

**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> CTY	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 31	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> CROSS CITY	<u>STATE</u> FL
<u>AIRPORT ELEVATION</u> 42	<u>TDZE</u> 42	<u>SUPERSEDED</u> RNAV (GPS) RWY 31	<u>DATED</u> 09/12/2019	<u>MAG VAR</u> 5W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>EPOCH YEAR</u> 2010
			<u>CANCEL/SUSPEND</u>	

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 229/30 CW 049/30	NOPT	229/15 CW 049/15		2500
2. 229/15 CW 049/15		OKBIE	IF/IAF	2000
3. 049/30 CW 139/30		WASET	IAF	2000
4. 139/30 CW 229/30		SNTFE	IAF	2000

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>
WASET	IAF	OKBIE	NOPT	TF	FB	1.00	048.65	7.00	2000
SNTFE	IAF	OKBIE	NOPT	TF	FB	1.00	228.74	7.00	2000
OKBIE	IF/IAF	HAMVU		TF	FB	1.00	318.69	6.04	1600
HAMVU	FAF	RW31	MAP	TF	FO	0.30	318.65	4.71	
RW31	MAP	292 MSL		CA			318.65		
292 MSL		GRSSO		DF	FO	1.00			2000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW31

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 DIRECT GRSSO AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

QUALITY
10
CHECKED

PROFILE:

1.	PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)									
2.	HOLD SE OKBIE, RT, 318.69 INBOUND, 2000 FT. IN LIEU OF PT (IAF), MAX 6000.														
3.	FAC:	318.65	FAF:	HAMVU	DIST FAF TO MAP:	4.71	DIST FAF TO THLD:	4.71							
4.	MIN ALT:	OKBIE 2000, HAMVU 1600													
5.	DIST TO THLD FROM OM:		MM:		IM:		150 HAT:		250 HAT:	0.60	GS ANT:				
6.	MIN GP INCPT:	1600	GP ALT AT PFAF:	HAMVU 1600					OM:		MM:			IM:	
7.	GP ANGLE:	3.00	34:1:	IS NOT CLEAR	20:1:	IS NOT CLEAR	TCH:	59.0							
8.	MSA FROM:														

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: RWY 31 HELICOPTER VISIBILITY REDUCTION BELOW 1SM NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: BARO-VNAV NA WHEN USING X60 ALTIMETER SETTING.
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 X60 ALTIMETER SETTING AND INCREASE LPV DA TO 383 FEET; INCREASE LNAV/VNAV DA TO 514 FEET AND ALL VISIBILITIES 1/4 SM. INCREASE ALL MDAS 100 FEET AND LNAV VISIBILITY CATS C AND D 1/4 SM, AND CIRCLING VISIBILITY CATS C AND D 1/4 SM.
CHART NOTE: STRAIGHT-IN RWY 31 NA AT NIGHT, CIRCLING RWY 4, 13, 31 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

FAS OBST: 240 AAO 293442N/0830254W
HOLD SE, RT, 318.55 INBOUND.
WAAS CHANNEL # 45620
REFERENCE PATH ID: W31A
CHART CIRCLING ICON.
LTP HAE: -15.3 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	292	1	250	292	1	250	292	1	250	292	1	250			
LNAV/VNAV DA	423	1 1/8	381	423	1 1/8	381	423	1 1/8	381	423	1 1/8	381			
LNAV MDA	500	1	458	500	1	458	500	1 3/8	458	500	1 3/8	458			
CIRCLING	500	1	458	520	1	478	660	1 3/4	618	660	2	618			



CHANGES - REASONS

1. ADDED TAA – PER FPT REQUEST.
2. TERMINAL ROUTES: REMOVED FEEDER SEGMENT FROM CTY VORTAC TO OKBIE WP – CTY VOR MON.
3. TERMINAL ROUTES: REMOVED INITIAL SEGMENT FROM ORATE WP TO OKBIE WP – REPLACED BY TAA.
4. TERMINAL ROUTES: ADDED NEW INITIAL SEGMENT FROM WASET WP TO OKBIE WP – NEW TAA.
5. TERMINAL ROUTES: ADDED NEW INITIAL SEGMENT FROM SNTFE WP TO OKBIE WP – NEW TAA.
6. TERMINAL ROUTES: REDUCED INTERMEDIATE SEGMENT LENGTH FROM 6.10 NM TO 6.04 NM – PFAF HANVU MOVED 364.75 FEET SOUTHEAST TO MATCH DESIGN ANGLE/TCH.
7. TERMINAL ROUTES: INCREASED FINAL SEGMENT DISTANCE FROM 4.65 NM TO 4.71 NM – PFAF HAMVU MOVED.
8. TERMINAL ROUTES: LOWERED MISSED SEGMENT CA LEG ALTITUDE FROM 383 MSL TO 292 MSL – LOWER LPV DA/HAT PER TARGETS RESULTS.
9. TERMINAL ROUTES: REMOVED MISSED APPROACH SEGMENT FROM CA ALTITUDE TO WATKI WP – MISSED APPROACH REDESIGN PER FPT.
10. TERMINAL ROUTES: REMOVED MISSED APPROACH SEGMENT FROM WATKI WP TO ZEVEL WP – MISSED APPROACH REDESIGN PER FPT.
11. TERMINAL ROUTES: REMOVED MISSED APPROACH SEGMENT FROM ZEVEL WP TO JUVIX WP – MISSED APPROACH REDESIGN PER FPT.
12. TERMINAL ROUTES: REMOVED MISSED APPROACH SEGMENT FROM JUVIX WP TO OKBIE WP – MISSED APPROACH REDESIGN PER FPT.
13. TERMINAL ROUTES: ADDED NEW MISSED APPROACH SEGMENT FROM CA ALTITUDE TO GRSSO WP – NEW MISSED APPROACH AND HOLDING PER FPT.
14. MISSED APPROACH INSTRUCTIONS: CHANGED FROM “CLIMB TO 2000 DIRECT WATKI AND RIGHT TURN ON TRACK 049 TO ZEVEL AND ON TRACK 139 TO JUVIX AND RIGHT TURN ON TRACK 229 TO OKBIE AND HOLD” TO “CLIMB TO 2000 DIRECT GRSSO AND HOLD” – MISSED APPROACH REDESIGN PER FPT.
15. PROFILE LINE 3: CHANGED “DIST FAF TO MAP” AND “DIST FAF TO THLD” FROM 4.65 TO 4.71 – FAF HAMVU MOVED 364.75 FEET SOUTHEAST AND IAW 8260.19J PARA 8-6-7.C(3) AND (4).
16. PROFILE LINE 5: CHANGED “DIST TO THLD FROM 341 HAT: 0.89” TO “DIST TO THLD FROM 250 HAT: 0.60” – IAW 8260.19J PARA 8-6-7.E(3) AND LPV HAT LOWERED FROM 341 TO 250 PER NEW TARGETS RESULTS.
17. PROFILE LINE 8: REMOVED MSA DATA – MSA REPLACED BY TAA.
18. NOTES: CHANGED BARO-VNAV NOTE FROM “BARO-VNAV NA” TO “BARO-VNAV NA WHEN USING X60 ALTIMETER SETTING” – IAW 8260.19J PARA 8-6-10.E(8).
19. NOTES: CHANGED REMOTE ALTIMETER SETTING NOTE FROM “CHART NOTE: USE WILLISTON ALTIMETER SETTING; WHEN NOT RECEIVED, USE GAINESVILLE ALTIMETER SETTING AND INCREASE ALL DA 25 FEET AND ALL MDA 40 FEET” TO “CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE X60 ALTIMETER SETTING AND INCREASE LPV DA TO 383 FEET; INCREASE LNAV/VNAV DA TO 514 FEET AND ALL VISIBILITIES 1/4 SM. INCREASE ALL MDAS 100 FEET AND LNAV VISIBILITY CAT C/D 1/4 SM, AND CIRCLING VISIBILITY CAT C/D 1/4 SM” - IAW 8260.19J PARA 8-6-10.F(4).
20. NOTES: REMOVED “CHART NOTE: PROCEDURE NA AT NIGHT” AND ADDED “CHART NOTE: STRAIGHT-IN RWY 31 NA AT NIGHT, CIRCLING RWY 4, 13, 31 NA AT NIGHT.” – OBSTACLES PENETRATE 20:1 SURFACE AND NEW CIRCLING MINIMUMS ADDED.
21. NOTES: ADDED “CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C OR ABOVE 54C” - CRITICAL TEMPS ADDED AND BASED ON STANDARD -30C ISA DEVIATION IAW 8260.19J PARA 8-6-10 R.
22. ADDITIONAL FLIGHT DATA: REMOVED “CHART WILLISTON MUNI AWOS” – NOT REQUIRED, PRIMARY UPGRADED TO AWOS 3PT..
23. ADDITIONAL FLIGHT DATA: CHANGED FAS OBST NOTE FROM “FAS OBST: 239 AAO 293438N/0830344W” TO “FAS OBST: 240 AAO 293442N/0830254W” – NEW TARGETS RESULTS.
24. ADDITIONAL FLIGHT DATA: ADDED “HOLD SE, RT, 318.55 INBOUND” - NEW MISSED APPROACH HOLDING AT GRSSO.
25. ALTERNATE MINIMUMS: CHANGED FROM “NA” TO “STANDARD – NA WHEN LOCAL WEATHER NOT AVAILABLE” – IAW 8260.19J PARA 8-6-12.B(4).
26. MINIMUMS: LOWERED LPV HAT/DA ALL CATS FROM 383/341 TO 292/250 AND VISIBILITY ALL CATS FROM 1 ¼ TO 1 – NEW OBSTACLE EVALUATION.
27. MINIMUMS: LOWERED LNAV/VNAV HAT/DA ALL CATS FROM 546/504 TO 423/381 AND VISIBILITY ALL CATS FROM 1 ¾ TO 1 1/8 – NEW TARGETS RESULTS AND IAW 8260.3F TABLE 3-3-1.
28. MINIMUMS: LOWERED LNAV MDA/HAT ALL CATS FROM 580/538 TO 500/458 AND VISIBILITY CAT C FROM 1 ½ TO 1 3/8 AND VISIBILITY CAT D FROM 1 ¾ TO 1 3/8 – NEW TARGETS RESULTS AND IAW 8260.3F TABLE 3-3-1.
29. MINIMUMS: ADDED CIRCLING MINIMUMS FOR ALL CATS – PER FPT REQUEST.
30. CRC REMAINDER CHANGED FROM “5BBB80B3” TO “CA1423B3” – FPAP LAT/ON CHANGED FROM “293839.8000N/ 0830718.8700W” TO “293839.7995N/ 0830718.8815W”.

COORDINATED WITH:

A4A

ALPA

X

AOPA

X

APA

HAI

NBAA

X

OTHER: ZJX, ARPT MGR

FLIGHT CHECKED BY

WILLIAM M YINGLING

Digitally signed by

DAVID DANNER

Mar 03, 2025

OFFICE

AJF

DATE

02/26/2025

DEVELOPED BY

DAVID DANNER (GEORGE H. TYLER)

Digitally signed by

DAVID DANNER

Mar 03, 2025

OFFICE

AJV-A421

DATE

11/22/2024

APPROVED BY

DAVID DANNER

Digitally signed by

DAVID DANNER

Mar 03, 2025

OFFICE

AJV-A421

DATE

04/17/2025

TITLE

MANAGER

QUALITY
10
CHECKED

FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KCTY
RUNWAY	RW31
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W31A
LTP/FTP LATITUDE	293738.1915N
LTP/FTP LONGITUDE	0830604.8535W
LTP/FTP ELLIPSOIDAL HEIGHT	-00153
FPAP LATITUDE	293839.7995N
FPAP LONGITUDE	0830718.8815W
THRESHOLD CROSSING HEIGHT (TCH)	00059.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1224
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	CA1423B3

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00124
FPAP ORTHOMETRIC HEIGHT	+00124



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

<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>AMDT NO.</u>	<u>CITY</u>	<u>STATE</u>	<u>AIRPORT ELEVATION</u>	<u>FACILITY</u>
CTY	RNAV (GPS) RWY 31	2	CROSS CITY	FL	42	RNAV

PART A: OBSTRUCTION DATA SEGMENTS

STRAIGHT-IN AREA

FROM 229/30 CW 049/30 **TO** 229/15 CW 049/15

<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>
TOWER (12-002158)	291533.00N/0823402.00W	1439	250	50	4D	1000					2500
TERRAIN	294251.00N/0822736.00W	200 (200)								AS1500	1700

COMPUTATIONS

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

SEGMENT REMARKS:

STRAIGHT-IN AREA

FROM 229/15 CW 049/15 **TO** OKBIE

<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>
TOWER (12-003831)	293631.93N/0825058.12W	549	50	50	2D	1000				AT451	2000
TERRAIN	293757.00N/0824303.00W	111 (100)								AS1500	1600

COMPUTATIONS

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

SEGMENT REMARKS:



LEFT BASE AREA

FROM

049/30 CW 139/30

TO

WASET

<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>
TOWER (12-001592)	294349.00N/0831415.00W	502	500	50	5D	1000				AT498	2000
TERRAIN	293754.00N/0830836.00W	65 (100)								AS1500	1600

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

RIGHT BASE AREA

FROM

139/30 CW 229/30

TO

SNTFE

<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>
TOWER (12-004259)	294926.00N/0823347.00W	648	50	20	2C	1000				AT352	2000
TERRAIN	295800.00N/0823721.00W	180 (200)								AS1500	1700

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INITIAL

FROM

WASET

TO

OKBIE

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>	<u>HMAS</u>				
1.00	7.00										
<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	292803.00N/0825742.00W	240	215	8	4B	1000				AT760	2000
TERRAIN	292857.00N/0825536.00W	42 (0)								AS1500	1500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INITIAL

FROM

SNTFE

TO

OKBIE

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>	<u>HMAS</u>				
1.00	7.00										
<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 (12-003830)	293349.06N/0825520.12W	345	20	3	1A	1000				AT655	2000
TERRAIN	293230.00N/0825139.00W	59 (100)								AS1500	1600

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INTERMEDIATE

FROM

OKBIE (IF/IAF)

TO

HAMVU

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>		<u>HMAS</u>				
1.00	6.04										
<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	292903.00N/0825603.00W	240	215	8	4B	500				AT860	1600
TERRAIN	293127.00N/0825530.00W	45 (0)								AS1500	1500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LPV

FROM

HAMVU

TO

RW31

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>		<u>HMAS</u>				
0.30	4.71		DA		250						
<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 (12-022509)	293734.17N/0830605.19W	104	50	20	2C		34.00:1			AC20	292

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FINAL: LNAV/VNAV

FROM

HAMVU

TO

RW31

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>		<u>HMAS</u>				
0.30	4.71		DA		381						
<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	293721.00N/0830451.00W	140	215	8	4B		23.43:1			AC8	423

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV

FROM

HAMVU

TO

RW31

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>		<u>HMAS</u>				
0.30	4.71		RW31		458						
<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	293442.00N/0830254.00W	240	215	8	4B	250					500

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

OKBIE

TO

P-4

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u> P-4	<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 (12-002225)	292818.70N/0825141.40W	537	100	20	3C	1000				AT463	2000
TERRAIN	293106.00N/0825221.00W	65 (100)								AS1500	1600

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

GRSSO

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30-1.00										99	
<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				2000
TOWER (12-001592)	294349.00N/0831415.00W	502	500	50	5D	1000					1600
TERRAIN	293745.00N/0830509.00W	72 (100)								AS1500	1600

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

GRSSO

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>	<u>HMAS</u>				
0.30-1.00										262	
<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				2000
TOWER (12-001592)	294349.00N/0831415.00W	502	500	50	5D	1000					1600
TERRAIN	293745.00N/0830509.00W	72 (100)								AS1500	1600

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH: LNAV

FROM

RW31

TO

GRSSO

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30-1.00											400
<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				2000
TOWER (12-001592)	294349.00N/0831415.00W	502	500	50	5D	1000					1600
TERRAIN	293745.00N/0830509.00W	72 (100)								AS1500	1600

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



AIRPORT ID
CTY

PROCEDURE NAME
RNAV (GPS) RWY 31

AMDT NO.
2

CITY
CROSS CITY

STATE
FL

AIRPORT ELEVATION
42

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											
TOWER (12-197165)	293726.93N/0830641.10W	1.30	458	192	20	3	1A	300			500
CATEGORY B											
TANK (12-000398)	293852.00N/0830833.00W	1.81	478	214	100	20	3C	300			520
CATEGORY C											
TOWER (12-004736)	293828.44N/0830901.99W	2.84	618	346	50	20	2C	300			660
CATEGORY D											
TOWER (12-004736)	293828.44N/0830901.99W	3.70	618	346	50	20	2C	300			660

CIRCLING REMARKS:

MSA/ESA

CENTER

RADIUS

REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

ZJX ARTCC, JAX APP CON

WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	WMSCR	ADJUSTMENTS
AWOS-3PT	CTY	24	CTY	0	Y	0
BACK-UP WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	WMSCR	ADJUSTMENTS
AWOS-3T	X60	24	X60	37.24	Y	91

WX REMARKS:

RASS PRESSURE PATTERNS SAME
CTY 42, X60 80
RA= 91.0

PRIMARY NAVAID	MONITOR POINT	HRS OPERATION	CAT
APPROACH AND RUNWAY LIGHTING SYSTEM		RUNWAY MARKINGS	RUNWAY VISUAL RANGE
RW04 - MIRL (PCL), PAPI-2L (PCL)		NPI-P	
RW13 - MIRL (PCL), REIL, PAPI-2L (PCL)		NPI-P	
RW22 - MIRL (PCL), PAPI-2L (PCL)		NPI-P	
RW31 - MIRL (PCL), REIL, PAPI-2L (PCL)		NPI-P	

GLIDESLOPE ANGLE	ELEV RWY THRESHOLD	TCH	ELEV GS ANTENNA	DISTANCE FROM RWY	VGSI ANGLE	TCH
3.00	40.6	59.0			3.00	36.3

FINAL APPROACH COURSE AIMING

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

CRITICAL TEMPERATURES

CRITICAL LOW	CRITICAL HIGH	ACT	APT ISA
-15C	+54C	-15C	+14.92C

CRITICAL TEMPERATURE REMARKS:

AVERAGE COLD TEMPERATURE DERIVED FROM STANDARD -30C ISA DEVIATION.
CRITICAL LOW TEMPERATURE BASED ON ACT.
DESCENT RATE (FPM): STANDARD TEMP 955 HIGH TEMP 1260.

"VISUAL PORTION OF FINAL" PENETRATIONS

FINAL TYPE	CIRCLING: RW04	QUALITY 10 CHECKED
20:1		
101 TREE (12-022349) 293755.40N/0830641.99W (1.89)		
FINAL TYPE	CIRCLING: RW13	

AIRPORT ID CTY	PROCEDURE NAME RNAV (GPS) RWY 31	AMDT NO. 2	CITY CROSS CITY	STATE FL	AIRPORT ELEVATION 42	FACILITY RNAV
20:1						
111 TREE (12-022389) 293818.93N/0830658.95W (15.29)			105 TREE (12-022374) 293818.17N/0830658.06W (14.78)			
116 TREE (12-022273) 293822.05N/0830658.91W (9.54)						
FINAL TYPE	CIRCLING: RW31					
20:1						
90 TREE (12-022542) 293729.83N/0830555.61W (0.73)						
FINAL TYPE	LPV, LNAV/VNAV, AND LNAV					
20:1						
90 TREE (12-022542) 293729.83N/0830555.61W (0.73)						
FINAL TYPE	LPV, LNAV/VNAV, AND LNAV					
34:1						
92 TREE (12-022541) 293730.05N/0830554.42W (20.99)			96 TREE (12-022558) 293731.42N/0830550.74W (20.88)			
94 TREE (12-022537) 293726.80N/0830556.61W (20.44)			91 TREE (12-022539) 293731.92N/0830552.44W (20.10)			
88 TREE (12-022543) 293727.91N/0830556.84W (17.15)			86 TREE (12-022540) 293731.75N/0830553.68W (17.08)			
86 TREE (12-022535) 293730.64N/0830553.39W (14.26)			86 TREE (12-022544) 293728.44N/0830555.36W (13.45)			
75 TREE (12-022545) 293729.83N/0830559.55W (13.18)			81 TREE (12-022536) 293728.91N/0830556.89W (12.29)			
84 TREE (12-022559) 293730.59N/0830552.21W (9.94)			94 TREE (12-022577) 293725.71N/0830552.01W (9.56)			
75 TREE (12-022556) 293728.61N/0830558.59W (8.87)			64 TREE (12-022561) 293731.35N/0830600.88W (7.79)			
95 TREE (12-022569) 293726.11N/0830549.58W (6.82)			91 TREE (12-022583) 293724.66N/0830552.95W (6.18)			
92 TREE (12-022578) 293724.35N/0830551.79W (4.36)			96 TREE (12-022570) 293724.70N/0830549.15W (4.12)			
86 TREE (12-022564) 293728.43N/0830549.06W (1.59)			79 TREE (12-022584) 293725.65N/0830555.63W (1.24)			
76 TREE (12-022560) 293728.58N/0830553.52W (0.28)			78 TREE (12-022590) 293727.20N/0830553.88W (0.13)			
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:

AVERAGE VEGETATION HEIGHT 100' PER EST FPT.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

PUBLISHED REMOTE ALTIMETER NOTE RETAINED PER FPT.

VDP NOT PUBLISHED DUE TO 20:1 PENETRATIONS.
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	3.15
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	313.65
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	100
DISTANCE FROM	THLD	TO 1500FT POINT	4.71
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	2.13
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	313.65
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	100

THRESHOLD COORDINATES (IF STR-IN)	293738.19N/0830604.85W
ARP COORDINATES	293807.90N/0830617.10W
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 22 DISTANCE 0.65 NM
FAF COORDINATES	293422.63N/0830210.16W
FIX NAME COORDINATES	

REMARKS

IAF WASET 292507.27N 0830241.96W 30 NM RADIUS
IAF SNTFE 293516.14N 0825136.97W 30 NM RADIUS
IF/IAF OKBIE 293011.82N 0825709.74W 30 NM RADIUS

PART E: PREPARED BY

NAME	OFFICE	DATE	TITLE
DAVID DANNER (GEORGE H. TYLER)	AJV-A421	11/22/2024	AERONAUTICAL INFORMATION SPECIALIST

