

**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> IGM	<u>PROCEDURE NAME</u> RNAV (GPS) Z RWY 21	<u>ORIGINAL/AMENDMENT</u> ORIG-D	<u>CITY</u> KINGMAN	<u>STATE</u> AZ		
<u>AIRPORT ELEVATION</u> 3449	<u>TDZE</u> 3403	<u>SUPERSEDED</u> RNAV (GPS) Z RWY 21	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>DATED</u> 03/31/2016	<u>MAG VAR</u> 12E	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<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>
BEYMI		CIVAT		TF	FB	1.00	303.32	8.74	8900
CIVAT	IAF	JAKLO		TF	FB	1.00	303.18	5.00	7200
DOMMS	IAF	JAKLO		TF	FB	1.00	123.07	8.30	7200
JAKLO	IF	JAMVU	PFAF	TF	FB	1.00	213.14	6.13	6300
JAMVU	PFAF	RW21	MAP	TF	FO	0.30	213.09	8.77	
RW21	MAP	3678 MSL		CA			213.09		
3678 MSL		IRDUQ		DF	FB	1.00			
IRDUQ		TOPRY		TF	FB	1.00	302.91	9.00	
TOPRY		PRFUM		TF	FO	1.00	028.76	23.05	9000

MISSED APPROACH

MAP:

LPV: DA

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 9000 DIRECT IRDUQ AND ON TRACK 302.91 TO TOPRY AND ON TRACK 028.76 TO PRFUM AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- | | | | | | | |
|------------------------------------|----------------------------|----------------|------------------------|-------------------------|---------|-----|
| 1. PT | SIDE OF COURSE | OUTBOUND | FT WITHIN | MILES OF | (IAF) | |
| 2. PROFILE STARTS AT JAKLO | | | | | | |
| 3. FAC: 213.09 | PFAF: JAMVU | | DIST PFAF TO MAP: 8.77 | DIST PFAF TO THLD: 8.77 | | |
| 4. MIN ALT: JAKLO 7200, JAMVU 6300 | | | | | | |
| 5. DIST TO THLD FROM OM: | MM: | IM: | 150 HAT: | 275 HAT: 0.73 | GS ANT: | |
| 6. MIN GP INCPT: 6300 | GP ALT AT PFAF: JAMVU 6300 | | | OM: | MM: | IM: |
| 7. GP ANGLE: 3.00 | 34:1: IS CLEAR | 20:1: IS CLEAR | TCH: 45.0 | | | |
| 8. MSA FROM: RW21 9700 | | | | | | |

QUALITY
13
CHECKED

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT BEYMI ON V105 EAST BOUND.

ADDITIONAL FLIGHT DATA:

HOLD NW, LT, 150.00 INBOUND.
WAAS CHANNEL # 70612
REFERENCE PATH ID: W21A
LTP HAE: 1006.5 M

MINIMUMS:

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

ALTERNATE: NA ☒

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	3678	1	275	3678	1	275	3678	1	275	3678	1	275			

CHANGES - REASONS

- INCORPORATED CHANGES FROM ALL PREVIOUS P-NOTAMS INTO FORM – IAW 8260-19J PARA 8-3-4.C (3).
- MISSED APPROACH: UPDATED "CLIMB TO 9000 DIRECT IRDUQ AND VIA TRACK 302.91 TO TOPRY AND VIA TRACK 028.76 TO PRFUM AND HOLD" TO "CLIMB TO 9000 DIRECT IRDUQ AND TRACK 302.91 TO TOPRY AND TRACK 028.76 TO PRFUM AND HOLD" - REMOVED VIA IAW 8260.19J 8-6-6.D.11.
- PROFILE LINE 1: REMOVED "NA" - NO LONGER REQUIRED, UPDATE TO NEW FORM AND IAW 8260.19J 8-6-7.A.3.
- PROFILE LINE 3: ADDED PFAF "JAMVU" AND DISTANCE PFAF TO MAP "8.77" - IAW 8260.19J 8-6-7.C.
- PROFILE LINE 5: UPDATED "250 HAT: 0.67" TO "275 HAT: 0.73" - LOCATION UPDATED FROM ADDITIONAL FLIGHT DATA AND IAW 8260-19J PARA 8-6-7.F.
- PROFILE LINE 7: ADDED "20:1 IS CLEAR" - IAW 8260.19J 8-6-7.G.3.
- PBN REQUIREMENTS NOTE: ADDED "RNP APCH - GPS" - IAW 8260.19I, PARA 8-6-8.B.2 AND CLEARS T-NOTAM 4/1394.
- NOTES: REMOVED "CHART NOTE: DME/DME RNP -0.3 NA" - NO LONGER REQUIRED.
- NOTES: UPDATED "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT BEYMI VIA V105 EAST BOUND" TO "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT BEYMI ON V105 EAST BOUND" - IAW 8260.19J 8-2-5.E
- MINIMUMS: UPDATED LPV DA/HAT FROM "3653/250" TO "3678/275" - NEW CONTROLLING OBSTACLE, CLEARS T-NOTAM 4/1394.
- CRC REMAINDER: UPDATED FROM "8D1CF701" TO "53ACB1BA" - FPAP LAT/LONG UPDATED FROM "351449.9800N/1135711.9100W" TO "351449.9890N/1135711.9110W" AND LTP/FTP ELLIPSOIDAL HEIGHT FROM "+10066" TO "+10065" AND LTP/FTP LAT LONG UPDATED FROM "351553.075N/1135554.9605W" TO "351553.0755N/1135554.9615W".



COORDINATED WITH:

A4A

☐

ALPA

☒

AOPA

☒

APA

☐

HAI

☐

NBAA

☒

OTHER:

AMGR, ZLA

FLIGHT CHECKED BY

THOMAS E MOLOKIE

Digitally signed by

ROBERT G HAMILTON

Nov 06, 2024

OFFICE

AJF

DATE

10/31/2024

DEVELOPED BY

ROBERT G HAMILTON (MATTHEW W.TOWNSEND)

Digitally signed by

ROBERT G HAMILTON

Nov 06, 2024

OFFICE

AJV-A433

DATE

05/15/2024

APPROVED BY

ROBERT G HAMILTON

Digitally signed by

ROBERT G HAMILTON

Nov 06, 2024

OFFICE

AJV-A433

DATE

TITLE

MANAGER

FAS DATA BLOCK INFORMATION

DATA FIELD

OPERATION TYPE
SBAS SERVICE PROVIDER IDENTIFIER
AIRPORT IDENTIFIER
RUNWAY
APPROACH PERFORMANCE DESIGNATOR
ROUTE INDICATOR
REFERENCE PATH DATA SELECTOR
REFERENCE PATH IDENTIFIER (APPROACH ID)
LTP/FTP LATITUDE
LTP/FTP LONGITUDE
LTP/FTP ELLIPSOIDAL HEIGHT
FPAP LATITUDE
FPAP LONGITUDE
THRESHOLD CROSSING HEIGHT (TCH)
TCH UNITS SELECTOR (METERS OR FEET USED)
GLIDEPATH ANGLE (GPA)
COURSE WIDTH AT THRESHOLD
LENGTH OFFSET
HORIZONTAL ALERT LIMIT (HAL)
VERTICAL ALERT LIMIT (VAL)

DATA

0
0
KIGM
RW21
0
Z
0
W21A
351553.0755N
1135554.9615W
+10065
351449.9890N
1135711.9110W
00045.0
F
03.00
106.75
0672
40.0
50.0

CRC REMAINDER

53ACB1BA

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE
LTP ORTHOMETRIC HEIGHT
FPAP ORTHOMETRIC HEIGHT

K2
+10347
+10347



**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>
IGM	RNAV (GPS) Z RWY 21	ORIG-D	KINGMAN	AZ	3449	RNAV

PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM BEYMI **TO** CIVAT

RNP 1.00 **DISTANCE** 8.74 **PAT** **MAP** **HAT** **HMAS**

<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	351736.00N/1133051.00W	6834	164	98	4E	2000					8900
TERRAIN	351736.00N/1133051.00W	6634 (6600)								AS1500	8100

COMPUTATIONS

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

SEGMENT REMARKS:

INITIAL

FROM CIVAT **TO** JAKLO

RNP 1.00 **DISTANCE** 5.00 **PAT** **MAP** **HAT** **HMAS**

<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	352824.00N/1134324.00W	5617	164	98	4E	1000				PR78 AT505	7200
TERRAIN	352824.00N/1134324.00W	5417 (5400)								AS1500	6900

COMPUTATIONS

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

SEGMENT REMARKS:



INITIAL

FROM

DOMMS

TO

JAKLO

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>		<u>HMAS</u>				
1.00	8.30										
<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	353521.00N/1134754.00W	6017	164	98	4E	1000				PR174	7200
TERRAIN	353500.00N/1134651.00W	5699 (5700)								AS1500	7200

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE

FROM

JAKLO

TO

JAMVU

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>		<u>HMAS</u>				
1.00	6.13										
<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	352133.00N/1134706.00W	5515	164	98	4E	500				AC98 PR117	6300
TERRAIN	352133.00N/1134706.00W	5315 (5300)								AS1000	6300

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FINAL: LPV

FROM

JAMVU

TO

RW21

<u>RNP</u> 0.30	<u>DISTANCE</u> 8.77	<u>PAT</u>	<u>MAP</u> DA	<u>HAT</u> 275	<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>
VEGETATION (04-024892)	351552.68N/1135550.93W	3401	20	10	1B		33.22:1			AC10 PR25	3678

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

PRFUM

<u>RNP</u> 0.30-1.00	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u> 3474			
<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				9000
AAO	352327.00N/1140724.00W	6313	164	98	4E	1000				SA-68 PR320	7600
TERRAIN	352327.00N/1140724.00W	6113 (6100)								AS1500	7600

COMPUTATIONS

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

SEGMENT REMARKS:

MSA

CENTER
RW21

RADIUS
25

<u>SECTOR</u>	<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>BEARING</u>	<u>DISTANCE</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
360-360	AAO	350434.80N/1135353.90W	160	11.4	8617	1000	3	6A	1000			9700

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

ZLA ARTCC, PRC FSS

WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	SERVICE-A	ADJUSTMENTS
ASOS	IGM	24	IGM	0	Y	0
BACK-UP WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	SERVICE-A	ADJUSTMENTS

WX REMARKS:

REMOTE ALTIMETER SETTING NOT USED, NO VIABLE SOURCE.

PRIMARY NAVAID	MONITOR POINT	HRS OPERATION	CAT
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APPROACH AND RUNWAY LIGHTING SYSTEM	RUNWAY MARKINGS	RUNWAY VISUAL RANGE
RW17 - MIRL (PCL), PAPI-2L	BSC-G	
RW35 - MIRL (PCL), PAPI-2L	BSC-G	
RW03 - REIL (PCL), MIRL (PCL), PAPI-4L (PCL)	NPI-G	
RW21 - MIRL (PCL), REIL (PCL), PAPI-4L (PCL)	NPI-G	

GLIDESLOPE ANGLE	ELEV RWY THRESHOLD	TCH	ELEV GS ANTENNA	DISTANCE FROM RWY	VGSI ANGLE	TCH
3.00	3394.6	45.0			3.00	44.9

FINAL APPROACH COURSE AIMING

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

CRITICAL TEMPERATURES

CRITICAL LOW	CRITICAL HIGH	ACT	APT ISA
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CRITICAL TEMPERATURE REMARKS:

"VISUAL PORTION OF FINAL" PENETRATIONS

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PENETRATIONS REMARKS:



PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

TAA NOT DEVELOPED PER FPO REQUEST.

LNAV/VNAV NOT DEVELOPED DUE TO HIGH TERRAIN AT THE PFAF LOCATION.

30' AVERAGE VEGETATION USED AS PER FPO.

REMOTE ALTIMETER SETTING NOT USED AS PER FPO DUE TO NO VIABLE SOURCE.

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	7.41
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.82
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	225.09
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	5000
DISTANCE FROM	THLD	TO 1500FT POINT	14.10
WIDTH OF	INTERMEDIATE	SEGMENT AT 1500FT POINT	4.00
TRUE COURSE OF	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	225.09
HIGH TERRAIN IN	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	5300

THRESHOLD COORDINATES (IF STR-IN)	351553.08N/1135554.96W
ARP COORDINATES	351534.12N/1135616.98W
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 3 DISTANCE 0.69 NM
FAF COORDINATES	352205.30N/1134819.92W
FIX NAME COORDINATES	

REMARKS

NO ADDITIONAL AIRSPACE REQUIRED.

PART E: PREPARED BY

NAME	OFFICE	DATE	TITLE
ROBERT G HAMILTON (MATTHEW W.TOWNSEND)	AJV-A433	05/15/2024	AERONAUTICAL INFORMATION SPECIALIST

