

**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> KMSL	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 30	<u>ORIGINAL/AMENDMENT</u> 3	<u>CITY</u> MUSCLE SHOALS	<u>STATE</u> AL		
<u>AIRPORT ELEVATION</u> 551	<u>TDZE</u> 551	<u>SUPERSEDED</u> RNAV (GPS) RWY 30	<u>ORIGINAL/AMENDMENT</u> 2B	<u>DATED</u> 08/15/2019	<u>MAG VAR</u> 3W	<u>EPOCH YEAR</u> 2015
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 NOVEMBER 2022	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TAA

FROM	FIX TYPE	TO	FIX TYPE	ALTITUDE
1. 207/30 CW 027/30	NOPT	207/15 CW 027/15		3200
2. 207/15 CW 027/15		HUPOK	IF/IAF	2700
3. 027/30 CW 207/30		027/15 CW 207/15		3200
4. 027/15 CW 207/15		HUPOK	IF/IAF	2700

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
HUPOK	IF/IAF	TICVU		TF	FB	1.00	297.24	7.28	2300
TICVU	FAF	DIXLI/2.50 NM TO RW30		TF	FB	0.30	297.17	2.81	
DIXLI/2.50 NM TO RW30		RW30	MAP	TF	FO	0.30	297.17	2.50	
RW30	MAP	751 MSL		CA			297.17		
751 MSL		JOBTA		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW30

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT JOBTA AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)

2. HOLD SE HUPOK, RT, 297.24 INBOUND, 2700 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 297.17FAF: TICVUDIST FAF TO MAP: 5.31DIST FAF TO THLD: 5.31

4. MIN ALT: HUPOK 2700, TICVU 2300, DIXLI/2.50 NM TO RW30 1400

5. DIST TO THLD FROM OM:MM:IM:150 HAT:200 HAT: 0.44GS ANT:

6. MIN GP INCPT: 2300GP ALT AT PFAF : TICVU 2300OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 59.1

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -9°C OR ABOVE 54°C.

ADDITIONAL FLIGHT DATA:

CHART COLUMBUS 2/4 MOA.
CHART CIRCLING ICON
HOLD NW, RT, 116.97 INBOUND.
CHART FAS OBST: 688 TRANSMISSION_LINE (01-021650) 344442N/0873442W.
CHART VDP AT 1.04 NM TO RW30.
WAAS CHANNEL # 40000
REFERENCE PATH ID: W30A
LTP HAE: 140.7 M

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

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 1/4, 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	751	1/2	200	751	1/2	200	751	1/2	200	751	1/2	200			
LNAV/VNAV DA	962	3/4	411	962	3/4	411	962	3/4	411	962	3/4	411			
LNAV MDA	940	1/2	389	940	1/2	389	940	5/8	389	940	5/8	389			
CIRCLING	1040	1	489	1040	1	489	1280	2	729	1280	2 1/4	729			



CHANGES - REASONS

1. MOVED TICVU 5725 FT (.94 NM) SOUTHEAST WHICH CHANGED THE DISTANCE BETWEEN HUPOK FROM 8.22 NM TO 7.28 NM; INCREASED PFAF ALTITUDE FROM 2000 TO 2300 - PER ATC/FPT REQUEST TO MAINTAIN 3.00 DEGREE GLIDESLOPE ANGLE.
2. CHANGED/REMOVED FROM PROFILE SECTION: LINE #3 CHANGED FAC FROM: 297.16 TO 297.17 AND DIST FAF TO MAP FROM: 4.37 TO 5.31; LINE #4 REMOVED ASTERISK; LINE #5 CHANGED DIST TO THLD FROM 200 FT HAT FROM: 45 TO 44; LINE #6 CHANGED MIN GP INCPT AND GP ALT AT FAF FROM 2000 TO 2300 - UPDATED DATA, ASTERISK NO LONGER REQUIRED AND ATC/FPT REQUEST.
3. REMOVED *LNAV ONLY FROM ADDITIONAL FLIGHT DATA - IAW 8260.19H.
4. REMOVED ALS INOP NOTE TO BACK OF 8260-9: CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED USE DECATUR ALTIMETER SETTING AND INCREASE LPV DA TO 834, LNAV/VNAV DA TO 1045 AND ALL MDA 100 FEET; INCREASE LNAV/VNAV ALL CATS VISIBILITY 1/4 SM, AND LNAV CAT C AND D VISIBILITY 3/8 SM, AND CIRCLING CAT C AND D VISIBILITY 1/2 SM. CHART NOTE: BARO-VNAV AND VDP NA WHEN USING DECATUR ALTIMETER SETTING. CHART NOTE: FOR INOPERATIVE ALS WHEN USING DECATUR ALTIMETER SETTING, INCREASE LPV ALL CATS VISIBILITY TO 7/8 SM; INCREASE LNAV/VNAV ALL CATS VISIBILITY AND LNAV CATS C AND D VISIBILITY TO 1 3/8 SM.- PER 8260.19I.
5. UPDATED COURSE/DISTANCE BETWEEN THE FOLLOWING: DISTANCE HUPOK TO TICVU FROM: 8.22 TO 7.28; COURSE AND DISTANCE TICVU TO DIXLI FROM: 297.16/1.87 TO 297.17/2.81; COURSE FROM DIXLI TO RW30 FROM: 297.16 TO 297.17 - IAW 8260.19I CRITERIA.
6. UPDATED MISSED APPROACH COURSE FROM 297.16 TO 297.17 - IAW 8260.19I CRITERIA.
7. UPDATED VISIBILITY VALUES FOR LNAV/VNAV FROM: 7/8 NM TO 3/4 NM ALL CATS - UPDATED VISIBILITY VALUES PER 8260.3E.
8. ADDITIONAL FLIGHT DATA: UPDATED CHART FAS OBST FROM OBST: 688 T-L TWR 344442N/0873442W TO 688 TRANSMISSION_LINE (01-021650) 344442N/0873442W AND DELETED 810 AAO 344219N/0873109W.- UPDATED DATA.
9. UPDATED CHART NOTE FROM: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -4°C OR ABOVE 54°C TO FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -9°C OR ABOVE 54°C - PER 8260.58B AJV VALIDATED CALCULATOR BASED ON NEW 5 YEAR TEMPERATURE STUDY.
10. UPDATED PBN REQUIREMENTS NOTE FROM: RNP APCH TO RNP APCH - GPS - IAW 8260.19I CRITERIA.
11. UPDATED FAS DATA BLOCK INFORMATION AS FOLLOWS: FPAP LATITUDE/LONGITUDE FROM 344505.8355N-0873726.7195W TO 344505.8310N-0873726.7215W; CRC REMAINDER FROM A8B45706 TO 592A00FF.

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

ERIC L GEYER

OFFICE

FPO

DATE

05/17/2022

Digitally signed by

DONALD E SMITH

Sep 26, 2022

DEVELOPED BY

SYLVAN DRAKES

Digitally signed by

SYLVAN DRAKES

Mar 11, 2022

OFFICE

AJV-A411

DATE

03/04/2022

APPROVED BY

JULIE MORGAN

OFFICE

AJV-A410

DATE**TITLE**
MANAGER

Digitally signed by

DONALD E SMITH

Sep 26, 2022

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMSL
RUNWAY	RW30
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W30A
LTP/FTP LATITUDE	344429.3900N
LTP/FTP LONGITUDE	0873548.0215W
LTP/FTP ELLIPSOIDAL HEIGHT	+01407
FPAP LATITUDE	344505.8310N
FPAP LONGITUDE	0873726.7215W
THRESHOLD CROSSING HEIGHT (TCH)	00059.1
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0712
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	592A00FF

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+01677
FPAP ORTHOMETRIC HEIGHT	+01677

