

**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> LWC	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 15	<u>ORIGINAL/AMENDMENT</u> ORIG-E	<u>CITY</u> LAWRENCE	<u>STATE</u> KS
<u>AIRPORT ELEVATION</u> 833	<u>TDZE</u> 832	<u>SUPERSEDED</u> RNAV (GPS) RWY 15	<u>DATED</u> 03/25/2021	<u>MAG VAR</u> 4E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>EPOCH YEAR</u> 2005
			<u>CANCEL/SUSPEND</u>	

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 059/30 CW 239/30	NOPT	059/15 CW 239/15		3600
2. 059/15 CW 239/15		RIBCO	IF/IAF	2700
3. 239/30 CW 329/30		BOVAC	IAF	3100
4. 329/30 CW 059/30		HASES	IAF	3600

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>
BOVAC	IAF	RIBCO	NOPT	TF	FB	1.00	239.46	5.00	2700
HASES	IAF	RIBCO	NOPT	TF	FB	1.00	059.34	5.00	2700
RIBCO	IF/IAF	ROYOL		TF	FB	1.00	149.40	6.02	2700
ROYOL	FAF	RW15	MAP	TF	FO	0.30	149.44	5.63	
RW15	MAP	1233 MSL		CA			149.44		
1233 MSL		GOLEY		DF	FO	1.00			3100

MISSED APPROACH

MAP:

LNAV: RW15

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3100 DIRECT GOLEY AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1.	PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)									
2.	HOLD NW RIBCO, RT, 149.40 INBOUND, 2700 IN LIEU OF PT (IAF), MAX 6000.														
3.	FAC:	149.44	FAF:	ROYOL	DIST FAF TO MAP:	5.63	DIST FAF TO THLD:	5.63							
4.	MIN ALT:	RIBCO 2700, ROYOL 2700													
5.	DIST TO THLD FROM OM:		MM:		IM:		150 HAT:		GS ANT:						
6.	MIN GP INCPT:		GP ALT AT FAF:						OM:		MM:		IM:		
7.	GP ANGLE:		34:1:	IS NOT CLEAR	20:1:	IS CLEAR	TCH:								
8.	MSA FROM:														

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: RWY 15 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.

ADDITIONAL FLIGHT DATA:

ROYOL TO RW15: 3.05/45.
HOLD SE, RT, 329.54 INBOUND.
CHART FAS OBST: 1212 TOWER (20-066282) 390325N/0951543W.
CHART VDP AT 1.51 NM TO RW15.

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C 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
LNAV MDA	1360	1	528	1360	1	528	1360	1 1/2	528		NA				
CIRCLING	1420	1	587	1480	1	647	1620	2 1/4	787		NA				

CHANGES - REASONS

- INCORPORATED CHANGES FROM ORIG-D- IAW 8260.19 PARA 8-3-4C(3).
- IN PBN REQUIRMENTS NOTE: CHANGE "RNP APCH" TO "RNP APCH - GPS" IAW FAA ORDER 8260-19J PARA 8-6-8.
- IN ADDITIONAL FLIGHT DATA, CHANGED FAS OBST FROM " CHART FAS OBST: 1087 TREE (20-046987) 390222N/0951451W." TO "CHART FAS OBST: 1212 TOWER (20-066282) 390325N/0951543W"- UPDATED SURVEY, NEW MDA AND HAT.
- IN ADDITIONAL FLIGHT DATA, CHANGED NOTE FROM "CHART VDP AT 1.44NM TO RW15." TO "CHART VDP AT 1.51NM TO RW15." - UPDATED SURVEY, NEW MDA AND HAT.
- IN MINIMUMS: CHANGED LNAV MDA/HAT FROM "1340/509" TO "1360/528"- UPDATED SURVEY, NEW CONTROLLING OBSTACLE.



COORDINATED WITH:

A4A

☐

ALPA

☒

AOPA

☒

APA

☐

HAI

☐

NBAA

☒

OTHER: ZKC, AMGR, KS AERO, ICT FSS

FLIGHT CHECKED BY
RUSSELL ROSLEWSKI

Digitally signed by

ALLAN WILL

Jul 15, 2025

OFFICE

AJF

DATE

07/10/2025

DEVELOPED BY
ERIC N SUSKI (TEVAR MALONE)

Digitally signed by

ALLAN WILL

Jul 15, 2025

OFFICE

AJV-33

DATE

04/25/2025

APPROVED BY
KYLE THOMPSON

Digitally signed by

ALLAN WILL

Jul 15, 2025

OFFICE

AJV-33

DATE

08/28/2025

TITLE

MANAGER



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

<u>AIRPORT ID</u> LWC	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 15	<u>AMDT NO.</u> ORIG-E	<u>CITY</u> LAWRENCE	<u>STATE</u> KS	<u>AIRPORT ELEVATION</u> 833	<u>FACILITY</u> RNAV
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PART A: OBSTRUCTION DATA SEGMENTS

STRAIGHT-IN AREA

FROM
059/30 CW 239/30

TO
059/15 CW 239/15

<u>RNP</u>	<u>DISTANCE</u>	<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 (20-001004)	390134.00N/0955459.00W	2549	500	50	5D	1000					3600
TERRAIN	392600.00N/0955154.00W	1339 (1300)								AS1500	2800

COMPUTATIONS

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

SEGMENT REMARKS:

STRAIGHT-IN AREA

FROM
059/15 CW 239/15

TO
RIBCO

<u>RNP</u>	<u>DISTANCE</u>	<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 (17-1351)	391117.00N/0951940.00W	1571	500	50	5D	1000					2600
TERRAIN	391927.00N/0951530.00W	1188 (1200)								AS1500	2700

COMPUTATIONS

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

SEGMENT REMARKS:



LEFT BASE AREA

FROM

239/30 CW 329/30

TO

BOVAC

<u>RNP</u>	<u>DISTANCE</u>	<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>
TOWERS (26-0038)	390414.00N/0943458.00W	2051	50	3	2A	1000					3100
TERRAIN	391200.00N/0951245.00W	1201 (1200)								AS1500	2700

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

RIGHT BASE AREA

FROM

329/30 CW 059/30

TO

HASES

<u>RNP</u>	<u>DISTANCE</u>	<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 (20-001004)	390134.00N/0955459.00W	2549	500	50	5D	1000					3600
TERRAIN	385354.00N/0955830.00W	1316 (1300)								AS1500	2800

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INITIAL

FROM

BOVAC

TO

RIBCO

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>	<u>HMAS</u>				
1.00	5.00										
<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 (17-1351)	391117.00N/0951940.00W	1571	500	50	5D	1000					2600
TERRAIN	391145.00N/0951336.00W	1185 (1200)								AS1500	2700

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INITIAL

FROM

HASES

TO

RIBCO

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>	<u>HMAS</u>				
1.00	5.00										
<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	390930.00N/0951945.00W	1382	164	98	4E	1000					2400
TERRAIN	390930.00N/0951945.00W	1182 (1200)								AS1500	2700

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INTERMEDIATE

FROM

RIBCO (IF/IAF)

TO

ROYOL

RNP

1.00

DISTANCE

6.02

PAT

MAP

HAT

HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TOWER (17-0386)	390839.00N/0951607.00W	1690	100	20	3C	500					2200
TERRAIN	390924.00N/0951906.00W	1185 (1200)								AS1500	2700

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV

FROM

ROYOL

TO

RW15

RNP

0.30

DISTANCE

5.63

PAT

MAP

RW15

HAT

528

HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TOWER (20-066282)	390325.30N/0951543.20W	1212	50	10	2B	250				SA-104	1360

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

RIBCO

TO

P-5

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u> P-5	<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 (20-000386)	390839.00N/0951607.00W	1690	100	20	3C	1000					2700
TERRAIN	390924.00N/0951906.00W	1185 (1200)								AS1500	2700

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH: LNAV

FROM

RW15

TO

GOLEY

<u>RNP</u> 0.30-1.00	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>	<u>HMAS</u> 1260				
<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>
							ASC				3100
TOWER (20-001146)	385346.00N/0951029.00W	2048	500	50	5D	1000					3100
TERRAIN	384900.00N/0950806.00W	1085 (1100)								AS1500	2600

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 (20-031584)	390153.93N/0951200.32W	1.30	587	1104	20	5	1B	300			1420
CATEGORY B											
TREE	390148.00N/0951054.00W	1.83	647	1173	215	8	4B	300			1480
CATEGORY C											
TOWER	390333.00N/0951124.00W	2.88	787	1255	250	50	4D	300		AC50	1620

CIRCLING REMARKS:

MSA/ESA

CENTERRADIUS

REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

ZKC ARTCC

WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	WMSCR	ADJUSTMENTS
ASOS	LWC	24	LWC	0	Y	0
BACK-UP WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	WMSCR	ADJUSTMENTS
ASOS	TOP	24	TOP	19.25	Y	52

WX REMARKS:

RASS PRESSURE PATTERNS THE SAME
KLWC 833, KTOP 881
RA = 51.2.

PRIMARY NAVAID	MONITOR POINT	HRS OPERATION	CAT
APPROACH AND RUNWAY LIGHTING SYSTEM		RUNWAY MARKINGS	RUNWAY VISUAL RANGE
RW01 - MIRL (PCL), REIL (PCL), PAPI-2L (PCL)		NPI-F	
RW19 - MIRL (PCL), REIL (PCL), PAPI-2L (PCL)		NPI-F	
RW15 - REIL (PCL), MIRL (PCL), PAPI-4L (PCL)		NPI-G	
RW33 - MALSR (PCL), MIRL (PCL), PAPI-4R (PCL)		PIR-G	

GLIDESLOPE ANGLE	ELEV RWY THRESHOLD	TCH	ELEV GS ANTENNA	DISTANCE FROM RWY	VGSI ANGLE	TCH
					3.00	45.0

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	☒	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	☒	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

CRITICAL LOW	CRITICAL HIGH	ACT	APT ISA
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CRITICAL TEMPERATURE REMARKS:

"VISUAL PORTION OF FINAL" PENETRATIONS

FINAL TYPE	LNAV
34:1	
900 TREE (20-032385) 390123.02N/0951321.31W (23.27)	905 TREE (20-031371) 390124.29N/0951323.52W (22.59)
892 TREE (20-046984) 390122.87N/0951318.81W (18.26)	892 TREE (20-032735) 390123.35N/0951320.00W (15.75)
886 TREE (20-032323) 390123.14N/0951317.41W (12.99)	882 TREE (20-032332) 390121.92N/0951317.36W (12.29)



<u>AIRPORT ID</u> LWC	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 15	<u>AMDT NO.</u> ORIG-E	<u>CITY</u> LAWRENCE	<u>STATE</u> KS	<u>AIRPORT ELEVATION</u> 833	<u>FACILITY</u> RNAV
888 TREE (20-031386) 390123.69N/0951320.04W (10.8)			890 TREE (20-032322) 390123.68N/0951322.79W (9.97)			
<u>PENETRATIONS REMARKS:</u>						

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

<u>PENETRATIONS REMARKS:</u>

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

BACKUP ALTIMETER CONTINGENCY NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE TOP ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET AND INCREASE LNAV AND CIRCLING CAT C VISIBILITY 1/4 SM.

VDP NA WHEN USING TOP ALTIMETER SETTING.

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	THLD	TO 1000FT POINT	3.63
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	153.44
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	1100
DISTANCE FROM	THLD	TO 1500FT POINT	5.43
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	1.95
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	153.44
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	1100

THRESHOLD COORDINATES (IF STR-IN) 390107.17N/0951312.32W

ARP COORDINATES 390040.00N/0951259.30W

RUNWAY APCH END AND DIST FURTHEST FROM ARP RUNWAY 15 DISTANCE 0.48 NM

FAF COORDINATES 390609.90N/0951626.32W

FIX NAME COORDINATES

REMARKS

PART E: PREPARED BY

<u>NAME</u>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
ERIC N SUSKI (TEVAR MALONE)	AJV-33	04/25/2025	AERONAUTICAL INFORMATION SPECIALIST

