

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.
 Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> MASON CITY MUNI	<u>AIRPORT ID</u> KMCW	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> 1C	<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SUPERSEDED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> 1B	<u>DATED</u> 11/12/2015	<u>MAG VAR</u> 0E	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 20 JUNE 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
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 FAF : 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				

PBN REQUIREMENTS NOTE:

RNP APCH.

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 ALOCK ON V100 WESTBOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT AREDA ON V120 SOUTHEAST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT TICUV ON V138-505 SOUTHWEST BOUND.
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 LNAV/VNAV VISIBILITY 1/4 SM; INCREASE ALL MDA 100 FEET AND LNAV CATS C AND D VISIBILITY 3/8 SM AND CIRCLING CAT C 1/4 SM.
CHART NOTE: FOR INOPERATIVE MALSR WHEN USING CHARLES CITY ALTIMETER SETTING, INCREASE LPV VISIBILITY TO 1 SM AND LNAV CATS C/D TO 1 3/8 SM.
CHART NOTE: BARO-VNAV AND VDP NA WHEN USING CHARLES CITY ALTIMETER SETTING.
CHART NOTE: FOR INOPERATIVE MALSR, INCREASE LNAV/VNAV VISIBILITY TO 7/8 SM AND LNAV CATS C AND D TO 1 SM.

ADDITIONAL FLIGHT DATA:

CHART AIRPORT ELEVATION 1213
CHART VDP AT 0.99 NM TO RW36*
*LNAV ONLY
WAAS CHANNEL #93522
REFERENCE PATH ID: W36A
CHART FAS OBST: 1296 TREE 430817N/0932024W.
HOLD N, RT, 179.93 INBOUND
LTP HAE: 335.3 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	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	1660	1	447	1680	1	467	1760	1 1/2	547	1780	2	567			

CHANGES - REASONS

1. UPDATED ALL COURSES 5 DEGREES- NEW AIRPORT MAGVAR DATA FROM 5E/1980 TO 0E/2020.
2. UPDATED LOCAL ALTIMETER CHART NOTE FROM WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CHARLES CITY ALTIMETER AND INCREASE ALL DA 87 FT AND ALL MDA 100 FT AND INCREASE LNAV/VNAV ALL CATS VISIBILITY 1/8 SM, LNAV AND CIRCLING CAT C AND D VISIBILITY 1/4 SM TO WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CHARLES CITY ALTIMETER SETTING: INCREASE LPV DA TO 1480 FEET, LNAV/VNAV DA TO 1562 AND LNAV/VNAV VISIBILITY 1/4 MILE; INCREASE ALL MDA 100 FEET AND LNAV CATS C AND D VISIBILITY 3/8 SM AND MILE AND CIRCLING CAT C 1/4 MILE- NOTAM FDC 5/7778.
3. REPLACED DME/DME RNP-0.3 NM WITH PBN REQUIREMENTS NOTE: RNP APCH - 8260.58A CHG 1, TABLE 1-2-1.
4. CHANGED AIRPORT ELEV FROM 1214 TO 1213 AND ADDED TO ADDITIONAL FLIGHT DATA- CURRENT AIRNAV DATA.
5. UPDATED LNAV/VNAV DA FROM 1463/250 HAT TO 1475/282 HAT- NOTAM FDC 5/7778.
6. UPDATED LNAV MDA FROM 1520/327 HAT TO 1560/ 367 HAT, VIS CAT C/D FROM 1/2 TO 5/8 SM- NOTAM FDC 5/7778.
7. UPDATED CIRCLING CAT D FROM 1840/627 HAA TO 1780/567 HAA - NOTAM FDC 5/7778.
8. CHANGED INOPERATIVE MALSR NOTE FROM FOR INOPERATIVE MALSR, WHEN USING CHARLES CITY ALTIMETER SETTING, INCREASE LPV ALL CATS VISIBILITY 1/2 SM, LNAV/VNAV ALL CATS VISIBILITY 5/8 SM, LNAV CAT C AND D VISIBILITY 3/4 SM TO FOR INOPERATIVE MALSR WHEN USING CHARLES CITY ALTIMETER SETTING, INCREASE LPV VISIBILITY TO 1 SM AND LNAV CATS C AND D TO 1 3/8 SM- NOTAM FDC 5/7778.
9. ADDED CHART NOTE: FOR INOPERATIVE MALSR, INCREASE LNAV/VNAV VISIBILITY TO 7/8 SM AND LNAV CATS C AND D TO 1 SM- NOTAM FDC 5/7778.
10. LTP/FTP LAT/LONG CHANGED FROM 430902.8700N-0931939.6400W TO 430902.8790N-0931939.6430W- NEW AIRNAV DATA.
11. CRC REMAINDER CHANGED FROM 32AB6CB7 TO C2B8EF89- UPDATED LTP/FTP COORDINATES.
12. CHANGED BARO-VNAV UPPER LIMIT TO 54C, DELETED FARENEHIT VALUES-AFS CALCULATOR USED, CHARTING CRITERIA CHANGE.
13. VDP CHANGED FROM .86 NM TO RW36 TO .99 NM TO RW36-CHART CORRECTION FORM AMDT 1B.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZMP, AMGR, ATA

FLIGHT CHECKED BY

JEFFREY W HARING

Digitally signed by
WARDELL HENNING

Feb 14, 2019

OFFICE

FICO

DATE

1/8/19

DEVELOPED BY

WARDELL HENNING (MICHAEL W HARRIS)

Digitally signed by
WARDELL HENNING

Feb 14, 2019

OFFICE

AJV-5430

DATE

10/22/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
WARDELL HENNING

Feb 14, 2019

OFFICE

AJV-5430

DATE

TITLE
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

