

**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>		
IAD	RNAV (RNP) Z RWY 19C	1	WASHINGTON	DC		
<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SUPERSEDED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>
312	272	RNAV (RNP) Z RWY 19C	ORIG-D	03/08/2012	10W	2000
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
RNAV		16 MAY 2024	ROUTINE			

TERMINAL ROUTES

THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 24-10.

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
NOOXX	IAF	CRLET		TF	FB	1.00	190.65	3.92	8000
CRLET		COWRR		TF	FB	1.00	190.66	3.73	7000
COWRR		COVUL		TF	FB	1.00	190.65	3.09	6000
COVUL	IAF	CHDMN		TF	FB	1.00	190.67	3.45	5000
CHDMN		CUTZZ		TF	FB	1.00	190.63	3.05	4000
CUTZZ	IAF	CRAKL		TF	FB	1.00	190.65	3.27	3000
LOGOW	IAF	PATWY		TF	FB	1.00	095.19	7.84	6000
PATWY		BULGR		TF	FB	1.00	097.89	2.67	6000
BULGR		COVUL		TF	FB	1.00	162.80	2.87	6000
DUBBV	IAF	HUGGZ		TF	FB	1.00	101.90	4.50	5000
HUGGZ		NOGGL		TF	FB	1.00	108.57	3.50	4000
NOGGL		CUTZZ		TF	FB	1.00	150.50	5.20	4000
CRAKL	IF	CLARZ		TF	FB	1.00	190.65	3.14	2000
CLARZ		FEMKO	PFAF	TF	FB	1.00	190.66	1.58	1500
FEMKO	PFAF	RW19C	MAP	TF	FO	0.30	190.65	3.70	
RW19C	MAP	554 MSL		CA			190.65		
554 MSL		MOOOV		DF	FO	1.00			3000

MISSED APPROACH

MAP:

RNP: DA

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT MOOOV AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1.	PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)
2.	PROFILE STARTS AT NOOXX					
3.	FAC:	190.65	PFAF:	FEMKO	DIST PFAF TO MAP:	DIST PFAF TO THLD:
4.	MIN ALT:	NOOXX 9000, CRLET 8000, COWRR 7000, COVUL 6000, CHDMN 5000, CUTZZ 4000, CRAKL 3000, CLARZ 2000, FEMKO 1500				
5.	DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	282 HAT:	0.73
6.	MIN GP INCPT:	1500	GP ALT AT PFAF:	FEMKO 1500	OM:	GS ANT:
7.	GP ANGLE:	3.00	34:1:	IS CLEAR	20:1:	IS CLEAR
8.	MSA FROM:	RW19C 3500	TCH:	54.0	MM:	IM:

PBN REQUIREMENTS NOTE:

RNP AR APCH - GPS.

NOTES:

CHART PROFILE NOTE: VGSI AND RNAV GLIDPATH 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: SIMULTANEOUS APPROACH AUTHORIZED.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.11 VISIBILITY ALL CATS TO RVR 4500, AND RNP 0.25 VISIBILITY ALL CATS TO RVR 5500.
CHART SPEED ICON IN PLANVIEW AT BULGR: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

HOLD N, RT, 187.14 INBOUND.
CHART AT OR ABOVE 9000 AT NOOXX.
CHART AT OR ABOVE 6000 AT LOGOW.
CHART AT OR ABOVE 5000 AT DUBBV.

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	554	2400	282	554	2400	282	554	2400	282	554	2400	282			
RNP 0.25 DA	624	3000	352	624	3000	352	624	3000	352	624	3000	352			
RNP 0.30 DA	702	4000	430	702	4000	430	702	4000	430	702	4000	430			



CHANGES - REASONS

1. TERMINAL ROUTES – DELETED LEGS SHNON TO CRVER, DRUZZ TO CRVER, CRVER TO DIMKE, MULRR TO DIMKE, DIMKE TO BOYDS, TRING TO BGBRO, BGBRO TO BOYDS, BOYDS TO CIREP, CIREP TO FEMKO – ATC/FPT REQUESTED COMPLETE REBUILD OF TERMINAL ROUTES
2. TERMINAL ROUTES – ADDED LEGS NOOXX TO CRLET, CRLET TO COWRR, COWRR TO COVUL, COVUL TO CHDMN, CHDMN TO CUTZZ, CUTZZ TO CRAKL, CRAKL TO CLARZ, LOGOW TO PATWY, PATWY TO BULGR, BULGR TO COVUL, DUBBV TO HUGGZ, HUGGZ TO NOGGL, NOGGL TO CUTZZ, CLARZ TO FEMKO - ATC/FPT REQUESTED COMPLETE REBUILD OF TERMINAL ROUTES
3. TERMINAL ROUTES – CHANGED LEG FROM FEMKO TO RW19C DISTANCE FROM 3.65 TO 3.70 – FEMKO FIX MOVED TO ALIGN WITH DESIGN TCH ON SISTER ILS PROCEDURE TO SAME RWY.
4. MISSED APPROACH INSTRUCTIONS CHANGED FROM “CLIMB TO 4000 VIA TRACK 190.65 TO BOPAC AND VIA TRACK 265.33 TO BLUES AND HOLD” TO “CLIMB TO 3000 DIRECT MOOOV AND HOLD” - ATC/FPT REQUESTED COMPLETE REBUILD OF MISSED
5. PROFILE LINE 2 – PROFILE STARTS CHANGED FROM BOYDS TO NOOXX - ATC/FPT REQUESTED COMPLETE REBUILD
6. PROFILE LINE 3 – ADDED PFAF FEMKO – IAW 8260.19I 8-6-7
7. PROFILE LINE 4 – MIN ALT CHANGED FROM “BOYDS 4000, CIREP 2500” TO “NOOXX 9000, CRLET 8000, COWRR 7000, COVUL 6000, CHDMN 5000, CUTZZ 4000, CRAKL 3000, CLARZ 2000, FEMKO 1500” - ATC/FPT REQUESTED COMPLETE REBUILD
8. PROFILE LINE 5 – REMOVED DIST FROM OM 3.66 AND ADDED “282 HAT: 0.73” – IAW 8260.19I 8-6-7
9. PROFILE LINE 7 – ADDED 20:1 IS CLEAR - IAW 8260.19 8-6-7.G.
10. NOTES – REMOVED “GPS REQUIRED” NOTE AND REPLACED IT WITH PBN REQUIREMENTS NOTE: “RNP AR APCH – GPS” – IAW FAAO 8260.19I PARAGRAPH 8-6-8.B.(2).
11. NOTES – CHANGED NOTE FROM “FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -13°C OR ABOVE 54°C” - IAW 8260-58B, 3-3-1
12. NOTES – ADDED CHART SPEED ICON IN PLANVIEW AT BULGR: MAX 210 KIAS - ATC/FPT REQUESTED
13. NOTES – CHANGED SIMULTANEOUS APPROACH NOTE FROM “SIMULTANEOUS APPROACH AUTHORIZED WITH ILS OR LOC/DME RWY 19L, ILS RWY 19L (CAT II)” TO “SIMULTANEOUS APPROACH AUTHORIZED” - 8260.19I, PARA 8-6-11.O.(8).(A).
14. NOTES – DELETED NOTE “USE OF FD OR AP PROVIDING RNAV TRACK GUIDANCE REQUIRED DURING SIMULTANEOUS OPERATIONS” – NO LONGER REQUIRED PER 8260.19I, PARA 8-6-11.O.(8).(D).
15. ADDITIONAL FLIGHT DATA – CHANGED HOLDING FROM “HOLD W, RT, 076.21 INBOUND” TO “HOLD N, RT, 187.14 INBOUND” - ATC/FPT REQUESTED MOVING MISSED HOLDING TO MOOOV FIX
16. ADDITIONAL FLIGHT DATA – FAS OBSTACLE 430 TWR 385914N/0772651W REMOVED - 8260.19I 8-6-10.C
17. ADDITIONAL FLIGHT DATA – ADDED “CHART AT OR ABOVE 9000 AT NOOXX, 6000 AT LOGOW, 5000 AT DUBBV, – ATC/FPT REQUESTED
18. ADDED RNP 0.11 AND RNP 0.25 TO MINIMUMS – ATC/FPT REQUESTED
19. CHANGED MINIMUMS FOR RNP 0.30 FROM ALL CATS 740/6000/468 TO 702/4000/430 – UPDATED EVALUATION
20. ADDED "CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.11 VISIBILITY ALL CATS TO RVR 4500, AND RNP 0.25 VISIBILITY ALL CATS TO RVR 5500" - 8260.19I 8-6-11.D

03/22/2024: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 02/22/2024.
CHANGED PROFILE NOTE "VGSI AND DESCENT ANGLES NOT COINCIDENT... TO VGSI AND RNAV GLIDEPATH NOT COINCIDENT...

COORDINATED WITH:

A4A

☒

ALPA

☒

AOPA

☒

APA

☒

HAI

☐

NBAA

☒

OTHER:

POTOMAC TRACON, 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

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Feb 20, 2024

OFFICE

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DATE

10/26/2023

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Feb 22, 2024

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DATE

TITLE

MANAGER

