

**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 ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>	
K78	VOR-A	4	ABILENE	KS	
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>DATED</u>	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
1153		VOR-A	08/17/2017	7E	1990
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>	
SLN			ROUTINE		

**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>
SLN VORTAC	IF	CHALK/13.12 DME/RADAR	NOPT				086.66	13.12	3000

**MISSED APPROACH**

**MAP:**

KELEC/18.07 DME

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 2600 THEN CLIMBING RIGHT TURN TO 3000 ON HEADING 320 AND SLN VORTAC R-087 TO CHALK/13.12 DME/RADAR AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**

**PROFILE:**

- |  |                       |                 |                       |                         |                          |
|--|-----------------------|-----------------|-----------------------|-------------------------|--------------------------|
| <b>1. PT</b>   | <b>SIDE OF COURSE</b> | <b>OUTBOUND</b> | <b>FT WITHIN</b>      | <b>MILES OF</b>         | (IAF)                    |
| 2. HOLD W CHALK/13.12 DME/RADAR, RT, 086.66 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000. |                       |                 |                       |                         |                          |
| <b>3. FAC:</b>   | 086.66                | <b>FAF:</b>     | CHALK/13.12 DME/RADAR | <b>DIST FAF TO MAP:</b> | <b>DIST FAF TO THLD:</b> |
| 4. <b>MIN ALT:</b> CHALK/13.12 DME/RADAR 3000  |                       |                 |                       |                         |                          |
| 8. <b>MSA FROM:</b> SLN VORTAC 3400  |                       |                 |                       |                         |                          |



**EQUIPMENT REQUIREMENTS NOTES:**

DME REQUIRED.  
RADAR REQUIRED FOR PROCEDURE ENTRY AT CHALK.

**NOTES:**

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SLN ALTIMETER SETTING AND INCREASE ALL MDAS 80 FEET AND VISIBILITY CAT C 1/4 SM.

**ADDITIONAL FLIGHT DATA:**

CHART ADA EAST AND WEST MOA.  
CHART RILEY MOA.  
CHART R-3602 A/B.  
CHART R-3601A.  
CHART SMOKY MOA.  
CHART TWISTER MOA.  
FAS OBST: 1483 AAO 385615N/0971748W.  
FAC CROSSES MIDPOINT OF RWY 18-36.  
CHART CIRCLING ICON.

**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
CIRCLING	1740	1	587	1740	1	587	1900	2 1/4	747		NA				

**CHANGES - REASONS**

1. TERMINAL ROUTES: CHANGED CHALK FROM "CHALK/13.12 DME" TO "CHALK/13.12 DME/RADAR" AND CHANGED COURSE FROM "086.67" TO "086.66" - RADAR REQUIRED AT CHALK FOR PROCEDURE ENTRY; UPDATED TARGETS EVAL.
2. MISSED APPROACH MAP: CHANGED FROM "KELEC/18.08 DME FIX" TO "KELEC/18.07 DME" - UPDATED TARGETS EVAL; 8260.19J 8-6-6.C.
3. MISSED APPROACH INSTRUCTIONS: CHANGED FROM "CHALK/13.12 DME" TO "CHALK/13.12 DME/RADAR" - FIX TYPE NOW INCLUDES RADAR.
4. LINE 2: CHANGED "CHALK" TO "CHALK/13.12 DME/RADAR", CHANGED INBOUND COURSE FROM "086.67" TO 086.66" AND ADDED "MAX 6000" - FIX TYPE NOW INCLUDES RADAR, UPDATED TARGETS EVAL; 8260.19J 8-6-7.B.
5. LINE 3: CHANGED FAC FROM "086.67" TO "086.66" AND CHANGED FAF FROM "CHALK/13.12 DME" TO "CHALK/13.12 DME/RADAR" - UPDATED TARGETS EVAL; FIX TYPE NOW INCLUDES RADAR.
6. LINE 4: CHANGED FROM "CHALK 3000" TO "CHALK/13.12 DME/RADAR 3000" - 8260.19J 8-6-7.D; FIX TYPE NOW INCLUDES RADAR.
7. MINIMUMS: CHANGED CIRCLING CAT A/B CMDA/HAA FROM "1760/607" TO "1740/587" AND CAT C FROM "1980/827" TO "1900/747" - NEW OBSTACLE SURVEY; UPDATED TARGETS EVAL.
8. ALTERNATE MINIMUMS: CHANGED FROM "STANDARD - CAT C 900-2 1/2" TO "NA" - PRIMARY ALTIMETER SOURCE ON THE AIRFIELD IS AN AWOS-2 AND IS NOT ON WMSCR.
9. MOVED CHART NOTE "DME REQUIRED" FROM CHART NOTES AND MOVED "CHART PLANVIEW NOTE: DME REQUIRED" FROM ADDITIONAL FLIGHT DATA TO EQUIPMENT REQUIREMENTS NOTES - 8260.19J 8-6-9.
10. ADDED "RADAR REQUIRED FOR PROCEDURE ENTRY AT CHALK" TO EQUIPMENT REQUIREMENTS NOTES - 8260.19J 8-6-10.G.
11. CHANGED CHART NOTE FROM "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SALINA ALTIMETER SETTING" TO "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SLN ALTIMETER SETTING AND INCREASE ALL MDAS 80 FEET AND VISIBILITY CAT C 1/4 SM" - 8260.19J 8-6-10.
12. REMOVED CHART NOTE: "RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" - NEW OBSTACLE SURVEY; 20:1 PENETRATIONS REMOVED PER UPDATED TGTS EVALUATION.
13. REMOVED CHART NOTE: "CIRCLING RWY 17 NA AT NIGHT" - NEW OBSTACLE SURVEY; UPDATED TARGETS EVAL.
14. ADDITIONAL FLIGHT DATA: CHANGED "CHART FAS OBST: 1424 TOWER 385556N/0971700W" TO "FAS OBST: 1483 AAO 385615N/0971748W" - NEW OBSTACLE SURVEY; UPDATED TARGETS EVAL; 8260.19J 8-6-11.C.
15. ADDITIONAL FLIGHT DATA: CHANGED "FAC CROSSES MIDPOINT OF RWY 17-35" TO "FAC CROSSES MIDPOINT OF RWY 18-36" - UPDATED MAG VAR.
16. ADDITIONAL FLIGHT DATA: ADDED SPECIAL USE AIRSPACE: "ADA EAST AND WEST MOA, RILEY MOA, R-3602 A/B, R-3601A, SMOKY MOA, TWISTER MOA" - ATC REQUEST; PILOT AWARENESS.
17. CHANGED ALTERNATE MINIMUMS FROM "STANDARD - CAT C 900-2 1/2" TO "NA" - AIRPORT HAS AWOS-2 AND NOT ON WMSCR.



COORDINATED WITH:

A4A

☐

ALPA

☒

AOPA

☒

APA

☐

HAI

☐

NBAA

☒

OTHER: ZKC, AMGR, ST AV DIR

FLIGHT CHECKED BY  
TERRY HESTER

Digitally signed by  
DAVID DANNER  
Jan 17, 2025

OFFICE

AJF

DATE

01/14/2025

DEVELOPED BY  
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Jan 17, 2025

OFFICE

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DATE

TITLE

MANAGER



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

<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>AMDT NO.</u>	<u>CITY</u>	<u>STATE</u>	<u>AIRPORT ELEVATION</u>	<u>FACILITY</u>
K78	VOR-A	4	ABILENE	KS	1153	SLN

**PART A: OBSTRUCTION DATA SEGMENTS**

**INTERMEDIATE**

**FROM** SLN VORTAC **TO** CHALK/13.12 DME/RADAR

<u>RNP</u>	<u>DISTANCE</u> 13.12	<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>
TOWER (20-000587)	385713.00N/0973632.00W	1825	500	50	5D	500					2400
TERRAIN	385712.00N/0973633.00W	1463 (1500)								AS1500	3000

**COMPUTATIONS**

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

**SEGMENT REMARKS:**

**FINAL**

**FROM** CHALK/13.12 DME/RADAR **TO** KELEC/18.07 DME

<u>RNP</u>	<u>DISTANCE</u> 4.95	<u>PAT</u>	<u>MAP</u> KELEC/18.07 DME				<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	385615.00N/0971748.00W	1483	215	8	4B	250					1740

**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

CHALK/RADAR

TO

P-4

RNP

DISTANCE

PAT

P-4

MAP

HAT

HMAS

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH

FROM

KELEC/18.07 DME

TO

CHALK/13.12 DME/RADAR

RNP

DISTANCE

PAT

MAP

HAT

HMAS

1490

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
							ASC				3000
TOWER (20-001554)	385746.00N/0971237.00W	1789	500	50	5D	1000					2800
TERRAIN	384821.00N/0970709.00W	1361 (1400)								AS1500	2900

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											
BUILDING (20-080166)	385500.34N/0971238.82W	1.30	587	1379	20	10	1B	300		XP61	1740
CATEGORY B											
BUILDING (20-080166)	385500.34N/0971238.82W	1.85	587	1379	20	10	1B	300		XP61	1740
CATEGORY C											
ANTENNA (20-079903)	385632.94N/0971138.43W	2.90	747	1595	20	10	1B	300			1900

CIRCLING REMARKS:

20:1 ELECTRICAL SYSTEM (20-029388) WAS EXCLUDED FROM THE EVALUATION BECAUSE IT IS A REIL. 8260.3F 3-3-2.C (5). XP: CMDA ADJUSTED FOR CAT A DUE TO MINIMUM FINAL SEGMENT ALTITUDE OF 1740 DUE TO OBSTACLES. XP: CMDA ADJUSTED FOR CAT B DUE TO MINIMUM FINAL SEGMENT ALTITUDE OF 1740 DUE TO OBSTACLES.



MSA

CENTER  
SLN VORTAC

RADIUS  
25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TOWER (20-001167)	390616.00N/0972316.00W			2398	500	50	5D	1000			3400

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

ZKC ARTCC, ICT FSS

WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	WMSCR	ADJUSTMENTS
AWOS-2	K78	24	K78	0	N	0
BACK-UP WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	WMSCR	ADJUSTMENTS
ASOS	SLN	24	SLN	20.67	Y	67

WX REMARKS:

RASS PRESSURE PATTERNS THE SAME  
KK78 1153, KSLN 1288  
RA = 66.5

PRIMARY NAVAID	MONITOR POINT	HRS OPERATION	CAT
SLN VORTAC	MOCC	24	1

APPROACH AND RUNWAY LIGHTING SYSTEM	RUNWAY MARKINGS	RUNWAY VISUAL RANGE
RW18 - REIL (PCL), MIRL (PCL), PAPI-2L (PCL)	NPI-G	
RW36 - MIRL (PCL), REIL (PCL), PAPI-2L (PCL)	NPI-G	

GLIDESLOPE ANGLE	ELEV RWY THRESHOLD	TCH	ELEV GS ANTENNA	DISTANCE FROM RWY	VGSI ANGLE	TCH
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FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	<input type="checkbox"/>	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	<input type="checkbox"/>	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

CRITICAL LOW	CRITICAL HIGH	ACT	APT ISA
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CRITICAL TEMPERATURE REMARKS:



"VISUAL PORTION OF FINAL" PENETRATIONS

PENETRATIONS REMARKS:
20:1 Electrical system (20-029388) was excluded from the evaluation because it is a REIL. 8260.3F 3-3-2.C (5).

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.

VDP NOT ESTABLISHED - CIRCLING ONLY.

CAT D MINIMUMS NA DUE TO AIRPORT INFRASTRUCTURE.

FAC CROSSES MID POINT OF RWY 18-36.

BACK UP ALTIMETER NOTE PUBLISHED AT FPT REQUEST.

VEGETATION HEIGHT: 100 FT, PER FPT.

ORDER 8260.3, 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	2.63
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	3.55
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	93.66
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	1300
DISTANCE FROM	MAP	TO 1500FT POINT	4.56
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	3.35
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	93.66
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	1300

THRESHOLD COORDINATES (IF STR-IN)

ARP COORDINATES	385414.60N/0971409.10W
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 36 DISTANCE 0.34 NM
FAF COORDINATES	385438.95N/0972030.65W
FIX NAME COORDINATES	

REMARKS

CIRCLING ONLY PROCEDURE. FACILITY OFF AIRPORT.

MAP AT KELEC 385418.82N/0971410.45W

NO ADDITIONAL AIRSPACE REQUIRED.



PART E: PREPARED BY

NAME	OFFICE	DATE	TITLE
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