

**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> MADERA MUNI	<u>AIRPORT ID</u> KMAE	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 12	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> MADERA	<u>STATE</u> CA
<u>AIRPORT ELEVATION</u> 255	<u>TDZE</u> 253	<u>SUPERSEDED</u> RNAV (GPS) RWY 12	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 07/21/2016	<u>MAG VAR</u> 13E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 10 OCTOBER 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1980

**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>
BLEAR		RUGUE		TF	FB	1.00	310.26	16.63	2000
EBTUW		COPPY		TF	FB	1.00	142.28	7.47	2000
RUGUE	IAF	IDAYI		TF	FB	1.00	032.22	7.00	2000
COPPY	IAF	IDAYI		TF	FB	1.00	211.06	7.00	2000
IDAYI	IF	FOSAB		TF	FB	1.00	121.94	6.10	1900
FOSAB	FAF	CIVSI/2.50 NM TO RW12		TF	FB	0.30	121.97	2.57	
CIVSI/2.50 NM TO RW12		RW12	MAP	TF	FO	0.30	121.97	2.50	
RW12	MAP	800 MSL		CA			121.97		800
800 MSL		KITBY		DF	FO	1.00			2000

**MISSED APPROACH**

**MAP:**

LPV: DA  
LNAV/VNAV: DA  
LNAV: RW12

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 800 THEN CLIMBING RIGHT TURN TO 2000 DIRECT KITBY AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



**PROFILE:**

- 1. **PT**      **SIDE OF COURSE**                      **OUTBOUND**                      **FT WITHIN**                      **MILES OF (IAF)**
- 2. PROFILE STARTS AT IDAYI
- 3. **FAC:** 121.97      **FAF:** FOSAB                      **DIST FAF TO MAP:** 5.07                      **DIST FAF TO THLD:** 5.07
- 4. **MIN ALT:** IDAYI 2000, FOSAB 1900, CIVSI/2.50 NM TO RW12 1080\*
- 5. **DIST TO THLD FROM OM:**                      **MM:**                      **IM:**                      **150 HAT:**                      **250 HAT:** 0.68                      **GS ANT:**
- 6. **MIN GP INCPT:** 1900                      **GP ALT AT FAF :** FOSAB 1900                      **OM:**                      **MM:**                      **IM:**
- 7. **GP ANGLE:** 3.00                      **34:1:** IS CLEAR                      **20:1:** IS CLEAR                      **TCH:** 35.0
- 8. **MSA FROM:** RW12 5900

**PBN REQUIREMENTS NOTE:**

RNP APCH.

**NOTES:**

CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).  
 CHART NOTE: CIRCLING NA TO RWYS 8 AND 26.  
 CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -3 C OR ABOVE 54 C.  
 CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BLEAR ON V230 NORTHEAST BOUND.

**ADDITIONAL FLIGHT DATA:**

CHART CIRCLING ICON.  
 CHART VDP AT 0.93 NM TO RW12\*  
 \*LNAV ONLY  
 WAAS CHANNEL #62909  
 REFERENCE PATH ID: W12A  
 HOLD NW, RT, 119.00 INBOUND  
 LTP HAE: 43.5 M

**MINIMUMS:**

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

**ALTERNATE:** NA  STANDARD

CATEGORY:	A			B			C			D			E		
	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	503	3/4	250	503	3/4	250	503	3/4	250		NA				
LNAV/VNAV DA	503	3/4	250	503	3/4	250	503	3/4	250		NA				
LNAV MDA	580	1	327	580	1	327	580	1	327		NA				
CIRCLING	680	1	425	720	1	465	740	1 1/2	485		NA				



**CHANGES - REASONS**

1. REMOVED BACKUP ALTIMETER SETTING AND ASSOCIATED VDP NA NOTES - MOVED TO -9 AS A CONTINGENCY NOTE.
2. CHANGED MISSED APPROACH INSTRUCTIONS FROM: CLIMB TO 700 THEN CLIMBING RIGHT TURN TO 2000 DIRECT KITBY AND HOLD TO: CLIMB TO 800 THEN CLIMBING RIGHT TURN TO 2000 DIRECT KITBY AND HOLD - LPV SECTION 1 END ALTITUDE 703.01 FT, RAISED CLIMB TO ALTITUDE TO NEXT 100 FT.
3. MSA CHANGED FROM RWY 12 5800 TO RWY12 5900 - NEW CONTROLLING OBSTACLE.
4. REMOVED UYOKA INITIAL FROM PROCEDURE - PER RAPT REQUEST.
5. REMOVED CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT UYOKA ON V23 NORTHWEST BOUND - UYOKA INITIAL REMOVED.
6. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BLEAR ON V230-585 NORTHEAST BOUND CHANGED TO CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BLEAR ON V230 NORTHEAST BOUND - V585 AIRWAY HAS BEEN CANCELED.
7. ADDED INITIAL FROM COPPY TO IDAYI - PER RAPT REQUEST.
8. ADDED FEEDER FROM EBTUW TO COPPY - PER RAPT REQUEST.
9. COURSE/DISTANCE FROM BLEAR TO RUGUE CHANGED FROM 310.35/16.43 TO 310.26/16.63 - RUGUE MOVED 0.20 NM NW.
10. COURSE/DISTANCE FROM RUGUE TO IDAYI CHANGED FROM 031.94/7.00 TO 032.22/7.00 - RUGUE MOVED 0.20 NM NW, IDAYI MOVED 0.17 NM NW.
11. COURSE/DISTANCE FROM IDAYI TO FOSAB CHANGED FROM 121.92/5.93 TO 121.94/6.10 - IDAYI MOVED 0.17 NM NW, FOSAB MOVED 19 FT SE.
12. LPV VISIBILITY ALL CATS CHANGED FROM 7/8 SM TO 3/4 SM - 8260.3D TABLE 3-3-1.
13. LNAV/VNAV VISIBILITY ALL CATS CHANGED FROM 7/8 SM TO 3/4 SM - 8260.3D TABLE 3-3-1.
14. CIRCLING MDA/HAA CAT A CHANGED FROM 680/425 TO 660/405, CAT C CHANGED FROM 720/465 TO 740/485 - NEW CONTROLLING OBSTACLES.
15. CHANGED TCH FROM 34 FT TO 35 FT - MINIMUM TCH FOR WHEEL HEIGHT GROUP 2, 8260.58A TABLE 1-3-1.
16. CHART FAS OBSTACLE CHANGED FROM 304 TREE 370000N/1200733W TO 319 TREE 365959N/1200648W - NEW CONTROLLING OBSTACLE.
17. REMOVED CHART NOTE: DME/DME RNP-0.3 NA AND ADDED RNP APCH TO PBN REQUIREMENTS NOTES - CURRENT NOTATION PER 8260.19H.
18. DISTANCE FAF TO MAP/FAF TO THLD CHANGED FROM 5.08 NM TO 5.07 NM - FOSAB MOVED 19 FT SE.
19. FPAP COORDINATES CHANGED FROM 365835.2400N-200550.3700W TO 365835.2409N-200550.3680W - TARGETS GENERATED.
20. CRC REMAINDER CHANGED FROM 0D55571E TO 65223599 - CHANGES TO FPAP COORDINATES, TCH.
21. LNAV ALL CATS MDA/HAT CHANGED FROM 560/307 TO 580/327 - NEW CONTROLLING OBSTACLE.
22. LNAV CAT C VISIBILITY CHANGED FROM 7/8 SM TO 1 SM - 8260.3D TABLE 3-3-1.
23. CHANGED NOTE FROM: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -4C (25F) OR ABOVE 54C (130F) TO: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -3C OR ABOVE 54C - NEW TEMPERATURE DATA, 8260.19H 8-6-9.S.
24. VDP DISTANCE CHANGED FROM 0.87 TO 0.93 NM - 8260.3D 2-6-5.B.
25. LINE 3: FAC CHANGED FROM 121.98 TO 121.97 - FOSAB MOVED 19 FT SE.

05/29/19: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 11/08/18.

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

7/19/2019: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 05/31/2019.

1. CHANGED CAT A CIRCLING MDA/HAA FROM 660/405 TO 680/425.

**COORDINATED WITH:**

**A4A**  **ALPA**  **AOPA**  **APA**  **HAI**  **NBAA**  **OTHER:** FAT APP CON, AMGR, ZOA

*Digitally signed by*

**CASIMIR L TABAKA**

Jul 22, 2019

**OFFICE**

FIOG

**DATE**

05/23/2019

*Digitally signed by*

**CASIMIR L TABAKA**

Jul 22, 2019

**OFFICE**

AJV-5421

**DATE**

11/08/2018

*Digitally signed by*

**CASIMIR L TABAKA**

Jul 22, 2019

**OFFICE**

AJV-5420

**DATE**

**TITLE**  
MANAGER



**FAS DATA BLOCK INFORMATION**

<b><u>DATA FIELD</u></b>	<b><u>DATA</u></b>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMAE
RUNWAY	RW12
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W12A
LTP/FTP LATITUDE	365938.3495N
LTP/FTP LONGITUDE	1200708.9730W
LTP/FTP ELLIPSOIDAL HEIGHT	+00435
FPAP LATITUDE	365835.2405N
FPAP LONGITUDE	1200550.3680W
THRESHOLD CROSSING HEIGHT (TCH)	00035.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1064
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	65223599

**ADDITIONAL PATH POINT RECORD INFORMATION**

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+00761
FPAP ORTHOMETRIC HEIGHT	+00761

