

**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> 94K	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 27	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> CASSVILLE	<u>STATE</u> MO		
<u>AIRPORT ELEVATION</u> 1483	<u>TDZE</u> 1483	<u>SUPERSEDED</u> RNAV (GPS) RWY 27	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 04/02/2015	<u>MAG VAR</u> 2E	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<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. 178/30 CW 358/30	NOPT	WURUG	IF/IAF	3600
2. 358/30 CW 178/30		WURUG	IF/IAF	3600

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>
WURUG	IF/IAF	JOXEV		TF	FB	1.00	267.82	6.01	3100
JOXEV	FAF	YERSU/2.50 NM TO RW27		TF	FB	0.30	267.74	2.49	
YERSU/2.50 NM TO RW27		RW27	MAP	TF	FO	0.30	267.74	2.50	
RW27	MAP	1883 MSL		CA			267.74		
1883 MSL		ZURES		DF	FO	1.00			3300

MISSED APPROACH

MAP:

LP: RW27
LNAV: RW27

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3300 DIRECT ZURES AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

QUALITY
16
CHECKED

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)

2. HOLD E WURUG, RT, 267.82 INBOUND, 3600 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC:

267.74

FAF: JOXEV

DIST FAF TO MAP: 4.99

DIST FAF TO THLD: 4.99

4. MIN ALT: WURUG 3600, JOXEV 3100, YERSU/2.50 NM TO RW27 2300

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

GS ANT:

6. MIN GP INCPT:

GP ALT AT FAF :

OM:

MM:

IM:

7. GP ANGLE:

34:1

IS CLEAR

20:1

IS CLEAR

TCH:

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: USE MONETT ALTIMETER SETTING, WHEN NOT RECEIVED, USE ROGERS ALTIMETER SETTING AND INCREASE ALL MDA 20 FT. INCREASE LP CAT C VISIBILITY 1/8 SM.

ADDITIONAL FLIGHT DATA:

CHART MONETT RGNL AWOS-3
CHART CIRCLING ICON
JOXEV TO RWY 27: 3.00/40
HOLD W, RT, 087.54 INBOUND.
CHART FAS OBST: 1616 TANK (29-004050) 364203N/0935243W.
WAAS CHANNEL # 50331
REFERENCE PATH ID: W27A
LTP HAE: 420 M

MINIMUMS:

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

ALTERNATE: NA ☒

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
LP MDA	1920	1	437	1920	1	437	1920	1 1/4	437		NA				
LNAV MDA	1940	1	457	1940	1	457	1940	1 3/8	457		NA				
CIRCLING	2000	1	517	2180	1	697	2180	2	697		NA				



CHANGES - REASONS

1. REPLACE NOTE: DME/DME RNP-0.3 NA WITH PBN REQUIREMENTS NOTE: RNP APCH - GPS - IAW 8260.19I, 8-6-8.B.(2).
2. LINE 7 NOTE UPDATE: CHANGED 34:1 IS NOT CLEAR TO 34:1 IS CLEARED. ADDED NOTE "20:1 IS CLEAR" - IAW 8260.19I PARA 8-6-7.G.(3).
3. CIRCLING CAT B MDA/HAA CHANGED FROM 2020/537 TO 2180/697, CAT C MDA/HAA CHANGED FROM 2160/677 TO 2180/697 - NEW CONTROLLING OBSTACLE.
4. CRC REMAINDER CHANGED FROM 9F0E5A39 TO 6163B828 - FPAP LON/LAT CHANGED FROM 364150.2500N/ 0935530.5900W TO 364150.2478N/0935530.5860W
5. CHANGED CHART NOTE FROM "USE MONETT ALTIMETER SETTING, WHEN NOT RECEIVED, USE ROGERS ALTIMETER SETTING AND INCREASE ALL MDA 20 FT" TO "USE MONETT ALTIMETER SETTING, WHEN NOT RECEIVED, USE ROGERS ALTIMETER SETTING AND INCREASE ALL MDA 20 FT. INCREASE LP CAT C VISIBILITY 1/8 SM" - VISCHECK UPDATE.
6. LP CAT C VIS CHANGED FROM 1 3/8 TO 1 1/4 - VISCHECK UPDATE.

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** SGF APP CON, ZKC, AMGR.

FLIGHT CHECKED BY

PROCESSED IAW TECHNICAL SUPPORT GROUP (AJF-17) MEMO DATED 07/07/2021 GUIDANCE FOR PROCEDURAL CHANGES REQUIRING FLIGHT INSPECTION/VALIDATION

DEVELOPED BY

KWEKU DONKOR

Digitally signed by

KWEKU DONKOR

May 06, 2022

OFFICE

Digitally signed by

DATE

DAVID TEFFETELLER

May 12, 2022

OFFICE

AJV-A433

DATE

04/03/2022

APPROVED BY

CASIMIR TABAKA

Digitally signed by

DAVID TEFFETELLER

May 12, 2022

OFFICE

AJV-A430

DATE

TITLE
MANAGER

QUALITY
16
CHECKED

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	94K
RUNWAY	RW27
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W27A
LTP/FTP LATITUDE	364150.7585N
LTP/FTP LONGITUDE	0935339.7955W
LTP/FTP ELLIPSOIDAL HEIGHT	+04200
FPAP LATITUDE	364150.2475N
FPAP LONGITUDE	0935530.5860W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1656
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	6163B828

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04485
FPAP ORTHOMETRIC HEIGHT	+04485



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

<u>AIRPORT ID</u> 94K	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 27	<u>AMDT NO.</u> ORIG-B	<u>CITY</u> CASSVILLE	<u>STATE</u> MO	<u>AIRPORT ELEVATION</u> 1483	<u>FACILITY</u> RNAV
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PART A: OBSTRUCTION DATA SEGMENTS

STRAIGHT-IN AREA

FROM
178/30 CW 358/30

TO
WURUG

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>							<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
												1.TWR (05-000787)	361730.00N/0932609.00W	2491	500	50	5D	1000					3500
												2.TERRAIN	361351.00N/0932751.00W	2067 (2100)								AS1500	3600

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

STRAIGHT-IN AREA

FROM
358/30 CW 178/30

TO
WURUG

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>							<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
												3.TWR (05-002191)	362448.06N/0935717.46W	2186	500	125	5E	1000				AT414	3600
												4.TERRAIN	362409.00N/0935503.00W	1815 (1800)								AS1500	3300

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INTERMEDIATE

FROM
WURUG (IF/IAF)

TO
JOXEV

RNP	DISTANCE 6.01	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
5.AAO	364019.96N/0934230.22W		1780	1000	20	6C	500					2300
6.TERRAIN	364019.96N/0934230.22W		1580 (1600)								AS1500	3100

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:

FINAL: LP

FROM
JOXEV

TO
YERSU/2.50 NM TO RW27

RNP	DISTANCE 2.49	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
7.TOWER (29-001709)	364132.00N/0934917.00W		1816	500	125	5E	250				AC125 RA75 DG34	2300

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:



FINAL: LP STEPDOWN

FROM

YERSU/2.50 NM TO RW27

TO

RW27

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	2.50		RW27		437							
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
8.TANK (29-004050)	364202.97N/0935242.56W		1616	50	20	2C	250				RA55 SA-14	1920

COMPUTATIONS

ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:

FINAL: LNAV

FROM

JOXEV

TO

YERSU/2.50 NM TO RW27

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	2.49											
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
7.TOWER (29-001709)	364132.00N/0934917.00W		1816	500	125	5E	250				RA75 AC125 DG34	2300

COMPUTATIONS

ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:



FINAL: LNAV STEPDOWN

FROM

YERSU/2.50 NM TO RW27

TO

RW27

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	2.50		RW27			457						
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
8.TANK (29-004050)	364202.97N/0935242.56W		1616	50	20	2C	250				RA55	1940

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:

HOLD-IN-LIEU OF PT

FROM

WURUG

TO

P-5

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
		P-5										
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
9.TWR (29-002922)	363910.88N/0933935.77W		1852	20	3	1A	1000				AT748	3600
6.TERRAIN	364019.96N/0934230.22W		1580 (1600)								AS1500	3100

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:



MISSED APPROACH : LP

FROM

RW27

TO

ZURES

RNP	DISTANCE	PAT	MAP	HAT			HMAS 1765					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				3300
10.TWR (29-002919)	364037.96N/0935728.70W		1737	20	3	1A	1000					2800
11.TERRAIN	364203.00N/0935603.00W		1575 (1600)								AS1500	3100

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:

MISSED APPROACH : LNAV

FROM

RW27

TO

ZURES

RNP	DISTANCE	PAT	MAP	HAT			HMAS 1785					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				3300
10.TWR (29-002919)	364037.96N/0935728.70W		1737	20	3	1A	1000					2800
11.TERRAIN	364203.00N/0935603.00W		1575 (1600)								AS1500	3100

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:



CIRCLING

☐ ALL CATS

☒ CAT A

☒ CAT B

☒ CAT C

☐ CAT D

☐ CAT E

☐ NOT AUTHORIZED

OBSTRUCTION	COORDINATES	RADIUS	HAA	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
CATEGORY A											
12.TANK (29-004050)	364202.97N/0935242.56W	1.31	517	1616	50	20	2C	300		RA55 XP29	2000
CATEGORY B											
13.TOWER (29-077068)	364340.31N/0935413.59W	1.86	697	1821	20	3	1A	300		RA55	2180
CATEGORY C											
13.TOWER (29-077068)	364340.31N/0935413.59W	2.92	697	1821	20	3	1A	300		RA55	2180

CIRCLING REMARKS:
XP: MATCHED PREVIOUS MINS.

CENTERRADIUS

REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

SGF APP CON, ZKC ARTCC, STL FSS

<u>WX SERVICE</u> AWOS-3	<u>LOCATION</u> KHFJ	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KHFJ	<u>DISTANCE</u> 13.65	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 55
<u>BACK-UP WX SERVICE</u> AWOS-3PT	<u>LOCATION</u> KROG	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KROG	<u>DISTANCE</u> 21.91	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 68

WX REMARKS:

RASS PRESSURE PATTERNS THE SAME
KHFJ 1313.9, KROG 1358.8
RA = 54.97/67.66.

<u>PRIMARY NAVAID</u>	<u>MONITOR POINT</u>	<u>HRS OPERATION</u>	<u>CAT</u>
<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>		<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW09 - MIRL (PCL), PAPI-2L		NPI-P	
RW27 - MIRL (PCL), PAPI-2L		NPI-P	

<u>GLIDESLOPE ANGLE</u>	<u>ELEV RWY THRESHOLD</u>	<u>TCH</u>	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u> 3.00	<u>TCH</u> 40.0
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FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	<input checked="" type="checkbox"/>	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	<input checked="" type="checkbox"/>	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

<u>CRITICAL LOW</u>	<u>CRITICAL HIGH</u>	<u>ACT</u>	<u>APT ISA</u>
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CRITICAL TEMPERATURE REMARKS:

"VISUAL PORTION OF FINAL" PENETRATIONS

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS



and/or
5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PENETRATIONS REMARKS:

PART C: GENERAL REMARKS:
VDP NOT ESTABLISHED - REMOTE ALTIMETER IN USE.
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



PART D: AIRSPACE

DOCKET #

ALL DISTANCES TO 1/100NM; ELEVATION TO NEAREST 100 FEET; COORDINATES TO 1/100 SECOND; DEG TO 1/100 DEGREE

DISTANCE FROM	THLD	TO 1000FT POINT	3.06
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	269.74
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	1500
DISTANCE FROM	THLD	TO 1500FT POINT	4.83
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	1.95
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	269.74
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	1500

THRESHOLD
COORDINATES
(IF STR-IN)364150.76N/0935339.80W

ARP COORDINATES364150.70N/0935401.90W

RUNWAY APCH END
AND DIST FURTHEST
FROM ARP RUNWAY 27 DISTANCE 0.30 NM

FAF
COORDINATES364152.27N/0934727.67W

FIX NAME
COORDINATES

REMARKS
NO ADDITIONAL AIRSPACE REQUIRED



PART E: PREPARED BY

<u>NAME</u> KWEKU DONKOR	<u>OFFICE</u> AJV-A433	<u>DATE</u> 04/03/2022	<u>TITLE</u> AERONAUTICAL INFORMATION SPECIALIST
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