

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33										Bearings, headings, courses, 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 in feet RVR.									
TERMINAL ROUTES																	MISSED APPROACH									
FROM				TO				COURSE AND DISTANCE				ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW11 CLIMB TO 3000 DIRECT FABAG AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 112.00 INBOUND. CHART FAS OBST: 563 ROD ON MCWV TWR 335805N/0811022W CHART 670 TOWER 335718N/0811448W. CHART 590 TOWER 335800N/0811047W. CHART ASR. CHART R-6001 A & B. DISTANCE TO THLD FROM 200 HAT: 0.47 NM. CHART VDP AT 1.42 NM TO RW11* *LNAV ONLY. WAAS CHANNEL # 61014 REFERENCE PATH ID: W11A LTP HAE: 38.7 M												
WIDER				DITME (TF) (FB) (RNP 2.00)				230.09 / 6.61				3000														
SAMMI				CAGUP (TF) (FB) (RNP 2.00)				060.45 / 14.32				3000														
LEDAS (IAF)				BAPNE (TF) (FB) (RNP 1.00)				111.62 / 8.49				2500														
CAGUP (IAF)				BAPNE (TF) (FB) (RNP 1.00)				036.63 / 5.00				2500														
DITME (IAF)				BAPNE (TF) (FB) (RNP 1.00)				187.00 / 5.00				2500														
(SEE FORM 8260-10)																										
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT BAPNE 3. FAC: 111.60 FAF: AGUVE DIST FAF TO MAP: 5.60 THLD: 5.60 4. MIN. ALT: BAPNE 2500, AGUVE 2100, BEHRN/2.00 NM TO RW11 920* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2100 GS ALT AT: AGUVE 2100 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 59.0 34:1 IS CLEAR 8. MSA FROM: RW11 3100																	MAG VAR: 7W EPOCH YEAR: 2020									
MINIMUMS																										
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT																	ALTERNATE: N A			STANDARD						
CATEGORY ==>>>		A			B			C			D			E												
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA								
LPV DA	436	1800	200	436	1800	200	436	1800	200	436	1800	200	436	1800	200											
LNAV/VNAV DA	744	6000	508	744	6000	508	744	6000	508	744	6000	508	744	6000	508											
LNAV MDA	740	2400	504	740	2400	504	740	5000	504	740	5000	504	740	5000	504											
CIRCLING	740	1	504	740	1	504	840	1 3/4	604	880	2	644														
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 48C (118F). CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT WIDER ON V53 NORTHWEST BOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SAMI ON V56 WESTBOUND. (CONTINUED ON PAGE 2)																										
CITY AND STATE COLUMBIA, SC				ELEVATION: 236 TDZE: 236 AIRPORT NAME: COLUMBIA METROPOLITAN				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 11, AMDT 1B				SUP:										
																AMDT: 1A										
																DATED 08/17/2017										



ALL AFFECTED PROCEDURES REVIEWED? <div><input type="checkbox"/> YES</div> <div><input type="checkbox"/> NO</div>		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE <div>ROUTINE</div>	
COORDINATED WITH: <div><div>ATA<div><input checked="" type="checkbox"/></div></div><div>AAT<div><input type="checkbox"/></div></div><div>ALPA<div><input checked="" type="checkbox"/></div></div><div>APA<div><input checked="" type="checkbox"/></div></div><div>AOPA<div><input checked="" type="checkbox"/></div></div><div>NBAA<div><input checked="" type="checkbox"/></div></div><div>OTHER (specify)<div><input checked="" type="checkbox"/> ZJX, COLUMBIA TRACON, AMGR</div></div></div>					
FLIGHT CHECKED BY					
NAME: FLIGHT INSPECTION REVIEW NOT REQUIRED-PROCESSED IAW FLIGHT INSPECTION TEAM (AJW-333) MEMO, MAY 30, 2017. <div>Digitally signed by</div>				FIFO	DATE:
DEVELOPED BY <div>DONALD H LANIER</div>					
NAME: <div>Digitally signed by</div> <div>LIAM DONAHUE LIAM DONAHUE</div>				FIFO AJV-5431	DATE: 07/07/2017
APPROVED BY <div>Jul 21, 2017</div>					
NAME: <div>Digitally signed by</div> <div>PATRICK J. MULQUEEN DONALD H LANIER</div>				FIFO AJV-5430	DATE:
CHANGES: <div>Jul 31, 2017</div> <div>1. ADDED 2 DEGREES TO ALL HEADINGS AND COURSES. 2. LTP LONGITUDE CHANGED FROM 0810815.9145W TO 0810815.9130W. 3. CRC REMAINDER CHANGED FROM FA169C6B TO 5489CE0E. 4. CHANGED LPV VISIBILITY FROM 2400 TO 1800 ALL CATS. 5. CHANGED THE WORD VIA TO ON IN PLANVIEW NOTES. 6. REMOVED CHART FAS OBS: 413 ANTENNA ON POLE 335705.35N/0810824.21W FROM ADDITIONAL FLIGHT DATA.</div>					
REASONS: <div>1. AIRPORT MAGNETIC VARIATION UPDATED FROM 5W/1985 TO 7W/2020. 2. NEW SURVEY. 3. NEW LTP LONGITUDE. 4, 5. AMDT 1A BY P-NOTAM). 6. FAAO 8260.19G PARAGRAPH8-6-8.</div>					



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

**RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33**

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
BAPNE (IF)	AGUVE (TF) (FB) (RNP 1.00)	111.53 / 6.10	2100
AGUVE (FAF)	BEHRN/2.00 NM TO RW11 (TF) (FB) (RNP 0.30)	111.60 / 3.60	
BEHRN	RW11 (MAP) (TF) (FO) (RNP 0.30)	111.60 / 2.00	
RW11 (MAP)	436 MSL (CA)		
436 MSL	FABAG (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT LEDAS ON V311 NORTHWEST BOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SAMMI VIA V56 WESTBOUND, AND ARRIVALS AT LEDAS VIA V311 NORTHWEST BOUND AND AT WIDER VIA V53 NORTHWEST BOUND.

QUALITY
18
CHECKED

CITY AND STATE

COLUMBIA, SC

ELEVATION: 236

TDZE: 236

AIRPORT NAME:

COLUMBIA METROPOLITAN

 FACILITY
IDENTIFIER:
RNAV

 PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 11, AMDT 1B

SUP:

AMDT: 1A

DATED: 08/17/2017

ALL AFFECTED PROCEDURES REVIEWED? <input type="checkbox"/> YES <input type="checkbox"/> NO		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
COORDINATED WITH:					
ATA <input type="checkbox"/>	AAT <input type="checkbox"/>	ALPA <input type="checkbox"/>	APA <input type="checkbox"/>	AOPA <input type="checkbox"/>	NBAA <input type="checkbox"/>
OTHER (specify) <input type="checkbox"/> _____					
FLIGHT CHECKED BY					
NAME:				FIFO	DATE:
DEVELOPED BY					
NAME:				FIFO	DATE:
APPROVED BY					
NAME:				FIFO	DATE:
CHANGES:					
REASONS:					

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR PART 97.33**

Bearings, headings, courses, 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 in feet RVR.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KCAE
RUNWAY	RW11
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W11A
LTP/FTP LATITUDE	335638.9315N
LTP/FTP LONGITUDE	0810815.9130W
LTP/FTP ELLIPSOIDAL HEIGHT	+00387
FPAP LATITUDE	335616.7600N
FPAP LONGITUDE	0810634.2700W
THRESHOLD CROSSING HEIGHT (TCH)	00059.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0080
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
 <u>CRC REMAINDER</u>	 5489CE0E

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00697
FPAP ORTHOMETRIC HEIGHT	+00697

QUALITY
18
CHECKED

CITY AND STATE COLUMBIA, SC	ELEVATION: 236 AIRPORT NAME: COLUMBIA METROPOLITAN	TDZE: 236	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 11, AMDT 1B	SUP:
					AMDT: 1A
					DATED: 08/17/2017

ALL AFFECTED PROCEDURES REVIEWED? <div><input type="checkbox"/> YES</div> <div><input type="checkbox"/> NO</div>		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
COORDINATED WITH:					
ATA <div><input type="checkbox"/></div>		AAT <div><input type="checkbox"/></div>	ALPA <div><input type="checkbox"/></div>	APA <div><input type="checkbox"/></div>	AOPA <div><input type="checkbox"/></div>
NBAA <div><input type="checkbox"/></div>		OTHER (specify) <div><input type="checkbox"/></div>			
FLIGHT CHECKED BY					
NAME:				FIFO	DATE:
DEVELOPED BY					
NAME:				FIFO	DATE:
APPROVED BY					
NAME:				FIFO	DATE:
CHANGES:					
REASONS:					

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.	
FEEDER	WIDER	DITME	1. TOWER (45-001387)	340856.00N/0811938.00W	745 (2C)	1000	AT1255	3000	
			2. TERRAIN	341003.00N/0812133.00W	499 (500)		AS1500	2000	
FEEDER	SAMMI	CAGUP	3. TOWER (45-001055)	335538.00N/0812944.00W	1130 (5D)	1000	AT870	3000	
			4. TERRAIN	335512.00N/0812718.00W	679 (700)		AS1500	2200	
INITIAL	LEDAS	BAPNE	5. TOWER (45-001809)	340242.00N/0813241.00W	844 (2C)	1000	AT646	2500	
			6. TERRAIN	335857.00N/0812215.00W	588 (600)		AS1500	2100	
INITIAL	CAGUP	BAPNE	7. TOWER (45-000750)	335411.00N/0812429.00W	1063 (5D)	1000	AT437	2500	
			8. TERRAIN	335656.00N/0812433.00W	630 (600)		AS1500	2100	
INITIAL	DITME	BAPNE	9. AAO	335857.00N/0812215.00W	788 (5E)	1000	AT712	2500	
			6. TERRAIN	335857.00N/0812215.00W	588 (600)		AS1500	2100	
INTERMEDIATE	BAPNE	AGUVE	10. TOWER (45-001820)	335934.00N/0811654.00W	962 (2C)	500	AT638	2100	
			6. TERRAIN	335857.00N/0812215.00W	588 (600)		AS1500	2100	
FINAL: LPV	AGUVE	RW11				ASC		436/200	
FINAL: LNAV/VNAV	AGUVE	RW11	11. ANT POLE (KCAE0107)	335705.35N/0810824.21W	413 (2C)	PDA	AC20 MA61	744/508	
2. PROCEDURE TURN									
3. MISSED APPROACH	MAP: DA / DA / RW11	FABAG	14. ROD TWR	335817.57N/0810846.47W	468 (2C)	ASC		3000	
	ELEV: 265/446/490		15. TOWER (45-001935)	335419.00N/0810609.00W	545 (2C)	1000		1600	
			16. TERRAIN	335821.00N/0810930.00W	400 (400)		AS1500	1900	
4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT.							
CATEGORY A	1.3 NM	REQUIRED 350	504	17. TREE (KCAE0114)	335741.76N/0810825.54W	429 (2C)	300	740	
CATEGORY B	1.5 NM	450	504	18. TREE (KCAE0116)	335806.69N/0810811.02W	435 (2C)	300	740	
CATEGORY C	1.7 NM	450	604	19. TOWER (45-002061)	335433.00N/0810556.00W	480 (5D)	300	AC50 840	
CATEGORY D	2.3 NM	550	644	20. ROD ON MCWV TWR	335804.86N/0811021.63W	563 (2C)	300	880	
CATEGORY E	4.5 NM	550							
5. MINIMUM SAFE ALTITUDES									
SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A
360-360	TOWER (45-	069/20.8	2049 (5D)	3100					
CITY AND STATE	ELEVATION: 236	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION					
COLUMBIA, SC	AIRPORT NAME: COLUMBIA METROPOLITAN	RNAV	RNAV (GPS) RWY 11, AMDT 1B	ASO					

PART B - SUPPLEMENTAL DATA										PART C - REMARKS: PRECIPITOUS TERRAIN EVALUATION COMPLETED. VGSI DATA: 3.00/59 NO ADDITIONAL AIRSPACE REQUIRED. ISA DEVIATION: -30.00 C LNAV INNER SLOPE: 23.4:1, OUTER SLOPE: 34:1. LPV INNER SLOPE: 34:1, OUTER SLOPE: 34:1. BACK-UP ALTIMETER NOT REQUIRED, AIRPORT HAS REDUNDANT ALTIMETER SOURCES. 100 FOOT TREES USED PER EST FPO. OBS #12 LNAV STEPDOWN IS LOCATED 225 FEET INTO THE SECONDARY WAS ADJUSTED VERTICALLY 50' AND HORIZONTALLY 500' FOR AC, DG ADJUSTMENT ADDED FOR STABLE DESCENT. OBS #13 IS LOCATED 1414 FEET INTO THE SECONDARY. TAA NOT DEVELOPED. ATC REQUEST.
1. COMMUNICATIONS WITH:			2. WEATHER SERVICE			3. ALTIMETER SETTING				
CAE TRACON ZJX ARTCC CAE TOWER				N W S	OTHER: ASOS		SOURCE:KCAE			
				F A A			DISTANCE:			
				A / C			HOURS REMOTE OPERATION:			
SATISFACTORY ON:			LOCATION: KCAE			ADJUSTMENT: 0				
4. MONITOR STATUS	X	V H F	X	U H F	H F	PRIMARY NAVAID:				
						MONITOR POINT:				
						HRS	CAT 1			
						OPTN:	CAT 3			
5. APPROACH & RUNWAY LIGHTING	X								ALSF-2 11	
									(S) SALS	
									X	MALSR 05, 29
									X	HIRL 05, 11, 23, 29
										MIRL
									X	REIL 05, 23
									X	TDZ 11, 23
									X	C/L 11, 29
									OTHER (SPECIFY) PAPI-4R 05 PAPI-4L 11, 23, 29	
6. RUNWAY MARKINGS			BASIC							
			ALL WEATHER PIR-G 05, 11, 23, 29							
			INSTRUMENT							
7. RUNWAY VISUAL RANGE			APPROACH 05, 11, 23, 29							
			MIDFIELD 11, 29							
			ROLL OUT 11, 29							
8. GLIDE PATH			GP ANGLE: 3.00				ELEV RWY THRESHOLD:228.7			
			DISTANCE FROM RWY:				ELEV GP ANTENNA:			
							THRESHOLD CROSSING HEIGHT:59.0			
9. FINAL APPROACH COURSE AIMING				X	RUNWAY THRESHOLD				FT. FROM THRESHOLD	
				X	ON CENTERLINE				FT. FROM CENTERLINE	
10. WAIVERS: NONE										
PART D - PREPARED BY: LIAM DONAHUE						DATE: 07/07/2017				
TITLE: AERONAUTICAL INFORMATION SPECIALIST						OFFICE: AJV-5431				



STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD		
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PART - A OBSTRUCTION DATA

[illegible]

PART B - SUPPLEMENTAL DATA										PART C - REMARKS:	
1. COMMUNICATIONS WITH:				2. WEATHER SERVICE			3. ALTIMETER SETTING				
SATISFACTORY ON:					N W S	OTHER:		SOURCE:			
					F A A			DISTANCE:			
					A / C			HOURS REMOTE OPERATION:			
	V H F		U H F		H F	LOCATION:			ADJUSTMENT:		
4. MONITOR STATUS		PRIMARY NAVAID:									
		MONITOR POINT:									
		HRS	CAT 1								
		OPTN:	CAT 3								
5. APPROACH & RUNWAY LIGHTING			ALS								
			(S) SALS								
			MALS								
			HIRL								
			MIRL								
			REIL								
			TDZ								
			C/LINE								
6. RUNWAY MARKINGS		BASIC									
		ALL WEATHER									
		INSTRUMENT									
7. RUNWAY VISUAL RANGE		APPROACH									
		MIDFIELD									
		ROLL OUT									
8. GLIDE PATH		GP ANGLE:				ELEV RWY THRESHOLD:					
		DISTANCE FROM RWY:				ELEV GP ANTENNA:					
						THRESHOLD CROSSING HEIGHT:					
9. FINAL APPROACH COURSE AIMING				RUNWAY THRESHOLD					FT. FROM THRESHOLD		
				ON CENTERLINE					FT. FROM CENTERLINE		
10. WAIVERS:											
PART D - PREPARED BY:										DATE:	
TITLE:										OFFICE:	

