Flight Procedure Tracking Form	Action: FLIGHT CHECK	Task Type: IAP	Date Open: 11/10/2011	Task #: 2011081023032101010	Request #: 20110810230321
Procedure: RNAV (GPS) RWY 35 AMDT 1		Airport ID: KAUM	Airport: AUSTIN MUNI		Reimbursable #:
City: AUSTIN	ST: MN	GPS #:		Estimated Chart Date: 04/05/2012	FICO #:
Fac ID:	Fac. Type: LPV-200 HAT		Specialist: JEFF RAWDON(Contractor)		

LPV

Procedure Review

	Rec'd	Rel'd	Full Name	Comments
Lead:	08/12/2011	12/21/2011	CASIMIR TABAKA	
QA:	12/21/2011	12/21/2011	CASIMIR TABAKA	
Liaison:	12/21/2011		Terrell	

P3

Procedure Comments:

Remark Type: INFORMATION

pg 1 of 2

AUSTIN, MN AUSTIN MUNI (KAUM) RNAV (GPS) RWY 35, AMDT 1 (LPV) ENROUTE-NO FC: 2.21.12 PUB: 4.5.12

ATTACHED FORMS: 8260-3; 8260-10; 8260-9; 8260-2(S): DACAB-INT, REV 2; FARUN-INT, REV 3; ICUNE, REV 1; MAROE, REV 1; ROCHESTER (RST) VDME, REV 15; ZEBOG-INT, ORIG; ZONVO, REV 1; (INFO ONLY) MASON CITY (MCW) VTAC, REV 14.

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

RNAV (GPS) RWY 35
AUSTIN MUNI (AUM)

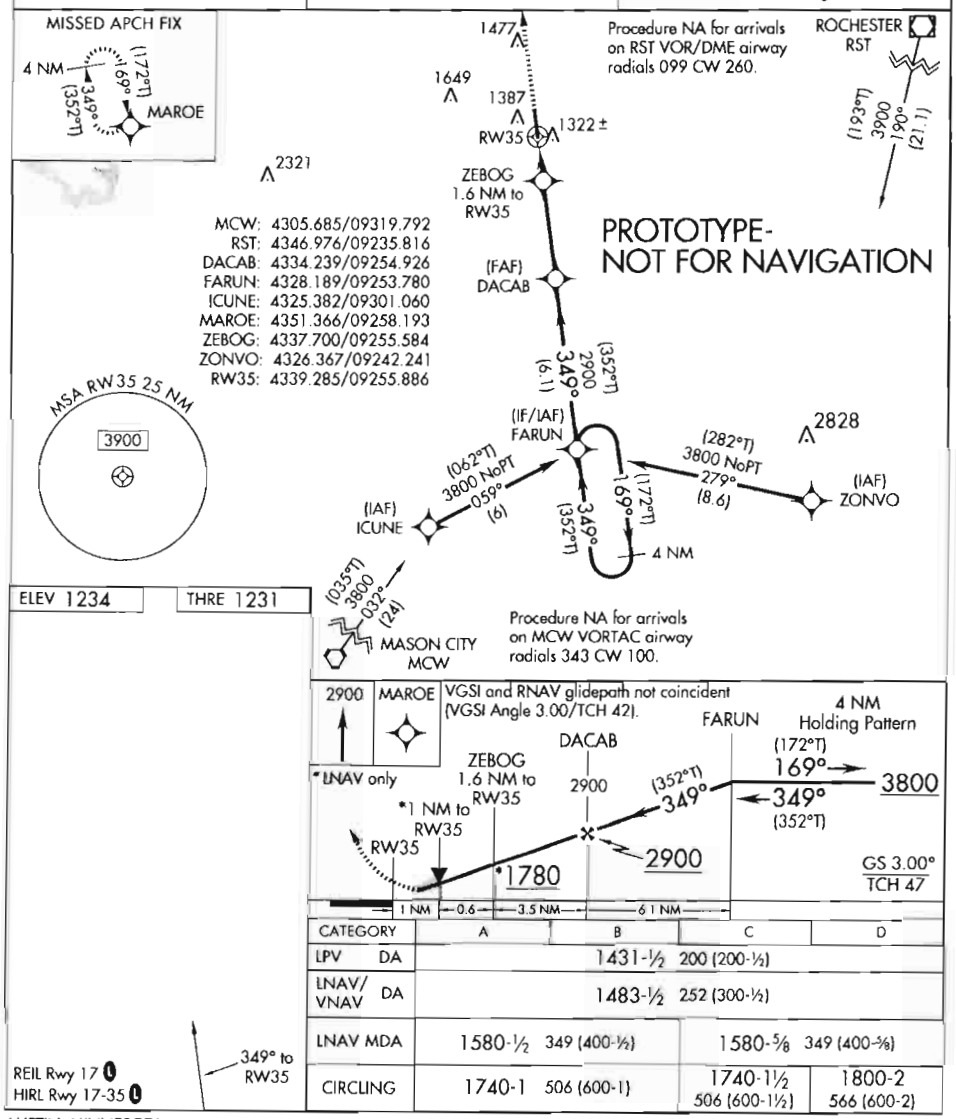
WAAS CH 99506 W35A	APP CRS 349°	Rwy ldg 5800 THRE 1231 Apt Elev 1234

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 36°C (96°F). DME/DME RNP-0.3 NA. Baro-VNAV and VDP NA with Albert Lea altimeter setting. When local altimeter setting not received, use Albert Lea altimeter setting and increase all DA 48 feet and all MDA 60 feet and increase LNAV Cats C and D visibility ⅛ mile. For inoperative MALSR, increase LNAV/VNAV all Cats visibility to ¾ mile and LNAV Cats C and D bisibility to 1 mile. For inoperative MALSR when using Albert Lea altimeter setting, increase LNAV Cats C and D visibility to 1⅛ mile.

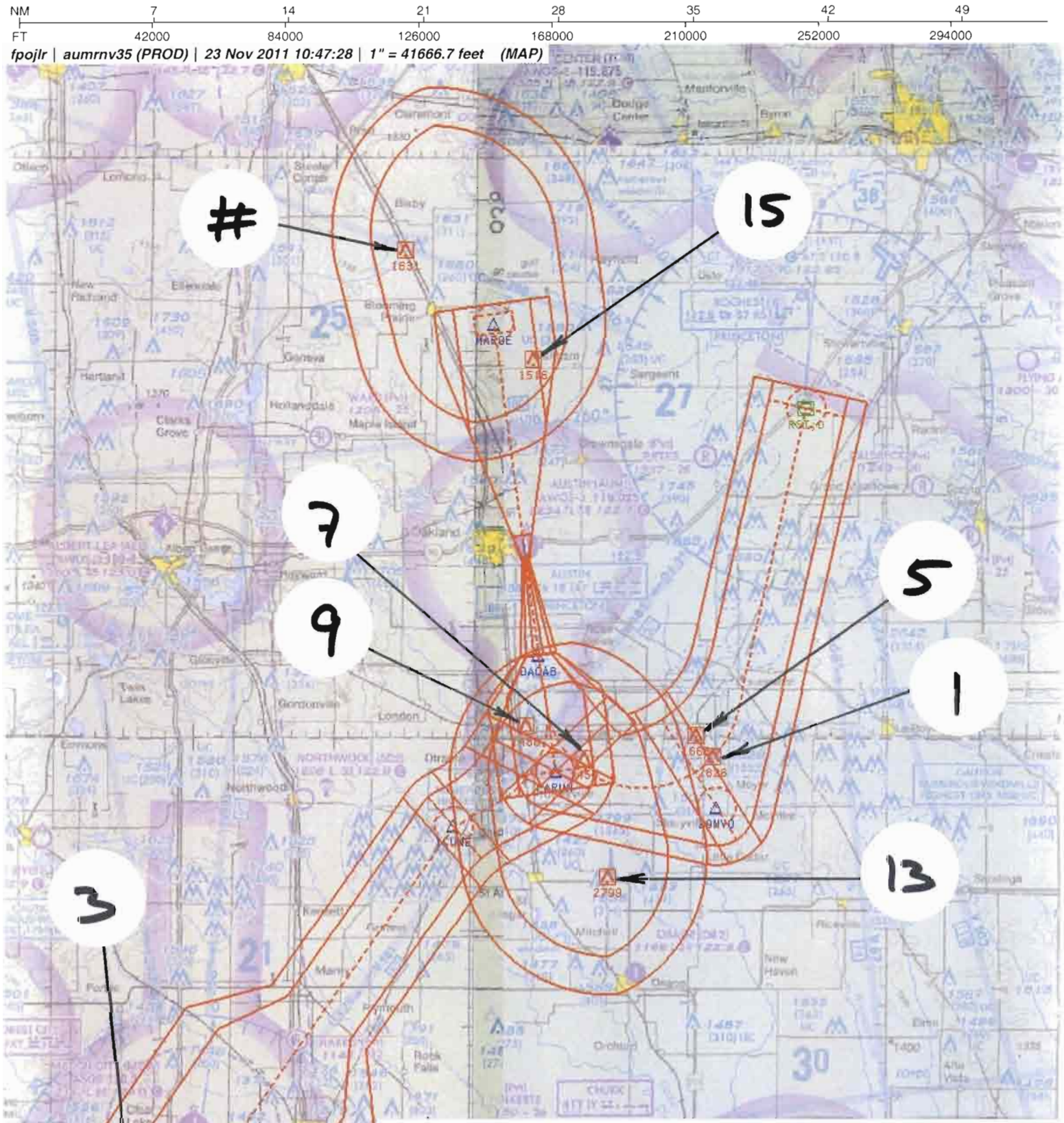
MALSR

MISSED APPROACH: Climb to 2900 direct MAROE and hold.

AWOS-3	ROCHESTER APP CON *	UNICOM
119.025	119.8 251.125	122.7 (CTAF)



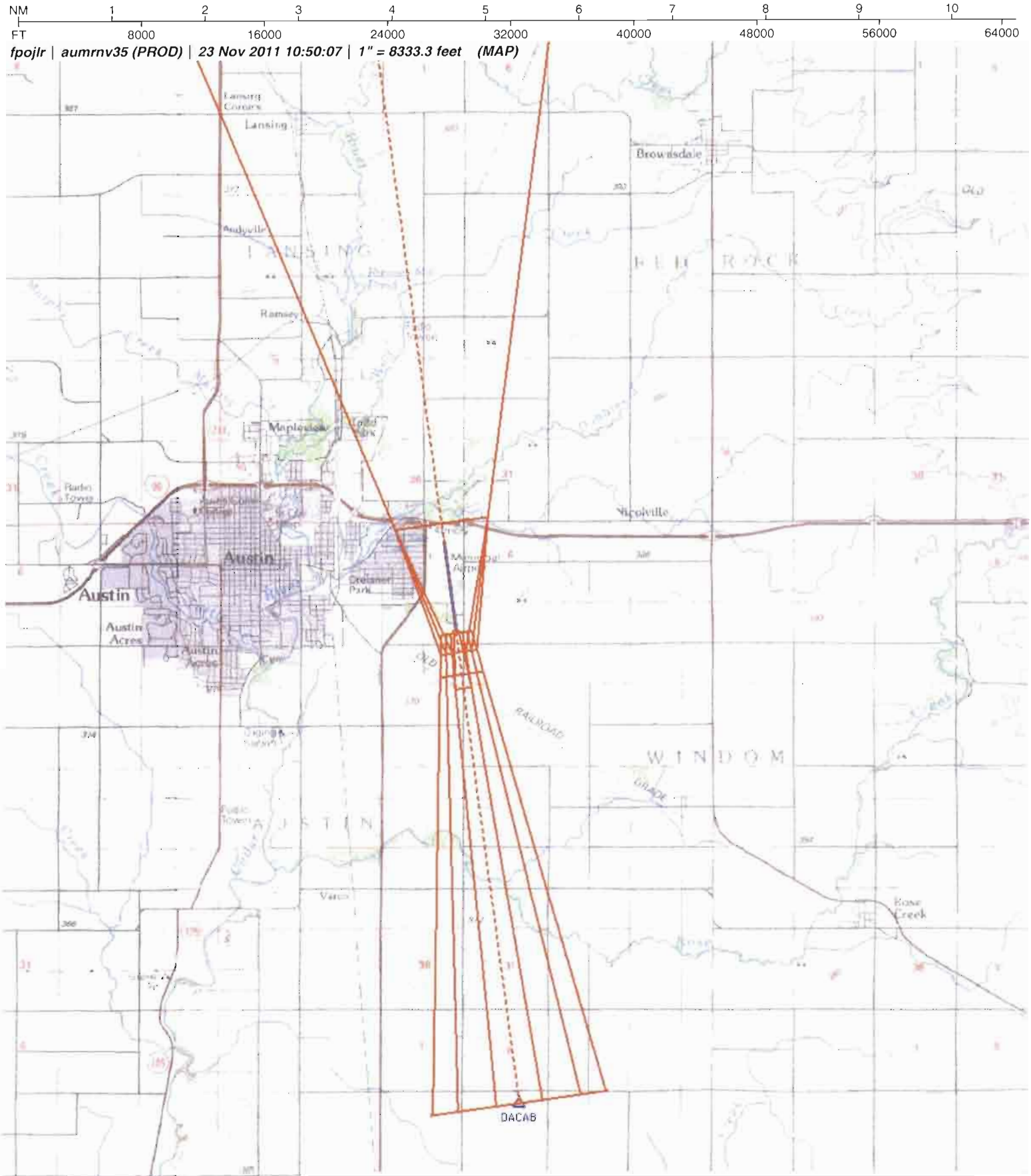
CATEGORY	A	B	C	D
LPV DA	1431-½ 200 (200-½)			
LNAV/VNAV DA	1483-½ 252 (300-½)			
LNAV MDA	1580-½ 349 (400-½)		1580-⅝ 349 (400-⅝)	
CIRCLING	1740-1 506 (600-1)		1740-1½ 506 (600-1½)	1800-2 566 (600-2)



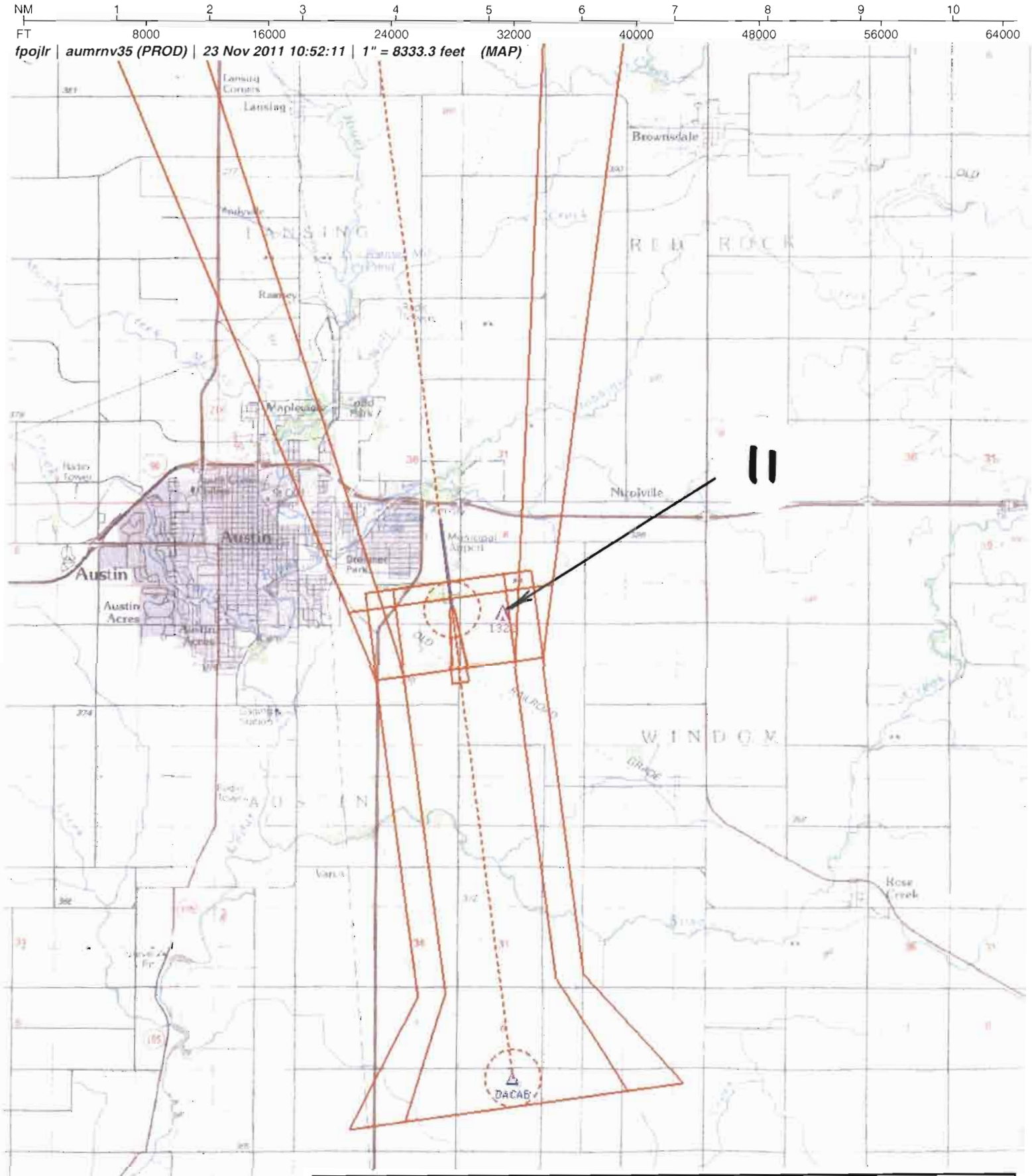
Airport ID:	KAUM
Apt Name:	AUSTIN MUNI
City:	AUSTIN
State:	MN
Scale:	1:500,000
Proc ID:	RNAV (GPS) RWY 35
Amdt #:	1

FM 9 – LPV (VERTICALLY GUIDED)

No	SEGMENT	OBSTRUCTION	ELEV
1	FEEDER	TOWER (19-020063)	2828
3	FEEDER	TOWER (19-001289)	1665
5	INITIAL	WNDML (19-020730)	1663
7	INITIAL	AAO	1450
13	HOLD-IN-LIEU	TOWER (19-000404)	2799
9	INTERMEDIATE	TOWER (27-001879)	1486
	FINAL: LPV	ASC	
15	MISSED APPROACH	AAO	1516
#	HOLDING	TOWER (27-001890)	1631



Airport ID:	KAUM	FM 9 – LPV (VERTICALLY GUIDED)			
Apt Name:	AUSTIN MUNI	No	SEGMENT	OBSTRUCTION	ELEV
City:	AUSTIN		FINAL: LPV	ASC	
State:	MN				
Scale:	1:100,000				
Proc ID:	RNAV (GPS) RWY 35				
Amdt #:	1				

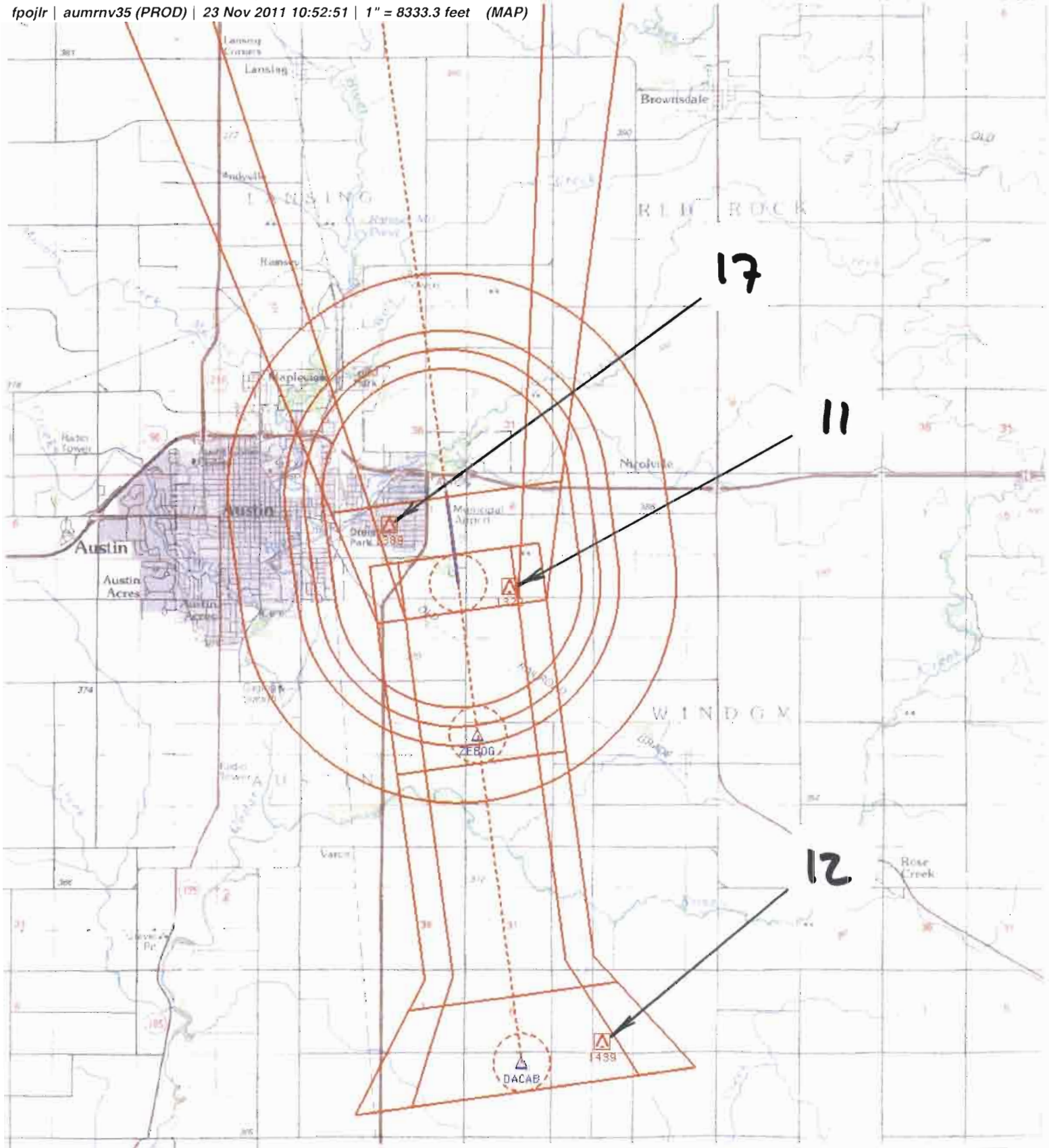


Airport ID:	KAUM	FM 9 – LNAV/VNAV (VERTICALLY GUIDED)			
Apt Name:	AUSTIN MUNI	No	SEGMENT	OBSTRUCTION	ELEV
City:	AUSTIN	11	FINAL: LNAV/VNAV	POLE (KAUMT0348)	1322
State:	MN				
Scale:	1:100,000				
Proc ID:	RNAV (GPS) RWY 35				
Amdt #:	1				

NM 1 2 3 4 5 6 7 8 9 10

FT 8000 16000 24000 32000 40000 48000 56000 64000

fpojlr | aumrnv35 (PROD) | 23 Nov 2011 10:52:51 | 1" = 8333.3 feet (MAP)



Airport ID:	KAUM
Apt Name:	AUSTIN MUNI
City:	AUSTIN
State:	MN
Scale:	1:100,000
Proc ID:	RNAV (GPS) RWY 35
Amdt #:	1

FM 9 – LNAV (NON-VERTICALLY GUIDED)

No	SEGMENT	OBSTRUCTION	ELEV
12	FINAL: LNAV	AAO	1439
11	FINAL: LNAV STEPDOWN	POLE (KAUMT0348)	1322
17	CIRCLING A/B/C/D	TANK (KAUMT0343)	1389

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
RST VOR/DME	ZONVO (FB)	189.80 / 21.13	3900
MCW VORTAC	ICUNE (FB)	031.70 / 23.98	3800
ZONVO (IAF)	FARUN (NOPT) (FB)	279.29 / 8.60	3800
ICUNE (IAF)	FARUN (NOPT) (FB)	059.08 / 6.00	3800
FARUN (IF/IAF)	DACAB (FB)	349.16 / 6.11	2900
DACAB (FAF)	ZEBOG/1.60 NM TO RW35 (FB)	349.14 / 3.49	
(SEE FORM 8260-10)			

MISSED APPROACH

LPV: DA
LNAV/VNAV: DA
LNAV: RW35

CLIMB TO 2900 DIRECT MAROE AND HOLD.

ADDITIONAL FLIGHT DATA:
HOLD N, RT, 169.10 INBOUND.
CHART FAS OBST: 1322 POLE 433910N/0925508W
DISTANCE TO THLD FROM 200 HATH: 0.48 NM.
CHART VDP AT 0.96 MILES TO RW35*
*LNAV ONLY.
WAAS CHANNEL # 99506
REFERENCE PATH ID: W35A
LTP HAE: 346.2 M

MAG VAR: 3E EPOCH YEAR: 1990

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. HOLD S FARUN, RT, 349.16 INBOUND, 3800 FT. IN LIEU OF PT (IAF)
3. FAC: 349.14 FAF: DACAB DIST FAF TO MAP: 5.09 THLD: 5.09
4. MIN. ALT: FARUN 3800, DACAB 2900, ZEBOG/1.60 NM TO RW35 1780*
5. DIST TO THLD FROM OM: ____ MM: ____ IM: ____ 150 HAT: ____ 100 HAT: ____ GS ANT: ____
6. MIN GS INCPT: 2900 GS ALT AT: DACAB 2900 OM: ____ MM: ____ IM: ____
7. GS ANGLE: 3.00 TCH: 47.2 34:1 IS CLEAR
8. MSA FROM: RW35 3900

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	1431	1/2	200	1431	1/2	200	1431	1/2	200	1431	1/2	200			
LNAV/VNAV DA	1483	1/2	252	1483	1/2	252	1483	1/2	252	1483	1/2	252			
LNAV MDA	1580	1/2	349	1580	1/2	349	1580	5/8	349	1580	5/8	349			
CIRCLING	1740	1	506	1740	1	506	1740	1 1/2	506	1800	2	566			

NOTES:
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 36C (96F).
CHART NOTE: DME/DME RNP-0.3 NA.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON RST VOR/DME AIRWAY RADIALS 099 CW 260.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON MCW VORTAC AIRWAY RADIALS 343 CW 100.
(SEE FORM 8260-10)

@ NA WHEN LOCAL WEATHER NOT AVAILABLE.

QUALITY 2 CHECKED

CITY AND STATE	ELEVATION: 1234 THRE: 1231	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP:
AUSTIN, MN	AIRPORT NAME: AUSTIN MUNI	RNAV	RNAV (GPS) RWY 35, AMDT 1	AMDT: ORIG
				DATED 04/10/2008

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]	[X] **ZMP, RST APP CON, ARPT MGR**

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:

DEVELOPED BY		
NAME: **JOSE ALFONSO (JEFF L. RAWDON)**	FIFO **AJV-353**	DATE: **11/16/2011**

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

CHANGES:

1. RAYOS FIX NAME CHANGED TO ZONVO; HADIL FIX NAME CHANGED TO ICUNE.
2. RST VOR/DME FEEDER SEGMENT COURSE/DISTANCE CHANGED FROM 201.19/19.83 TO 189.90/21.13.
3. RST VOR/DME FEEDER SEGMENT ALTITUDE CHANGED FROM 3800 TO 3900.
4. MCW VORTAC FEEDER SEGMENT COURSE/DISTANCE CHANGED FROM 029.65/25.94 TO 031.70/23.98.
5. ZONVO INITIAL SEGMENT COURSE/DISTANCE CHANGED FROM 259.23/5.00 TO 279.29/8.60.
6. ICUNE INITIAL SEGMENT COURSE/DISTANCE CHANGED FROM 079.07/5.00 TO 059.08/6.00.
7. INTERMEDIATE SEGMENT COURSE/DISTANCE CHANGED FROM 349.15/6.18 TO 349.16/6.11.
8. ADDED ZEBOG STEPDOWN FIX.
9. HOLD-IN-LIEU COURSE CHANGED FROM 349.15 TO 349.16.
10. FINAL LENGTH CHANGED FROM 5.02 TO 5.09.
11. TCH CHANGED FROM 47.7 TO 47.2.
12. CHANGED FROM 34:1 IS NOT CLEAR TO 34:1 IS CLEAR.
13. MSA MINIMUM ALTITUDE CHANGED FROM 3800 TO 3900.
14. PROCEDURAL ELEVATION CHANGED FROM TDZE 1234 TO THRE 1231.
SEE 8260-10

REASONS:

1. FIXES MOVED MORE THAN 1 NM; RENAMED IAW N JO 7400.27.
2, 4, 5, 6. SEGMENTS ADJUSTED TO MEET MINIMUM DTA REQUIREMENTS IAW 8260.54A.
3, 13. NEW CONTROLLING OBSTRUCTION.
7, 10. PFAF RELOCATED IAW 8260.54A FORMULA 2-16B.
8. STEPDOWN FIX NECESSARY AFTER APPLICATION OF AAO IN FINAL IAW 8260.19D PARA 274.
9. TO ALIGN WITH ADJUSTED INTERMEDIATE SEGMENT COURSE.
11. REVISED ILS GLIDESLOPE DATA.
12. VISUAL SURFACES NOW CLEAR.
14. IAW 8260.3B CHG 20 PARA 3.1.
15, 16, 17. REEVALUATED BASED ON CURRENT OBSTRUCTION DATA AND IAW 8260.54A.
18, 19, 25, 26, 27. REEVALUATED BASED ON LOWER MINIMA AND IAW 8260.3B CHG 20 CHAPTER 3.
20. RECALCULATED BASED ON LOWER MINIMA.
21. RECALCULATED IAW 8260.54A FORMULA 4-8.
22. VISUAL SURFACES NOW CLEAR.
23, 24. TURN RESTRICTION CHANGED FROM 120 DEG TO 90 DEG.

QUALITY 2 CHECKED

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
ZEBOG/1.60 NM TO RW35	RW35 (MAP) (FO)	349.13 / 1.60	
RW35 (MAP)	1431 MSL	349.13	
1431 MSL	MAROE (FO)		2900

NOTES, (CONT.):
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT.
CHART NOTE: BARO-VNAV AND VDP NA WITH ALBERT LEA ALTIMETER SETTING.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ALBERT LEA ALTIMETER SETTING AND INCREASE ALL DA 48 FEET AND ALL MDA 60 FEET AND INCREASE LNAV CATS C AND D VISIBILITY 1/8 MILE.
CHART NOTE: FOR INOPERATIVE MALSR, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 3/4 MILE AND LNAV CATS C AND D VISIBILITY TO 1 MILE.
CHART NOTE: FOR INOPERATIVE MALSR WHEN USING ALBERT LEA ALTIMETER SETTING, INCREASE LNAV CATS C AND D VISIBILITY TO 1 1/8 MILE.

QUALITY 2 CHECKED

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

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:

CHANGES CONT.
15. LPV DA/HATH CHANGED FROM 1527/293 TO 1431/200. 16. LNAV/VNAV DA/HATH CHANGED FROM 1578/344 TO 1483/252. 17. LNAV MDA/HATH CHANGED FROM 1700/466 TO 1580/349. 18. LPV AND LNAV/VNAV ALL CATS VISIBILITY CHANGED FROM 3/4 TO 1/2 MILE. 19. LNAV CATS A/B VISIBILITY CHANGED FROM 3/4 TO 1/2 MILE; CAT C CHANGED FROM 3/4 TO 5/8 MILE; CAT D CHANGED FROM 1 TO 5/8 MILE. 20. VDP LOCATION CHANGED FROM 1.34 TO 0.96 MILES TO RW35. 21. BARO-VNAV CRITICAL HIGH TEMPERATURE CHANGED FROM 46C (115F) TO 36C (96F); NOTE UPDATED. 22. REMOVED CHART NOTE "VISIBILITY REDUCTION BY HELICOPTERS NA." 23. CHANGED ARRIVAL RESTRICTION AT RST VOR/DME FROM AIRWAY RADIALS 157 CW 260 TO 099 CW 260. 24. CHANGED ARRIVAL RESTRICTION AT MCW VORTAC FROM AIRWAY RADIALS 343 CW 075 TO 343 CW 100. 25. CHANGED B/U ALSTG VISIBILITY ADJUSTMENTS FROM "...INCREASE LNAV/VNAV VISIBILITY 1/4 MILE ALL CATS, AND LNAV CAT C/D VISIBILITY 1/4 MILE" TO "...INCREASE LNAV CATS C AND D VISIBILITY 1/8 MILE." 26. ADDED CHART NOTE "FOR INOPERATIVE MALSR, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 3/4 MILE AND LNAV CATS C AND D VISIBILITY TO 1 MILE." 27. CHANGED INOPERATIVE MALSR WHEN USING B/U ALSTG NOTE FROM "...INCREASE LPV VISIBLITY TO 1 1/4 MILE ALL CATS" TO "...INCREASE LNAV CATS C AND D VISIBILITY TO 1 1/8 MILE."

REASONS:

QUALITY 2 CHECKED

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FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KAUM
RUNWAY	RW35
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W35A
LTP/FTP LATITUDE	433917.1235N
LTP/FTP LONGITUDE	0925553.1440W
LTP/FTP ELLIPSOIDAL HEIGHT	+03462
FPAP LATITUDE	434045.3900N
FPAP LONGITUDE	0925609.9500W
THRESHOLD CROSSING HEIGHT (TCH)	00047.2
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0984
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	684BBF83

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03751
FPAP ORTHOMETRIC HEIGHT	+03751

QUALITY 2 CHECKED

CITY AND STATE	ELEVATION: 1234 THRE: 1231	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
AUSTIN, MN	AIRPORT NAME: AUSTIN MUNI	RNAV	RNAV (GPS) RWY 35, AMDT 1	AMDT: ORIG
				DATED: 04/10/2008

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

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 2 CHECKED

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 aiport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

ARINC PACKET - 424-18 - RNAV (GPS)

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAD        MCW   K3011490VTHW N43054112W093194754    N43054112W093194754E0060012092     NARMASON CITY
        SUSAD        RST   K3011200VDLA N43465856W092354898    N43465856W092354898E0050013801     NARROCHESTER

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   DACAB K30    C     N43341436W092545558                    E0006     NAR           DACAB
        SUSAEAENRT   FARUN K30    C     N43281132W092534679                    E0006     NAR           FARUN
        SUSAEAENRT   ICUNE K30    W     N43252294W093010361                    E0007     NAR           ICUNE
        SUSAEAENRT   MAROE K30    W     N43512195W092581158                    E0006     NAR           MAROE
        SUSAEAENRT   ZEBOG K30    C     N43374201W092553504                    E0006     NAR           ZEBOG
        SUSAEAENRT   ZONVO K30    W     N43262203W092421443                    E0004     NAR           ZONVO

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KAUMK3AAUM     0     058YHN43394550W092555850E003001234         1800018000C    MNAR    AUSTIN MUNI

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KAUMK3FR35   AFARUN 010FARUNK3EA0EE AR   HF                    34920040    + 03800     18000                A JS
        SUSAP KAUMK3FR35   AMCW   010MCW  K3D 0V       IF                                            18000                A JS
        SUSAP KAUMK3FR35   AMCW   020ICUNEK3EA0E  A 020TF                    03170240    + 03800                          A JS
        SUSAP KAUMK3FR35   AMCW   030FARUNK3EA0EE B 010TF                    05910060    + 03800                          A JS
        SUSAP KAUMK3FR35   ARST   010RST  K3D 0V       IF                                            18000                A JS
        SUSAP KAUMK3FR35   ARST   020ZONVOK3EA0E  A 020TF                    18980211    + 03900                          A JS
        SUSAP KAUMK3FR35   ARST   030FARUNK3EA0EE B 010TF                    27930086    + 03800                          A JS
        SUSAP KAUMK3FR35   R      010FARUNK3EA0E  I    IF                                + 03800     18000                A JS
        SUSAP KAUMK3FR35   R      020DACABK3EA1E  F 051TF                    34920061    + 02900                 RW35  K3PGA JS
        SUSAP KAUMK3FR35   R      020DACABK3EA2WALPV       ALNAV/VNAV ALNAV                                                JS
        SUSAP KAUMK3FR35   R      021ZEBOGK3EA0E S  031TF                    34910035    V 0178001788        -300         A JS
        SUSAP KAUMK3FR35   R      030RW35 K3PG0GY M 031TF                    34910016      01278             -300         A JS
        SUSAP KAUMK3FR35   R      040         0  M     CA                    3491        + 01431                          A JS
        SUSAP KAUMK3FR35   R      050MAROEK3EA0EY      DF                                + 02900                          A JS
        SUSAP KAUMK3FR35   R      060MAROEK3EA0EE  R   HM                    16910040    + 02900                          A JS
```

QUALITY CHECKED 1

CITY AND STATE	ELEVATION: 1234 THRE: 1231	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
AUSTIN, MN	AIRPORT NAME: AUSTIN MUNI	RNAV	RNAV (GPS) RWY 35, AMDT 1	AMDT: ORIG
				DATED: 04/10/2008

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

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:

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 aiport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KAUMK3GRW35    0058003491 N43391712W092555314+0000    +0346201231000047100I

                 1         2         3         4         5         6         7         8         9         0         1         2         3
PP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KAUMK3PR35   RW35 001 0000W35A0N4339171235W09255531440+034620300N4340453900W09256099500106750984000472F400350684BBF83
        SUSAP KAUMK3PR35   RW35 002E      +03751+03751LPV       99506

                 1         2         3         4         5         6         7         8         9         0         1         2         3
MSA     123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KAUMK3SRW35 K3PG               0   18018003925                                                                          M
```

QUALITY CHECKED 1

CITY AND STATE	ELEVATION: 1234 THRE: 1231	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
AUSTIN, MN	AIRPORT NAME: AUSTIN MUNI	RNAV	RNAV (GPS) RWY 35, AMDT 1	AMDT: ORIG
				DATED: 04/10/2008

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

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:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - 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 aiport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

ARINC FLIGHT INSPECTION SUMMARY - VERSION 424-18 - RNAV (GPS)

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE
	FARUN	FARUN	010	IAF	HF	R	FO		349.2(352.2T)	004.0	03800
	MCW	MCW	010		IF						
	MCW	ICUNE	020	IAF	TF		FB	2.0	031.7(034.7T)	024.0	03800
	MCW	FARUN	030	IF	TF		FB	1.0	059.1(062.1T)	006.0	03800
	RST	RST	010		IF						
	RST	ZONVO	020	IAF	TF		FB	2.0	189.8(192.8T)	021.1	03900
	RST	FARUN	030	IF	TF		FB	1.0	279.3(282.3T)	008.6	03800
		FARUN	010	FACF	IF						03800
		DACAB	020	FAF	TF		FB	0.5	349.2(352.2T)	006.1	02900
		ZEBOG	021	SDF	TF		FB	0.3	349.1(352.1T)	003.5	0178001788
		RW35	030	MAP	TF		FO	0.3	349.1(352.1T)	001.6	01278

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE
		040		CA				349.1(352.1T)		01431
	MAROE	050		DF		FO				02900
	MAROE	060		HM	R	FO		169.1(172.1T)	004.0	02900

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	MCW	N430541.12	W0931947.54	N4305.685	W09319.792
	RST	N434658.56	W0923548.98	N4346.976	W09235.816
	DACAB	N433414.36	W0925455.58	N4334.239	W09254.926
	FARUN	N432811.32	W0925346.79	N4328.189	W09253.780
	ICUNE	N432522.94	W0930103.61	N4325.382	W09301.060
	MAROE	N435121.95	W0925811.58	N4351.366	W09258.193
	ZEBOG	N433742.01	W0925535.04	N4337.700	W09255.584
	ZONVO	N432622.03	W0924214.43	N4326.367	W09242.241
	RW35	N433917.12	W0925553.14	N4339.285	W09255.886

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW35	01231	47

QUALITY CHECKED 1

CITY AND STATE	ELEVATION: 1234 THRE: 1231	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
AUSTIN, MN	AIRPORT NAME: AUSTIN MUNI	RNAV	RNAV (GPS) RWY 35, AMDT 1	AMDT: ORIG
				DATED: 04/10/2008

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE			3. ALTIMETER SETTING
SATISFACTORY ON:		N W S	OTHER:	SOURCE:
		F A A		DISTANCE:
		A / C		HOURS REMOTE OPERATION:
V H F / U H F / H F	LOCATION:			ADJUSTMENT:

4. MONITOR STATUS	PRIMARY NAVAID:	
	MONITOR POINT:	
	HRS OPTN: CAT 1	
	HRS OPTN: CAT 3	
5. APPROACH & RUNWAY LIGHTING		**ALS**
		(S) SALS
		MALS
		HIRL
		MIRL
		REIL
		TDZ
		C/LINE
		OTHER (SPECIFY)
6. RUNWAY MARKINGS	BASIC	
	ALL WEATHER	
	INSTRUMENT	
7. RUNWAY VISUAL RANGE	APPROACH	
	MIDFIELD	
	ROLL OUT	
8. GLIDE PATH	GP ANGLE:	ELEV RWY THRESHOLD:
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT:
9. FINAL APPROACH COURSE AIMING	RUNWAY THRESHOLD	FT. FROM THRESHOLD
	ON CENTERLINE	FT. FROM CENTERLINE

10. WAIVERS:

PART D - PREPARED BY:	DATE:
TITLE:	OFFICE:

PART C - REMARKS:

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: DACAB **STATE:** MN **COUNTRY:** US

LATITUDE/LONGITUDE: 433414.36N/0925455.58W **TYPE:** WP, INT

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	AUSTIN	I-AUM	LOC		171.13	172.13		6.21	37763	2900	5700
2	ROCHESTER	RST	VOR/DME	L	222.55	227.55		18.83		2900	5700
3	ALBERT LEA	AEL	VOR/DME	T	107.41	108.41		20.93		2900	5700

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

REMARKS:
AUSTIN (FAC 1) AND ROCHESTER (FAC 2) USED TO ESTABLISH FIX COORDINATES
8260.54A FORMULA 2-16B USED TO EXTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 35	1, 2, 3		KAUM	AUSTIN	MN (US)
IAP	RNAV (GPS) RWY 35			KAUM	AUSTIN	MN (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2 **DATE OF REVISION:** 04/05/2012

REASON FOR REVISION:
FIX MOVED 460.12 FT SOUTH; COORDINATES UPDATED.
FAC 1 DIST FROM FAC CHANGED FROM 37282 TO 37763 FT.
FAC 2 BRG CHANGED FROM 222.75/227.75 TO 222.55/227.55; DIST FROM FAC CHANGED FROM 18.78 TO 18.83 NM; MAA CHANGED FROM 17500 TO 5700.
FAC 3 BRG CHANGED FROM 107.22/108.22 TO 107.41/108.41; DIST FROM FAC CHANGED FROM 20.90 TO 20.93 NM; MAA CHANGED FROM 12000 TO 5700.

DEVELOPED BY: **DATE:** 11/10/2011 **OFFICE:** AJV-353 **NAME:** JOSE ALFONSO (JEFF RAWDON)

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

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: RST APP CON
OTHER:

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: FARUN **STATE:** IA **COUNTRY:** US

LATITUDE/LONGITUDE: 432811.32N/0925346.79W **TYPE:** WP, INT

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	AUSTIN	I-AUM	LOC		171.13	172.13		12.32		3800	5700
2	MASON CITY	MCW	VORTAC	H	034.03	040.03		29.45		3800	17500
3	ALBERT LEA	AEL	VOR/DME	T	120.40	121.40		24.29		3800	12000

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	S	I-AUM	LOC	171.13	351.13	R	1		3800	6000	5	6
2	S		WP	169.16	349.16	R		4	3800	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (19-000404)	432220.00N/0925000.00W	2799	1D
2	200	TOWER (19-000404)	432220.00N/0925000.00W	2799	1D

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
MASON CITY (FAC 2) AND AUSTIN (FAC 1) USED TO ESTABLISH FIX COORDINATES
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 35	1, 2, 3	1	KAUM	AUSTIN	MN (US)
IAP	RNAV (GPS) RWY 17		2	KAUM	AUSTIN	MN (US)
IAP	RNAV (GPS) RWY 35		2	KAUM	AUSTIN	MN (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3 **DATE OF REVISION:**

REASON FOR REVISION:
HOLDING PAT 1 CRS/CRS INBOUND CHANGED FROM 169.15/349.15 TO 169.16/349.16.

DEVELOPED BY: **DATE:** 11/10/2011 **OFFICE:** AJV-353 **NAME:** JOSE ALFONSO (JEFF RAWDON)

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

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: RST APP CON
OTHER:

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: ICUNE **STATE:** IA **COUNTRY:** US

LATITUDE/LONGITUDE: 432522.94N/0930103.61W **TYPE:** WP

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

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

REMARKS:
NAME CHANGED FROM HADIL TO ICUNE.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 35			KAUM	AUSTIN	MN (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 04/05/2012

REASON FOR REVISION:
FIX NAME CHANGED FROM HADIL TO ICUNE DUE TO MOVE EXCEEDING 1 NM.
FIX MOVED 2.15 NM SOUTH; COORDINATES UPDATED.
REMOVED FARUN AS FAC 1.

DEVELOPED BY: **DATE:** 11/10/2011 **OFFICE:** AJV-353 **NAME:** JOSE ALFONSO (JEFF RAWDON)

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

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: RST APP CON
OTHER:

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: MAROE **STATE:** MN **COUNTRY:** US

LATITUDE/LONGITUDE: 435121.95N/0925811.58W **TYPE:** WP

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

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	N		WP	349.10	169.10	R		4	2900	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (27-001890)	435446.00N/0930428.00W	1631	2C

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 17		1	KAUM	AUSTIN	MN (US)
IAP	RNAV (GPS) RWY 35		1	KAUM	AUSTIN	MN (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 04/05/2012

REASON FOR REVISION:
DELETED KAUM R17 AS FAC 1.

DEVELOPED BY: **DATE:** 11/15/2011 **OFFICE:** AJV-353 **NAME:** JOSE ALFONSO (JEFF RAWDON)

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

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: RST APP CON
OTHER:

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: ROCHESTER VOR/DME **STATE:** MN **COUNTRY:** US

LATITUDE/LONGITUDE: 434658.56N/0923548.98W **TYPE:**

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	ROCHESTER	RST	VOR/DME	L						2900	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	SW	RST	VOR/DME	205.14	025.14	R	1		3000	6000	4	5
2	NE	RST	VOR/DME	059.66	239.66	R	1		3000	6000	4	5
3	NE		WP	060.00	240.00	R		4	2900	6000	5	6
4	SE	RST	VOR/DME	139.26	319.26	R	1		3000	6000	4	5

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (27-001665)	433823.00N/0923831.00W	1890	5D
2	200	WINDMILL (27-020341)	434511.34N/0924053.51W	1809	4D
3	200	WINDMILL (27-020341)	434511.34N/0924053.51W	1809	4D
4	200	TOWER (27-001580)	433836.00N/0923139.00W	2549	4D

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
HOLDING PAT 4 OBSTRUCTION IS 3912.78 FT INTO THE SECONDARY AREA.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	ROCHESTER			KANE	MINNEAPOLIS	MN (US)
DP	ZMBRO			KANE	MINNEAPOLIS	MN (US)
DP	ROCHESTER			KFCM	MINNEAPOLIS	MN (US)
DP	ZMBRO			KFCM	MINNEAPOLIS	MN (US)
DP	MEADOW LAKE			KMSP	MINNEAPOLIS	MN (US)
DP	MINNEAPOLIS			KMSP	MINNEAPOLIS	MN (US)
DP	ROCHESTER			KMSP	MINNEAPOLIS	MN (US)
DP	ZMBRO			KMSP	MINNEAPOLIS	MN (US)
DP	ROCHESTER			KSTP	ST PAUL	MN (US)
DP	ZMBRO			KSTP	ST PAUL	MN (US)
EN ROUTE	V161					(US)
EN ROUTE	V170					(US)
EN ROUTE	V24					(US)
EN ROUTE	V24-398					(US)
EN ROUTE	V398-411					(US)
EN ROUTE	V411					(US)
EN ROUTE	V503					(US)
EN ROUTE	V67					(US)
EN ROUTE	V82-161					(US)
EN ROUTE	V82-170					(US)
IAP	RNAV (GPS) RWY 12			KCCY	CHARLES CITY	IA (US)
IAP	ILS OR LOC RWY 35 (ALT MISSED)		1	KAUM	AUSTIN	MN (US)
IAP	RNAV (GPS) RWY 17			KAUM	AUSTIN	MN (US)
IAP	RNAV (GPS) RWY 35			KAUM	AUSTIN	MN (US)
IAP	VOR RWY 17			KAUM	AUSTIN	MN (US)
IAP	VOR RWY 35			KAUM	AUSTIN	MN (US)
IAP	VOR/DME-A		2	KAUM	AUSTIN	MN (US)
IAP	RNAV (GPS) RWY 16			KTOB	DODGE CENTER	MN (US)
IAP	RNAV (GPS) RWY 34			KTOB	DODGE CENTER	MN (US)
IAP	VOR-A		4	KTOB	DODGE CENTER	MN (US)
IAP	ILS OR LOC RWY 30			KOWA	OWATONNA	MN (US)
IAP	RNAV (GPS) RWY 30			KOWA	OWATONNA	MN (US)
IAP	COPTER ILS OR LOC RWY 31		1	KRST	ROCHESTER	MN (US)
IAP	ILS OR LOC RWY 13		1	KRST	ROCHESTER	MN (US)
IAP	ILS OR LOC RWY 31		1	KRST	ROCHESTER	MN (US)
IAP	RADAR-1		1	KRST	ROCHESTER	MN (US)
IAP	RNAV (GPS) RWY 13		3	KRST	ROCHESTER	MN (US)
IAP	RNAV (GPS) RWY 20		3	KRST	ROCHESTER	MN (US)
IAP	VOR RWY 2		1	KRST	ROCHESTER	MN (US)
IAP	VOR/DME RWY 20		1	KRST	ROCHESTER	MN (US)
IAP	LOC RWY 30			KONA	WINONA	MN (US)
STAR	JANESVILLE			KORD	CHICAGO	IL (US)
STAR	KASPR			KMSP	MINNEAPOLIS	MN (US)

QUALITY CHECKED 2

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 15 **DATE OF REVISION:** 04/05/2012

REASON FOR REVISION:
FACILITY COORDINATES UPDATED PER NEW AVNIS DATA.
UPDATED FIX USE.

DEVELOPED BY:	**DATE:** 11/15/2011	**OFFICE:** AJV-353	**NAME:** JOSE ALFONSO (JEFF RAWDON)
APPROVED BY:	**DATE:**	**OFFICE:** AJV-353	**NAME:** LARRY STROUT
	SIGNATURE:		

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: RST APP CON
OTHER: RST ATCT

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: ZEBOG **STATE:** MN **COUNTRY:** US

LATITUDE/LONGITUDE: 433742.01N/0925535.04W **TYPE:** WP

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 35			KAUM	AUSTIN	MN (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 05/03/2012

REASON FOR REVISION:
02/27/2012: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 11/09/2011.
1. FIX TYPE DELETED INT.
2. DELETED FAC 1/2/3.
3. DELETED REMARK AUSTIN (FAC 1) AND ROCHESTER (FAC 2) USED TO ESTABLISH FIX COORDINATES.
4. REMOVED ILS OR LOC RWY 35 FROM FIX USE.
UPDATED COPY DEVELOPED BY ANKUR VERMA.

DEVELOPED BY: **DATE:** 11/09/2011 **OFFICE:** AJV-353 **NAME:** JOSE ALFONSO (JEFF RAWDON)

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

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: RST APP CON
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: ZONVO **STATE:** IA **COUNTRY:** US

LATITUDE/LONGITUDE: 432622.03N/0924214.43W **TYPE:** WP

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

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

REMARKS:
NAME CHANGED FROM RAYOS TO ZONVO.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 35			KAUM	AUSTIN	MN (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 04/05/2012

REASON FOR REVISION:
FIX NAME CHANGED FROM RAYOS TO ZONVO DUE TO MOVE EXCEEDING 1 NM.
FIX MOVED 4.26 NM SOUTHEAST; COORDINATES UPDATED.
REMOVED FARUN AS FAC 1.

DEVELOPED BY: **DATE:** 11/15/2011 **OFFICE:** AJV-353 **NAME:** JOSE ALFONSO (JEFF RAWDON)

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

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: RST APP CON
OTHER:

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

INFO ONLY

NAME: MASON CITY VORTAC **STATE:** IA **COUNTRY:** US

LATITUDE/LONGITUDE: 430541.12N/0931947.54W **TYPE:**

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	MASON CITY	MCW	VORTAC	H							45000

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	W	MCW	VORTAC	278.00	098.00	L	1-1 1/2		3000	45000	4	29
2	S	MCW	VORTAC	176.00	356.00	R	1		3000	6000	4	5
3	S	MCW	VORTAC	175.00	355.00	R	1		3000	6000	4	5
4	S		WP	176.00	356.00	R		4	3800	6000	5	6
5	W		WP	278.00	098.00	L		10	15000	45000	16	30

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	200	TOWER (19-001289)	430528.00N/0932359.00W	1665	2C
1	200	TOWER (19-001289)	430528.00N/0932359.00W	1665	2C
2	200	TOWER (19-001289)	430528.00N/0932359.00W	1665	2C
3	200	TOWER (19-001289)	430528.00N/0932359.00W	1665	2C
4	200	TOWER (19-001289)	430528.00N/0932359.00W	1665	2C
4	310	TOWER (19-001289)	430528.00N/0932359.00W	1665	2C
5	265	TOWER (19-001056)	431004.00N/0930606.00W	1971	5D

REASON FOR NONSTANDARD HOLDING:
PAT 1 ATC REQUEST
PAT 5 ATC REQUEST

HOLDING RESTRICTIONS:
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 3000.
HOLDING LIMITED TO ESTABLISHED PATTERNS.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
4	RNAV (GPS) RWY 18	KMCW	MASON CITY	IA (US)

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	DES MOINES			KDSM	DES MOINES	IA (US)
DP	ORSKY			KANE	MINNEAPOLIS	MN (US)
DP	ORSKY			KFCM	MINNEAPOLIS	MN (US)
DP	ORSKY			KMSP	MINNEAPOLIS	MN (US)
DP	ORSKY			KSTP	ST PAUL	MN (US)
EN ROUTE	J148					(US)
EN ROUTE	J16		1			(US)
EN ROUTE	J25					(US)
EN ROUTE	J90					(US)
EN ROUTE	V120		1			(US)
EN ROUTE	V13					(US)
EN ROUTE	V138					(US)
EN ROUTE	V158					(US)
EN ROUTE	V161					(US)
EN ROUTE	V505					(US)
IAP	RNAV (GPS) RWY 12			KCCY	CHARLES CITY	IA (US)
IAP	NDB RWY 14			KCAV	CLARION	IA (US)
IAP	NDB RWY 33			KFXY	FOREST CITY	IA (US)
IAP	RNAV (GPS) RWY 33			KFXY	FOREST CITY	IA (US)
IAP	VOR/DME-A			KFXY	FOREST CITY	IA (US)
IAP	VOR/DME RWY 35			KHPT	HAMPTON	IA (US)
IAP	ILS OR LOC RWY 36			KMCW	MASON CITY	IA (US)
IAP	LOC BC RWY 18		2	KMCW	MASON CITY	IA (US)
IAP	RNAV (GPS) RWY 18		4	KMCW	MASON CITY	IA (US)
IAP	VOR RWY 36		2	KMCW	MASON CITY	IA (US)
IAP	VOR/DME RWY 18		3	KMCW	MASON CITY	IA (US)
IAP	ILS OR LOC RWY 12			KALO	WATERLOO	IA (US)
IAP	VOR RWY 36			KALO	WATERLOO	IA (US)
IAP	RNAV (GPS) RWY 35			KAEL	ALBERT LEA	MN (US)
IAP	VOR/DME RWY 35			KAEL	ALBERT LEA	MN (US)
IAP	ILS OR LOC RWY 35			KAUM	AUSTIN	MN (US)
IAP	RNAV (GPS) RWY 17			KAUM	AUSTIN	MN (US)

QUALITY 2 CHECKED

IAP	RNAV (GPS) RWY 35		KAUM	AUSTIN	MN (US)
STAR	BULLZ (RNAV)	5	KORD	CHICAGO	IL (US)
STAR	JANESVILLE	1	KORD	CHICAGO	IL (US)
STAR	KASPR		KMSP	MINNEAPOLIS	MN (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 14 **DATE OF REVISION:** 10/20/2011

REASON FOR REVISION:
UPDATE NAVAID COORDINATES DUE TO 3RD PARTY SURVEY DTD 12/4/2009 AND NFDD 086 DTD 5/4/2011.
UPDATED PAT 5 LENGTH DME 8 TO 10, HOLDING ALTITUDE 14000 TO 15000, TEMPLATES MIN 14 TO 16 AND CONTROLLING OBSTRUCTION DATA.
UPDATED FIX USE.
ADDED SECTIONAL TO REQUIRED CHARTING.

DEVELOPED BY: **DATE:** 06/30/2011 **OFFICE:** AJV-353 **NAME:** THOMAS KIRKPATRICK

APPROVED BY: **DATE:** 04/12/2011 **OFFICE:** AJV-353 **NAME:** GREGORY YAMAMOTO

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: CEN
ARTCC: ZAU, ZMP
ATC FACILITY:
OTHER:

QUALITY 2 CHECKED

TERMINAL AIRSPACE DATA REQUIREMENTS

CITY: **AUSTIN** STATE: **MN**

AIRPORT NAME: **AUSTIN MUNI** ID: **KAUM**

PROCEDURE: **RNAV (GPS) RWY 35** AMDT: **1**

DOCKET # :
(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 **2.89**
   (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 **352.14**
4. High Terrain in **FINAL** segment containing 1000' point **1241**
5. Distance from **THLD** to 1500' point **4.69**
   (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 **352.14**
8. High Terrain in **FINAL** segment containing 1500' point **1241**
9. Threshold Coordinates (if straight-in) ... **433917.12N** / **0925553.14W**
10. ARP Coordinates ..... **433945.50N** / **0925558.50W**
11. Runway Approach End and distance furthest from ARP.....RWY **35**
    Distance **0.48** NM
12. FAF Coordinates ..... **433414.36N** / **0925455.58W**
    (Click to Select)

REMARKS: Approach/Drawing attached.