

**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> KMCW	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> 1E	<u>CITY</u> MASON CITY	<u>STATE</u> IA		
<u>AIRPORT ELEVATION</u> 1213	<u>TDZE</u> 1193	<u>SUPERSEDED</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> 1D	<u>DATED</u> 07/15/2021	<u>MAG VAR</u> 0E	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 DECEMBER 2023	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

**TERMINAL ROUTES**

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
ALOCK	IAF	IKUWY	NOPT	TF	FB	1.00	011.57	22.27	3000
AREDA	IAF	IKUWY	NOPT	TF	FB	1.00	286.37	17.86	3000
TICUV	IAF	IKUWY	NOPT	TF	FB	1.00	068.95	30.72	3000
IKUWY	IF/IAF	UDCEC		TF	FB	1.00	359.93	6.90	2800
UDCEC	FAF	YOPUB/2.10 NM TO RW36		TF	FB	0.30	359.93	2.82	
YOPUB/2.10 NM TO RW36		RW36	MAP	TF	FO	0.30	359.93	2.10	
RW36	MAP	1393 MSL		CA			359.93		
1393 MSL		QOJIP		DF	FO	1.00			3000

**MISSED APPROACH**

**MAP:**

LPV: DA  
 LNAV/VNAV: DA  
 LNAV: RW36

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 3000 DIRECT QOJIP AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



**PROFILE:**

1. **PT**            **SIDE OF COURSE**                      **OUTBOUND**                      **FT WITHIN**                      **MILES OF**                      (IAF)

2. HOLD S IKUWY, RT, 359.93 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. **FAC:** 359.93                                      **FAF:** UDCEC                                      **DIST FAF TO MAP:** 4.92                                      **DIST FAF TO THLD:** 4.92

4. **MIN ALT:** IKUWY 3000, UDCEC 2800, YOPUB/2.10 NM TO RW36 1900

5. **DIST TO THLD FROM OM:**                      **MM:**                      **IM:**                      **150 HAT:**                      **200 HAT:** 0.50                      **GS ANT:**

6. **MIN GP INCPT:** 2800                      **GP ALT AT PFAF :** UDCEC 2800                                      **OM:**                                      **MM:**                                      **IM:**

7. **GP ANGLE:** 3.00                      **34:1:** IS CLEAR                      **20:1:** IS CLEAR                      **TCH:** 40.0

8. **MSA FROM:** RW36 3800

**EQUIPMENT REQUIREMENTS NOTE:**

RNP APCH-GPS.

**NOTES:**

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 54°C.

CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT AREDA ON V120 SOUTHEAST BOUND.

CHART NOTE: BARO-VNAV AND VDP NA WHEN USING CHARLES CITY ALTIMETER SETTING.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV VISIBILITY TO 7/8 SM AND LNAV CATS C AND D TO 1 SM.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CHARLES CITY ALTIMETER SETTING: INCREASE LPV DA TO 1480 FEET, LNAV/VNAV DA TO 1562 AND VISIBILITY ALL CATS 1/8 SM; INCREASE ALL MDA 100 FEET, LNAV CATS C, AND D VISIBILITY 3/8 SM AND CIRCLING CAT C 1/4 SM.

CHART NOTE: FOR INOPERATIVE ALS WHEN USING CHARLES CITY ALTIMETER, INCREASE LPV VISIBILITY TO 7/8 SM, LNAV/VNAV VISIBILITY TO 1 SM AND LNAV CATS C/D TO 1 3/8 SM.

**ADDITIONAL FLIGHT DATA:**

HOLD N, RT, 179.93 INBOUND.

CHART FAS OBST: 1296 TREE (19-053044) 430817N/0932024W.

CHART VDP AT 0.99 NM TO RW36.

WAAS CHANNEL # 93522

REFERENCE PATH ID: W36A

LTP HAE: 335.3 M



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

**ALTERNATE:** NA  STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.

<b>CATEGORY:</b>	<b>A</b>			<b>B</b>			<b>C</b>			<b>D</b>			<b>E</b>		
<b>FINAL TYPE</b>	<b>DA/MDA</b>	<b>VIS</b>	<b>HAT/HAA</b>	<b>DA/MDA</b>	<b>VIS</b>	<b>HAT/HAA</b>	<b>DA/MDA</b>	<b>VIS</b>	<b>HAT/HAA</b>	<b>DA/MDA</b>	<b>VIS</b>	<b>HAT/HAA</b>	<b>DA/MDA</b>	<b>VIS</b>	<b>HAT/HAA</b>
LPV DA	1393	1/2	200	1393	1/2	200	1393	1/2	200	1393	1/2	200			
LNAV/VNAV DA	1475	1/2	282	1475	1/2	282	1475	1/2	282	1475	1/2	282			
LNAV MDA	1560	1/2	367	1560	1/2	367	1560	5/8	367	1560	5/8	367			
CIRCLING	1680	1	467	1760	1	547	1780	1 1/2	567	1780	2	567			

**CHANGES - REASONS**

1. INCORPORATED CHANGES FROM P-NOTAMS FOR AMDT 1C AND 1D INTO FORM - IAW 8260.19I PARA 8-3-4.C (3).
2. PROFILE: REMOVED "\*" FROM LINE "4. MIN ALT: IKUWY 3000, UDCEC 2800, YOPUB/2.10 NM TO RW36 1900\*" - ASSOCIATED WITH "\*\*LNAV ONLY", NO LONGER REQUIRED PER CURRENT CRITERIA.
3. NOTES: DELETED CHART PLANVIEW NOTE "PROCEDURE NA FOR ARRIVAL AT ALOCK ON V100 WESTBOUND" - V100 NO LONGER ACTIVE.
4. NOTES: DELETED CHART PLANVIEW NOTE "PROCEDURE NA FOR ARRIVAL AT TICUV ON V138-505 SOUTHWEST BOUND" - V138-505 NO LONGER ACTIVE.
5. NOTES: AMMENDED CHART NOTE FROM "CHART NOTE: FOR INOPERATIVE MALSR, INCREASE LNAV/VNAV VISIBILITY TO 7/8 SM AND LNAV CATS C AND D TO 1 SM" TO "CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV VISIBILITY TO 7/8 SM AND LNAV CATS C AND D TO 1 SM" - UPDATING TO CURRENT CRITERIA FORMAT.
6. ADDITIONAL FLIGHT DATA: DELETED "CHART AIRPORT ELEVATION: 1213" - FROM A PREVIOUS AMENDMENT, AIRNAV HAS UPDATED ELEVATION.
7. ADDITIONAL FLIGHT DATA: REMOVED "\*" FROM "CHART VDP AT 0.99 NM TO RW36\*", DELETED "\*\*LNAV ONLY" - NO LONGER REQUIRED PER CURRENT CRITERIA.

**COORDINATED WITH:**

**A4A**  **ALPA**  **AOPA**  **APA**  **HAI**  **NBAA**  **OTHER:** ZMP, AMGR

**FLIGHT CHECKED BY**

PROCESSED IAW TECHNICAL SUPPORT GROUP (AJF-17) MEMO DATED 07/07/2021 GUIDANCE FOR PROCEDURAL CHANGES REQUIRING FLIGHT INSPECTION/VALIDATION

**OFFICE**

**DATE**

*Digitally signed by*

**CASIMIR L TABAKA**

**OFFICE**

**DATE**

Nov 07, 2023

AJV-A432

06/29/2023

**DEVELOPED BY**

CASIMIR L. TABAKA (CHRISTOPHER D. WILKINSON)

*Digitally signed by*

**CASIMIR L TABAKA**

Nov 07, 2023

**OFFICE**

**DATE**

**TITLE**

CASIMIR TABAKA

*Digitally signed by*

**CASIMIR L TABAKA**

Nov 07, 2023

AJV-A432

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMCW
RUNWAY	RW36
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W36A
LTP/FTP LATITUDE	430902.8790N
LTP/FTP LONGITUDE	0931939.6430W
LTP/FTP ELLIPSOIDAL HEIGHT	+03353
FPAP LATITUDE	431031.9900N
FPAP LONGITUDE	0931939.7900W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0768
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	C2B8EF89

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03636
FPAP ORTHOMETRIC HEIGHT	+03636

