

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> NEVADA COUNTY	<u>AIRPORT ID</u> KGOO	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 7	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> GRASS VALLEY	<u>STATE</u> CA
<u>AIRPORT ELEVATION</u> 3158	<u>TDZE</u> 3131	<u>SUPERSEDED</u> RNAV (GPS) RWY 7	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 03/29/2018	<u>MAG VAR</u> 16E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 8 NOVEMBER 2018	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

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>
MRGGO	IF/IAF	ULAHY		TF	FB	1.00	074.53	8.76	4300
ULAHY	FAF	RW07	MAP	TF	FO	0.30	071.25	3.73	
RW07	MAP	3900 MSL		CA			071.25		3900
3900 MSL		MRGGO		DF	FO	1.00			6000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW07

MISSED APPROACH INSTRUCTIONS:

(DO NOT EXCEED 250 KIAS UNTIL MRGGO) CLIMB TO 3900 THEN CLIMBING RIGHT TURN TO 6000 DIRECT MRGGO AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
2. PROFILE STARTS AT MRGGO
3. **FAC:** 071.25 **FAF:** ULAHY **DIST FAF TO MAP:** 3.73 **DIST FAF TO THLD:** 3.73
4. **MIN ALT:** MRGGO 5000, ULAHY 4300
5. **DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **475 HAT:** 1.56 **GS ANT:**
6. **MIN GP INCPT:** 4300 **GP ALT AT FAF :** ULAHY 4300 **OM:** **MM:** **IM:**
7. **GP ANGLE:** 3.00 **34:1:** IS NOT CLEAR **20:1:** IS NOT CLEAR **TCH:** 40.0
8. **MSA FROM:** RW07 9700

PBN REQUIREMENTS NOTE:



RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA NORTH OF RWY 07-25.
CHART NOTE: RWY 7 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -21C OR ABOVE 54C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MRGGO ON V332 NORTHWEST BOUND AND V200 WESTBOUND.
CHART NOTE: PROCEDURE NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
WAAS CHANNEL #90240
REFERENCE PATH ID: W07A
CHART FAS OBST: 3201 TREE 391343N/1210019W.
HOLD SE, RT, 304.46 INBOUND
LTP HAE: 910.1 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 1/4

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	3606	1 3/8	475	3606	1 3/8	475	3606	1 3/8	475	3606	1 3/8	475			
LNAV/VNAV DA	3772	1 7/8	641	3772	1 7/8	641	3772	1 7/8	641	3772	1 7/8	641			
LNAV MDA	3860	1	729	3860	1	729	3860	2	729	3860	2	729			
CIRCLING	3860	1	702	3860	1	702	3880	2	722	3880	2 1/4	722			

CHANGES - REASONS

1. TERMINAL ROUTES, RW07 (MAP) TO 3560 MSL CHANGED TO RW07 (MAP) TO 3900 MSL. ALTITUDE CHANGED FROM 3560 TO 3900 - TO CLEAR A MISSED APPROACH OBSTACLE IN SECTION 2 IAW 8260.58A 3-5-2B.
2. TERMINAL ROUTES, 3560 MSL TO MRGGO CHANGED TO 3900 MSL TO MRGGO - TO CLEAR A MISSED APPROACH OBSTACLE IN SECTION 2 IAW 8260.58A 3-5-2B.
3. PROFILE LINE 7, 20:1 IS NOT CLEAR ADDED - IAW 8260.19H PARA 8-6-7G(3).
4. LPV MINIMA CHANGED FROM 3381 DA/250 HAT/1 SM TO 3606 DA/475 HAT/1 3/8 SM FOR CATS A-D - NEW CONTROLLING OBSTACLE.
5. LNAV/VNAV MINIMA CHANGED FROM 3565 DA/434 HAT/1 3/4 VIS TO 3772 DA/641 HAT/1 7/8 FOR CATS A-D - NEW CONTROLLING OBSTACLE.
6. CIRCLING MINIMA CATS C-D CHANGED FROM 3860 MDA/702 HAA TO 3880 MDA/722 HAA - NEW CONTROLLING OBSTACLE.
7. MISSED APPROACH CHANGED FROM 'CLIMB TO 3560 THEN CLIMBING RIGHT TURN TO 6000 DIRECT MRGGO AND HOLD' TO '(DO NOT EXCEED 250 KIAS UNTIL MRGGO) CLIMB TO 3900 THEN CLIMBING RIGHT TURN TO 6000 DIRECT MRGGO AND HOLD' - TO CLEAR A MISSED APPROACH OBSTACLE IN SECTION 2 IAW 8260.58A 3-5-2B.
8. ADDITIONAL FLIGHT DATA, FAS OBST: 3186 TREE 391314N/1210016W CHANGED TO FAS OBST: 3201 TREE 391343N/1210019W - NEW CONTROLLING OBSTACLE.
9. ADDITIONAL FLIGHT DATA, DISTANCE TO THLD FROM 250 HATH: 0.85 NM CHANGED TO DISTANCE TO THLD FROM 475 HAT: 1.56 NM - HAT RAISED TO CLEAR MISSED APPROACH PENETRATING OBSTACLE.
10. ADDITIONAL FLIGHT DATA, NOTE DELETED: CHART VDP AT 2.34 NM TO RW07 - OBSTACLES PENETRATE VDP SURFACE.
11. NOTE DELETED: DME/DME RNP-0.3 NA - NOTE REPLACED WITH NEW PBN EQUIPMENT REQUIREMENT NOTE.
12. PBN REQUIREMENTS NOTE ADDED: RNP APCH - PER MEMO 257
13. FAHRENHEIT TEMPS DELETED FROM NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -21C (-5F) OR ABOVE 54C (130F) - PER 8260.19H 8-6-9S.
14. NOTE DELETED: RWY 25 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED - NO LONGER REQUIRED FOR CIRCLING RUNWAYS PER THE .19H.
15. NOTE CHANGED FROM 'RWY 7 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED' TO 'RWY 7 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED' - 20:1 STRAIGHT-IN PENETRATIONS.
16. NOTE DELETED 'CIRCLING RWY 25 NA AT NIGHT' AND REPLACED WITH 'PROCEDURE NA AT NIGHT' - STRAIGHT-IN AND CIRCLING 20:1 PENETRATIONS.
17. NOTE DELETED: ALTERNATE MINIMUMS NA WHEN LOCAL WEATHER NOT AVAILABLE - PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.



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<u>COORDINATED WITH:</u>					
A4A <input type="checkbox"/> ALPA <input checked="" type="checkbox"/> AOPA <input checked="" type="checkbox"/> APA <input type="checkbox"/> HAI <input type="checkbox"/> NBAA <input checked="" type="checkbox"/> OTHER: ZOA, NORCAL APP CON, AMGR					
<u>FLIGHT CHECKED BY</u>		Digitally signed by	<u>OFFICE</u>	<u>DATE</u>	
THOMAS E MOLOKIE		DAVID TEFFETELLER	FICO	9/24/18	
		Sep 27, 2018			
<u>DEVELOPED BY</u>		Digitally signed by	<u>OFFICE</u>	<u>DATE</u>	
ANDREA CHANEY		ANDREA J CHANEY	AJV-5433	07/19/2018	
<u>APPROVED BY</u>		Digitally signed by	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
PATRICK MULQUEEN		DAVID TEFFETELLER	AJV-5430		MANAGER
		Sep 27, 2018			



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KGOO
RUNWAY	RW07
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W07A
LTP/FTP LATITUDE	391325.5355N
LTP/FTP LONGITUDE	1210038.7220W
LTP/FTP ELLIPSOIDAL HEIGHT	+09101
FPAP LATITUDE	391329.7130N
FPAP LONGITUDE	1205844.1875W
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	1424
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	875BF440

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+09359
FPAP ORTHOMETRIC HEIGHT	+09359

