

**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> KLYV	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 18	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> LUVERNE	<u>STATE</u> MN		
<u>AIRPORT ELEVATION</u> 1435	<u>TDZE</u> 1435	<u>SUPERSEDED</u> RNAV (GPS) RWY 18	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 06/03/2010	<u>MAG VAR</u> 3E	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 27 JANUARY 2022	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TAA

FROM	FIX TYPE	TO	FIX TYPE	ALTITUDE
1. 085/30 CW 266/30	NOPT	085/10 CW 266/10		3900
2. 085/10 CW 266/10		TYIBR	IF/IAF	3600
3. 266/30 CW 355/30		KOVRE	IAF	3600
4. 355/30 CW 085/30		355/15 CW 085/15		4500
5. 355/15 CW 085/15		RURGY	IAF	3600

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
KOVRE	IAF	TYIBR	NOPT	TF	FB	1.00	265.55	7.20	3600
RURGY	IAF	TYIBR	NOPT	TF	FB	1.00	085.32	7.20	3600
TYIBR	IF/IAF	HEPIL		TF	FB	1.00	175.43	6.01	3300
HEPIL	FAF	COMDA/2.37 NM TO RW18		TF	FB	0.30	175.44	3.33	
COMDA/2.37 NM TO RW18		RW18	MAP	TF	FO	0.30	175.44	2.37	
RW18	MAP	1635 MSL		CA			175.44		
1635 MSL		HEXAM		DF	FO	1.00			3200



MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW18

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3200 DIRECT HEXAM AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)
2. HOLD N TYIBR, RT, 175.43 INBOUND, 3600 FT. IN LIEU OF PT (IAF), MAX 6000.					
3. FAC:	175.44	FAF: HEPIL	DIST FAF TO MAP: 5.70		DIST FAF TO THLD: 5.70
4. MIN ALT: TYIBR 3600, HEPIL 3300, COMDA/2.37 NM TO RW18 2240					
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	200 HAT: 0.47	GS ANT:
6. MIN GP INCPT:	3300	GP ALT AT PFAF :	HEPIL 3300	OM:	MM:
7. GP ANGLE:	3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 50.0	IM:
8. MSA FROM:					

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 54°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:

HOLD S, RT, 355.45 INBOUND.
CHART FAS OBST: 1706 TOWER (27-023662) 433941N/0961330W.
CHART 1975 TOWER 434308N/0961339W.
CHART VDP AT 1.55 NM TO RW18.
WAAS CHANNEL # 86317
REFERENCE PATH ID: W18A
CHART CIRCLING ICON.
LTP HAE: 411 M



MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C 1000-2 3/4, CAT D 1000-3, 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	1635	1	200	1635	1	200	1635	1	200	1635	1	200			
LNAV/VNAV DA	1847	1 1/8	412	1847	1 1/8	412	1847	1 1/8	412	1847	1 1/8	412			
LNAV MDA	1960	1	525	1960	1	525	1960	1 1/2	525	1960	1 1/2	525			
CIRCLING	1960	1	525	2160	1	725	2360	2 3/4	925	2360	3	925			

CHANGES - REASONS

1. CHANGED AIRPORT ELEVATION/TDZE FROM 1434 TO 1435. - NEW SURVEY.
2. DELETED FEEDERS FROM SECTO AND OGT VOR/DME AND THE INITIAL FROM POEMS. - ATC REQUEST.
3. CHANGED HEADING /DISTANCE ON INITIALS FROM RUGY TO TYIBR FROM 85.36/5 TO 85.32/7.2 AND RAISED ALTITUDE FROM 3300 TO 3600 - RUGY FIX MOVED 2.2 NM TO ALLOW SEGMENT LENGTH TO MEET CURRENT CRITERIA AND ATC REQUEST.
4. CHANGED HEADING /DISTANCE ON INITIALS FROM KOVRE TO TYIBR FROM 265.52/5 TO 265.55/7.2 AND RAISED ALTITUDE FROM 3300 TO 3600 - KOVRE FIX MOVED 2.2 NM TO ALLOW SEGMENT LENGTH TO MEET CURRENT CRITERIA AND ATC REQUEST.
5. CHANGED INTERMEDIATE COURSE FROM 175.44 TO 175.43 AND DISTANCE FROM 6.10 TO 6.01. - NEW TARGETS CALCULATIONS AND NEW PFAF LOCATION.
6. CHANGED DISTANCE FROM HEPIL TO COMDA FROM 3.21 TO 3.33. - NEW PFAF LOCATION TO MEET CURRENT CRITERIA.
7. CHANGED DISTANCE FROM COMDA TO THE MAP FROM 2.40 TO 2.37. - NEW STEP-DOWN FIX LOCATION TO MEET CURRENT CRITERIA.
8. ADDED MAX ALTITUDE OF 6000 AND RAISED MIN ALTITUDE FROM 3300 TO 3600 FOR THE HOLD-IN-LIEU ON LINE 2 OF PROFILE VIEW. - ATC REQUEST AND FAAO 8260.191 PARAGRAPH 8-6-7.
9. CHANGED DIST FAF TO MAP AND FAF TO THLD FROM 5.61 TO 5.70 IN LINE 3 OF PROFILE VIEW. - NEW FAF LOCATION.
10. REMOVED THE * FROM LINE 4 OF PROFILE VIEW AND CHANGED COMDA REY DIST FROM 2.4 TO 2.37. - * NO LONGER REQUIRED AND NEW COMDA LOCATION.
11. CHANGED FAS OBST FROM 1599 TRANSMISSION TOWER AND 1694 CELL TOWER TO 1706 TOWER (27-023662) 433941N/0961330W. - NEW TARGETS FINAL EVALUATION.
12. CHANGED 7:1 OBSTACLE IN ADDITIONAL FLIGHT DATA FROM 1978 TOWER TO 1975 TOWER. - NEW TARGETS FINAL EVALUATION.
13. CHANGED VDP FROM 1.56 NM TO RW18 TO 1.55 TO RWY 18 AND DELETED *LNAV ONLY FROM ADDITIONAL FLIGHT DATA. - NEW TARGETS FINAL EVALUATION AND *LNAV ONLY NO LONGER REQUIRED.
14. ADDED PBN REQUIREMENTS NOTE: RNP APCH - GPS. - IAW FAAO 8260.191 PARAGRAPH 8-6-8.
15. REPLACED MSA WITH T CONFIGURATION TAA. - ATC REQUEST.
16. DELETED CHART NOTE: DME/DME RNP-0.3 NA. - NOTE NO LONGER REQUIRED.
17. DELETED PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT OGT VOR/DME VIA V250 NORTHEAST BOUND. - FEEDER FROM OGT DELETED.
18. RAISED LPV DA FROM 1634 TO 1635. - TDZE INCREASED BY A FOOT.
19. LOWERED LNAV/VNAV DA/HAT - VIS FROM 2131/697 - 2 1/2 TO 1847/412 - 1 1/8. - CURRENT CRITERIA NO LONGER HAS MISSED PENETRATION. (27-000237) NO LONGER IN THE TRAP.
20. CHANGED LNAV HAT FROM 526 TO 525 AND CAT D VISIBILITY FROM 1 3/4 TO 1 1/2. - NEW TDZE AND VISI CHECK.
21. CHANGED CIRCLING CAT A HAA FROM 526 TO 525. - NEW AIRPORT ELEVATION.
22. CHANGED CIRCLING CATS B, C, D, MDA/HAA - VIS FROM 1960/526 - 1, 2140/706 - 2 AND 2140/706 - 2 1/4 TO 2160/725 - 1, 2360/925 - 2 3/4, AND 2360/925 - 3. - NEW CIRCLING CRITERIA AND NEW CONTROLLING OBSTACLES.
23. ADDED CHART CIRCLING ICON TO ADDITIONAL FLIGHT DATA. - NEW CIRCLING CRITERIA APPLIED.
24. LTP COORDINATES CHANGED FROM 433721.1020N/0961304.6260W TO 433721.1010N/0961304.6105W AND ELLIPSOIDAL HT. FROM 04107 TO 04110 IN FAS DATA- NEW SURVEY.
25. FPAP COORDINATES CHANGED FROM 433552.0200N/0961301.2900W TO 433552.0220N/0961301.2825W AND CRC REMAINDER FROM 56079604 TO CF3EB9D9. - NEW FAS CALCULATIONS.
26. LTP/FPAP ORTHOMETRIC HT FROM 04371 TO 04374 IN FAS DATA. - NEW FAS CALCULATIONS.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZMP, AMGR, FSD APP CON.

FLIGHT CHECKED BY

MICHAEL A GREENWOOD

Digitally signed by

DONALD H LANIER

Nov 29, 2021

OFFICE

FPO

DATE

11/18/2021

DEVELOPED BY

LIAM DONAHUE

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LIAM DONAHUE

Oct 01, 2021

OFFICE

AJV-A431

DATE

09/27/2021

APPROVED BY

LONNIE EVERHART

Digitally signed by

DONALD H LANIER

Nov 29, 2021

OFFICE

AJV-A430

DATE

09/27/2021

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KLYV
RUNWAY	RW18
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W18A
LTP/FTP LATITUDE	433721.1010N
LTP/FTP LONGITUDE	0961304.6105W
LTP/FTP ELLIPSOIDAL HEIGHT	+04110
FPAP LATITUDE	433552.0220N
FPAP LONGITUDE	0961301.2825W
THRESHOLD CROSSING HEIGHT (TCH)	00050.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1472
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	CF3EB9D9

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04374
FPAP ORTHOMETRIC HEIGHT	+04374

