Flight Procedure Tracking Form	Action: FLIGHT CHECK	Task Type: IAP	Date Open: 09/19/2011	Task #: 20110614224917	Request #: 20110614224917
Procedure: RNAV (GPS) RWY 21 AMDT 2		**Airport ID:** KFOA	**Airport:** FLORA MUNI		**Reimbursable #:**
City: FLORA	**ST:** IL	**GPS #:**		**Estimated Chart Date:** 05/31/2012	**FICO #:**
Fac ID:	**Fac. Type:** LPV		**Specialist:** THOMAS KIRKPATRICK		

LPV

Procedure Review

	Rec'd	Rel'd	Full Name	Comments
Lead:	11/09/2011	01/05/2012	STEVEN SZUKALA	
QA:	01/05/2012	01/05/2012	STEVEN SZUKALA	
Liaison:	01/05/2012		Terrell	

Procedure Comments: ENROUTE **Remark Type:** INFORMATION

pg 2 of 2

FLORA, IL FLORA MUNI (KFOA) RNAV (GPS) RWY 21, AMDT 2 (LPV) ENROUTE-YES FC: 4.3.12 PUB: 5.31.12

ATTACHED FORMS: 8260-3; 8260-10; 8260-9; 8260-2(S): FIPEN, REV 3; HANEL, REV 3; JISID, REV 3; JOVAR-INT, ORIG; BIBLE GROVE (BIB) VTAC, REV 9.

CONTACT: JOSE ALFONSO/STEVE BARNETT, AJV-353 LEADS, 405.954.6378/9568:

NEW

FLORA, ILLINOIS

AL-6547 (FAA)

FIG

RNAV (GPS) RWY 21

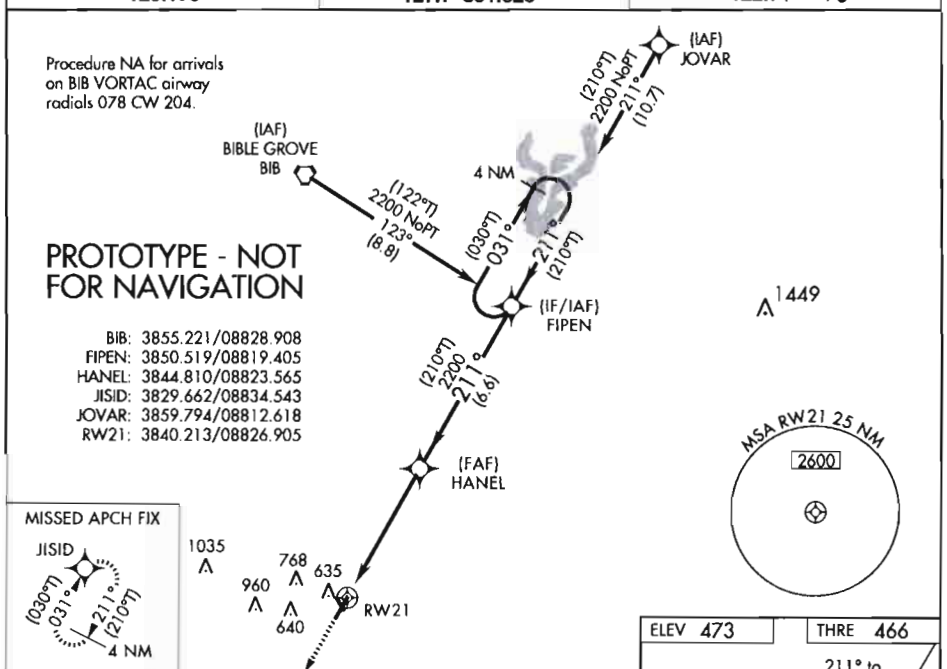
FLORA MUNI (FOA)

WAAS CH 86428 W21A	APP CRS 211°	Rwy ldg 5003 THRE 466 Apt Elev 473

Baro-VNAV NA when using Olney-Noble altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). When VGSI inop, Straight-In/Circling Rwy 21 procedure NA at night. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Olney-Noble altimeter setting and increase all DA 33 feet and all MDA 40 feet; increase LNAV/VNAV visibility ⅛ mile all Cats, and Circling Cat C visibility ¼ mile. Circling to Rwy 15/33 NA at night.

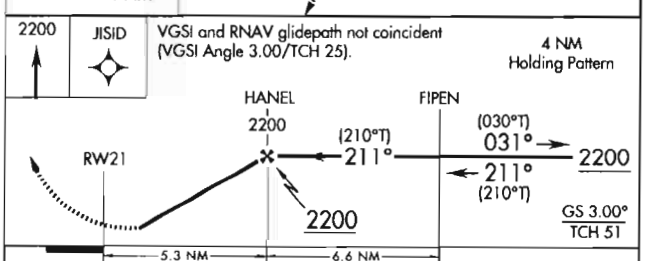
MISSED APPROACH: Climb to 2200 direct JISID and hold.

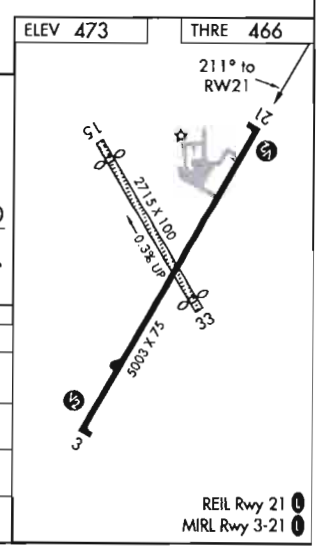
AWOS-3	KANSAS CITY CENTER	UNICOM
120.175	127.7 351.825	122.7 (CTAF)



PROTOTYPE - NOT FOR NAVIGATION

BIB: 3855.221/08828.908
FIPEN: 3850.519/08819.405
HANEL: 3844.810/08823.565
JISID: 3829.662/08834.543
JOVAR: 3859.794/08812.618
RW21: 3840.213/08826.905





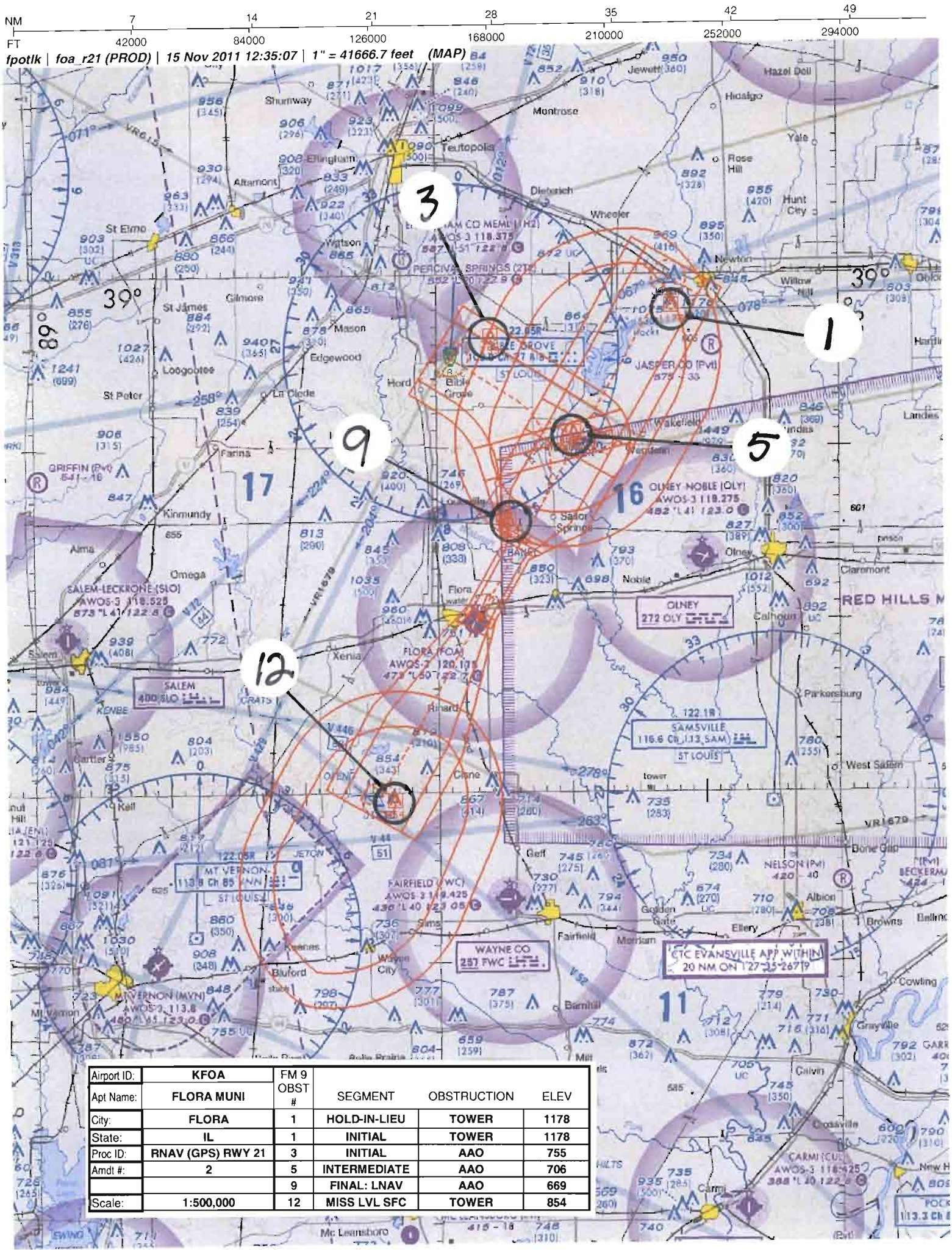
CATEGORY	A	B	C	D
LPV DA	742-1 276 (300-1)			NA
LNAV/VNAV DA	784-1 318 (400-1)			NA
LNAV MDA	920-1 454 (500-1)		920-1⅜ 454 (500-1⅜)	NA
CIRCLING	940-1 467 (500-1)		1120-1¾ 647 (700-1¾)	NA

FLORA, ILLINOIS
Amdt 2 FIG

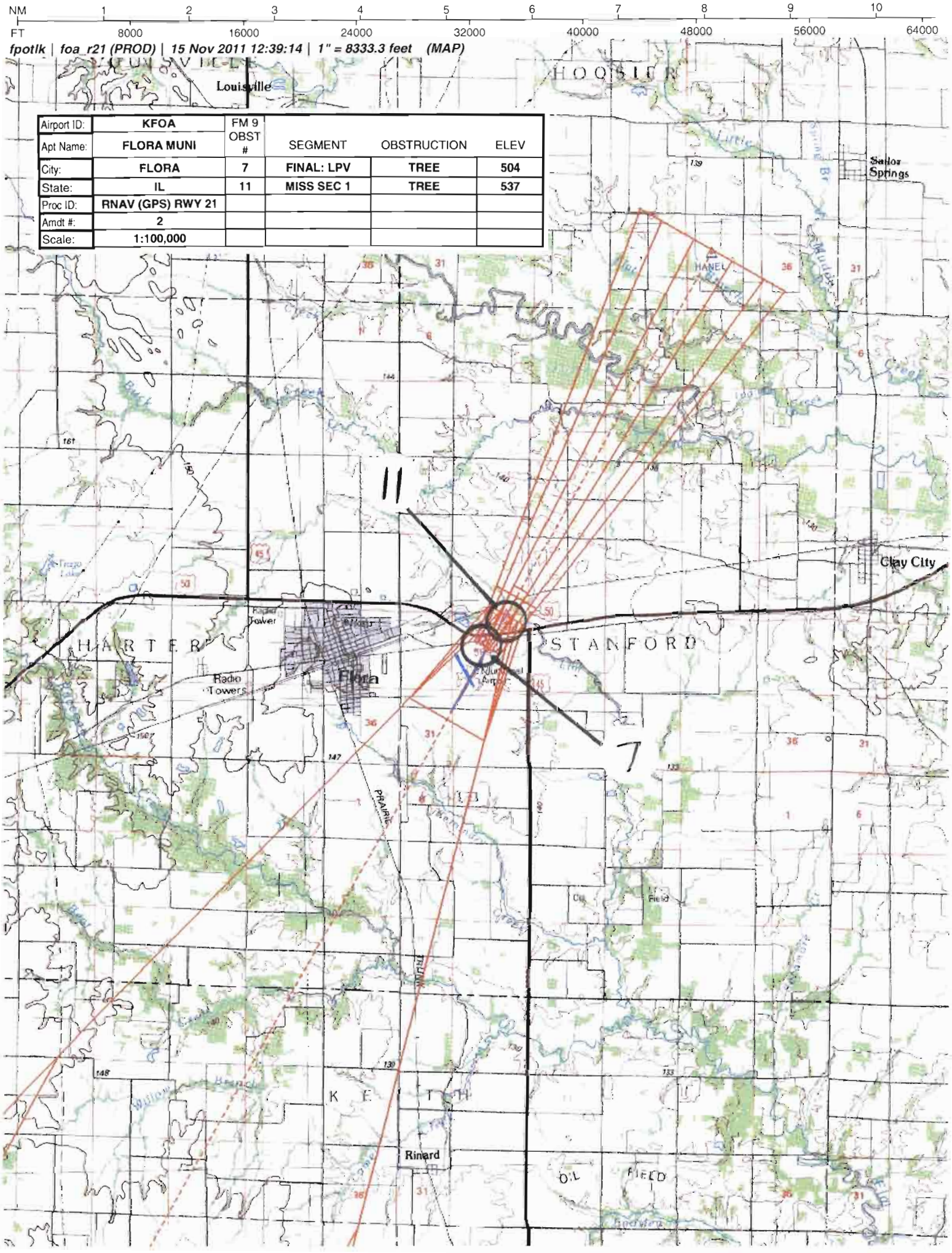
38°40'N-88°27'W

FLORA MUNI (FOA)

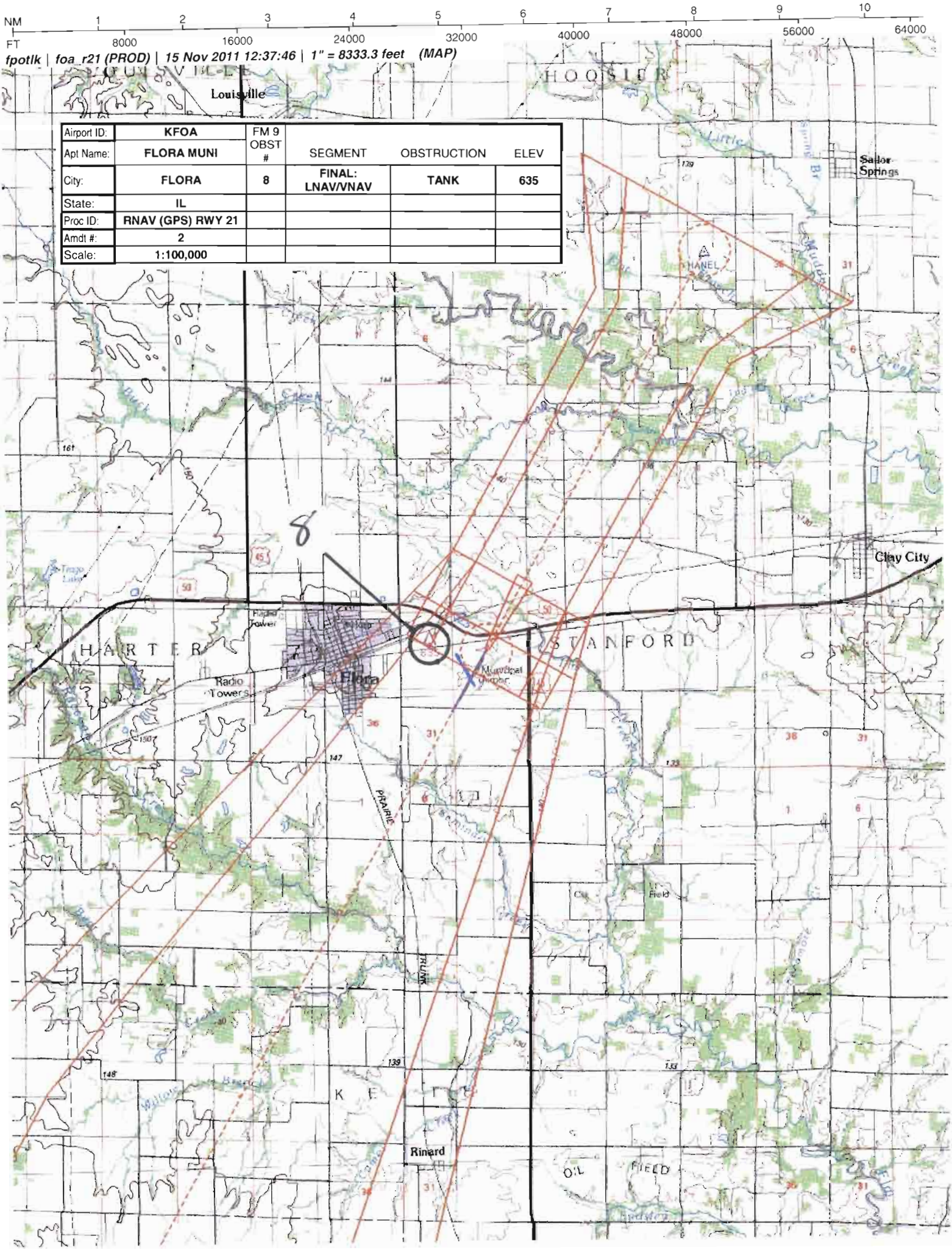
RNAV (GPS) RWY 21

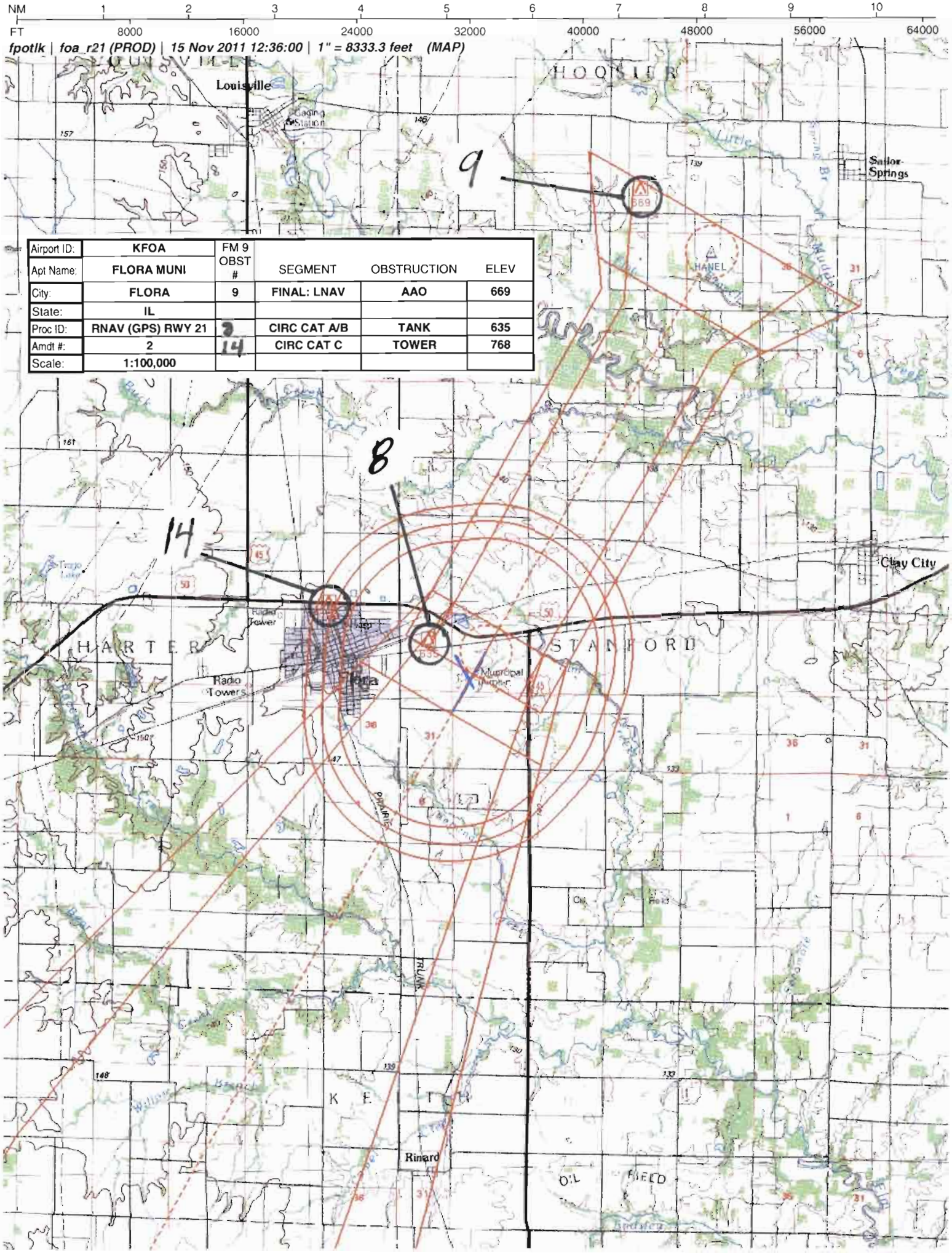


Airport ID:	KFOA	FM 9 OBST #	SEGMENT	OBSTRUCTION	ELEV
Apt Name:	FLORA MUNI				
City:	FLORA	1	HOLD-IN-LIEU	TOWER	1178
State:	IL	1	INITIAL	TOWER	1178
Proc ID:	RNAV (GPS) RWY 21	3	INITIAL	AAO	755
Amdt #:	2	5	INTERMEDIATE	AAO	706
		9	FINAL: LNAV	AAO	669
Scale:	1:500,000	12	MISS LVL SFC	TOWER	854



Airport ID:	KFOA	FM 9 OBST #	SEGMENT	OBSTRUCTION	ELEV
Apt Name:	FLORA MUNI				
City:	FLORA	7	FINAL: LPV	TREE	504
State:	IL	11	MISS SEC 1	TREE	537
Proc ID:	RNAV (GPS) RWY 21				
Amdt #:	2				
Scale:	1:100,000				


NM 1 2 3 4 5 6 7 8 9 10
FT 8000 16000 24000 32000 40000 48000 56000 64000
fpotlk | foa_r21 (PROD) | 15 Nov 2011 12:37:46 | 1" = 8333.3 feet (MAP)
Louisville
HOOSIER
Sailor Springs
Clay City
HARTER
STANFORD
Flora
Radio Towers
Municipal Airport
PRAIRIE
TRUNK
Rinard
OIL FIELD
Airport ID: KFOA
Apt Name: FLORA MUNI
City: FLORA
State: IL
Proc ID: RNAV (GPS) RWY 21
Amdt #: 2
Scale: 1:100,000
FM 9 OBST #: 8
SEGMENT: FINAL: LNAV/VNAV
OBSTRUCTION: TANK
ELEV: 635



Airport ID:	KFOA	FM 9 OBST #	SEGMENT	OBSTRUCTION	ELEV
Apt Name:	FLORA MUNI				
City:	FLORA	9	FINAL: LNAV	AAO	669
State:	IL				
Proc ID:	RNAV (GPS) RWY 21	8	CIRC CAT A/B	TANK	635
Amdt #:	2	14	CIRC CAT C	TOWER	768
Scale:	1:100,000				

US DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33

Bearings, headings, courses, 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 in feet RVR.

TERMINAL ROUTES

FROM	TO	COURSE AND DISTANCE	ALTITUDE
JOVAR (IAF)	FIPEN (NOPT) (FB)	210.79 / 10.67	2200
BIB VORTAC (IAF)	FIPEN (NOPT) (FB)	123.28 / 8.78	2200
FIPEN (IF/IAF)	HANEL (FB)	210.72 / 6.57	2200
HANEL (FAF)	RW21 (MAP) (FO)	210.68 / 5.28	
RW21 (MAP)	742 MSL	210.68	
742 MSL	JISID (FO)		2200

MISSED APPROACH

LPV: DA
LNAV/VNAV: DA
LNAV: RW21

CLIMB TO 2200 DIRECT JISID AND HOLD.

ADDITIONAL FLIGHT DATA:

HOLD SW, RT, 030.57 INBOUND.
FAS OBST: 669 AAO 384527N/0882436W
DISTANCE TO THLD FROM 276 HATH: 0.70 NM.
WAAS CHANNEL # 86428
REFERENCE PATH ID: W21A
LTP HAE: 110.9 M

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. HOLD NE FIPEN, RT, 210.72 INBOUND, 2200 FT. IN LIEU OF PT (IAF)
3. FAC: 210.68 FAF: HANEL DIST FAF TO MAP: 5.28 THLD: 5.28
4. MIN. ALT: FIPEN 2200, HANEL 2200
5. DIST TO THLD FROM OM: ____ MM: ____ IM: ____ 150 HAT: ____ 100 HAT: ____ GS ANT: ____
6. MIN GS INCPT: 2200 GS ALT AT: HANEL 2200 OM: ____ MM: ____ IM: ____
7. GS ANGLE: 3.00 TCH: 51.0 34:1 IS NOT CLEAR
8. MSA FROM: RW21 2600

MAG VAR: 1W EPOCH YEAR: 2000

MINIMUMS

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT | ALTERNATE: N A | STANDARD @

CATEGORY =====>	A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
LPV DA	742	1	276	742	1	276	742	1	276		NA				
LNAV/VNAV DA	784	1	318	784	1	318	784	1	318		NA				
LNAV MDA	920	1	454	920	1	454	920	1 3/8	454		NA				
CIRCLING	940	1	467	940	1	467	1120	1 3/4	647		NA				

NOTES:
CHART NOTE: CIRCLING TO RWY 15/33 NA AT NIGHT.
CHART NOTE: BARO-VNAV NA WHEN USING OLNEY-NOBLE ALTIMETER SETTING.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 54C (130F).
CHART NOTE: WHEN VGSI INOP, STRAIGHT-IN/CIRCLING RWY 21 PROCEDURE NA AT NIGHT.
(SEE FORM 8260-10)

@ NA WHEN LOCAL WEATHER NOT AVAILABLE.

QUALITY 2 CHECKED

CITY AND STATE	ELEVATION: 473 THRE: 466 AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP:
FLORA, IL	FLORA MUNI	RNAV	RNAV (GPS) RWY 21, AMDT 2	AMDT: 1A
				DATED 05/06/2010

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
[ ] YES [X] NO		**ROUTINE**

COORDINATED WITH:

ATA	AAT	ALPA	APA	AOPA	NBAA	OTHER (specify)
[ ]	[ ]	[ ]	[ ]	[X]	[X]	[X] **ZKC, AMGR**

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:

DEVELOPED BY		
NAME:	FIFO	DATE:
THOMAS L KIRKPATRICK	**AJV-353**	**11/15/2011**

APPROVED BY		
NAME:	FIFO	DATE:
LARRY H STROUT MANAGER	**AJV-353**	

CHANGES:

1. ADD LPV AND LNAV/VNAV LINES OF MINIMUMS AND ALL ASSOCIATED NOTES.
2. KENBE AND SAM VOR/DME FEEDERS AND AGAKE IAF REMOVED.
3. CHANGED BIB VORTAC TO FIPEN COURSE FROM 127 TO 123.
4. ADD JOVAR AS INITIAL.
5. CHANGED FIPEN TO HANEL DISTANCE FROM 6.09 TO 6.57
6. CHANGED FAF TO MAP/THLD FROM 5.24/5.24 TO 5.28/5.28.
7. RAISED LNAV MDA/HAT FROM 900/430 TO MDA/HATH 920/454.
8. CHANGED LNAV CAT C VISIBILITY FROM 1 1/4 TO 1 3/8.
9. MADE PROCEDURE NA AT NIGHT WHEN VGSI INOP.
10. REVISED ALL PLANVIEW NA NOTES.
11. UPDATED BACK-UP ALTIMETER.
12. CHANGED FAS OBST FROM 635 TANK TO A 669 AAO.
13. REMOVED VDA.
14. ADDED CIRCLING RESTRICTION TO RWY 15/33.

REASONS:

1. FTW FPT REQUEST.
2,4. ATC REQUEST.
3,5. FIPEN MOVED AS RESULT OF IMPLEMENTAION OF NEW CRITERIA.
6. FAF MOVED TO RNP PFAF LOCATION.
7,12. NEW CONTROLLING OBSTACLE.
8. NEW VISIBILITY TABLE.
9. VISUAL SURFACE (20:1) PENETRATED.
10,11. NEW NOTES APPLY.
13. VERTICLE GUIDENCE PROVIDED.
14. NO SURVEY.

PDF EDITS:
TERMINAL ROUTES - ADD (FAF) AFTER HANEL, CHANGED 742 TO 2200.

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33

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NOTES, (CONT.):
CHART NOTE: DME/DME RNP-0.3 NA.
CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON BIB VORTAC AIRWAY RADIALS 078 CW 204.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OLNEY-NOBLE ALTIMETER SETTING AND INCREASE ALL DA 33 FEET AND ALL MDA 40 FEET; INCREASE LNAV/VNAV VISIBILITY 1/8 MILE ALL CATS, AND CIRCLING CAT C VISIBILITY 1/4 MILE.

QUALITY 2 CHECKED

CITY AND STATE	ELEVATION: 473 THRE: 466	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
FLORA, IL	AIRPORT NAME: **FLORA MUNI**	**RNAV**	**RNAV (GPS) RWY 21, AMDT 2**	AMDT: **1A**
				DATED: **05/06/2010**

ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	FIFO	DATE:
APPROVED BY		
NAME:	FIFO	DATE:

CHANGES:

REASONS:

QUALITY CHECKED 2

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FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KFOA
RUNWAY	RW21
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W21A
LTP/FTP LATITUDE	384012.7770N
LTP/FTP LONGITUDE	0882654.3170W
LTP/FTP ELLIPSOIDAL HEIGHT	+01109
FPAP LATITUDE	383855.2600N
FPAP LONGITUDE	0882750.5700W
THRESHOLD CROSSING HEIGHT (TCH)	00051.0
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	F48D102F

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01421
FPAP ORTHOMETRIC HEIGHT	+01421

QUALITY 2 CHECKED

CITY AND STATE	ELEVATION: 473 THRE: 466	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
FLORA, IL	AIRPORT NAME: FLORA MUNI	RNAV	RNAV (GPS) RWY 21, AMDT 2	AMDT: 1A
				DATED: 05/06/2010

ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	FIFO	DATE:
APPROVED BY		
NAME:	FIFO	DATE:

CHANGES:

REASONS:

QUALITY CHECKED 2

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.33**

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ARINC PACKET - 424-8 - RNAV (GPS)

```
                1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAD        BIB   K5010900VTL  N38551324W088285450    N38551324W088285450E0030005401     NARBIBLE GROVE

                1         2         3         4         5         6         7         8         9         0         1         2         3
WP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   FIPEN K50    W     N38503111W088192427                    W0025     NAR           FIPEN
        SUSAEAENRT   HANEL K50    W     N38444859W088233388                    W0025     NAR           HANEL
        SUSAEAENRT   JISID K50    W     N38293970W088343260                    W0023     NAR           JISID
        SUSAEAENRT   JOVAR K50    C   L N38594762W088123706                    W0027     NAR           JOVAR

                1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KFOAK5AFOA     0     050YHN38395396W088271120W001000473         1800018000C    MNAR    FLORA MUNI

                1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KFOAK5FR21   ABIB   010BIB  K5D 0V  A    IF                                          18000                A JS
        SUSAP KFOAK5FR21   ABIB   020FIPENK5EA0EE B 010TF                    12330088    + 02200                      A JS
        SUSAP KFOAK5FR21   AFIPEN 010FIPENK5EA0EE AR   HF                   21070040    + 02200     18000            A JS
        SUSAP KFOAK5FR21   AJOVAR 010JOVARK5EA0E  A    IF                                      18000                A JS
        SUSAP KFOAK5FR21   AJOVAR 020FIPENK5EA0EE B 010TF                    21080107    + 02200                      A JS
        SUSAP KFOAK5FR21   R      010FIPENK5EA0E  I    IF                                     + 02200     18000            A JS
        SUSAP KFOAK5FR21   R      020HANELK5EA1E  F 051TF                    21070066    + 02200                RW21  K5PGA JS
        SUSAP KFOAK5FR21   R      020HANELK5EA2WALPV       ALNAV/VNAV ALNAV                                                JS
        SUSAP KFOAK5FR21   R      030RW21 K5PG0GY M 031TF                    21070053      00517          -300           A JS
        SUSAP KFOAK5FR21   R      040         0  M     CA                   2107        + 00742                      A JS
        SUSAP KFOAK5FR21   R      050JISIDK5EA0EY       DF                             + 02200                      A JS
        SUSAP KFOAK5FR21   R      060JISIDK5EA0EE  R    HM                   03060040    + 02200                      A JS

                1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
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                1         2         3         4         5         6         7         8         9         0         1         2         3
PP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KFOAK5PR21   RW21 001 0000W21A0N3840127770W08826543170+011090300N3838552600W088275057001067512240005 0F400500F48D102F
        SUSAP KFOAK5PR21   RW21 002E      +01421+01421LPV       86428
```

QUALITY 1 CHECKED

CITY AND STATE	ELEVATION: **473** **THRE: 466**	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
FLORA, IL	AIRPORT NAME: **FLORA MUNI**	**RNAV**	**RNAV (GPS) RWY 21, AMDT 2**	AMDT: **1A**
				DATED: **05/06/2010**

ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

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```
                1         2         3         4         5         6         7         8         9         0         1         2         3
MSA     123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        --------------------------------------------------------------------------------------------------------------------------------
        SUSAP KFOAK5SRW21 K5PG                0   18018002625                                                                    M
```

QUALITY 1 CHECKED

CITY AND STATE	ELEVATION: 473 THRE: 466	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
FLORA, IL	AIRPORT NAME: FLORA MUNI	RNAV	RNAV (GPS) RWY 21, AMDT 2	AMDT: 1A
				DATED: 05/06/2010

ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.33**

Bearings, headings, courses, 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 in feet RVR.

ARINC SUMMARY - 424-8 - RNAV (GPS)

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	BIB	BIB	010	IAF	IF		FB					
	BIB	FIPEN	020		TF		FB	1.0	123.3(122.3T)	008.8	AA 02200	
	FIPEN	FIPEN	010	IAF	HF	R	FO		210.7(209.7T)	004.0	AA 02200	
	JOVAR	JOVAR	010	IAF	IF		FB					
	JOVAR	FIPEN	020		TF		FB	1.0	210.8(209.8T)	010.7	AA 02200	
		FIPEN	010	FACF	IF		FB				AA 02200	
		HANEL	020	FAF	TF		FB	0.5	210.7(209.7T)	006.6	AA 02200	
		RW21	030	MAP	TF		FO	0.3	210.7(209.7T)	005.3	AT 00517	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		210.7(209.7T)		AA 00742	
	JISID	050		DF		FO				AA 02200	
	JISID	060		HM	R	FO		030.6(029.6T)	004.0	AA 02200	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	BIB	N385513.24	W0882854.50	N3855.221	W08828.908
	FIPEN	N385031.11	W0881924.27	N3850.519	W08819.405
	HANEL	N384448.59	W0882333.88	N3844.810	W08823.565
	JISID	N382939.70	W0883432.60	N3829.662	W08834.543
	JOVAR	N385947.62	W0881237.06	N3859.794	W08812.618
	RW21	N384012.78	W0882654.32	N3840.213	W08826.905

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW21	00466	51

QUALITY 1 CHECKED

CITY AND STATE	ELEVATION: **473** **THRE: 466**	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
FLORA, IL	AIRPORT NAME: **FLORA MUNI**	**RNAV**	**RNAV (GPS) RWY 21, AMDT 2**	AMDT: **1A**
				DATED: **05/06/2010**

ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
INITIAL	JOVAR	FIPEN	1. TOWER (17-002560)	385751.00N/0881224.00W	1178 (5D)	1000		2200
			2. TERRAIN	385700.00N/0881145.00W	581 (600)		AS1500	2100
INITIAL	BIB VORTAC	FIPEN	3. AAO	385606.00N/0882554.00W	755 (4E)	1000	AT445	2200
			4. TERRAIN	385645.00N/0882718.00W	555 (600)		AS1500	2100
INTERMEDIATE	FIPEN (IF/IAF)	HANEL	5. AAO	385030.00N/0881945.00W	706 (4E)	500	AC98 AT896	2200
			6. TERRAIN	385027.00N/0881945.00W	502 (500)		AS1500	2000
FINAL: LPV	HANEL	RW21	7. TREE (KFOAT0056)	384016.64N/0882656.77W	504 (2C)	34:1	AC20 MA26	742/276
FINAL: LNAV/VNAV	HANEL	RW21	8. TANK (17-002726)	384016.00N/0882745.00W	635 (2C)	PDA	AC20	784/318
FINAL: LNAV	HANEL	RW21	9. AAO	384527.22N/0882436.36W	669 (2C)	250		920
2. HOLD-IN-LIEU-OF-PT	FIPEN	P-5	1. TOWER (17-002560)	385751.00N/0881224.00W	1178 (5D)	1000		2200
			10. TERRAIN	385630.00N/0881127.00W	591 (600)		AS1500	2100
3. MISSED APPROACH MAP:	DA / DA / RW21	JISID	11. TREE (KFOAT0065)	384031.71N/0882636.06W	537 (2C)	ASC		2200
			12. TOWER (17-000782)	382913.17N/0883319.18W	854 (4D)	1000		1900
ELEV:	543/634/820		13. TERRAIN	383133.00N/0883157.00W	539 (500)		AS1500	2000

4. CIRCLING AREA	DISTANCE				HT. ABV. ARPT.					
CATEGORY A	1.3 NM	REQUIRED	350	ACTUAL	467	8. TANK (17-002726)	384016.00N/0882745.00W	635 (2C)	300	940
CATEGORY B	1.5 NM		450		467	8. TANK (17-002726)	384016.00N/0882745.00W	635 (2C)	300	940
CATEGORY C	1.7 NM		450		647	14. TOWER (17-000645)	384042.00N/0882914.00W	768 (5D)	300	AC50 1120
CATEGORY D	2.3 NM		550							
CATEGORY E	4.5 NM		550							

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID: RW21

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	MSA
360-360	TWR (17-001372)	252/ 23.6	1550 (5D)	2600					

QUALITY CHECKED 2

CITY AND STATE		FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
FLORA, IL	ELEVATION: 473 AIRPORT NAME: FLORA MUNI	RNAV	RNAV (GPS) RWY 21, AMDT 2	AGL

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE		3. ALTIMETER SETTING
ZKC ARTCC STL FSS	N W S	OTHER: AWOS-3	SOURCE: KFOA / KOLY
	F A A		DISTANCE: 0 / 13.44
SATISFACTORY ON:	A / C		HOURS REMOTE OPERATION:
X V H F X U H F H F	LOCATION: KFOA		ADJUSTMENT: 0 / 33

4. MONITOR STATUS		
PRIMARY NAVAID:		
MONITOR POINT:		
HRS OPTN:	CAT 1	
	CAT 3	

5. APPROACH & RUNWAY LIGHTING	
	ALS
	(S) SALS
	MALS
	HIRL
X	MIRL 21 (PCL), 03 (PCL)
X	REIL 21 (PCL)
	TDZ
	C/LINE
X	OTHER (SPECIFY) PVASI-2L 21 (PCL), 03 (PCL)

6. RUNWAY MARKINGS	
BASIC	
ALL WEATHER	
INSTRUMENT	NPI-G 03; -F 21

7. RUNWAY VISUAL RANGE	
APPROACH	
MIDFIELD	
ROLL OUT	

8. GLIDE PATH		
GP ANGLE: 3.00		ELEV RWY THRESHOLD: 466.1
DISTANCE FROM RWY:		ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT: 51.0

9. FINAL APPROACH COURSE AIMING			
	X	RUNWAY THRESHOLD	FT. FROM THRESHOLD
	X	ON CENTERLINE	FT. FROM CENTERLINE

10. WAIVERS: NONE

PART D - PREPARED BY:	DATE:
THOMAS L KIRKPATRICK	11/15/2011
TITLE: AERONAUTICAL INFORMATION SPECIALIST	OFFICE: AJV-353

PART C - REMARKS:

VDP NOT ESTABLISHED - OBSTACLE'S PENETRATE 20:1.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

RWY 15/33 TURF RWY NO LIGHTS.

VGSI 3.00/TCH 25.3

LPV:
SURFACE = 34:1
LNAV/VNAV:
SURFACE = 23.56:1

AVERAGE COLD TEMPERATURE BASED ON 5 YEAR AVERAGE (2006-2010)

RASS PRESSURE PATTERNS SAME
KFOA 473, KOLY 482
RA = 32.2.
SEE ATTACHED AIRSPACE LETTER.

NO TAA AT ATC REQUEST.

51 FOOT TCH USED FOR PROCEDURE DEVELOPMENT TO MITIGATE GQS PENETRATER (ROAD KFOAT0080).

ORDER 8260.3, VOLUME 1, "VISUAL PORTION OF FINAL" PENETRATIONS:
20:1
504 TREE (KFOAT0056) 384016.64N/0882656.77W (35.74)
513 TREE (KFOAT0086) 384021.61N/0882654.26W (17.98)
408 TREE (KFOAT0077) 384021.25N/0882651.93W (9.99)
479 ROAD (KFOAT0081) 384016.38N/0882654.92W (8.26)
477 ROAD (KFOAT0080) 384015.57N/0882653.10W (6.25)
506 TREE (KFOAT0076) 384022.27N/0882651.59W (2.84)

ORDER 8260.3, VOLUME 1, "VISUAL PORTION OF FINAL" PENETRATIONS:
34:1
519 TREE (KFOAT0072) 384028.18N/0882643.94W (7.00)
537 TREE (KFOAT0065) 384030.71N/0882636.06W (6.79)
493 POLE (KFOAT0059) 384022.39N/0882653.00W (6.42)
526 TREE (KFOAT0063) 384030.72N/0882642.61W (5.90)
522 TREE (KFOAT0062) 384030.45N/0882644.23W (4.47)
518 TREE (KFOAT0060) 384031.16N/0882645.98W (0.65)
478 ROAD (KFOAT0082) 381019.91N/0882655.02W (0.16)

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: FIPEN **STATE:** IL **COUNTRY:** US

LATITUDE/LONGITUDE: 385031.11N/0881924.27W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	NE		WP	030.72	210.72	R		4	2200	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (17-002560)	385751.00N/0881224.00W	1178	5D

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETE.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 21		1	KFOA	FLORA	IL (US)
IAP	RNAV (GPS) RWY 3		1	KFOA	FLORA	IL (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3 **DATE OF REVISION:** 05/31/2012

REASON FOR REVISION:
UPDATED COORDINATES, FIX MOVED 3197 FEET NE.
CHANGED HOLDING INBOUND FROM 210.73 TO 210.72, CHANGED HOLDING DME OUTBOUND LEGS FROM 5 TO 4 NM, CHANGED CONTROLLING OBSTACLE FROM A 1075 MSL TOWER TO A 1178 MSL TOWER.

DEVELOPED BY: **DATE:** 11/14/2011 **OFFICE:** AJV-353 **NAME:** THOMAS KIRKPATRICK

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZKC
ATC FACILITY:
OTHER:

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: HANEL **STATE:** IL **COUNTRY:** US

LATITUDE/LONGITUDE: 384448.59N/0882333.88W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 21			KFOA	FLORA	IL (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3 **DATE OF REVISION:** 05/31/2012

REASON FOR REVISION:
UPDATE FIX COORDINATES, FIX MOVED 284 FEET NNE.
REMOVED FAC 1.

DEVELOPED BY: **DATE:** 11/14/2011 **OFFICE:** AVN-120 **NAME:** THOMAS KIRKPATRICK

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZKC, ZID
ATC FACILITY:
OTHER:

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: JISID **STATE:** IL **COUNTRY:** US

LATITUDE/LONGITUDE: 382939.70N/0883432.60W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	SW		WP	210.57	030.57	R		4	2200	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (17-000782)	382913.17N/0883319.18W	854	4D

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETE.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 21		1	KFOA	FLORA	IL (US)
IAP	RNAV (GPS) RWY 3		1	KFOA	FLORA	IL (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3 **DATE OF REVISION:** 05/31/2012

REASON FOR REVISION:
UPDATE FIX COORDINATES, FIX MOVED 121 FEET NE.
UPDATED HOLDING PATTERN INBOUND FROM 030.58 TO 030.57, CHANGED HOLDING DME OUTBOUND LEGS FROM 5 TO 4 NM, UPDATE OBSTACLE NUMBER (ONLY THE NUMBER).

DEVELOPED BY: **DATE:** 11/14/2011 **OFFICE:** AJV-353 **NAME:** THOMAS KIRKPATRICK

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZKC
ATC FACILITY:
OTHER:

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: JOVAR **STATE:** IL **COUNTRY:** US

LATITUDE/LONGITUDE: 385947.62N/0881237.06W **TYPE:** WP, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	BIBLE GROVE	BIB	VORTAC	L	067.14	070.14	13.50	13.50		2300	17500

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V12	1				(US)
IAP	RNAV (GPS) RWY 21			KFOA	FLORA	IL (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 05/31/2012

DEVELOPED BY: **DATE:** 11/14/2011 **OFFICE:** AJV-353 **NAME:** THOMAS KIRKPATRICK

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZKC
ATC FACILITY:
OTHER:

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: BIBLE GROVE VORTAC **STATE:** IL **COUNTRY:** US

LATITUDE/LONGITUDE: 385513.24N/0882854.50W **TYPE:**

"INFO ONLY"

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	BIBLE GROVE	BIB	VORTAC	L							17500

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	S	BIB	VORTAC	161.02	341.02	L	1		2300	6000	4	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	200	STACK (17-000868)	385606.00N/0881625.00W	1075	6E
1	200	AAO	385821.00N/0882639.00W	768	4E

REASON FOR NONSTANDARD HOLDING:
PAT 1 COMPATIBLE WITH PROCEDURE TURN AT EFFINGHAM

HOLDING RESTRICTIONS:
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 3000 FEET.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	GATEWAY			KALN	ALTON/ST LOUIS	IL (US)
DP	GATEWAY			KBLV	BELLEVILLE	IL (US)
DP	GATEWAY			KCPS	CAHOKIA/ST LOUIS	IL (US)
DP	GATEWAY			KSTL	ST LOUIS	MO (US)
DP	GATEWAY			KSUS	ST LOUIS	MO (US)
EN ROUTE	V12					(US)
EN ROUTE	V221					(US)
EN ROUTE	V429					(US)
EN ROUTE	V72					(US)
IAP	LOC RWY 29		1	K1H2	EFFINGHAM	IL (US)
IAP	VOR RWY 1		1	K1H2	EFFINGHAM	IL (US)
IAP	LOC/DME RWY 21		1	KFOA	FLORA	IL (US)
IAP	RNAV (GPS) RWY 21			KFOA	FLORA	IL (US)
IAP	ILS RWY 23			KMVN	MOUNT VERNON	IL (US)
IAP	VOR RWY 23			KMVN	MOUNT VERNON	IL (US)
IAP	LOC RWY 11			KOLY	OLNEY/NOBLE	IL (US)
IAP	NDB RWY 03			KOLY	OLNEY/NOBLE	IL (US)
IAP	RNAV (GPS) RWY 09			KRSV	ROBINSON	IL (US)
IAP	RNAV (GPS) RWY 27			KRSV	ROBINSON	IL (US)
IAP	NDB RWY 18			KSLO	SALEM	IL (US)
STAR	RACYR			KIND	INDIANAPOLIS	IN (US)
STAR	CHERI			KSDF	LOUISVILLE	KY (US)

REQUIRED CHARTING: DP, STAR, IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: LOW

RECORD REVISION NUMBER: 9 **DATE OF REVISION:** 04/05/2012

REASON FOR REVISION:
UPDATE FIX COORDINATES, FIX MOVED 3 FEET.

DEVELOPED BY: **DATE:** 01/03/2012 **OFFICE:** AJV-353 **NAME:** STEVEN BARNETT (GRACE NOWAK)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZKC
ATC FACILITY:
OTHER: ZID

QUALITY 2 CHECKED

TERMINAL AIRSPACE DATA REQUIREMENTS

CITY: **FLORA** STATE: **IL**

AIRPORT NAME: **FLORA MUNI** ID: **KFOA**

PROCEDURE: **RNAV (GPS) RWY 21** AMDT: **2**

DOCKET#: **NOT REQUIRED**
(96-AXX-X/Required/Not Required)

ALL DIST TO 1/100 NM; ELEV TO NEAREST FT; COORD TO 1/100 SEC; DEG TO 1/100 DG.

1. Distance from **THLD** to 1000' point **2.95**
   (Enter THLD, FAF, ARP, FACILITY, as appropriate)
2. Width of **FINAL** segment at 1000' point **1.20**
   (Enter appropriate segment, final, intermediate, etc.)
3. True Course of **FINAL** segment containing 1000' point **209.68**
4. High Terrain in **FINAL** segment containing 1000' point **469**
5. Distance from **THLD** to 1500' point **4.88**
   (If 1500' point in PT maneuvering area or holding pattern note in remarks)
6. Width of **FINAL** segment at 1500' point **1.76**
7. True Course of **FINAL** segment containing 1500' point **209.68**
8. High Terrain in **FINAL** segment containing 1500' point **469**
9. Threshold Coordinates (if straight-in) ... **384012.78N** / **0882654.32W**
10. ARP Coordinates ..... **383953.96N** / **0882711.20W**
11. Runway Approach End and distance furthest from ARP ..... RWY **3**
    Distance **0.44** NM
12. FAF Coordinates ..... **384448.59N** / **0882333.88W**

REMARKS: Approach/Drawing attached.