

**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> MARINA MUNI	<u>AIRPORT ID</u> KOAR	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 11	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> MARINA	<u>STATE</u> CA
<u>AIRPORT ELEVATION</u> 137	<u>TDZE</u> 137	<u>SUPERSEDED</u> RNAV (GPS) RWY 11	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 02/11/2010	<u>MAG VAR</u> 15E
<u>EPOCH YEAR</u> 1985					
<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>
PENNI	IAF	FOMET		TF	FB	1.00	047.06	8.50	2700
MOVER	IAF	FOMET		TF	FB	1.00	197.28	5.50	2700
FOMET	IF	AXAME		TF	FB	1.00	107.58	5.50	1800
AXAME	FAF	RW11	MAP	TF	FO	0.30	107.64	5.03	
RW11	MAP	600 MSL		CA			107.64		600
600 MSL		FOMET		DF	FO	1.00			2700

MISSED APPROACH

MAP:

LNAV: RW11

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 600, THEN CLIMBING LEFT TURN TO 2700 DIRECT FOMET AND HOLD, CONTINUE CLIMB-IN-HOLD TO 2700.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

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

2. PROFILE STARTS AT FOMET

3. FAC: 107.64 FAF: AXAME DIST FAF TO MAP: 5.03 DIST FAF TO THLD: 5.03

4. MIN ALT: FOMET 2700, AXAME 1800

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

6. MIN GP INCPT: GP ALT AT FAF :

7. GP ANGLE: 34:1: IS NOT CLEAR 20:1: IS CLEAR TCH:

8. MSA FROM: RW11 6300

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 11 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PENNI ON V27 NORTHWEST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MOVER ON V25-87 NORTHWEST BOUND.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
AXAME TO RW11: 3.04/40.
CHART VDP AT 1.06 NM TO RW11
CHART FAS OBST: 270 TREE 364048N/1214618W.
HOLD W, RT, 107.58 INBOUND

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
LNAV MDA	520	1	383	520	1	383		NA			NA				
CIRCLING	640	1	503	760	1	623		NA			NA				



CHANGES - REASONS

1. UPDATED INITIAL SEGMENT MOVER FROM COURSE/DISTANCE 203.49M/5.54 TO 197.28M/5.50 - FAAO 8260.58A CHG1 PARA 1-2-5A(3).
2. UPDATED INITIAL SEGMENT PENNI FROM COURSE/DISTANCE 043.43M/8.22 TO 047.06M/8.50 - FAAO 8260.58A CHG1 PARA 1-2-5A(3).
3. UPDATED INTERMEDIATE SEGMENT FOMET FROM COURSE/DISTANCE 107.56M/6.10 TO 107.58M/5.50 - TARGETS EVALUATED FAC.
4. UPDATED FAC FROM COURSE 107.63M TO 107.64M - TARGETS GENERATED FAC.
5. ADDED "CHART CIRCLING ICON" TO ADDITIONAL FLIGHT DATA - NEW CIRCLING CRITERIA APPLIED.
6. REMOVED H-I-L - ATC REQUEST.
7. CHANGED FOMET IF/IAF TO IF ONLY - ATC REQUEST.
8. REMOVED NOPT FROM INITIAL SEGMENT PENNI - H-I-L REMOVED FROM PROCEDURE.
9. REMOVED NOPT FROM INITIAL SEGMENT MOVER - H-I-L REMOVED FROM PROCEDURE.
10. UPDATED CHART NOTE FROM "VISIBILITY REDUCTION BY HELICOPTERS NA" TO "RWY 11 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED" - FAAO 8260.19H PARA 8-6-11K (3).
11. REMOVED "DME/DME RNP 0.3 NA" AND ADDED "RNP APCH" TO PBN REQUIREMENTS NOTES SECTION - IAW 8260.19H PARA 8-6-8.
12. ADDED CA LEG TO MISSED SEGMENT - CODING REQUIREMENT.
13. MISSED APPROACH CHANGED FROM "CLIMBING LEFT TURN TO 2700 DIRECT FOMET AND HOLD" TO "CLIMB TO 600, THEN CLIMBING LEFT TURN TO 2700 DIRECT FOMET AND HOLD, CONTINUE CLIMB-IN-HOLD TO 2700 - PER TARGETS BUILD.
14. REMOVED BACKUP ALTIMETER - MOVED TO -9 AS A CONTINGENCY NOTE.
15. ADDED VDP - AIRPORT NOW HAS LOCAL ALTIMETER SOURCE.
16. LNAV MDA/HAT CHANGED FROM 720/583 TO 520/383 - NEW CONTROLLING OBSTACLE.
17. CIRCLING CAT A MDA/HAA CHANGED FROM 720/583 TO 640/503, CAT B FROM 740/603 TO 760/623 - NEW CONTOLLING OBSTACLE.
18. ADDED "PROCEDURE NA FOR ARRIVAL AT PENNI ON V27 NORTHWEST BOUND AND ARRIVAL AT MOVER ON V25-87 NORTHWEST BOUND - TURNS EXCEED 90 DEGREES.

COORDINATED WITH:

A4A ☐ ALPA ☐ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: MRY APCH, AMGR, CA AERO.

FLIGHT CHECKED BY

THOMAS E MOLOKIE

Digitally signed by

DONALD H LANIER

Jun 09, 2020

OFFICE

FICO

DATE

06/04/2020

DEVELOPED BY

DONALD H. LANIER (ROSALYN REOLA)

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DONALD H LANIER

Jun 09, 2020

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AJV-A431

DATE

01/27/2020

APPROVED BY

GEORGE DAVIS

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DONALD H LANIER

Jun 09, 2020

OFFICE

AJV-A430

DATE

TITLE
MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

<u>AIRPORT</u> MARINA MUNI	<u>AIRPORT ID</u> KOAR	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 11	<u>AMDT NO.</u> 2	<u>CITY</u> MARINA	<u>STATE</u> CA	<u>AIRPORT ELEVATION</u> 137	<u>FACILITY</u> RNAV
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PART A: OBSTRUCTION DATA SEGMENTS

INITIAL

<u>FROM</u> PENNI	<u>TO</u> FOMET
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<u>RNP</u>	<u>DISTANCE</u> 8.50	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<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>
1.SHIP MAST	364644.02N/1215701.90W		208	250	50	4D	1000				AT1492	2700
2.TERRAIN	364444.62N/1220142.49W		0 (0)								AS1500	1500

COMPUTATIONS

<u>ALT</u>	<u>KIAS</u>	<u>KTAS</u>	<u>HAA</u>	<u>VKTW</u>	<u>TR</u>	<u>BA</u>	<u>DTA</u>	<u>COURSE CHANGE</u>	<u>DVEB</u>	<u>VEB OCS</u>	<u>RF CENTER FIX/DISTANCE</u>
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SEGMENT REMARKS:

INITIAL

<u>FROM</u> MOVER	<u>TO</u> FOMET
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<u>RNP</u>	<u>DISTANCE</u> 5.50	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<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>
1.SHIP MAST	364644.02N/1215701.90W		208	250	50	4D	1000				AT1492	2700
3.TERRAIN	364903.86N/1215512.16W		0 (0)								AS1500	1500

COMPUTATIONS

<u>ALT</u>	<u>KIAS</u>	<u>KTAS</u>	<u>HAA</u>	<u>VKTW</u>	<u>TR</u>	<u>BA</u>	<u>DTA</u>	<u>COURSE CHANGE</u>	<u>DVEB</u>	<u>VEB OCS</u>	<u>RF CENTER FIX/DISTANCE</u>
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SEGMENT REMARKS:

QUALITY
10
CHECKED

INTERMEDIATE

FROM
FOMET

TO
AXAME

RNP	DISTANCE 5.50	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
1.SHIP MAST	364644.02N/1215701.90W		208	250	50	4D	500				DG1092	1800
4.TERRAIN	364515.01N/1215408.89W		0 (0)								AS1500	1500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV

FROM
AXAME

TO
RW11

RNP	DISTANCE 5.03	PAT	MAP RW11	HAT 383			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
5.TREE	364048.24N/1214617.73W		270	50	3	2A	250					520

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



MISSED APPROACH : LNAV

FROM
RW11

TO
FOMET

RNP	DISTANCE	PAT	MAP	HAT			HMAS 420					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				2700
6.TREE	363909.00N/1214439.00W		366	164	98	4E	1000					1400
7.TERRAIN	363912.00N/1214442.00W		255 (300)								AS1500	1800

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

CIRCLING

☐ ALL CATS

☒ CAT A

☒ CAT B

☐ CAT C

☐ CAT D

☐ CAT E

☐ NOT AUTHORIZED

OBSTRUCTION	COORDINATES	RADIUS	HAA	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
CATEGORY A											
8.TREE	363938.00N/1214536.65W	1.30	503	339	50	20	2C	300			640
CATEGORY B											
9.TREE	363909.79N/1214518.45W	1.81	623	459	50	20	2C	300			760

CIRCLING REMARKS:

MSA

CENTER
RW11

RADIUS
25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	AAO	361845.00N/1213400.00W	141	24.3	5246	164	98	4E	1000			6300

MSA REMARKS:

QUALITY
10
CHECKED

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH
MRY APP CON, ZOA ARTCC

<u>WX SERVICE</u> AWOS	<u>LOCATION</u> KOAR	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KOAR	<u>DISTANCE</u> 0	<u>SERVICE-A</u> N	<u>ADJUSTMENTS</u> 0
<u>BACK-UP WX SERVICE</u> ASOS	<u>LOCATION</u> KMRY	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KMRY	<u>DISTANCE</u> 6.893	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 33

WX REMARKS:
RASS PRESSURE PATTERNS THE SAME
KOAR 136.6, KMRY 256.6
RA=32.67

<u>PRIMARY NAVAID</u>	<u>MONITOR POINT</u>	<u>HRS OPERATION</u>	<u>CAT</u>
<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>		<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW11 - MIRL (PCL)		NPI-G	
RW29 - MIRL (PCL), PAPI-2L (PCL)		NPI-G	

<u>GLIDESLOPE ANGLE</u>	<u>ELEV RWY THRESHOLD</u>	<u>TCH</u>	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u>	<u>TCH</u>
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FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	<input checked="" type="checkbox"/>	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	<input checked="" type="checkbox"/>	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

<u>CRITICAL LOW</u>	<u>CRITICAL HIGH</u>	<u>ACT</u>	<u>APT ISA</u>
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CRITICAL TEMPERATURE REMARKS:



"VISUAL PORTION OF FINAL" PENETRATIONS

Final Type	FINAL
34:1	
143 VEGETATION (06-043996) 364106.53N/1214602.30W (1.74)	

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or
5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

CONTINGENCY ALTIMETER NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECIEVED, USE MONTEREY ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET.

VDP NA WHEN USING MONTEREY ALTIMETER SETTING.

ORDER 8260.3, VOLUME 1, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.





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	2.70
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	122.64
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	100
DISTANCE FROM	THLD	TO 1500FT POINT	4.63
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	1.76
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	122.64
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	100

THRESHOLD
COORDINATES
(IF STR-IN)

364102.79N/1214559.95W

ARP COORDINATES

364053.50N/1214542.00W

RUNWAY APCH END
AND DIST FURTHEST
FROM ARP

RUNWAY 29 DISTANCE 0.29 NM

FAF
COORDINATES

364345.94N/1215115.99W

FIX NAME
COORDINATES

REMARKS

NO ADDITIONAL AIRSPACE REQUIRED

PART E: PREPARED BY

<u>NAME</u> DONALD H. LANIER (ROSALYN REOLA)	<u>OFFICE</u> AJV-A431	<u>DATE</u> 01/27/2020	<u>TITLE</u> AERONAUTICAL INFORMATION SPECIALIST
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