

**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</u> COLUMBIA RGNL	<u>AIRPORT ID</u> KCOU	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 31	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> COLUMBIA	<u>STATE</u> MO
<u>AIRPORT ELEVATION</u> 889	<u>TDZE</u> 886	<u>SUPERSEDED</u> RNAV (GPS) RWY 31	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 10/12/2017	<u>MAG VAR</u> 0E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2020

TAA

FROM	FIX TYPE	TO	FIX TYPE	ALTITUDE
1. 226/30 CW 046/30	NOPT	AJQUR	IF/IAF	3100
2. 046/30 CW 136/30		WEGSI	IAF	3100
3. 136/30 CW 226/30		JOTUD	IAF	3100

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
WEGSI	IAF	AJQUR	NOPT	TF	FB	1.00	045.48	6.50	3100
JOTUD	IAF	AJQUR	NOPT	TF	FB	1.00	225.60	6.50	3100
AJQUR	IF/IAF	IHJAK		TF	FB	1.00	315.54	6.50	2500
IHJAK	FAF	JUBAX/2.60 NM TO RW31		TF	FB	0.30	315.48	2.32	
JUBAX/2.60 NM TO RW31		RW31	MAP	TF	FO	0.30	315.48	2.60	
RW31	MAP	1138 MSL		CA			315.48		
1138 MSL		NAYLU		DF	FO	1.00			3100

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW31

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3100 DIRECT NAYLU AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)

2. HOLD SE AJQUR, RT, 315.54 INBOUND, 3100 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 315.48FAF: IHJAKDIST FAF TO MAP: 4.92DIST FAF TO THLD: 4.92

4. MIN ALT: AJQUR 3100, IHJAK 2500, JUBAX/2.60 NM TO RW31 1760*

5. DIST TO THLD FROM OM:MM:IM:150 HAT:250 HAT: 0.64GS ANT:

6. MIN GP INCPT: 2500GP ALT AT FAF : IHJAK 2500OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 44.9

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING RWY 20 NA AT NIGHT.
CHART NOTE: RWY 31 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 54°C.
CHART NOTE: CIRCLING NA FOR CAT D W OF RWYS 2 AND 13.

ADDITIONAL FLIGHT DATA:

1024 AAO 384533N/0920736W
HOLD NW, RT, 135.32 INBOUND.
CHART FAS OBST: 978 TREE 384919N/0921208W.
DISTANCE TO THLD FROM 250 HAT: 0.64 NM.
CHART VDP AT 0.96 NM TO RW31*
*LNAV ONLY.
WAAS CHANNEL # 86242
REFERENCE PATH ID: W31A
CHART CIRCLING ICON.
LTP HAE: 237.4 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - 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	1138	1	252	1138	1	252	1138	1	252	1138	1	252			
LNAV/VNAV DA	1138	1	252	1138	1	252	1138	1	252	1138	1	252			
LNAV MDA	1240	1	354	1240	1	354	1240	1	354	1240	1	354			
CIRCLING	1300	1	411	1340	1	451	1360	1 1/2	471	1440	2	551			

CHANGES - REASONS

1. DELETED NOTE: DME/DME RNP-0.3 NA. - NO LONGER REQUIRED.
2. ADDED PBN REQUIREMENTS NOTE: RNP APCH. - 8260.19H, 8-6-8B1.
3. DELETED FAHRENHEIT TEMPERATURES FROM BARO-VNAV NOTE. - 8260.19H, 8-6-9S.
4. CHANGED CIRCLING CAT C MINIMUMS FROM CMDA/HAA 1340/451 TO 1360/471. - NEW CONTROLLING OBSTACLE.
5. ADDED 20:1 IS CLEAR IN PROFILE VIEW. - 8260.19H, 8-6-11K3.
6. CHANGED CHART NOTE: "CIRCLING NA FOR CAT D WEST OF RWYS 2 AND 13" TO "CIRCLING NA FOR CAT D W OF RWYS 2 AND 13". - 8260.19H, 8-6-11O5A.
7. ADDED CHART NOTE: CIRCLING RWY 20 NA AT NIGHT. - EVALUATION REVEALED 20:1 PENETRATIONS FOR RWY 20/ENTERED INTO 20:1 TRACKER.
8. ADDED MAX 6000 C-I-H ON LINE 2 OF PROFILE. - 8260.19H, 8-6-7B2.
9. ADDED "NA WHEN LOCAL WEATHER NOT AVAILABLE" TO ALTERNATE MINIMUMS. - MEMO #266, ATTACHMENT 4, PARA 6.
10. FAS DATA BLOCK INFORMATION CHANGED LTP/FTP LATITUDE FROM 384859.3265N TO 384859.3235N, LONGITUDE FROM 0921233.9130W TO 0921233.9065W AND CRC REMAINDER FROM 12F5C48E TO 13656F47. - NEW AIRNAV DATA.

COORDINATED WITH:

A4A☒ALPA☒AOPA☒APA☒HAI☐NBAA☒OTHER: COU ATCT, MIZZU APP CON, ZKC, MO STATE AERO

FLIGHT CHECKED BY

ANTHONY D VALLERA

Digitally signed by

WARDELL HENNING

Oct 16, 2020

OFFICE

FICO

DATE

10/09/2020

DEVELOPED BY

WARDELL HENNING (THOR CORNELL)

Digitally signed by

WARDELL HENNING

Oct 16, 2020

OFFICE

AJV-A432

DATE

04/10/2020

APPROVED BY

GEORGE DAVIS

Digitally signed by

WARDELL HENNING

Oct 16, 2020

OFFICE

AJV-A430

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KCOU
RUNWAY	RW31
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W31A
LTP/FTP LATITUDE	384859.3235N
LTP/FTP LONGITUDE	0921233.9065W
LTP/FTP ELLIPSOIDAL HEIGHT	+02374
FPAP LATITUDE	385002.8570N
FPAP LONGITUDE	0921353.9325W
THRESHOLD CROSSING HEIGHT (TCH)	00044.9
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1080
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	13656F47

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+02699
FPAP ORTHOMETRIC HEIGHT	+02699



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

AIRPORT	AIRPORT ID	PROCEDURE NAME	AMDT NO.	CITY	STATE	AIRPORT ELEVATION	FACILITY
COLUMBIA RGNL	KCOU	RNAV (GPS) RWY 31	1A	COLUMBIA	MO	889	RNAV

PART A: OBSTRUCTION DATA SEGMENTS

STRAIGHT-IN AREA

FROM
226/30 CW 046/30

TO
AJQUR

<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.TOWER (29-001264)	384214.50N/0920521.80W		1799	500	125	5E	1000				AT301	3100
2.TERRAIN	381700.00N/0914130.00W		1083 (1100)								AS1500	2600

COMPUTATIONS

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

SEGMENT REMARKS:

LEFT BASE AREA

FROM
046/30 CW 136/30

TO
WEGSI

<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.TOWER (29-001464)	383815.73N/0922935.13W	2037	500	125	5E	1000					3100
4.TERRAIN	382721.00N/0924703.00W	1073 (1100)								AS1500	2600

COMPUTATIONS

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

SEGMENT REMARKS:



RIGHT BASE AREA

FROM
136/30 CW 226/30

TO
JOTUD

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
5.TOWER (29-002111)	391549.00N/0920807.00W		2043	500	50	5D	1000					3100
6.TERRAIN	390254.00N/0920545.00W		965 (1000)								AS1500	2500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INITIAL

FROM
WEGSI

TO
AJQUR

<u>RNP</u>	<u>DISTANCE</u> 6.50	<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>
7.TOWER (29-000085)	384130.00N/0920545.00W		1770	100	20	3C	1000				AT330	3100
8.TERRAIN	383930.00N/0920706.00W		880 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INITIAL

FROM
JOTUD

TO
AJQUR

RNP	DISTANCE 6.50	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
9.TOWER (29-001474)	384217.36N/0920030.39W		1317	50	20	2C	1000				AT783	3100
10.TERRAIN	384412.00N/0915421.00W		886 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE

FROM
AJQUR (IF/IAF)

TO
IHJAK

RNP	DISTANCE 6.50	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
1.TOWER (29-001264)	384214.50N/0920521.80W		1799	500	125	5E	500				AC125	2500
11.TERRAIN	384257.00N/0920557.00W		883 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FINAL: LPV

FROM
IHJAK

TO
RW31

RNP	DISTANCE 4.92	PAT	MAP DA	HAT 252			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
12.TREE (KCOUT000121)	384849.44N/0921225.93W		928	20	3	1A		34.00:1				1138

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

SEGMENT REMARKS:

FINAL: LNAV/VNAV

FROM
IHJAK

TO
RW31

<u>RNP</u>	<u>DISTANCE</u> 4.92	<u>PAT</u>	<u>MAP</u> DA	<u>HAT</u> 252			<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>
13.TREE (KCOUT000176)	384918.94N/0921208.41W		978	20	3	1A	161					1138

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

SEGMENT REMARKS:

LNAV/VNAV: SURFACE: 23.47:1.



FINAL: LNAV

FROM

IHJAK

TO

JUBAX/2.60 NM TO RW31

<u>RNP</u>	<u>DISTANCE</u> 2.32	<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>
14.AAO	384627.00N/0920903.00W		952	100	50	3D	250				AC50 DG508	1760

COMPUTATIONS

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

SEGMENT REMARKS:

FINAL: LNAV STEPDOWN

FROM

JUBAX/2.60 NM TO RW31

TO

RW31

<u>RNP</u>	<u>DISTANCE</u> 2.60	<u>PAT</u>	<u>MAP</u> RW31	<u>HAT</u> 354			<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>
13.TREE (KCOUT000176)	384918.94N/0921208.41W		978	20	3	1A	250					1240

COMPUTATIONS

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

SEGMENT REMARKS:



HOLD-IN-LIEU OF PT

FROM
AJQUR

TO
P-5

RNP	DISTANCE	PAT P-5	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
1.TOWER (29-001264)	384214.50N/0920521.80W		1799	500	125	5E	1000				AT301	3100
15.TERRAIN	383718.00N/0915051.00W		936 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH : LPV

FROM
DA

TO
NAYLU

RNP	DISTANCE	PAT	MAP	HAT			HMAS 951					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				3100
16.TOWER (29-000075)	385317.00N/0921549.00W		1616	50	3	2A	1000					2700
17.TERRAIN	385254.00N/0921454.00W		824 (800)								AS1500	2300

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



MISSED APPROACH : LNAV/VNAV

FROM

DA

TO

NAYLU

RNP	DISTANCE	PAT	MAP	HAT			HMAS 978					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				3100
16.TOWER (29-000075)	385317.00N/0921549.00W		1616	50	3	2A	1000					2700
17.TERRAIN	385254.00N/0921454.00W		824 (800)								AS1500	2300

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

SEGMENT REMARKS:

MISSED APPROACH : LNAV

FROM

RW31

TO

NAYLU

RNP	DISTANCE	PAT	MAP	HAT			HMAS 1140					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				3100
16.TOWER (29-000075)	385317.00N/0921549.00W		1616	50	3	2A	1000					2700
17.TERRAIN	385254.00N/0921454.00W		824 (800)								AS1500	2300

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

SEGMENT REMARKS:



<u>AIRPORT</u> COLUMBIA RGNL	<u>AIRPORT ID</u> KCOU	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 31	<u>AMDT NO.</u> 1A	<u>CITY</u> COLUMBIA	<u>STATE</u> MO	<u>AIRPORT ELEVATION</u> 889	<u>FACILITY</u> RNAV
---------------------------------	---------------------------	--	-----------------------	-------------------------	--------------------	---------------------------------	-------------------------

CIRCLING

☐ ALL CATS

☒ CAT A

☒ CAT B

☒ CAT C

☒ CAT D

☐ CAT E

☐ NOT AUTHORIZED

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>RADIUS</u>	<u>HAA</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
CATEGORY A											
17.TREE (29-043575)	384918.94N/0921208.41W	1.3	411	978	20	3	1A	300		XP22	1300
CATEGORY B											
18.TOWER (29-062465)	384945.50N/0921504.14W	1.84	451	987	20	10	1B	300		HAA	1340
CATEGORY C											
19.WATER_TOWER (29-062343)	384735.71N/0921612.73W	2.89	471	1046	20	10	1B	300			1360
CATEGORY D											
20.AAO	385310.94N/0921203.68W	3.77	551	1091	50	20	2C	300		HAA	1440

CIRCLING REMARKS:
XP TO MAINTAIN CURRENT MINIMUMS.

CENTER

RADIUS

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:
110 FT VEGETATION
VISIBILITIES LIMITED TO 1 SM PER ADO DUE TO AIRPORT DESIGN.

QUALITY
42
CHECKED

FAA Form 8260-9 / (11/16) Supersedes Previous Edition

Electronic Version

Page 8 of 12

PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH
ZKC ARTCC, COU TOWER, MIZZU APP CON

<u>WX SERVICE</u> ASOS	<u>LOCATION</u> KCOU	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KCOU	<u>DISTANCE</u> 0	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 0
<u>BACK-UP WX SERVICE</u> ASOS	<u>LOCATION</u> KJEF	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KJEF	<u>DISTANCE</u> 13.681	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 80

WX REMARKS:
RASS PRESSURE PATTERNS THE SAME
KCOU 889, KJEF 543
RA = 80.0.

<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>
RW13 - MIRL (PCL), REIL, PAPI-4L		NPI-G	
RW31 - MIRL (PCL), REIL, PAPI-4L		NPI-G	
RW02 - MALSR (PCL), HIRL (PCL)		PIR-G	APPROACH
RW20 - HIRL (PCL), REIL, ODALS (PCL)		PIR-G	

<u>GLIDESLOPE ANGLE</u> 3.00	<u>ELEV RWY THRESHOLD</u> 885.6	<u>TCH</u> 44.9	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u> 3.00	<u>TCH</u> 44.9
---------------------------------	------------------------------------	--------------------	------------------------	--------------------------	---------------------------	--------------------

<u>FINAL APPROACH COURSE AIMING</u>			
RUNWAY THRESHOLD	<input checked="" type="checkbox"/>	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	<input checked="" type="checkbox"/>	FT FROM CENTERLINE	

<u>CRITICAL TEMPERATURES</u>			
<u>CRITICAL LOW</u> -17C	<u>CRITICAL HIGH</u> +54C	<u>ACT</u> -17C	<u>APT ISA</u> +31.23C

CRITICAL TEMPERATURE REMARKS:
AVERAGE COLD TEMPERATURE DERIVED FROM 5-YEAR HISTORY (2012-2016).
CRITICAL LOW TEMPERATURE BASED ON ACT.
DESCENT RATE (FPM): STANDARD TEMP 966 HIGH TEMP 1127.



"VISUAL PORTION OF FINAL" PENETRATIONS

Final Type	CIRCLING RWY 20
20:1	
922 TREE (29-062347) 384933.92N/0921244.45W (2.79)	
Final Type	FINAL
34:1	
928 TREE (KCOUT000121) 384849.44N/0921225.93W (11.88)	
923 TREE (KCOUT000129) 384849.38N/0921223.74W (3.18)	

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

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

PENETRATIONS REMARKS:

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FOR CONTINGENCY PURPOSES:
WHEN LOCAL ALTIMETER SETTING IS NOT RECEIVED USE JEFFERSON CITY ALTIMETER SETTING AND INCREASE ALL DAS/MDAS 80 FT; INCREASE LNAV CATS C AND D VISIBILITY 1/4 SM.
BARO-VNAV NA WHEN USING JEFFERSON CITY ALTIMETER SETTING.
VDP NA WITH JEFFERSON CITY ALTIMETER SETTING

TERPS PARAGRAPH 289 APPLIED TO 1024 AAO 384533N/0920736W.

ORDER 8260.3, VOLUME 1, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



<u>AIRPORT</u> COLUMBIA RGNL	<u>AIRPORT ID</u> KCOU	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 31	<u>AMDT NO.</u> 1A	<u>CITY</u> COLUMBIA	<u>STATE</u> MO	<u>AIRPORT ELEVATION</u> 889	<u>FACILITY</u> RNAV
---------------------------------	---------------------------	--	-----------------------	-------------------------	--------------------	---------------------------------	-------------------------

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	3.04
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	315.48
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	900
DISTANCE FROM	THLD	TO 1500FT POINT	4.72
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	1.96
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	315.48
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	900

THRESHOLD
COORDINATES
(IF STR-IN)

384859.32N/0921233.91W

ARP COORDINATES

384902.40N/0921304.90W

RUNWAY APCH END
AND DIST FURTHEST
FROM ARP

FAF
COORDINATES

384528.70N/0920809.04W

FIX NAME
COORDINATES

IAF WEGSI: 383616.62N/0920814.91W, IAF JOTUD: 384523.50N/0915623.98W, IF/IAF AJQUR: 384050.21N/0920219.82W

REMARKS

TAA STRAIGHT-IN:
226/30 CW 046/30 TO AJQUR.
TAA LEFT BASE: 136/30 CW 226/30 TO WEGSI.
TAA RIGHT BASE: 046/30 CW 136/30 TO JOTUD.

QUALITY
42
CHECKED

FAA Form 8260-9 / (11/16) Supersedes Previous Edition

Electronic Version

Page 11 of 12

<u>AIRPORT</u> COLUMBIA RGNL	<u>AIRPORT ID</u> KCOU	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 31	<u>AMDT NO.</u> 1A	<u>CITY</u> COLUMBIA	<u>STATE</u> MO	<u>AIRPORT ELEVATION</u> 889	<u>FACILITY</u> RNAV
PART E: PREPARED BY							
<u>NAME</u> WARDELL HENNING (THOR CORNELL)			<u>OFFICE</u> AJV-A432	<u>DATE</u> 04/10/2020	<u>TITLE</u> AERONAUTICAL INFORMATION SPECIALIST		

QUALITY
42
CHECKED