

**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> KSBX	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 23	<u>ORIGINAL/AMENDMENT</u> 2C	<u>CITY</u> SHELBY	<u>STATE</u> MT		
<u>AIRPORT ELEVATION</u> 3443	<u>TDZE</u> 3443	<u>SUPERSEDED</u> RNAV (GPS) RWY 23	<u>ORIGINAL/AMENDMENT</u> 2B	<u>DATED</u> 03/02/2017	<u>MAG VAR</u> 15E	<u>EPOCH YEAR</u> 2005
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

**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>
BRADZ		YENUP		TF	FO	1.00	015.56	33.05	9000
CTB VOR/DME		YENUP		TF	FO	1.00	067.17	30.79	9000
WEBVO		YENUP		TF	FO	1.00	295.62	6.40	9000
YENUP	IF/IAF	JIKBO		TF	FB	1.00	230.19	7.50	5100
JIKBO	FAF	ZIRTA/1.80 NM TO RW23		TF	FB	0.30	230.07	3.26	
ZIRTA/1.80 NM TO RW23		RW23	MAP	TF	FO	0.30	230.07	1.80	
RW23	MAP	4300 MSL		CA			230.07		4300
4300 MSL		YENUP		DF	FO	1.00			9000

**MISSED APPROACH**

**MAP:**

LPV: DA  
 LNAV/VNAV: DA  
 LNAV: RW23

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 4300 THEN CLIMBING RIGHT TURN TO 9000 DIRECT YENUP AND HOLD, CONTINUE CLIMB-IN-HOLD TO 9000.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)

2. HOLD NE YENUP, RT, 230.19 INBOUND, 7000 FT. IN LIEU OF PT (IAF), MAX 14000.

3. FAC: 230.07FAF: JIKBODIST FAF TO MAP: 5.06DIST FAF TO THLD: 5.06

4. MIN ALT: YENUP 7000, JIKBO 5100, ZIRTA/1.80 NM TO RW23 4060

5. DIST TO THLD FROM OM:MM:IM:150 HAT:356 HAT: 0.98GS ANT:

6. MIN GP INCPT: 5100GP ALT AT PFAF : JIKBO 5100OM:MM:IM:

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

8. MSA FROM: RW23 8200

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.  
CHART NOTE: BARO-VNAV NA WHEN USING CUT BANK ALTIMETER SETTING.  
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -21°C OR ABOVE 54°C.  
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).  
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CUT BANK ALTIMETER SETTING.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON  
CHART FAS OBST: 3546 POLE (30-056502) 483308N/1115110W.  
WAAS CHANNEL # 78026  
REFERENCE PATH ID: W23A  
CHART CIRCLING ICON.  
LTP HAE: 1034.7 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 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	3799	1	356	3799	1	356	3799	1	356	3799	1	356		QUALITY 10 CHECKED	
LNAV/VNAV DA	3813	1	370	3813	1	370	3813	1	370	3813	1	370			
LNAV MDA	3920	1	477	3920	1	477	3920	1 3/8	477	3920	1 3/8	477			
CIRCLING	4020	1	577	4080	1	637	4100	1 3/4	657	4220	2 1/2	777			

<u>AIRPORT ID</u> KSBX	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 23	<u>ORIGINAL/AMENDMENT</u> 2C	<u>CITY</u> SHELBY	<u>STATE</u> MT
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**CHANGES - REASONS**  
1: UPDATED FEEDER ROUTES RNP VALUE FROM: 2.0 TO: 1.0 - 8260.58B 3-1-2 TABLE 1-2-1.  
2: PROFILE LINE 4: REMOVED "" - NO LONGER REQUIRED.  
3: PROFILE LINE 5: ADDED 356 HAT: 0.98 - 8260.19I 8-6-7 E(3).  
4: PROFILE LINE 7: ADDED 20:1: IS CLEAR - NO 20:1 PENETRATIONS.  
5: ADDED RNP APCH - GPS TO PBN REQUIREMENT NOTES; REMOVED DME/DME RNP-0.3 NA - 8260.19I 8-6-8 B(2).  
6: CHANGED CHART NOTE: FROM: BARO-VNAV NA TO: BARO-VNAV NA WHEN USING CUT BANK ALTIMETER SETTING - PRIMARY ALTIMETER ESTABLISHED; 8260.19I 8-6-9 E(8)&(9).  
7: UPDATED CHART PROFILE NOTE: FROM: VGSI AND RNAV GLIDEPATH NOT COINCIDENT TO: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}) - 8260.19I 8-6-9 M (1).  
8: ADDED CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -21°C OR ABOVE 54°C - 8260.19I 8-6-9 R.  
9: DELETED \*LNAV ONLY - NO LONGER REQUIRED.  
10: CHANGED BACK UP ALTIMETER NOTE FROM: USE CUT BANK ALTIMETER SETTING, IF NOT RECEIVED USE GREAT FALLS ALTIMETER SETTING AND INCREASE ALL DA 81 FEET AND ALL MDA 100 FT; INCREASE LPV ALL CATS VISIBILITY 1/4 MILE, LNAV/VNAV ALL CATS VISIBILITY 5/8 MILE, LNAV CATS C/D, AND CIRC CAT C/D VISIBILITIES 1/4 MILE TO: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CUT BANK ALTIMETER SETTING - PRIMARY ALTIMETER ESTABLISHED; MAINTAINED CURRENT MINIMA.  
11: DELETED CHART NOTE: STRAIGHT-IN RWY 23 NA AT NIGHT, CIRCLING RWY 23 NA AT NIGHT - NO 20:1 PENETRATIONS.  
12: ADDITIONAL FLIGHT DATA: DELETED CHART CUT BANK ASOS - PRIMARY ALTIMETER ESTABLISHED.  
13: ADDED ALTERNATE MINS: STANDARD - CAT D 800-2 1/2, NA WHEN LOCAL WEATHER NOT AVAILABLE - PRIMARY ALTIMETER ESTABLISHED; 8260.19I 8-6-11 B(4).  
14: CHANGED LPV VISIBILITY ALL CATS FROM: 1 1/8 SM TO: 1 SM - 8260.3E VISIBILITY TABLE 3-3-1.  
15: CHANGED LNAV/VNAV VISIBILITY ALL CATS FROM: 1 1/4 SM TO: 1 SM - 8260.3E VISIBILITY TABLE 3-3-1.  
16: CHANGED CHART NOTE FROM: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM TO: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM - 34:1 PENETRATIONS EXISTS.

**COORDINATED WITH:**

**A4A** ☐ **ALPA** ☒ **AOPA** ☐ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZCL, GTF FSS, AMGR

**FLIGHT CHECKED BY**  
GARY J VEER

*Digitally signed by*  
**JASON KRETSCHMER**  
Jun 27, 2023

**OFFICE**  
FPO  
**DATE**  
06/21/2023

**DEVELOPED BY**  
JASON KRETSCHMER (MICAH HILLEY)

*Digitally signed by*  
**JASON KRETSCHMER**

**OFFICE**  
AJV-A421  
**DATE**  
04/24/2023

**APPROVED BY**  
JASON KRETSCHMER

Jun 27, 2023  
*Digitally signed by*  
**JASON KRETSCHMER**  
Jun 27, 2023

**OFFICE**  
AJV-A420

**DATE**  
**TITLE**  
MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSBX
RUNWAY	RW23
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W23A
LTP/FTP LATITUDE	483238.9580N
LTP/FTP LONGITUDE	1115145.7655W
LTP/FTP ELLIPSOIDAL HEIGHT	+10347
FPAP LATITUDE	483201.2800N
FPAP LONGITUDE	1115347.2500W
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	362320F2

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+10494
FPAP ORTHOMETRIC HEIGHT	+10494

QUALITY  
10  
CHECKED

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

<u>AIRPORT ID</u> KSBX	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 23	<u>AMDT NO.</u> 2C	<u>CITY</u> SHELBY	<u>STATE</u> MT	<u>AIRPORT ELEVATION</u> 3443	<u>FACILITY</u> RNAV
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PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM  
BRADZ

TO  
YENUP

<u>RNP</u>	<u>DISTANCE</u> 33.05	<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>
AAO	481048.00N/1120218.00W		4140	50	20	2C	2000				AT2860	9000
TERRAIN	481048.00N/1120212.68W		3902 (3900)								AS1500	5400

COMPUTATIONS

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

SEGMENT REMARKS:

FEEDER

FROM  
CTB VOR/DME

TO  
YENUP

<u>RNP</u>	<u>DISTANCE</u> 30.79	<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>
WINDMILL (30-020156)	483406.50N/1121316.90W		4368	500	50	5D	2000				AT2632	9000
TERRAIN	483427.00N/1121357.00W		4111 (4100)								AS1500	5600

COMPUTATIONS

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

SEGMENT REMARKS:

QUALITY  
10  
CHECKED

FEEDER

FROM

WEBVO

TO

YENUP

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	6.40											
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	483733.00N/1113700.00W		3652	50	20	2C	2000				AT3348	9000
TERRAIN	483733.00N/1113700.00W		3452 (3500)								AS1500	5000

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE

FROM

YENUP (IF/IAF)

TO

JKBO

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	7.50											
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	483739.00N/1114230.00W		3681	164	98	4E	500				AC98 AT821	5100
TERRAIN	483739.00N/1114230.00W		3481 (3500)								AS1500	5000

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FINAL: LPV

FROM

JIKBO

TO

RW23

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	5.06		DA			356						
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
SIGN (30-027285)	483247.15N/1115135.37W		3479	20	3	1A		34:1			XP106	3799

COMPUTATIONS

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

PRIMARY ALTIMETER ESTABLISHED; XP TO MAINTAIN CURRENT MINIMUMS.

FINAL: LNAV/VNAV

FROM

JIKBO

TO

RW23

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	5.06		DA			370						
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
POLE (30-027541)	483307.66N/1115033.31W		3546	20	3	1A		23.4:1			XP106	3813

COMPUTATIONS

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

PRIMARY ALTIMETER ESTABLISHED; XP TO MAINTAIN CURRENT MINIMUMS.



FINAL: LNAV

FROM

JIKBO

TO

ZIRTA/1.80 NM TO RW23

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	3.26											
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	483330.19N/1114657.50W		3609	50	20	2C	250				XP187	4060

COMPUTATIONS

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

SEGMENT REMARKS:

PRIMARY ALTIMETER ESTABLISHED; XP TO MAINTAIN CURRENT MINIMUMS.

FINAL: LNAV STEPDOWN

FROM

ZIRTA/1.80 NM TO RW23

TO

RW23

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>					
	1.80		RW23	477								
<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>
POLE (30-056502)	483307.70N/1115110.36W		3546	20	3	1A	250				XP106	3920

COMPUTATIONS

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

PRIMARY ALTIMETER ESTABLISHED; XP TO MAINTAIN CURRENT MINIMUMS.





HOLD-IN-LIEU OF PT

FROM

YENUP

TO

P-9

RNP	DISTANCE	PAT P-9	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	485051.00N/1112230.00W		6575	50	20	2C	1000				AT252 SA-827	7000
TERRAIN	484924.00N/1112212.00W		4384 (4400)								AS1500	5900

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

YENUP

RNP	DISTANCE	PAT	MAP	HAT			HMAS 3506					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				9000
AAO	483051.00N/1120230.00W		3888	50	20	2C	1000					4900
TERRAIN	483051.00N/1120230.00W		3688 (3700)								AS1500	5200

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



AIRPORT ID

KSBX

PROCEDURE NAME

RNAV (GPS) RWY 23

AMDT NO.

2C

CITY

SHELBY

STATE

MT

AIRPORT ELEVATION

3443

FACILITY

RNAV

MISSED APPROACH : LNAV/VNAV

FROM

DA

TO

YENUP

RNP

DISTANCE

PAT

MAP

HAT

HMAS

3546

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
							ASC				9000
AAO	483051.00N/1120230.00W	3888	50	20	2C	1000					4900
TERRAIN	483051.00N/1120230.00W	3688 (3700)								AS1500	5200

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH : LNAV

FROM

RW23

TO

YENUP

RNP

DISTANCE

PAT

MAP

HAT

HMAS

3820

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
							ASC				9000
AAO	483051.00N/1120230.00W	3888	50	20	2C	1000					4900
TERRAIN	483051.00N/1120230.00W	3688 (3700)								AS1500	5200

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

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											
TREE	483342.61N/1115100.86W	1.38	577	3599	50	20	2C	300		XP121	4020
CATEGORY B											
ANTENNA (30-027588)	483058.32N/1114958.06W	1.97	637	3659	20	3	1A	300		XP121	4080
CATEGORY C											
WATER_TOWER (30-027589)	483005.42N/1115351.30W	3.12	657	3688	20	3	1A	300		XP112	4100
CATEGORY D											
AAO	483636.00N/1115139.00W	4.38	777	3767	50	20	2C	300		XP153	4220

CIRCLING REMARKS:  
PRIMARY ALTIMETER ESTABLISHED; XP TO MAINTAIN CURRENT MINIMUMS.

MSA

CENTER  
RW23

RADIUS  
25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	AAO	485554.00N/1113157.00W	014	26.7	7153	50	20	2C	1000			8200

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH  
ZLC ARTCC, GTF FSS

<u>WX SERVICE</u> AWOS-3PT	<u>LOCATION</u> KSBX	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KSBX	<u>DISTANCE</u> 0.03	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 0
<u>BACK-UP WX SERVICE</u> ASOS	<u>LOCATION</u> KCTB	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KCTB	<u>DISTANCE</u> 20.49	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 106

WX REMARKS:  
RASS PRESSURE PATTERNS THE SAME  
KSBX 3443, KCTB 3858  
RA = 105.3.

<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>
RW11 - MIRL (PCL), PAPI-2L		BSC-G	
RW29 - MIRL (PCL), PAPI-2L		BSC-G	
RW05 - MIRL (PCL), PAPI-2L (PCL)		NPI-G	
RW23 - MIRL (PCL), PAPI-2L (PCL)		NPI-G	

<u>GLIDESLOPE ANGLE</u> 3.00	<u>ELEV RWY THRESHOLD</u> 3442.8	<u>TCH</u> 45.0	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u> 3.00	<u>TCH</u> 32.0
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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> -21C	<u>CRITICAL HIGH</u> +54C	<u>ACT</u> -21C	<u>APT ISA</u> +8.18C
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CRITICAL TEMPERATURE REMARKS:  
AVERAGE COLD TEMPERATURE DERIVED FROM STANDARD -30C ISA DEVIATION.  
CRITICAL LOW TEMPERATURE BASED ON ACT.  
DESCENT RATE (FPM): STANDARD TEMP 1002 HIGH TEMP 1322.



"VISUAL PORTION OF FINAL" PENETRATIONS

Final Type	LPV, LNAV/VNAV, NPA
34:1	
3461 SIGN (30-027281) 483240.25N/1115135.37W (3.81)	

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 - VDP IS LOCATED WITHIN 0.5 NM FROM FINAL FIX.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

50' VEGETATION USED EXCEPT WITHIN SHELBY CITY LIMITS AND INSIDE OF 5 NM PER FPT.

ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



<div>AIRPORT ID KSBX</div>	<div>PROCEDURE NAME RNAV (GPS) RWY 23</div>	<div>AMDT NO. 2C</div>	<div>CITY SHELBY</div>	<div>STATE MT</div>	<div>AIRPORT ELEVATION 3443</div>	<div>FACILITY RNAV</div>
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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	5.06
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	245.07
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	3500
DISTANCE FROM	THLD	TO 1500FT POINT	5.06
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	1.95
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	245.07
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	3500

THRESHOLD  
COORDINATES  
(IF STR-IN)

483238.96N/1115145.77W

ARP COORDINATES

483226.50N/1115216.50W

RUNWAY APCH END  
AND DIST FURTHEST  
FROM ARP

RUNWAY 5 DISTANCE 0.43 NM

FAF  
COORDINATES

483447.11N/1114451.31W

FIX NAME  
COORDINATES

REMARKS

NO ADDITIONAL AIRSPACE REQUIRED.

QUALITY  
10  
CHECKED

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

Electronic Version

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PART E: PREPARED BY

<u>NAME</u> JASON KRETSCHMER (MICAH HILLEY)	<u>OFFICE</u> AJV-A421	<u>DATE</u> 04/24/2023	<u>TITLE</u> AERONAUTICAL INFORMATION SPECIALIST
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