

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.23

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> AUSTIN MUNI	<u>AIRPORT ID</u> KAUM	<u>PROCEDURE NAME</u> VOR RWY 17	<u>ORIGINAL/AMENDMENT</u> 3	<u>CITY</u> AUSTIN	<u>STATE</u> MN
<u>AIRPORT ELEVATION</u> 1234	<u>TDZE</u> 1234	<u>SUPERSEDED</u> VOR RWY 17	<u>ORIGINAL/AMENDMENT</u> 2	<u>DATED</u> 02/14/2008	<u>MAG VAR</u> 0E
<u>FACILITY</u> JAY	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> 08/15/2019	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2020

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>
RST VOR/DME		SPAMM INT/JAY 10.81 DME					258.90	15.38	3000
JAY VOR/DME		SPAMM INT/JAY 10.81 DME	FAF/IAF				353.07	10.81	2900

MISSED APPROACH

MAP:

5.11 NM AFTER SPAMM INT/JAY 10.81 DME OR AT JAY 5.69 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2900 DIRECT JAY VOR/DME AND HOLD

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT R **SIDE OF COURSE** 353.07 **OUTBOUND** 2900 **FT WITHIN** 10 **MILES OF** SPAMM INT/10.81 DME (IAF)
- 2.
3. **FAC:** 173.07 **FAF:** SPAMM INT/JAY 10.81 DME **DIST FAF TO MAP:** 5.11 **DIST FAF TO THLD:** 5.11
4. **MIN ALT:** SPAMM INT/JAY 10.81 DME 2900, JAPSA/7.30 DME 1740
8. **MSA FROM:** JAY VOR/DME 3900

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON RST VOR/DME AIRWAY RADIALS 213 CW 310.



ADDITIONAL FLIGHT DATA:

MA HOLDING: HOLD S JAY VOR/DME LT 353.07 INBOUND
CHART VDP AT 6.72 DME.
DISTANCE VDP TO THLD 1.03 NM.
CHART CIRCLING ICON.
SPAMM TO RW17: 3.00/41.
CHART FAS OBST: 1312 POLE 434146N/0925548W.

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
S-17	1740	1	506	1740	1	506	1740	1 3/8	506	1740	1 3/8	506			
CIRCLING	1740	1	506	1740	1	506	1800	1 1/2	566	1880	2	646			
JAPSA DME FIX MINIMUMS															
S-17	1600	1	366	1600	1	366	1600	1	366	1600	1	366			
CIRCLING	1700	1	466	1700	1	466	1800	1 1/2	566	1880	2	646			

CHANGES - REASONS

1. CHANGED CHART NOTE: FROM VISIBILITY REDUCTION BY HELICOPTERS NA TO RWY 35 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - 34:1 PENETRATIONS EXIST.
2. CHANGED MSA ALTITUDE FROM 3800 FT TO 3900 FT - NEW CONTROLLING OBSTACLE.
3. UPDATED FAS OBST FROM 1359 TREE TO 1312 POLE - NEW OBSTACLE EVALUATION.
4. COURSE RST VOR/DME TO SPAMM CHANGED FROM 258.91 TO 258.90 - PER FACILITY MAG VAR CHANGE, FIX MOVED FOR STRAIGHT IN ALIGNMENT.
5. DISTANCE RST VOR/DME TO SPAMM CHANGED FROM 15.34 TO 15.38 - FIX MOVED FOR STRAIGHT IN ALIGNMENT.
6. COURSE JAY VOR/DME TO SPAMM CHANGED FROM 350.50 TO 353.07 - PER FACILITY MAG VAR CHANGE, FIX MOVED FOR STRAIGHT IN ALIGNMENT.
7. DISTANCE JAY VOR/DME TO SPAMM CHANGED FROM 10.80 TO 10.81 - FIX MOVED FOR STRAIGHT IN ALIGNMENT.
8. CHANGED FINAL COURSE FROM 170.50 TO 173.07- MAG VAR CHANGED TO 0 FROM E3, SPAMM MOVED FOR STRAIGHT IN ALIGNMENT.
9. CHANGED CHARTED FAS OBSTACLE FROM 1359 TREE TO 1312 POLE- NEW OBSTACLE EVALUATION.
10. CHANGED TDZE ELEVATION FROM 1231 TO 1234 - PENDING AIRNAV DATA.
11. CHANGED CIRCLING MDA/HAA FROM CAT A/B/C 1780/546, CAT D 1800/566 TO CAT A/B 1740/506, CAT C 1800/566, CAT D 1840/606 - NEW CIRCLING CRITERIA, NEW OBSTACLE EVALUATION.
12. CHANGED JAPSA FIX CIRCLING MDA/HAA FROM CAT A/B/C 1740/506, CAT D 1800/566 TO CAT A/B 1700/466, CAT C 1800/566, CAT D 1840/606 - NEW CIRCLING CRITERIA, NEW OBSTACLE EVALUATION.
13. ADD VDP 1.03 NM FROM RWY 17 THRESHOLD, JAY 6.72 DME.
14. REMOVED BACKUP ALTIMETER NOTE, REMOVED NOTE *1840 WHEN USING ALBERT LEA ALTIMETER SETTING - MOVED TO CONTINGENCY NOTES.
15. CHANGED FINAL CONTROLLING OBSTACLE FROM 1477 FT TOWER TO 1482 TOWER - NEW OBSTACLE EVALUATION.
16. CHANGED MISSED HOLDING COURSE FROM 005.00 TO 353.07 - TO ALIGN INBOUND COURSE WITH NEXT LEG IN PROCEDURE.
17. LOWERED S-17 MDA FROM 1780 TO 1740, CAT C VISIBILITY CHANGED FROM 1 1/2SM TO 1 3/8SM, CAT D VISIBILITY CHANGED FROM 1 3/4SM TO 1 3/8SM. LOWERED JAPSA MDA/HAT FROM 1620/389 TO 1600/366 ALL CATS AND S-17 CAT D VISIBILITY FROM 1 1/4SM TO 1SM - NEW OBSTACLE EVALUATION, LOWER MINIMUMS, HAT CHANGED A DIFFERENT AMOUNT DUE TO TDZE ELEVATION CHANGE.

06/26/2019: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON: 10/03/2018:

1. CHANGED REQUIRED EFFECTIVE DATE FROM: ROUTINE TO: 08/15/2019.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZMP, AMGR

FLIGHT CHECKED BY

PENDING

Digitally signed by **OFFICE**
WARDELL HENNING

Jun 26, 2019

DATE

DEVELOPED BY

WARDELL HENNING (JANTZEN TAYLOR)

Digitally signed by
WARDELL HENNING

Jun 26, 2019

OFFICE
AJV-5430

DATE
10/03/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
WARDELL HENNING

Jun 26, 2019

OFFICE
AJV-5430

DATE

TITLE
MANAGER



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

<u>AIRPORT</u> AUSTIN MUNI	<u>AIRPORT ID</u> KAUM	<u>PROCEDURE NAME</u> VOR RWY 17	<u>AMDT NO.</u> 3	<u>CITY</u> AUSTIN	<u>STATE</u> MN	<u>AIRPORT ELEVATION</u> 1234	<u>FACILITY</u> JAY
-------------------------------	---------------------------	-------------------------------------	----------------------	-----------------------	--------------------	----------------------------------	------------------------

PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

<u>FROM</u> RST VOR/DME	<u>TO</u> SPAMM INT/JAY 10.81 DME
----------------------------	--------------------------------------

<u>RNP</u>	<u>DISTANCE</u> 15.38	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>
------------	--------------------------	------------	------------	------------	-------------

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
1.WINDMILL (27-026327)	434254.73N/0924248.59W	1893	500	50	5D	1000					2900
2.TERRAIN	434409.00N/0924042.00W	1460 (1500)								AS1500	3000

COMPUTATIONS

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

SEGMENT REMARKS:

FEEDER

<u>FROM</u> JAY VOR/DME	<u>TO</u> SPAMM INT/JAY 10.81 DME
----------------------------	--------------------------------------

<u>RNP</u>	<u>DISTANCE</u> 10.81	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>
------------	--------------------------	------------	------------	------------	-------------

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
3.TOWER (27-001340)	434145.00N/0930112.00W	1540	500	50	5D	1000				AT360	2900
4.TERRAIN	434533.00N/0925124.00W	1319 (1300)								AS1500	2800

COMPUTATIONS

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

SEGMENT REMARKS:



INTERMEDIATE: PT

FROM

10 NM

TO

SPAMM INT/JAY 10.81 DME

RNP	DISTANCE	PAT	MAP	HAT			HMAS				
	10.00										
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
5.WINDMILL (27-026427)	435113.47N/0925307.25W	1791	500	50	5D	500				SA-213 AT813	2900
6.TERRAIN	435527.00N/0925315.00W	1339 (1300)								AS1500	2800

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

SEGMENT REMARKS:

FINAL

FROM

SPAMM INT/JAY 10.81 DME

TO

JAPSA/7.30 DME

RNP	DISTANCE	PAT	MAP	HAT			HMAS				
	3.51					506					
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
7.TOWER (27-022037)	434234.28N/0925650.43W	1482	20	3	1A	250					1740

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

SEGMENT REMARKS:



FINAL: STEPDOWN

FROM

JAPSA/7.30 DME

TO

5.11 NM AFTER SPAMM INT/JAY 10.81 DME OR AT JAY 5.69 DME

RNP	DISTANCE	PAT	MAP	HAT	HMAS							
	1.60		5.11 NM AFTER SPAMM/INT/JAY 10.81 DME OR AT JAY 5.69 DME	366								
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
8.POLE (27-021974)	434145.66N/0925547.54W		1312	20	3	1A	250				MA20	1600

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

PROCEDURE TURN

FROM

SPAMM

TO

10 NM

RNP	DISTANCE	PAT	MAP	HAT	HMAS							
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
9.WINDMILL (27-026446)	434743.10N/0924702.55W		1876	500	50	5D	1000					2900
10.TERRAIN	434739.00N/0924712.00W		1405 (1400)								AS1500	2900

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



MISSED APPROACH

FROM

5.11 NM AFTER SPAMM INT/JAY 10.81 DME OR AT JAY 5.69 DME

TO

JAY VOR/DME

RNP	DISTANCE	PAT	MAP	HAT	HMAS						
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
13.TANK (27-000765)	433948.65N/0925653.20W	1389	20	3	1A		ASC				2900
11.AAO	433636.00N/0925154.00W	1454	164	98	4E	1000					2500
12.TERRAIN	433636.00N/0925154.00W	1254 (1300)								AS1500	2800

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											
13.TANK (27-000765)	433948.65N/0925653.20W	1.31	506/466	1389	20	3	1A	300		SI	1740/1700
CATEGORY B											
13.TANK (27-000765)	433948.65N/0925653.20W	1.85	506/466	1389	20	3	1A	300		SI	1740/1700
CATEGORY C											
7.TOWER (27-022037)	434234.28N/0925650.43W	2.91	566/566	1482	20	3	1A	300			1800/1800
CATEGORY D											
14.TOWER (27-001786)	434055.12N/0930001.63W	3.80	646/646	1525	500	50	5D	300		AC50	1880/1880

CIRCLING REMARKS:



MSA

CENTER
JAY VOR/DME

RADIUS
25

<u>SECTOR</u>	<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>BEARING</u>	<u>DISTANCE</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>
360-360	TOWER (19-020063)	432832.00N/0924230.00W	123	11.0	2828	500	50	5D	1000			3900

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH
ZMP ARTCC, PNM FSS, RST APP CON

<u>WX SERVICE</u> AWOS	<u>LOCATION</u> KAUM	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KAUM	<u>DISTANCE</u> 0	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 0
<u>BACK-UP WX SERVICE</u> AWOS	<u>LOCATION</u> KAEL	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KAEL	<u>DISTANCE</u> 18.93	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 48

WX REMARKS:
RASS (PRESSURE PATTERNS SAME)
KAUM 1233 MSL, KAEL 1261 MSL
RA=47.5

<u>PRIMARY NAVAID</u> JAY VOR/DME	<u>MONITOR POINT</u>	<u>HRS OPERATION</u> 24	<u>CAT</u> 3
<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>		<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW17 - HIRL (PCL), REIL (PCL), PAPI-4L (PCL)		PIR-P	
RW35 - MALSR (PCL), HIRL (PCL), PAPI-4L (PCL)		PIR-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> 40.7
-------------------------	---------------------------	------------	------------------------	--------------------------	---------------------------	--------------------

<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>	<u>CRITICAL HIGH</u>	<u>ACT</u>	<u>APT ISA</u>

CRITICAL TEMPERATURE REMARKS:



"VISUAL PORTION OF FINAL" PENETRATIONS

Final Type	RWY 17		
34:1			
1270 TREE (27-045340) 434028.48N-0925606.07W (1.14)		1276 TREE (27-042770) 434028.47N-0925610.95W (5.72)	
1274 TREE (27-041409) 434029.33N-0925607.78W (2.13)		1286 TREE (27-041280) 434033.60N-0925609.86W (0.92)	

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

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

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

CONTINGENCY ALITMETER NOTES:
WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ALBERT LEA ALTIMETER SETTING AND INCREASE MDA 60 FEET, INCREASE VISIBILITY S-17 CAT C/D 1/4 SM, INCREASE CIRCLING CAT C 1/8 SM, JAPSA FIX MINIMUMS INCREASE VISIBILITY S-17 CAT C/D 1/4 SM, INCREASE CIRCLING CAT C 1/4 SM.
VDP NA WHEN USING ALBERT LEA ALTIMETER SETTING
JAPSA FIX MIMUNIM 1800 WHEN USING ALBERT LEA ALTIMETER SETTING.

ORDER 8260.3, VOLUME 1, 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	MAP	TO 1000FT POINT	3.11
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	2.88
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	173.07
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	1280
DISTANCE FROM	MAP	TO 1500FT POINT	4.91
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	3.06
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	173.07
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	1280
THRESHOLD COORDINATES (IF STR-IN)	434013.86N/0925603.95W		
ARP COORDINATES	433945.50N/0925558.50W		
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 35 DISTANCE 0.95 NM		
FAF COORDINATES	434518.43N/0925655.12W		
FIX NAME COORDINATES			
REMARKS			



PART E: PREPARED BY

<u>NAME</u> WARDELL HENNING (JANTZEN TAYLOR)	<u>OFFICE</u> AJV-5430	<u>DATE</u> 10/03/2018	<u>TITLE</u> AERONAUTICAL INFORMATION SPECIALIST
---	---------------------------	---------------------------	---

