

FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
RNAV (GPS) 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> KMCZ	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 21	<u>ORIGINAL/AMENDMENT</u> 1C	<u>CITY</u> WILLIAMSTON	<u>STATE</u> NC		
<u>AIRPORT ELEVATION</u> 75	<u>TDZE</u> 75	<u>SUPERSEDED</u> RNAV (GPS) RWY 21	<u>ORIGINAL/AMENDMENT</u> 1B	<u>DATED</u> 10/10/2019	<u>MAG VAR</u> 9W	<u>EPOCH YEAR</u> 1990
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 10 AUGUST 2023	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

**TAA**

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 123/30 CW 303/30	NOPT	WOBGO	IF/IAF	2400
2. 303/30 CW 123/30		WOBGO	IAF	2400

**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>
WOBGO	IF/IAF	NASIE		TF	FB	1.00	212.79	4.95	1600
NASIE	FAF	HOBVU/1.64 NM TO RW21		TF	FB	0.30	212.76	3.01	
HOBVU/1.64 NM TO RW21		RW21	MAP	TF	FO	0.30	212.76	1.64	
RW21	MAP	343 MSL		CA			212.76		
343 MSL		TALOE		DF	FO	1.00			2400

**MISSED APPROACH**

**MAP:**

LPV: DA  
LNAV/VNAV: DA  
LNAV: RW21

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 2400 DIRECT TALOE AND HOLD, CONTINUE CLIMB-IN-HOLD TO 2400.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**

QUALITY  
34  
CHECKED

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)

2. HOLD NE WOBGO, RT, 212.79 INBOUND, 2400 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 212.76FAF: NASIEDIST FAF TO MAP: 4.65DIST FAF TO THLD: 4.65

4. MIN ALT: WOBGO 2400, NASIE 1600, HOBVU/1.64 NM TO RW21 640

5. DIST TO THLD FROM OM:MM:IM:150 HAT:268 HAT: 0.70GS ANT:

6. MIN GP INCPT: 1600GP ALT AT PFAF : NASIE 1600OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 45.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: CIRCLING RWY 3 NA AT NIGHT.  
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15°C OR ABOVE 54°C.  
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:

HOLD SW, RT, 032.70 INBOUND.  
CHART FAS OBST: 187 TREE (37-052441) 355253N/0770919W.  
CHART 173 TREE 355352N/0770946W.  
269 AAO 355527N/0770742W.  
CHART VDP AT 1.07 NM TO RW21.  
WAAS CHANNEL # 86237  
REFERENCE PATH ID: W21A  
CHART CIRCLING ICON.  
LTP HAE: -13 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 900-2 1/2, NA WHEN LOCAL WEATHER NOT AVAILABLE.

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
LPV DA	383	1	308	383	1	308	383	1	308	383	1	308			
LNAV/VNAV DA	343	1	268	343	1	268	343	1	268	343	1	268			
LNAV MDA	440	1	365	440	1	365	440	1	365	440	1	365			
CIRCLING	500	1	425	540	1	465	680	1 3/4	605	880	2 1/2	805			

QUALITY  
34  
CHECKED

**CHANGES - REASONS**

1. 8260-3 TERMINAL ROUTE CA AND DF LEGS CHANGED CA ALTITUDES FROM 337 MSL TO 343 MSL - PER CURRENT EVALUATION AND NEW OIS SURVEY.
2. 8260-3 PROFILE SECTION LINE 5 DIST TO THLD FROM HAT CHANGED FROM 262 TO 268 - PER CURRENT EVALUATION AND NEW OIS SURVEY.
3. 8260-3 PROFILE SECTION LINE 7 34:1 CHANGED FROM "IS CLEAR" TO IS NOT CLEAR - PER CURRENT EVALUATION AND NEW OIS SURVEY.
4. 8260-3 CHANGED PBN REQUIREMENTS NOTE FROM "RNP APCH" TO RNP APCH - GPS. - 8260.19I, 8-6-8 B (2).
5. 8260-3 NOTES SECTION ADDED NOTE CIRCLING RWY 3 NA AT NIGHT. - 20:1 PENETRATION(S) EXIST AND IAW 8260.19I 8-6-11O(2)(H).
6. 8260-3 ADDITIONAL FLIGHT DATA CHART FAS OBST CHANGED FROM "186 TREE 355253N/0770919W" TO 187 TREE (37-052441) 355253N/0770919W. - PER CURRENT EVALUATION AND NEW OIS SURVEY.
7. 8260-3 ADDITIONAL FLIGHT DATA DELETED \*LNAV ONLY AND THE ASTERISK FROM CHART VDP AT 1.07 NM TO RW21\* - IAW 8260.19I 8-6-10M AND CRITERIA MEMO IMPLEMENTATION OF 8260.19I DTD JUNE 29, 2020 ATTACHMENT 3 4M.
8. 8260-3 ALTERNATE SECTION CHANGED ALTERNATE FROM "NA" TO STANDARD - CAT D 900-2 1/2, NA WHEN LOCAL WEATHER NOT AVAILABLE. - PER CURRENT EVALUATION AND IAW 8260.19I 8-6-11B.(4) AND CRITERIA MEMO IMPLEMENTATION OF 8260.19I DTD JUNE 29, 2020 ATTACHMENT 4 5B.
9. 8260-3 MINIMUMS SECTION CHANGED LPV DA/HAT FROM 380/305 TO 383/308 ALL CATS - PER CURRENT EVALUATION AND NEW OIS SURVEY.
10. 8260-3 MINIMUMS SECTION CHANGED LNAV/VNAV DA/HAT FROM 337/262 TO 343/268 ALL CATS - PER CURRENT EVALUATION AND NEW OIS SURVEY.
11. 8260-3 NOTES SECTION REMOVED BARO-VNAV AND VDP NA WHEN USING ROCKY MOUNT ALTIMETER SETTING - MOVED TO PART C REMARKS FOR CONTINGENCY PURPOSES.
12. 8260-3 FAS DATA BLOCK LTP/FTP LATITUDE AND LONGITUDE CHANGED FROM 355206.5235N/0771029.2950W TO 355206.5240N/0771029.2945W - PER CURRENT AIRNAV DATA.
13. 8260-3 FAS DATA BLOCK FPAP LATITUDE AND LONGITUDE CHANGED FROM 355044.8400N/0771113.4200W TO 355044.8425N/0771113.4195W - PER TARGETS CALCULATION.
14. 8260-3 FAS DATA BLOCK CHANGED CRC REMAINDER FROM D34F0607 TO 52AAF6B1 - PER SIAP CALCULATION.

**COORDINATED WITH:**A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: AMGR, ZDC**FLIGHT CHECKED BY**

GEORGE E SEARLES

Digitally signed by

RAKE MCGRAW

**OFFICE**

FPO

**DATE**

06/15/2023

Digitally signed by Jun 20, 2023

**DEVELOPED BY**

RAKE MCGRAW (NEERAJ VERMA)

RAKE MCGRAW

Jun 20, 2023

**OFFICE**

AJV-A422

**DATE**

03/16/2023

**APPROVED BY**

RAKE MCGRAW

Digitally signed by

RAKE MCGRAW

**OFFICE**

AJV-A422

**DATE**

08/10/2023

**TITLE**  
MANAGER

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMCZ
RUNWAY	RW21
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W21A
LTP/FTP LATITUDE	355206.5240N
LTP/FTP LONGITUDE	0771029.2945W
LTP/FTP ELLIPSOIDAL HEIGHT	-00130
FPAP LATITUDE	355044.8425N
FPAP LONGITUDE	0771113.4195W
THRESHOLD CROSSING HEIGHT (TCH)	00045.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1224
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	52AAF6B1

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00226
FPAP ORTHOMETRIC HEIGHT	+00226