

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</u> LOUISA COUNTY/FREEMAN FIELD	<u>AIRPORT ID</u> KLKU	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 27	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> LOUISA	<u>STATE</u> VA	
<u>AIRPORT ELEVATION</u> 494	<u>TDZE</u> 494	<u>SUPERSEDED</u> RNAV (GPS) RWY 27	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 07/29/2010	<u>MAG VAR</u> 10W	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 182/30 CW 002/30	NOPT	JODKA	IF/IAF	2900
2. 002/30 CW 182/30		002/14 CW 182/14		4000
3. 002/14 CW 182/14		JODKA	IAF	2900

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>
JODKA	IF/IAF	LUYIS		TF	FB	1.00	272.47	5.96	2300
LUYIS	FAF	OVILY/1.41 NM TO RW27		TF	FB	0.30	272.41	4.14	
OVILY/1.41 NM TO RW27		RW27	MAP	TF	FO	0.30	272.41	1.41	
RW27	MAP	1000 MSL		CA			272.41		1000
1000 MSL		GVE VORTAC		DF	FO	1.00			2900

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW27

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1000 THEN CLIMBING RIGHT TURN TO 2900 DIRECT GVE VORTAC AND HOLD, CONTINUE CLIMB-IN-HOLD TO 2900.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD E JODKA, RT, 272.47 INBOUND, 2900 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 272.41FAF: LUYISDIST FAF TO MAP: 5.55DIST FAF TO THLD: 5.55
4. MIN ALT: JODKA 2900, LUYIS 2300, OVILY/1.41 NM TO RW27 980*
5. DIST TO THLD FROM OM:MM:IM:150 HAT:250 HAT: 0.66GS ANT:
6. MIN GP INCPT: 2300GP ALT AT FAF : LUYIS 2300OM:MM:IM:
7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 40.0
8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA N OF RWY 9-27.
CHART NOTE: BARO-VNAV NA WHEN USING ORANGE ALTIMETER SETTING.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15°C OR ABOVE 54°C.
*LNAV ONLY
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ORANGE ALTIMETER SETTING AND INCREASE ALL DA TO 780 FEET AND ALL MDA 40 FEET AND INCREASE LPV AND LNAV/VNAV VISIBILITY 1/8 SM.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
WAAS CHANNEL #58318
REFERENCE PATH ID: W27A
CHART FAS OBST: 599 TREE 380101N/0775800W.
HOLD S, RT, 002.00 INBOUND
LTP HAE: 118.1 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - 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	744	3/4	250	744	3/4	250		NA			NA				
LNAV/VNAV DA	744	3/4	250	744	3/4	250		NA			NA				
LNAV MDA	860	1	366	860	1	366		NA			NA				
CIRCLING	900	1	406	960	1	466		NA			NA				



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KLKU
RUNWAY	RW27
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W27A
LTP/FTP LATITUDE	380038.2035N
LTP/FTP LONGITUDE	0775745.8330W
LTP/FTP ELLIPSOIDAL HEIGHT	+01181
FPAP LATITUDE	380026.2945N
FPAP LONGITUDE	0775937.5605W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1440
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	51D7B00B

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+01504
FPAP ORTHOMETRIC HEIGHT	+01504



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

AIRPORT	AIRPORT ID	PROCEDURE NAME	AMDT NO.	CITY	STATE	AIRPORT ELEVATION	FACILITY
LOUISA COUNTY/FREEMAN FIELD	KLKU	RNAV (GPS) RWY 27	2	LOUISA	VA	494	RNAV

PART A: OBSTRUCTION DATA SEGMENTS

STRAIGHT-IN AREA

FROM
182/30 CW 002/30

TO
JODKA

<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>
1.AAO	382748.00N/0775245.00W		607	164	98	4E	2000				AT293	2900
2.TERRAIN	383133.00N/0774030.00W		470 (500)								AS1500	2000

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

STRAIGHT-IN AREA

FROM
002/30 CW 182/30

TO
002/14 CW 182/14

<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>
3.AAO	380733.00N/0781709.00W	1998	164	98	4E	2000					4000
4.TERRAIN	380733.00N/0781712.00W	1798 (1800)								AS1500	3300

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



STRAIGHT-IN AREA

FROM

002/14 CW 182/14

TO

JODKA

<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>
5.TOWER (51-069951)	380747.00N/0774254.00W		873	250	50	4D	1000				AT1027	2900
6.TERRAIN	381303.00N/0775033.00W		548 (500)								AS1500	2000

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

INTERMEDIATE

FROM

JODKA (IF/IAF)

TO

LUYIS

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>					
	5.96											
<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>
7.TOWER (51-001152)	380317.00N/0774810.00W		730	500	50	5D	500				AT1070	2300
8.TERRAIN	380212.00N/0775015.00W		426 (400)								AS1500	1900

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



FINAL: LPV

FROM

LUYIS

TO

RW27

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	5.55		DA		250							
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
9.TREE (51-072169)	380043.00N/0775737.65W		518	20	3	1A		34:1				744

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

FINAL: LNAV/VNAV

FROM

LUYIS

TO

RW27

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	5.55		DA		250							
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
10.TREE (51-072096)	380101.02N/0775800.34W		599	20	3	1A	142				XP3	744

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

XP3 ADDED TO ACHIEVE 250 FOOT HEIGHT OVER TDZE.



FINAL: LNAV

FROM

LUYIS

TO

OVILY/1.41 NM TO RW27

<u>RNP</u>	<u>DISTANCE</u> 4.14	<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>
11.AAO	380131.20N/0775344.20W		669	50	20	2C	250				RA36 DG25	980

<u>COMPUTATIONS</u>	<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>
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SEGMENT REMARKS:

FINAL: LNAV STEPDOWN

FROM

OVILY/1.41 NM TO RW27

TO

RW27

<u>RNP</u>	<u>DISTANCE</u> 1.41	<u>PAT</u>	<u>MAP</u> RW27	<u>HAT</u> 366			<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>
10.TREE (51-072096)	380101.02N/0775800.34W		599	20	3	1A	250					860

<u>COMPUTATIONS</u>	<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>
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SEGMENT REMARKS:



HOLD-IN-LIEU OF PT

FROM
JODKA

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>
7.TOWER (51-001152)	380317.00N/0774810.00W	730	500	50	5D	1000				AT1170	2900
TERRAIN	380248.00N/0774918.00W	417 (400)								AS1500	1900

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

MISSED APPROACH : LPV

FROM
DA

TO
GVE VORTAC

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u> 557					
<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				2900
12.TOWER (51-000969)	380118.11N/0780014.70W		819	20	3	1A	1000					1900
13.TERRAIN	380151.00N/0780148.00W		541 (500)								AS1500	2000

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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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											
14.TREE (51-071910)	380007.68N/0775802.11W	1.30	406	595	20	3	1A	300			900
CATEGORY B											
14.TREE (51-071910)	380007.68N/0775802.11W	1.82	466	595	20	3	1A	300		HAA	960

CIRCLING REMARKS:

CENTER

RADIUS

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

ISA DEVIATION: -30

CALCULATED HIGH TEMP EXCEEDS 54C - CHARTED 54C.

VEGETATION HEIGHT 100'.



FACILITY
RNAV

ORDER 8260.3, VOLUME 1, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



<u>AIRPORT</u> LOUISA COUNTY/FREEMAN FIELD	<u>AIRPORT ID</u> KLKU	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 27	<u>AMDT NO.</u> 2	<u>CITY</u> LOUISA	<u>STATE</u> VA	<u>AIRPORT ELEVATION</u> 494	<u>FACILITY</u> RNAV
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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	3.04
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	515
DISTANCE FROM	THLD	TO 1500FT POINT	4.95
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	1.57
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	515

THRESHOLD
COORDINATES
(IF STR-IN)

380038.20N/0775745.83W

ARP COORDINATES

380035.37N/0775812.46W

RUNWAY APCH END
AND DIST FURTHEST
FROM ARP

RUNWAY 27 DISTANCE 0.35 NM

FAF
COORDINATES

380122.43N/0775048.40W

FIX NAME
COORDINATES

REMARKS

TAA 30 NM FROM: JODKA (IF/IAF) 380209.56N/0774319.92W.

QUALITY
22
CHECKED

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

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Page 10 of 11

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TITLE
AERONAUTICAL INFORMATION SPECIALIST

