

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> KLUK	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 21	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> CINCINNATI	<u>STATE</u> OH
<u>AIRPORT ELEVATION</u> 482	<u>TDZE</u> 475	<u>SUPERSEDED</u>	<u>DATED</u>	<u>EPOCH YEAR</u> 1990
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
BOSTR		KUYEY		TF	FO	1.00	339.07	26.58	2600
MOAKS	IAF	KUYEY	NOPT	TF	FB	1.00	269.55	5.95	2600
KUYEY	IF/IAF	SIYOR		TF	FB	1.00	205.07	6.83	2000
SIYOR	FAF	YACUK/2.97 NM TO RW21		TF	FB	0.30	205.03	1.70	
YACUK/2.97 NM TO RW21		RW21	MAP	TF	FO	0.30	205.03	2.97	
RW21	MAP	797 MSL		CA			205.03		
797 MSL		WONAN		DF	FB	1.00			
WONAN		CALIF		TF	FO	1.00	129.55	8.44	2600

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW21

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2600 DIRECT WONAN AND ON TRACK 129.55 TO CALIF AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- | | | | | | |
|---|----------------------------|----------------|-----------------------|------------------------|---------|
| 1. PT | SIDE OF COURSE | OUTBOUND | FT WITHIN | MILES OF | (IAF) |
| 2. HOLD NE KUYEY, RT, 205.01 INBOUND, 2600 FT. IN LIEU OF PT (IAF), MAX 6000. | | | | | |
| 3. FAC: 205.03 | FAF: SIYOR | | DIST FAF TO MAP: 4.67 | DIST FAF TO THLD: 4.67 | |
| 4. MIN ALT: KUYEY 2600, SIYOR 2000, YACUK/2.97 NM TO RW21 1460 | | | | | |
| 5. DIST TO THLD FROM OM: | MM: | IM: | 150 HAT: | 322 HAT: 0.89 | GS ANT: |
| 6. MIN GP INCPT: 2000 | GP ALT AT PFAF: SIYOR 2000 | | | OM: | MM: |
| 7. GP ANGLE: 3.00 | 34:1: IS NOT CLEAR | 20:1: IS CLEAR | TCH: 38.5 | | IM: |
| 8. MSA FROM: RW21 3000 | | | | | |



PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: CIRCLING NA FOR CAT D NORTH OF RWY 7-25.
CHART NOTE: CIRCLING RWY 7 NA AT NIGHT.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15°C OR ABOVE 54°C.
CHART NOTE: RWY 21 HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BOSTR ON V128 EASTBOUND T217 SOUTHBOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MOAKS ON V5 NORTHEAST BOUND.
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO LPV ALL CATS AND LNAV CAT A AND B VISIBILITY.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS AND LNAV CAT C AND D VISIBILITY TO 1 7/8 SM.

ADDITIONAL FLIGHT DATA:

HOLD E, RT, 288.87 INBOUND.
CHART FAS OBST: 875 TREE (39-060429) 390756N/0842436W.
CHART VDP AT 1.96 NM TO RW21.
WAAS CHANNEL # 90148
REFERENCE PATH ID: W21A
LTP HAE: 110.7 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT B 900-2, CAT C 900-2 1/2, 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	797	5000	322	797	5000	322	797	5000	322	797	5000	322			
LNAV/VNAV DA	1140	1 1/2	665	1140	1 1/2	665	1140	1 1/2	665	1140	1 1/2	665			
LNAV MDA	1140	5000	665	1140	5000	665	1140	1 1/2	665	1140	1 1/2	665			
CIRCLING	1260	1	778	1360	1 1/4	878	1360	2 1/2	878	1400	3	918			

CHANGES - REASONS

ORIG.



COORDINATED WITH:

A4A

X

ALPA

X

AOPA

X

APA

X

HAI

NBAA

X

OTHER:

CVG APP CON, LUK ATCT, ZID, AMGR.

FLIGHT CHECKED BY

JAMES ONIEAL

Digitally signed by

CASIMIR L TABAKA

May 20, 2024

OFFICE

FPO

DATE

05/16/2024

DEVELOPED BY

CASIMIR L. TABAKA (SILVIA YOUNG)

Digitally signed by

CASIMIR L TABAKA

Apr 04, 2024

OFFICE

AJV-A432

DATE

03/04/2024

APPROVED BY

CASIMIR L. TABAKA

Digitally signed by

CASIMIR L TABAKA

Apr 04, 2024

OFFICE

AJV-A432

DATE

TITLE

MANAGER

FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KLUK
RUNWAY	RW21
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W21A
LTP/FTP LATITUDE	390630.0875N
LTP/FTP LONGITUDE	0842442.4330W
LTP/FTP ELLIPSOIDAL HEIGHT	+01107
FPAP LATITUDE	390506.8330N
FPAP LONGITUDE	0842523.4615W
THRESHOLD CROSSING HEIGHT (TCH)	00038.5
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0888
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	4C91D68E

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01448
FPAP ORTHOMETRIC HEIGHT	+01448



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

<u>AIRPORT ID</u> KLUK	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 21	<u>AMDT NO.</u> ORIG	<u>CITY</u> CINCINNATI	<u>STATE</u> OH	<u>AIRPORT ELEVATION</u> 482	<u>FACILITY</u> RNAV
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PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM BOSTR **TO** KUYEY

RNP 1.00 DISTANCE 26.58 PAT MAP HAT HMAS

<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 (39-004399)	385503.78N/0840547.58W	1229	50	20	2C	1000				AT371	2600
TERRAIN	385418.00N/0840327.00W	944 (900)								AS1500	2400

COMPUTATIONS

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

SEGMENT REMARKS:

INITIAL

FROM MOAKS **TO** KUYEY

RNP 1.00 DISTANCE 5.95 PAT MAP HAT HMAS

<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 (39-003255)	391900.00N/0841958.00W	1197	250	50	4D	1000				AT403	2600
TERRAIN	391912.00N/0841933.00W	954 (1000)								AS1500	2500

COMPUTATIONS

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

SEGMENT REMARKS:

QUALITY
10
CHECKED

INTERMEDIATE

FROM

KUYEY (IF/IAF)

TO

SIYOR

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
1.00	6.83										
<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 (39-003255)	391900.00N/0841958.00W	1197	250	50	4D	500					1700
TERRAIN	391845.00N/0842103.00W	954 (1000)								AS1000	2000

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LPV

FROM

SIYOR

TO

RW21

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30	4.67		DA				322				
<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>
TREE (39-058174)	390706.85N/0842426.59W	579	20	3	1A		34.00:1			MA72	797

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FINAL: LNAV/VNAV

FROM

SIYOR

TO

RW21

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30	4.67		DA				665				
<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>
TREE (39-060429)	390756.42N/0842435.99W	875	20	3	1A		23.34:1				1140

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV

FROM

SIYOR

TO

YACUK/2.97 NM TO RW21

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30	1.70										
<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	391051.00N/0842306.00W	1086	215	8	4B	250				RA100 DG24	1460

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV STEPDOWN

FROM

YACUK/2.97 NM TO RW21

TO

RW21

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30	2.97		RW21				665				
<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>
TREE (39-060429)	390756.42N/0842435.99W	875	20	3	1A	250					1140

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

KUYEY

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 (39-000020)	392111.00N/0841931.00W	1568	100	20	3C	1000					2600
TERRAIN	391909.00N/0842209.00W	980 (1000)								AS1500	2500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH: LPV

FROM

DA

TO

CALIF

<u>RNP</u> 0.30	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u> 578			
<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>
TREE (39-058174)	390706.85N/0842426.59W	579	20	3	1A		ASC				2600
TOWER (21-000344)	385733.20N/0842311.80W	1202	250	50	4D	1000					2300
TERRAIN	390139.00N/0842748.00W	908 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



MISSED APPROACH: LNAV/VNAV

FROM

DA

TO

CALIF

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30								979			
<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				2600
TOWER (21-000344)	385733.20N/0842311.80W	1202	250	50	4D	1000					2300
TERRAIN	390139.00N/0842748.00W	908 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH: LNAV

FROM

RW21

TO

CALIF

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30-1.00								1040			
<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				2600
TOWER (21-000344)	385733.20N/0842311.80W	1202	250	50	4D	1000					2300
TERRAIN	390139.00N/0842748.00W	908 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



AIRPORT ID

KLUK

PROCEDURE NAME

RNAV (GPS) RWY 21

AMDT NO.

ORIG

CITY

CINCINNATI

STATE

OH

AIRPORT ELEVATION

482

FACILITY

RNAV

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 (39-067377)	390543.91N/0842703.21W	1.30	778	943	20	3	1A	300			1260
CATEGORY B											
TANK (21-000139)	390545.00N/0842727.00W	1.82	878	1045	20	3	1A	300			1360
CATEGORY C											
BUILDING (39-058486)	390712.61N/0842900.52W	2.86	878	1054	20	10	1B	300			1360
CATEGORY D											
AAO	390605.00N/0842019.00W	3.74	918	1100	50	20	2C	300			1400

CIRCLING REMARKS:

MSA

CENTER	RADIUS
RW21	25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TOWER (39-001241)	393044.00N/0843809.00W	341	26.4	1902	500	50	5D	1000			3000

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

CVG APP CON, LUK TOWER

WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	SERVICE-A	ADJUSTMENTS
ASOS	LUK	24	LUK	0.19	Y	0
BACK-UP WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	SERVICE-A	ADJUSTMENTS
ASOS	CVG	24	CVG	12.41	Y	83

WX REMARKS:

RASS PRESSURE PATTERNS THE SAME
KLUK 482, KCVG 865
RA = 82.3.

PRIMARY NAVAID	MONITOR POINT	HRS OPERATION	CAT
APPROACH AND RUNWAY LIGHTING SYSTEM		RUNWAY MARKINGS	RUNWAY VISUAL RANGE
RW03 - HIRL (PCL), REIL, PAPI-4R		NPI-F	ROLL OUT
RW07 - MIRL		NPI-F	
RW25 - MIRL, VASI-4L		NPI-F	
RW21 - MALSR (PCL), HIRL (PCL), PAPI-4L (PCL)		PIR-F	APPROACH

GLIDESLOPE ANGLE	ELEV RWY THRESHOLD	TCH	ELEV GS ANTENNA	DISTANCE FROM RWY	VGSI ANGLE	TCH
3.00	475.1	38.5			3.00	38.9

FINAL APPROACH COURSE AIMING

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

CRITICAL TEMPERATURES

CRITICAL LOW	CRITICAL HIGH	ACT	APT ISA
-15C	+54C	-15C	+14.05C

CRITICAL TEMPERATURE REMARKS:

AVERAGE COLD TEMPERATURE DERIVED FROM 5-YEAR HISTORY (2019-2023).
CRITICAL LOW TEMPERATURE BASED ON ACT.
DESCENT RATE (FPM): STANDARD TEMP 961 HIGH TEMP 1268.

"VISUAL PORTION OF FINAL" PENETRATIONS

FINAL TYPE	CIRCLING RWY 7		
34:1			
893 TREE (39-066764) 390551.9600N/0842652.4100W (108.05)	917 TREE (39-061021) 390533.7600N/0842648.5900W (102.24)		
908 TREE (39-061259) 390550.0600N/0842657.1600W (102.01)	927 TREE (39-060733) 390549.0300N/0842701.9800W (101.78)		



<u>AIRPORT ID</u> KLUK	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 21	<u>AMDT NO.</u> ORIG	<u>CITY</u> CINCINNATI	<u>STATE</u> OH	<u>AIRPORT ELEVATION</u> 482	<u>FACILITY</u> RNAV
943 TREE (39-067377) 390543.9100N/0842703.2100W (101.37)			916 TREE (39-067277) 390548.9100N/0842659.2900W (99.86)			
900 TREE (39-066944) 390549.9000N/0842655.4600W (99.55)			929 TREE (39-059956) 390545.8400N/0842701.7300W (97.09)			
901 TREE (39-060798) 390548.5100N/0842655.6700W (96.52)			884 TREE (39-060474) 390551.0100N/0842652.9100W (95.06)			
878 TREE (39-059787) 390550.9000N/0842651.5700W (93.47)			892 TREE (39-060194) 390534.8300N/0842645.0100W (92.24)			
891 TREE (39-059340) 390541.4700N/0842649.4800W (91.41)			896 TREE (39-059640) 390535.1500N/0842646.6300W (91.36)			
904 TREE (39-061665) 390550.0500N/0842659.2100W (90.84)			817 TREE (39-060892) 390555.2900N/0842638.5700W (88.14)			
881 TREE (39-059784) 390540.2600N/0842646.9300W (87.42)			826 TREE (39-060398) 390553.8900N/0842640.7400W (86.27)			
832 TREE (39-059092) 390553.5900N/0842642.3000W (86.13)			814 TREE (39-059740) 390540.5100N/0842628.2900W (85.94)			
879 TREE (39-059646) 390549.9400N/0842653.7900W (84.46)			889 TREE (39-067364) 390540.5500N/0842651.1000W (81.58)			
904 TREE (39-059745) 390544.7400N/0842658.3000W (81.43)			881 TREE (39-060199) 390537.2200N/0842646.6000W (81.37)			
892 TREE (39-058717) 390547.3000N/0842656.9100W (80.34)			916 TREE (39-059660) 390543.8900N/0842701.6400W (79.79)			
898 TREE (39-061952) 390546.2100N/0842658.0900W (79.65)			888 TREE (39-059365) 390536.8100N/0842648.8600W (79.53)			
830 TREE (39-058185) 390553.8900N/0842643.9100W (79.23)			902 TREE (39-060057) 390546.6200N/0842659.6700W (79.12)			
919 TREE (39-058621) 390545.6800N/0842703.9500W (78.98)			890 TREE (39-058598) 390531.2400N/0842646.0900W (77.98)			
891 TREE (39-060785) 390532.9000N/0842647.5100W (77.96)			797 TREE (39-058747) 390541.9400N/0842626.7100W (77.83)			
902 TREE (39-061668) 390536.8400N/0842653.6200W (77.02)			891 TREE (39-061029) 390538.2700N/0842651.4900W (76.82)			
877 TREE (39-060483) 390539.6500N/0842648.4400W (76.72)			885 TREE (39-066772) 390545.4900N/0842654.8000W (76.4)			
871 TREE (39-059345) 390547.7800N/0842652.4900W (75.87)			926 TREE (39-066776) 390542.9600N/0842705.0600W (75.67)			
918 TREE (39-057782) 390547.5900N/0842706.1100W (74.98)			857 TREE (39-061576) 390537.1100N/0842641.7400W (74.04)			
865 TREE (39-062052) 390535.1100N/0842643.3300W (71.76)			925 TREE (39-061217) 390539.8800N/0842703.8800W (71.48)			
892 TREE (39-058718) 390534.7100N/0842650.8900W (71.48)			883 TREE (39-058600) 390535.3600N/0842648.7900W (71.33)			
901 TREE (39-060728) 390543.7400N/0842659.8200W (70.77)			861 TREE (39-059545) 390542.1000N/0842647.4500W (69.97)			
867 TREE (39-060131) 390538.7700N/0842646.9300W (69.89)			803 TREE (39-066755) 390554.0200N/0842638.9900W (69.67)			
788 TREE (39-058746) 390543.1400N/0842627.4100W (69.23)			803 TREE (39-060110) 390539.6900N/0842629.3900W (69.16)			
884 TREE (39-061264) 390540.4200N/0842653.2600W (68.75)			791 BUILDING (39-067356) 390555.7600N/0842637.0300W (68.62)			
893 TREE (39-060421) 390547.6500N/0842700.9400W (68.13)			780 TREE (39-058672) 390543.4300N/0842625.7400W (67.74)			
873 TREE (39-059106) 390536.2200N/0842647.5700W (67.62)			874 TREE (39-067360) 390539.6000N/0842650.2800W (67.19)			
862 TREE (39-059549) 390533.6300N/0842642.8000W (67.1)			847 TREE (39-059260) 390550.3000N/0842650.1000W (66.17)			
875 TREE (39-067367) 390541.3100N/0842652.2500W (65.38)			899 TREE (39-060981) 390542.2300N/0842659.9700W (64.67)			
882 TREE (39-061611) 390544.5100N/0842656.6600W (64.6)			803 TREE (39-057969) 390553.0100N/0842639.8000W (64.46)			
896 TREE (39-067271) 390528.4300N/0842650.0200W (63.63)			819 TREE (39-058826) 390546.8100N/0842640.4500W (63.51)			
852 TREE (39-061373) 390534.7200N/0842641.9400W (62.68)			807 TREE (39-060965) 390552.5700N/0842641.2300W (62.44)			
876 BUILDING (39-061024) 390536.5100N/0842650.3600W (61.59)			884 TREE (39-061617) 390538.4600N/0842654.0400W (61.39)			
884 TREE (39-059177) 390531.9400N/0842649.6300W (61.31)			862 TREE (39-060202) 390533.0600N/0842644.0800W (61.29)			
836 TREE (39-061487) 390537.3500N/0842639.7600W (60.5)			896 TREE (39-060661) 390534.3200N/0842654.9600W (60.38)			

QUALITY
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<u>AIRPORT ID</u> KLUK	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 21	<u>AMDT NO.</u> ORIG	<u>CITY</u> CINCINNATI	<u>STATE</u> OH	<u>AIRPORT ELEVATION</u> 482	<u>FACILITY</u> RNAV
892 TREE (39-059667) 390548.4100N/0842703.4300W (60.26)			784 TREE (39-060712) 390554.6000N/0842636.7500W (59.85)			
837 TREE (39-061376) 390551.4700N/0842650.0500W (59.11)			769 TREE (39-058669) 390544.5800N/0842626.3200W (57.44)			
903 TREE (39-060350) 390542.5900N/0842703.4400W (57.44)			855 TREE (39-059356) 390548.7800N/0842654.1400W (56.49)			
884 TREE (39-059743) 390532.9100N/0842652.2500W (54.48)			804 TREE (39-058833) 390552.3500N/0842642.9800W (52.82)			
836 TREE (39-061862) 390535.7100N/0842641.0200W (52.23)			792 TREE (39-060588) 390538.6800N/0842630.4200W (52.18)			
881 TREE (39-059753) 390535.8000N/0842654.2700W (51.29)			845 TREE (39-059548) 390536.0600N/0842644.3000W (50.63)			
871 TREE (39-061953) 390543.2800N/0842656.9000W (49.85)			888 TREE (39-060735) 390529.1900N/0842652.3200W (49.42)			
861 TREE (39-058917) 390548.5000N/0842657.7300W (49.33)			805 TREE (39-059698) 390552.8000N/0842644.5900W (49.28)			
834 TREE (39-066937) 390537.8300N/0842643.0200W (48.28)			881 TREE (39-066941) 390536.5600N/0842655.6700W (48.21)			
764 TREE (39-060054) 390556.2000N/0842635.4900W (48.03)			809 TREE (39-066936) 390546.8900N/0842642.3200W (47.18)			
860 TREE (39-058719) 390545.7200N/0842656.3200W (46.65)			823 TREE (39-058450) 390536.1600N/0842639.3100W (46.25)			
881 TREE (39-060413) 390531.5700N/0842652.8700W (46.14)			879 TREE (39-067375) 390547.1300N/0842702.9200W (46)			
851 TREE (39-059642) 390531.6400N/0842644.4000W (45.81)			838 TREE (39-059789) 390542.8500N/0842648.5500W (44.91)			
863 TRANSMISSION_LINE (39-067275) 390547.7400N/0842659.1300W (44.65)			829 TREE (39-059259) 390546.6200N/0842648.6800W (44.39)			
877 TREE (39-060062) 390529.4500N/0842650.8800W (44.05)			768 TREE (39-066931) 390542.3400N/0842628.5300W (43.44)			
889 TREE (39-057786) 390545.9700N/0842705.7400W (43.43)			828 TREE (39-067267) 390544.9700N/0842647.6500W (43.07)			
841 TRANSMISSION_LINE (39-059649) 390546.4200N/0842652.5300W (42.51)			829 TREE (39-059791) 390549.1700N/0842651.2000W (41.66)			
892 TREE (39-061478) 390544.8800N/0842706.3900W (41.59)			833 TREE (39-059540) 390538.8000N/0842645.5700W (40.7)			
837 TREE (39-059845) 390532.3400N/0842642.5700W (39.84)			811 TREE (39-061481) 390543.9700N/0842643.0700W (39.65)			
889 TREE (39-060646) 390539.0300N/0842702.2100W (39.29)			878 TREE (39-066775) 390547.1700N/0842704.6100W (39.21)			
796 TRANSMISSION_LINE (21-022281) 390545.9400N/0842640.8200W (37.16)			856 TREE (39-058714) 390536.6800N/0842651.8900W (36.66)			
862 TREE (39-059496) 390539.3400N/0842655.5200W (36.32)			833 TREE (39-059341) 390544.9600N/0842651.1700W (35.79)			
864 TREE (39-059498) 390531.5900N/0842651.2700W (34.76)			862 TREE (39-067124) 390542.3700N/0842658.0700W (34.62)			
826 TREE (39-059268) 390537.0700N/0842644.1700W (34.48)			747 TREE (39-058673) 390542.0900N/0842624.9400W (34.35)			
852 TREE (39-061255) 390530.0500N/0842646.9400W (34.2)			824 TREE (39-059553) 390545.1600N/0842649.2200W (34.05)			
805 TREE (39-058681) 390547.5500N/0842645.6600W (33.11)			870 TREE (39-059955) 390539.6400N/0842658.9600W (33.05)			
793 TRANSMISSION_LINE (39-058359) 390545.8400N/0842641.0900W (32.98)			804 TREE (39-067112) 390546.1800N/0842644.5700W (32.67)			
818 TREE (39-059444) 390542.0200N/0842645.7800W (32.6)			836 TREE (39-059112) 390542.0300N/0842650.9800W (32.51)			
864 TREE (39-060416) 390539.7400N/0842657.4800W (32.44)			896 TREE (39-061695) 390545.6100N/0842710.8400W (31.82)			
823 TRANSMISSION_LINE (39-060130) 390546.2900N/0842650.5000W (31.27)			761 TREE (39-060587) 390553.4400N/0842637.5800W (31.21)			
804 TREE (39-060823) 390548.3900N/0842646.5500W (31)			853 TREE (39-061658) 390540.4900N/0842655.2500W (30.99)			
882 TREE (39-067126) 390533.7100N/0842659.0000W (30.86)			800 TREE (39-060366) 390536.8200N/0842637.6500W (30.6)			
791 TREE (39-058192) 390544.9100N/0842640.6000W (30.48)			816 TREE (39-058953) 390534.1800N/0842640.5000W (30.41)			
886 TREE (39-061546) 390543.9000N/0842707.2200W (30.37)			795 TREE (39-060367) 390545.1000N/0842642.2400W (29.22)			
852 TREE (39-061332) 390533.3200N/0842650.7000W (28.85)			871 TREE (39-059658) 390534.8800N/0842657.2300W (28.8)			

QUALITY
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<u>AIRPORT ID</u> KLUK	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 21	<u>AMDT NO.</u> ORIG	<u>CITY</u> CINCINNATI	<u>STATE</u> OH	<u>AIRPORT ELEVATION</u> 482	<u>FACILITY</u> RNAV
817 TREE (39-061655) 390539.7800N/0842645.1400W (28.52)			851 TREE (39-061959) 390541.9800N/0842656.5000W (28.16)			
805 TREE (39-060828) 390544.0700N/0842644.7600W (28.01)			778 TREE (39-060969) 390546.7400N/0842639.1700W (26.8)			
889 TREE (39-061101) 390541.1400N/0842707.2400W (26.77)			798 TREE (39-061053) 390550.4900N/0842647.5400W (26.53)			
770 TREE (39-061172) 390539.3000N/0842632.1000W (25.8)			792 TREE (39-067114) 390549.0400N/0842645.1400W (25.46)			
880 TREE (39-061195) 390524.5100N/0842653.8500W (25)			880 TREE (39-066777) 390541.4500N/0842705.3800W (24.98)			
854 BUILDING (39-059742) 390534.0900N/0842652.9500W (24.84)			828 TREE (39-058369) 390545.1300N/0842653.1200W (24.4)			
825 TREE (39-060200) 390531.2000N/0842642.8100W (24.31)			781 TREE (39-059104) 390547.4900N/0842641.2900W (24.19)			
867 TREE (39-059976) 390537.2200N/0842659.0200W (24.11)			799 TREE (39-058442) 390538.2700N/0842640.3300W (23.7)			
733 TREE (39-058490) 390545.8000N/0842626.6100W (23.32)			883 TREE (39-061090) 390542.3800N/0842707.3500W (23.32)			
857 TRANSMISSION_LINE (39-060660) 390538.0100N/0842656.9300W (23.26)			865 TREE (39-059656) 390533.7900N/0842656.5200W (22.69)			
860 TRANSMISSION_LINE (39-067282) 390542.7500N/0842701.4000W (21.92)			790 TREE (39-060819) 390551.9900N/0842647.7000W (21.53)			
860 TREE (39-059650) 390536.8600N/0842657.5100W (21.52)			738 TREE (39-059480) 390555.0800N/0842634.8800W (21.5)			
862 TREE (39-059959) 390532.5300N/0842655.3300W (20.85)			870 TREE (39-060636) 390537.3600N/0842701.1100W (20.16)			
790 TREE (39-060650) 390535.2100N/0842636.8000W (19.74)			770 TREE (39-060191) 390547.7900N/0842639.6700W (19.55)			
884 TREE (39-067289) 390544.4500N/0842710.1700W (19.4)			807 TREE (39-061370) 390538.7900N/0842644.3100W (19.06)			
783 TREE (39-059404) 390543.8600N/0842640.8800W (19.02)			785 TREE (39-060039) 390548.0400N/0842644.3400W (18.87)			
874 TREE (39-067372) 390537.6200N/0842702.9400W (18.4)			800 TREE (39-059173) 390545.9400N/0842647.3600W (18.38)			
830 TREE (39-066773) 390544.2300N/0842655.0200W (17.65)			815 TREE (39-060482) 390543.0300N/0842650.0400W (17.15)			
770 TREE (39-059089) 390545.6000N/0842639.0100W (16.66)			824 TREE (39-066765) 390543.9000N/0842653.3800W (16.58)			
518 BUILDING (39-024185) 390607.1100N/0842541.6000W (15.57)			795 TREE (39-060824) 390538.7100N/0842641.9300W (15.16)			
839 BUILDING (39-061619) 390529.0400N/0842648.3800W (13.79)			732 TREE (39-058749) 390544.2300N/0842628.1900W (13.1)			
779 TREE (39-060035) 390547.1400N/0842643.8100W (12.59)			800 TREE (39-059436) 390532.5200N/0842639.9200W (12.5)			
851 TREE (39-059962) 390538.3800N/0842658.5800W (12.39)			798 TREE (39-061371) 390543.1000N/0842646.6000W (12.3)			
880 TREE (39-059010) 390539.5700N/0842707.7700W (12.2)			872 TREE (39-061621) 390544.1800N/0842708.6700W (11.99)			
794 TREE (39-067359) 390548.8300N/0842649.5100W (11.74)			879 TREE (39-058959) 390538.4100N/0842706.8600W (11.62)			
746 TREE (39-061165) 390552.4000N/0842638.2800W (11.31)			794 TREE (39-061863) 390539.5100N/0842643.3800W (11.01)			
881 TREE (39-059859) 390544.6800N/0842711.9000W (10.92)			764 TREE (39-066934) 390548.7600N/0842641.0900W (10.9)			
721 TREE (39-058754) 390555.3100N/0842633.2100W (10.86)			757 TREE (39-060397) 390546.5100N/0842637.7600W (10.17)			
858 TREE (39-057717) 390531.4400N/0842656.5200W (10.12)			770 TREE (39-059402) 390548.2800N/0842642.7300W (10.05)			
787 TREE (39-061563) 390545.1000N/0842645.4500W (10.04)			514 BUILDING (39-060535) 390606.4300N/0842541.5900W (9.99)			QUALITY 10 CHECKED
785 TREE (39-061859) 390549.0400N/0842647.5900W (9.92)			867 TREE (39-057791) 390527.4500N/0842656.5200W (9.67)			
896 TREE (39-058687) 390543.5600N/0842715.8700W (9.44)			866 TREE (39-061094) 390545.3500N/0842708.5600W (9.14)			
853 TREE (39-057719) 390539.8100N/0842701.1000W (9)			798 TREE (39-059262) 390541.0600N/0842646.1600W (9)			
866 TREE (39-067284) 390546.5200N/0842709.4800W (8.71)			874 TREE (39-061821) 390523.6000N/0842656.2100W (8.63)			
781 BUILDING (39-058454) 390545.0100N/0842644.1700W (8.29)			512 BUILDING (39-060539) 390606.6600N/0842541.7400W (8.01)			

<u>AIRPORT ID</u> KLUK		<u>PROCEDURE NAME</u> RNAV (GPS) RWY 21	<u>AMDT NO.</u> ORIG	<u>CITY</u> CINCINNATI	<u>STATE</u> OH	<u>AIRPORT ELEVATION</u> 482	<u>FACILITY</u> RNAV
787 BUILDING (39-058952) 390546.9800N/0842647.3200W (7.98)				787 TREE (39-066938) 390541.9800N/0842643.9800W (7.77)			
852 TREE (39-059665) 390527.6900N/0842652.9400W (7.71)				822 TREE (39-061262) 390541.7000N/0842653.8600W (7.69)			
895 TREE (39-058510) 390541.9500N/0842715.0100W (7.62)				866 TREE (39-061213) 390529.5500N/0842658.2500W (7.62)			
856 TREE (39-058622) 390535.0100N/0842659.1200W (7.52)				764 TREE (39-058584) 390544.4400N/0842639.1400W (7.46)			
706 TERRAIN (39-058492) 390557.5700N/0842631.4500W (7.34)				769 TREE (39-060369) 390552.4700N/0842646.0800W (7.31)			
884 TREE (39-059873) 390538.4800N/0842709.6600W (7.03)				821 TREE (39-060797) 390529.3600N/0842645.5900W (6.27)			
850 BUILDING (39-058624) 390541.0900N/0842702.1300W (5.45)				796 TREE (39-062000) 390533.2300N/0842641.3200W (5.31)			
849 TREE (39-059664) 390529.1200N/0842653.9100W (4.72)				829 TERRAIN (39-061656) 390535.2500N/0842652.3700W (4.6)			
850 TREE (39-059979) 390526.4200N/0842652.5800W (3.95)				793 TERRAIN (39-059856) 390548.0000N/0842651.0100W (3.55)			
545 TREE (39-060572) 390605.3400N/0842551.6400W (3.41)				838 BUILDING (39-060412) 390526.9300N/0842649.7300W (3.09)			
787 TREE (39-058957) 390540.8700N/0842644.6600W (2.77)				881 TREE (39-060140) 390536.4800N/0842708.7400W (2.5)			
853 TREE (39-067130) 390546.5200N/0842707.5800W (2.33)				545 TREE (39-061142) 390606.5100N/0842552.7800W (2.21)			
707 TREE (39-058045) 390545.2200N/0842624.9800W (1.62)				704 TREE (39-058036) 390546.5500N/0842625.1400W (1.22)			
743 TREE (39-060400) 390551.7600N/0842640.0700W (0.56)							
FINAL TYPE		LPV, LNAV/VNAV & LNAV RWY 21					
34:1							
529 TREE (39-057920) 390646.5600N/0842438.6500W (10.88)				570 TREE (39-059780) 390657.7400N/0842420.9400W (6.1)			
521 TREE (39-058129) 390644.3300N/0842433.6600W (4.93)				561 TREE (39-066564) 390658.9100N/0842434.2000W (4.87)			
518 TREE (39-058128) 390642.9000N/0842431.5600W (4.15)				537 TREE (39-059392) 390648.9000N/0842427.9200W (3.46)			
530 TREE (39-061405) 390647.2400N/0842430.0900W (2.88)				512 TREE (39-057587) 390643.5100N/0842438.8700W (2.53)			
579 TREE (39-058168) 390701.6600N/0842417.2000W (1.1)				556 TREE (39-061804) 390658.1000N/0842432.9300W (1.07)			
508 TREE (39-058555) 390642.7800N/0842438.6900W (0.41)				476 LIGHTING (39-067051) 390632.5500N/0842442.5900W (0.07)			
PENETRATIONS REMARKS:							

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.
100' VEGETATION USED PER FPT CHECKLIST.

FOR CONTINGENCY PURPOSES:
NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CINCINNATI/NORTH KENTUCKY INTL ALTIMETER SETTING AND INCREASE LPV DA TO 880 FEET; INCREASE LNAV/VNAV DA TO 1223 FEET AND ALL VISIBILITIES 1/4 SM; INCREASE ALL MDAS 100 FEET AND LNAV VISIBILITY CAT C AND D 1/4 SM, AND CIRCLING VISIBILITY CAT A, B AND C 1/2 SM.
NOTE: BARO-VNAV AND VDP NA WHEN USING CINCINNATI/NORTH KENTUCKY INTL ALTIMETER SETTING.
NOTE: CHART NOTE: FOR INOPERATIVE ALS WHEN USING CINCINNATI/NORTH KENTUCKY INTL ALTIMETER SETTING, INCREASE LPV ALL CATS VISIBILITY TO RVR 6000, LNAV/VNAV ALL CATS VISIBILITY TO 2 SM, LNAV CAT B VISIBILITY TO 1 1/4 SM AND CATS C AND D VISIBILITY TO 2 1/2 SM.

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	4.35
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.84
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	201.03
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	900
DISTANCE FROM	THLD	TO 1500FT POINT	4.67
WIDTH OF	INTERMEDIATE	SEGMENT AT 1500FT POINT	1.23
TRUE COURSE OF	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	201.07
HIGH TERRAIN IN	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	1000

THRESHOLD COORDINATES (IF STR-IN)	390630.09N/0842442.43W
ARP COORDINATES	390610.72N/0842503.38W
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 3 DISTANCE 0.62 NM
FAF COORDINATES	391051.74N/0842233.30W
FIX NAME COORDINATES	IF/IAF KUYEY 391714.68N/0841923.80W

REMARKS

PART E: PREPARED BY

NAME	OFFICE	DATE	TITLE
CASIMIR L. TABAKA (SILVIA YOUNG)	AJV-A432	03/04/2024	AERONAUTICAL INFORMATION SPECIALIST

