

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 9	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> LOUISA	<u>STATE</u> VA	
<u>AIRPORT ELEVATION</u> 494	<u>TDZE</u> 489	<u>SUPERSEDED</u> RNAV (GPS) RWY 9	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 12/10/2015	<u>MAG VAR</u> 10W	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 15 AUGUST 2019	<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. 002/30 CW 182/30	NOPT	002/6 CW 182/6		6100
2. 002/6 CW 182/6		WEBBR	IF/IAF	3300
3. 182/30 CW 002/30		182/6 CW 002/6		5000
4. 182/6 CW 002/6		WEBBR	IAF	3300

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>
WEBBR	IF/IAF	PREAK		TF	FB	1.00	092.20	4.98	2200
PREAK	FAF	LIRKE/2.80 NM TO RW09		TF	FB	0.30	092.26	2.51	
LIRKE/2.80 NM TO RW09		RW09	MAP	TF	FB	0.30	092.26	2.80	
RW09	MAP	1000 MSL		CA			092.26		1000
1000 MSL		TURCO		DF	FO	1.00			3300

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW09

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1000 THEN CLIMBING RIGHT TURN TO 3300 DIRECT TURCO AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)
2.	HOLD W WEBBR, RT, 092.20 INBOUND, 3300 FT. IN LIEU OF PT (IAF), MAX 6000.				
3. FAC:	092.26	FAF: PREAK	DIST FAF TO MAP: 5.31	DIST FAF TO THLD: 5.31	
4. MIN ALT:	WEBBR 3300, PREAK 2200, LIRKE/2.80 NM TO RW09 1400*				
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	250 HAT: 0.72	GS ANT:
6. MIN GP INCPT:	2200	GP ALT AT FAF : PREAK 2200	OM:	MM:	IM:
7. GP ANGLE:	3.00	34:1: IS NOT CLEAR	20:1: IS CLEAR	TCH: 40.0	
8. MSA FROM:					

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA NORTH OF RWY 9-27.
CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15°C OR ABOVE 54°C.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ORANGE ALTIMETER SETTING AND INCREASE LPV DA TO 775 FEET, LNAV/VNAV DA TO 784 FEET AND ALL MDA 40 FEET;
INCREASE LPV AND LNAV/VNAV VISIBILITY 1/8 SM.
CHART NOTE: BARO-VNAV AND VDP NA WHEN USING ORANGE ALTIMETER SETTING.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.04 NM TO RW09*
*LNAV ONLY
WAAS CHANNEL #48843
REFERENCE PATH ID: W09A
CHART FAS OBST: 586 TANK 380055N/0775901W.
HOLD SW, RT, 062.77 INBOUND
LTP HAE: 110.7 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	739	3/4	250	739	3/4	250		NA			NA				
LNAV/VNAV DA	748	3/4	259	748	3/4	259		NA			NA				
LNAV MDA	840	1	351	840	1	351		NA			NA				
CIRCLING	900	1	406	960	1	466		NA			NA				



CHANGES - REASONS

- 1. RAISED MISSED APPROACH CLIMB TO ALTITUDE BEFORE TURNING FROM 900 TO 1000 - LNAV/VNAV MISSED APPROACH SECTION 2 PENETRATION BY 819 FT MSL TOWER (51-000969) 380118.11N/0780014.70W.
- 2. CHANGED CHART NOTE "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ORANGE ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET" TO READ "CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ORANGE ALTIMETER SETTING AND INCREASE LPV DA TO 775 FEET, LNAV/VNAV DA TO 784 FEET AND ALL MDA 40 FEET AND INCREASE LPV AND LNAV/VNAV VISIBILITY 1/8 SM" - RASS VALUE CHANGED WITH UTILIZING NEW TARGETS PROGRAMMING AND IAW AJV-5 VISICHECK TOOL SOP AND ADDING LPV AND LNAV/VNAV LINES OF MINIMA.
- 3. ADDED LPV AND LNAV/VNAV LINES OF MINIMA AND ALL ASSOCIATED NOTES - NEW VG RUNWAY SURVEYS PERMIT NEW LINES.
- 4. VDP RELOCATED FROM 1.2 NM TO MAP TO 1.04 NM TO MAP - NEW LOCATION PER TARGETS EVALUATION AND LOWER LNAV MDA.
- 5. LOWERED LNAV MDA FROM 880 TO 840 - NEW CONTROLLING OBSTACLES DUE TO NEW RUNWAY SURVEY OBSTACLE DATA.
- 6. TDZE AND APT ELEV CHANGED FROM 488/493 TO 494/494 - NEW AIRPORT SURVEY DATA AVBL IN AIRNAV.
- 7. REMOVED FARENHEIT TEMPS FROM THE LNAV/VNAV NA BELOW NOTE - NO LONGER REQUIRED.
- 8. CHANGED CHART NOTE VISIBILITY REDUCTION BY HELICOPTERS NA TO READ: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - 20:1 PENETRATIONS REMOVED, NOW ONLY 34:1 PENETRATIONS EXIST.
- 9. REMOVED CHART NOTES: DME/DME RNP-0.3 NA AND ADDED PBN REQUIREMENTS NOTE: RNP APCH - IAW 8260.19H.
- 10. DELETED WITTO FEEDER, ZAVRO AND TURCO INITIALS, AND MSA AND REPLACED WITH A MODIFIED HALF-MOON TAA - ATC/FPT REQUEST TO SIMPLIFY THE PROCEDURE AND MIRROR CHANGES TO THE RNAV (GPS) RWY 27 PROCEDURE.
- 11. ADDED H-I-L AT WEBBR - TO SUPPORT TAA DESIGN.
- 12. CIRCLING CAT A MDA CHANGED FROM 920 TO 900 - NEW CONTROLLING OBSTACLE DUE TO NEW RUNWAY VG SURVEY.
- 13. ADDED CHARTING OF WAAS CHANNEL - PROCEDURE NOW WAAS COMPATABLE.
- 14. CHANGED CHARTING OF FINAL ANGLE/TCH 3.00/40 TO GLIDE PATH/TCH 3.00/40 - DUE TO ADDITION OF VERTICAL FINALS.
- 15. ADDED CHART NOTE "LNAV ONLY" AND CALLOUT SYMBOL FOR FINAL SDF LIRKE FIX ALTITUDE - IAW 8260.19 H PARA 8-6-7D(3).
- 16. ADDED CHARTING OF 4 NM HOLDING PATTERN IN PROFILE VIEW AT FIX WEBBR - DUE TO ADDITION OF H-I-L SEGMENT.

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** AMGR, PCT TRACON, ZDC

FLIGHT CHECKED BY	<i>Digitally signed by</i>	OFFICE	DATE
STEPHEN BAUER	DAVID DANNER	FICO	4/11/19
	Apr 15, 2019		

DEVELOPED BY	<i>Digitally signed by</i>	OFFICE	DATE
DAVID DANNER (JOHN LINDSEY)	DAVID DANNER	AJV-A421	02/08/2019

APPROVED BY	<i>Digitally signed by</i>	OFFICE	DATE	TITLE
JULIE MORGAN	DAVID DANNER	AJV-A42		MANAGER
	Apr 15, 2019			



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KLKU
RUNWAY	RW09
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W09A
LTP/FTP LATITUDE	380032.5315N
LTP/FTP LONGITUDE	0775839.0790W
LTP/FTP ELLIPSOIDAL HEIGHT	+01107
FPAP LATITUDE	380044.4250N
FPAP LONGITUDE	0775647.3460W
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	050803B2

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+01431
FPAP ORTHOMETRIC HEIGHT	+01431

