

**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> CUBA MUNI	<u>AIRPORT ID</u> KUBX	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> ORIG-D	<u>CITY</u> CUBA	<u>STATE</u> MO	
<u>AIRPORT ELEVATION</u> 1023	<u>TDZE</u> 1023	<u>SUPERSEDED</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>DATED</u> 09/15/2016	<u>MAG VAR</u> 1E	<u>EPOCH YEAR</u> 2000
<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

<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>
BACTA		PABXO		TF	FB	1.00	063.40	18.56	3000
BUNKS		RURVE		TF	FB	1.00	322.60	17.72	3000
PABXO	IAF	QUMXE	NOPT	TF	FB	1.00	094.59	6.00	3000
LENOX	IAF	QUMXE	NOPT	TF	FB	1.00	016.62	6.34	3000
RURVE	IAF	QUMXE	NOPT	TF	FB	1.00	274.75	6.00	3000
QUMXE	IF/IAF	SOGSE		TF	FB	1.00	004.67	6.10	2700
SOGSE	FAF	RW36	MAP	TF	FO	0.30	004.68	5.15	
RW36	MAP	1423 MSL		CA			004.68		
1423 MSL		JAXIP		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LP: RW36
LNAV: RW36

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT JAXIP AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD S QUMXE, RT, 004.67 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 004.68

FAF: SOGSE

DIST FAF TO MAP: 5.15

DIST FAF TO THLD: 5.15

4. MIN ALT: QUMXE 3000, SOGSE 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 NOT CLEAR

TCH:

8. MSA FROM: RW36 3000

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: RWY 36 HELICOPTER VISIBILITY REDUCTION BELOW 1 NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BACTA ON V289 SOUTHBOUND, AND ARRIVALS AT BUNKS ON V175 SOUTHEAST BOUND, AND ARRIVALS AT BUNKS ON V72-190 EASTBOUND, AND FOR ARRIVALS AT LENOX ON V238 SOUTHWEST BOUND.
CHART NOTE: USE ROLLA/VICHY ALTIMETER SETTING; WHEN NOT RECEIVED, USE FORT LEONARD WOOD ALTIMETER SETTING AND INCREASE ALL MDAs 60 FT.

ADDITIONAL FLIGHT DATA:

SOGSE TO RW36: 3.00/40
CHART ROLLA/VICHY ASOS
CHART CIRCLING ICON.
WAAS CHANNEL #70543
REFERENCE PATH ID: W36A
CHART FAS OBST: 1159 TREE 380327N/0912538W.
HOLD N, RT, 184.71 INBOUND
LTP HAE: 280 M

MINIMUMS:

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

ALTERNATE: NA ☒

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
LP MDA	1480	1	457	1480	1	457		NA			NA				
LNAV MDA	1480	1	457	1480	1	457		NA			NA				
CIRCLING	1580	1	557	1780	1	757		NA			NA				



CHANGES - REASONS

1. UPDATED FAS DATA BLOCK, LTP FROM 380350.7610N-0912546.0075W TO 380350.7612N-0912546.0079W; FPAP FROM 380519.5200N-0912534.8200W TO 380519.5192N-0912534.8178W; HAL FROM 50 TO 40; CRC REMAINED FROM CF187119 TO C5CBAA76. - REPULLED AIRNAV DATA/SYSTEM GENERATED.
2. CIRCLING CAT B RAISED MDA/HAA FROM 1580/557 TO 1780/757 - NEW OBSTACLE EVALUATION UPDATED CIRCLING RADII.
3. REPLACED CHART NOTE FROM "STRAIGHT IN RWY 36 NA AT NIGHT, CIRCLING RWY 36 NA AT NIGHT" TO "PROCEDURE NA AT NIGHT" - IAW .19H 8-6-11O2A.
4. ADDED CHART CIRCLING ICON - APPLIED EXPANDED CIRCLING RADII.
5. REMOVED DME/DME RNP 0.3NA - NOTE NO LONGER REQUIRED.
6. ADDED PBN REQUIREMENTS NOTE: RNP APCH - IAW .19H.
7. ADDED 20:1 NOT CLEAR - NOTE REQUIRED IAW .19H
8. ADDED CHART NOTE VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}) - VGSI DATA AVAIL/NOTE REQD IAW .19H.
9. ADDED TO ADDITIONAL FLIGHT DATA: CHART ROLLA/VICHY ASOS - IAW .19H PRIMARY REMOTE ALTIMETER.

COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAJ** ☐ **NBAA** ☒ **OTHER:** ZKC, AMGR

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY

Digitally signed by

HEIDI SNIDER

HEIDI SNIDER

Oct 07, 2019

OFFICE

AJV-A422

DATE

08/23/2019

APPROVED BY

MARLON ROBINSON

OFFICE

AJV-A420

DATE

TITLE
MANAGER

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KUBX
RUNWAY	RW36
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W36A
LTP/FTP LATITUDE	380350.7610N
LTP/FTP LONGITUDE	0912546.0075W
LTP/FTP ELLIPSOIDAL HEIGHT	+02800
FPAP LATITUDE	380519.5190N
FPAP LONGITUDE	0912534.8175W
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	1704
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	C5CBAA76

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03107
FPAP ORTHOMETRIC HEIGHT	+03107



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

AIRPORT	AIRPORT ID	PROCEDURE NAME	AMDT NO.	CITY	STATE	AIRPORT ELEVATION	FACILITY
CUBA MUNI	KUBX	RNAV (GPS) RWY 36	ORIG-D	CUBA	MO	1023	RNAV

PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM TO
BACTA PABXO

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>					
	18.56											
<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.TWR (29-001280)	375239.00N/0914446.00W		1693	500	50	5D	1000				AT307	3000
2.TERRAIN	374912.70N/0914729.20W		1239 (1200)								AT1500	2700

COMPUTATIONS

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

SEGMENT REMARKS:

FEEDER

FROM TO
BUNKS RURVE

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>					
	17.72											
<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	373636.70N/0910751.40W		1700	50	20	2C	1000					2700
4.TERRAIN	373742.00N/0910757.00W		1463 (1500)								AS1500	3000

COMPUTATIONS

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

SEGMENT REMARKS:



INITIAL

FROM
PABXO

TO
QUMXE

RNP	DISTANCE 6.00	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
5.AAO	375236.00N/0913239.00W		1384	164	98	4E	1000				AT616	3000
6.TERRAIN	375236.00N/0913239.00W		1184 (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
LENOX

TO
QUMXE

RNP	DISTANCE 6.34	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
7.AAO	374621.00N/0913115.00W		1407	164	98	4E	1000				AT593	3000
8.TERRAIN	374809.00N/0913136.00W		1207 (1200)								AS1500	2700

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FACILITY
RNAV

SEGMENT REMARKS:

FINAL: LP

FROM

SOGSE

TO

RW36

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	5.15		RW36		457							
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
13.TREE	380327.33N/0912537.50W		1159	50	20	2C	250				RA56	1480

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

FROM

SOGSE

TO

RW36

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	5.15		RW36		457							
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
13.TREE	380327.33N/0912537.50W		1159	50	20	2C	250				RA56	1480

COMPUTATIONS

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



SEGMENT REMARKS:

MISSED APPROACH : LNAV

FROM
RW36

TO
JAXIP

RNP	DISTANCE	PAT	MAP	HAT			HMAS 1324					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				3000
15.TWR (29-002394)	380806.00N/0912400.00W		1499	500	125	4D	1000					2500
16.TERRAIN	380330.00N/0912533.00W		1027 (1000)								AS1500	2500

COMPUTATIONS

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

SEGMENT REMARKS:

OBST #15 - AC 4D OE STUDY, 1999-ACE-352-OE.

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											
16.TOWER (29-002147)	380440.65N/0912429.03W	1.30	557	1204	20	3	1A	300		RA56 XP20	1580
CATEGORY B											
17.TOWER (29-000138)	380509.00N/0912354.00W	1.84	757	1359	500	125	4D	300		RA56 AC50	1780

CIRCLING REMARKS:

OBS 17. REQUEST 4D AC VERIFICATION TOWER 1359 MSL 380509.00N/0912354.00W (29-000138)
MATCH PUBLISHED

MSA

CENTER
RW36

RADIUS
25



SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TWR (29-001829)	380616.00N/0910230.00W	081	18.5	1971	500	125	5E	1000			3000

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

AIRPORT
CUBA MUNI

AIRPORT ID
KUBX

PROCEDURE NAME
RNAV (GPS) RWY 36

AMDT NO.
ORIG-D

CITY
CUBA

STATE
MO

AIRPORT ELEVATION
1023

FACILITY
RNAV



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH
ZKC ARTCC

<u>WX SERVICE</u> ASOS	<u>LOCATION</u> KVIH	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KVIH	<u>DISTANCE</u> 16.48	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 56
<u>BACK-UP WX SERVICE</u> ASOS	<u>LOCATION</u> KTBN	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KTBN	<u>DISTANCE</u> 39.03	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 107

WX REMARKS:
RASS PRESSURE PATTERNS SAME KUBX 1023, KVIH 1148, KTBN 1158 RA = 55.5/107.2

<u>PRIMARY NAVAID</u>	<u>MONITOR POINT</u>	<u>HRS OPERATION</u>	<u>CAT</u>
<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>		<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW18 - MIRL (PCL), REIL (PCL), PAPI-2L		NPI-G	
RW36 - MIRL (PCL), REIL (PCL), PAPI-2L		NPI-G	

<u>GLIDESLOPE ANGLE</u>	<u>ELEV RWY THRESHOLD</u>	<u>TCH</u>	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u> 3.00	<u>TCH</u> 49.7
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FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	<input checked="" type="checkbox"/>	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	<input checked="" type="checkbox"/>	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

<u>CRITICAL LOW</u>	<u>CRITICAL HIGH</u>	<u>ACT</u>	<u>APT ISA</u>
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CRITICAL TEMPERATURE REMARKS:



Final Type	LNAV FINAL		
20:1			
1073 TREE (29-029406) 380340.96N/0912544.80W (14.75)			
Final Type	LNAV FINAL		
34:1			
1058 TRANSMISSION_LINE (29-023674) 380340.90N/0912545.42W (15.42)		1063 TRANSMISSION_LINE (29-023673) 380339.10N/0912549.97W (14.03)	

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

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



<u>AIRPORT</u> CUBA MUNI	<u>AIRPORT ID</u> KUBX	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 36	<u>AMDT NO.</u> ORIG-D	<u>CITY</u> CUBA	<u>STATE</u> MO	<u>AIRPORT ELEVATION</u> 1023	<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	3.01
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.64
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	005.68
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	1059
DISTANCE FROM	THLD	TO 1500FT POINT	6.11
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	2.25
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	005.68
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	1059

THRESHOLD
COORDINATES
(IF STR-IN)

380350.76N/0912546.01W

ARP COORDINATES

380407.58N/0912543.89W

RUNWAY APCH END
AND DIST FURTHEST
FROM ARP

RUNWAY 36 DISTANCE 0.55 NM

FAF
COORDINATES

375842.84N/0912624.77W

FIX NAME
COORDINATES

REMARKS

NO ADDITIONAL AIRSPACE REQUIRED

QUALITY
31
CHECKED

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

Electronic Version

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PART E: PREPARED BY

<u>NAME</u> HEIDI SNIDER	<u>OFFICE</u> AJV-A422	<u>DATE</u> 08/23/2019	<u>TITLE</u> AERONAUTICAL INFORMATION SPECIALIST
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