

1. THIS IS A COMPLETE REDESIGN OF THE PROCEDURE WITH NEW LEGS/FIXES, MISSED APPROACH AND MINIMUMS - ATC REQUESTED CHANGES TO OVERLAY THE ILS AND RNAV (GPS) TO THIS RWY.
2. REMOVED FEEDERS FROM SHNON AND DRUZZ FIXES - ATC/PBN REDESIGN.
3. REMOVED INITIALS FROM CSN VORTAC AND BRV VORTAC - ATC/PBN REDESIGN.
4. REMOVED IINTERMEDIATE FROM MOSBY - ATC/PBN REDESIGN.
5. REMOVED RNP MISSED APPROACH CLIMB TO 5000 VIA TRACK 011 TO FUREE AND LEFT TURN DIRECT HARPP AND HOLD - ADDED RNAV MISSED APPROACH CLIMB TO 800 THEN CLIMBING RIGHT TURN TO 3000 DIRECT JCOBY AND HOLD.
6. ADDED INITIALS FROM GNATZ, TWOOT, ESPNN, FAWLR AND HUFFF FIXES TO INTERMEDIATE ESTYN - ATC/PBN REDESIGN.
7. CHARTED ALTITUDES: "AT OR ABOVE 5000 AT GNATZ", "AT OR ABOVE 7000 AT ESPNN" AND "AT OR ABOVE 6000 AT HUFFF" - ATC REQUEST.
8. ADDED MISSED HOLDING AT JCOBY: HOLD W, LT, 096.17 INBOUND - ATC REQUEST.
9. UPDATED INOPERATIVE NOTE FROM: FOR INOPERATIVE ALSF-2, INCREASE RNP 0.30 VISIBILITY TO 1 3/4" TO " FOR INOPERTIVE ALS, INCREASE RNP 0.11 ALL CATS VISIBILITY TO RVR 4500" - UPDATED MINIMUMS.
10. CHANGED DISTANCE FROM 507 HAT TO DISTANCE FROM 313 HAT 0.81 - NEW RNP LINE OF MINIMUMS.
11. MSA RAISED FROM 3400 TO 3500 - NEW OBSTACLE EVALUATION.
12. THE PFAF WAXIN NAME WAS RETAINED AND MOVED NORTH 1.2NM ALONG FINAL - PFAF ALTITUDE LOWERED FROM 1900 TO 1500 AND TCH RAISED FROM 53 TO 55.2.
13. RNP 0.30 MINS LOWERED FROM DA 819/HAT 507, RVR 6000 TO DA 770/HAT458, RVR 4500 - FPT AUTHORIZED LOWERING MINS.
14. DELETED NOTE "GPS REQUIRED" AND ADDED "PBN REQUIREMENTS NOTE: RNP AR APCH - GPS" - IAW 8260.19I 8-6-8.
15. UPDATED UNCOMPENSATED BARO-VNAV TEMPERATURES FROM "...NA BELOW -14 C (6F) OR ABOVE 48C (119F) TO ... NA BELOW -13°C OR ABOVE +54°C. - NEW 5 YEAR AVERAGE CALCULATED, FAHRENHEIT TEMPERATURE NO LONGER REQUIRED.
16. DELETED CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH ILS OR LOC/DME RWY 1 L. ILS ' RWY 1 L CAT (II), ILS RWY 1 L CAT (ILL) - PROCEDURE IS NOT A SIMULTANEOUS DEPENDENT APPROACH UNDER ORDER JO 7110.308
17. DELETED CHART NOTE USE OF FD OR AP PROVIDING RNAV TRACK GUIDANCE REQUIRED DURING SIMULTANEOUS OPERATIONS - NOT REQUIRED FOR A NON SIMULTANEOUS DEPENDENT APPROACH.
18. ADDED CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED - ATC REQUEST FOR SIMULTANEOUS APPROACHES.

COORDINATED WITH:

A4A

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ALPA

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AOPA

☒

APA

☒

HAI

☐

NBAA

☐

OTHER:

POTOMAC APP CON, APT MGR

FLIGHT CHECKED BY

ANTHONY D VALLERA

Digitally signed by
CASIMIR L TABAKA
Mar 08, 2024

OFFICE

FPO

DATE

03/07/2024

DEVELOPED BY

JOSEPH L. ZEDER

Digitally signed by
JOSEPH L ZEDER
Jan 30, 2024

OFFICE

AJV-A432

DATE

11/08/2023

APPROVED BY

CASIMIR L. TABAKA

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Mar 08, 2024

OFFICE

AJV-A432

DATE

TITLE
MANAGER

