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Southwest (SW) Vol 2 of 4

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07 AUG 2025

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02 OCT 2025

Consult the Change Notice (CN) effective 04 SEP 2025 for revised Instrument Procedure Charts for this volume

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CORRECTIONS, COMMENTS AND/OR PROCUREMENT

FOR CHARTING ERRORS, OR FOR CHANGES, ADDITIONS, RECOMMENDATIONS ON PROCEDURAL ASPECTS CONTACT:
FAA, Aeronautical Information Services
1305 East-West Highway
SSMC 4, Room 4531
Silver Spring, MD 20910-3281
Telephone: 1-800-638-8972
https://www.faa.gov/air_traffic/flight_info/aeronav/aero_data/

For inquiries regarding military charts, please contact **aerohelp@nga.mil**

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Frequently asked questions (FAQ) are answered on our website at: **https://www.faa.gov/go/ais**
See the FAQs prior to contact via toll free number or email.

Request for the creation or revisions to Airport Diagrams should be in accordance with FAA Order 7910.4

INOP COMPONENTS 25051

INOPERATIVE COMPONENTS OR VISUAL AIDS TABLE
(For Civil Use Only)

Straight-in and Sidestep landing minimums published on instrument approach procedure charts are based on full operation of all components and visual aids (see exception below for ALSF 1 & 2) associated with the particular approach chart being used. Higher minimums are required with inoperative components or visual aids as indicated below. If more than one component is inoperative, each minimum is raised to the highest minimum required by any single component that is inoperative. ILS glideslope inoperative minimums are published on the instrument approach charts as localizer minimums. This table applies to approach categories A thru D and is to be used unless amended by notes on the approach chart. Such notes apply only to the particular approach category(ies) as stated. Category E inoperative notes will be specified when published on civil charts. The inoperative table does not apply to Circling minimums. See legend page for description of components indicated below.

Full Operation Exception: For ALSF 1 & 2 operated as SSALR, or when the sequenced flashing lights are inoperative, there is no effect on visibility for ILS lines of minima.

(1) ILS, PAR, LPV, GLS minima

Inoperative Component or Visual Aid	Increase Visibility
All ALS types (except ODALS)	¼ mile

(2) ILS, LPV, GLS with visibility minima of RVR 1800†/2000*/2200*

Inoperative Component or Visual Aid	Increase Visibility
ALSF 1 & 2, MALSR, SSALR	To RVR 4000† To RVR 4500*
TDZL or RCLS	To RVR 2400#
RVR	To ½ mile

#For ILS, LPV, GLS procedures with a 200 foot HAT, RVR 1800 authorized with use of FD or AP or HUD to DA. For ILS procedures with a 200 foot HAT with a restriction on autopilot usage, RVR 1800 authorized with use of FD or HUD to DA.

(3) All Approach Types and all lines of minima other than (1) & (2) above

Inoperative Component or Visual Aid	Increase Visibility
ALSF 1 & 2, MALSR, SSALR	½ mile
MALSF, MALS, SSALF, SSALS, SALSF, SALS	¼ mile

(4) Sidestep minima (CAT C-D)

Inoperative Component or Visual Aid to Sidestep Runway	Increase Visibility
ALSF 1 & 2, MALSR, SSALR	½ mile

(5) All Approach Types, All lines of minima

Inoperative Component or Visual Aid	Increase Visibility
ODALS (CAT A-B)	¼ mile
ODALS (CAT C-D)	⅛ mile

INOP COMPONENTS 25051

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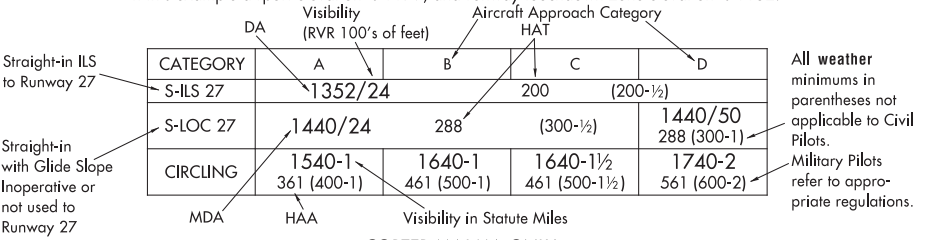
TERMS/LANDING MINIMA DATA 20142

IFR LANDING MINIMA

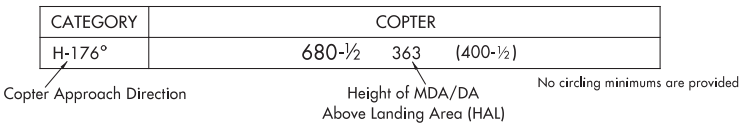
The United States Standard for Terminal Instrument Procedures (TERPS) is the approved criteria for formulating instrument approach procedures. Landing minima are established for six aircraft approach categories (ABCDE and COPTER).
In the absence of COPTER MINIMA, helicopters may use the CAT A minimums of other procedures.

LANDING MINIMA FORMAT

In this example airport elevation is 1179, and runway touchdown zone elevation is 1152.



COPTER MINIMA ONLY



NOTE: The W symbol indicates outages of the WAAS vertical guidance may occur daily at this location due to initial system limitations. WAAS NOTAMS for vertical outages are not provided for this approach. Use LNAV minima for flight planning at these locations, whether as a destination or alternate. For flight operations at these locations, when the WAAS avionics indicate that LNAV/VNAV or LPV service is available, then vertical guidance may be used to complete the approach using the displayed level of service. Should an outage occur during the procedure, reversion to LNAV minima may be required. As the WAAS coverage is expanded, the W will be removed.

RNAV minimums are dependent on navigation equipment capability, as stated in the applicable AFM, AFMS, or other FAA approved document. See AIM paragraph 5-4-5, AC 90-105 and AC 90-107 for detailed requirements for each line of minima.

COLD TEMPERATURE AIRPORTS

NOTE: A ❄-12°C symbol indicates a cold temperature altitude correction is required at this airport when reported temperature is at or below the published temperature. See the following Cold Temperature Error Table to make manual corrections. Advise ATC with altitude correction. Advising ATC with altitude corrections is not required in the final segment. See Aeronautical Information Manual (AIM), Chapter 7, for guidance and additional information. For a complete list, see the "Cold Temperature Airports" link under the Additional Resources heading at the bottom of the following page: http://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/dtpp/search/

COLD TEMPERATURE ERROR TABLE

HEIGHT ABOVE AIRPORT IN FEET

REPORTED TEMP °C	200	300	400	500	600	700	800	900	1000	1500	2000	3000	4000	5000
+10	10	10	10	10	20	20	20	20	20	30	40	60	80	90
0	20	20	30	30	40	40	50	50	60	90	120	170	230	280
-10	20	30	40	50	60	70	80	90	100	150	200	290	390	490
-20	30	50	60	70	90	100	120	130	140	210	280	420	570	710
-30	40	60	80	100	120	140	150	170	190	280	380	570	760	950
-40	50	80	100	120	150	170	190	220	240	360	480	720	970	1210
-50	60	90	120	150	180	210	240	270	300	450	590	890	1190	1500

AIRCRAFT APPROACH CATEGORIES

Aircraft approach category indicates a grouping of aircraft based on a speed of VREF, if specified, or if VREF not specified, 1.3 VSO at the maximum certificated landing weight. VREF, VSO, and the maximum certificated landing weight are those values as established for the aircraft by the certification authority of the country of registry. Helicopters are Category A aircraft. An aircraft shall fit in only one category. When necessary to operate the aircraft at an airspeed in excess of the maximum airspeed of its certified aircraft approach category, pilots should use the applicable higher category minima. For additional options and to ensure the aircraft remains within protected airspace, consult the AIM. See following category limits:

MANEUVERING TABLE

Approach Category	A	B	C	D	E
Speed (Knots)	0-90	91-120	121-140	141-165	Abv 165

TERMS/LANDING MINIMA DATA 20142

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TERMS/LANDING MINIMA DATA 25163

CIRCLING APPROACH OBSTACLE PROTECTED AIRSPACE

The circling MDA provides vertical obstacle clearance during a circle-to-land maneuver. The circling MDA protected area extends from the threshold of each runway authorized for landing following a circle-to-land maneuver for a distance as shown in the table below. The resultant arcs are then connected tangentially to define the protected area.

CIRCLING APPROACH MANEUVERING AIRSPACE RADIUS

Circling MDA protected areas use the radius distance shown in the following table, expressed in nautical miles (NM), dependent on aircraft approach category, and the altitude of the circling MDA, which accounts for true airspeed increase with altitude.

Circling MDA in feet MSL	Approach Category and Circling Radius (NM)				
	CAT A	CAT B	CAT C	CAT D	CAT E
1000 or less	1.3	1.7	2.7	3.6	4.5
1001-3000	1.3	1.8	2.8	3.7	4.6
3001-5000	1.3	1.8	2.9	3.8	4.8
5001-7000	1.3	1.9	3.0	4.0	5.0
7001-9000	1.4	2.0	3.2	4.2	5.3
9001 and above	1.4	2.1	3.3	4.4	5.5

Users may ignore the presence of C symbols on charts which will be removed on a day-forward basis. All circling areas within this volume have been evaluated for the circling MDA protected area radius shown in the table above.

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Comparable Values of RVR and Visibility

The following table shall be used for converting RVR to ground or flight visibility. For converting RVR values that fall between listed values, use the next higher RVR value; do not interpolate. For example, when converting 4800 RVR, use 5000 RVR with the resultant visibility of 1 mile.

RVR (feet)	Visibility (SM)	RVR (feet)	Visibility (SM)	RVR (feet)	Visibility (SM)	RVR (feet)	Visibility (SM)
1600	¼	2400	½	3500	⅝	5500	1
1800	½	2600	½	4000	¾	6000	1¼
2000	½	3000	⅝	4500	⅞		
2200	½	3200	⅝	5000	1		

RADAR MINIMA

	RWY	GP/TCH/RPI	CAT	DA/ MDA-VIS	HAT HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT HAA	CEIL-VIS
PAR	10	2.5°/42/1000	ABCDE	**195**/16	100	(100-¼)				
	28	2.5°/48/1068	ABCDE	**187**/16	100	(100-¼)				
ASR	10		ABC	**560**/40	463	(500-¾)	DE	**560**/50	463	(500-1)
	28		AB	**600**/50	513	(600-1)	CDE	**600**/60	513	(600-1¼)
CIR	10		AB	**560**-1¼	463	(500-1¼)	CDE	**560**-1½	463	(500-1½)
	28		AB	**600**-1¼	503	(600-1¼)	CDE	**600**-1½	503	(600-1½)

Visibility (RVR 100's of feet)

Visibility in Statute Miles

All minimums in parentheses not applicable to Civil Pilots. Military Pilots refer to appropriate regulations.

Radar Minima:

1. Minima shown are the lowest permitted by established criteria. Pilots should consult applicable directives for their category of aircraft.
2. The circling MDA and weather minima to be used are those for the runway to which the final approach is flown- not the landing runway. In the above RADAR MINIMA example, a category C aircraft flying a radar approach to runway 10, circling to land on runway 28, must use an MDA of 560 feet with weather minima of 500-1½.

NOTE: Military RADAR MINIMA may be shown with communications symbology that indicates emergency frequency monitoring capability by the radar facility as follows: (E) VHF and UHF emergency frequencies monitored
(V) VHF emergency frequency (121.5) monitored
(U) UHF emergency frequency (243.0) monitored
Additionally, unmonitored frequencies which are available on request from the controlling agency may be annotated with an "x".

A Alternate Minimums not standard. Civil users refer to tabulation. USA/USN/USAF pilots refer to appropriate regulations.
A NA Alternate minimums are Not Authorized due to unmonitored facility or absence of weather reporting service.
T Airport is published in the Takeoff Minimums, (Obstacle) Departure Procedures, and Diverse Vector Area (Radar Vectors) tabulation.

TERMS/LANDING MINIMA DATA 25163

GENERAL INFORMATION

This publication is issued every 56 days and includes Standard Instrument Approach Procedures (SIAPS), Standard Instrument Departures (SIDs), Standard Terminal Arrivals (STARs), IFR Takeoff Minimums and (Obstacle) Departure Procedures (ODPs), IFR Alternate Minimums, and Radar Instrument Approach Minimums for use by civil and military aviation. The organization responsible for SIAPs, Radar Minimums, SIDs, STARs and graphic ODPs is identified in parentheses in the top margin of the procedure; e.g., (FAA), (FAA-O), (USA), (USAF), (USN). SIAPS with the (FAA) and (FAA-O) designation are regulated under 14 CFR, Part 97. SIAPs with the (FAA-O) designation have been developed by an authorized non-FAA service provider. See 14 CFR, Part 91.175 (a) and the AIM for further details. 14 CFR, Part 91.175 (g) and the Special Notices section of the Chart Supplement contain information on civil operations at military airports.

The FAA uses an internal numbering system on all charts in the TPP. This Approach and Landing (AL) number is located on the top center margin of the chart followed by the organization responsible for the procedure in parentheses, e.g., AL-18 (FAA), AL-11919 (FAA-O). Military procedures do not show AL number, but do show the appropriate authority for the procedure, e.g., (USAF).

CHART CURRENCY INFORMATION

Date of Latest Revision 09365

The Date of Latest Revision identifies the Julian date the chart was added or last revised for any reason. The first two digits indicate the year, the last three digits indicate the day of the year (001 to 365/6) in which the latest revision of any kind has been made to the chart.

The FAA Procedure Amendment Number represents the most current amendment of a given procedure. The Procedure Amendment Effective Date represents the AIRAC cycle date on which the procedure amendment was incorporated into the chart. Updates to the amendment number & effective date represent procedural/criteria revisions to the charted procedure, e.g., course, fix, altitude, minima, etc. On Departure Procedures and Standard Terminal Arrivals, procedural revisions to the current chart are indicated by an upnumber to the procedure title with the procedure amendment effective date following. On Radar Minima, Takeoff Minimums and (Obstacle) Departure Procedures and Diverse Vector Areas, the FAA Procedure Amendment Number, Procedure Effective Date, and the Julian Date of Last Revision will be shown on the same line, e.g., AMDT 2 10DEC15 (15344).

MISCELLANEOUS

★ Indicates a non-continuously operating facility, see Chart Supplement.

For Civil (FAA) instrument procedures, "RADAR REQUIRED" in the planview of the chart indicates that ATC radar must be available to assist the pilot when transitioning from the en route environment. "Radar required" in the pilot briefing portion of the chart indicates that ATC radar is required on portions of the procedure outside the final approach segment, including the missed approach. Some military procedures also have equipment requirements such as "Radar Required", but do not conform to the same charting application standards used by the FAA.

Distances are in nautical miles (except visibility in statute miles and Runway Visual Range in hundreds of feet). Runway dimensions are in feet. Elevations are in feet, Mean Sea Level (MSL). Ceilings are in feet above airport elevation. Radials/bearings/headings/courses are magnetic. Horizontal Datum: Unless otherwise noted on the chart, all coordinates are referenced to North American Datum 1983 (NAD 83), which for charting purposes is considered equivalent to World Geodetic System 1984 (WGS 84).

Terrain is scaled within the neat lines (planview boundaries) and does not accurately underlie not-to-scale distance depictions or symbols.

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STANDARD TERMINAL ARRIVALS AND DEPARTURE PROCEDURES

The use of the associated codified STAR/DP and transition identifiers are requested of users when filing flight plans online. It must be noted that when filing a STAR/DP with a transition, the first three coded characters of the STAR and the last three coded characters of the DP are replaced by the transition code. Examples: ACTON SIX ARRIVAL, file (AQN.AQN6); ACTON SIX ARRIVAL, EDNAS TRANSITION, file (EDNAS.AQN6). FREEHOLD THREE DEPARTURE, file (FREH3.RBV), FREEHOLD THREE DEPARTURE, ELWOOD CITY TRANSITION, file (FREH3.EWC).

PROCEDURE PBN/EQUIPMENT REQUIREMENTS

Users will begin to see Performance-Based Navigation (PBN) Requirements and Equipment Requirements on Instrument Approach Procedures (IAPs), RNAV STARs and RNAV DPs prominently displayed in separate, standardized notes boxes. For procedures with PBN elements, the PBN box will contain the procedure's navigation specification(s); and, if required: specific sensors or infrastructure needed for the navigation solution; any additional or advanced functional requirements; the minimum Required Navigation Performance (RNP) value and any amplifying remarks. Items listed in this PBN box are REQUIRED for the procedure's PBN elements. The Equipment Requirements Box will list non-PBN requirements. On charts with both PBN elements and equipment requirements, the PBN requirements box will be listed first. The publication of these notes will continue incrementally until all charts have been amended to comply with the new standard.

IAP PBN/Equipment Requirements Notes Box

PBN Requirements Box →	From WINRZ, LIBGE: RNAV-1 GPS, RNAV-1GPS from MAP to YARKU.
Equipment Requirements Box →	DME required for LOC only.
Standard Procedure Notes Box →	(T) Circling to Rwy 25 NA at night. #For inop MALSR increase S-ILS 16R all cats visibility to 2½ SM.

RNAV STAR and DP PBN/Equipment Requirements Notes Box

PBN Requirements Box →	RNAV 1 - DME/DME/IRU or GPS
Equipment Requirements Box →	RADAR required

PILOT CONTROLLED AIRPORT LIGHTING SYSTEMS

Reference the Chart Supplement for detailed information on pilot controlled lighting (PCL) systems.

Available FAA standard approach lighting systems are charted as a negative symbol to indicate pilot contolled lighting, e.g., (A1), (V)

Available airport lighting systems that are charted as notes, e.g. REIL, MIRL, are shown with a negative "(L)" symbol beside the name to indicate pilot controlled lighting.

To activate lights, use frequency indicated in the communications section of the chart with a (L)

KEY MIKE	FUNCTION
7 times within 5 seconds	Highest intensity available
5 times within 5 seconds	Medium or lower intensity (Lower REIL or REIL-off)
3 times within 5 seconds	Lowest intensity available (Lower REIL or REIL-off)

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ABBREVIATIONS 25107

AAF	Army Air Field
AAUP	Attention All Users Page
ADF	Automatic Direction Finder
ADIZ	Air Defense Identification Zone
AFAUX	Air Force Auxiliary
AFB	Air Force Base
AFRC	Armed Forces Reserve Center/Air Force Reserve Command
AGL	Above Ground Level
AFHP	Air Force Heliport
AFIS	Automatic Flight Information Service
AHP	Army Heliport
ALF	Auxiliary Landing Field
ALS	Approach Light System
ALSF	Approach Light System with Sequenced Flashing Lights
ANGB	Air National Guard Base
ANGS	Air National Guard Station
Ant	Antenna
AOB	At or Below
AP	Autopilot System
APCH	Approach
APP CON	Approach Control
AR	Authorization Required
ARB	Air Reserve Base
ARPT	Airport
ARR	Arrival
AS	Air Station
ASOS	Automated Surface Observing System
ASR	Airport Surveillance RADAR
ASSC	Airport Surface Surveillance Systems
ATC	Air Traffic Control
ATCT	Airport Traffic Control Tower
ATIS	Automatic Terminal Information Service
AUNICOM	Automated UNICOM
AWOS	Automated Weather Observing System
Baro-VNAV	Barometric Vertical Navigation
BC	Back Course
brg	Bearing
CAPT	Captain
CAT	Category
CCW	Counterclockwise
CDI	Course Deviation Indicator
CGAS	Coast Guard Air Station
Chan	Channel
CIR	Circling
CL	Centerline Lighting System
CLNC DEL	Clearance Delivery
CNF	Computer Navigation Fix
CPDLC	Controller Pilot Data Link Communications
CTAF	Common Traffic Advisory Frequency
CW	Clockwise
D-ATIS	Digital-Automatic Terminal Information Service
DA	Decision Altitude
DEP	Departure
DEP CON	Departure Control
DER	Departure End of Runway
DH	Decision Height
DME	Distance Measuring Equipment
DP	Departure Procedure
DTHR	Displaced Runway Threshold
DVA	Diverse Vector Area
ELEV	Elevation
EMAS	Engineered Material Arresting System
EXEC	Executive
FAF	Final Approach Fix
FD	Flight Director System
FL	Flight Level
FLD	Field
FM	Fan Marker
FMS	Flight Management System
GBAS	Ground Based Augmentation System
GCA	Ground Control Approach
GCO	Ground Communication Outlet
GLS	Ground Based Augmentation System Landing System
GP	Glidepath
GPS	Global Positioning System
GS	Glide Slope
HAA	Height Above Airport
HAL	Height Above Landing
HAT	Height Above Touchdown
HATh	Height Above Threshold
HCH	Heliport Crossing Height
hdg	Heading
HIRL	High Intensity Runway Lights
HUD	Head-up Display
IAF	Initial Approach Fix
IAP	Instrument Approach Procedure
ICAO	International Civil Aviation Organization
IF	Intermediate Fix
IFR	Instrument Flight Rules
ILS	Instrument Landing System
IM	Inner Marker
INC	Incorporated
Inop	Inoperative
INT	Intersection
INTCNTL	Intercontinental
INTL	International
JNGB	Joint National Guard Base
JRB	Joint Reserve Base
K	Knots
KIAS	Knots Indicated Airspeed
LAAS	Local Area Augmentation System

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ABBREVIATIONS 25107

LDA	Localizer Type Directional Aid
Ldg	Landing
LIRL	Low Intensity Runway Lights
LNAV	Lateral Navigation
LOA	Letter of Agreement/ Authorization
LOC	Localizer
LOM	Locator Outer Marker
LP	Localizer Performance
LPV	Localizer Performance with Vertical Guidance
LR	Lead Radial
LRRS	Long Range RADAR Station
MAA	Maximum Authorized Altitude
MALS	Medium Intensity Approach Lighting System
MALSF	Medium Approach Lighting System with Sequenced Flashers
MALSR	Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights
MAP	Missed Approach Point
MCAF	Marine Corps Air Facility
MCALF	Marine Corps Auxiliary Landing Filed
MCAS	Marine Corps Air Station
MCB	Marine Corps Base
MCOLF	Marine Corps Outlying Field
MDA	Minimum Descent Altitude
MEA	Minimum Enroute Altitude
MEML	Memorial
METRO	Metropolitan
MIRL	Medium Intensity Runway Lights
MM	Middle Marker
MOCA	Minimum Obstruction Clearance Altitude
MRA	Minimum Reception Altitude
MSL	Mean Sea Level
MSPEC	Management Specification
MUNI	Municipal
N/A	Not Applicable
NA	Not Authorized
NAAS	Naval Auxiliary Air Station
NAF	Naval Air Facility
NALF	Naval Auxiliary Landing Field
NAS	Naval Air Station
NDB	Nondirectional Radio Beacon
NM	Nautical Mile
NOLF	Naval Outlying Field
NoPT	No Procedure Turn
NOTAM	Notice to Airmen
NS	Naval Station
NTL	National
ODALS	Omnidirectional Approach Lighting System
ODP	Obstacle Departure Procedure
OM	Outer Marker
OPSPEC	Operations Specification
PAR	Precision Approach Radar
PDC	Pre-Departure Clearance
PRM	Precision Runway Monitor
Pvt	Private
R	Radial
RA	Radio Altimeter setting height
RAIL	Runway Alignment Indicator Lights
RCLS	Runway Centerline Light System
REIL	Runway End Identifier Lights
RF	Radius to Fix
RGNL	Regional
RLLS	Runway Lead-in Light System
RNAV	Area Navigation
RNP	Required Navigation Performance
RPI	Runway Point of Interception)
RVR	Runway Visual Range
RWY	Runway
S	Straight-in
SALS	Simplified Short Approach Light System
SALSF	Short Approach Lighting System with Sequenced Flashing Lights
SDF	Simplified Directional Facility
SFB	Space Force Base
SID	Standard Instrument Departure
SM	Statute Mile
SR-SS	Sunrise-Sunset
SSALF	Short Approach Lighting System with Sequenced Flashing Lights
SSALR	Simplified Short Approach Light System with Runway Alignment Indicator Lights
SSALS	Simplified Short Approach Lighting System
ST	Saint
STE	Sainte
STAR	Standard Terminal Arrival
TAA	Terminal Arrival Area
TACAN	Tactical Air Navigation
TCH	Threshold Crossing Height
TDZ	Touchdown Zone
TDZE	Touchdown Zone Elevation
TDZ/CL	Touchdown Zone and Runway Centerline Lighting
TDZL	Touchdown Zone Lights
THR	Threshold
TODA	Takeoff Distance Available
TORA	Takeoff Run Available
tr	Track
TRML	Terminal
TWR	Tower
UNICOM	Universal Communications Station
USA	United States Army
USAF	United States Air Force

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ABBREVIATIONS 25107

USCG……	United States Coast Guard
USMC……	United States Marine Corps
USN……	United States Navy
USSF……..	United States Space Force
VASI……	Visual Approach Slope Indicator
VCOA……	Visual Climb Over Airport
VDA……	Vertical Descent Angle
VDP……	Visual Descent Point
VFR……...	Visual Flight Rules
VGSI……..	Visual Glide Slope Indicator
VNAV…….	Vertical Navigation
VOR……...	Very High Frequency Omni-Directional Range
VORTAC……...	Very High Frequency Omni-Directional Range/Tactical Air Navigation
WAAS……	Wide Area Augmentation System
WP/WPT……...	Waypoint

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LEGEND 23334

INSTRUMENT APPROACH PROCEDURES (CHARTS)

PLANVIEW SYMBOLS

ROUTES

Procedure Track

Feeder Route

Missed Approach

Visual Flight Path

165°
345°
Procedure Turn
(Type degree and point of turn optional)

Minimum Route Altitude → 3100 NoPT to LOM
045°
Mileage → (14.2)

HOLDING PATTERNS

Hold-in-lieu of Procedure Turn

HOLD 10000 8000
090° (IAS) 270°
4 NM

HOLD 10000 8000
090° 1 min 270°

Missed Approach
090° 270°

Arrival
HOLD 8000
090° 270°

Holding pattern with maximum restricted airspeed:
(175K) applies to all altitudes.
(210K) applies to altitudes above 6000′ to and including 14000′.
Arrival Holding Pattern altitude restrictions will be indicated when they deviate from the adjacent leg.

Timing or distance limits for Hold-in-lieu of Procedure Turn Holding Patterns will be shown.
DME fixes may be shown.

FIXES/ATC REPORTING REQUIREMENTS

Reporting Point

Waypoint

MAP WP (Flyby)

MAP WP (Flyover)

GLGHR INT — Intersection

MYLES
I-LVF 14.9 — (Distance From Facility)

DME

Flyover Point

x (CFTSP) — Computer Navigation Fix (CNF)-No ATC Function ("x" omitted when it is a MAP)

R-198 → Radial line and value

LR-198 → Lead Radial

LB-198 → Lead Bearing

ALTITUDES

5500 Mandatory Altitude
2500 Minimum Altitude
4300 Maximum Altitude
3000 Recommended Altitude
5000 Mandatory Block
3000 Altitude

INDICATED AIRSPEED

175K	120K	250K	180K
Mandatory Airspeed	Minimum Airspeed	Maximum Airspeed	Recommended Airspeed

RADIO AIDS TO NAVIGATION

110.1 Underline indicates No Voice transmitted on this frequency

VOR
VORTAC
TACAN
VOR/DME
DME
NDB
NDB/DME
LOM (Compass locator at Outer Marker)
Marker Beacon

Marker beacons that are not specifically part of the procedure.

Localizer Front Course (LOC/LDA)
Right side shading- Front course

Localizer Back Course
Left side shading- Back Course

SDF Course

LOC/LDA/SDF Transmitter
LOC/DME
(shown when installation is offset from its normal postion off the end of the runway.)

Primary NAVAID
LIMA
114.5 LIM
Chan 92

Secondary NAVAID
LOM
AKRON
362 AK

TACAN or DME NAVAID
SCOTT
Chan 59
SKE
(112.2)
VHF Paired Frequency

SW-2, 07 AUG 2025 to 02 OCT 2025

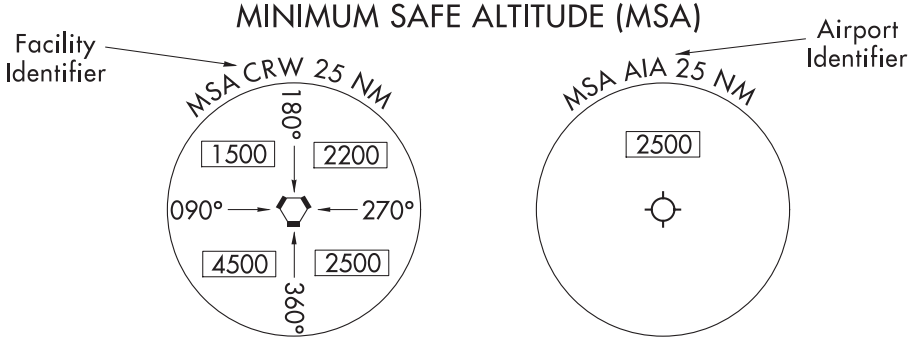
LEGEND 23110

INSTRUMENT APPROACH PROCEDURES (CHARTS)

SW-2, 07 AUG 2025 to 02 OCT 2025

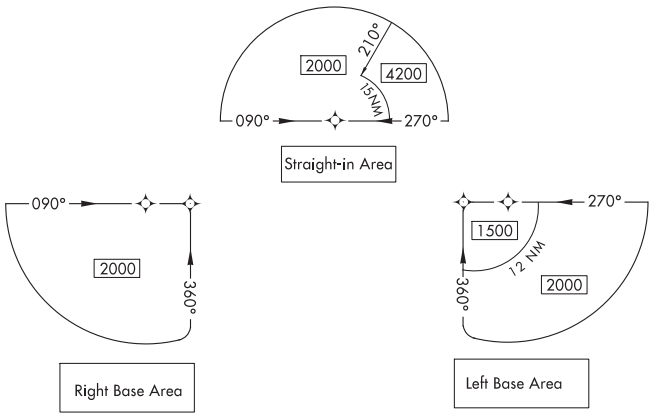
PLANVIEW SYMBOLS

MINIMUM SAFE ALTITUDE (MSA)



(arrows on distance circle identify sectors)

TERMINAL ARRIVAL AREA (TAA)



MISCELLANEOUS

VOR Changeover Point

RWY 15 S12° 00.52′ W77° 06.91′ End of Rwy Coordinates (DoD only)

Distance not to scale

International Boundary

Air Defense Identification Zone

SPECIAL USE AIRSPACE

R-352

R-Restricted W-Warning
P-Prohibited A-Alert
MOA-Military Operations Area

AIRPORTS

Primary and Secondary (named in planview)

Civil

Seaplane Base

Heliport

Joint (Civil-Military)

OBSTACLES

- Spot Elevation
- Obstacle
- Highest Obstacle
- Highest Spot Elevation
- Group of Obstacles
- ± Doubtful accuracy

LEGEND 23110

LEGEND 24361

INSTRUMENT APPROACH PROCEDURES (CHARTS)

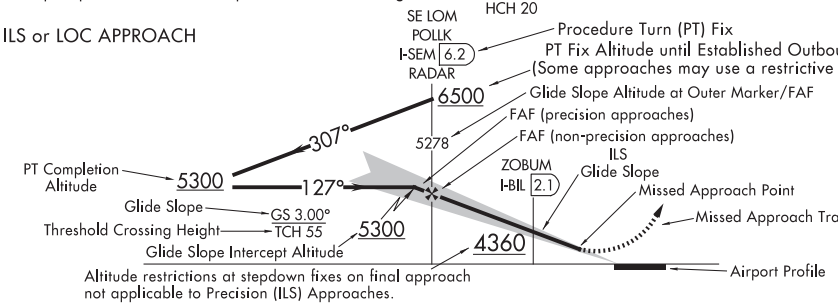
PROFILE VIEW

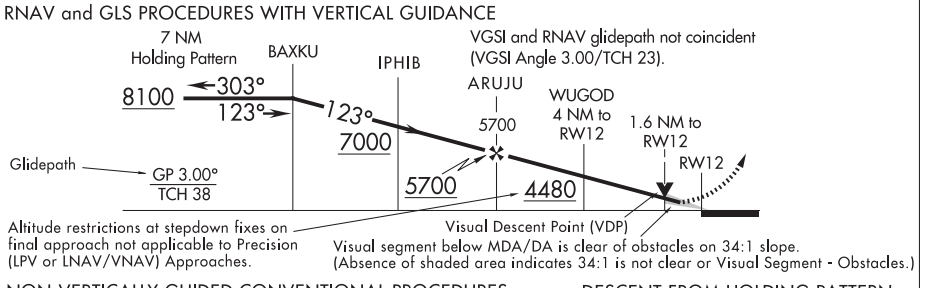
Three different methods are used to depict either electronic or vertical guidance: "GS", "GP", or "VDA".

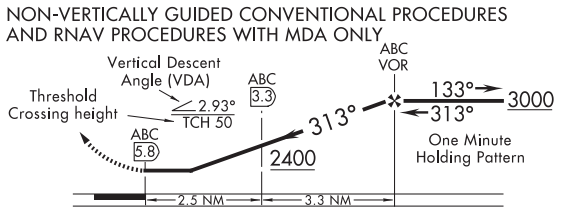
1. "GS" indicates that an Instrument Landing System (ILS) electronic glide slope (a ground antenna) provides vertical guidance. The profile section of ILS procedures depict a GS angle and TCH in the following format: GS 3.00°, TCH 55

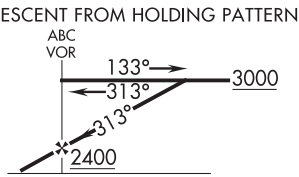
2. "GP" on GLS and RNAV procedures indicates that either electronic vertical guidance (via Wide Area Augmentation System - WAAS or Ground Based Augmentation System - GBAS) or barometric vertical guidance is provided. GLS and RNAV procedures with a published decision altitude (DA/H) depict a GP angle and TCH in the following format: GP 3.00°, TCH 50.

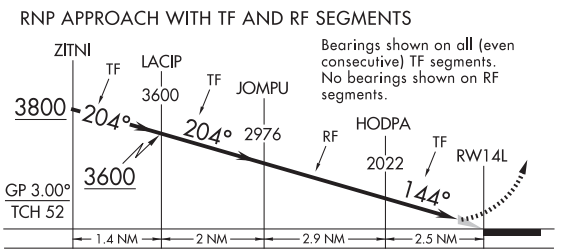
3. An advisory vertical descent angle (VDA) is provided on non-vertically guided conventional procedures and RNAV procedures with only a minimum descent altitude (MDA) to assist in preventing controlled flight into terrain. On Civil (FAA) procedures, this information is placed above or below the procedure track following the fix it is based on. Absence of a VDA or a note that the VDA is not authorized indicates that the prescribed obstacle clearance surface is not clear and the VDA must not be used below MDA. VDA is depicted in the following format: 3.00°, TCH 55. On Copter procedures this is depicted in the following format: 7.30°, HCH 20











ALTITUDES

5500	Mandatory Altitude	3000	Recommended Altitude
2500	Minimum Altitude	5000 / 3000	Mandatory Block Altitude
4300	Maximum Altitude		

PROFILE SYMBOLS

2400 — Glide Slope/Glidepath Intercept Altitude and final approach fix for vertically guided approach procedures.

▼ Visual Descent Point (VDP)

Visual Flight Path

Note: Facilities and waypoints are depicted as a solid vertical line while fixes and intersections are depicted as a dashed vertical line.

LEGEND 24361

SW-2, 07 AUG 2025 to 02 OCT 2025

LEGEND 23334 STANDARD TERMINAL ARRIVAL (STAR) CHARTS

RADIO AIDS TO NAVIGATION

Compulsory:

VOR · VORTAC · DME · NDB/DME · VOR/DME · TACAN · NDB

Non-Compulsory:

VOR · VORTAC · DME · NDB/DME · VOR/DME · TACAN · NDB

LOM (Compass locator at outer marker)

Marker Beacon

Localizer Front Course

BACK COURSE

Localizer Back Course (Shading on left)

(T) indicates frequency protection range

ORLANDO
112.25 (T) ORL
Chan 59(Y)

Underline indicates no voice transmitted on this frequency

(Y) TACAN must be placed in "Y" mode to receive distance information

TACAN or DME NAVAID Box

SCOTT
Chan 59
SKE
(112.2)

VHF Paired Frequency

FIXES/ATC REPORTING REQUIREMENTS

Unnamed DME fix

▲ Reporting Point (Compulsory)

△ Reporting Point (Non-Compulsory)

Obvious DME (DME mileage matches route mileage)

75 DME Mileage (when not obvious)

Waypoint (Compulsory)

Waypoint (Non-Compulsory)

Flyover Point

x
(CFTSP) Computer Navigation Fix (CNF) - No ATC Function

AIRPORTS

Civil · Military · Joint (Civil-Military)

Airports not served by the procedure shown in screened color

Civil · Military · Joint (Civil-Military)

ROUTES

MAA FL200 Maximum Authorized Altitude

4500 MEA-Minimum Enroute Altitude

*3500 MOCA-Minimum Obstruction Clearance Altitude

270° Arrival Route

(65) Mileage between Radio Aids, Reporting Points, and Route Breaks

Transition Route

R-275 Radial line and value

Lost Communications Track

V12 J80 Airway/Jet Route Identification

(IAS) Holding Pattern

Lost Comm Holding Pattern

Holding pattern with maximum restricted airspeed
(175K) applies to all altitudes
(210K) applies to altitudes above 6000' to and including 14000'

SPECIAL USE AIRSPACE

R-352

R-Restricted W-Warning
P-Prohibited A-Alert
MOA-Military Operations Area

ALTITUDES

5500 Mandatory Altitude (Cross at)

2300 Minimum Altitude (Cross at or above)

4800 Maximum Altitude (Cross at or below)

15000
12000
Block Altitude

Altitude change at other than Radio Aids to Navigation

INDICATED AIRSPEED

175K Mandatory Airspeed

120K Minimum Airspeed

250K Maximum Airspeed

MISCELLANEOUS

Changeover Point

Air Defense Identification Zone

N
Indicates True North is not aligned to the top of the page

Ldg KLAS and KHND
Ldg Rwys 16L/C/R
Terminus identifier

LEGEND 23334

SW-2, 07 AUG 2025 to 02 OCT 2025

LEGEND 23334 DEPARTURE PROCEDURE (DP) CHARTS

RADIO AIDS TO NAVIGATION

Compulsory:

VOR VORTAC DME NDB/DME

VOR/DME TACAN NDB

Non-Compulsory:

VOR VORTAC DME NDB/DME

VOR/DME TACAN NDB

LOC LOC/DME (shown when installation is offset from its normal position off the end of the runway.)

LOM (Compass locator at outer marker)

Marker Beacon

Localizer Front Course

BACK COURSE

Localizer Back Course (Shading on left)

(T) indicates frequency protection range

ORLANDO
112.25 (T) ORL
Chan 59(Y)

Underline indicates no voice transmitted on this frequency

(Y) TACAN must be placed in "Y" mode to receive distance information

TACAN or DME NAVAID Box

SCOTT
Chan 59
SKE
(112.2)

VHF Paired Frequency

FIXES/ATC REPORTING REQUIREMENTS

Unnamed DME fix

▲ Reporting Point (Compulsory)

△ Reporting Point (Non-Compulsory)

Obvious DME (DME mileage matches route mileage)

75 DME Mileage (when not obvious)

Waypoint (Compulsory)

Waypoint (Non-Compulsory)

Flyover Point

x (CFTSP) Computer Navigation Fix (CNF) - No ATC Function

MISCELLANEOUS

Changeover Point

Distance not to scale

International Boundary

Sector Boundary

Air Defense Identification Zone

Takeoff Minimums and (Obstacle) Departure Procedures entry published.

ROUTES

4500 MEA-Minimum Enroute Altitude

*3500 MOCA-Minimum Obstruction Clearance Altitude

270° Departure Route

(65) Mileage between Radio Aids, Reporting Points, and Route Breaks

Transition Route

R-275 Radial line and value

Lost Communications Track

Visual Flight Path

V12 J80 Airway/Jet Route Identification

(IAS) Holding Pattern

Lost Comm Holding Pattern

Holding pattern with maximum restricted airspeed (175K) applies to all altitudes (210K) applies to altitudes above 6000' to and including 14000'

SPECIAL USE AIRSPACE

R-352

R-Restricted W-Warning
P-Prohibited A-Alert
MOA-Military Operations Area

ALTITUDES

5500 Mandatory Altitude (Cross at)

2300 Minimum Altitude (Cross at or above)

4800 Maximum Altitude (Cross at or below)

15000 / 12000 Block Altitude

TOP ALTITUDE: 5000 Top altitude restriction

INDICATED AIRSPEED

175K Mandatory Airspeed

120K Minimum Airspeed

250K Maximum Airspeed

AIRPORTS

Heliport

Civil Military Joint (Civil-Military)

MINIMUM SAFE ALTITUDE (MSA)

Facility Identifier

MSA CRW 25 NM
180°
4500 4100
090° 270°
5300 4700
360°

Airport Identifier

MSA AIA 25 NM
2500

(arrows on distance circle identify sectors)

LEGEND 23334

SW-2, 07 AUG 2025 to 02 OCT 2025

AIRPORT DIAGRAM/AIRPORT SKETCH

Runways

Hard Surface | Other Than Hard Surface | Taxiways, Parking Areas | Stopways, Overruns, Blast Pads | Metal Surface

Closed Runway | Closed Surface | Non-Movement | Under Construction | Water Runway

ARRESTING GEAR: Specific arresting gear systems; e.g., BAK12, MA-1A etc., shown on airport diagrams, not applicable to Civil Pilots. Military Pilots refer to appropriate DOD publications.

uni-directional | bi-directional | Jet Barrier

ARRESTING SYSTEM [ ] (EMAS)

REFERENCE FEATURES

Displaced Threshold
Hot Spot
Runway Holding Position Markings
Buildings
Self-Serve Fuel ##
Tanks
Obstructions
Airport Beacon #
Runway Radar Reflectors
Bridges
Control Tower # TWR

	Unlit	Lit
Wind Cone		
Landing Tee		
Tetrahedron		

When Control Tower and Rotating Beacon are co-located, Beacon symbol will be used and further identified as TWR.

See appropriate Chart Supplement for information.

Runway Weight Bearing Capacity or Pavement Classification Number (PCN)/Pavement Classification Rating (PCR) is shown as a codified expression. Refer to the appropriate Supplement/Directory for applicable codes e.g., RWY 14-32 PCR 560 R/B/W/T; S-75, D-185, 2D-325, 2D/2D2-1120

Helicopter Alighting Areas

Negative Symbols used to identify Copter Procedures

landing point

NOTE:
Landmark features depicted on Copter Approach insets and sketches are provided for visual reference only.

Runway TDZ elevation.....TDZE 123

Runway Slope..... ←0.3% Down.....0.8% UP→
(shown when rounded runway slope is ≥ 0.3%)

NOTE:
Runway Slope measured to midpoint on runways 8000 feet or longer.

U.S. Navy Optical Landing System (OLS) "OLS" location is shown because of its height of approximately 7 feet and proximity to edge of runway may create an obstruction for some types of aircraft.

Approach light symbols are shown in the Flight Information Handbook.

Airport diagram scales are variable.

True/magnetic North orientation may vary from diagram to diagram

Coordinate values are shown in 1 or ½ minute increments. They are further broken down into 6 second ticks, within each 1 minute increments.

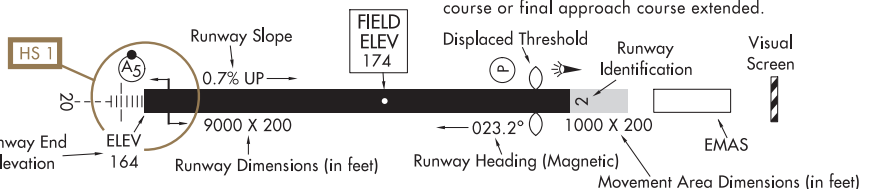
Positional accuracy within ± 600 feet unless otherwise noted on the chart.

Runway length depicted is the physical length of the runway (end-to-end, including displaced thresholds if any) but excluding areas designated as stopways.

A D symbol is shown to indicate runway declared distance information available, see appropriate Chart Supplement for distance information.

NOTE:
All new and revised airport diagrams are shown referenced to the World Geodetic System (WGS) (noted on appropriate diagram), and may not be compatible with local coordinates published in DoD FLIP. (Foreign Only)

The airport sketch box includes the final approach course or final approach course extended.



SCOPE

Airport diagrams are specifically designed to assist in the movement of ground traffic at locations with complex runway/taxiway configurations. Airport diagrams are not intended to be used for approach and landing or departure operations. For revisions to Airport Diagrams: Consult FAA Order 7910.4.

SW-2, 07 AUG 2025 to 02 OCT 2025

LEGEND 22195

INSTRUMENT APPROACH PROCEDURES (CHARTS)
APPROACH LIGHTING SYSTEM - UNITED STATES

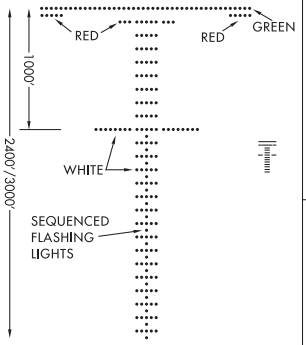
Approach lighting and visual glide slope systems are indicated on the airport sketch by an identifier, e.g., (A2), (V), etc.

A dot " ● " portrayed with approach lighting letter identifier indicates sequenced flashing lights (F) installed with the approach lighting system e.g., (A1). Negative symbology, e.g., (A1), (V) indicates Pilot Controlled Lighting (PCL).

CATEGORY I APPROACH LIGHTING SYSTEM

(A1)

ALSF-1

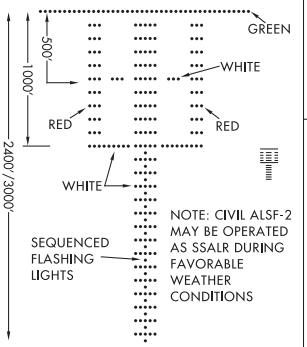


(High Intensity)
LENGTH 2400/3000 FEET

CATEGORY II APPROACH LIGHTING SYSTEM

(A)

ALSF-2

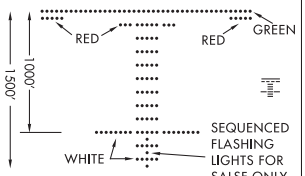


(High Intensity)
LENGTH 2400/3000 FEET

SHORT APPROACH LIGHTING SYSTEM

(A2) (A2)

SALS/SALSF



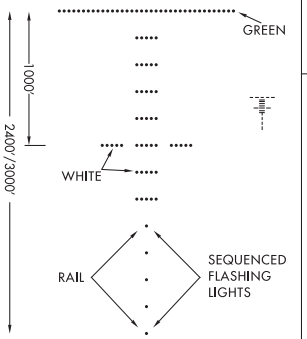
(High Intensity)
LENGTH 1500 FEET

SIMPLIFIED SHORT APPROACH LIGHTING SYSTEM

with Runway Alignment Indicator Lights

(A3)

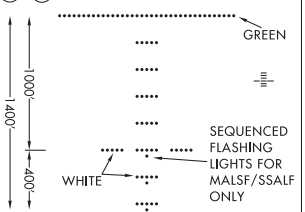
SSALR



(High Intensity)
LENGTH 2400/3000 FEET

MEDIUM INTENSITY (**MALS** and **MALSF**) OR SIMPLIFIED SHORT (**SSALS** and **SSALF**) APPROACH LIGHTING SYSTEMS

(A4) (A4)



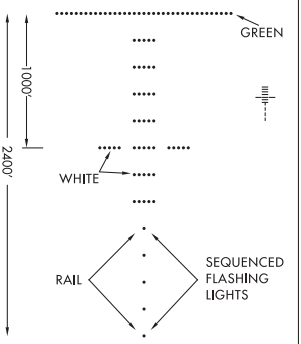
LENGTH 1400 FEET

MEDIUM INTENSITY APPROACH LIGHTING SYSTEM

with Runway Alignment Indicator Lights

(A5)

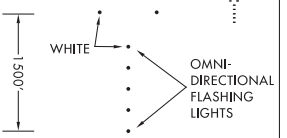
MALSR



LENGTH 2400 FEET

OMNIDIRECTIONAL APPROACH LIGHTING SYSTEM

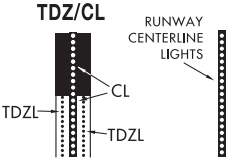
ODALS



LENGTH 1500 FEET

RUNWAY TOUCHDOWN ZONE AND CENTERLINE LIGHTING SYSTEMS

TDZ/CL



AVAILABILITY of TDZ/CL will be shown by NOTE in SKETCH e.g. "TDZ/CL Rwy 15"

LEGEND 22195

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

LEGEND 22195

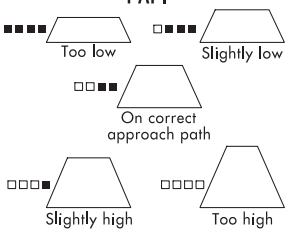
INSTRUMENT APPROACH PROCEDURES (CHARTS)
APPROACH LIGHTING SYSTEM - UNITED STATES

Approach lighting and visual glide slope systems are indicated on the airport sketch by an identifier, (A2), (V), etc.

A dot " ● " portrayed with approach lighting letter identifier indicates sequenced flashing lights (F) installed with the approach lighting system e.g., (A1). Negative symbology, e.g., (A1), (V) indicates Pilot Controlled Lighting (PCL).

(P) PRECISION APPROACH PATH INDICATOR

PAPI



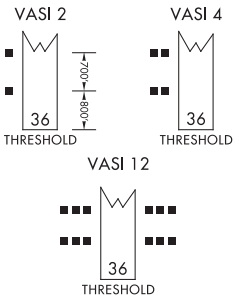
Legend: □ White ■ Red

(V) VISUAL APPROACH SLOPE INDICATOR

VASI

VISUAL APPROACH SLOPE INDICATOR WITH STANDARD THRESHOLD CLEARANCE PROVIDED.

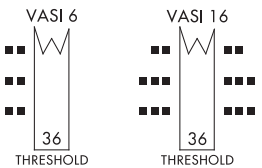
ALL LIGHTS WHITE — TOO HIGH
FAR LIGHTS RED, NEAR LIGHTS WHITE — ON GLIDE SLOPE
ALL LIGHTS RED — TOO LOW



(V3) VISUAL APPROACH SLOPE INDICATOR

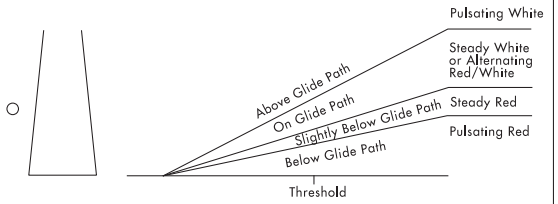
VASI

3-BAR, 6 OR 16 BOX, VISUAL APPROACH SLOPE INDICATOR THAT PROVIDES 2 GLIDE ANGLES AND 2 THRESHOLD CROSSING HEIGHTS.



(V2) PULSATING VISUAL APPROACH SLOPE INDICATOR

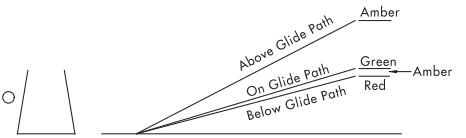
PVASI



CAUTION: When viewing the pulsating visual approach slope indicators in the pulsating white or pulsating red sectors, it is possible to mistake this lighting aid for another aircraft or a ground vehicle. Pilots should exercise caution when using this type of system.

(V4) TRI-COLOR VISUAL APPROACH SLOPE INDICATOR

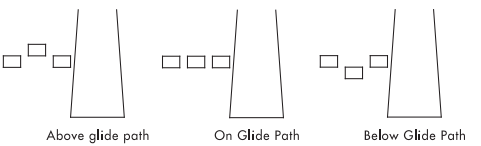
TRCV



CAUTION: When the aircraft descends from green to red, the pilot may see a dark amber color during the transition from green to red.

(V5) ALIGNMENT OF ELEMENTS SYSTEMS

APAP



Painted panels which may be lighted at night. To use the system the pilot positions the aircraft so the elements are in alignment.

LEGEND 22195

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SUPPLEMENTAL TABLES 25107

FREQUENCY PAIRING TABLE

TACAN CHANNEL	VHF FREQUENCY	TACAN CHANNEL	VHF FREQUENCY	TACAN CHANNEL	VHF FREQUENCY
17Y	108.05	40X	110.30	88Y	114.15
18X	108.10	40Y	110.35	89Y	114.25
18Y	108.15	41Y	110.45	90Y	114.35
19Y	108.25	42X	110.50	91Y	114.45
20X	108.30	42Y	110.55	92Y	114.55
20Y	108.35	43Y	110.65	93Y	114.65
21Y	108.45	44X	110.70	94Y	114.75
22X	108.50	44Y	110.75	95Y	114.85
22Y	108.55	45Y	110.85	96Y	114.95
23Y	108.65	46X	110.90	97Y	115.05
24X	108.70	46Y	110.95	98Y	115.15
24Y	108.75	47Y	111.05	99Y	115.25
25Y	108.85	48X	111.10	100Y	115.35
26X	108.90	48Y	111.15	101Y	115.45
26Y	108.95	49Y	111.25	102Y	115.55
27Y	109.05	50X	111.30	103Y	115.65
28X	109.10	50Y	111.35	104Y	115.75
28Y	109.15	51Y	111.45	105Y	115.85
29Y	109.25	52X	111.50	106Y	115.95
30X	109.30	52Y	111.55	107Y	116.05
30Y	109.35	53Y	111.65	108Y	116.15
31Y	109.45	54X	111.70	109Y	116.25
32X	109.50	54Y	111.75	110Y	116.35
32Y	109.55	55Y	111.85	111Y	116.45
33Y	109.65	56X	111.90	112Y	116.55
34X	109.70	56Y	111.95	113Y	116.65
34Y	109.75	80Y	113.35	114Y	116.75
35Y	109.85	81Y	113.45	115Y	116.85
36X	109.90	82Y	113.55	116Y	116.95
36Y	109.95	83Y	113.65	117Y	117.05
37Y	110.05	84Y	113.75	118Y	117.15
38X	110.10	85Y	113.85	119Y	117.25
38Y	110.15	86Y	113.95		
39Y	110.25	87Y	114.05		

See the Chart Supplement for a complete listing.

SUPPLEMENTAL TABLES 25107

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SUPPLEMENTAL TABLES 25107

INSTRUMENT TAKEOFF AND APPROACH PROCEDURE CHARTS
RATE OF CLIMB TABLE
(ft per min)

The rate of climb table is provided for use in planning and executing climbs with a known or approximate ground speed. Rates of climb in ft per min are monitored with a vertical speed indicator (VSI). The use of a climb rate should not be used if it will exceed the aircraft's operational limitations.

ft/NM	%	GROUND SPEED (knots)										
		60	90	120	150	180	210	240	270	300	330	360
152	2.50	152	228	304	380	456	532	608	684	760	836	912
200	3.29	200	300	400	500	600	700	800	900	1000	1100	1200
210	3.46	210	315	420	525	630	735	840	945	1050	1155	1260
220	3.62	220	330	440	550	660	770	880	990	1100	1210	1320
230	3.79	230	345	460	575	690	805	920	1035	1150	1265	1380
240	3.95	240	360	480	600	720	840	960	1080	1200	1320	1440
250	4.11	250	375	500	625	750	875	1000	1125	1250	1375	1500
260	4.28	260	390	520	650	780	910	1040	1170	1300	1430	1560
270	4.44	270	405	540	675	810	945	1080	1215	1350	1485	1620
280	4.61	280	420	560	700	840	980	1120	1260	1400	1540	1680
290	4.77	290	435	580	725	870	1015	1160	1305	1450	1595	1740
300	4.94	300	450	600	750	900	1050	1200	1350	1500	1650	1800
310	5.10	310	465	620	775	930	1085	1240	1395	1550	1705	1860
320	5.27	320	480	640	800	960	1120	1280	1440	1600	1760	1920
330	5.43	330	495	660	825	990	1155	1320	1485	1650	1815	1980
340	5.60	340	510	680	850	1020	1190	1360	1530	1700	1870	2040
350	5.76	350	525	700	875	1050	1225	1400	1575	1750	1925	2100
360	5.92	360	540	720	900	1080	1260	1440	1620	1800	1980	2160
370	6.09	370	555	740	925	1110	1295	1480	1665	1850	2035	2220
380	6.25	380	570	760	950	1140	1330	1520	1710	1900	2090	2280
390	6.42	390	585	780	975	1170	1365	1560	1755	1950	2145	2340
400	6.58	400	600	800	1000	1200	1400	1600	1800	2000	2200	2400
450	7.41	450	675	900	1125	1350	1575	1800	2025	2250	2475	2700
500	8.23	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
550	9.05	550	825	1100	1375	1650	1925	2200	2475	2750	3025	3300

SUPPLEMENTAL TABLES 25107

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SUPPLEMENTAL TABLES 25107

INSTRUMENT TAKEOFF AND APPROACH PROCEDURE CHARTS
RATE OF DESCENT TABLE

The rate of descent table is provided for use in planning and executingdescents with a known or approximate ground speed. The descent chart may also be used to calculate a constant rate of descent in the final segment on a non-precision approach. This rate of descent is advisory only. Rates of descent in ft per min are monitored with a vertical speed indicator (VSI). The use of a descent rate should not be used if it will exceed the aircraft's operational limitations.

ANGLE	ft/NM	GROUND SPEED (knots)										
		60	90	120	150	180	210	240	270	300	330	360
2.0	212	212	318	424	530	637	743	849	955	1061	1167	1273
2.5	265	265	398	531	663	796	929	1061	1194	1326	1459	1592
2.6	276	276	414	552	690	828	966	1104	1242	1380	1518	1655
2.7	287	287	430	573	716	860	1003	1146	1289	1433	1576	1719
2.8	297	297	446	594	743	892	1040	1189	1337	1486	1634	1783
2.9	308	308	462	616	770	923	1077	1231	1385	1539	1693	1847
3.0	318	318	478	637	796	955	1115	1274	1433	1592	1751	1911
3.1	329	329	494	658	823	987	1152	1316	1481	1645	1810	1974
3.2	340	340	510	679	849	1019	1189	1359	1529	1699	1868	2038
3.3	350	350	526	701	876	1051	1226	1401	1577	1752	1927	2102
3.4	361	361	541	722	902	1083	1263	1444	1624	1805	1985	2166
3.5	372	372	557	743	929	1115	1301	1487	1672	1858	2044	2230
3.6	382	382	573	765	956	1147	1338	1529	1720	1911	2103	2294
3.7	393	393	589	786	982	1179	1375	1572	1768	1965	2161	2358
3.8	404	404	605	807	1009	1211	1413	1614	1816	2018	2220	2421
3.9	414	414	621	828	1036	1243	1450	1657	1864	2071	2278	2485
4.0	425	425	637	850	1062	1275	1487	1700	1912	2124	2337	2549
4.5	478	478	717	956	1196	1435	1674	1913	2152	2391	2630	2869
5.0	532	532	797	1063	1329	1595	1861	2126	2392	2658	2924	3190
5.5	585	585	878	1170	1463	1755	2048	2340	2633	2925	3218	3510
6.0	639	639	958	1277	1597	1916	2235	2555	2874	3193	3512	3832
6.5	692	692	1038	1385	1731	2077	2423	2769	3115	3461	3808	4154
7.0	746	746	1119	1492	1865	2238	2611	2984	3357	3730	4103	4476
7.5	800	800	1200	1600	2000	2400	2800	3200	3600	4000	4400	4800
8.0	854	854	1281	1708	2135	2562	2989	3416	3843	4270	4697	5124
8.5	908	908	1362	1816	2270	2724	3178	3632	4086	4540	4994	5448
9.0	962	962	1444	1925	2406	2887	3368	3849	4331	4812	5293	5774
9.5	1017	1017	1525	2034	2542	3050	3559	4067	4576	5084	5592	6101
10.0	1071	1071	1607	2143	2678	3214	3750	4286	4821	5357	5893	6428

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HERLONG, CA
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IFR TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude, and/or airports that have civil IFR takeoff minimums other than standard, are listed below. Takeoff Minimums and Departure Procedures apply to all runways unless otherwise specified. An entry may also be listed that contains only Takeoff Obstacle Notes. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are textually described below, or published separately as a graphic procedure. If the ODP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or the applicable military volume, as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not specifically assigned an ODP, SID, or RADAR vector as part of an IFR clearance, an ODP may be required to be flown for obstacle clearance, even though not specifically stated in the IFR clearance. When doing so in this manner, ATC should be informed when the ODP being used contains a specified route to be flown, restrictions before turning, and/or altitude restrictions.

Some ODPs, which are established solely for obstacle avoidance, require a climb in visual conditions to cross the airport, a fix, or a NAVAID in a specified direction, at or above a specified altitude. These procedures are called Visual Climb Over Airport (VCOA). To ensure safe and efficient operations, the pilot must verbally request approval from ATC to fly the VCOA when requesting their IFR clearance.

At some locations where an ODP has been established, a diverse vector area (DVA) may be created to allow RADAR vectors to be used in lieu of an ODP. DVA information will state that headings will be as assigned by ATC and climb gradients, when applicable, will be published immediately following the specified departure procedure.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard takeoff rules and establishes takeoff minimums for certain operators as follows: (1) For aircraft, other than helicopters, having two engines or less – one statute mile visibility. (2) For aircraft having more than two engines – one-half statute mile visibility. (3) For helicopters – one-half statute mile visibility. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) takeoff minima are published below. For military takeoff minima, refer to appropriate service directives.

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ALTURAS, CA

ALTURAS MUNI (AAT)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 10APR08 (08101) (FAA)

DEPARTURE PROCEDURE:

Use BACHS DEPARTURE.

AMEDEE AAF (KAHC)

HERLONG, CA

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 30JAN20 (20030)

TAKEOFF MINIMUMS:

Rwy 9, std. w/min. climb of 350' per NM to 9500, or 4100-3 for VCOA.

Rwy 27, std. w/min. climb of 390' per NM to 8500, or 4100-3 for VCOA.

DEPARTURE PROCEDURE:

Rwy 9, climbing right turn on a heading between 086° CW to 266° from DER.

Rwy 27, climbing left turn on a heading between 086° CW 266° from DER.

VCOA:

All runways, obtain ATC approval for VCOA When requesting IFR clearance. Climb in visual Conditions to cross AMEDEE AAF at or above 8000 before proceeding on course.

ARCATA-EUREKA, CA

CALIFORNIA REDWOOD COAST—HUMBOLDT COUNTY (ACV)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 8 12OCT17 (17285) (FAA)

TAKEOFF MINIMUMS:

Rwy 1, std. w/min. climb of 360' per NM to 500 or 1100-2½ for VCOA.

Rwy 14, 400-2½ or std. w/min. climb of 382' per NM to 600.

DEPARTURE PROCEDURE:

Rwy 1, 32, climbing left turn to intercept ACV R-250 to HOCUT INT and continue climb to MEA on V27.

Rwy 14, 19, climbing right turn to intercept ACV R-250 to HOCUT INT and continue climb to MEA on V27.

VCOA:

Rwy 1, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross California Redwood Coast-Humboldt County airport westbound at or above 1200 to intercept ACV R-250 to HOCUT INT and continue climb to MEA on V27.

TAKEOFF OBSTACLE NOTES:

Rwy 1, runway lights 10' from DER, 54' left and right of centerline, 1' AGL/209' MSL.
Fence beginning 150' from DER, 397' right of centerline, up to 9' AGL/217' MSL.
Tree, fence, pole beginning 222' from DER, 158' right of centerline, up to 260' MSL.
Tree 276' from DER, 491' left of centerline, 245' MSL.
Trees beginning 310' from DER, 198' left of centerline, up to 248' MSL.
Tree 383' from DER, 408' right of centerline, 316' MSL.
Trees beginning 385' from DER, 0' left of centerline, up to 179' AGL/325' MSL.
Trees beginning 423' from DER, 11' left of centerline, up to 118' AGL/260' MSL.
Trees beginning 583' from DER, 6' left of centerline, up to 178 AGL/278' MSL.
Trees beginning 1922' from DER, 179' right of centerline, up to 344' MSL.
Trees beginning 2291' from DER, 266' right of centerline, up to 124 AGL/356' MSL.
Tree 3390' from DER, 164' left of centerline, 150' AGL/335' MSL.
Trees beginning 3400' from DER, 108' left of centerline, up to 175' AGL/357' MSL.
Trees beginning 3478' from DER, 12' left of centerline, up to 187' AGL/364' MSL.
Tree 3602' from DER, 725' right of centerline, 358' MSL.
Trees beginning 3603' from DER, 1' right of centerline, up to 177' AGL/365' MSL.
Trees beginning 3714' from DER, 34' left of centerline, up to 192' AGL/369' MSL.
Trees beginning 3722' from DER, 51' left of centerline, up to 197' AGL/372' MSL.
Trees beginning 3763' from DER, 1' left of centerline, up to 202' AGL/375' MSL.
Tree 4016' from DER, 567' right of centerline, 367' MSL.
Trees beginning 4017' from DER, 67' right of centerline, up to 197' AGL/373' MSL.
Trees beginning 6044' from DER, 852' left of centerline, up to 163' AGL/379' MSL.
Tree 1.1 NM from DER, 48' right of centerline, 385' MSL.
Trees beginning 1.2 NM from DER, 1220' right of centerline, up to 416' MSL.
Trees beginning 1.7 NM from DER, 2648' right of centerline, up to 602' MSL.
Tree 1.8 NM from DER, 3460' right of centerline, 605' MSL.
Rwy 14, runway lights 9' from DER, 54' left and right of centerline, 1' AGL/223' MSL.
Tree 621' from DER, 591' left of centerline, 256' MSL.
Tree, antenna, pole, beginning 733' from DER, 378' left of centerline, up to 262' MSL.
Tree 1086' from DER, 716' right of centerline, 277' MSL.
Trees, beginning 1110' from DER, 717' right of centerline, up to 290' MSL.
Tree 1701' from DER, 860' left of centerline, 283' MSL.
Trees beginning 1843' from DER, 875' left of centerline, up to 307' MSL.
Trees, beginning 2568' from DER, 801' left of centerline, up to 321' MSL.
Trees beginning 3085' from DER, 565' left of centerline, up to 326' MSL.
Tree 3807' from DER, 1202' left of centerline, 374' MSL.
Trees, beginning 3827' from DER, 794' left of centerline, up to 392' MSL.
Trees, beginning 4152' from DER, 813' left of centerline, up to 420' MSL.
Trees, beginning 4514' from DER, 1245' left of centerline, up to 443' MSL.
Trees, beginning 4707' from DER, 880' left of centerline, up to 446' MSL.
Trees, beginning 5176' from DER, 1028' left of centerline, up to 447' MSL.
Trees, beginning 5712' from DER, 1337' left of centerline, up to 467' MSL.
Trees, beginning 1.1 NM from DER, 1618' left of centerline, up to 515' MSL.
Trees, beginning 1.2 NM from DER, 1929' left of centerline, up to 565' MSL.
Tree 1.7 NM from DER, 3238' left of centerline, 568' MSL.
Trees beginning 1.8 NM from DER, 1864' left of centerline, up to 588' MSL.
Rwy 19, runway lights 9' from DER, 55' left and right of centerline, 189' MSL.
Vegetation 15' from DER, 270' right of centerline, 191' MSL.
Tree 776' from DER, 696' right of centerline, 77' AGL/215' MSL.
Rwy 32, fence, beginning 91' from DER, 476' right of centerline, up to 196' MSL.
Fence 132' from DER, 221' left of centerline, 8' AGL/188' MSL.
Tree, fence, bush beginning 183' from DER, 202' left of centerline, up to 195' MSL.
Fence, beginning 268' from DER, 176' right of centerline, up to 13' AGL/197' MSL.
Obs light DME, NAVAID, beginning 580' from DER, 258' right of centerline, up to 29' AGL/203' MSL.
Tree 1022' from DER, 624' right of centerline, 256' MSL.
Trees, beginning 1036' from DER, 448' right of centerline, up to 267' MSL.

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ATWATER, CA

CASTLE (MER)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1A 15DEC11 (11349) (FAA)

TAKEOFF MINIMUMS:

Rwy 13, std. w/ min. climb of 250' per NM to 2500 or 2200-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

Rwy 13, climb heading 126° to 2500 before turning left. For climb in visual conditions, cross Castle Airport at or above 2200 before proceeding on course.

Rwy 31, climb heading 306° to 1100 before turning right.

TAKEOFF OBSTACLE NOTES:

Rwy 13, tree 2539' from DER, 1005' right of centerline, 89' AGL/261' MSL.

Rwy 31, tree 1274' from DER, 829' left of centerline, 20' AGL/224' MSL.

Trees beginning 2909' from DER, 542' right of centerline, 65' AGL/269' MSL.

AUBURN, CA

AUBURN MUNI (AUN)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 25JAN24 (24025) (FAA)

DEPARTURE PROCEDURE:

Use YUBBA DEPARTURE.

TAKEOFF OBSTACLE NOTES:

Rwy 7, tree 98' from DER, 447' left of centerline, 1541' MSL.

Building, tree beginning 99' from DER, 234' right of centerline, up to 24' AGL/1553' MSL.

Tree 959' from DER, 241' right of centerline, 1578' MSL.

Tree 992' from DER, 431' right of centerline, 1602' MSL.

Trees beginning 1035' from DER, 139' right of centerline, up to 1614' MSL.

Trees beginning 1103' from DER, 244' right of centerline, up to 1587' MSL.

Trees beginning 1266' from DER, 263' right of centerline, up to 1676' MSL.

Pole, electrical system, trees beginning 1366' from DER, 253' right of centerline, up to 60' AGL/1679' MSL.

Trees beginning 1514' from DER, 56' right of centerline, up to 1681' MSL.

Tree 5369' from DER, 1805' left of centerline, 1684' MSL.

Trees beginning 5546' from DER, 1593' left of centerline, up to 1735' MSL.

Trees beginning 1 NM from DER, 1140' left of centerline, up to 1779' MSL.

Trees beginning 1.1 NM from DER, 1983' right of centerline, up to 1726' MSL.

Tree, pole beginning 1.3 NM from DER, 1113' right of centerline, up to 1773' MSL.

Trees beginning 1.4 NM from DER, 918' left of centerline, up to 1796' MSL.

Trees, transmission line, tank, building beginning 1.5 NM from DER, 372' left of centerline, up to 1801' MSL.

Trees beginning 1.6 NM from DER, 535' left of centerline, up to 1915' MSL.

Tree, traverse way beginning 1.7 NM from DER, 1523' left of centerline, up to 1859' MSL.

Electrical system, trees beginning 2.1 NM from DER, 2928' left of centerline, up to 62' AGL/2059' MSL.

Tree 2.2 NM from DER, 3991' left of centerline, 2151' MSL.

Trees beginning 2.3 NM from DER, 3015' left of centerline, up to 2105' MSL.

Tree 2.4 NM from DER, 4231' left of centerline, 1986' MSL.

Rwy 25, rising terrain 26' from DER, 286' right of centerline, 1496' MSL.

Trees beginning 31' from DER, 477' left of centerline, up to 1532' MSL.

Tree, rising terrain, fences, vertical structure, building beginning 89' from DER, 199' right of centerline, up to 1529' MSL.

Trees beginning 774' from DER, 419' right of centerline, up to 1538' MSL.

Tree 1023' from DER, 652' right of centerline, 1539' MSL.

Trees beginning 1678' from DER, 207' right of centerline, up to 1547' MSL.

BEALE AFB (KBAB)

MARYSVILLE, CA

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 25JAN24 (24025) (USAF)

TAKEOFF MINIMUMS:

Rwy 33, 3400-3 or std w/min climb of 203'/NM to 3900.

DEPARTURE PROCEDURE:

Rwy 15, climb on a hdg between 100° CW to 325° from DER.

Rwy 33, climb on a hdg between 146° CW to 344° from DER.

TAKEOFF OBSTACLE NOTES:

Rwy 33, terrain 0' from DER, 500' right of centerline, 118' MSL.

Aircraft tail 129' from DER, 525' right of centerline, 16' AGL/134' MSL.

BECKWOURTH, CA

NERVINO (O02)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 17OCT13 (13290) (FAA)

TAKEOFF MINIMUMS:

Rwys 8, 26, 3500-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

Rwys 8, 26, for climb in visual conditions: cross Nervino airport at or above 8300 before proceeding on course.

CON'T

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BECKWOURTH, CA (CON'T)

NERVINO (O02) (CON'T)

TAKEOFF OBSTACLE NOTES:
Rwy 8, road 58' from DER, 469' right of centerline, 15' AGL/4920' MSL.
Pole 310' from DER, 522' right of centerline, 49' AGL/4925' MSL.
Pole 528' from DER, 522' right of centerline, 39' AGL/4924' MSL.
Tree 1.47 NM from DER, 727' right of centerline, 100' AGL/5193' MSL.
Tree 1.9 NM from DER, 2534' right of centerline, 100' AGL/5499' MSL.
Bush 2.03 NM from DER, 2126' right of centerline, 4' AGL/5406' MSL.
Rwy 26, tree 5856' from DER, 1984' right of centerline, 100' AGL/5339' MSL.
Tree 1.25 NM from DER, 2439' right of centerline, 100' AGL/5420' MSL.
Tree 2.07 NM from DER, 3302' left of centerline, 100' AGL/5570' MSL.

BISHOP, CA

BISHOP (BIH)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4A 29MAR18 (18088) (FAA)

TAKEOFF MINIMUMS:
Rwy 8, 12, 17, 9000-3 for VCOA.
Rwy 26, std. w/ min. climb of 280' per NM to 10400', or 9000-3 for VCOA.
Rwys 30, 35, std. w/ min. climb of 285' per NM to 10500', or 9000-3 for VCOA.
DEPARTURE PROCEDURE:
Rwys 26, 30, climbing right turn on heading 360, thence…
Rwy 35, climbing left turn on heading 290, thence…
…all aircraft intercept BIH R-322 to NIKOL INT/BIH 38.46 DME. Aircraft departing NIKOL on V244 westbound cross NIKOL at or above 13100; aircraft departing NIKOL on V381 southeast bound cross NIKOL at or above 13000; aircraft departing NIKOL on T298 westbound or T259 westbound cross NIKOL at or above 12200; all other aircraft cross NIKOL at or above 11000.
VCOA:
All Rwys, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Bishop airport at or above 13000' before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 26, trees and bushes beginning 69' from DER, 150' right of centerline, up to 4197' MSL.
Trees beginning 925' from DER, 32' left of centerline, up to 4167' MSL.
Rwy 35, trees beginning 238' from DER, 31' left of centerline, up to 4146' MSL.
Trees beginning 215' from DER, 146' right of centerline, up to 4146' MSL.

BYRON, CA

BYRON (C83)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 17AUG17 (17229) (FAA)

TAKEOFF MINIMUMS:
Rwy 23, NA - obstacles.
Rwy 30, 200-1⅛ or std. with a min. climb of 245' per NM to 300, or alternatively, with standard takeoff minimums and normal 200' per NM climb gradient, takeoff must occur no later than 1900' prior to DER.
DEPARTURE PROCEDURE:
Rwy 5, climbing left turn heading 010°, thence...
Rwy 12, climbing left turn heading 360°, thence…
Rwy 30, climbing right turn heading 065°, thence…
…on LIN VOR/DME R-227 to LIN VOR/DME before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 5, bush 17' from DER, 67' right of centerline, 6' AGL/52' MSL.
Rwy 12, multiple trees and bush beginning 240' from DER, 286' right of centerline, up to 39' AGL/76' MSL.
Rwy 30, multiple poles, building, and terrain beginning 66' from DER, 228' left of centerline, up to 65' AGL/225' MSL.
Multiple poles beginning 949' from DER, 28' right of centerline, up to 42' AGL/103' MSL.

CHESTER, CA

ROGERS FLD (O05)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 31OCT24 (24305) (FAA)

DEPARTURE PROCEDURE:
Use CHOTT DEPARTURE.

CHICO, CA

CHICO RGNL (CIC)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 7 21MAY20 (23054) (FAA)

DEPARTURE PROCEDURE:
Rwys 13L/R, climbing right turn heading 230° to intercept V-23/T-261.
Rwys 31L/R, climbing left turn heading 230° to intercept V-23/T-261.
CON'T

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CHICO, CA (CON'T)

CHICO RGNL (CIC) (CON'T)

TAKEOFF OBSTACLE NOTES:

Rwy 13L, terrain 298' from DER, 537' left of centerline, 216' MSL.
Trees, pole beginning 947' from DER, 560' left of centerline, up to 241' MSL.
Rwy 13R, vehicles on road beginning at DER, left and right of centerline, up to 225' MSL.
Rwy 31L, vehicles on road beginning at DER, left and right of centerline, up to 235' MSL.
Tower 611' from DER, 349' right of centerline, 35' AGL/267' MSL.
Rwy 31R, tree 1124' from DER, 612' right of centerline, 282' MSL.
Tree 1363' from DER, 768' left of centerline, 280' MSL.

CLOVERDALE, CA

CLOVERDALE MUNI (O60)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 17JUN21 (21168) (FAA)

TAKEOFF MINIMUMS:

Rwy 14, 300-1 w/min. climb of 475' per NM to 1400, or 3900-3 for VCOA.
Rwy 32, 3900-3 for VCOA.

DEPARTURE PROCEDURE:

Rwy 14, climb on a heading between 120° CW to 150° from DER to 4500 before proceeding on course.

VCOA:

All runways, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Cloverdale Muni airport at or above 4000 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 14, tree 38' from DER, 411' right of centerline, 305' MSL.
Vegetation 61' from DER, 307' left of centerline, 276' MSL.
Vegetation beginning 80' from DER, 90' left of centerline, up to 9' AGL/279' MSL.
Trees beginning 95' from DER, 18' right of centerline, up to 43' AGL/310' MSL.
Tree 391' from DER, 29' left of centerline, 31' AGL/291' MSL.
Tree 396' from DER, 154' left of centerline, 40' AGL/298' MSL.
Tree 416' from DER, 80' left of centerline, 37' AGL/299' MSL.
Trees beginning 419' from DER, 20' left of centerline, up to 43' AGL/303' MSL.
Tree 448' from DER, 207' left of centerline, 58' AGL/329' MSL.
Tree, pole beginning 611' from DER, 30' right of centerline, up to 314' MSL.
Trees, ag equip beginning 662' from DER, 20' left of centerline, up to 369' MSL.
Trees beginning 1046' from DER, 325' right of centerline, up to 352' MSL.
Trees, stack, buildings beginning 1483' from DER, 41' right of centerline, up to 373' MSL.
Buildings, pipeline pipes, poles, trees, ag equip, transmission lines beginning 1907' from DER, 8' right of centerline, up to 142' AGL/427' MSL.
Ag equip, tree beginning 2902' from DER, 37' left of centerline, up to 5' AGL/371' MSL.
Tree 2970' from DER, 291' left of centerline, 48' AGL/380' MSL.
Ag equip beginning 2979' from DER, 87' left of centerline, up to 5' AGL/386' MSL.
Antenna, trees, ag equip, pole beginning 3082' from DER, 70' left of centerline, up to 19' AGL/403' MSL.
Tree, buildings beginning 4785' from DER, 503' left of centerline, up to 31' AGL/426' MSL.
Tree 4878' from DER, 415' left of centerline, 37' AGL/428' MSL.
Tree 4916' from DER, 511' left of centerline, 52' AGL/446' MSL.
Ag equip beginning 1 NM from DER, 1806' right of centerline, up to 6' AGL/448' MSL.
Tree 1 NM from DER, 1969' right of centerline, 496' MSL.
Trees beginning 1.1 NM from DER, 1127' right of centerline, up to 534' MSL.
Tree 1.5 nm from DER, 2973' right of centerline, 549' MSL.
Tree 1.6 NM from DER, 2150' right of centerline, 529' MSL.
Trees beginning 1.6 NM from DER, 1753' right of centerline, up to 719' MSL.
Trees beginning 1.7 NM from DER, 393' right of centerline, up to 814' MSL.
Trees beginning 2.2 NM from DER, 8' right of centerline, up to 772' MSL.
Tree 2.2 NM from DER, 59' left of centerline, 620' MSL.
Tree 2.5 NM from DER, 1452' right of centerline, 780' MSL.
Rwy 32, tree 32' from DER, 497' right of centerline, 288' MSL.
Ag equip 35' from DER, 371' left of centerline, 6' AGL/283' MSL.
Tree 51' from DER, 252' left of centerline, 297' MSL.
Tree, fences beginning 71' from DER, 67' right of centerline, up to 313' MSL.
Trees, ag equip, fences beginning 96' from DER, 62' left of centerline, up to 30' AGL/322 ' MSL.
Tree 419' from DER, 477' right of centerline, 329' MSL.
Tree 450' from DER, 372' left of centerline, 341' MSL.
Trees beginning 806' from DER, 505' right of centerline, up to 331' MSL.
Trees beginning 989' from DER, 293' left of centerline, up to 363' MSL.
Tree 2915' from DER, 965' right of centerline, 349' MSL.
Tree, building beginning 2967' from DER, 1241' left of centerline, up to 393' MSL.
Trees beginning 3274' from DER, 173' right of centerline, up to 374' MSL.
Trees beginning 1.6 NM from DER, 292' right of centerline, up to 581' MSL.
Tree, building beginning 2.2 NM from DER, 221' right of centerline, up to 652' MSL.
Tree 2.3 NM from DER, 276' right of centerline, 672' MSL.
Tank 2.4 NM from DER, 3970' left of centerline, 680' MSL.

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COALINGA, CA

NEW COALINGA MUNI (C80)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 05OCT23 (23278) (FAA)

TAKEOFF MINIMUMS:

Rwys 1, 19, NA-Environmental.

DEPARTURE PROCEDURE:

Rwys 12, 30, use AVENAL DEPARTURE.

TAKEOFF OBSTACLE NOTES:

Rwy 12, vehicle on road beginning 9' from DER, 362' left of centerline, up to 614' MSL.
NAVAID 15' from DER, 125' right of centerline, 2' AGL/603' MSL.
Vehicle on road beginning 76' from DER, 506' right of centerline, up to 614' MSL.
Rwy 30, NAVAID 14' from DER, 125' left of centerline, 1' AGL/626' MSL.
Terrain 43' from DER, 472' right of centerline, 627' MSL.
Vehicle on road beginning 145' from DER, 456' right of centerline, up to 645' MSL.
Vehicle on road 202' from DER, 446' left of centerline, 643' MSL.
Vehicle on road 330' from DER, 378' right of centerline, 646' MSL.
Vehicle on road beginning 384' from DER, 1' left of centerline, up to 644' MSL.
Vehicle on road 532' from DER, 362' right of centerline, 647' MSL.
Vehicle on road beginning 655' from DER, on and left of centerline, up to 646' MSL.
Vehicle on road beginning 679' from DER, on and right of centerline, up to 648' MSL.
Vehicle on road beginning 731' from DER, 113' left of centerline, up to 648' MSL.

COLUMBIA, CA

COLUMBIA (O22)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 30JAN20 (20030) (FAA)

TAKEOFF MINIMUMS:

Rwys 11, 29, NA - Environmental.
Rwy 35, NA - ATC.

DEPARTURE PROCEDURE:

Rwy 17, use FICHU RNAV DEPARTURE.

TAKEOFF OBSTACLE NOTES:

Rwy 17, bush 31' from DER, 196' right of centerline, 2083' MSL.
Tree 148' from DER, 387' right of centerline, 2108' MSL.
Trees beginning 180' from DER, 287' left of centerline, up to 2126' MSL.
Tree 262' from DER, 527' right of centerline, 2163' MSL.
Trees beginning 354' from DER, 240' left of centerline, up to 2127' MSL.
Tree, rd (n), pole, grd, bush beginning 414' from DER, 46' right of centerline, up to 2188' MSL.
Tree 456' from DER, 325' left of centerline, 2130' MSL.
Trees beginning 492' from DER, 109' left of centerline, up to 2133' MSL.
Trees beginning 725' from DER, 26' left of centerline, up to 2171' MSL.
Trees beginning 1260' from DER, 56' left of centerline, up to 2181' MSL.
Tree 1527' from DER, 893' right of centerline, 2205' MSL.
Tree 1619' from DER, 860' right of centerline, 2220' MSL.
Trees beginning 1664' from DER, 896' right of centerline, up to 2238' MSL.
Tree 2152' from DER, 982' left of centerline, 2212' MSL.
Tree 2195' from DER, 988' left of centerline, 2262' MSL.
Tree 2195' from DER, 987' left of centerline, 2273' MSL.
Tree, tower beginning 5842' from DER, 410' left of centerline, up to 2339' MSL.
Tree 5936' from DER, 557' left of centerline, 2239' MSL.

COLUSA, CA

COLUSA COUNTY (O08)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 11JUL24 (24193) (FAA)

DEPARTURE PROCEDURE:

Rwy 14, climbing right turn heading 175° to intercept ILA R-030 to ILA VORTAC before proceeding on course.
Rwy 32, climbing left turn direct ILA VORTAC before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 14, vehicle on road 1' from DER, 350' right of centerline, 60' MSL.
Vehicles on road, fence, sign beginning 23' from DER, 233' right of centerline, up to 62' MSL.
Vehicle on road, vegetation beginning 39' from DER, 455' left of centerline, up to 67' MSL.
Vehicles on road beginning 95' from DER, 472' left of centerline, up to 68' MSL.
Tree, fence, vehicles on road beginning 139' from DER, 347' left of centerline, up to 77' MSL.
Buildings, fence, vehicle on road beginning 194' from DER, 196' right of centerline, up to 14' AGL/63' MSL.
Building, vehicles on road, trees beginning 437' from DER, 57' right of centerline, up to 31' AGL/80' MSL.
Trees beginning 803' from DER, 145' right of centerline, up to 103' MSL.
Building 1477' from DER, 429' left of centerline, 61' AGL/107' MSL.
Rwy 32, building, fence beginning 92' from DER, 253' left of centerline, up to 13' AGL/63' MSL.
Buildings beginning 168' from DER, 444' right of centerline, up to 22' AGL/70' MSL.
Tree, vehicle on road beginning 239' from DER, 165' left of centerline, up to 90' MSL.
Building 358' from DER, 323' right of centerline, 22' AGL/71' MSL.

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COLUSA, CA (CON'T)

COLUSA COUNTY (O08) (CON'T)

Rwy 32 (CON'T), building, tanks beginning 369' from DER, 413' right of centerline, up to 27' AGL/76' MSL.
Vehicles on road 490' from DER, left and right of centerline, up to 15' AGL/64' MSL.
Tree, pole beginning 820' from DER, 473' left of centerline, up to 91' MSL.
Tower 1396' from DER, 91' right of centerline, 55' AGL/105' MSL.
Transmission line 2163' from DER, 378' right of centerline, 57' AGL/107' MSL.
Tree 2836' from DER, 195' right of centerline, 120' MSL.

CONCORD, CA

BUCHANAN FLD (CCR)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 22JUN17 (21112) (FAA)

TAKEOFF MINIMUMS:
Rwys 1L/R, std. w/min. climb of 330' per NM to 1000 or 3700-3 for VCOA.
Rwys 14L/R, std. w/min. climb of 420' per NM to 2700 or 3700-3 for VCOA.
Rwys 19L/R, std. w/min. climb of 490' per NM to 3900 or 3700-3 for VCOA.
Rwys 32L/R, std. w/min. climb of 330' per NM to 1000 or 3700-3 for VCOA.

DEPARTURE PROCEDURE:
Rwys 1L/R, 14L/R, 19L/R, climbing left turn direct CCR VOR/DME, thence...
Rwys 32L/R, climbing right turn direct CCR VOR/DME, thence...
...aircraft departing on CCR VOR/DME R-150 clockwise R-110, climb on course.
All others, climb in CCR VOR/DME holding pattern (hold N, left turns, 191° inbound) to cross CCR VOR/DME at or above 3400 before proceeding on course.

VCOA:
All Rwys, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Buchanan Fld airport at or above 3600 before proceeding on course.

TAKEOFF OBSTACLE NOTES:
Rwy 1L, fence 116' from DER, 1' right of centerline, 29' MSL.
Building 639' from DER, 381' right of centerline, 25' AGL/48' MSL.
Vegetation 675' from DER, 96' left of centerline, 38' MSL.
Tree and poles beginning 1261' from DER, 19' right of centerline, up to 78' MSL.
Flagpole 1520' from DER, 753' left of centerline, 71' MSL.
Tree, camera, and general utility beginning 1860' from DER, 48' right of centerline, up to 98' MSL.
Pole 1906' from DER, 120' left of centerline, 51' AGL/72' MSL.
Sign 1996' from DER, 812' left of centerline, 78' MSL.
Tree 2392' from DER, 8' left of centerline, 83' MSL.
Rwy 1R, pole 1551' from DER, 97' right of centerline, 43' AGL/67' MSL.
Pole 1864' from DER, 357' right of centerline, 96' MSL.
Tree 1927' from DER, 222' right of centerline, 131' MSL.
Tree 2110' from DER, 981' right of centerline, 133' MSL.
Rwy 14L, vehicles on road and fences beginning 82' from DER, 29' left of centerline, up to 40' MSL.
Building and trees beginning 731' from DER, 191' left of centerline, up to 51' MSL.
Trees and buildings beginning 840' from DER, 93' left of centerline, up to 77' MSL.
Trees, poles, and buildings beginning 942' from DER, 13' left of centerline, up to 102' MSL.
Trees, buildings, and poles beginning 1116' from DER, 10' right of centerline, up to 40' AGL/71' MSL.
Tree 1465' from DER, 112' right of centerline, 73' MSL.
Trees beginning 1496' from DER, 121' right of centerline, up to 84' MSL.
Trees beginning 1648' from DER, 62' right of centerline, up to 91' MSL.
Trees and building beginning 1750' from DER, 30' left of centerline, up to 105' MSL.
Tree 2570' from DER, 93' right of centerline, 92' MSL.
Buildings beginning 5413' from DER, 99' left of centerline, up to 177' MSL.
Building 5456' from DER, 138' left of centerline, 146' AGL/179' MSL.
Rwy 14R, windsock 411' from DER, 451' right of centerline, 31' AGL/51' MSL.
Control tower 1140' from DER, 315' right of centerline, 61' AGL/84' MSL.
Electrical system, tree, pole, and antenna beginning 1140' from DER, 167' right of centerline, up to 98' MSL.
Tree 2744' from DER, 886' left of centerline, 102' MSL.
Building 3149' from DER, 946' right of centerline, 92' AGL/125' MSL.
Buildings beginning 3253' from DER, 846' right of centerline, up to 103' AGL/136' MSL.
Rwy 19L, tree 2132' from DER, 376' left of centerline, 90' MSL.
Tree 2257' from DER, 27' left of centerline, 97' MSL.
Tree 2543' from DER, 384' right of centerline, 87' MSL.
Tree 3111' from DER, 946' right of centerline, 106' MSL.
Rwy 19R, terrain 43' from DER, 397' left of centerline, 25' MSL.
Fence 123' from DER, 502' left of centerline, 30' MSL.
Tree 603' from DER, 489' right of centerline, 44' MSL.
Pole and trees beginning 844' from DER, 152' right of centerline, up to 94' MSL.
Tree 1023' from DER, 81' left of centerline, 59' MSL.
Pole and trees beginning 1201' from DER, 568' left of centerline, up to 77' MSL.
Building and trees beginning 1275' from DER, 114' left of centerline, up to 97' MSL.
Tree 2129' from DER, 447' right of centerline, 106' MSL.
Tree 2755' from DER, 216' left of centerline, 108' MSL.
Rwy 32L, building 7' from DER, 321' left of centerline, 18' AGL/35' MSL.
Vehicles on road and hangar beginning 259' from DER, 300' left of centerline, up to 37' MSL.
CON'T

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CONCORD, CA (CON'T)

BUCHANAN FLD (CON'T)

Rwy 32L (CON'T), vehicles on road beginning 560' from DER, 3' right of centerline, up to 34' MSL.
Vehicles on road 627' from DER, 609' left of centerline, 38' MSL.
Vehicles on road beginning 631' from DER, 63' left of centerline, up to 38' MSL.
Building 633' from DER, 253' right of centerline, 17' AGL/35' MSL.
Vehicles on road 699' from DER, 8' right of centerline, 38' MSL.
Vehicles on road beginning 715' from DER, 37' right of centerline, up to 39' MSL.
Vehicles on road beginning 720' from DER, 2' left of centerline, up to 39' MSL.
Vehicles on road beginning 730' from DER, 137' right of centerline, up to 40' MSL.
Vehicles on road beginning 751' from DER, 216' right of centerline, up to 41' MSL.
Vehicles on road beginning 792' from DER, 493' right of centerline, up to 42' MSL.
Vehicles on road beginning 798' from DER, on centerline, up to 42' MSL.
Tree 824' from DER, 135' left of centerline, 40' MSL.
Vehicles on road beginning 891' from DER, 488' right of centerline, up to 43' MSL.
Vehicles on road 920' from DER, 642' right of centerline, 44' MSL.
Transmission towers beginning 6014' from DER, 1332 'left of centerline, up to 173' MSL.
Tank 1 NM from DER, 1927' right of centerline, 213' MSL.
Chimney 1.4 NM from DER, 2458' right of centerline, 355' AGL/378' MSL.
Refinery 1.6 NM from DER, 2934' right of centerline, 308' AGL/322' MSL.
Rwy 32R, terrain 81' from DER, 481' right of centerline, 21' MSL.
Vehicles on road 559' from DER, 3' right of centerline, 34' MSL.
Vehicles on road 585' from DER, 496' left of centerline, 34' MSL.
Building 632' from DER, 246' left of centerline, 35' MSL.
Building 653' from DER, 236' right of centerline, 41' MSL.
Flagpole, signs, and vehicles on road beginning 654' from DER, 55' right of centerline, up to 21' AGL/43' MSL.
Vehicles on road beginning 677' from DER, 491' left of centerline, up to 38' MSL.
Vehicles on road beginning 714' from DER, 374' left of centerline, up to 39' MSL.
Vehicles on road beginning 730' from DER, 243' left of centerline, up to 40' MSL.
Vehicles on road and trees beginning 750' from DER, 6' left of centerline, up to 41' MSL.
Vehicles on road beginning 820' from DER, 285' right of centerline, up to 45' MSL.
Vehicles on road beginning 824' from DER, 234' right of centerline, up to 47' MSL.
Vehicles on road 828' from DER, 624' right of centerline, 48' MSL.
Vehicles on road beginning 829' from DER, on centerline, up to 50' MSL.
Vehicles on road beginning 867' from DER, 43' left of centerline, up to 42' MSL.
Vehicles on road 899' from DER, 11' left of centerline, 43' MSL.
Vehicles on road beginning 932' from DER, 269' right of centerline, up to 52' MSL.
Agricultural equipment 2109' from DER, 600' right of centerline, 78' AGL/99' MSL.
Pole 3700' from DER, 1431' right of centerline, up to 40' AGL/150' MSL.
Pole 4067' from DER, 1531' right of centerline, 43' AGL/161' MSL.
Tank 4527' from DER, 1675' right of centerline, 57' AGL/170' MSL.
Transmission tower 6013' from DER, 1840' left of centerline, 173' MSL.
Tank 1 NM from DER, 1423' right of centerline, 126' AGL/213' MSL.
Chimney 1.4 NM from DER, 1954' right of centerline, 355' AGL/378' MSL.
Refinery 1.6 NM from DER, 2429' right of centerline, 308' AGL/322' MSL.

CRESCENT CITY, CA

JACK MC NAMARA FLD (CEC)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2A 03JAN19 (22139) (FAA)

TAKEOFF MINIMUMS:
Rwy 12, 300-2¼ or std. w/min. climb of 254' per NM to 300, or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 2200' prior to DER.
Rwy 18, 300-1 or std. w/min. climb of 308' per NM to 400.
Rwy 36, 300-1 or std. w/min. climb of 443' per NM to 300.

DEPARTURE PROCEDURE:
Rwys 12, 18, climbing right turn, thence...
Rwys 30, 36, climbing left turn, thence...
...Climb direct CEC VORTAC. Aircraft departing CEC R-144 CW R-350 climb on course. All others continue climb in CEC VORTAC holding pattern (hold south, left turn, 346° inbound) to cross CEC VORTAC at or above:
R-351 CW R-048, 2900;
R-049 CW R-113, 4300;
R-114 CW R-143, 2900.

TAKEOFF OBSTACLE NOTES:
Rwy 12, terrain 7' from DER, 6' right of centerline, 54' MSL.
Terrain 9' from DER, 15' left of centerline, 54' MSL.
NAVAID and tree beginning 12' from DER, 117' left of centerline, up to 4' AGL/57' MSL.
Tree 798' from DER, 378' left of centerline, 149' MSL.
Trees beginning 828' from DER, 437' left of centerline, up to 151' MSL.
Tree 1078' from DER, 390' right of centerline, 101' MSL.
Trees beginning 1162' from DER, 75' left of centerline, up to 163' MSL.
Trees beginning 1185' from DER, 156' right of centerline, up to 123' MSL.
Tree and pole beginning 1332' from DER, 215' right of centerline, up to 149' MSL.
Trees beginning 1458' from DER, 2' left of centerline, up to 169' MSL.
CON'T

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CRESCENT CITY, CA (CON'T)

JACK MC NAMARA FLD (CEC) (CON'T)

Rwy 12 (CON'T), tree and pole beginning 1526' from DER, 93' right of centerline, up to 150' MSL.
Trees beginning 1914' from DER, 83' right of centerline, up to 152' MSL.
Trees beginning 2058' from DER, 155' right of centerline, up to 156' MSL.
Trees beginning 2353' from DER, 182' right of centerline, up to 159' MSL.
Trees beginning 2549' from DER, 604' right of centerline, up to 173' MSL.
Trees beginning 2656' from DER, 108' right of centerline, up to 175' MSL.
Trees beginning 2986' from DER, 73' right of centerline, up to 189' MSL.
Tree 5151' from DER, 211' right of centerline, 216' MSL.
Tree 5184' from DER, 47' left of centerline, 195' MSL.
Antenna 1.8 NM from DER, 2439' left of centerline, 320' AGL/333' MSL.
Rwy 18, terrain 27' from DER, 12' left of centerline, 52' MSL.
Structure 35' from DER, 113' right of centerline, 7' AGL/57' MSL.
Structure 35' from DER, 116' left of centerline, 4' AGL/54' MSL.
Trees beginning 183' from DER, 384' right of centerline, up to 59' MSL.
Vehicles on road 319' from DER, 570' left of centerline, 60' MSL.
Tree 412' from DER, 166' left of centerline, 64' MSL.
Trees beginning 445' from DER, 188' left of centerline, up to 66' MSL.
Trees beginning 543' from DER, 411' left of centerline, up to 68' MSL.
Terrain 4897' from DER, 1653' right of centerline, 202' MSL.
Terrain 4973' from DER, 1722' right of centerline, 242' MSL.
Rwy 30, NAVAID and terrain beginning 4' from DER, 5' right of centerline, up to 1' AGL/58' MSL.
Trees beginning 29' from DER, 374' right of centerline, up to 65' MSL.
Tree 153' from DER, 332' left of centerline, 65' MSL.
Tree 164' from DER, 439' left of centerline, 73' MSL.
Rwy 36, terrain 6' from DER, 317' left of centerline, 77' MSL.
Tree 104' from DER, 467' right of centerline, 77' MSL.
Tree 143' from DER, 201' left of centerline, 84' MSL.
Tree and vegetation beginning 185' from DER, 92' right of centerline, up to 86' MSL.
Tree and vegetation beginning 405' from DER, 197' right of centerline, up to 97' MSL.
Tree 663' from DER, 30' left of centerline, 86' MSL.
Tree 762' from DER, 97' left of centerline, 94' MSL.
Tree 791' from DER, 155' left of centerline, 96' MSL.
Tree 843' from DER, 227' left of centerline, 105' MSL.
Trees beginning 981' from DER, 100' left of centerline, up to 117' MSL.
Trees beginning 1081' from DER, 35' left of centerline, up to 135' MSL.
Tree 1135' from DER, 226' right of centerline, 104' MSL.
Tree 1273' from DER, 60' right of centerline, 111' MSL.
Trees beginning 1352' from DER, 100' right of centerline, up to 112' MSL.
Trees beginning 1550' from DER, 25' right of centerline, up to 129' MSL.
Tree 1629' from DER, 425' left of centerline, 149' MSL.
Trees beginning 1654' from DER, 473' left of centerline, up to 151' MSL.
Trees beginning 1824' from DER, 192' left of centerline, up to 159' MSL.
Trees beginning 1961' from DER, 78' left of centerline, up to 164' MSL.
Trees beginning 2056' from DER, 978' right of centerline, up to 150' MSL.
Tree 2322' from DER, 757' right of centerline, 155' MSL.
Trees beginning 2322' from DER, 35' right of centerline, up to 176' MSL.
Tree 2590' from DER, 908' right of centerline, 179' MSL.
Tree 2591' from DER, 1044' right of centerline, 189' MSL.
Trees beginning 2644' from DER, 367' right of centerline, up to 192' MSL.
Trees beginning 2696' from DER, 70' right of centerline, up to 195' MSL.
Trees beginning 2928' from DER, 135' left of centerline, up to 174' MSL.
Trees beginning 2933' from DER, 37' right of centerline, up to 196' MSL.
Trees beginning 3318' from DER, 75' left of centerline, up to 181' MSL.
Trees beginning 3587' from DER, 132' left of centerline, up to 182' MSL.

DAVIS, CA

UNIVERSITY (EDU)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 07MAY09 (09127) (FAA)

DEPARTURE PROCEDURE:

Rwy 17, climbing right turn via heading 200° and ILA R-151 to EMBER INT/ILA 48 DME before proceeding on course.
Rwy 35, climbing left turn via heading 320° and ILA R-145 to ILA VORTAC before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 17, trees beginning 1353' from DER, 31' right of centerline, up to 40' AGL/109' MSL.
Rwy 35, tree 24' from DER, 433' left of centerline, 40' AGL/104' MSL.
Vehicle 288' from DER, on centerline, 15' AGL/74' MSL.

DAVIS/WOODLAND/WINTERS, CA

YOLO COUNTY (DWA)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 19JUL18 (18200) (FAA)

DEPARTURE PROCEDURE:

Rwy 16, climb heading 164° to 2200 before turning right.

Rwy 34, climb heading 344° to 1500 before turning left.

TAKEOFF OBSTACLE NOTES:

Rwy 16, tree 462' from DER, 543' right of centerline, 139' MSL.
Tree 733' from DER, 566' right of centerline, 147' MSL.
Trees beginning 1182' from DER, 434' left of centerline, up to 195' MSL.
Tree 2760' from DER, 217' right of centerline, 197' MSL.

Rwy 34, tree 367' from DER, 574' right of centerline, 135' MSL.
Tree, pole beginning 544' from DER, 473' left of centerline, up to 166' MSL.
Tree 1010' from DER, 541' left of centerline, 206' MSL.

EUREKA, CA

MURRAY FLD (EKA)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 27AUG09 (21196) (FAA)

TAKEOFF MINIMUMS:

Rwy 12, std. w/min. climb of 465' per NM to 1800 or 3800-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

Rwy 12 climbing right turn heading 265° to intercept V27. For climb in visual conditions: cross Murray Fld airport at or above 3700 before proceeding on course.

Rwy 30, climbing left turn heading 265° to intercept V27.

TAKEOFF OBSTACLE NOTES:

Rwy 12, bush 50' from DER, 82' left of centerline, 6' AGL/16' MSL.
Multiple trees beginning 1.5 NM from DER, 2993' left of centerline.
Multiple trees beginning 1.6 NM from DER, 2318' right of centerline.

Rwy 30, multiple trees, beginning 443' from DER, 389' right of centerline, up to 93' AGL/103' MSL.
Tree 664' from DER, 587' left of centerline, 46' AGL/56' MSL.
Pole 753' from DER, 155' right of centerline 27' AGL/ 37' MSL.
Railroad 786' from DER, 4' left of centerline 23' AGL/31' MSL.
Road beginning 602' from DER, 4' left of centerline up to 15' AGL/23' MSL.
Bush 566' from DER, 69' left of centerline, 8' AGL/18' MSL.

FIREBAUGH, CA

FIREBAUGH (F34)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 20SEP12 (12264) (FAA)

DEPARTURE PROCEDURE:

Rwy 12, climbing right turn heading 134° to intercept the PXN VORTAC R-061 to MENDO INT. Aircraft departing MENDO INT heading 230° CW 150°, climb on course. All others, climb in MENDO INT holding pattern (hold NE, right turns, 241° inbound) to cross MENDO INT at or above 3000 before proceeding on course.

Rwy 30, climbing left turn heading 180° to intercept PXN VORTAC R-061 to PXN VORTAC, continue climb in PXN VORTAC holding pattern (SW, right turns, 049° inbound) to cross PXN VORTAC at or above airway MEA/MCA for route of flight.

TAKEOFF OBSTACLE NOTES:

Rwy 30, poles beginning 921' from DER, 525' left of centerline, up to 65' AGL/203' MSL.
Elevator 1941' from DER, 739' right of centerline, 97' AGL/242' MSL.

FORTUNA, CA

ROHNERVILLE (FOT)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 23OCT86 (86296) (FAA)

TAKEOFF MINIMUMS:

Rwy 11, NA.

DEPARTURE PROCEDURE:

Climb direct FOT VORTAC. Continue climb in holding pattern (hold N, right turns, 161° inbound) to cross FOT VORTAC at or above 3000.

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FRESNO, CA

FRESNO CHANDLER EXEC (FCH)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 10OCT19 (21168) (FAA)

DEPARTURE PROCEDURE:

Rwy 12, climb on a heading between 101° CW to 290° from DER.

Rwy 30, climb on a heading between 111° CW to 338° from DER.

TAKEOFF OBSTACLE NOTES:

Rwy 12, sign 9' from DER, 125' left of centerline, 3' AGL/282' MSL.
Pole, traverse way, fence, vegetation, trees beginning 32' from DER, 125' right of centerline, up to 20' AGL/300' MSL.
Tree 94' from DER, 310' right of centerline, 317' MSL.
Trees, traverse way, vegetation, fence beginning 95' from DER, 60' right of centerline, up to 323 ' MSL.
Trees, poles, traverse ways, fence, transmission line, building beginning 154' from DER, right of centerline, up to 326' MSL.
Vegetation, fence beginning 250' from DER, 14' left of centerline, up to 292' MSL.
Trees, vegetation, traverse way beginning 344' from DER, 14' left of centerline, up to 294' MSL.
Traverse way, tree beginning 390' from DER, 10' left of centerline, up to 296' MSL.
Pole, trees, vegetation, traverse way beginning 408' from DER, 9' left of centerline, up to 31' AGL/311' MSL.
Trees, poles, transmission line, building beginning 476' from DER, 93' right of centerline, up to 341' MSL.
Trees, traverse ways, vegetation beginning 499' from DER, 47' left of centerline, up to 323 ' MSL.
Trees, poles, traverse way, transmission line, building beginning 615' from DER, 36' left of centerline, up to 332 ' MSL.
Trees, poles, buildings beginning 630' from DER, 4' right of centerline, up to 346' MSL.
Trees beginning 904' from DER, 15' left of centerline, up to 340' MSL.
Trees, poles beginning 934' from DER, 38' left of centerline, up to 346' MSL.
Trees, pole beginning 966' from DER, 7' right of centerline, up to 347' MSL.
Poles, tree beginning 1093' from DER, 263' left of centerline, up to 63' AGL/348' MSL.
Trees, poles beginning 1118' from DER, 12' left of centerline, up to 349' MSL.
Trees, poles beginning 1133' from DER, 2' right of centerline, up to 355' MSL.
Trees, poles beginning 1349' from DER, 13' left of centerline, up to 363' MSL.
Trees, pole beginning 1640' from DER, 88' left of centerline, up to 372' MSL.
Trees beginning 1756' from DER, 57' left of centerline, up to 375' MSL.
Trees beginning 1816 ' from DER, 31' right of centerline, up to 376' MSL.
Tree 3089' from DER, 146' left of centerline, 377' MSL.
Tree 3792 ' from DER, 172' left of centerline, 378' MSL.
Trees beginning 3938' from DER, 356' left of centerline, up to 391' MSL.
Rwy 30, traverse way 7' from DER, 341' right of centerline, 294' MSL.
Sign 21' from DER, 120' left of centerline, 2' AGL/279' MSL.
Pole, traverse way beginning 72' from DER, 374' left of centerline, up to 28' AGL/305' MSL.
Tree, fences, traverse way beginning 114' from DER, 122' right of centerline, up to 296' MSL.
Pole 140' from DER, 427' left of centerline, 38' AGL/315' MSL.
Trees, vegetation, traverse way, poles beginning 174' from DER, 43' left of centerline, up to 326' MSL.
Electrical system, traverse way beginning 377' from DER, 7' right of centerline, up to 19' AGL/297' MSL.
Tree 1412' from DER, 799' left of centerline, 358' MSL.
Poles beginning 1419' from DER, 158' right of centerline, up to 41' AGL/320' MSL.
Tree 1539' from DER, 844' left of centerline, 389' MSL.

FRESNO YOSEMITE INTL (FAT)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 9 10OCT19 (19283) (FAA)

TAKEOFF MINIMUMS:

Rwys 11L/R, 29L/R, std. w/min. climb of 250' per NM to 5000 or 5800 - 3 for VCOA.

DEPARTURE PROCEDURE:

Rwys 11L/R, climb heading 112° to 2500,then climbing left turn heading 040° to intercept FRA VORTAC R-150 to FRA VORTAC. Cross FRA VORTAC at or above 6000, thence...

Rwys 29L/R, climb heading 292° to 2500, then climbing right turn heading 350° to intercept FRA VORTAC R-230. Cross FRA VORTAC at or above 6000, thence...

...continue climb in FRA VORTAC holding pattern (hold south, left turn, 350° inbound) to cross FRA VORTAC at or above MEA/ MCA for route of flight.

VCOA:

All runways, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Fresno Yosemite Intl airport at or above 6000, then on FRA R-180 to FRA VORTAC before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 11L, lighting beginning 109' from DER, on centerline, up to 4' AGL/336' MSL.
Pole 648' from DER, 542' left of centerline, 16' AGL/349' MSL.
Electrical system 1223' from DER, 662' right of centerline, 30' AGL/363' MSL.
Pole 1229' from DER, 664' right of centerline, 33' AGL/365' MSL.
Tree, pole beginning 1414' from DER, 668' right of centerline, up to 377' MSL.
Sign, transmission line beginning 1694' from DER, 862' right of centerline, up to 51' AGL/383' MSL.
Rwy 11R, lighting 10' from DER, 55' right of centerline, 1' AGL/331' MSL.
General utility 159' from DER, 433' left of centerline, 3' AGL/334' MSL.
Pole 329' from DER, 280' left of centerline, 21' AGL/349' MSL.
Tower 664' from DER, 274' left of centerline, 34' AGL/362' MSL.
Pole 1205' from DER, 569' right of centerline, 54' AGL/382' MSL.
Pole 1458' from DER, 393' right of centerline, 54' AGL/384' MSL.
Pole 1598' from DER, 294' right of centerline, 55' AGL/385' MSL.
CON'T

SW-2, 07 AUG 2025 to 02 OCT 2025

FRESNO, CA (CON'T)

FRESNO YOSEMITE INTL (FAT) (CON'T)

Rwy 11R (CON'T), electrical system, pole beginning 1598' from DER, 262' right of centerline, up to 57' AGL/386' MSL.
Tree 2648' from DER, 442' right of centerline, 398' MSL.
Rwy 29L lighting 9' from DER, 55' left of centerline, 2' AGL/331' MSL.
Lighting 10' from DER, 54' right of centerline, 1' AGL/331' MSL.
Transmission line, pole beginning 997' from DER, 620' left of centerline, up to 55' AGL/385' MSL.
Tree, transmission line beginning 1132' from DER, 189' left of centerline, up to 396' MSL.
Trees beginning 1457' from DER, 172' left of centerline, up to 429' MSL.
Trees beginning 1668' from DER, 2' right of centerline, up to 378' MSL.
Tree 1905' from DER, 359' right of centerline, 380' MSL.
Rwy 29R, lighting 9' from DER, 54' right of centerline, 2' AGL/334' MSL.
Pole 994' from DER, 601' right of centerline, 29' AGL/364' MSL.
Pole beginning 1019' from DER, 548' right of centerline, up to 30' AGL/365' MSL.
Trees beginning 2315' from DER, 847' left of centerline, up to 395' MSL.

GRASS VALLEY, CA

NEVADA COUNTY (GOO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1A 29MAR18 (18088) (FAA)

TAKEOFF MINIMUMS:
Rwy 7, NA.
DEPARTURE PROCEDURE:
Rwy 25, climb via MYV R-058 to 6000 then continue climb on course.
TAKEOFF OBSTACLE NOTES:
Rwy 25, multiple trees and bushes beginning 40' from DER, 78' right of centerline, up to 3087' MSL.
Trees beginning 68' from DER, 312' left of centerline, up to 3137' MSL.
Trees beginning 593' from DER, 149' right of centerline, up to 3088' MSL.
Tree 648' from DER, 176' right of centerline, 3093' MSL.
Trees beginning 698' from DER, 175' right of centerline, up to 3094' MSL.
Tree 748' from DER, 138' right of centerline, 3096' MSL.
Tree 773' from DER, 167' right of centerline, 3102' MSL.

GROVELAND, CA

PINE MOUNTAIN LAKE (E45)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 10NOV16 (16315) (FAA)

TAKEOFF MINIMUMS:
Rwy 9, 600-2¾ or std. w/min. climb of 400' per NM to 4000.
DEPARTURE PROCEDURE:
Rwy 9, turn right.
Rwy 27, turn left.
All aircraft climb direct LIN VOR/DME. Cross LIN VOR/DME at or above 5000.

HALF MOON BAY, CA

HALF MOON BAY (HAF)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 15JUN23 (23166) (FAA)

TAKEOFF MINIMUMS:
Rwy 12, std. w/min. climb of 375' per NM to 3200.
DEPARTURE PROCEDURE:
Rwy 12, climb on heading 122° to 3000, then climbing left turn direct OSI VOR/DME. Continue climb in OSI holding pattern (hold southeast, left turns, 321° inbound) to cross OSI VOR/DME at or above 5100 on V25-87 before proceeding on course.
Rwy 30, use SEEMS DEPARTURE.
TAKEOFF OBSTACLE NOTES:
Rwy 12, tree 2557' from DER, 212' left of centerline, 90' AGL/114' MSL.
Rwy 30, trees beginning 1248' from DER, 83' left of centerline, up to 160' MSL.
Tree 1263' from DER, 628' right of centerline, 156' MSL.
Trees and poles beginning 1490' from DER, 102' right of centerline, up to 160' MSL.
Trees beginning 1921' from DER, 161' left of centerline, up to 172' MSL.
Trees beginning 2234' from DER, 23' left of centerline, up to 192' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

ORIG 16OCT14 (14289) (FAA)

Rwy 12, heading as assigned by ATC.

HANFORD, CA

HANFORD MUNI (HJO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1A 15SEP16 (16259) (FAA)

DEPARTURE PROCEDURE:

Rwy 14, climbing left turn heading 050° to intercept V-23.

Rwy 32, climbing right turn heading 050° to intercept V-23.

TAKEOFF OBSTACLE NOTES:

Rwy 14: fence 9' from DER, 298' left of centerline, 244' MSL.
Catenary 1293' from DER,1293' left of centerline, 39' AGL/287' MSL.
Poles beginning 1679' from DER, crossing centerline, up to 52' AGL/296' MSL.
Trees beginning 2224' from DER, 391' left of centerline up to 313' MSL.
Rwy 32: fence 168' from DER, 9' left of centerline, 245' MSL.
Pole 588' from DER, 588' left of centerline, 25' AGL/278' MSL.
Sign 614' from DER, 151' right of centerline, 9' AGL/261' MSL.
Trees and poles beginning 592' from DER, 3' left of centerline, up to 300' MSL.
Poles beginning 1127' from DER, 222' right of centerline, up to 40' AGL/293' MSL.
Tree 2159' from DER, 434' right of centerline, 299' MSL.

HAYWARD, CA

HAYWARD EXEC (HWD)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1B 07AUG25 (25219) (FAA)

TAKEOFF MINIMUMS:

Rwy 10L, 300-1¼ or std w/min climb of 211'/NM to 300.

DEPARTURE PROCEDURE:

Rwys 10L/R, climbing right turn direct OSI VOR/DME.

Rwys 28L/R, climbing left turn direct OSI VOR/DME.

TAKEOFF OBSTACLE NOTES:

Rwy 10L, sign 32' from DER, 117' left of centerline, 3' AGL/40' MSL.
Signs beginning 71' from DER, 116' left of centerline, up to 6' AGL/43' MSL.
Building 108' from DER, 486' left of centerline, 18' AGL/55' MSL.
Building 621' from DER, 172' left of centerline, 16' AGL/58' MSL.
Building 625' from DER, 115' left of centerline, 17' AGL/59' MSL.
Buildings beginning 753' from DER, 99' left of centerline, up to 23' AGL/66' MSL.
Building 1144' from DER, 98' left of centerline, 23' AGL/70' MSL.
Tree 1376' from DER, 242' left of centerline, 32' AGL/81' MSL.
Tree 1378' from DER, 275' left of centerline, 33' AGL/83' MSL.
Trees, buildings beginning 1378' from DER, 117' left of centerline, up to 51' AGL/98' MSL.
Trees, poles beginning 1387' from DER, 12' left of centerline, up to 66' AGL/115' MSL.
Trees beginning 2050' from DER, 1' right of centerline, up to 60' AGL/107' MSL.
Trees beginning 2320' from DER, 191' left of centerline, up to 118' MSL.
Tree 2442' from DER, 52' right of centerline, 66' AGL/117' MSL.
Tree 2616' from DER, 67' left of centerline, 120' MSL.
Tree 2983' from DER, 120' left of centerline, 132' MSL.
Tree 3080' from DER, 803' left of centerline, 94' AGL/151' MSL.
Trees, buildings beginning 3881' from DER, 256' left of centerline, up to 107' AGL/168' MSL.
Rwy 10R, trees, terrain, poles, walls, fence, vehicles on road beginning 21' from DER, 9' left of centerline, up to 107' MSL.
Pole 23' from DER, 122' right of centerline, 10' AGL/60' MSL.
Poles, terrain, fence, walls, trees, buildings beginning 152' from DER, 26' right of centerline, up to 32' AGL/80' MSL.
Trees, buildings, vehicles on road beginning 414' from DER, 99' left of centerline, up to 66' AGL/117' MSL.
Trees, vehicles on road, poles, buildings, light poles beginning 588' from DER, 24' left of centerline, up to 120' MSL.
Poles, light poles beginning 729' from DER, 27' right of centerline, up to 30' AGL/82' MSL.
Poles, trees, light poles beginning 804' from DER, 62' right of centerline, up to 35' AGL/85' MSL.
Trees, poles, signs, buildings beginning 954' from DER, 14' left of centerline, up to 132' MSL.
Building 1104' from DER, 3' right of centerline, 42' AGL/92' MSL.
Pole 1194' from DER, 204' right of centerline, 43' AGL/93' MSL.
Trees, poles beginning 1224' from DER, 8' right of centerline, up to 43' AGL/95' MSL.
Tree 1877' from DER, 216' right of centerline, 48' AGL/99' MSL.
Trees beginning 1939' from DER, 104' right of centerline, up to 79' AGL/129' MSL.
Buildings, trees, signs beginning 2066' from DER, 653' left of centerline, up to 101' AGL/155' MSL.
Rwy 28L, tree, NAVAID beginning 94' from DER, 268' right of centerline, up to 13' AGL/39' MSL.
NAVAID, vehicle on road beginning 169' from DER, 259' right of centerline, up to 21' AGL/47' MSL.
Trees beginning 654' from DER, 46' right of centerline, up to 73' MSL.
Tree 751' from DER, 1' left of centerline, 32' AGL/55' MSL.
Tree 793' from DER, 43' left of centerline, 35' AGL/57' MSL.
Trees beginning 856' from DER, 190' left of centerline, up to 46' AGL/69' MSL.
Trees beginning 897' from DER, 2' left of centerline, up to 108' MSL.
Tree 898' from DER, 531' right of centerline, 64' AGL/89' MSL.
Trees beginning 899' from DER, 67' right of centerline, up to 71' AGL/95' MSL.
Trees, poles beginning 962' from DER, 215' right of centerline, up to 74' AGL/97' MSL.
Trees beginning 1046' from DER, 139' right of centerline, up to 75' AGL/99' MSL.
CON'T

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HAYWARD, CA (CON'T)

HAYWARD EXEC (HWD) (CON'T)

Rwy 28L (CON'T), trees beginning 1079' from DER, 6' right of centerline, up to 82' AGL/105' MSL.
Trees, fence beginning 1280' from DER, 270' right of centerline, up to 91' AGL/113' MSL.
Rwy 28R, building 44' from DER, 445' right of centerline, 25' AGL/55' MSL.
Trees, fence beginning 389' from DER, 208' right of centerline, up to 81' MSL.
Trees beginning 642' from DER, 459' right of centerline, up to 95' AGL/128' MSL.
Trees, poles beginning 696' from DER, 3' right of centerline, up to 98' AGL/131' MSL.
NAVAID 726' from DER, 241' left of centerline, 21' AGL/47' MSL.
Trees beginning 1211' from DER, 260' left of centerline, up to 73' MSL.
Trees beginning 1461' from DER, 19' left of centerline, up to 68' AGL/91' MSL.
Tree 1496' from DER, 33' left of centerline, 69' AGL/93' MSL.
Trees beginning 1497' from DER, 5' left of centerline, up to 71' AGL/94' MSL.
Trees beginning 1519' from DER, 38' left of centerline, up to 74' AGL/97' MSL.
Tree 1769' from DER, 586' left of centerline, 82' AGL/101' MSL.
Trees beginning 1777' from DER, 44' left of centerline, up to 81' AGL/102' MSL.
Trees beginning 1837' from DER, 13' left of centerline, up to 91' AGL/113' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 2 20FEB25 (25051) (FAA)

Rwy 10L, heading as assigned by ATC; requires min climb of 211' per NM to 300.
Rwy 10R, heading as assigned by ATC
Rwys 28L/R, heading as assigned by ATC; requires min climb of 310' per NM to 4600.

HOLLISTER, CA

HOLLISTER MUNI (CVH)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 05JUN08 (08157) (FAA)

TAKEOFF MINIMUMS:
Rwy 6, NA-obstacles.
Rwy 24, NA-ATC.
Rwy 13, std. w/ min. climb of 391' per NM to 3500, or 3100-3 for climb in visual conditions.
Rwy 31, std. w/ min climb of 209' per NM to 2300, or 3100-3 for climb in visual conditions.

DEPARTURE PROCEDURE:
Rwy 13, climbing right turn to heading 332° and via SJC R-121 direct SJC VOR/DME to 6000 before proceeding on course or for climb in visual conditions: cross Hollister Muni Airport at or above 3100 MSL before proceeding on course.
Rwy 31, climb heading 307° and via SJC R-121 direct SJC VOR/DME to 6000 before proceeding on course or for climb in visual conditions: cross Hollister Muni Airport at or above 3100 MSL before proceeding on course.

TAKEOFF OBSTACLE NOTES:
Rwy 13, terrain beginning 992' from DER, 348' left of centerline, up to 289' MSL.
Terrain beginning 2467' from DER, 154' right of centerline, up to 309' MSL.
Trees beginning 1277' from departure end of runway, 348' left of centerline, up to 309' MSL.
Ttrees beginning 2467' from DER, 153' right of centerline, up to 270' MSL.
Rwy 31, terrain beginning 76' from DER, 392' left of centerline, up to 247' MSL.
Terrain beginning 14' from DER, 179' right of centerline, up to 231' MSL.

JACKSON, CA

WESTOVER FLD AMADOR COUNTY (JAQ)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 02NOV23 (23306) (FAA)

TAKEOFF MINIMUMS:
Rwy 1, 300-1 or std w/min climb of 672'/NM to 2000.

DEPARTURE PROCEDURE:
Rwy 1, climbing left turn direct LIN VOR/DME, continue climbing on course.
Rwy 19, climbing right turn direct LIN VOR/DME, continue climbing on course.

TAKEOFF OBSTACLE NOTES:
Rwy 1, terrain, utility building beginning 55' from DER, 169' right of centerline, up to 1701' MSL.
Terrain beginning 188' from DER, 193' right of centerline, up to 1702' MSL.
Terrain beginning 263' from DER, 252' right of centerline, up to 1703' MSL.
Tree 314' from DER, 170' left of centerline, 1692' MSL.
Vehicles on road 359' from DER, 76' left of centerline, 1693' MSL.
Terrain, vehicles on road beginning 456' from DER, 50' right of centerline, up to 1706' MSL.
Agricultural equipment, vehicles on road beginning 664' from DER, 265' right of centerline, up to 6' AGL/1730' MSL.
Tree 666' from DER, 194' left of centerline, 1701' MSL.
Tree 697' from DER, 56' left of centerline, 1703' MSL.
Building, vehicles on road, tree beginning 734' from DER, 8' right of centerline, up to 16' AGL/1741' MSL.
Poles, vehicles on road, fence beginning 779' from DER, 400' right of centerline, up to 45' AGL/1752' MSL.
Tree 1088' from DER, 392' right of centerline, 1756' MSL.
Pole 1123' from DER, 610' right of centerline, 39' AGL/1762' MSL.
Tree 1123' from DER, 740' right of centerline, 1764' MSL.
Trees, pole, vehicles on road beginning 1243' from DER, 331' right of centerline, up to 1772' MSL.
Trees, terrain, pole, transmission line, vehicles on road beginning 1406' from DER, 254' right of centerline, up to 1785' MSL.
CON'T

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JACKSON, CA (CON'T)

WESTOVER FLD AMADOR COUNTY (JAQ) (CON'T)

Rwy 1 (CON'T), tree 1538' from DER, 876' right of centerline, 1789' MSL.
Tree 1561' from DER, 456' right of centerline, 1802' MSL.
Trees, vehicles on road beginning 1619' from DER, 255' right of centerline, up to 1812' MSL.
Trees, building beginning 1806' from DER, 633' right of centerline, up to 1828' MSL.
Tree, building, terrain beginning 1954' from DER, 188' right of centerline, up to 1833' MSL.
Tree, building beginning 2037' from DER, 547' right of centerline, up to 1855' MSL.
Trees, terrain beginning 2093' from DER, 188' right of centerline, up to 1855' MSL.
Rwy 19, light poles 9' from DER, 39' left of centerline, 1' AGL/1692' MSL.
Building, antenna beginning 56' from DER, 158' right of centerline, up to 20' AGL/1697' MSL.
Light poles, tank beginning 80' from DER, 104' left of centerline, up to 5' AGL/1695' MSL.
Tower 269' from DER, 411' right of centerline, 63' AGL/1714' MSL.

KING CITY, CA

MESA DEL REY (KIC)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 26DEC24 (24361) (FAA)

TAKEOFF MINIMUMS:
Rwy 11, std w/min climb of 272' per NM to 2200 or 4500-3 for VCOA.
Rwy 29, std w/min climb of 326' per NM to 5700 or 4500-3 for VCOA.
DEPARTURE PROCEDURE:
Rwy 11, climb on a heading between 100° CW to 130° from DER.
Rwy 29, climb on a heading between 300° CW to 330° from DER.
VCOA:
Rwys 11, 29, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Mesa Del Ray airport at or above 4700 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 11, vehicle on road 3' from DER, 115' left of centerline, 375' MSL.
Trees, building beginning 5' from DER, 234' right of centerline, up to 16' AGL/385' MSL.
Building, terrain, fence beginning 16' from DER, 369' left of centerline, up to 10' AGL/386' MSL.
Tank 167' from DER, 518' left of centerline, 15' AGL/393' MSL.
Trees beginning 479' from DER, 370' left of centerline, up to 48' AGL/421' MSL.
Rwy 29, terrain 4' from DER, 496' right of centerline, 370' MSL.
Terrain 37' from DER, 153' right of centerline, 371' MSL.
Fence 98' from DER, 388' left of centerline, 5' AGL/376' MSL.
Pole 139' from DER, 495' left of centerline, 36' AGL/405' MSL.
Fences, tree beginning 220' from DER, 191' right of centerline, up to 8' AGL/378' MSL.

LAKEPORT, CA

LAMPSON FLD (1O2)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 08APR10 (21336) (FAA)

TAKEOFF MINIMUMS:
Rwy 10, std. w/min. climb of 400' per NM to 4500, do not exceed 210K until intercepting the ENI R-073 or 3200-3 for climb in visual conditions.
Rwy 28, NA-Rapidly rising terrain.
DEPARTURE PROCEDURE:
Rwy 10, climbing left turn to 6000 via heading 310° and ENI R-073 to ENI VORTAC before proceeding on course, or for climb in visual conditions: cross Lampson Fld at or above 4400 MSL before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 10, vehicle on road 347' from DER, 7' right of centerline, 15' AGL/1394' MSL.
Trees beginning 280' from DER, 201' left of centerline, up to 100' AGL/1479' MSL.
Trees beginning 494' from DER, 219' right of centerline, up to 100' AGL/1479' MSL.

LEMOORE NAS (REEVES FLD) (KNLC)

LEMOORE, CA

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 12JUN25 (25163) (USN)

DEPARTURE PROCEDURE:
Rwy 14L, climb on hdg between 322° CW to 230° from DER.
Rwy 14R, climb on hdg between 322° CW to 233° from DER.
Rwy 32L, climb on hdg between 284° CW to 142° from DER.
Rwy 32R, climb on hdg between 281° CW to 142° from DER.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 2 12JUN25 (25163) (USN)

Rwys 14L/R, 32L/R, hdgs as assigned by ATC.

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LINCOLN, CA

LINCOLN RGNL/KARL HARDER FLD (LHM)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 20JUL95 (21140) (FAA)

DEPARTURE PROCEDURE:

Rwy 15, climbing right turn.

Rwy 33, climbing left turn.

All aircraft climb direct MYV VOR/DME, then climb on course.

DIVERSE VECTOR AREA (RADAR VECTORS)

ORIG 05FEB15 (15036) (FAA)

Rwys 15,33, headings as assigned by ATC.

LITTLE RIVER, CA

LITTLE RIVER (LLR)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 03JUN10 (10154) (FAA)

DEPARTURE PROCEDURE: Use LITTLE RIVER DEPARTURE.

LIVERMORE, CA

LIVERMORE MUNI (LVK)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 22JUN17 (17173) (FAA)

DEPARTURE PROCEDURE:

Use LIVERMORE DEPARTURE.

LODI, CA

LODI (1O3)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2A 10NOV16 (16315) (FAA)

TAKEOFF MINIMUMS:

Rwys 12, 30, NA-Environmental.

DEPARTURE PROCEDURE:

Rwy 8, climb heading 076° to 600 then climbing right turn on LIN R-290 to LIN VOR/DME, thence…

Rwy 26, climb heading 256° to 800 climbing right turn on heading 080° to intercept LIN R-290 to LIN VOR/DME, thence…

...continue climb in hold (hold Southeast, right turns, 326° inbound) to MCA or MEA for route of flight.

TAKEOFF OBSTACLE NOTES:

Rwy 8, hangars, buildings, and vehicles on roadways beginning at DER, left and right of centerline, up to 25' AGL/84' MSL.

Power lines beginning at 4.9 NM from DER, left and right of centerline, up to 160' AGL/220' MSL.

Rwy 26, vehicles on roadway beginning 7' from DER, 265' right of centerline, up to 15' AGL/69' MSL.

Trees beginning 15' from DER, left and right of centerline, up to 100' AGL/154' MSL.

Power lines beginning at 4.6 NM from DER, left and right of centerline, up to 160' AGL/220' MSL.

LOS BANOS, CA

LOS BANOS MUNI (LSN)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 17DEC09 (09351) (FAA)

DEPARTURE PROCEDURE:

Rwy 14, climb on a heading between 318° CW to 151° from DER, or minimum climb of 320' per NM to 5100 for all other courses.

Rwy 32, climb on a heading between 260° CW to 137° from DER, or minimum climb of 273' per NM to 5200 for all other courses.

TAKEOFF OBSTACLE NOTES:

Rwy 14, multiple trees, poles, buildings beginning 3' from DER, 24' left of centerline, up to 73' AGL/194' MSL.

Multiple trees, poles, buildings beginning 20' from DER, 21' right of centerline, up to 85' AGL/206' MSL.

Rwy 32, multiple trees beginning 220' from DER, 453' right of centerline, up to 40' AGL/160' MSL.

Multiple poles, beginning 1120' from DER, 173' left of centerline, up to 60' AGL/181' MSL.

MADERA, CA

MADERA MUNI (MAE)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5A 31DEC20 (20366) (FAA)

TAKEOFF MINIMUMS:

Rwy 12, std. w/ min. climb of 250' per NM to 2000.

DEPARTURE PROCEDURE:

Rwy 12, climbing left turn heading 080° to intercept V-230.

Rwy 30, climbing right turn heading 110° to intercept V-230.

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MAMMOTH LAKES, CA
MAMMOTH YOSEMITE (MMH)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 05MAR15 (15064) (FAA)
DEPARTURE PROCEDURE:
Use NIKOL DEPARTURE.

MARINA, CA
MARINA MUNI (OAR)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 11FEB10 (22139) (FAA)
TAKEOFF MINIMUMS:
Rwy 11, std. w/min. climb of 307' per NM to 4500, or 2000-2½ for climb in visual conditions.
DEPARTURE PROCEDURE:
Rwy 11, climb heading 108° and SNS VORTAC R-252 to SNS VORTAC, thence...,
or for climb in visual conditions: cross Marina Muni Airport at or above 2100, then proceed on SNS VORTAC R-261 to SNS VORTAC, thence...
Rwy 29, climb via heading 288° to 1200', then climbing right turn direct SNS VORTAC, thence…
...all aircraft continue climb in SNS holding pattern (west, left turns, 084° inbound) to cross SNS VORTAC at or above MEA/MCA for direction of flight before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 11, windsock 32' from DER, 386' left of centerline, 8' AGL/148' MSL.
Rwy 29, bush 158' from DER, 272' right of centerline, 10' AGL/142' MSL.

MARIPOSA, CA
MARIPOSA-YOSEMITE (MPI)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 20JAN05 (05020) (FAA)
TAKEOFF MINIMUMS:
Rwy 8, N/A-Obstacles
DEPARTURE PROCEDURE:
Rwy 26, climb via heading 265° to 3000, then climbing left turn to 7000 direct FRA VORTAC before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 26, tree 10' from DER, 313' left of centerline, 100' AGL/2265' MSL.
Tree 1146' from DER, 303' left of centerline, 100' AGL/2298' MSL.

MARYSVILLE, CA
YUBA COUNTY (MYV)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A 27JUN13 (13178) (FAA)
DEPARTURE PROCEDURE:
All runways, climb direct ILA VORTAC.
TAKEOFF OBSTACLE NOTES:
Rwy 5, tree 750' from DER, 239' right of centerline, 44' AGL/109' MSL.
Tower 986' from DER, 258' left of centerline, 46' AGL/108' MSL.
Tree 1737' from DER, 191' left of centerline, 70' AGL/134' MSL.
Tree 2792' from DER, 607' left of centerline, 81' AGL/145' MSL.
Rwy 23, railroad 822' from DER, 1' right of centerline, 23' AGL/85' MSL.
Building 903' from DER, 387' right of centerline, 29' AGL/89' MSL.
Rwy 32, pole 1040' from DER, 717' left of centerline, 32' AGL/94' MSL.
Tree 2487' from DER, 586' left of centerline, 75' AGL/134' MSL.
Tree 3135' from DER, 672' right of centerline, 93' AGL/157' MSL.

MERCED, CA
MERCED YOSEMITE RGNL (MCE)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 5B 10DEC15 (22363) (FAA)
DEPARTURE PROCEDURE:
Rwy 12, climbing right turn to 3000 via heading 330° and MOD R-120 to MOD.
Rwy 30, climb to 3000 via heading 300° and MOD R-120 to MOD.
TAKEOFF OBSTACLE NOTES:
Rwy 12, tree 1321' from DER, 785' left of centerline, 50' AGL/190' MSL.
Rwy 30, bush 183' from DER, 490' right of centerline, 20' AGL/161' MSL.
Bush 486' from DER, 604' left of centerline, 20' AGL/170' MSL.
Tree 2457' from DER, 263' left of centerline, 50' AGL/220' MSL.

MODESTO, CA

MODESTO CITY-COUNTY-HARRY SHAM FLD (MOD)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5A 10JAN13 (21168) (FAA)

DEPARTURE PROCEDURE:

Rwys 28L/R, climb on a heading between 256° CW to 109° from DER, or min. climb of 230' per NM to 5000 for all other courses.

TAKEOFF OBSTACLE NOTES:

Rwy 10R, trees beginning 169' from DER, 37' right of centerline, up to 91' AGL/195' MSL.
Sign 57' from DER, 211' right of centerline, 15' AGL/89' MSL.
Sign 16' from DER, 135' left of centerline, 4' AGL/87' MSL.
Trees beginning 823' from DER, 79' left of centerline, up to 89' AGL/148' MSL.
Rwy 10L, trees beginning 15' from DER, 65' right of centerline, up to 68' AGL/172' MSL.
Vehicles on road beginning 178' from DER, 17' left of centerline, up to 15' AGL/96' MSL.
Trees beginning 1413' from DER, 184' left of centerline, up to 63' AGL/126' MSL.
Rwy 28R, vehicles on road beginning 47' from DER, 332' right of centerline, up to 15' AGL/114' MSL.
Pole 754' from DER, 699' right of centerline, 34' AGL/133' MSL.
Building 979' from DER, 697' right of centerline, 29' AGL/128' MSL.
Tree 1390' from DER, 516' right of centerline, 37' AGL/136' MSL.
Trees beginning 2077' from DER, 379' left of centerline, up to 79' AGL/173' MSL.
Rwy 28L, multiple poles, trees, and buildings beginning 128' from DER, 34' left of centerline, up to 102' AGL/196' MSL.
Vehicles on road beginning 448' from DER, 219' left of centerline, up to 15' AGL/112' MSL.
Multiple poles and building beginning 1021' from DER, 350' right of centerline, up to 57' AGL/154' MSL.
Trees beginning 1112' from DER, 20' right of centerline, up to 70' AGL/164' MSL.

MONTAGUE, CA

SISKIYOU COUNTY (SIY)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2A 09JAN14 (14009) (FAA)

TAKEOFF MINIMUMS:

Rwy 17, CAT A,B 2400-2 or std. with a min. climb of 350' per NM to 5500. CAT C,D 4100-2 or std. with a min. climb of 350' per NM to 7400.
Rwy 35, 4000-2 or std. with a min. climb of 300' per NM to 7000.

DEPARTURE PROCEDURE:

Rwy 17, climb direct MOG NDB. Continue climb to 10000 in MOG holding pattern (hold N, right turns, 176° inbound).
Rwy 35, climb to 7000 via runway heading and 356° bearing from MOG NDB, then climbing right turn to 10000 direct MOG NDB.
All aircraft depart MOG NDB at or above MEA for route of flight.

MONTEREY, CA

MONTEREY RGNL (MRY)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 8 10DEC15 (15344) (FAA)

TAKEOFF MINIMUMS:

Rwy 10L, std. w/min. climb of 449' per NM to 1800, or 1700-2½ for climb in visual conditions.
Rwy 10R, std. w/min. climb of 459' per NM to 1800, or 1700-2½ for climb in visual conditions.
Rwy 28L, std. w/min. climb of 218' per NM to 3300, or 1700-2½ for climb in visual conditions.
Rwy 28R, std. w/min. climb of 205' per NM to 3300, or 1700-2½ for climb in visual conditions.

DEPARTURE PROCEDURE:

Rwy 10L, climbing left turn heading 045.00 and SNS VORTAC R-225 to SNS VORTAC, climb in SNS holding pattern (hold W, LT, 084° inbound) to cross SNS VORTAC at or above MEA/MCA for route of flight.
Rwy 10R, climbing left turn heading 045° and SNS VORTAC R-225 to SNS VORTAC, climb in SNS holding pattern (hold W, LT, 084° inbound) to cross SNS VORTAC at or above MEA/MCA for route of flight.
Rwy 28L, climbing right turn heading 045° and SNS VORTAC R-260 to SNS VORTAC, climb in SNS holding pattern (hold W, LT, 084° inbound) to cross SNS VORTAC at or above MEA/MCA for route of flight.
Rwy 28R, climbing right turn heading 045.00 and SNS VORTAC R-260 to SNS VORTAC, climb in SNS holding pattern (hold W, LT, 084° inbound) to cross SNS VORTAC at or above MEA/MCA for route of flight.

VCOA:

Obtain ATC approval for climb in visual conditions when requesting IFR clearance. Climb in visual conditions to cross Monterey RGNL at or above 1800, then on SNS VORTAC R-231 to SNS VORTAC. Climb in SNS holding pattern (hold W, LT, 084° inbound) to cross SNS VORTAC at or above MEA/MCA for route of flight.

TAKEOFF OBSTACLE NOTES:

Rwy 10L, NAVAID 556' from DER, 217' right of centerline, 20' AGL/272' MSL.
Bushes beginning 1.6 NM from DER, 1188' left of centerline up to 9' AGL/729' MSL.
Trees beginning 1.7 NM from DER , 923' left of centerline up to 102' AGL/764' MSL.
Trees beginning 1.6 NM from DER, 1993' right of centerline up to 90' AGL/923' MSL.
Bushes beginning 1.9 NM from DER, 2497' right of centerline up to 9' AGL/781' MSL.
Tower 2 NM from DER 3305' left of centerline, 27' AGL/767' MSL.
CON'T

MONTEREY, CA (CON'T)

MONTEREY RGNL (MRY) (CON'T)

Rwy 10R, ground 11' from DER, 358' left of centerline 258' MSL.
Tree 230' from DER 388' left of centerline 21' AGL/265' MSL.
NAVAID 240' from DER, 282' left of centerline, 20' AGL/272' MSL.
Bushes beginning 1.5 NM from DER, 2381' left of centerline, up to 9' AGL/648' MSL.
Trees beginning 1.7 NM from DER, 388' left of centerline up to 76' AGL/629' MSL.
Bushes beginning 1.8 NM from DER, 2005' right of centerline up to 9' AGL/741' MSL.
Trees beginning 1.5 NM from DER, 1749' right of centerline up to 90' AGL/843' MSL.
Rwy 28L, terrain abeam DER, 198' left of centerline, up to 163' MSL.
Trees beginning 797' from DER, 678' left of centerline, up to 83' AGL/228' MSL.
Tree 1008' from DER, 616' left of centerline, 100' AGL/195' MSL.
Pole 1128' from DER, 716' left of centerline, 54' AGL/195' MSL.
Tree 1372' from DER, 755' left of centerline, 93' AGL/227' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 1 23JUN16 (16175) (FAA)

Rwy 10L, heading as assigned by ATC; requires min. climb of 360' per NM to 2900.
Rwy 10R, heading as assigned by ATC; requires min. climb of 370' per NM to 2800.
Rwy 28L, heading as assigned by ATC; requires min. climb of 310' per NM to 1100.
Rwy 28R, heading as assigned by ATC; requires min. climb of 250' per NM to 1100.

MOUNTAIN VIEW, CA

MOFFETT FEDERAL AIRFIELD (NUQ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 18OCT12 (21168) (FAA)

TAKEOFF MINIMUMS:
Rwys 14L/R, std. w/min. climb of 550' per NM to 4000 or 1700-2½ for climb in visual conditions.
Rwys 32L/R, std. w/min. climb of 285' per NM to 3500 or 1700-2½ for climb in visual conditions.
DEPARTURE PROCEDURE:
Rwys 14L/R, climbing right turn direct OSI VORTAC, thence…
or for climb in visual conditions cross Moffett Federal Airfield at or above 1600 then on OSI R-066 to OSI VORTAC, thence…
When executing VCOA notify ATC prior to departure.
Rwys 32L/R, climb heading 322° to 700, then climbing left turn heading 230° until receiving OSI VORTAC, then direct OSI VORTAC, thence…
or for climb in visual conditions cross Moffett Federal Airfield at or above 1600 then on OSI R-066 to OSI VORTAC, thence…
When executing VCOA notify ATC prior to departure.
...continue climb in OSI VORTAC holding pattern (hold southeast, left turns, 321° inbound) to cross OSI VORTAC at or above MEA for route of flight.
TAKEOFF OBSTACLE NOTES:
Rwy 32R, light support structures abeam DER, 76' left and 76' right of centerline, up to 3' AGL/7' MSL.
Vehicles on road beginning 5' from DER, 92' left of centerline, up to 15' AGL/20' MSL.
Vehicles on road beginning 512' from DER, 158' right of centerline, up to 15' AGL/20' MSL.
Fence 134' from DER, left and right of centerline, up to 8' AGL/12' MSL.
Rwy 32L, light support structures abeam DER, 76' left and 76' right of centerline, up to 1' AGL/5' MSL.
Navaid 449' from DER, 315' right of centerline, up to 17' AGL/21' MSL.
Tree 1632' from DER, 934' left of centerline, up to 100' AGL/129' MSL.
Rwy 14L, light support structure 13' from DER, 126' right of centerline, up to 4' AGL/34' MSL.
Vehicles on road beginning 770' from DER, 547' right of centerline, 15' AGL/53' MSL.
Rail car on railroad beginning 774' from DER, 261' right of centerline, up to 23' AGL/60' MSL.
Trees beginning 1191' from DER, 71' right of centerline, up to 100' AGL/171' MSL.
Trees beginning 1922' from DER, 109' left of centerline, up to 100' AGL/153' MSL.
Rwy 14R, light support structures abeam DER, 77' right and 77' left of centerline, up to 3' AGL/37' MSL.
Fence, 187' from DER, 488' right of centerline, up to 8' AGL/45' MSL.
Vehicles on road beginning 207' from DER, 520' right of centerline, 15' AGL/55' MSL.
Rail car on railroad beginning 955' from DER, 342' left of centerline, up to 23' AGL/60' MSL.
Trees beginning 1066' from DER, 34' left of centerline, up to 100' AGL/153' MSL.

NAPA, CA

NAPA COUNTY (APC)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4 03JUN10 (10154) (FAA)

DEPARTURE PROCEDURE:
Use NAPAA DEPARTURE.

SW-2, 07 AUG 2025 to 02 OCT 2025

NOVATO, CA

GNOSS FLD (DVO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 02MAY13 (21224) (FAA)

TAKEOFF MINIMUMS:

Rwy 13, 400-2¼ or std. w/min. climb of 580' per NM to 500.

Rwy 31, 600-2½ w/min. climb of 285' per NM to 1500 or std. w/min. climb of 679' per NM to 800 or 2000-2½ for climb in visual conditions...

DEPARTURE PROCEDURE:

Rwy 13, climb heading 132° to 600 then turn left direct SGD VORTAC before proceeding on course.

Rwy 31, climbing right turn direct SGD VORTAC before proceeding on course.

… For climb in visual conditions, cross Gnoss Fld at or above 1900' MSL then proceed direct SGD VORTAC before proceeding on course. When executing VCOA, notify ATC prior to departure.

TAKEOFF OBSTACLE NOTES:

Rwy 13, trees beginning 2633' from DER, 627' left of centerline, up to 50' AGL/346' MSL.
Trees beginning 3630' from DER, 1274' right of centerline, up to 50' AGL/369' MSL.
Power line 1.7 NM from DER, 1980' left of centerline, 121' AGL/360' MSL.

Rwy 31, trees beginning 3237' from DER, 321' left of centerline, up to 50' AGL/569' MSL.

OAKDALE, CA

OAKDALE (O27)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 10NOV16 (16315) (FAA)

DEPARTURE PROCEDURE:

Rwy 10, climbing left turn via heading 020° and LIN VOR/DME R-124 to WRAPS INT/LIN 16.66 DME. Climb in WRAPS holding pattern (Northwest, right turn, 124° inbound) to cross WRAPS INT at or above MEA for direction of flight.

Rwy 28, climb via heading 276° and LIN VOR/DME R-146 to LIN VOR/DME to cross LIN VOR/DME at or above MEA for direction of flight.

TAKEOFF OBSTACLE NOTES:

Rwy 10, terrain beginning 388' from DER, up to 279' MSL.

Rwy 28, power line 3447' from DER, 407' right of centerline, 115' AGL/329' MSL.

OAKLAND, CA

OAKLAND INTL (OAK)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 7 17OCT13 (25163) (FAA)

DEPARTURE PROCEDURE:

Rwys 10L/R, 12, 15, 30, climbing right turn to intercept V107-301, thence …

Rwys 28L/R, climb heading 278° to intercept V107-301, thence …

Rwy 33, climbing left turn to intercept V107-301, thence...

… to cross COMMO INT at or above 4000, continue climb-in-hold (hold E, right turns, 288° inbound) to 4000 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 10L, building, hanger and road beginning 225' from DER, 554' left of centerline, up to 37' AGL/42' MSL.
Trees beginning 1644' from DER, 309' left of centerline, up to 59' AGL/67' MSL.

Rwy 10R, runway lights 9' from DER, 26' left and right of centerline, 1' AGL/9' MSL.
Sign 63' from DER, 251' left of centerline, 4' AGL/10' MSL.
Signs, fence and poles beginning 361' from DER, 540' right of centerline up to 35' AGL/44' MSL.
Signs and trees beginning 1160' from DER, 177' right of centerline, up to 36' AGL/50' MSL.

Rwy 12, runway end and ALS lights beginning 11' from DER, 9' left and right of centerline, 1' AGL/10' MSL.

Rwy 15, ATCT 3613' from DER, 1017' left of centerline, 88' AGL/101' MSL.
Obstruction light on WSK 813' from DER, 577' right of centerline, 24' AGL/27' MSL.

Rwy 28L, rising terrain beginning 8' from DER, crossing centerline, up to 9' MSL.
Multiple trees beginning 105' from DER, 35' left of centerline, up to 64' AGL/80' MSL.
Traffic lights and poles beginning 895' from DER, 164' left of centerline, up to 29' AGL/37' MSL.
Substation 1593' from DER, 871' left of centerline, 37' AGL/53' MSL.
Fence 95' from DER, 410' left of centerline, 6' AGL/13' MSL.
Multiple trees beginning 994' from DER, 55' right of centerline, up to 91' AGL/96' MSL.

Rwy 28R, multiple trees beginning 1745' from DER, 23' left of centerline, up to 91' AGL/96' MSL.
Multiple trees beginning 2053' from DER, 88' right of centerline, up to 109' AGL/111' MSL.

Rwy 30, light pole 582' from DER, 483' left of centerline, 16' AGL/26' MSL.

Rwy 33, multiple trees, buildings and poles beginning 256' from DER, 497' left of centerline, up to 41' AGL/45' MSL.
Multiple trees, buildings, poles and towers beginning 762' from DER, 267' right of centerline, up to 39' AGL/51' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

ORIG 16OCT14 (14289) (FAA)

Rwy 10L, headings as assigned by ATC; requires min. climb of 340' per NM to 2300.

Rwy 10R, headings as assigned by ATC; requires min. climb of 330' per NM to 2300.

Rwys 12, 15, headings as assigned by ATC.

Rwys 28L/R, 30, headings as assigned by ATC; requires min. climb of 240' per NM to 2400.

Rwy 33, headings as assigned by ATC; requires min. climb of 210' per NM to 2400.

ORLAND, CA

HAIGH FLD (O37)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 21MAY20 (21336) (FAA)

DEPARTURE PROCEDURE:

Rwy 15, climb to 1000 then climbing left turn heading 100° to intercept RBL VORTAC R-140 to 5000 before proceeding on course.

Rwy 33, climb to 1000, then climbing right turn heading 020° to intercept RBL VORTAC R-140 to 5000 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 15, fence 6' from DER, 383' right of centerline, 6' AGL/214' MSL.
Fence 15' from DER, 397' left of centerline, 6' AGL/214' MSL.
Pole 88' from DER, 443' left of centerline, 29' AGL/237' MSL.
Pole 1198' from DER, 661' right of centerline, 35' AGL/247' MSL.
Pole beginning 1262' from DER, 173' right of centerline, up to 45' AGL/258' MSL.
Tree 1370' from DER, 824' left of centerline, 270' MSL.
Tree 1464' from DER, 390' right of centerline, 273' MSL.
Trees beginning 1480' from DER, 399' right of centerline, up to 313' MSL.
Rwy 33, tree, traverse_way beginning 78' from DER, 224' left of centerline, up to 237' MSL.
Pole beginning 358' from DER, 298' right of centerline, up to 24' AGL/241' MSL.
Pole 955' from DER, 256' left of centerline, 31' AGL/249' MSL.
Tree 1202' from DER, 791' left of centerline, 281' MSL.
Tree 1807' from DER, 595' left of centerline, 308' MSL.
Tree 2388' from DER, 383' right of centerline, 324' MSL.

OROVILLE, CA

OROVILLE MUNI (OVE)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 22JUN17 (17173) (FAA)

TAKEOFF MINIMUMS:

Rwy 2, std. w/ min. climb of 280' per NM to 1500, or 1000-2½ for VCOA.

Rwy 31, 300-1⅞ or std. w/ min. climb of 245' per NM to 600.

DEPARTURE PROCEDURE:

Rwy 2, 31, climbing left turn to 5000 on heading 200° direct ILA VORTAC before proceeding on course.

Rwys 13, 20, climbing right turn to 5000 on heading 210° direct ILA VORTAC before proceeding on course.

VCOA:

Obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Oroville Municipal airport south-westbound at or above 1000, then direct ILA VORTAC before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 2, ground 170' from DER, 475' right of centerline, 189' MSL.
Ground 191' from DER, 489' right of centerline, 190' MSL.
Tree 511' from DER, 600' left of centerline, 231' MSL.
Tree 513' from DER, 603' left of centerline, 236' MSL.
NAVAID 1143' from DER, 348' right of centerline, 215' MSL.
Pole 1364' from DER, 740' right of centerline, 255' MSL.
Poles beginning 1365' from DER, 537' right of centerline, up to 256' MSL.
Rwy 13, poles beginning 128' from DER, 292' right of centerline, up to 29' AGL/203' MSL.
Vertical structure 177' from DER, 493' left of centerline, 184' MSL.
Vehicles on road 210' from DER, 515' left of centerline, 189' MSL.
Tree 312' from DER, 554' left of centerline, 205' MSL.
Rwy 20, vehicles on road 819' from DER, 376' left of centerline, 203' MSL.
Poles beginning 902' from DER, 655' right of centerline, up to 36' AGL/217' MSL.
Rwy 31, sign 32' from DER, 325' left of centerline, 195' MSL.
Ground beginning 109' from DER, 410' right of centerline, up to 200' MSL.
Trees beginning 641' from DER, 621' left of centerline, up to 244' MSL.
Tree 1380' from DER, 466' left of centerline, 264' MSL.
T-L tower 1.3 NM from DER, 1826' right of centerline, 144' AGL/444' MSL.

PALO ALTO, CA

PALO ALTO (PAO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-B 15OCT15 (15288) (FAA)

DEPARTURE PROCEDURE:

Rwy 13, turn left.

Rwy 31, turn right.

All aircraft climb direct SJC VOR/DME before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 13, building with ship mast 1325' from DER, 450' left of centerline, 60' AGL/67' MSL.

PETALUMA, CA

PETALUMA MUNI (O69)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 13NOV14 (22307) (FAA)

TAKEOFF MINIMUMS:

Rwy 11, std. w/min. climb of 235' per NM to 1500.

Rwy 29, 300-1¼ or std. w/min. climb of 276' per NM to 400.

DEPARTURE PROCEDURE:

Rwy 11, climb heading 108° to 1500 then continue climb direct SGD VORTAC.

Rwy 29, climb heading 289° to 1500 then climbing left turn to 3000 direct SGD VORTAC.

All aircraft continue climb to MEA for route of flight.

TAKEOFF OBSTACLE NOTES:

Rwy 11, tree 1095' from DER, 779' right of centerline, 55' AGL/116' MSL.

Sign 69' from DER, 141' right of centerline, 9' AGL/80' MSL.

Vertical structure 8' from DER, 248' left of centerline, 10' AGL/81' MSL.

Trees 172' from DER, beginning 399' left of centerline, up to 46' AGL/117' MSL.

Trees 40' from DER, beginning 465' left of centerline, up to 40' AGL/111' MSL.

Rwy 29, trees 1091' from DER, beginning 151' right of centerline, up to 91' AGL/172' MSL.

Vertical structure 194' from DER, 248' right of centerline, up to 19' AGL/98' MSL.

Trees 121' from DER, beginning 282' right of centerline, up to 51' AGL/132' MSL.

Trees and buildings 88' from DER, beginning 292' left of centerline, up to 40' AGL/121' MSL.

Trees 1363' from DER, 462' left of centerline, up to 96' AGL/177' MSL.

Pole 1262' from DER, 90' left of centerline, 41' MSL/ 122' AGL.

Poles 2508' from DER, beginning 87' left of centerline, up to 94' AGL/175' MSL.

PLACERVILLE, CA

PLACERVILLE (PVF)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 15NOV12 (12320) (FAA)

TAKEOFF MINIMUMS:

Rwy 5, NA-obstacles.

DEPARTURE PROCEDURE:

Rwy 23, climb to 5000 on HNW R-226 then climbing right turn on HNW R-276 to HNW VOR/DME. Aircraft departing HNW VOR/DME R-180 CW R-303 climb on course; all others climb in HNW VOR/DME holding pattern (hold SW, right turns, 048° inbound) to cross HNW VOR/DME at or above MEA/MCA for direction of flight before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 23, hangar 20' from DER, 340' right of centerline, 27' AGL/2586' MSL.

PORTERVILLE, CA

PORTERVILLE MUNI (PTV)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2A 06DEC18 (18340) (FAA)

TAKEOFF MINIMUMS:

Rwy 12, std. w/min. climb of 220' per NM to 600.

DEPARTURE PROCEDURE:

Rwy 12, climbing right turn thence . . .

Rwy 30, climbing left turn thence . . .

...climb direct TTE VOR/DME. Aircraft departing TTE VOR/DME R-146 CW R-330 climb on course. All other aircraft climb in TTE VOR/DME holding pattern (hold northwest, right turn, 143° inbound) to cross TTE R-331 CW R-060, 8600; R-061 CW R -145, 7000.

TAKEOFF OBSTACLE NOTES:

Rwy 12, tree 618' from DER, 241' right of centerline, 460' MSL.

Trees beginning 776' from DER, 193' left of centerline, up to 467' MSL.

Pole 906' from DER, 588' left of centerline, 43' AGL/491' MSL.

Rwy 30, fence 176' from DER, 499' right of centerline, 6' AGL/436' MSL.

RED BLUFF, CA

RED BLUFF MUNI (RBL)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 10FEB11 (11041) (FAA)

DEPARTURE PROCEDURE:

Rwy 15, climb direct RBL VORTAC, thence...

Rwy 33, climbing right turn direct RBL VORTAC, thence...

...continue climb in RBL holding pattern (S, right turns, 341° inbound) to cross RBL VORTAC at or above MEA for route of flight.

TAKEOFF OBSTACLE NOTES:

Rwy 15, WSK 5' from DER, 258' right of centerline, 18' AGL/361' MSL.

Tree 2065' from DER, 879' left of centerline, 100' AGL/449' MSL.

Rwy 33, trees beginning 468' from DER, 563' left of centerline, up to 54' AGL/387' MSL.

Trees beginning 587' from DER, 493' right of centerline, up to 73' AGL/393' MSL.

SW-2, 07 AUG 2025 to 02 OCT 2025

REDDING, CA

BENTON FLD (O85)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 05OCT23 (23278) (FAA)

DEPARTURE PROCEDURE:

Use REDDING DEPARTURE.

TAKEOFF OBSTACLE NOTES:

Rwy 16, trees beginning 75' from DER, 319' left of centerline, up to 30' AGL/732' MSL.
Vehicle on road 273' from DER, 537' right of centerline, 730' MSL.
Tree 771' from DER, 613' right of centerline, 747' MSL.
Tree 1105' from DER, 324' right of centerline, 755' MSL.
Trees beginning 1207' from DER, 162' right of centerline, up to 51' AGL/762' MSL.
Rwy 34, building 2' from DER, 455' left of centerline, 724' MSL.
Pole, sign beginning 63' from DER, 179' right of centerline, up to 749' MSL.
NAVAID, trees, pole beginning 84' from DER, 260' left of centerline, up to 748' MSL.
Trees, fence, poles beginning 116' from DER, 182' right of centerline, up to 46' AGL/765' MSL.
Trees, pole beginning 373' from DER, 224' left of centerline, up to 57' AGL/753' MSL.
Trees beginning 623' from DER, 440' right of centerline, up to 775' MSL.
Pole, trees beginning 750' from DER, 19' left of centerline, up to 754' MSL.
Trees beginning 1766' from DER, 870' left of centerline, up to 779' MSL.

REDDING RGNL (RDD)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5C 30JAN20 (23110) (FAA)

DEPARTURE PROCEDURE:

Rwy 12, climb on heading 126° and RBL R-344 to RBL VORTAC to 3000 before proceeding on course.
Rwy 16, climbing left turn heading 114° and RBL R-344 to RBL VORTAC to 3000 before proceeding on course.
Rwys 30, 34, climbing right turn heading 114° and RBL R-344 to RBL VORTAC to 3000 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 12, trees beginning 45' from DER, 359' left of centerline, up to 23' AGL/515' MSL.
Trees, fence, general utility, transmission line beginning 281' from DER, 314' left of centerline, up to 49' AGL/542' MSL.
Transmission line 1920' from DER, 677' left of centerline, 60' AGL/543' MSL.
Tree 3470' from DER, 541' left of centerline, 109' AGL/590' MSL.
Rwy 16, tree 152' from DER, 463' right of centerline, 12' AGL/495' MSL.
Tree 347' from DER, 584' right of centerline, 46' AGL/527' MSL.
Rwy 30, terrain 27' from DER, 249' right of centerline, 502' MSL.
Aircraft on taxiway, pole, and trees beginning 32' from DER, 68' right of centerline, up to 44' AGL/544' MSL.
Aircraft on taxiway, pole, and building beginning 223' from DER, 13' left of centerline, up to 44' AGL/544' MSL.
Tree 1410' from DER, 211' left of centerline, 44' AGL/545' MSL.
Tree 1556' from DER, 417' right of centerline, 57' AGL/558' MSL.
Building and trees beginning 1584' from DER, 267' right of centerline, up to 60' AGL/563' MSL.
Tree 1588' from DER, 55' left of centerline, 50' AGL/553' MSL.
Trees beginning 1672' from DER, 431' right of centerline, up to 69' AGL/572' MSL.
Trees beginning 1793' from DER, 4' right of centerline, up to 74' AGL/576' MSL.
Trees beginning 1794' from DER, 78' left of centerline, up to 60' AGL/561' MSL.
Trees beginning 1882' from DER, 95' right of centerline, up to 74' AGL/577' MSL.
Trees beginning 2093' from DER, 227' right of centerline, up to 82' AGL/583' MSL.
Trees, building beginning 2340' from DER, 399' right of centerline, up to 99' AGL/600' MSL.
Tree 2788' from DER, 984' left of centerline, 113' AGL/613' MSL.
Tree 3256' from DER, 912' right of centerline, 94' AGL/601' MSL.
Rwy 34, electrical system 37' from DER, 130' right of centerline, 2' AGL/506' MSL.
Sign 38' from DER, 125' right of centerline, 4' AGL/508' MSL.
Sign 39' from DER, 123' left of centerline, 4' AGL/508' MSL.
Signs beginning 98' from DER, 252' left of centerline, up to 5' AGL/510' MSL.
Tree 2322' from DER, 1015' left of centerline, 67' AGL/576' MSL.
Tree 2386' from DER, 934' left of centerline, 74' AGL/583' MSL.
Tree 2455' from DER, 1120' left of centerline, 83' AGL/593' MSL.
Trees beginning 2662' from DER, 767' left of centerline, up to 83' AGL/594' MSL.
Trees beginning 2817' from DER, 479' left of centerline, up to 86' AGL/596' MSL.
Trees beginning 2906' from DER, 828' left of centerline, up to 87' AGL/598' MSL.
Trees beginning 2967' from DER, 794' left of centerline, up to 89' AGL/600' MSL.
Trees beginning 3137' from DER, 867' left of centerline, up to 96' AGL/608' MSL.
Trees beginning 3188' from DER, 792' left of centerline, up to 103' AGL/615' MSL.
Tower 3312' from DER, 1032' left of centerline, 108' AGL/622' MSL.
Antenna 3312' from DER, 1031' left of centerline, 105' AGL/619' MSL.

SW-2, 07 AUG 2025 to 02 OCT 2025

REEDLEY, CA

REEDLEY MUNI (O32)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 03JAN19 (19003) (FAA)

DEPARTURE PROCEDURE:

Rwy 16, climb on a heading between 132° CW to 323° from DER.

Rwy 34, climb on a heading between 156° CW to 320° from DER.

TAKEOFF OBSTACLE NOTES:

Rwy 16, vehicles on road, terrain, building and vegetation beginning 26' from DER, 309' left of centerline, up to 15' AGL/402' MSL.

Tree 1551' from DER, 778' right of centerline, 431' MSL.

Tree 1648' from DER, 893' left of centerline, 461' MSL.

Tree 1737' from DER, 210' right of centerline, 434' MSL.

Tree 2010' from DER, 189' left of centerline, 453' MSL.

Trees beginning 2033' from DER, 615' left of centerline, up to 482' MSL.

Tree 2894' from DER, 630' left of centerline, 483' MSL.

Rwy 34, tree 116' from DER, 376' right of centerline, 403' MSL.

Tree 166' from DER, 499' right of centerline, 406' MSL.

Vehicles on road and tree beginning 289' from DER, 329' right of centerline, up to 407' MSL.

RIO VISTA, CA

RIO VISTA MUNI (O88)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 05DEC19 (19339) (FAA)

DEPARTURE PROCEDURE:

Rwy 7, climbing left turn direct SAC VORTAC. Continue climb in SAC VORTAC holding pattern (hold, south, right turn, 016° inbound) to cross SAC VORTAC at or above MEA for route of flight.

Rwy 15, climb to 800 then climbing left turn direct SAC VORTAC. Continue climb in SAC VORTAC holding pattern (hold, south, right turn, 016° inbound) to cross SAC VORTAC at or above MEA for route of flight.

Rwy 25, climbing right turn direct SAC VORTAC. Continue climb in SAC VORTAC holding pattern (hold, south, right turn, 016° inbound) to cross SAC VORTAC at or above MEA for route of flight.

Rwy 33, climbing right turn direct SAC VORTAC. Continue climb in SAC VORTAC holding pattern (hold, south, right turn, 016° inbound) to cross SAC VORTAC at or above MEA for route of flight.

TAKEOFF OBSTACLE NOTES:

Rwy 7, lighting 10' from DER, 107' right of centerline, 2' AGL/24' MSL.

Terrain 111' from DER, 491' left of centerline, 27' MSL.

Rwy 15, pole 9' from DER, 19' left of centerline, 2' AGL/22' MSL.

Terrain 42' from DER, 270' right of centerline, 23' MSL.

Pole, vehicles on road, building beginning 112' from DER, 438' right of centerline, up to 33' AGL/55' MSL.

Poles, vehicles on road beginning 292' from DER, 25' left of centerline, up to 52' MSL.

Wind indicator, tree, vehicles on road, buildings, pole beginning 345' from DER, 1' right of centerline, up to 35' AGL/58' MSL.

Pole 1462' from DER, 99' left of centerline, 33' AGL/60' MSL.

Rwy 25, terrain, lighting beginning 0' from DER, 79' left of centerline, up to 26' MSL.

Poles, vehicles on road, trees beginning 287' from DER, 186' left of centerline, up to 54' MSL.

Tree 940' from DER, 201' left of centerline, 26' AGL/55' MSL.

Trees beginning 957' from DER, 3' left of centerline, up to 27' AGL/56' MSL.

Pole 1015' from DER, 308' right of centerline, 47' MSL.

Rwy 33, lighting 10' from DER, 100' right of centerline, 3' AGL/24' MSL.

Trees beginning 124' from DER, 252' right of centerline, up to 24' AGL/30' MSL.

Pole 1601' from DER, 846' left of centerline, 43' AGL/66' MSL.

Pole 1639' from DER, 891' left of centerline, 44' AGL/68' MSL.

Trees, building beginning 1912' from DER, 792' left of centerline, up to 66' AGL/92' MSL

SACRAMENTO, CA

SACRAMENTO EXEC (SAC)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 20JUN19 (21112) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 2, multiple trees 1128' from DER, 108' left of centerline, up to 76' AGL/96' MSL.

Antenna 1376' from DER, 663' left of centerline, 51' AGL/71' MSL.

Trees 1858' from DER, 137' right of centerline, 73' AGL/93' MSL.

Rwy 12, multiple trees 518' from DER, 26' left of centerline, up to 83' AGL/98' MSL.

Light pole 507' from DER, 336' left of centerline, 37' AGL/52' MSL.

Transmission pole 3971' from DER, 647' left of centerline, 130' AGL/154' MSL.

Multiple trees 475' from DER, 476' right of centerline up to 97' AGL/112' MSL.

Light poles 711' from DER, 241' right of centerline, 36' AGL/51' MSL.

Rwy 20, multiple trees beginning 850' from DER, 626' left of centerline, up to 92' AGL/107' MSL.

Multiple trees beginning 714' from DER, 515' right of centerline, up to 66' AGL/81' MSL.

Rwy 30, obstruction light on hangers 460' from DER, 360' right of centerline, 25' AGL/43' MSL.

Multiple trees beginning 631' from DER, 195' right of centerline, up to 56' AGL/74' MSL.

Multiple trees beginning 1331' from DER, 247' left of centerline, up to 90'/110' MSL.

Antenna on building 1543' from DER, 442' left of centerline, 47' AGL/67' MSL.

SACRAMENTO, CA (CON'T)

SACRAMENTO INTL (SMF)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1A 21MAY20 (20142) (FAA)

DEPARTURE PROCEDURE:

Rwy 17L, climb heading 168° to 700 before turning east.

TAKEOFF OBSTACLE NOTES:

Rwy 17L, vehicles on road, 225' from DER, crossing runway centerline, 10' AGL/31' MSL

Rwy 35L, tree 3656' from DER, 1296' left of centerline, 98' AGL/123' MSL.

Rwy 35R, pole 1786' from DER, 945' right of centerline, 46' AGL/73' MSL.

SACRAMENTO MATHER (MHR)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 06JAN94 (94006) (FAA)

DEPARTURE PROCEDURE:

Rwys 4L,4R, climbing right turn direct SAC VORTAC.

Rwys 22L,22R climb direct SAC VORTAC.

SALINAS, CA

SALINAS MUNI (SNS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5 19MAY22 (22139) (FAA)

DEPARTURE PROCEDURE:

Rwy 8, climbing right turn to intercept SNS VORTAC R-124 to 5500 before proceeding on course.

Rwy 13, climbing left turn to intercept SNS VORTAC R-124 to 5500 before proceeding on course.

Rwy 26, climbing right turn to intercept SNS VORTAC R-264 to 5000 before proceeding on course.

Rwy 31, climbing left turn to intercept SNS VORTAC R-264 to 5000 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 8, fence 195' from DER, 409' left of centerline, 5' AGL/92' MSL.

Transmission line 1801' from DER, 761' left of centerline, 90' AGL/171' MSL.

Rwy 26, pole, vehicle on road, tree beginning 110' from DER, 266' left of centerline, up to 34' AGL/98' MSL.

Pole, vehicle on road beginning 137' from DER, 281' right of centerline, up to 33' AGL/100' MSL.

Poles beginning 910' from DER, 233' right of centerline, up to 35' AGL/102' MSL.

Tree 1646' from DER, 351' left of centerline, 119' MSL.

Tree 1909' from DER, 73' right of centerline, 121' MSL.

Building 1943' from DER, 435' left of centerline, 60' AGL/128' MSL.

Tower 2769' from DER, 32' right of centerline, 81' AGL/145' MSL.

Transmission line 2974' from DER, 739' right of centerline, 93' AGL/150' MSL.

Tower 3991' from DER, 424' left of centerline, 116' AGL/179' MSL.

Rwy 31, trees, building beginning 171' from DER, 390' right of centerline, up to 133' MSL.

Vehicle on road 206' from DER, 201' left of centerline, 97' MSL.

Tree 282' from DER, 436' left of centerline, 120' MSL.

Trees, pole, transmission line beginning 1043' from DER, 5' left of centerline, up to 172' MSL.

Fence, transmission line, poles beginning 1141' from DER, 202' right of centerline, up to 60' AGL/145' MSL.

SAN ANDREAS, CA

CALAVERAS COUNTY/MAURY RASMUSSEN FLD (CPU)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 10NOV16 (24305) (FAA)

TAKEOFF MINIMUMS:

Rwy 13, 1800-5 or std w/min climb of 300' per NM to 3700.

DEPARTURE PROCEDURE:

Rwy 13, climb runway heading to 3100, then climbing right turn via LIN R-085 to LIN VOR/DME.

Rwy 31, climb via heading 311° to 3000, then climbing left turn via Linden (LIN) VOR/DME R-029 to LIN VOR/DME.

TAKEOFF OBSTACLE NOTES:

Rwy 13, windsock 4' from DER, 129' right of centerline, 14' AGL/1341' MSL.

Lights 4' from DER, 68' right of centerline, up to 2' AGL/1330' MSL.

Bush 24' from DER, 140' right of centerline, 3' AGL/1331' MSL.

Tree 43' from DER, 287' right of centerline, up to 8' AGL/ 1336' MSL.

Bush 26' from DER, 96' left of centerline, up to 1' AGL/1329' MSL.

Rwy 31, tree 19' from DER, 242' left of centerline, up to 30' AGL/1335' MSL.

Trees 220' from DER, 375' right of centerline, up to 40' AGL/1345' MSL.

Pole 667' from DER, 653' left of centerline, 23' AGL/1326' MSL.

Trees 1010' from DER, 651' right of centerline, up to 46' AGL/1351' MSL.

SW-2, 07 AUG 2025 to 02 OCT 2025

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

25219

SAN CARLOS, CA

SAN CARLOS (SQL)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 10AUG23 (23222) (FAA)

TAKEOFF MINIMUMS:

Rwy 12, 300-1⅜ or std w/min climb of 240'/NM to 300.

Rwy 30, 300-1⅜ or std w/min climb of 290'/NM to 400.

DEPARTURE PROCEDURE:

Rwy 12, climb on heading 123° to 500, then climbing left turn direct SJC VOR/DME before proceeding on course.

Rwy 30, climb on heading 303° to 600, then climbing right turn direct SJC VOR/DME before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 12, pole 9' from DER, 267' right of centerline, 25' MSL.
Tree, pole, building beginning 9' from DER, 266' right of centerline, up to 51' AGL/57' MSL.
Dam, terrain, light poles beginning 109' from DER, 58' left of centerline, up to 3' AGL/12' MSL.
Building, pole beginning 295' from DER, 266' right of centerline, up to 59' MSL.
Buildings, poles, electrical system, tree, sign beginning 472' from DER, 267' right of centerline, up to 61' MSL.
Transmission line 1669' from DER, 734' right of centerline, 92' AGL/94' MSL.
Poles, tree beginning 2409' from DER, 735' right of centerline, up to 106' MSL.
Transmission line 1.1 NM from DER, 2196' left of centerline, 200' AGL/208' MSL.
Rwy 30, pole 15' from DER, 286' right of centerline, 20' AGL/25' MSL.
Wind indicator, vehicle on road, sign beginning 18' from DER, 250' right of centerline, up to 26' MSL.
Poles, tree beginning 46' from DER, 283' left of centerline, up to 36' MSL.
Pole 79' from DER, 511' right of centerline, 36' MSL.
Electrical system, pole, vehicle on road, building, tree beginning 89' from DER, on centerline, up to 41' AGL/46' MSL.
Tree, building beginning 169' from DER, 392' left of centerline, up to 43' MSL.
Vehicle on road, pole, tree beginning 229' from DER, 10' left of centerline, up to 52' MSL.
Tree, light poles, pole beginning 852' from DER, 243' right of centerline, up to 48' MSL.
Electrical system, pole, tree, sign beginning 902' from DER, 346' left of centerline, up to 93' MSL.
Tree, pole beginning 1178' from DER, 347' right of centerline, up to 54' MSL.
Building, tree beginning 1342' from DER, 497' right of centerline, up to 76' MSL.
Poles, tower beginning 1891' from DER, 736' left of centerline, up to 112' MSL.
Tree, buildings beginning 2126' from DER, 809' right of centerline, up to 89' MSL.
Buildings, trees beginning 2454' from DER, 508' right of centerline, up to 102' MSL.
Buildings, trees beginning 2990' from DER, 514' right of centerline, up to 109' MSL.
Electrical system 3393' from DER, 737' left of centerline, 117' MSL.
Buildings beginning 3562' from DER, 363' right of centerline, up to 113' MSL.
Pole 15' from DER, 286' right of centerline, 20' AGL/25' MSL.
Wind indicator, vehicle on road, sign beginning 18' from DER, 250' right of centerline, up to 26' MSL.
Pole, tree beginning 46' from DER, 283' left of centerline, up to 36' MSL.
Pole 79' from DER, 511' right of centerline, 36' MSL.
Electrical system, pole, vehicle on road, building, tree beginning 89' from DER, on centerline, up to 41' AGL/46' MSL.
Tree, building beginning 169' from DER, 392' left of centerline, up to 43' MSL.
Vehicle on road, pole, tree beginning 229' from DER, 10' left of centerline, up to 52' MSL.
Tree, light poles, pole beginning 852' from DER, 243' right of centerline, up to 48' MSL.
Electrical system, pole, tree, sign beginning 902' from DER, 346' left of centerline, up to 93' MSL.
Tree, pole beginning 1178' from DER, 347' right of centerline, up to 54' MSL.
Building, tree beginning 1342' from DER, 497' right of centerline, up to 76' MSL.
Poles, tower beginning 1891' from DER, 736' left of centerline, up to 112' MSL.
Tree, buildings beginning 2126' from DER, 809' right of centerline, up to 89' MSL.
Buildings, trees beginning 2454' from DER, 508' right of centerline, up to 102' MSL.
Buildings, trees beginning 2990' from DER, 514' right of centerline, up to 109' MSL.
Electrical system 3393' from DER, 737' left of centerline, 117' MSL.
Buildings beginning 3562' from DER, 363' right of centerline, up to 113' MSL.
Building, pole beginning 1 NM from DER, 1523' right of centerline, up to 178' MSL.
Building 1 NM from DER, 1557' right of centerline, 211' AGL/217' MSL.
Building 1 NM from DER, 1332' right of centerline, 228' AGL/234' MSL.
Buildings beginning 1 NM from DER, 1001' right of centerline, up to 237' AGL/242' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 1 20FEB25 (25051) (FAA)

Rwy 12, heading as assigned by ATC; requires min climb of 470'/NM to 3400.

Rwy 30, heading as assigned by ATC; requires min climb of 288'/NM to 2100.

SW-2, 07 AUG 2025 to 02 OCT 2025

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

25219

SAN FRANCISCO, CA

SAN FRANCISCO INTL (SFO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 9 24JUL14 (14205) (FAA)

TAKEOFF MINIMUMS:

Rwys 19L, 19R, std. w/min. climb of 575' per NM to 2000.

Rwys 28L, 28R, std. w/min. climb of 351' per NM to 1300.

DEPARTURE PROCEDURE:

Rwys 1L, 1R, climb heading 014° to 2000, thence …

Rwys 10L, 10R, climbing left turn heading 053° to intercept SFO R-090 eastbound to 2300; thence …

Rwys 19L, 19R, climbing left turn heading 053° to intercept SFO R-090 eastbound to 2600, thence …

Rwys 28L, 28R, climb heading 284° to 2000, thence …

… continue climb on course.

TAKEOFF OBSTACLE NOTES:

Rwy 1 L, ships beginning 1646' from DER, right and left of centerline, up to 150' AGL/150' MSL.

Rwy 1R, ships beginning 1173' from DER, right and left of centerline, up to 150' AGL/150' MSL.

Rwy 10L, sign 62' from DER, 300' left of centerline, 4' AGL/15' MSL.

Building and rod on building beginning 257' from DER, 560' left of centerline, up to 14' AGL/24' MSL.

Rwy 19L, multiple poles beginning 548' from DER, 46' left of centerline, up to 20' AGL/480' MSL.

Multiple poles and signs beginning 652' from DER, 337' right of centerline, up to 20' AGL/38' MSL.

Multiple buildings, transmission towers, poles, trees, signs, electrical system beginning 937' from DER, 11' left of centerline, up to 100' AGL/127' MSL.

Multiple buildings, transmission towers, poles, trees, signs, electrical system beginning 887' from DER, 61' right of centerline, up to 100' AGL/128' MSL.

Multiple buildings 3831' from DER, 1138' left of centerline, up to 105' AGL/127' MSL.

Multiple buildings and trees beginning 3831' from DER, 74' right of centerline up to 100' AGL/167' MSL.

Rwy 19R, multiple poles, trees, electrical system beginning 454' from DER, 82' right of centerline, up to 40' AGL/60' MSL.

Multiple transmission towers, trees beginning 918' from DER, 7' left of centerline, up to 80' AGL/96' MSL.

Poles and electrical system 1188' from DER, 1' right of centerline, 44' AGL/50' MSL.

Multiple transmission towers, trees beginning 1617' from DER, 16' right of centerline, up to 80' AGL/85' MSL.

Rwy 28L, sign 19' from DER, 500' right of centerline, 5' AGL/9' MSL.

Obstruction lights on DME beginning 277' from DER, 162' left of centerline, up to 16' AGL/26' MSL.

Obstruction light on localizer beginning 219' from DER, on centerline, up to 10' AGL/17' MSL.

Multiple poles, electrical system beginning 824' from DER, 300' left of centerline, up to 40' AGL/56' MSL.

Multiple buildings, transmission towers, tank and pole beginning 1305' from DER, 370' left of centerline, up to 95' AGL/103' MSL.

Rwy 28R, multiple signs, beginning 23' from DER, 140' right of centerline, up to 5' AGL/10' MSL.

Terrain beginning 58' from DER, 146' right of centerline, up to 10' MSL.

Sign, 63' from DER, 250' left of centerline 5' AGL/8' MSL.

Terrain beginning 130' from DER, 235' left of centerline, up to 10' MSL.

Antenna on building, obstruction light on DME, tree, beginning 556' from DER, 268' right of centerline, up to 35' AGL/43' MSL.

Multiple poles beginning 918' from DER, 598' left of centerline, up to 22' AGL/35' MSL.

Multiple buildings, trees beginning 1467' from DER, 683' right of centerline, up to 60' AGL/68' MSL.

Multiple buildings, transmission towers, trees and electrical system beginning 1826' from DER, 123' left of centerline, up to 95' AGL/103' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 1 20AUG15 (15232) (FAA)

Rwys 1L, 1R, headings as assigned by ATC; requires min. climb of 420' per NM to 2600.

Rwys 10L, 10R, headings as assigned by ATC.

SAN JOSE, CA

NORMAN Y MINETA SAN JOSE INTL (SJC)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6C 21JUL16 (16203) (FAA)

TAKEOFF MINIMUMS:

Rwys 12L/R, 400-2½ or std. w/min. climb of 261' per NM to 500.

DEPARTURE PROCEDURE:

Rwys 12L/R, climbing right turn to 2000 on Heading 318° and on OAK R-135 to OAK VOR/DME before proceeding on course.

Rwys 30L/R, climb via heading 315° to 2000, then via OAK R-132 to OAK VOR/DME before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 12L, fence 156' from DER, 57' left of centerline, 14' AGL/73' MSL.

OI on blast fence, 156' from DER, 57' left of centerline, 73' MSL.

Pole 191' from DER, 81' left of centerline, 34' AGL/93' MSL.

Trees beginning 286' from DER, 161' right of centerline, up to 107' MSL.

T-L twr, pole beginning 466' from DER, 228' left of centerline, up to 46' AGL/105' MSL.

Tree 1281' from DER, 529' left of centerline, 117' MSL.

T-L twr 1731' from DER, 729' left of centerline, 86' AGL/156' MSL.

Tree 1799' from DER, 273' left of centerline, 144' MSL.

Tree 1887' from DER, 68' right of centerline, 124' MSL.

T-L twr 3047' from DER, 543' left of centerline, 73' AGL/147' MSL.

Building 1.2 NM from DER, 630' left of centerline, 170' AGL/250' MSL.

CON'T

SW-2, 07 AUG 2025 to 02 OCT 2025

SAN JOSE, CA (CON'T)

NORMAN Y MINETA SAN JOSE INTL (SJC) (CON'T)

Rwy 12L (CON'T), building 1.3 NM from DER, 1051' left of centerline, 265' MSL.
Building 1.3 NM from DER, 445' left of centerline, 217' AGL/301' MSL.
Building 1.3 NM from DER, 51' left of centerline, 228' AGL/309' MSL.
Buildings beginning 1.3 NM from DER, 81' left of centerline, up to 312' MSL.
Building 1.5 NM from DER, 975' left of centerline, 262' AGL/351' MSL.
Building 1.5 NM from DER, 1591' left of centerline, 268' AGL/358' MSL.
Buildings beginning 1.5 NM from DER, 82' left of centerline, up to 365' MSL.
Buildings beginning 1.6 NM from DER, 280' right of centerline, up to 346' MSL.
Buildings beginning 1.6 NM from DER, 350' right of centerline, up to 260' AGL/350' MSL.
Building 1.6 NM from DER, 1977' left of centerline, 286' AGL/368' MSL.
Buildings beginning 1.6 NM from DER, 640' left of centerline, up to 274' AGL/370' MSL.
Building 1.9 NM from DER, 313' right of centerline, 284' AGL/373' MSL.
Building 1.9 NM from DER, 282' right of centerline, 281' AGL/372' MSL.
Rwy 12R, ol on loc 10' from DER, on centerline, 68' MSL.
Ol on blast fence 45' from DER, 115' right of centerline, 75' MSL.
Fence 45' from DER, 115' right of centerline, 14' AGL/75' MSL.
Tree 269' from DER, 149' right of centerline, 100' MSL.
Trees, beginning 285' from DER, 193' left of centerline, up to 107' MSL.
Rd 338' from DER, 2' right of centerline, 82' MSL.
Tree, pole beginning 519 ' from DER, 279' right of centerline, up to 122' MSL.
Trees beginning 1798' from DER, 631' left of centerline, up to 144' MSL.
Poles beginning 1948' from DER, 688' right of centerline, up to 59' AGL/128 ' MSL.
Tree 2604' from DER, 551' right of centerline, 133' MSL.
T-L twr 3046' from DER, 1243' left of centerline, 73' AGL/147' MSL.
Tree 3079' from DER, 873' right of centerline, 142' MSL.
Building 1.3 NM from DER, 1145' left of centerline, 217' AGL/301' MSL.
Building 1.3 NM from DER, 751' left of centerline, 228' AGL/309' MSL.
Buildings beginning 1.3 NM from DER, 781' left of centerline, up to 312' MSL.
Building 1.5 NM from DER, 1676' left of centerline, 262' AGL/351' MSL.
Building 1.5 NM from DER, 2291' left of centerline, 268' AGL/358' MSL.
Buildings beginning 1.5 NM from DER, 134' left of centerline, up to 365' MSL.
Building 1.6 NM from DER, 2678' left of centerline, 286' AGL/368' MSL.
Buildings beginning 1.6 NM from DER, 1340' left of centerline, up to 274' AGL/370' MSL.
Building 1.6 NM from DER, 345' right of centerline, 320' MSL.
Building 1.9 NM from DER, 386' left of centerline, 284' AGL/373' MSL.
Building 1.9 NM from DER, 417' left of centerline, 281' AGL/372' MSL.
Rwy 30L, poles beginning 166' from DER, 494' left of centerline, up to 69' MSL.
NAVAID 174' from DER, on centerline, 7' AGL/44' MSL.
Fence 184' from DER, 369' right of centerline, 15' AGL/51' MSL.
Tree 308' from DER, 424' left of centerline, 71' MSL.
Tree, pole beginning 473' from DER, 118' right of centerline, up to 72' MSL.
Poles beginning 711' from DER, 544' right of centerline, up to 75' MSL.
NAVAID 782' from DER, 350' left of centerline, 47' AGL/83' MSL.
Pole 1227' from DER, 607' left of centerline, 48' AGL/86' MSL.
Pole 1315' from DER, 548' right of centerline, 49' AGL/80' MSL.
Pole 1329' from DER, 743' left of centerline, 57' AGL/94' MSL.
Tree 1852' from DER, 179' right of centerline, 85' MSL.
Tree 2561' from DER, 738' right of centerline, 108' MSL.
Trmsn twr, t-l twr, beginning 2616' from DER, 1130' left of centerline, up to 120' MSL.
Pole 2806' from DER, 1215' left of centerline, 135' MSL.
Pole 2897' from DER, 614' left of centerline, 113' MSL.
Pole, t-l twr, beginning 4145' from DER, 1329' left of centerline, up to 152' MSL.
Rwy 30R, pole 100' from DER, 449' right of centerline, 40' AGL/75' MSL.
Fence 138' from DER 243' right of centerline, 13' AGL/47' MSL.
Fence 184' from DER, 329' left of centerline, 15' AGL/51' MSL.
Tree 411' from DER, 37' left of centerline, 70' MSL.
Tree 473' from DER, 319' left of centerline, 72' MSL.
Pole 526' from DER, 580' left of centerline, 26' AGL/61' MSL.
Pole 657' from DER, 369' right of centerline, 53' AGL/84' MSL.
Vehicle on rd beginning 688' from DER, on centerline, up to 68' MSL.
Poles beginning 711' from DER, 57' left of centerline, up to 25' AGL/75' MSL.
Pole 961' from DER, 133' right of centerline, 56' AGL/88' MSL.
Pole 1315' from DER, 150' left of centerline, 49' AGL/80' MSL.
Tree 1852' from DER, 519' left of centerline, 85' MSL.
Tree 2561' from DER, 39' right of centerline, 108' MSL.
Building 3424' from DER, 146' right of centerline, 96' AGL/124' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 1 21JUL16 (16203) (FAA)

Rwys 12L/R, heading as assigned by ATC; requires min. climb of 470' per NM to 5600.
Rwys 30L/R, heading as assigned by ATC; requires min. climb of 490' per NM to 5600 and do not exceed 210 KTS until established on assigned heading.

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SAN JOSE, CA (CON'T)

REID-HILLVIEW OF SANTA CLARA COUNTY (RHV)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 05SEP24 (24249) (FAA)

DEPARTURE PROCEDURE:

Rwys 13L/R, use HENCE DEPARTURE.

Rwys 31L/R, use DECOT DEPARTURE.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 1 12JUN25 (25163) (FAA)

Rwys 31L/R, heading as assigned by ATC.

SAN MARTIN, CA

SAN MARTIN (E16)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 05NOV20 (20310) (FAA)

TAKEOFF MINIMUMS:

Rwy 32, 3600-3 for VCOA.

DEPARTURE PROCEDURE:

Rwy 14, climb on heading 141° to 5000 and SNS R-355 to SNS VORTAC before proceeding on course.

VCOA:

Rwy 32, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross San Martin Airport at or above 3700 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 14, traverse way, vegetation beginning 50' from DER, 104' left of centerline, up to 291' MSL.
Pole, traverse way, fence, trees beginning 259' from DER, 81' left of centerline, up to 30' AGL/308' MSL.
Traverse way 344' from DER, 17' right of centerline, up to 286' MSL.
Antenna 1568' from DER, 620' left of centerline, 55' AGL/319' MSL.
Trees beginning 1571' from DER, 601' right of centerline, up to 71' AGL/338' MSL.
Rwy 32, traverse way 73' from DER, 429' right of centerline, 300' MSL.
Traverse way 127' from DER, 321' right of centerline, 301' MSL.
Tree 169' from DER, 537' right of centerline, 303' MSL.
Pole, traverse way, trees beginning 213' from DER, 173' right of centerline, up to 37' AGL/321' MSL.
Traverse way 387' from DER, 575' left of centerline, 300' MSL.
Trees, pole, traverse way beginning 545' from DER, 46' left of centerline, up to 321' MSL.
Traverse way beginning 1171' from DER, 71' right of centerline, up to 323' MSL.
Traverse way, trees beginning 1172' from DER, 188' right of centerline, up to 327' MSL.
Tree 1486' from DER, 668' left of centerline, 335' MSL.
Trees beginning 1573' from DER, 297' left of centerline, up to 337' MSL.
Tree 1670' from DER, 655' right of centerline, 330' MSL.
Tree 1708' from DER, 87' right of centerline, 331' MSL.
Tree 1837' from DER, 328' left of centerline, 342' MSL.
Trees beginning 1880' from DER, 177' right of centerline, up to 340' MSL.
Trees beginning 2045' from DER, 331' left of centerline, up to 350' MSL.
Tree 2146' from DER, 888' right of centerline, 341' MSL.
Trees beginning 2217' from DER, 194' right of centerline, up to 72' AGL/364' MSL.
Trees beginning 2319' from DER, 342' left of centerline, up to 357' MSL.
Tree 2984' from DER, 1021' left of centerline, 378' MSL.
Tree 3137' from DER, 946' left of centerline, 381' MSL.

SANTA ROSA, CA

CHARLES M SCHULZ/SONOMA COUNTY (STS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 8 17JUN21 (24305) (FAA)

TAKEOFF MINIMUMS:

Rwy 2, std w/min climb of 300' per NM to 2100 or 1500-3 for VCOA.
Rwy 14, std w/min climb of 285' per NM to 2500 or 1500-3 for VCOA.
Rwy 20, std w/min climb of 265' per NM to 2200 or 1500-3 for VCOA.
Rwy 32, std w/min climb of 375' per NM to 2200 or 1500-3 for VCOA.

DEPARTURE PROCEDURE:

Rwy 2, climbing left turn to 2100 on a heading between 200° CW to 305° from DER before proceeding on course.
Rwy 14, climb to 2500 on a heading between 110° CW to 315° from DER before proceeding on course.
Rwy 20, climb to 2200 on a heading between 100° CW to 250° from DER before proceeding on course.
Rwy 32, climbing left turn to 2200 on a heading between 145° CW to 315° from DER before proceeding on course.

VCOA:

Obtain ATC approval for VCOA when requesting IFR clearance.
Rwys 2, 14, 20, 32 climb in visual conditions to cross Charles M Schulz/Sonoma County airport at or above 1400 before proceeding southbound on PYE R-349 to PYE VOR/DME.

TAKEOFF OBSTACLE NOTES:

Rwy 2, tree 515' from DER, 561' right of centerline, 145' MSL.
Tree, pole beginning 629' from DER, 19' right of centerline, up to 156' MSL.
Tree 971' from DER, 369' left of centerline, 42' AGL/148' MSL.
Tree 985' from DER, 216' left of centerline, 149' MSL.

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SANTA ROSA, CA (CON'T)

CHARLES M SCHULZ/SONOMA COUNTY (STS) (CON'T)

Rwy 2 (CON'T), trees beginning 1053' from DER, 215' left of centerline, up to 150' MSL.
Trees beginning 1153' from DER, 146' left of centerline, up to 156' MSL.
Trees beginning 1328' from DER, 478' right of centerline, up to 168' MSL.
Trees beginning 1604' from DER, 639' left of centerline, up to 166' MSL.
Trees beginning 1638' from DER, 786' right of centerline, up to 184' MSL.
Trees beginning 1846' from DER, 619' left of centerline, up to 65' AGL/174' MSL.
Trees beginning 2145' from DER, 344' right of centerline, up to 190' MSL.
Trees beginning 2299' from DER, 342' right of centerline, up to 191' MSL.
Tree 2679' from DER, 443' right of centerline, 196' MSL.
Rwy 14, pole 6' from DER, 40' left of centerline, 121' MSL.
Tree 409' from DER, 602' left of centerline, 138' MSL.
Tree 778' from DER, 649' left of centerline, 146' MSL.
Tree 972' from DER, 629' left of centerline, 147' MSL.
Trees beginning 1202' from DER, 599' left of centerline, up to 155' MSL.
Tree 1336' from DER, 759' left of centerline, 167' MSL.
Tree 2136' from DER, 778' right of centerline, 174' MSL.
Tree 2194' from DER, 1033' right of centerline, 180' MSL.
Tree 5322' from DER, 1543' left of centerline, 255' MSL.
Rwy 20, tree 107' from DER, 461' right of centerline, 40' AGL/162' MSL.
Trees beginning 1497' from DER, 731' right of centerline, up to 248' MSL.
Tree 1595' from DER, 482' left of centerline, 171' MSL.
Tree 1679' from DER, 404' left of centerline, 187' MSL.
Tree 1693' from DER, 934' right of centerline, 137' AGL/269' MSL.
Trees beginning 1705' from DER, 566' right of centerline, up to 144' AGL/274' MSL.
Tree 2840' from DER, 1174' left of centerline, 228' MSL.
Rwy 32, tree 88' from DER, 472' left of centerline, 147' MSL.
Trees beginning 263' from DER, 425' left of centerline, up to 153' MSL.
Tree 642' from DER, 450' right of centerline, 143' MSL.
Tree 700' from DER, 548' right of centerline, 158' MSL.
Trees beginning 797' from DER, 470' left of centerline, up to 154' MSL.
Trees beginning 902' from DER, 609' right of centerline, up to 172' MSL.
Tree 1298' from DER, 370' left of centerline, 155' MSL.
Trees beginning 1701' from DER, 140' left of centerline, up to 174' MSL.
Tree 3187' from DER, 139' left of centerline, 167' AGL/257' MSL.

SOUTH LAKE TAHOE, CA

LAKE TAHOE (TVL)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 8 13SEP18 (18256) (FAA)

TAKEOFF MINIMUMS:
Rwy 18, std. w/min. climb of 810' per NM to 10800, or alternatively, 1600-3 w/min. climb of 765' per NM to 10800, or 5100-5 for VCOA.
Rwy 36, 300-1⅜ or std. w/min. climb of 755' per NM to 6500.

DEPARTURE PROCEDURE:
Rwy 18, climb heading 177° to 7900 then climbing right turn to intercept and climb on SWR R-133 to SWR VOR/DME thence...
Rwy 36, climb heading 357° to intercept and climb on SWR R-113 to SWR VOR/DME thence...
...Proceed on course.

VCOA:
Rwy 18, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross South Lake Tahoe Airport at or above 11200' MSL then intercept and proceed on SWR R-127 to SWR VOR/DME.

TAKEOFF OBSTACLE NOTES:
Rwy 18, pole 10' from DER, 40' left of centerline, 2' AGL/6270' MSL.
Vehicles on road, sign beginning 16' from DER, 247' right of centerline, up to 6282' MSL.
Trees beginning 19' from DER, 378' left of centerline, up to 88' AGL/6354' MSL.
Trees, vehicles on road, vegetation, terrain, pole beginning 140' from DER, 20' right of centerline, up to 88' AGL/6355' MSL.
Pole, trees beginning 263' from DER, 4' left of centerline, up to 102' AGL/6369' MSL.
Trees beginning 917' from DER, 1' left of centerline, up to 111' AGL/6388' MSL.
Trees beginning 1095' from DER, 8' right of centerline, up to 107' AGL/6392' MSL.
Trees beginning 1702' from DER, on centerline, up to 6403' MSL.
Trees beginning 1960' from DER, 6' left of centerline, up to 98' AGL/6412' MSL.
Trees, poles beginning 2021' from DER, 1' right of centerline, up to 6416' MSL.
Trees beginning 2392' from DER, 8' left of centerline, up to 113' AGL/6418' MSL.
Trees, buildings beginning 2441' from DER, 1' left of centerline, up to 6419' MSL.
Trees, buildings, vehicles on road, poles, antenna, vegetation beginning 2712' from DER, on centerline, up to 91' AGL/6420' MSL.
Tree 2.5 NM from DER, 1451' left of centerline, 7837' MSL.
Rwy 36, sign 9' from DER, 212' left of centerline, 4' AGL/6256' MSL.
Vehicle on road 18' from DER, 360' left of centerline, 6266' MSL.
Trees, vehicle on road beginning 51' from DER, 330' right of centerline, up to 47' AGL/6296' MSL.
Tree, pole, terrain, fence beginning 142' from DER, 236' right of centerline, up to 50' AGL/6302' MSL.
Trees beginning 175' from DER, 210' right of centerline, up to 44' AGL/6312' MSL.

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SOUTH LAKE TAHOE, CA (CON'T)

LAKE TAHOE (TVL) (CON'T)

Rwy 26 (CON'T), trees beginning 225' from DER, 173' right of centerline, up to 47' AGL/6319' MSL.
Trees beginning 459' from DER, 181' right of centerline, up to 58' AGL/6328' MSL.
Trees, vehicles on road beginning 593' from DER, 52' right of centerline, up to 59' AGL/6330' MSL.
Trees, vehicles on road beginning 768' from DER, 84' right of centerline, up to 71' AGL/6340' MSL.
Trees, vehicles on road beginning 953' from DER, 143' right of centerline, up to 67' AGL/6348' MSL.
Trees, vehicles on road beginning 1116' from DER, 104' right of centerline, up to 54' AGL/6355' MSL.
Tree 1324' from DER, 564' right of centerline, 62' AGL/6370' MSL.
Tree 1331' from DER, 761' right of centerline, 61' AGL/6379' MSL.
Trees, vehicles on road beginning 1382' from DER, 142' right of centerline, up to 6382' MSL.
Trees beginning 1497' from DER, 161' right of centerline, up to 69' AGL/6391' MSL.
Trees, vehicles on road, terrain beginning 1520' from DER, 41' left of centerline, up to 6402'MSL.
Trees, vehicles on road, fence, NAVAID, poles, tower beginning 1838' from DER, 5' left of centerline, up to 74' AGL/6427' MSL.
Trees beginning 5300' from DER, 377' right of centerline, up to 133' AGL/6430' MSL.
Trees beginning 1 NM from DER, 703' right of centerline, up to 6436' MSL.
Trees beginning 1 NM from DER, 1100' right of centerline, up to 134' AGL/6420' MSL

STOCKTON, CA

STOCKTON METRO (SCK)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 20JUN19 (21168) (FAA)

TAKEOFF MINIMUMS:
Rwy 29R, 200-1¼ or std. w/min. climb of 215' per NM to 300 or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1400' prior to DER.

TAKEOFF OBSTACLE NOTES:
Rwy 11L, building 231' from DER, 401' left of centerline, 8' AGL/39' MSL.
Traverse way 413' from DER, 456' left of centerline, 49' MSL.
Rwy 11R, traverse way 61' from DER, 486' right of centerline, 43' MSL.
Lighting 122' from DER, 415' left of centerline, 2' AGL/29' MSL.
Rwy 29L, traverse way, aircraft parking, electrical system beginning 132' from DER, 235' left of centerline, up to 45' MSL.
Buildings beginning 424' from DER, 369' left of centerline, up to 61' MSL.
Building 2946' from DER, 1215' left of centerline, 102' MSL.
Building 2963' from DER, 1203' left of centerline, 97' AGL/117' MSL.
Stack, building beginning 5568' from DER, 1600' right of centerline, up to 150' AGL/171' MSL.
Rwy 29R, fence, trees beginning 181' from DER, 5' right of centerline, up to 18' AGL/41' MSL.
Fence, trees, traverse way, pole beginning 208' from DER, 1' left of centerline, up to 17' AGL/41' MSL.
Poles, traverse way beginning 255' from DER, 35' right of centerline, up to 32' AGL/55' MSL.
Poles beginning 528' from DER, 305' left of centerline, up to 31' AGL/54' MSL.
Pole 653' from DER, 515' left of centerline, 32' AGL/55' MSL.
Pole 834' from DER, 693' left of centerline, 38' AGL/60' MSL.
Pole 1587' from DER, 857' left of centerline, 48' AGL/69' MSL.
Elevator 4480' from DER, 868' right of centerline, 122' AGL/141' MSL.
Stack, buildings beginning 4599' from DER, 827' right of centerline, up to 150' AGL/171' MSL.
Elevator, building beginning 1 NM from DER 1878' left of centerline, up to 174' AGL/191' MSL.

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SUSANVILLE, CA

SUSANVILLE MUNI (SVE)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 25DEC03 (03359) (FAA)

DEPARTURE PROCEDURE:
Use AMEDEE DEPARTURE.

TRACY, CA

TRACY MUNI (TCY)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 22OCT09 (09295) (FAA)

TAKEOFF MINIMUMS:
Rwy 26, 700-3 or std. w/ a min. climb of 320' per NM to 1000.

DEPARTURE PROCEDURE:
Rwy 8, climb to 3000 via heading 073° and MOD VOR/DME R-264 to MOD VOR/DME before proceeding on course.
Rwy 12, climbing left turn to 3000 to intercept MOD VOR/DME R-264 to MOD VOR/DME before proceeding on course.
Rwy 26, climbing right turn to 3000 via heading 150° and MOD VOR/DME R-264 to MOD VOR/DME before proceeding on course.
Rwy 30, climbing right turn to 3000 via heading 150° to intercept MOD VOR/DME R-264 to MOD VOR/DME before proceeding on course.

TAKEOFF OBSTACLE NOTES:
Rwy 8, tree 472' from DER, 198' left of centerline, 50' AGL/194' MSL.
Fence 167' from DER, 8' right of centerline, 25' AGL/176' MSL.
Vehicle on road 241' from DER, 412' left of centerline, 15' AGL/183' MSL.
Vehicles on roads starting 241' from DER, 7' right of centerline, up to 15' AGL/189' MSL.

CON'T

TRACY, CA (CON'T)

TRACY MUNI (TCY) (CON'T)

Rwy 8 (CON'T), poles starting 403' from DER, 204' left of centerline, up to 54' AGL/208' MSL.
Poles starting 727' from DER, 49' right of centerline, up to 54' AGL/212' MSL.
Rwy 12, trees starting 436' from DER, 251' right of centerline, up to 72' AGL/253' MSL.
Conveyor 1995' from DER, 504' left of centerline, 66' AGL/ 270' MSL.
Poles starting 832' from DER, 396' right of centerline, up to 56' AGL/240' MSL.
Obstruction light on hopper 1934' from DER, 274' right of centerline, 74' AGL/255' MSL.
Vehicles on road starting 133' from DER, 272' left of centerline, up to 15' AGL/206' MSL.
Fence 32' from DER 405' left of centerline, 25' AGL/194' MSL.
Rwy 26, tree 1173' from DER, 180' right of centerline, 35' AGL/234'MSL.
Trees starting 1067' from DER, 125' left of centerline, up to 35' AGL/794' MSL.
Vehicle on road 236' from DER, 150' left of centerline, 15' AGL/214' MSL.
Fence 69' from DER, 133' left of centerline, 23' AGL/203' MSL.
Rising terrain 11105' from DER, 2814' left of centerline, up to 739' MSL.
Rwy 30, trees starting 438' from DER, 30' right of centerline, up to 35' AGL/209' MSL.
Tree 1079' from DER, 82' left of centerline, 35' AGL/214' MSL.
Obstruction light on hopper 985' from DER, 353' right of centerline, 72' AGL/236' MSL.
Bush 195' from DER, 364' left of centerline, 25' AGL/189' MSL.
Light pole 1149' from DER, 160' left of centerline, 47' AGL/211' MSL.
Obstruction light on building 2289' from DER, 65' right of centerline, 74' AGL/238' MSL.

TRAVIS AFB (KSUU)

FAIRFIELD, CA

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 17APR25 (25107) (USAF)

TAKEOFF MINIMUMS:
Rwy 3R, std w/min climb of 287'/NM to 4000, or 2400-3 for VCOA.
Rwys 21L/R, 3L, std w/ min climb of 311'/NM to 4000, or 2400-3 for VCOA.
VCOA:
All Rwys, obtain ATC approval for VCOA when requesting IFR clearance. For climb in visual conditions: cross Travis AFB airport at or above 2300 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 3L, taxiing acft, beginning 620' from DER, 500' left of centerline, 65' AGL/131' MSL.
Taxiing acft, beginning 620' from DER, 500' right of centerline, 65' AGL/125' MSL.
Holding acft, 1900' from DER, 385' left of centerline, 65' AGL/128' MSL.
Holding acft, 1900' from DER, 385' right of centerline, 65' AGL/125' MSL.
Rwy 21L, bldg 310' from DER, 580' left of centerline, 15' AGL/65' MSL.
Poles beginning 340' from DER, 550' left of centerline, 50' AGL/81' MSL.

TRUCKEE, CA

TRUCKEE-TAHOE (TRK)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6 29DEC22 (22363) (FAA)

TAKEOFF MINIMUMS:
Rwys 11, 20, NA-Obstacles.
DEPARTURE PROCEDURE:
Rwys 2, 29, use TRUCK DEPARTURE.
TAKEOFF OBSTACLE NOTES:
Rwy 2, trees, electrical system beginning 32' from DER, 189' left of centerline, up to 5934' MSL.
Trees beginning 448' from DER, 431' right of centerline, up to 5968' MSL.
Trees beginning 1 NM from DER, 1765' right of centerline, up to 6078' MSL.
Tree 1 NM from DER, 1920' right of centerline, 6125' MSL.
Trees beginning 1 NM from DER, 1540' right of centerline, up to 6130' MSL.
Tree 1.1 NM from DER, 2002' right of centerline, 6145' MSL.
Tree 1.1 NM from DER, 1766' right of centerline, 6153' MSL.
Trees beginning 1.1 NM from DER, 1340' right of centerline, up to 6154' MSL.
Trees beginning 1.1 NM from DER, 1302' right of centerline, up to 6182' MSL.
Trees beginning 1.1 NM from DER, 1115' right of centerline, up to 6242' MSL.
Trees beginning 1.1 NM from DER, 1067' right of centerline, up to 6248' MSL.
Trees beginning 1.2 NM from DER, 1147' right of centerline, up to 6253' MSL.
Trees beginning 1.2 NM from DER, 1351' right of centerline, up to 6266' MSL.
Trees beginning 1.2 NM from DER, 929' right of centerline, up to 6272' MSL.
Trees beginning 1.2 NM from DER, 818' right of centerline, up to 6280' MSL.
Trees beginning 1.3 NM from DER, 1744' right of centerline, up to 6281' MSL.
Trees beginning 1.3 NM from DER, 639' right of centerline, up to 6288' MSL.
Trees beginning 1.3 NM from DER, 433' right of centerline, up to 6305' MSL.
Trees, building beginning 1.4 NM from DER, 40' right of centerline, up to 6315' MSL.
Tree 1.5 NM from DER, 7' left of centerline, 6137' MSL.
Rwy 29, sign 23' from DER, 157' left of centerline, 3' AGL/5902' MSL.
Trees beginning 73' from DER, 400' right of centerline, up to 5968' MSL.
Pole 144' from DER, 217' left of centerline, 6' AGL/5905' MSL.
Trees beginning 206' from DER, 55' right of centerline, up to 5971' MSL.
CON'T

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TRUCKEE, CA (CON'T)

TRUCKEE-TAHOE (TRK) (CON'T)

Rwy 29 (CON'T), tree 213' from DER, 546' left of centerline, 5923' MSL.
Trees beginning 637' from DER, 81' left of centerline, up to 6005' MSL.
Tree 5956' from DER, 542' right of centerline, 6058' MSL.
Trees beginning 1.6 NM from DER, 1356' left of centerline, up to 6153' MSL.
Trees beginning 1.6 NM from DER, 1384' left of centerline, up to 6197' MSL.
Trees, water tower beginning 1.6 NM from DER, 1738' left of centerline, up to 6206' MSL.
Trees, pole beginning 1.6 NM from DER, 249' left of centerline, up to 6268' MSL.
Tree 1.8 NM from DER, 3070' right of centerline, 6192' MSL.
Tree 1.8 NM from DER, 2728' right of centerline, 6197' MSL.
Tree 1.8 NM from DER, 1614' right of centerline, 6204' MSL.
Trees beginning 1.8 NM from DER, 1108' right of centerline, up to 6211' MSL.
Tree 1.8 NM from DER, 2581' right of centerline, 6259' MSL.
Trees beginning 1.8 NM from DER, 2144' right of centerline, up to 6265' MSL.
Trees beginning 1.9 NM from DER, 183' right of centerline, up to 6266' MSL.
Tree 1.9 NM from DER, 3540' right of centerline, 6308' MSL.
Tree 1.9 NM from DER, 3135' right of centerline, 6351' MSL.
Trees beginning 1.9 NM from DER, 307' right of centerline, up to 6379' MSL.
Tree 2 NM from DER, 3583' right of centerline, 6391' MSL.
Trees beginning 2 NM from DER, 1301' right of centerline, up to 6458' MSL.
Trees beginning 2 NM from DER, 535' right of centerline, up to 6468' MSL.
Tree 2 NM from DER, 639' left of centerline, 6270' MSL.
Tree 2.1 NM from DER, 2242' left of centerline, 6315' MSL.
Trees beginning 2.1 NM from DER, 50' left of centerline, up to 6332' MSL.
Tree 2.1 NM from DER, 2881' right of centerline, 6502' MSL.
Trees beginning 2.1 NM from DER, 214' right of centerline, up to 6505' MSL.
Tree 2.1 NM from DER, 2769' left of centerline, 6439' MSL.
Trees beginning 2.1 NM from DER, 259' left of centerline, up to 6440' MSL.
Tree 2.1 NM from DER, 3037' right of centerline, 6547' MSL.
Trees beginning 2.1 NM from DER, 636' right of centerline, up to 6573' MSL.
Trees beginning 2.2 NM from DER, 1171' right of centerline, up to 6583' MSL.
Trees beginning 2.2 NM from DER, 733' left of centerline, up to 6460' MSL.
Trees, building beginning 2.2 NM from DER, 20' left of centerline, up to 6549' MSL.
Trees beginning 2.2 NM from DER, 525' right of centerline, up to 6612' MSL.
Trees beginning 2.3 NM from DER, 1111' right of centerline, up to 6657' MSL.
Tree beginning 2.3 NM from DER, 2179' right of centerline, up to 6682' MSL.
Trees beginning 2.3 NM from DER, 412' right of centerline, up to 6731' MSL.
Trees beginning 2.4 NM from DER, 371' right of centerline, up to 6776' MSL.
Tower 2.5 NM from DER, 2714' right of centerline, 93' AGL/6817' MSL.
Antenna, trees beginning 2.5 NM from DER, 73' right of centerline, up to 88' AGL/6822' MSL.

TULARE, CA

MEFFORD FLD (TLR)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 24MAR22 (22083) (FAA)

DEPARTURE PROCEDURE:
Rwy 13, climb on heading 135° and TTE R-294 to TULE (TTE) VOR/DME, thence...
Rwy 31, climb on heading 315° to 1500, then climbing left turn to intercept TTE R-294 to TULE (TTE) VOR/DME, thence...
...cross TTE VOR/DME at or above 3000 and climb on course

TAKEOFF OBSTACLE NOTES:
Rwy 13, trees beginning 71' from DER, 13' right of centerline, up to 60' AGL/349' MSL.
Fence 370' from DER crossing extended runway centerline, 6' AGL/280' MSL.
Hangers 200' from DER, 525' right of centerline up to 28' AGL/287 MSL.
Trees beginning 85' from DER, 27' left of centerline, up to 60' AGL/349' MSL.
Rwy 31, vehicle on road 83' from DER, 340' right of centerline, 279' MSL.
Vehicle on road beginning 210' from DER, 376' right of centerline, up to 280' MSL.
Vehicle on road 343' from DER, 415' left of centerline, 280' MSL.
Vehicle on road 492' from DER, 395' left of centerline, 281' MSL.
Vehicle on road 544' from DER, 416' right of centerline, 281' MSL.
Vehicle on road 684' from DER, 458' left of centerline, 283' MSL.
Sign 793' from DER, 424' left of centerline, 13' AGL/286' MSL.
Pole 1141' from DER, 547' left of centerline, 26' AGL/298' MSL.
Sign 1422' from DER, 542' right of centerline, 37' AGL/311' MSL.
Tower 3586' from DER, 580' left of centerline, 110' AGL/383' MSL.

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TURLOCK, CA

TURLOCK MUNI (O15)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 31OCT24 (24305) (FAA)

TAKEOFF MINIMUMS:

Rwy 30, 300-2 or std w/min climb of 210'/NM to 500.

DEPARTURE PROCEDURE:

Rwy 12, climb on heading 120° to 1200 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 12, vehicle on road, fence beginning 16' from DER, 216' right of centerline, up to 15' AGL/175' MSL.
Fence beginning 26' from DER, 162' left of centerline, up to 167' MSL.
Rwy 30, terrain beginning 7' from DER, 185' right of centerline, up to 164' MSL.
Electrical system, building beginning 435' from DER, 526' left of centerline, up to 196' MSL.
Electrical system, vehicle on road beginning 575' from DER, 221' left of centerline, up to 198' MSL.
Electrical systems, buildings, trees, tank beginning 735' from DER, 79' left of centerline, up to 34' AGL/199' MSL.

UKIAH, CA

UKIAH MUNI (UKI)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 03NOV22 (22307) (FAA)

TAKEOFF MINIMUMS:

Rwy 15, std. w/min. climb of 687' per NM to 3900 or 4000-3 for climb in visual conditions.
Rwy 33, std. w/min. climb of 350' per NM to 5000 or 4000-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

Rwy 15, climb on heading 155° to 3800 before proceeding on course.
Rwy 33, climb on heading 335° to 4000, then climbing left turn direct ENI VORTAC, continue climb in ENI holding pattern (hold S, right turns, 022° inbound) to cross ENI VORTAC at or above MEA for route of flight.

VCOA:

All runways, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Ukiah Muni airport at or above 4500 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 15, general utility 13' from DER, 118' right of centerline, 6' AGL/610' MSL.
General utility 13' from DER, 115' left of centerline, 4' AGL/606' MSL.
Building, road beginning 34' from DER, 245' right of centerline, up to 16' AGL/625' MSL.
Tree, road beginning 112' from DER, 124' left of centerline, up to 629' MSL.
Building, sign, road beginning 116' from DER, 246' right of centerline, up to 628' MSL.
Pole 275' from DER, 357' right of centerline, 28' AGL/634' MSL.
Pole, road, building beginning 294' from DER, 4' right of centerline, up to 30' AGL/636' MSL.
Tree, pole beginning 527' from DER, 283' left of centerline, up to 647' MSL.
Pole, tree, building beginning 530' from DER, 150' right of centerline, up to 40' AGL/645' MSL.
Tree, building, pole beginning 555' from DER, 28' right of centerline, up to 696' MSL.
Trees beginning 1026' from DER, 338' left of centerline, up to 670' MSL.
Trees beginning 2193' from DER, 33' left of centerline, up to 674' MSL.
Trees beginning 2543' from DER, 418' right of centerline, up to 712' MSL.
Tree 2755' from DER, 31' left of centerline, 698' MSL.
Rwy 33, general utility 1' from DER, 137' left of centerline, 3' AGL/621' MSL.
Pole, road, tree beginning 27' from DER, 157' right of centerline, up to 27' AGL/635' MSL.
Terrain 130' from DER, 471' left of centerline, 623' MSL.
Pole, road beginning 269' from DER, 154' right of centerline, up to 36' AGL/645' MSL.
Tree 461' from DER, 555' left of centerline, 654' MSL.
Pole, road, tree beginning 543' from DER, 12' left of centerline, up to 53' AGL/679' MSL.
Pole beginning 572' from DER, 505' right of centerline, up to 41' AGL/647' MSL.
Transmission line, sign, tree beginning 894' from DER, 288' left of centerline, up to 65' AGL/691' MSL.
Transmission line, building, tree beginning 931' from DER, 411' right of centerline, up to 61' AGL/667' MSL.
Tree, pole, sign beginning 961' from DER, 9' left of centerline, up to 693' MSL.
Tree, transmission line, pole beginning 1357' from DER, 161' right of centerline, up to 668' MSL.
Trees beginning 1670' from DER, 407' right of centerline, up to 679' MSL.
Trees beginning 2593' from DER, 906' left of centerline, up to 708' MSL.
Trees beginning 2788' from DER, 878' left of centerline, up to 709' MSL.
Tree 5383' from DER, 1848' left of centerline, 752' MSL.
Tree 5948' from DER, 1814' left of centerline, 767' MSL.

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VACAVILLE, CA

NUT TREE (VCB)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5 17AUG17 (17229) (FAA)

TAKEOFF MINIMUMS:

Rwy 20, std. w/ min. climb of 410' per NM to 1600, or 1200-2½ for VCOA .

DEPARTURE PROCEDURE:

Rwy 2, climbing right turn to intercept SAC R-242 to SAC VORTAC to 2000 before proceeding on course.

Rwy 20, climbing left turn to intercept SAC R-242 to SAC VORTAC to 2000 before proceeding on course.

VCOA:

Rwy 20, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Nut Tree airport eastbound at or above 1300 then climb to 2000 on SAC R-242 TO SAC VORTAC, proceed on course.

TAKEOFF OBSTACLE NOTES:

Rwy 2, parking lot, pole beginning 51' from DER, 290' right of centerline, up to 15' AGL/119' MSL.
Fence beginning 99' from DER, 210' left of centerline, up to 118' MSL.
Pole, parking lot, tree beginning 137' from DER, 417' left of centerline, up to 148' MSL.
Tree 948' from DER, 732' right of centerline, 141' MSL.
Pole 1099' from DER, 612' left of centerline, 149' MSL.
Rwy 20, terrain beginning 8' from DER, 253' right of centerline, up to 117' MSL.
Tree 61' from DER, 411' left of centerline, 51' AGL/163' MSL.
Terrain 140' from DER, 432' right of centerline, 124' MSL.
Tree 144' from DER, 538' left of centerline, 85' AGL/197' MSL.
Pole, terrain, fence beginning 206' from DER, 167' right of centerline, up to 12' AGL/130' MSL.
Tree 259' from DER, 506' left of centerline, 211' MSL.
Pole, ant, tree beginning 362' from DER, 497' left of centerline, up to 125' AGL/239' MSL.
Tree 544' from DER, 454' right of centerline, 135' MSL.
Tree, road (north) beginning 710' from DER, 393' right of centerline, up to 164' MSL.
Tree, pole, ant, terrain, chimney/smokestack, sign beginning 825' from DER, 22' left of centerline, up to 264' MSL.
Tree, pole beginning 1576' from DER, 344' right of centerline, up to 190' MSL.
T-l tower, pole beginning 1860' from DER, 82' right of centerline, up to 55' AGL/191' MSL.
Terrain 2985' from DER, 1295' right of centerline, 195' MSL.
Terrain 3087' from DER, 1146' right of centerline, 198' MSL.
Terrain 3090' from DER, 1303' right of centerline, 210' MSL.
Terrain beginning 3155' from DER, 1128' right of centerline, up to 217' MSL.
Tree, terrain beginning 3252' from DER, 535' right of centerline, up to 241' MSL.
Terrain beginning 3635' from DER, 54' right of centerline, up to 248' MSL.
Terrain 4058' from DER, 110' right of centerline, 254' MSL.
Terrain, tree beginning 4104' from DER, 18' right of centerline, up to 263' MSL.
Tree 5765' from DER, 1605' right of centerline, 264' MSL.

VISALIA, CA

VISALIA MUNI (VIS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5 24MAR22 (22083) (FAA)

DEPARTURE PROCEDURE:

Rwy 12, climb on heading 121° to 1500, then climbing right turn direct TTE VOR/DME thence...

Rwy 30, climb on heading 301° to 1600, then climbing left turn to intercept the TTE R-300 to TULE (TTE) VOR/DME thence...

...cross TTE VOR/DME at or above MEA for the route of flight before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 12, vehicle on road 175' from DER, 252' right of centerline, 307' MSL.
Vehicle on road 178' from DER, 248' left of centerline, 308' MSL.
Tree 758' from DER, 616' right of centerline, 62' AGL/356' MSL.
Tree 1302' from DER, 817' left of centerline, 61' AGL/356' MSL.
Tree 3155' from DER, 737' left of centerline, 85' AGL/380' MSL.
Rwy 30, sign 17' from DER, 249' left of centerline, 3' AGL/292' MSL.
Fence beginning 59' from DER, 416' left of centerline, up to 7' AGL/296' MSL.
Trees, vehicle on road beginning 186' from DER, 269' left of centerline, up to 40' AGL/330' MSL.
Building 291' from DER, 249' right of centerline, 15' AGL/305' MSL.
Trees, vehicle on road beginning 791' from DER, 232' left of centerline, up to 332' MSL.
Building 849' from DER, 663' right of centerline, 327' MSL.
Tree 2663' from DER, 341' left of centerline, 370' MSL.
Tree 3035' from DER, 415' left of centerline, 379' MSL.

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WATSONVILLE, CA

WATSONVILLE MUNI (WVI)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5A 13SEP18 (18256) (FAA)

TAKEOFF MINIMUMS:

Rwy 27, NA - airport obstacles.

DEPARTURE PROCEDURE:

Rwys 2, 9, 20, use WATSONVILLE DEPARTURE.

TAKEOFF OBSTACLE NOTES:

Rwy 2, lighting 8' from DER, 84' left of centerline, 1' AGL/159' MSL.
Lighting 9' from DER, 84' right of centerline, 158' MSL.
Pole 14' from DER, 349' left of centerline, 205' MSL.
Pole, building, vehicles on road, tree and fence beginning 15' from DER, 322' left of centerline, up to 50' AGL/213' MSL.
Trees beginning 278' from DER, 414' right of centerline, up to 188' MSL.
pole, vehicles on road, stack, tree and building beginning 429' from DER, 157' left of centerline, up to 58' AGL/220' MSL.
pole, building and tree beginning 808' from DER, 22' right of centerline, up to 40' AGL/198' MSL.
Tree and transmission line beginning 1021' from DER, 137' right of centerline, up to 222' MSL.
Pole 1174' from DER, 328' right of centerline, 57' AGL/224' MSL.
Trees beginning 1275' from DER, 298' right of centerline, up to 242' MSL.
Tree 1345' from DER, 320' left of centerline, 236' MSL.
Tree 2249' from DER, 371' left of centerline, 264' MSL.
Rwy 9, tree and pole beginning 1' from DER, 152' left of centerline, up to 157' MSL.
Pole 65' from DER, 301' right of centerline, 31' AGL/148' MSL.
tree, fence, building, vehicles on road and pole beginning 74' from DER, 251' left of centerline, up to 160' MSL.
Pole, tree, building, tank and stack beginning 210' from DER, 139' left of centerline, up to 177' MSL.
Pole 231' from DER, 250' right of centerline, 32' AGL/153' MSL.
Trees beginning 312' from DER, 560' right of centerline, up to 173' MSL.
Tower, pole and tree beginning 828' from DER, 136' left of centerline, up to 52' AGL/181' MSL.
Trees beginning 915' from DER, 146' right of centerline, up to 197' MSL.
Tree 1815' from DER, 365' left of centerline, 215' MSL.
Tower 4697' from DER, 1365' right of centerline, 189' AGL/292' MSL.
Rwy 20, tree 57' from DER, 500' left of centerline, 153' MSL.
Fence 57' from DER, 268' right of centerline, 7' AGL/143' MSL.
Pole 95' from DER, 467' left of centerline, 175' MSL.
pole, vehicles on road and tree beginning 96' from DER, 377' left of centerline, up to 50' AGL/183' MSL.
Transmission line 848' from DER, 505' left of centerline, 44' AGL/184' MSL.
Tree and transmission line beginning 919' from DER, 520' left of centerline, up to 190' MSL.
Tree 1153' from DER, 286' right of centerline, 169' MSL.
Tree 1207' from DER, 615' left of centerline, 197' MSL.
Tree, building and transmission line beginning 1267' from DER, 318' left of centerline, up to 203' MSL.
Tree 1336' from DER, 7' right of centerline, 177' MSL.
Tree 1337' from DER, 46' right of centerline, 192' MSL.
Tree 2201' from DER, 776' right of centerline, 240' MSL.

WEED, CA

WEED (O46)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 22JUN17 (17173) (FAA)

DEPARTURE PROCEDURE:

Use FOBRO (RNAV) DEPARTURE.

WILLITS, CA

ELLS FLD/WILLITS MUNI (O28)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 05AUG04 (21336) (FAA)

DEPARTURE PROCEDURE:

Rwy 16, use MENDOCINO RNAV DEPARTURE.
Rwy 34, use FLUEN RNAV DEPARTURE.

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WILLOWS, CA

WILLOWS/GLENN COUNTY (WLW)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 22JUN17 (22027) (FAA)

DEPARTURE PROCEDURE:

Rwy 13, climbing right turn heading 150 to 1000 thence...
Rwy 16, climbing left turn heading 145 to 1000 thence...
Rwy 31, climbing left turn heading 140 to 1000 thence...
Rwy 34, climbing right turn heading 150 to 1000 thence…
...all aircraft continue climb direct ILA VORTAC before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 13, vehicles beginning 325' from DER, 563' left of centerline, up to 17' AGL/146' MSL.
Rwy 16, poles beginning 14' from DER, 409' right of centerline, up to 35' AGL/172' MSL.
Tree 232' from DER, 436 left of centerline, 149' MSL.
Rwy 34, tower 869' from DER, 434' right of centerline, 55' AGL/196 MSL.
Pole 909' from DER, 305 right of centerline, 24' AGL/165' MSL.

WOODLAND, CA

WATTS-WOODLAND (O41)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 07MAY09 (09127) (FAA)

DEPARTURE PROCEDURE:

Rwy 18, climb heading 185° and ILA R-151 to EMBER INT/ILA 48 DME before proceeding on course.
Rwy 36, climbing left turn via heading 320° and ILA R-145 to ILA VORTAC before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 18, tree 2478' from DER, 283' right of centerline, 100' AGL/249' MSL.
Vehicle on road 192' from DER, on centerline, 15' AGL/144' MSL.
Rwy 36, tree 453' from DER, 69' left of centerline, 100' AGL/224' MSL.
Vehicle on road 350' from DER, on centerline, 15' AGL/134' MSL.
Tree 4489' from DER, 1688' left of centerline, 100' AGL/234' MSL.

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INSTRUMENT APPROACH PROCEDURE CHARTS

IFR ALTERNATE AIRPORT MINIMUMS

Pilots must review the IFR Alternate Minimums Notes to determine alternate airport suitability. ⚠NA designation on the approach chart means that pilots may not use that approach as an alternate due to unmonitored facility, absence of weather reporting service, or lack of adequate navigation coverage. Approaches with the ⚠NA designation are not listed in this section. ⚠ designation on the approach chart indicates that the approach procedure has non-standard minimums (for aircraft other than helicopters) or restrictions (for all users) for its use as an alternate. A procedure is not authorized for alternate flight planning purposes when local weather is not available.

MILITARY USERS NOTE: For IFR alternate airport and minima planning, refer to appropriate service directives.

Alternate Minima (ref: 14 CFR 91.169)

	Precision Approach	Non-Precision Approach
Standard	**600-2**	**800-2**
⚠Non-Standard or restrictions	As indicated below	As indicated below
Helicopters	For the selected approach: Ceiling: 200' above published ceiling Visibility: the greater of 1 SM visibility or the published visibility	

Note: For alternate airport flight planning purposes, precision approach operations include: ILS, PAR, and GLS, and Non-Precision approach operations include: NDB, VOR, LOC, TACAN, LDA, SDF, ASR, RNAV (GPS) and RNAV (RNP).

NAME — ALTERNATE MINIMUMS

ALTURAS, CA
ALTURAS
MUNI (AAT)……**RNAV (GPS) Rwy 31**
Category B, 900-2.

ARCATA/EUREKA, CA
CALIFORNIA REDWOOD COAST-HUMBOLDT
COUNTY (ACV)……**RNAV (GPS) Rwy 1**[1]
RNAV (GPS) Rwy 32[2]
[1]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.
[2]Category D, 800-2¼.

ATWATER, CA
CASTLE (MER)……**ILS or LOC Rwy 31**
NA when local weather not available.
NA when control tower closed.

AUBURN, CA
AUBURN MUNI (AUN)……**RNAV (GPS) Rwy 7**
Category B, 900-2.

BISHOP, CA
BISHOP (BIH)……**LDA Rwy 17**[1]
RNAV (GPS) Y Rwy 12[2]
RNAV (GPS) Z Rwy 12[3]
[1]Categories A, B, 2300-2; Categories C, D, 2300-3.
[2]Categories A, B 2500-2; Category C, 2500-3.
[3]Categories A, B, 2300-2; Category C, 2300-3.

NAME — ALTERNATE MINIMUMS

BYRON, CA
BYRON (C83)……**RNAV (GPS) Rwy 30**
Category D, 800-2½.

CHESTER, CA
ROGERS FLD (O05)……**RNAV (GPS) Rwy 34**
Category A, 1000-2; Category B, 1200-2; Category C, 1200-3.

CHICO, CA
CHICO RGNL (CIC)……**ILS or LOC Rwy 13L**
RNAV (GPS) Rwy 13L
NA when local weather not available.

COALINGA, CA
NEW COALINGA MUNI
MUNI (C80)……**RNAV (GPS) Rwy 30**
NA when local weather not available.
Category C, 800-2¼; Category D, 1100-3.

CONCORD, CA
BUCHANAN
FLD (CCR)……**LDA Rwy 19R**[12]
RNAV (GPS) Rwy 19R[3]
VOR Rwy 19R[3]
[1]NA when control tower closed.
[2]Category C, 1000-2¾; Category D, 1300-3.
[3]Categories A, B, 1000-2; Category C, 1000-3; Category D, 1300-3.

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NAME ALTERNATE MINIMUMS

COLUMBIA, CA
COLUMBIA (O22)..... **RNAV (GPS) Rwy 35**
NA when local weather not available.
Categories A, B, 1100-2; Category C, 1100-3.

CRESCENT CITY, CA
JACK MC NAMARA
FLD (CEC)..... **RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 36
VOR Rwy 12
VOR/DME Rwy 12
VOR/DME Rwy 36
NA when local weather not available.

DAVIS, CA
UNIVERSITY (EDU)..... **RNAV (GPS) Rwy 17**
RNAV (GPS) Rwy 35
NA when local weather not available.

FRESNO, CA
FRESNO CHANDLER
EXEC (FCH)..... **RNAV (GPS) Rwy 12**
NA when local weather not available.

FRESNO YOSEMITE
INTL (FAT)..... **ILS Y or LOC Y Rwy 29R[1]**
LOC Y Rwy 11L[2]
TACAN Rwy 11L[3]
TACAN Rwy 29R[2]
[1]LOC, Category E, 900-2¾.
[2]Category E, 900-2¾.
[3]Category E, 900-2.

GRASS VALLEY, CA
NEVADA
COUNTY (GOO)..... **RNAV (GPS) Rwy 7**
NA when local weather not available.
Category D, 800-2¼.

HAYWARD, CA
HAYWARD EXEC (HWD)..... **LOC Rwy 28L[1]**
RNAV (GPS) Rwy 28L
NA when local weather not available.
Category D, 900-2¾.
[1]NA when control tower closed.

HOLLISTER, CA
HOLLISTER MUNI (CVH)..... **RNAV (GPS) Rwy 13[1]**
RNAV (GPS) Rwy 31[2]
NA when local weather not available.
[1]Categories A, B, C, 900-2½.
[2]Category C, 800-2½.

LINCOLN, CA
LINCOLN RGNL/KARL
HARDER FLD (LHM)..... **RNAV (GPS) Rwy 15**
RNAV (GPS) Rwy 33
NA when local weather not available.

NAME ALTERNATE MINIMUMS

LITTLE RIVER, CA
LITTLE RIVER (LLR)..... **RNAV (GPS) Rwy 29**
Category D, 900-2¾.

LIVERMORE, CA
LIVERMORE MUNI (LVK)..... **ILS Rwy 25R[12]**
LOC Rwy 25R[34]
RNAV (GPS) Rwy 25R[5]
[1]NA when local weather not available.
[2]NA when control tower closed.
[3]NA when tower closed.
[4]Categories A, B, 1600-2; Categories C, D, 1600-3.
[5]Category D, 1400-3.

MAMMOTH LAKES, CA
MAMMOTH
YOSEMITE (MMH)..... **RNAV (GPS) Rwy 27**
Categories A, B, 1300-2; Category C, 1300-3.

MADERA, CA
MADERA MUNI (MAE)..... **RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30
NA when local weather not available.

MARIPOSA, CA
MARIPOSA-
YOSEMITE (MPI)..... **RNAV (GPS)-A**
NA when local weather not available.
Category A, 1900-2; Category B, 2000-2.

MARYSVILLE, CA
YUBA COUNTY (MYV)..... **RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
NA when local weather not available.

MODESTO, CA
MODESTO CITY-COUNTY-HARRY SHAM
FLD (MOD)..... **ILS or LOC Rwy 28R[12]**
RNAV (GPS) Rwy 28R[3]
[1]NA when control tower closed.
[2]LOC, Category D, 800-2¼.
[3]Category D, 800-2¼.

MONTEREY, CA
MONTEREY
RGNL (MRY)..... **ILS or LOC Rwy 10R[12]**
LOC Rwy 28L[13]
RNAV (GPS) Rwy 10R[4]
RNAV (GPS) Y Rwy 28L[5]
RNAV (RNP) Z Rwy 28L[6]
[1]NA when control tower closed.
[2]LOC, Category C, 1100-3; Category D, NA.
[3]Categories A, B, 1700-2, Categories C, D, 1700-3.
[4]Category C, 1100-3; Category D, 800-2½.
[5]Categories A, B, 900-2, Category C, 1100-3.
[6]Categories A, B, C, 1000-3.

SW-2, 07 AUG 2025 to 02 OCT 2025

NAME	ALTERNATE MINIMUMS

MOUNTAIN VIEW, CA
MOFFET FEDERAL AIRFIELD (NUQ)…….....…**ILS or LOC Rwy 32R**[12]
LOC Rwy 14L[136]
RNAV (GPS) Rwy 14L[4]
RNAV (GPS) Rwy 14R[4]
RNAV (GPS) Rwy 32L[4]
RNAV (GPS) Rwy 32R[36]
TACAN Rwy 32L[15]
TACAN Rwy 32R[15]
[1]NA when tower closed.
[2]LOC, Category D, 800-2½; Category E, 1000-3.
[3]Category D, 800-2½.
[4]Category D, 800-2¼.
[5]Category D, 800-2½; Category E, 1000-3.
[6]NA when local weather not available.

NAPA, CA
NAPA COUNTY (APC)..……..**ILS or LOC Z Rwy 1L**[12]
RNAV (GPS) Rwy 6[3]
RNAV (GPS) Rwy 19R[4]
RNAV (GPS) Y Rwy 1L[5]
VOR Rwy 6[6]
NA when local weather not available.
[1]NA when control tower closed.
[2]LOC, Categories C, D, 1300-3.
[3]Categories A, B, 1400-2; Categories C, D, 1400-3.
[4]Categories C, D, 1300-3.
[5]Categories A, B, C, D, 1300-5.
[6]Categories A, B, 1100-2; Categories C, D, 1300-3.

NOVATO, CA
GNOSS FLD (DVO)……....**RNAV (GPS) Rwy 13**
NA when local weather not available.
Categories A, B, 1100-2.

OAKLAND, CA
OAKLAND INTL (OAK)……**ILS or LOC Rwy 12**[1]
ILS or LOC Rwy 28R[2]
ILS or LOC Rwy 30[2]
RNAV (GPS) Rwy 10L[3]
RNAV (GPS) Rwy 10R[3]
RNAV (GPS) Y Rwy 12[3]
RNAV (GPS) Y Rwy 28L[3]
RNAV (GPS) Y Rwy 28R[3]
RNAV (GPS) Y Rwy 30[3]
VOR Rwy 10R[3]
[1]ILS, Category C, 700-2; Category D, 1400-3; LOC, Category D, 1400-3.
[2]LOC, Category D, 1400-3.
[3]Category D, 1400-3.

PALO ALTO, CA
PALO ALTO (PAO)……...**RNAV (GPS) Rwy 31**
NA when control tower closed.

PETALUMA, CA
PETALUMA MUNI (O69)…….**RNAV (GPS) Rwy 29**
NA when local weather not available.
Category B, 900-2.

PLACERVILLE, CA
PLACERVILLE (PVF)……**RNAV (GPS) Rwy 5**
NA when local weather not available.
Category B, 900-2.

PORTERVILLE, CA
PORTERVILLE MUNI (PTV)……**VOR-A**
NA when local weather not available.

RED BLUFF, CA
RED BLUFF MUNI (RBL)……**RNAV (GPS) Rwy 15**[1]
RNAV (GPS) Rwy 33
VOR Rwy 33
VOR/DME Rwy 15[1]
NA when local weather not available.
[1]Category D, 800-2¼.

REDDING, CA
REDDING RGNL (RDD)……....…**ILS or LOC Rwy 34**[12]
LOC BC Rwy 16[13]
RNAV (GPS) Rwy 16[3]
RNAV (GPS) Rwy 34[3]
VOR Rwy 34[4]
NA when local weather not available.
[1]NA when control tower closed.
[2]LOC, Category D, 900-2¾; Category E, 900-3.
[3]Category D, 900-2¾.
[4]Categories A, B, 1200-2; Categories C, D, 1200-3.

SACRAMENTO, CA
SACRAMENTO EXE (SAC)…..**ILS or LOC Rwy 2**[12]
RNAV (GPS) Rwy 2[3]
VOR Rwy 2[3]
NA when local weather not available.
[1]NA when control tower closed.
[2]LOC, Category D, 800-2½.
[3]Category D, 800-2½.

SACRAMENTO INTL (SMF)...……**ILS or LOC Rwy 17L**[1]
RNAV (GPS) Y Rwy 17L[2]
RNAV (GPS) Y Rwy 35R[2]
[1]LOC, Category D, 900-2¾.
[2]Category D, 900-2¾.

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NAME	ALTERNATE MINIMUMS

SACRAMENTO, CA (CON'T)
SACRAMENTO MATHER (MHR).....**ILS Y or Y LOC Rwy 22L[12]**
ILS Z or Z LOC Rwy 22L[12]
RNAV (GPS) Rwy 4R
RNAV (GPS) Rwy 22L[3]
RNAV (GPS) Rwy 22R[3]
NA when local weather not available.
[1]NA when control tower closed.
[2]LOC, Category D, 800-2¼; Category E, 800-2½.
[3]Category D, 800-2¼.

SALINAS, CA
SALINAS MUNI (SNS).....**ILS Rwy 31[1]**
LOC Rwy 31[12]
RNAV (GPS) Rwy 8[3]
RNAV (GPS) Rwy 13[2]
RNAV (GPS) Y Rwy 31[2]
RNAV (GPS) Z Rwy 31
VOR Rwy 13[4]
NA when local weather not available.
[1]NA when control tower closed.
[2]Category D, 1600-3.
[3]Category D, 1500-3.
[4]Category D, 900-2¾.

SAN ANDREAS, CA
CALAVERAS COUNTY/MAURY RASMUSSEN FLD (CPU).....**RNAV (GPS) Rwy 31**
Category C, 1100-3.

SAN CARLOS, CA
SAN CARLOS (SQL).....**RNAV (GPS) Y Rwy 30[1]**
RNAV (GPS) Z Rwy 30[2]
NA when local weather not available.
[1]Categories A, B, 1300-2.
[2]Categories A, B, 900-2.

NAME	ALTERNATE

SAN FRANCISCO, CA
SAN FRANCISCO INTL (SFO).....**ILS or LOC Rwy 19L[1]**
ILS or LOC Rwy 28L[2]
ILS or LOC Rwy 28R[3]
RNAV (GPS) Rwy 10L[4]
RNAV (GPS) Rwy 19L[5]
RNAV (GPS) Rwy 28L[6]
RNAV (GPS) Y Rwy 10R[7]
RNAV (GPS) Y Rwy 19R[8]
RNAV (GPS) Z Rwy 28R[9]
RNAV (RNP) Z Rwy 10R[a]
[1]ILS, Categories A, B, C, D, 800-2; LOC, Categories A, B, 1800-2; Categories C, D, 1800-3.
[2]ILS, Categories A, B, C, D, 800-2½; LOC, Category A, 900-2; Category B, 1000-2; Category C, 1600-3; Category D, 900-2½.
[3]LOC, Category B, 1000-2; Category C, 1600-3.
[4]Categories A, B, 1100-2; Categories C, D, 1100-3.
[5]Categories A, B, 1100-2; Categories C, D, 1100-2½.
[6]Categories A, B, 1100-2; Category C, 1600-3; Category D, 1100-2½.
[7]Categories A, B, 1200-2; Category C, D, 1200-3.
[8]Categories A, B, C, D, 1400-4.
[9]Category B, 1100-2; Category C, 1700-3.
[a]Categories A, B, C, D, 1100-4.

SAN JOSE, CA
NORMAN Y MINETA SAN JOSE INTL (SJC).....**ILS or LOC Rwy 12R**
ILS or LOC Rwy 30L
NA when control tower closed.

SAN MARTIN, CA
SAN MARTIN (E16).....**RNAV (GPS) Rwy 32**
NA when local weather not available.
Categories A, B, 1100-2.

SANTA ROSA, CA
CHARLES M SCHULZ/SONOMA COUNTY (STS).....**ILS or LOC Rwy 32[123]**
RNAV (GPS) Rwy 2[4]
RNAV (GPS) Rwy 14[4]
RNAV (GPS) Rwy 32[14]
[1]NA when local weather not available.
[2]NA when control tower closed.
[3]LOC, Category C, 1000-3; Category D, 1300-3.
[4]Category C, 1000-3; Category D, 1300-3.

STOCKTON, CA
STOCKTON METRO (SCK).....**ILS or LOC Rwy 29R**
NA when control tower closed.

NAME	ALTERNATE MINIMUMS	NAME	ALTERNATE

SUSANVILLE, CA

SUSANVILLE
MUNI (SVE)……..……..**RNAV (GPS) Rwy 29**
Categories A, B, 1700-2; Category C, 1700-3;
Category D, 2000-3.
NA when local weather not available.

TRUCKEE, CA

TRUCKEE-TAHOE
(TRK)…….....**RNAV (GPS)-A**[1]
RNAV (GPS) Rwy 11[2]
RNAV (GPS) Rwy 20[3]
NA when local weather not available.
[1]Categories A, B, 1600-2; Category C, 1800-3.
[2]Categories A, B, 1900-2; Category C, 1900-3.
[3]Category A, 1300-2; Category B, 1400-2;
Category C, 1800-3.

UKIAH, CA

UKIAH MUNI (UKI)…….……**LOC Rwy 15**[1]
RNAV (GPS)-B[2]
RNAV (GPS) RWY 15[1]
VOR-A[3]
[1]Categories A, B, 1700-2; Category C, 1700-3;
Category D, 2200-3.
[2]Categories A, B, 1500-2; Category C, 1600-3;
Category D, 2200-3.
[3]Categories A, B, 2800-2; Categories C, D, 2800-3.

VACAVILLE, CA

NUT TREE (VCB)……**RNAV (GPS) Rwy 20**[12]
VOR-A[3]
[1]NA when local weather not available.
[2]Category C, 900-2½; Category D, 1400-3.
[3]Categories A, B, 900-2; Category C, 900-2½;
Category D, 1300-3.

VISALIA, CA

VISALIA
MUNI (VIS)….....**RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30
NA when local weather not available.

WATSONVILLE, CA

WATSONVILLE
MUNI (WVI)……**RNAV (GPS) Rwy 2**[1]
VOR-A[2]
NA when local weather not available.
[1]Category D, 1000-3.
[2]Categories A, B, 1200-2; Categories C, D, 1200-3.

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RADAR INSTRUMENT APPROACH MINIMUMS

LEMOORE NAS (REEVES FIELD) (KNLC)

Lemoore, CA Amdt 9 12JUN25 (25163) (USN) ELEV **228**

RADAR - (E) 125.95 270.8x 314.0x 317.575x 322.45x 323.15x 336.4x 346.375x 348.75x 353.55x 363.7x 370.875x 377.075x

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR[1 2]	32L[3 4]	3.0°/40/762	ABCDE	**327**-¼	100	(100-¼)
	14L	3.0°/54/1019	ABCDE	**319**-½	100	(100-½)
	14R[5]	3.0°/52/998	ABCDE	**328**-½	100	(100-½)
	32R[5]	3.0°/46/876	ABCDE	**321**-½	100	(100-½)
ASR[2]	32L[6 7]		AB	**600**-½	373	(400-½)
			CDE	**600**-⅝	373	(400-⅝)
	14L		AB	**680**-1	461	(500-1)
			CDE	**680**-1⅜	461	(500-1⅜)
	14R[5]		AB	**760**-1	532	(600-1)
			CDE	**760**-1½	532	(600-1½)
	32R[5]		AB	**780**-1	559	(600-1)
			CDE	**780**-1⅝	559	(600-1⅝)
CIR[8]	14L, 32L		AB	**680**-1	452	(500-1)
			C	**680**-1½	452	(500-1½)
			D	**780**-2	552	(600-2)
			E	**800**-2	572	(600-2)
	14R		AB	**760**-1	532	(600-1)
			C	**760**-1½	532	(600-1½)
			D	**780**-2	552	(600-2)
			E	**800**-2	572	(600-2)
	32R		AB	**780**-1	552	(600-1)
			C	**780**-1⅝	552	(600-1⅝)
			D	**780**-2	552	(600-2)
			E	**800**-2	572	(600-2)

[1]No-NOTAM MP: PAR-Rwy 14R-32L 1600-2400Z++ Mon, Rwy 14L-32R 1600-2400Z++ Wed.
[2]Simultaneous approaches authorized.
[3]When ALS inop, increase vis to ½ mile.
[4]Caution: WCH 15 ft for group 4 less than required 20 ft.
[5]Pattern at 3000 ft.
[6]When ALS inop, increase vis to 1 mile.
[7]Step Down Fix at 3 NM from thld, 1100 min.
[8]Circling authorized only from ASR.

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RADAR INSTRUMENT APPROACH MINIMUMS

RADAR MINS
25163

N1

24305

LAND AND HOLD-SHORT OPERATIONS (LAHSO)

LAHSO is an acronym for "Land and Hold-Short Operations." These operations include landing and holding short of an intersection runway, an intersecting taxiway, or other predetermined points on the runway other than a runway or taxiway. Measured distance represents the available landing distance on the landing runway, in feet.

Specific questions regarding these distances should be referred to the air traffic manager of the facility concerned. The Aeronautical Information Manual contains specific details on hold-short operations and markings.

CITY/AIRPORT	LDG RWY	HOLD-SHORT POINT	AVBL LDG DIST
NAPA, CA			
NAPA COUNTY (APC)	24	01L-19R	3,700 feet
SANTA ROSA, CA			
CHARLES M SCHULZ/SONOMA COUNTY (STS)	02	14-32	4,608 feet

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HOT SPOTS

An "airport surface hot spot" is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

A "hot spot" is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles or ellipses designated as "HS 1", "HS 2", etc. and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

CITY/AIRPORT	HOT SPOT	DESCRIPTION*
ATWATER, CA		
CASTLE (MER)	HS 1	Twy A, Twy A1, Twy B, and Twy G complex int.
	HS 2	Twy A and southeast ramp, traffic congestion.
BEALE AFB, CA		
BEALE AFB (BAB)	HS 1	Twy B, high-speed U-2 mobile traffic when Rwy 15 in use.
	HS 2	Twy E, high-speed U-2 mobile traffic when Rwy 33 in use.
	HS 3	Twy F, in the vicinity of Twy C, Twy L, and Twy K. Frequent U-2 and high speed mobile traffic, slope of the twy limits visibility in both directions.
CONCORD, CA		
BUCHANAN FLD (CCR)	HS 1	Rwy 32L and run-up area, Twy J.
	HS 2	Complex int at Rwy 01R-19L, Twy J, Twy A, Twy C, and Twy K.
	HS 3	Rwy 32L apch, Twy A.
	HS 4	Rwy 32R, Twy B, Twy J, and the run up area.
FAIRFIELD, CA		
TRAVIS AFB (SUU)	HS 1	Twy G/H and Rwy 21R/03L intersection is vehicle crossing and single Rwy 21L/03R entry/exit point. Expect high vehicle and aircraft traffic.
HAYWARD, CA		
HAYWARD EXEC (HWD)	HS 1	Rwy 10L-28R, Twy E and Twy A.
	HS 2	Area not visible from ATCT.
	HS 3	Area not visible from ATCT.
	HS 4	Area not visible from ATCT.
	HS 5	Rwy 28L hold bars on Twy A1 and Twy Z1.
LIVERMORE, CA		
LIVERMORE MUNI (LVK)	HS 1	Pilots instructed to hold short of Rwy 25R at Twy B sometimes fail to comply. Pilots sometimes land on Rwy 25R without clearance.
	HS 2	Pilots instructed to hold short of Rwy 25L at Twy C sometimes fail to comply.
	HS 3	Pilots instructed to hold short of Rwy 07L at Twy H sometimes fail to comply.
	HS 4	Pilots instructed to hold short of Rwy 07R at Twy G sometimes fail to comply.
	HS 5	Pilots instructed to hold short of Rwy 25R at Twy G sometimes fail to comply.
	HS 6	Pilots may be confused at the intersections of Twy J, Twy A, and Twy G sometimes fail to comply with taxi instructions.
NAPA, CA		
NAPA COUNTY (APC)	HS 1	Twy A, Twy A2, Twy C, Twy E and the ramp.
	HS 2	Rwy 24, Twy A.
	HS 3	Rwy 24 and Rwy 01L.
OAKLAND, CA		
OAKLAND INTL (OAK)	HS 1	Rwy 28R, Twy A and Twy B.
	HS 2	Rwy 10L-28R, Twy H, Twy G, Twy C and Twy D.
	HS 3	Runway incursion risk. Twy C between Twy C1 and Twy J. APCH/DEP hold in effect when instructed by ATC.

(SEE CONTINUATION PAGE FOR MORE LISTINGS)

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25051

HOT SPOTS

(CONTINUED)

CITY/AIRPORT	HOT SPOT	DESCRIPTION*
SACRAMENTO, CA		
SACRAMENTO EXEC (SAC)	HS 1	Inbound Twy A and outbound Twy B.
	HS 2	Portion of Twy E not visible from twr.
SACRAMENTO, CA		
SACRAMENTO INTL (SMF)	HS 1	Twy Y2 between Concourse A and Concourse B.
	HS 2	Vehicle Service Road crossing Twy W and Twy Y.
	HS 3	Twy A at the int of Twy A13, Twy G1 and Twy P.
SAN FRANCISCO, CA		
SAN FRANCISCO INTL (SFO)	HS 1	Complex int Twy B and Twy F.
	HS 2	Rwy 01L-19R, Twy C and Twy E.
	HS 3	Acft exiting Rwy 28R on Twy T: Taxi aircraft up to and hold short of Rwy 28L unless specifically cleared to cross. Twy T has hold short lines for both Rwy 28R and Rwy 28L. Be sure to identify the correct hold short line for Rwy 28L to ensure aircraft tail is fully clear of Rwy 28R.
	HS 4	Runway incursion risk. ATC may request aircraft to hold on a RWY short of an intersection with another RWY. At runway intersections, vertical holding position signs exist with no surface painted markings. When instructed, pilots must hold short of the holding position signs.
SAN JOSE, CA		
NORMAN Y. MINETA SAN JOSE INTL (SJC)	HS 1	Rwy incursion risk. Rwy 30L at Twy D. Short distance from run-up area to Rwy.
SAN JOSE, CA		
REID-HILLVIEW OF SANTA CLARA COUNTY (RHV)	HS 1	Numerous inbounds and outbounds at twy intersections Twy D, Twy Z, and Twy Y.
	HS 2	Maintain vigilance when maneuvering at Twy Y, Twy Z, and Twys Z1, Z2, Z3 and Z4.
SANTA ROSA, CA		
CHARLES M SCHULZ/ SONOMA COUNTY (STS)	HS 1	Twy A, Twy A5, Twy Z complex int in close proximity to Rwy 14-32.
	HS 2	South run-up area not visible from the twr.
	HS 3	North run-up area east of Twy A and Twy H int in close proximity of Rwy 20 Apch Hold.
	HS 4	Wrong rwy departure risk.
STOCKTON, CA		
STOCKTON METRO (SCK)	HS 1	Area not visible from control twr.
	HS 2	Closely spaced rwys on Twy H.
TRUCKEE, CA		
TRUCKEE-TAHOE (TRK)	HS 1	Simultaneous ops on Rwy 11-29 and Rwy 02-20.

*See appropriate Chart Supplement HOT SPOT table for additional information.

25051

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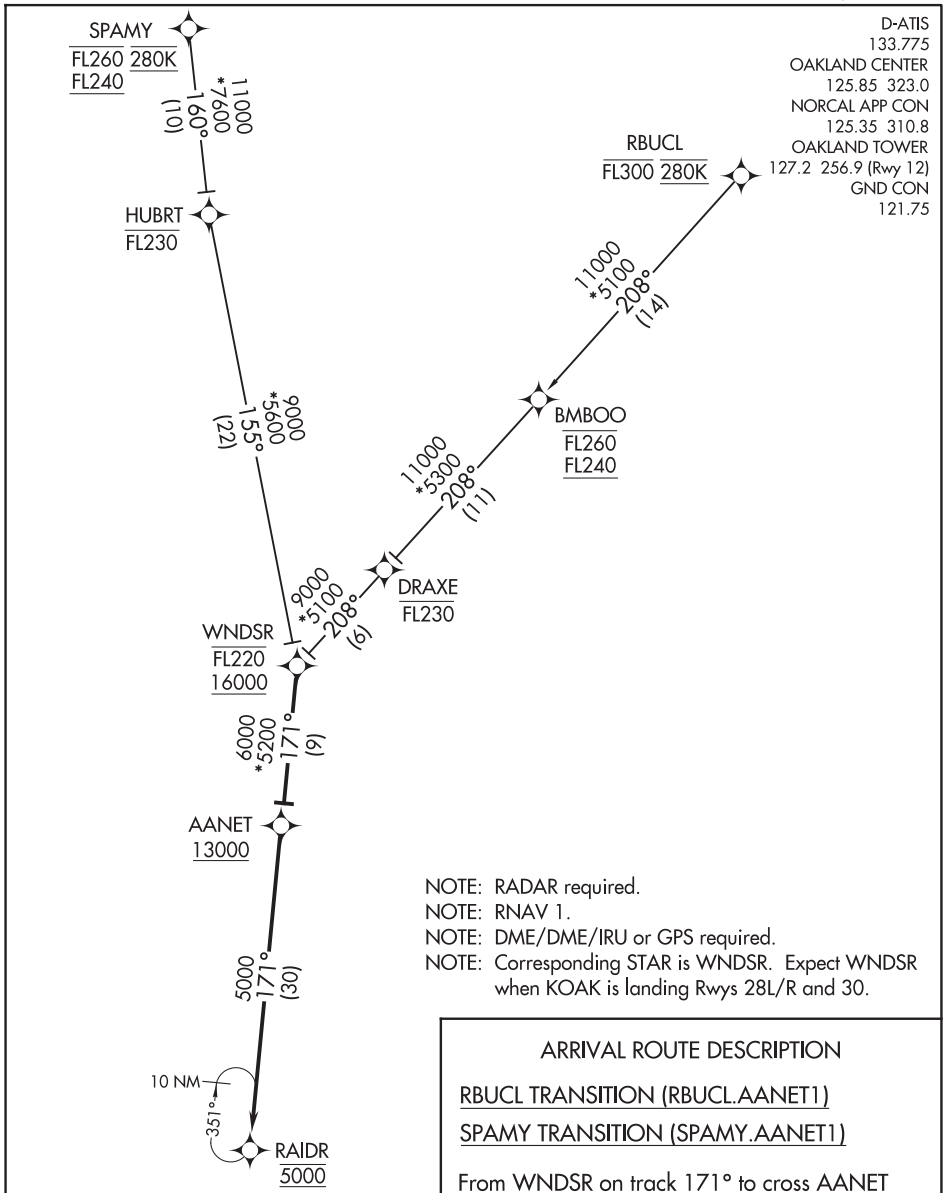

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Corresponding STAR is WNDSR. Expect WNDSR when KOAK is landing Rwys 28L/R and 30.

ARRIVAL ROUTE DESCRIPTION

RBUCL TRANSITION (RBUCL.AANET1)

SPAMY TRANSITION (SPAMY.AANET1)

From WNDSR on track 171° to cross AANET at or above 13000.

LANDING RUNWAY 12: From AANET on track 171° to cross RAIDR at 5000. Expect assigned instrument approach procedure.

NOTE: Chart not to scale.

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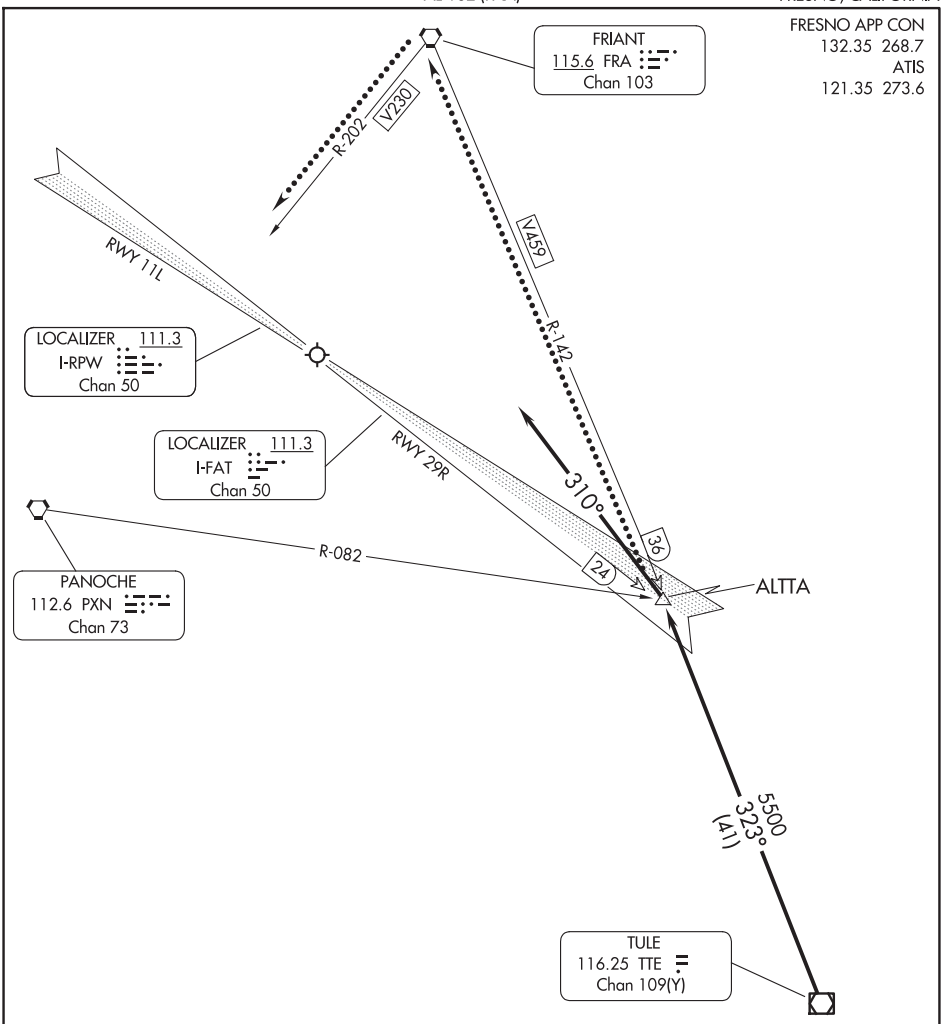
(TTE.ALTTA9) 23334

ALTTA NINE ARRIVAL

AL-162 (FAA)

FRESNO YOSEMITE INTL (FAT)
FRESNO, CALIFORNIA



NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

From over TULE (TTE) VOR/DME on TTE R-323 and FRIANT (FRA) VORTAC R-142 to ALTTA. Expect ILS or LOC RWY 29R approach. For Rwy 11L operations: Depart ALTTA heading 310° and expect RADAR vectors to LOC Y RWY 11L.

LOST COMMUNICATIONS: Rwy 11L: Proceed to FRA VORTAC on V459, then on V230, execute the LOC Y RWY 11L approach.

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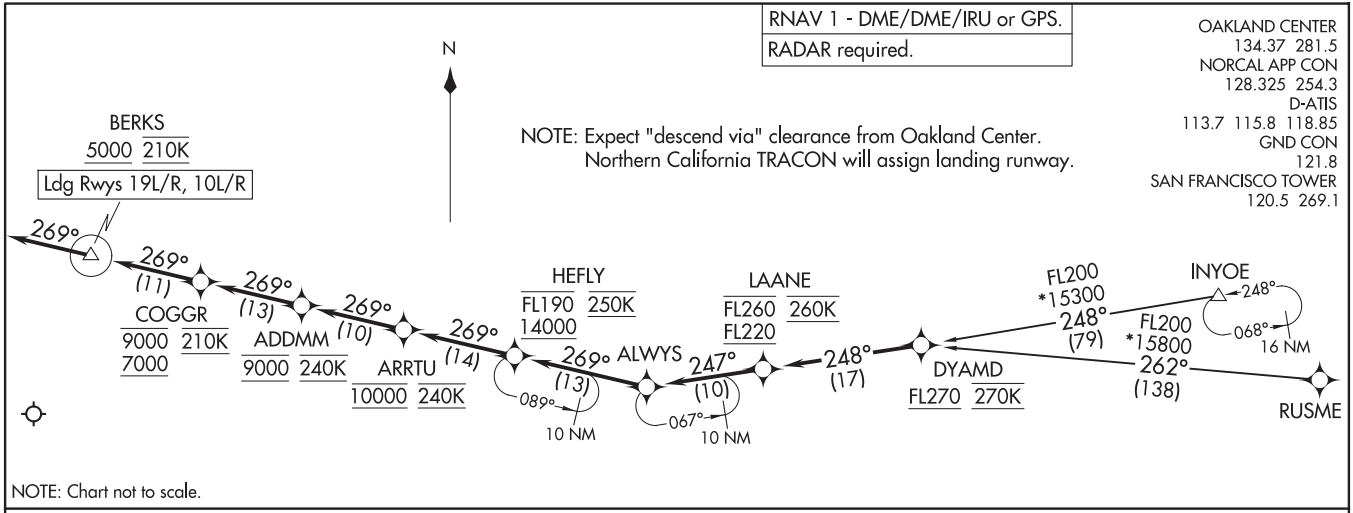
ALWYS THREE ARRIVAL (RNAV)

(DYAMD.ALWYS3) 11JUL24



ARRIVAL ROUTE DESCRIPTION

INYOE TRANSITION (INYOE.ALWYS3)

RUSME TRANSITION (RUSME.ALWYS3)

From DYAMD on track 248° to cross LAANE between FL220 and FL260 and at 260K, then on track 247° to ALWYS.

LANDING RUNWAYS 10L/R: From ALWYS on track 269° to cross HEFLY between 14000 and FL190 and at 250K, then on track 269° to cross ARRTU at 10000 and at 240K, then on track 269° to cross ADDMM at 9000 and at 240K, then on track 269° to cross COGGR between 7000 and 9000 and at 210K, then on track 269° to cross BERKS at or above 5000 and at 210K, then on track 269°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 19L/R: From ALWYS on track 269° to cross HEFLY between 14000 and FL190 and at 250K, then on track 269° to cross ARRTU at 10000 and at 240K, then on track 269° to cross ADDMM at 9000 and at 240K, then on track 269° to cross COGGR between 7000 and 9000 and at 210K, then on track 269° to cross BERKS at or above 5000 and at 210K, then on track 269°. Expect ILS or RNAV (GPS) approach to Rwy 19L, or RADAR vectors to final approach course.

(DYAMD.ALWYS3) 24193
ALWYS THREE ARRIVAL (RNAV)

AL-375 (FAA)

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA

Z3

(AMRVR.AMRVR2) 24305

AMRVR TWO ARRIVAL (RNAV)

SACRAMENTO MATHER (MHR)
SACRAMENTO, CALIFORNIA

AL-356 (FAA)

ARRIVAL ROUTE DESCRIPTION

ADWAT TRANSITION (ADWAT.AMRVR2)

MINA TRANSITION (MVA.AMRVR2)

. . . . From AMRVR on track 249° to cross GEKNE at or above 12200, then on track 250° to cross SAKOC at or above 9500, then on track 250° to cross JACII at or above 8000, then on track 249° to cross HNW VOR/DME at or above 7000. Expect ILS approach Runway 22L or visual approach.

NOTE: Chart not to scale.

SW-2, 07 AUG 2025 to 02 OCT 2025

AMRVR TWO ARRIVAL (RNAV)
SACRAMENTO, CALIFORNIA
SACRAMENTO MATHER (MHR)

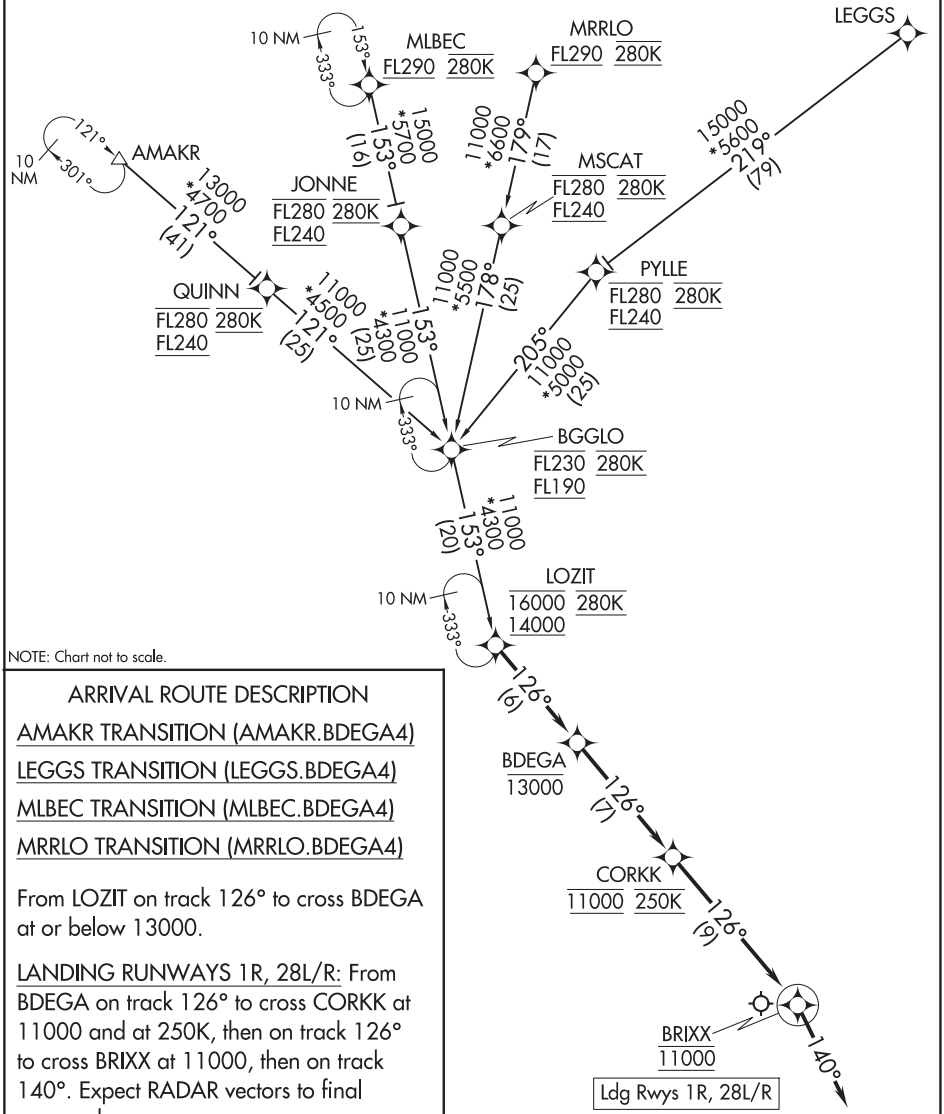
(AMRVR.AMRVR2) 13SEP18

SW-2, 07 AUG 2025 to 02 OCT 2025

OAKLAND CENTER
125.85 323.0
NORCAL APP CON
133.95 317.6
D-ATIS
113.7 115.8 118.85
GND CON
121.8
SAN FRANCISCO TOWER
120.5 269.1

RNAV 1 - DME/DME/IRU or GPS.
RADAR required.

CBRNA



NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

AMAKR TRANSITION (AMAKR.BDEGA4)

LEGGS TRANSITION (LEGGS.BDEGA4)

MLBEC TRANSITION (MLBEC.BDEGA4)

MRRLO TRANSITION (MRRLO.BDEGA4)

From LOZIT on track 126° to cross BDEGA at or below 13000.

LANDING RUNWAYS 1R, 28L/R: From BDEGA on track 126° to cross CORKK at 11000 and at 250K, then on track 126° to cross BRIXX at 11000, then on track 140°. Expect RADAR vectors to final approach course.

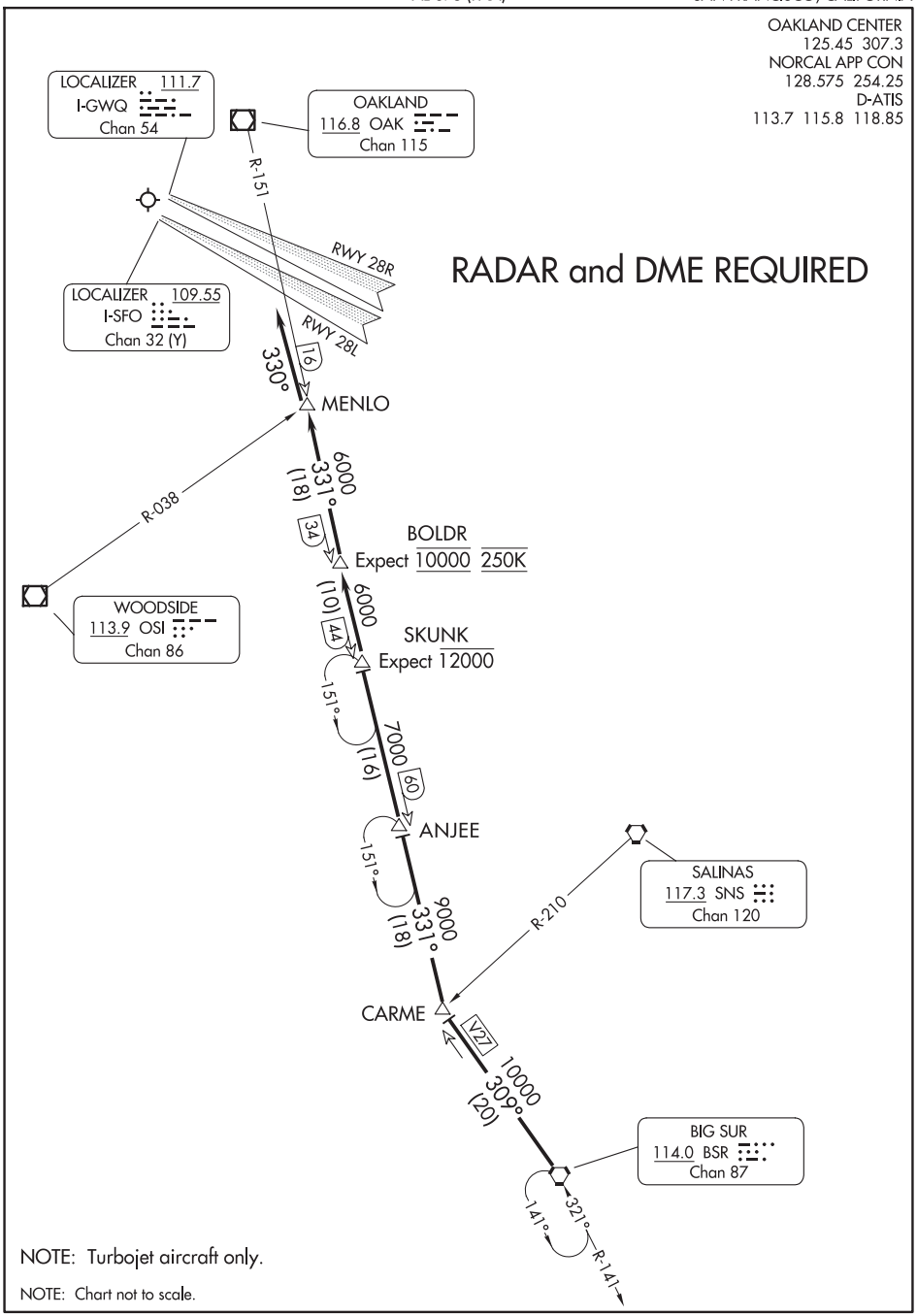
SW-2, 07 AUG 2025 to 02 OCT 2025

(BSR.BSR3) 23334

BIG SUR THREE ARRIVAL

AL-375 (FAA)

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA



BIG SUR THREE ARRIVAL

(BSR.BSR3) 15SEP16

SAN FRANCISCO, CALIFORNIA
SAN FRANCISCO INTL (SFO)

SW-2, 07 AUG 2025 to 02 OCT 2025

BMBER ONE ARRIVAL (RNAV)

BMBER ONE ARRIVAL (RNAV)

CONCORD, CALIFORNIA

(BMBER.BMBER1) 19339

BMBER ONE ARRIVAL (RNAV)

AL-5320 (FAA) CONCORD, CALIFORNIA

ARRIVAL ROUTE DESCRIPTION

NURAY TRANSITION (NURAY.BMBER1)

PEMKE TRANSITION (PEMKE.BMBER1)

RPARK TRANSITION (RPARK.BMBER1)

LANDING KSUU, KCCR: From BMBER on track 265° to cross JOSBA between 10000 and 11000, then on track 267° to cross RAAAF at 6000 and at or below 230K, then on heading 303° or as assigned by ATC. Expect RADAR vectors to final approach course.

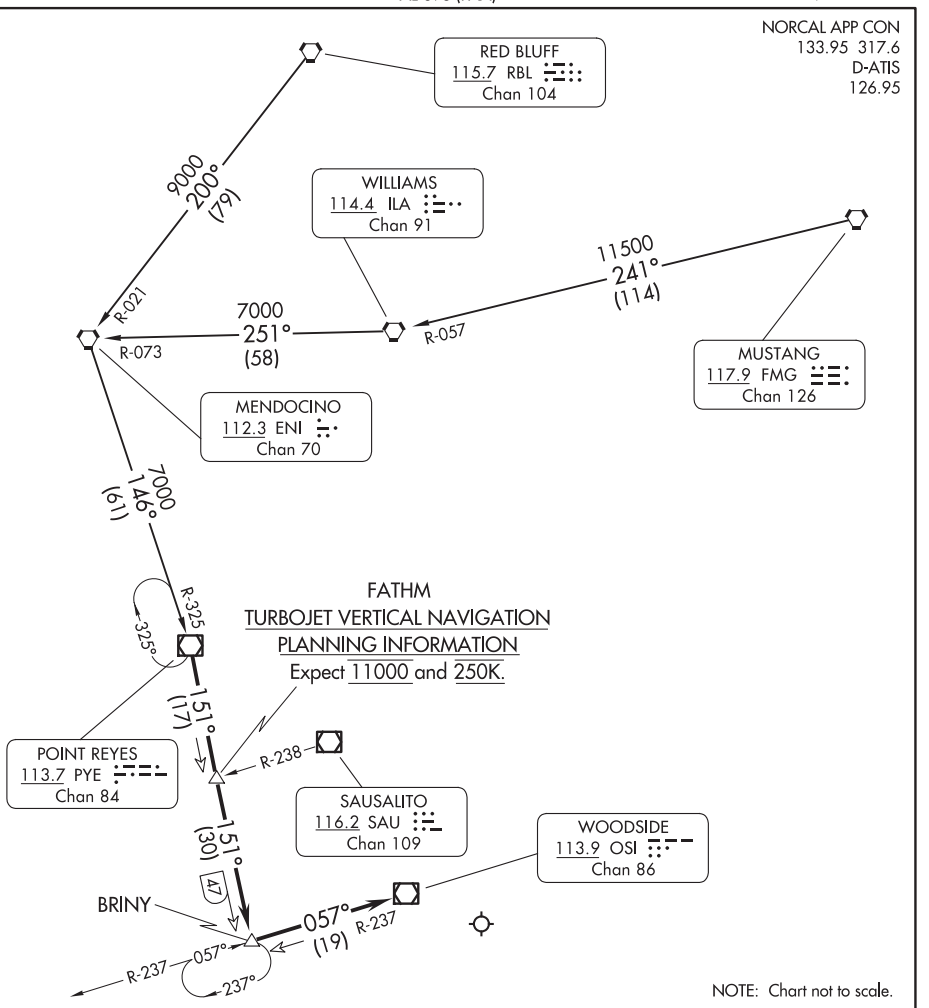
LOST COMMUNICATIONS

KSUU: From RAAAF, proceed on track 318° to cross SEATO at 6000. Execute ILS or LOC RWY 21L or TACAN RWY 3L approach. If unable, hold at SEATO as depicted, maintain 6000 feet.

KCCR: From RAAAF, proceed on track 312° to cross REJOY at 6000 and execute RNAV, LDA, or VOR RWY 19R approach.

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025



ARRIVAL ROUTE DESCRIPTION

MENDOCINO TRANSITION (ENI.BRINY2): From over ENI VORTAC via ENI R-146 and PYE R-325 to PYE VOR/DME. Thence . . . .

MUSTANG TRANSITION (FMG.BRINY2): From over FMG VORTAC via FMG R-241 to ILA VORTAC then via ILA R-251 to ENI VORTAC, then via ENI R-146 to PYE VOR/DME. Thence . . . .

RED BLUFF TRANSITION (RBL.BRINY2): From over RBL VORTAC via RBL R-200 and ENI R-146 to PYE VOR/DME. Thence . . . .

. . . . From over PYE VOR/DME via PYE R-151 to BRINY INT/DME, then via OSI R-237 to OSI VOR/DME. Expect RADAR vectors to Rwy 12R final approach course.

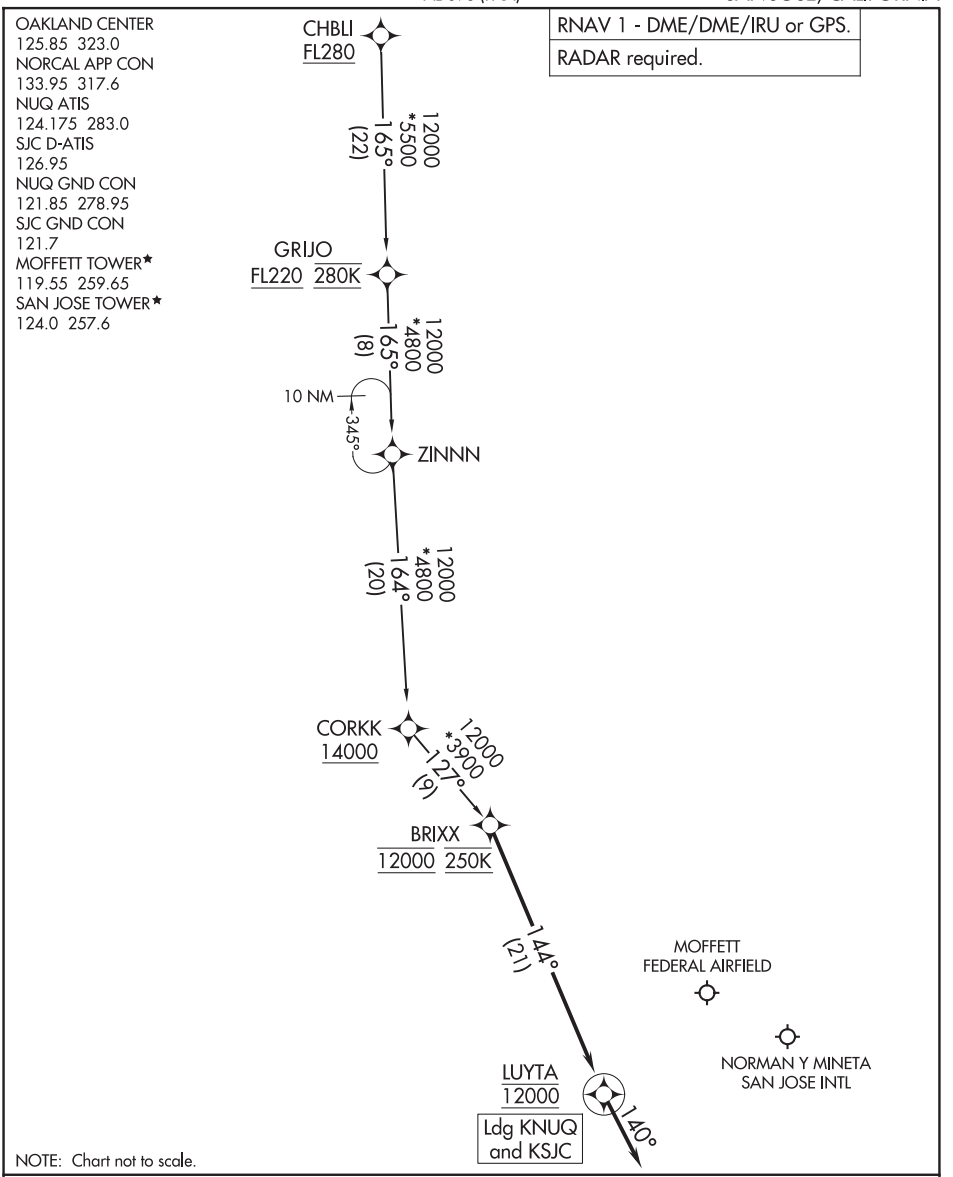
SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(BRIXX.BRIXX4) 24249

BRIXX FOUR ARRIVAL (RNAV)

AL-693 (FAA)

SAN JOSE, CALIFORNIA



ARRIVAL ROUTE DESCRIPTION

CHBLI TRANSITION (CHBLI.BRIXX4)

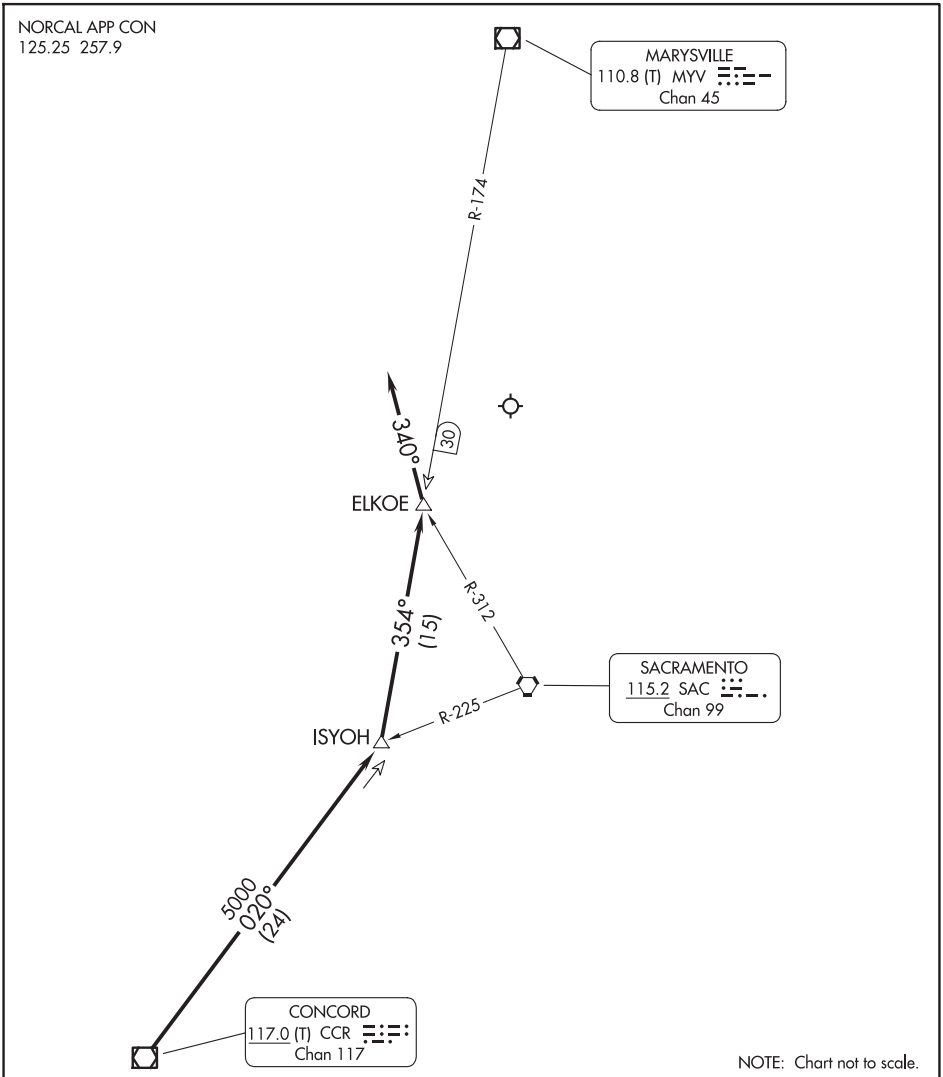
LANDING KSJC/KNUQ: From BRIXX on track 144° to cross LUYTA at 12000, then on track 140°. Expect RADAR vectors to final approach course.

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

CONCORD TWO ARRIVAL

AL-5490 (FAA)



ARRIVAL ROUTE DESCRIPTION

From over CCR VOR/DME via CCR R-020 to ISYOH INT, then via MYV R-174 to ELKOE INT, then on heading 340°. Expect RADAR vectors to final approach course.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(DYAMD.DYAMD5) 19003

DYAMD FIVE ARRIVAL (RNAV)

AL-375 (FAA)

Transition Routes

SAN FRANCISCO INTL (SFO)

SAN FRANCISCO, CALIFORNIA

(CONTINUED ON FOLLOWING PAGE)

DYAMD FIVE ARRIVAL (RNAV) Transition Routes

SAN FRANCISCO, CALIFORNIA
SAN FRANCISCO INTL (SFO)

(DYAMD.DYAMD5) 03JAN19

SW-2, 07 AUG 2025 to 02 OCT 2025

NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Expect to receive "descend via" clearance from Oakland Center. Northern California TRACON will assign landing runway.
NOTE: RADAR required for non-GPS equipped aircraft.
NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

From DYAMD on track 248° to cross LAANE between FL220 and FL260 and at 280K, then on track 247° to ALWYS.

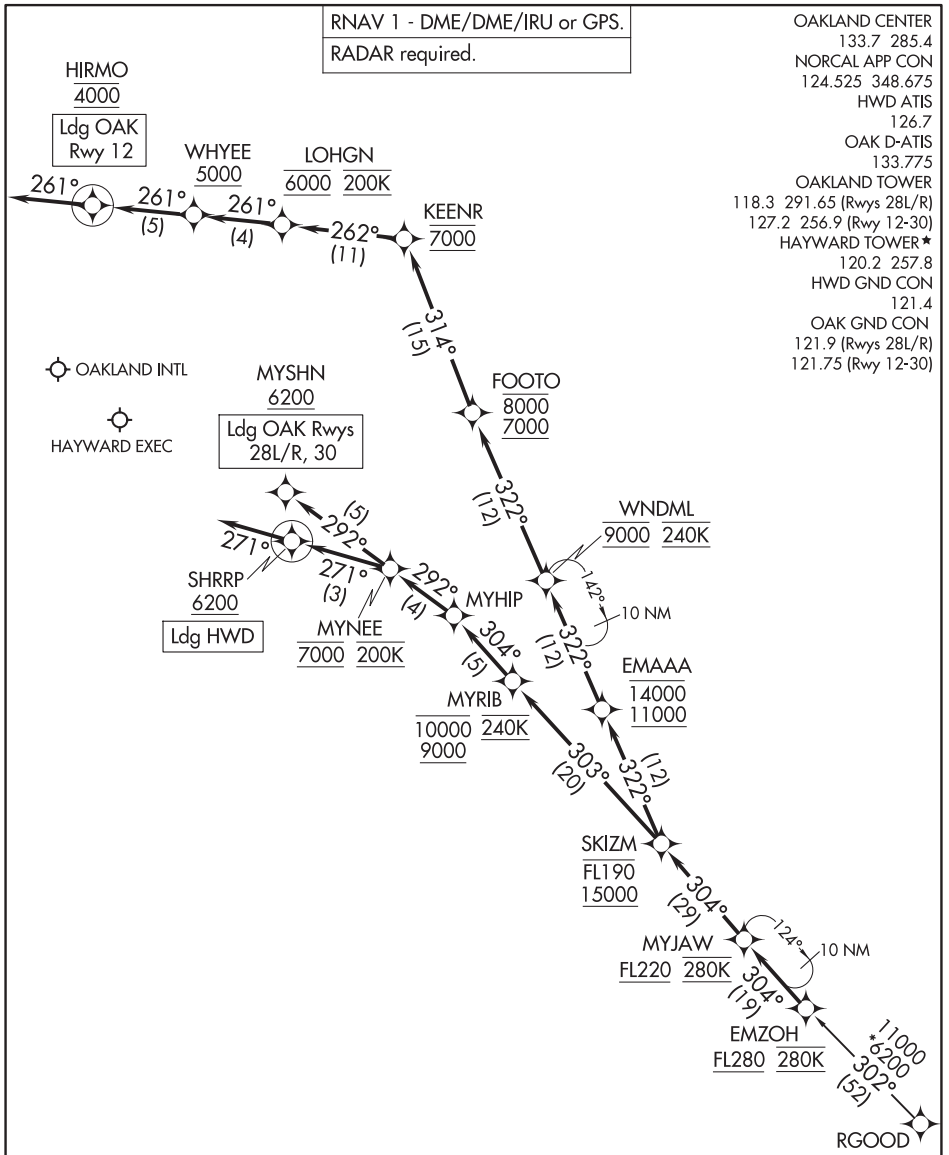
LANDING RUNWAYS 28L/R: From ALWYS on track 247° to cross FLOWZ between 14000 and FL190 and at 280K, then on track 248° to cross CEDES between 10000 and 12000 and at 250K, then on track 239° to cross FRELY at or above 8000 and at 230K, then on track 239° to cross ARCHI at 7000. Expect assigned instrument approach procedure.

(EMZOH.EMZOH4) 25163

EMZOH FOUR ARRIVAL (RNAV)

AL-294 (FAA)

OAKLAND, CALIFORNIA



NOTE: Expect to receive "descend via" clearance from Oakland Center.
Northern California TRACON will assign landing runway.

(CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

ARRIVAL ROUTE DESCRIPTION

RGOOD TRANSITION (RGOOD.EMZOH4)

OAK: From EMZOH on track 304° to cross MYJAW at or above FL220 and at 280K, then on track 304° to cross SKIZM between 15000 and FL190.

LANDING OAK RUNWAY 12: From SKIZM on track 322° to cross EMAAA between 11000 and 14000, then on track 322° to cross WNDML at 9000 and at 240K, then on track 322° to cross FOOTO between 7000 and 8000, then on track 314° to cross KEENR at 7000, then on track 262° to cross LOHGN at 6000 and at 200K, then on track 261° to cross WHYEE at or above 5000, then on track 261° to cross HIRMO at 4000, then on track 261°. Expect RNAV (RNP) Z RWY 12 approach or RADAR vectors to final approach course.

LANDING OAK RUNWAYS 28L/R, 30: From SKIZM on track 303° to cross MYRIB between 9000 and 10000 and at 240K, then on track 304° to MYHIP, then on track 292° to cross MYNEE at 7000 and at 200K, then on track 292° to cross MYSHN at or above 6200, Expect ILS or RNAV approach Rwy 28L/R, 30 approach.

LANDING HWD: From EMZOH on track 304° to cross MYJAW at or above FL220 and at 280K, then on track 304° to cross SKIZM between 15000 and FL190, then on track 303° to cross MYRIB between 9000 and 10000 and at 240K, then on track 304° to MYHIP, then on track 292° to cross MYNEE at 7000 and at 200K, then on track 271° to cross SHRRP at or above 6200, then on track 271°. Expect RADAR vectors to final approach course.

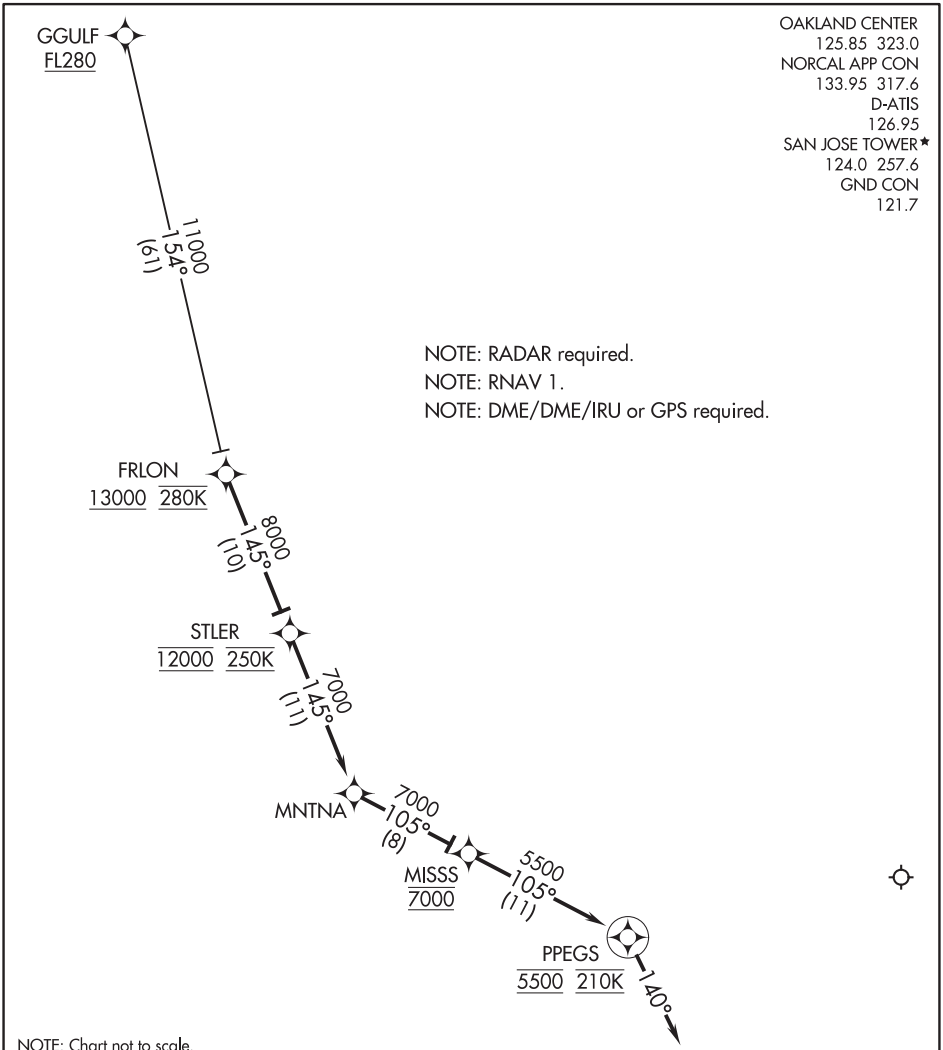
SW-2, 07 AUG 2025 to 02 OCT 2025

(FRLON.FRLON2) 17173

FRLON TWO ARRIVAL (RNAV)

AL-693 (FAA)

NORMAN Y MINETA SAN JOSE INTL (SJC)
SAN JOSE, CALIFORNIA



ARRIVAL ROUTE DESCRIPTION

GGULF TRANSITION (GGULF.FRLON2)

From FRLON on track 145° to cross STLER at 12000 and at 250K, then on track 145° to MNTNA, then on track 105° to cross MISSS at 7000, then on track 105° to cross PPEGS at 5500 and at 210K, then on track 140°. Expect RADAR vectors to final approach course.

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

ARRIVAL ROUTE DESCRIPTION
COALDALE TRANSITION (OAL.MOD9): From over OAL VORTAC on OAL R-246 and MOD R-064 to MOD VOR/DME. Thence. . . .
MINA TRANSITION (MVA.MOD9): From over MVA VORTAC on MVA R-204 and OAL R-246 and MOD R-064 to MOD VOR/DME. Thence. . . .
MUSTANG TRANSITION (FMG.MOD9): From over FMG VORTAC on FMG R-182 and MOD R-064 to MOD VOR/DME. Thence. . . .
. . . . . From over MOD VOR/DME on MOD R-245 to LEEFF, then on MOD R-245 to GROAN, then on MOD R-245 to CEDES, then on OSI VOR/DME R-056 to ARCHI, then on OSI R-056 to MEHTA. Expect RADAR vectors to final approach course.
LOST COMMUNICATIONS: Intercept and proceed on SFO RWY 28R localizer to CEPIN.
OAKLAND CENTER
134.375 281.5
NORCAL APP CON
128.325 254.3
D-ATIS
113.7 115.8 118.85
MUSTANG
117.9 FMG
Chan 126
MINA
115.1 MVA
Chan 98
COALDALE
117.7 OAL
Chan 124
MODESTO
114.6 MOD
Chan 93
SCAGGS ISLAND
112.1 SGD
Chan 58
OAKLAND
116.8 OAK
Chan 115
LOCALIZER 111.7
I-GWQ
Chan 54
SAN FRANCISCO
115.8 SFO
Chan 105
WOODSIDE
113.9 OSI
Chan 86
F1240
182°
(115)
TROSE
FL180
244°
(27)
FL190
244°
(50)
KYLLA
FL190
246°
(29)
INYOE
FL190
246°
(48)
FL190
204°
(53)
LEEFF
8000
245°
(8)
GROAN
(16)
065°
CEDES
Expect 11000
ARCHI
8000
236°
(13)
6000
(6)
CEPIN
MEHTA
R-064
064°
R-119
R-151
R-101
R-056
SFO
R-091
I-GWQ
NOTE: RADAR required.
NOTE: DME required.
NOTE: Chart not to scale.
N

(OAKES.OAKES3) 25163

OAKES THREE ARRIVAL (RNAV) Transition Routes

OAKLAND, CALIFORNIA

OAKES THREE ARRIVAL (RNAV) Transition Routes
OAKLAND, CALIFORNIA

(OAKES.OAKES3) 12JUN25

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

ARRIVAL ROUTE DESCRIPTION

OAK: From OAKES on track 244° to cross GRUDG between FL200 and FL230 and at 260K, then on track 244° to cross BANND between 17000 and FL190.

LANDING OAK RUNWAY 12: From BANND on track 277° to cross SULRR between 12000 and 13000 and at 250K, then on track 264° to cross KEENR at 7000, then on track 262° to cross LOHGN at 6000 and at 200K, then on track 261° to cross WHYEE at or above 5000, then on track 261° to cross HIRMO at 4000, then on track 261°. Expect RNAV (RNP) Z RWY 12 approach or RADAR vectors to final approach course.

LANDING OAK RUNWAYS 28L/R, 30: From BANND on track 244° to TOOOL, then on track 237° to cross FFIST between 7000 and 9000 and at 200K. Expect ILS or RNAV approach Rwy 28L/R, 30 approach.

LANDING HWD: From OAKES on track 244° to cross GRUDG between FL200 and FL230 and at 260K, then on track 244° to cross BANND between 17000 and FL190, then on track 244° to TOOOL, then on track 237° to cross FFIST between 7000 and 9000 and at 200K, then on track 181° to cross NORCL at 7000, then on track 237°. Expect RADAR vectors to final approach course.

(OSVEE.OSVEE2) 22139

OSVEE TWO ARRIVAL (RNAV)

AL-488 (FAA)

TRAVIS AFB (KSUU)
FAIRFIELD, CALIFORNIA

ARRIVAL ROUTE DESCRIPTION

LIBBO TRANSITION (LIBBO.OSVEE2)

ROVUE TRANSITION (ROVUE.OSVEE2)

ZONSO TRANSITION (ZONSO.OSVEE2)

From MOLEN on track 057° to OCOVA.

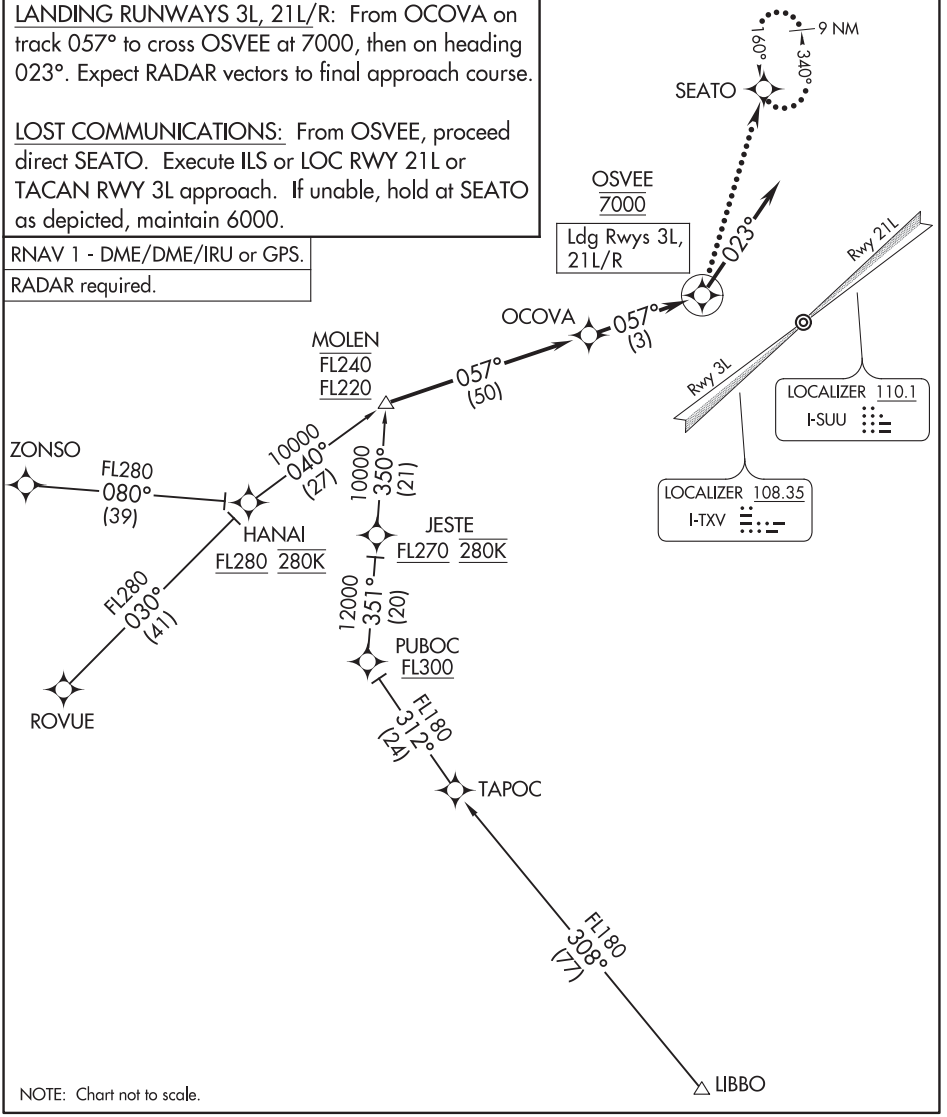
LANDING RUNWAYS 3L, 21L/R: From OCOVA on track 057° to cross OSVEE at 7000, then on heading 023°. Expect RADAR vectors to final approach course.

LOST COMMUNICATIONS: From OSVEE, proceed direct SEATO. Execute ILS or LOC RWY 21L or TACAN RWY 3L approach. If unable, hold at SEATO as depicted, maintain 6000.

RNAV 1 - DME/DME/IRU or GPS.

RADAR required.

TRAVIS APP CON
126.6 281.45 (N)
119.9 322.325 (S)
TRAVIS TOWER
120.75 254.4
GND CON
121.8 289.4
D-ATIS
135.55 292.125



NOTE: Chart not to scale.

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

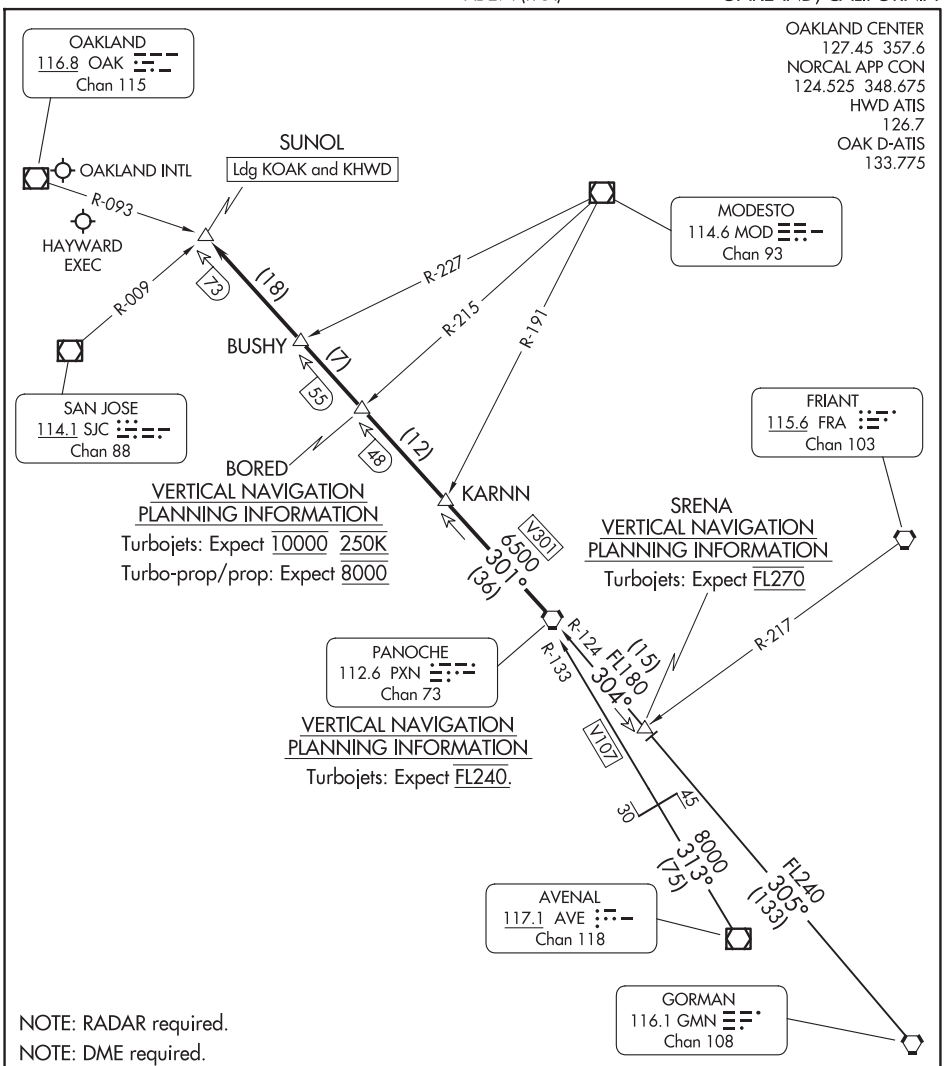
NORCAL APP CON
123.7 338.25
TRAVIS APP CON
126.6 281.45 (N)
119.9 322.325 (S)
D-ATIS
135.55 292.125
RADAR required.
NOTE: Heavy glider activity over the Sierra Nevada mountain range.
ARRIVAL ROUTE DESCRIPTION
MINA TRANSITION (MVA.SWR1): From over MVA VORTAC on MVA R-273 and SWR R-093 to SWR VOR/DME, then on SWR R-236 to PEELS INT. Thence. . . .
MUSTANG TRANSITION (FMG.SWR1): From over FMG VORTAC on FMG R-218 and SWR R-037 to SWR VOR/DME, then on SWR R-236 to PEELS INT. Thence. . . .
LANDING RUNWAYS 3L/R: From over PEELS on heading 200°. Expect RADAR vectors to final approach course.
LANDING RUNWAYS 21L/R: From over PEELS on heading 175°. Expect RADAR vectors to final approach course.
LOST COMMUNICATIONS
RUNWAY 3L: From over PEELS proceed to SGD VORTAC. Expect ILS or LOC RWY 3L approach.
RUNWAY 21R: From over PEELS proceed to SAC VORTAC. Expect ILS or LOC RWY 21L approach.
NOTE: Chart not to scale.
SW-2, 07 AUG 2025 to 02 OCT 2025
WILLIAMS
114.4 IIA
Chan 91
MARYSVILLE
110.8 (T) MYV
Chan 45
MUSTANG
117.9 FMG
Chan 126
MINA
115.1 MVA
Chan 98
PALISADES
113.2 SWR
Chan 79
SACRAMENTO
115.2 SAC
Chan 99
LINDEN
114.8 LIN
Chan 95
SCAGGS ISLAND
112.1 SGD
Chan 58
LOCALIZER 110.1
I-SUU
PEELS
5000
FLUNK
TENCO
R-131
R-129
R-359
R-343
R-037
R-093
R-273
FL200
273°
(111)
FL200
218°
(63)
12000
*11200
236°
(36)
5000
236°
(19)
(55)
5000
*2500
236°
(21)
(76)
175°
200°
N

(PXN.PXN6) 25163

PANOCHE SIX ARRIVAL

AL-294 (FAA)

OAKLAND, CALIFORNIA



SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

ARRIVAL ROUTE DESCRIPTION

AVENAL TRANSITION (AVE.PXN6): From over AVE VOR/DME on AVE R-313 and PXN R-133 to PXN VORTAC. Thence. . . .

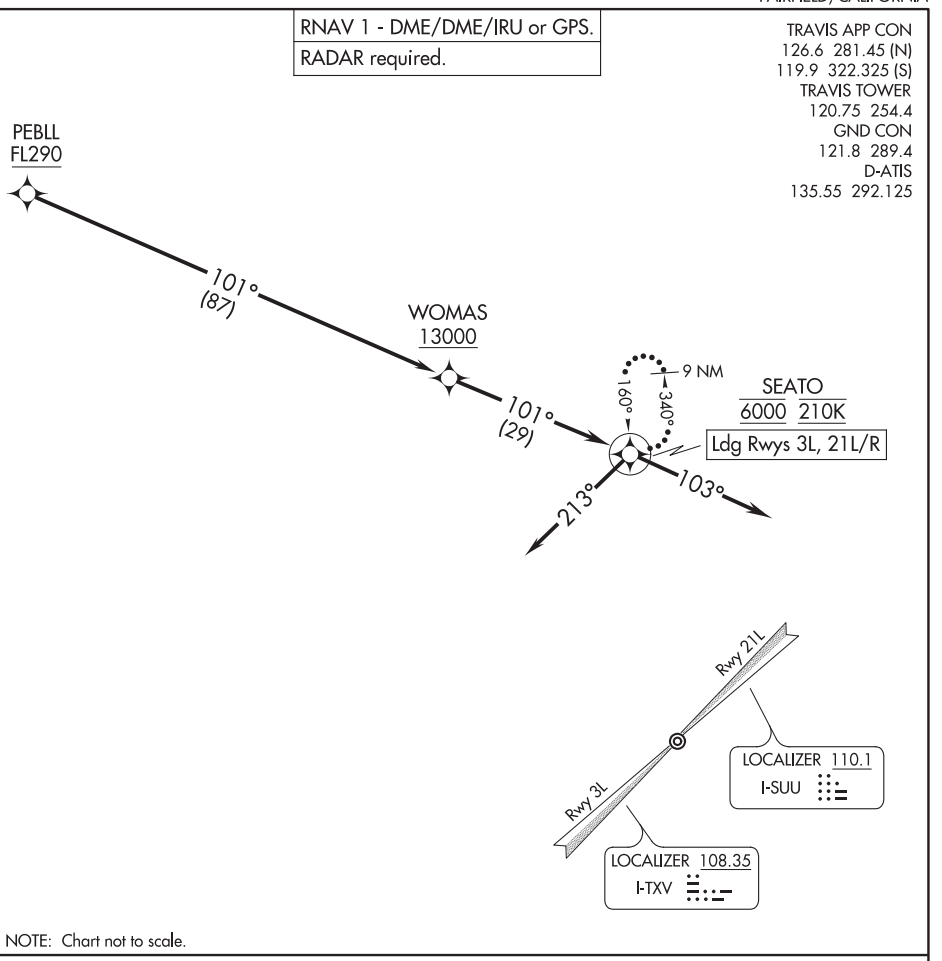
GORMAN TRANSITION (GMN.PXN6): From over GMN VORTAC on GMN R-305 and PXN R-124 to SRENA, then on PXN R-124 to PXN VORTAC. Thence. . . .

. . . .From over PXN VORTAC on PXN R-301 to SUNOL. Expect RADAR vectors to final approach course.

PANOCHE SIX ARRIVAL

OAKLAND, CALIFORNIA

(PXN.PXN6) 15AUG19



SW-2, 07 AUG 2025 to 02 OCT 2025

ARRIVAL ROUTE DESCRIPTION

From PEBLL on track 101° to cross WOMAS at or above 13000.

LANDING RUNWAY 3L: From WOMAS on track 101° to cross SEATO at 6000 and at 210K, then on heading 213°. Expect RADAR vectors to final approach course.

LANDING RUNWAY 21L/R: From WOMAS on track 101° to cross SEATO at 6000 and at 210K, then on heading 103°. Expect RADAR vectors to final approach course.

LOST COMMUNICATIONS: From SEATO, execute ILS or LOC RWY 21L or TACAN RWY 3L approach. If unable, hold at SEATO as depicted, maintain 6000.

(PIRAT.PIRAT3) 25163

PIRAT THREE ARRIVAL (RNAV)

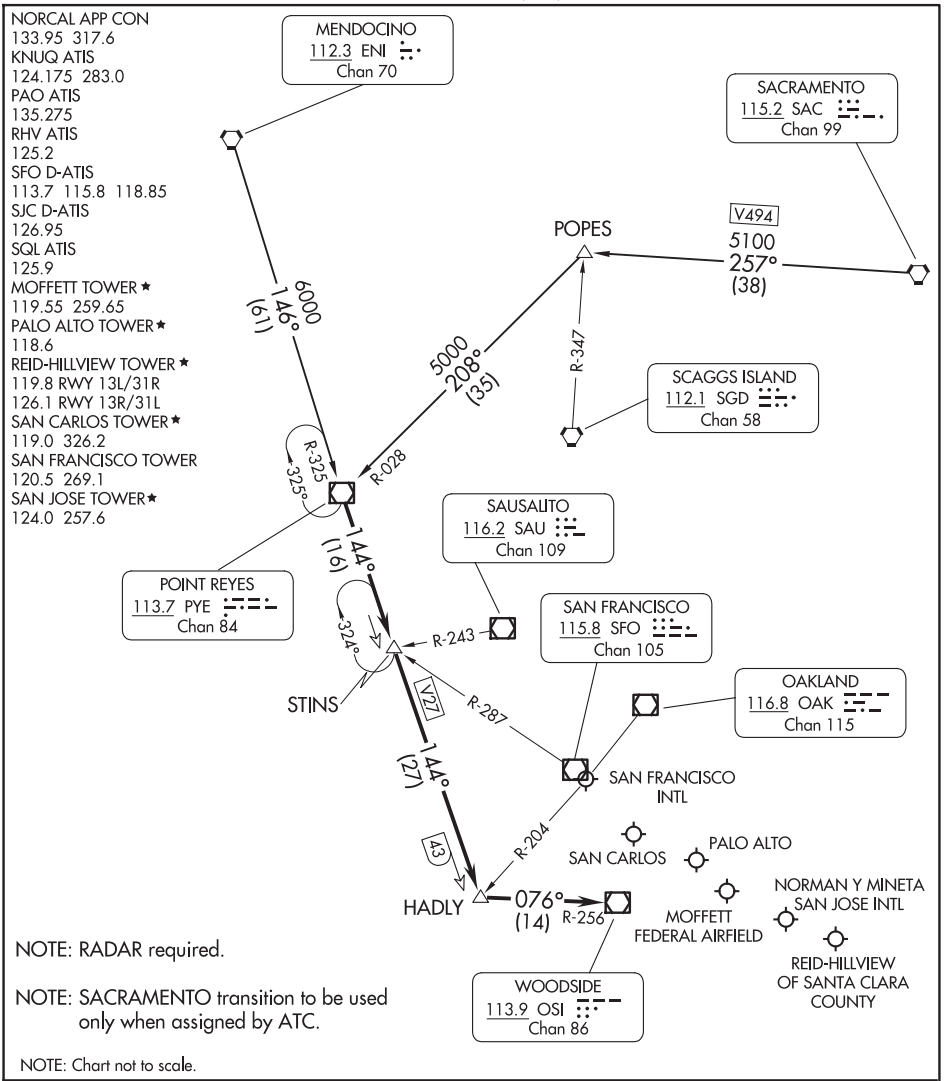
AL-375 (FAA)

SAN FRANCISCO, CALIFORNIA

PIRAT THREE ARRIVAL (RNAV)

(PIRAT.PIRAT3) 11JUL24

SAN FRANCISCO, CALIFORNIA



NOTE: RADAR required.

NOTE: SACRAMENTO transition to be used only when assigned by ATC.

NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

MENDOCINO TRANSITION (ENI.PYE3): From over ENI VORTAC on ENI R-146 and PYE R-325 to PYE VOR/DME. Thence. . . .

SACRAMENTO TRANSITION (SAC.PYE3): From over SAC VORTAC on SAC R-257 and PYE R-028 to PYE VOR/DME. Thence. . . .

. . . .From over PYE VOR/DME on PYE R-144 to HADLY, then on OSI R-256 to OSI VOR/DME. Expect RADAR vectors to final approach course.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(STUBL.RAZRR5) 22195 AL-693 (FAA) NORMAN Y MINETA SAN JOSE INTL (SJC)

RAZRR FIVE ARRIVAL (RNAV) Transition Routes

SAN JOSE, CALIFORNIA

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

RAZRR FIVE ARRIVAL (RNAV) Transition Routes

SAN JOSE, CALIFORNIA

NORMAN Y MINETA SAN JOSE INTL (SJC)

(STUBL.RAZRR5) 14JUL22

SW-2, 07 AUG 2025 to 02 OCT 2025

OAKLAND CENTER
121.25 327.0
NORCAL APP CON
126.475 317.775
D-ATIS
126.95
SAN JOSE TOWER★
124.0 257.6
GND CON
121.7

ARRIVAL ROUTE DESCRIPTION

From STUBL on track 250° to cross RAZRR between FL200 and FL220, then on track 249° to cross OUCHH between 16000 and FL190, then on track 249° to cross NIKKT between 10000 and 14000.

EAST TRANSITION LANDING RUNWAYS 12L/R: From NIKKT on track 240° to cross GOTEE between 10000 and 12000 and at 280K, then on track 240° to SHIKK, then on track 281° to cross TRCOT at or above 9000 and at 240K, then on track 281° to cross GGUGL between 7000 and 8000, then on track 318° to cross GAARY at or above 5800, then on track 318° to cross EDMND at or above 5600, then on track 318° to cross JESEN at or above 4100, then on track 306° to cross HITTIR at 4000, then on track 306°. Expect RADAR vectors to final approach course.

WEST TRANSITION LANDING RUNWAYS 30L/R: From NIKKT on track 265° to cross SEKKO between 8000 and 10000 and at 250K, then on track 265° to cross SCOPR between 5000 and 7000, then on track 265° to cross KLIDE at or above 4000 and at 230K. Expect assigned instrument approach or RADAR vectors to final approach course.

RNAV 1 - DME/DME/IRU or GPS
RADAR required

NOTE: Chart not to scale.

NOTE: Expect to receive transition (east/west) and "descend via" clearance from Oakland Center. Northern California TRACON will assign landing runway.
NOTE: West transition indicates Rwys 30L/R.
NOTE: East transition indicates Rwys 12L/R.
NOTE: Expect west transition unless otherwise advised.

REBAS ONE ARRIVAL (RNAV) Transition Routes

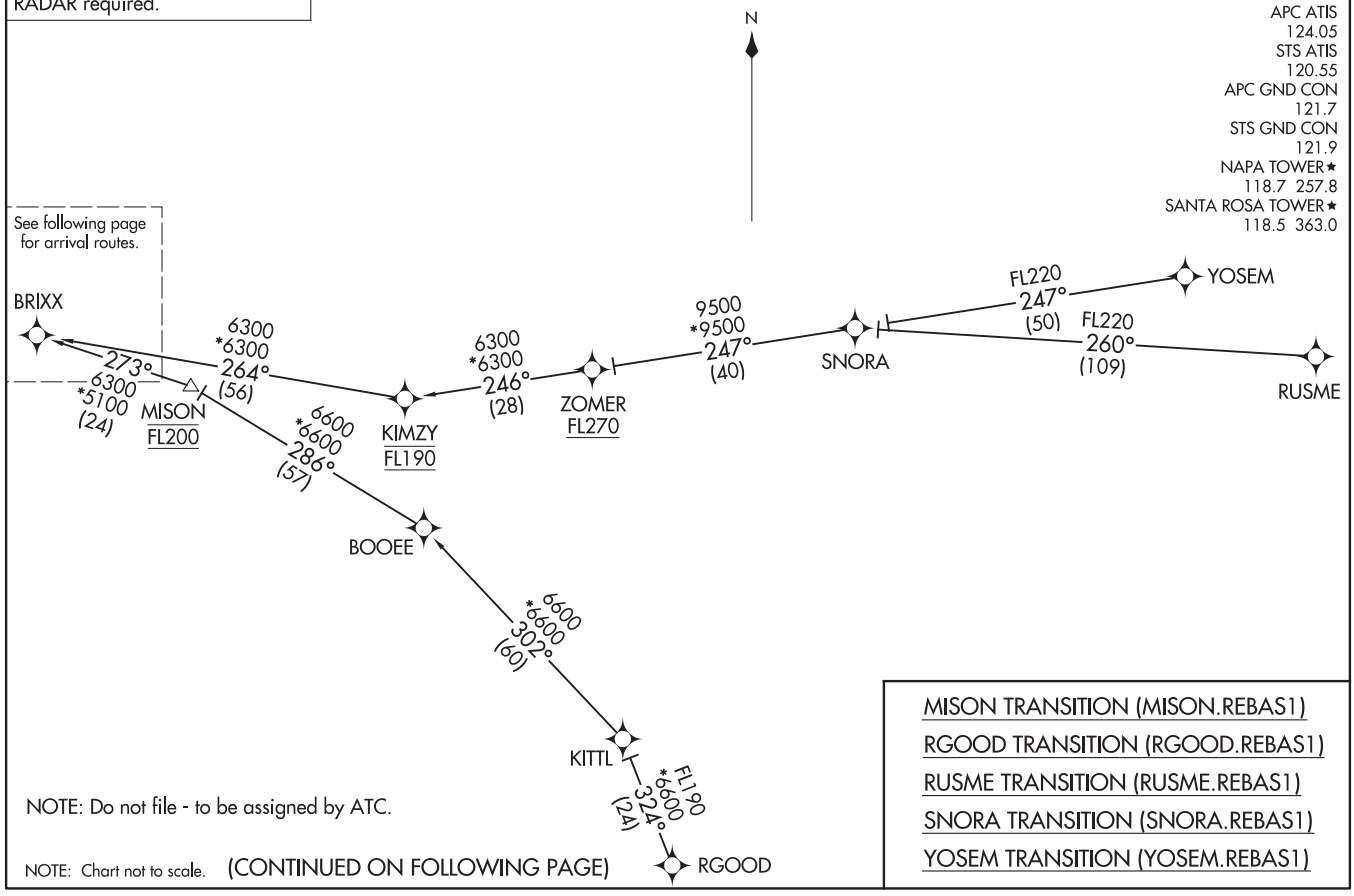
(BRIXX.REBAS1) 11JUL24

NAPA, CALIFORNIA

RNAV 1 - DME/DME/IRU or GPS.

RADAR required.

OAKLAND CENTER
127.8 353.5
APC ATIS
124.05
STS ATIS
120.55
APC GND CON
121.7
STS GND CON
121.9
NAPA TOWER★
118.7 257.8
SANTA ROSA TOWER★
118.5 363.0



NOTE: Do not file - to be assigned by ATC.

NOTE: Chart not to scale.

(CONTINUED ON FOLLOWING PAGE)

MISON TRANSITION (MISON.REBAS1)
RGOOD TRANSITION (RGOOD.REBAS1)
RUSME TRANSITION (RUSME.REBAS1)
SNORA TRANSITION (SNORA.REBAS1)
YOSEM TRANSITION (YOSEM.REBAS1)

REBAS ONE ARRIVAL (RNAV) Transition Routes

(BRIXX.REBAS1) 24193

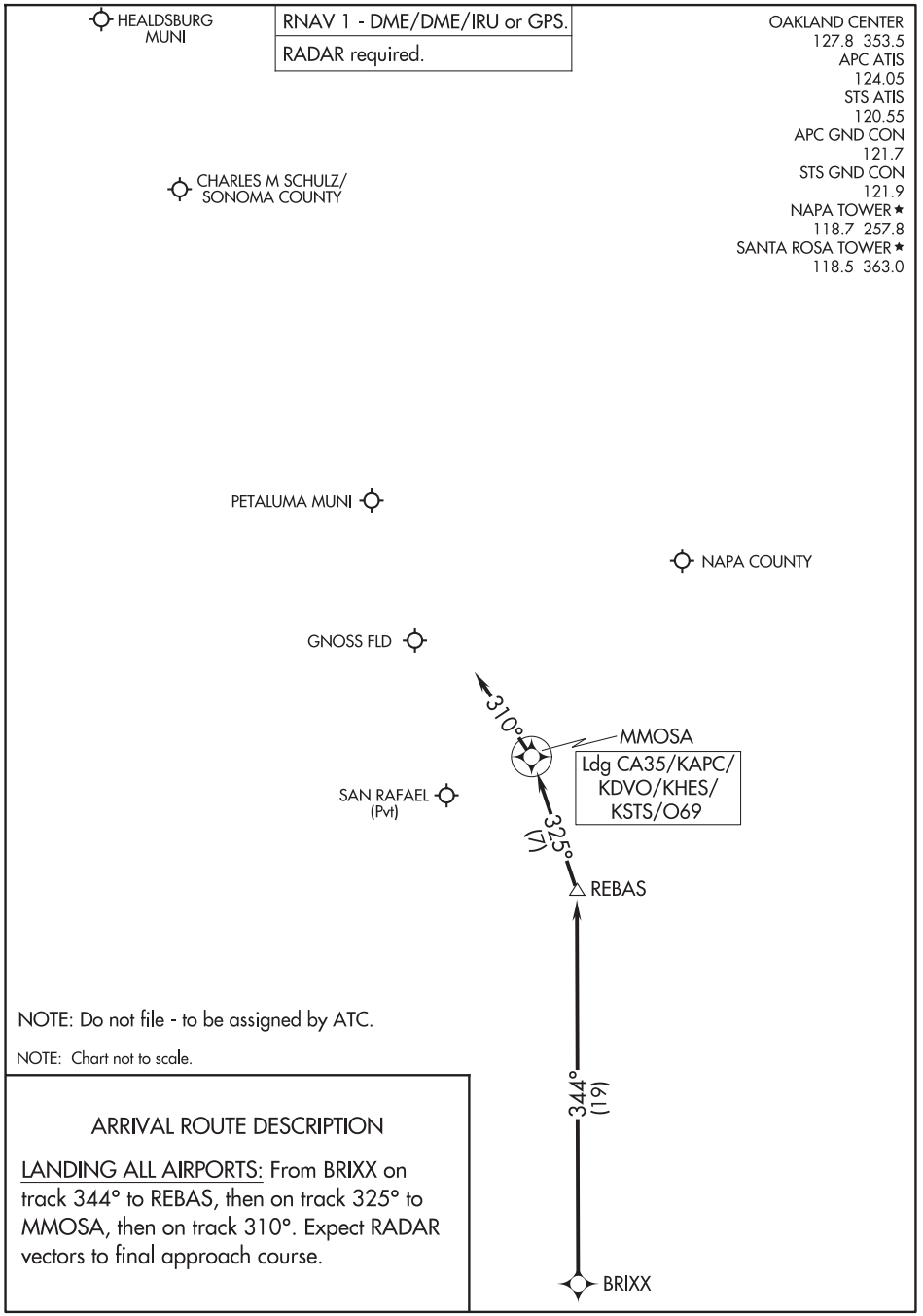
AL-281 (FAA)

Z28

NAPA, CALIFORNIA

REBAS ONE ARRIVAL (RNAV) Arrival Routes

NAPA, CALIFORNIA



NOTE: Do not file - to be assigned by ATC.

NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

LANDING ALL AIRPORTS: From BRIXX on track 344° to REBAS, then on track 325° to MMOSA, then on track 310°. Expect RADAR vectors to final approach course.

REBAS ONE ARRIVAL (RNAV) Arrival Routes

NAPA, CALIFORNIA

SW-2, 07 AUG 2025 to 02 OCT 2025

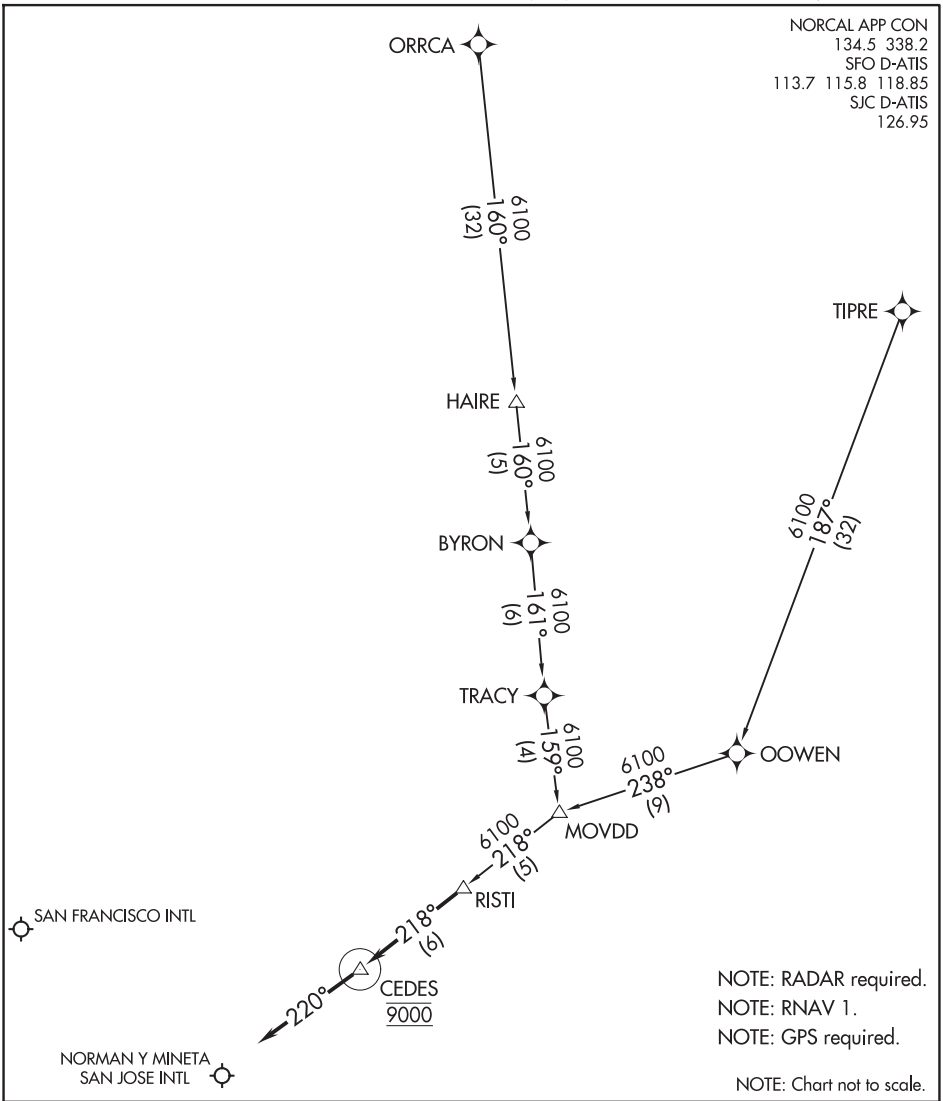
SW-2, 07 AUG 2025 to 02 OCT 2025

(RISTI.RISTI1) 20198

RISTI ONE ARRIVAL (RNAV)

AL-375 (FAA)

SAN FRANCISCO, CALIFORNIA



SW-2, 07 AUG 2025 to 02 OCT 2025

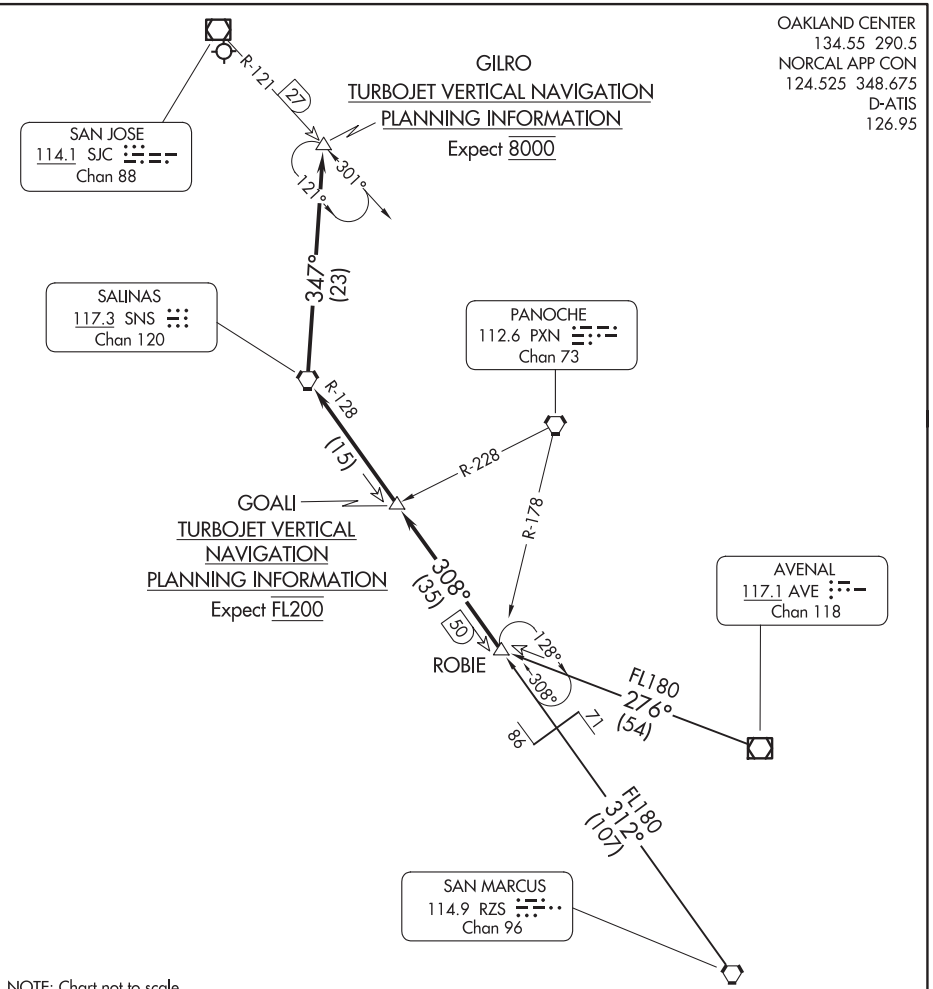
SW-2, 07 AUG 2025 to 02 OCT 2025

ARRIVAL ROUTE DESCRIPTION

ORRCA TRANSITION (ORRCA.RISTI1)

TIPRE TRANSITION (TIPRE.RISTI1)

LANDING KSFO/KSJC: From RISTI on track 218° to cross CEDES at 9000, then on heading 220° or as assigned by ATC. Expect RADAR vectors to final approach course.



ARRIVAL ROUTE DESCRIPTION

AVENAL TRANSITION (AVE.ROBIE5): From over AVE VOR/DME on AVE R-276 to ROBIE. Thence . . . .

SAN MARCUS TRANSITION (RZS.ROBIE5): From over RZS VORTAC on RZS R-312 and SNS R-128 to ROBIE. Thence . . . .

. . . . From over ROBIE on SNS R-128 to SNS VORTAC. Then on SNS R-347 to GILRO. Expect the ILS RWY 30L approach.

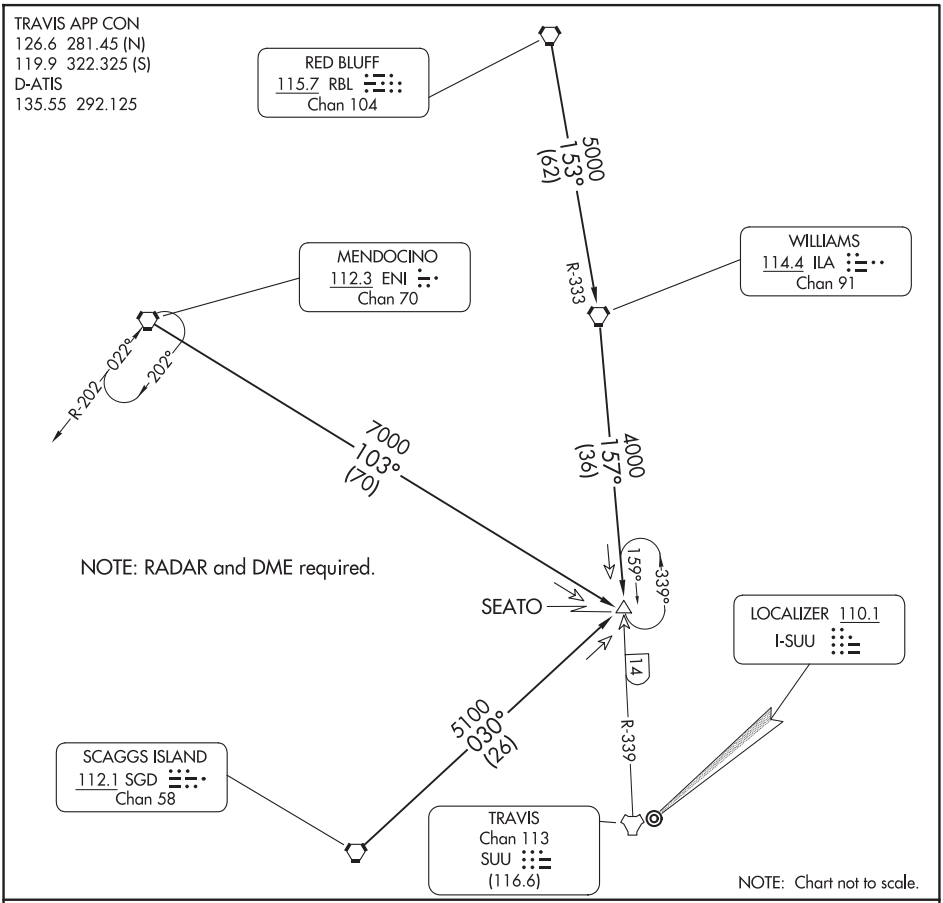
FOR RUNWAY 12 OPERATIONS: Expect routing SNS direct SJC VOR/DME and RADAR vectors to final approach course.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(SEATO.SEATO4) 23334
SEATO FOUR ARRIVAL

AL-488 (FAA)

TRAVIS AFB (KSUU)
FAIRFIELD, CALIFORNIA



ARRIVAL ROUTE DESCRIPTION

MENDOCINO TRANSITION (ENI.SEATO4): From over ENI VORTAC via ENI R-103 to SEATO INT. Thence . . . .

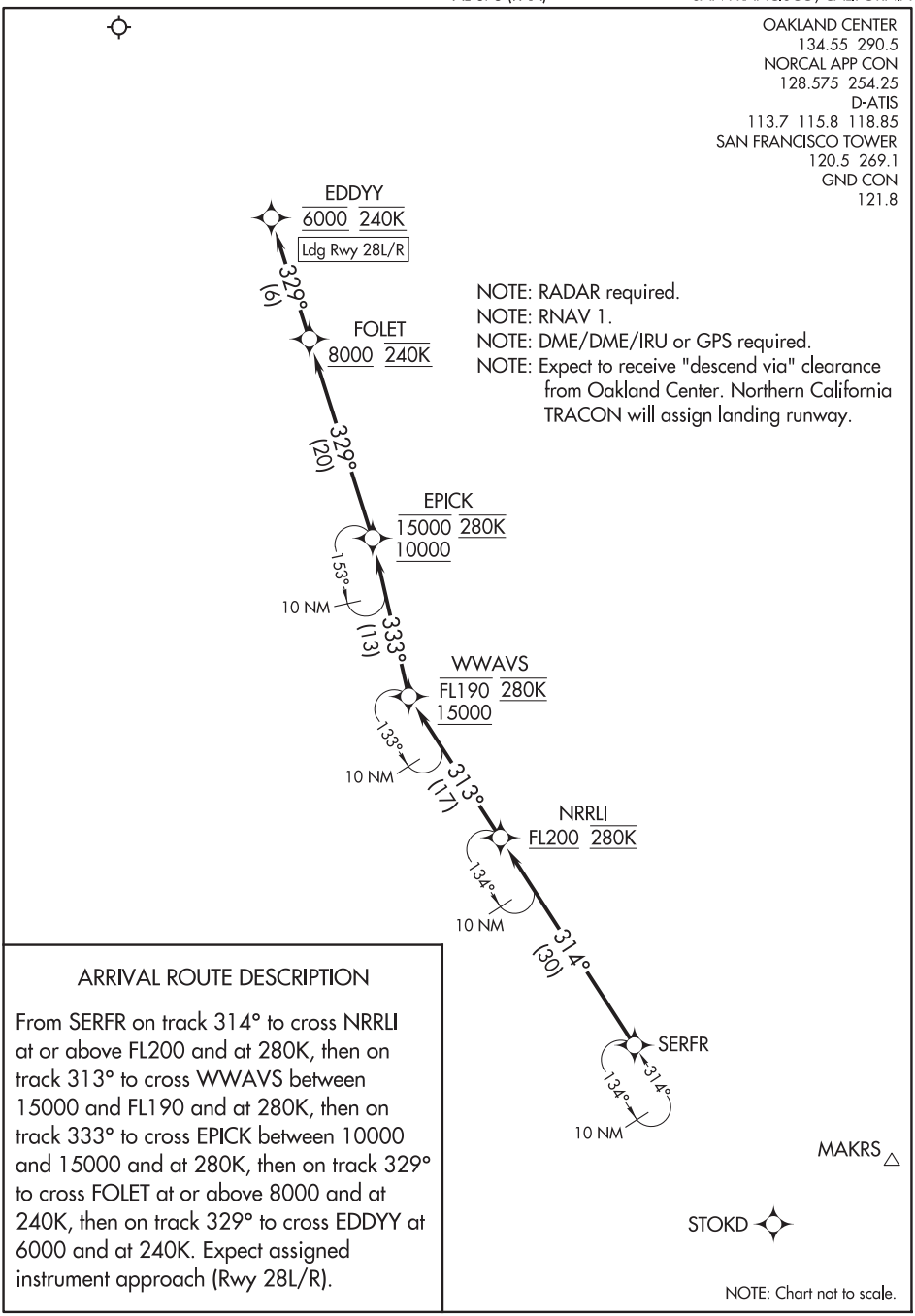
RED BLUFF TRANSITION (RBL.SEATO4): From over RBL VORTAC via RBL R-153 and ILA R-333 to ILA VORTAC, then via ILA R-157 to SEATO INT. Thence . . . .

SCAGGS ISLAND TRANSITION (SGD.SEATO4): From over SGD VORTAC via SGD R-030 to SEATO INT. Thence . . . .

. . . . From over SEATO INT:
RWY 3L/R: Expect RADAR vectors for ILS or LOC RWY 3L approach.
RWY 21L/R: Expect RADAR vectors for ILS or LOC RWY 21L approach.

LOST COMMUNICATIONS:
RWY 3L via SEATO then TACAN RWY 3L.
RWY 21R via SEATO then TACAN RWY 21R.

SW-2, 07 AUG 2025 to 02 OCT 2025



SW-2, 07 AUG 2025 to 02 OCT 2025

(SILCN.SILCN6) 22195

SILCN SIX ARRIVAL (RNAV)

NORMAN Y MINETA SAN JOSE INTL (SJC)

SAN JOSE, CALIFORNIA

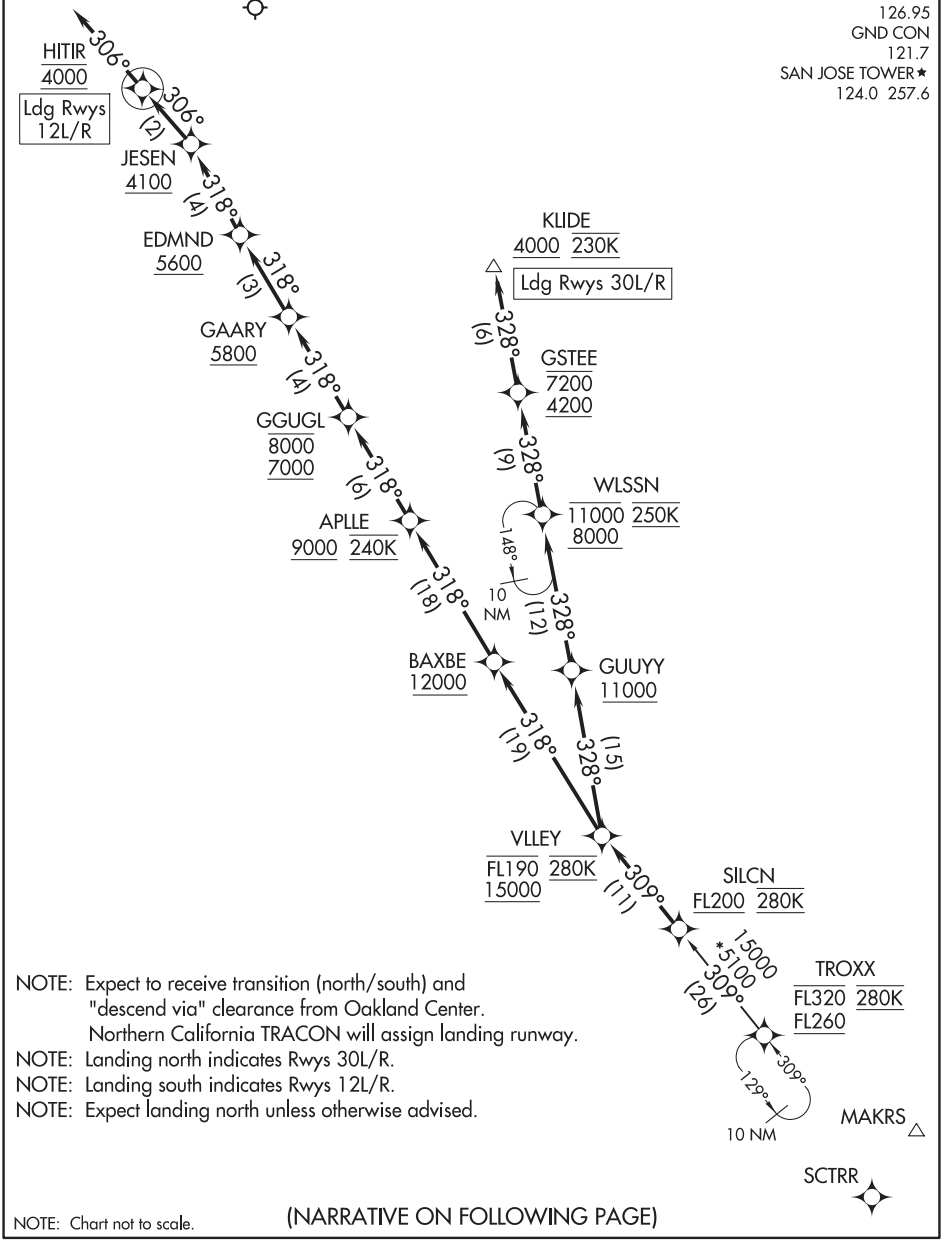
AL-693 (FAA)

SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV 1 - DME/DME/IRU or GPS

RADAR required

OAKLAND CENTER
134.55 290.5
NORCAL APP CON
124.525 348.675
D-ATIS
126.95
GND CON
121.7
SAN JOSE TOWER ★
124.0 257.6



NOTE: Expect to receive transition (north/south) and "descend via" clearance from Oakland Center. Northern California TRACON will assign landing runway.

NOTE: Landing north indicates Rwys 30L/R.

NOTE: Landing south indicates Rwys 12L/R.

NOTE: Expect landing north unless otherwise advised.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

ARRIVAL ROUTE DESCRIPTION

TROXX TRANSITION (TROXX.SILCN6)

From SILCN on track 309° to cross VLLEY between 15000 and FL190 and at 280K.

SOUTH TRANSITION LANDING RUNWAYS 12L/R: From VLLEY on track 318° to cross BAXBE at or above 12000, then on track 318° to cross APLLE at or above 9000 and at 240K, then on track 318° to cross GGUGL between 7000 and 8000, then on track 318° to cross GAARY at or above 5800, then on track 318° to cross EDMND at or above 5600, then on track 318° to cross JESEN at or above 4100, then on track 306° to cross HITIR at 4000, then on track 306°. Expect RADAR vectors to final approach course.

NORTH TRANSITION LANDING RUNWAYS 30L/R: From VLLEY on track 328° to cross GUUYY at or above 11000, then on track 328° to cross WLSSN between 8000 and 11000 and at 250K, then on track 328° to cross GSTEE between 4200 and 7200, then on track 328° to cross KLIDE at or above 4000 and at 230K. Expect assigned intrument approach or RADAR vectors to final approach course.

SW-2, 07 AUG 2025 to 02 OCT 2025

(SLMMR.SLMMR5) 22195

SLMMR FIVE ARRIVAL (RNAV)

AL-5490 (FAA)

SACRAMENTO INTL (SMF)

SACRAMENTO, CALIFORNIA

RNAV 1-DME/DME/IRU or GPS

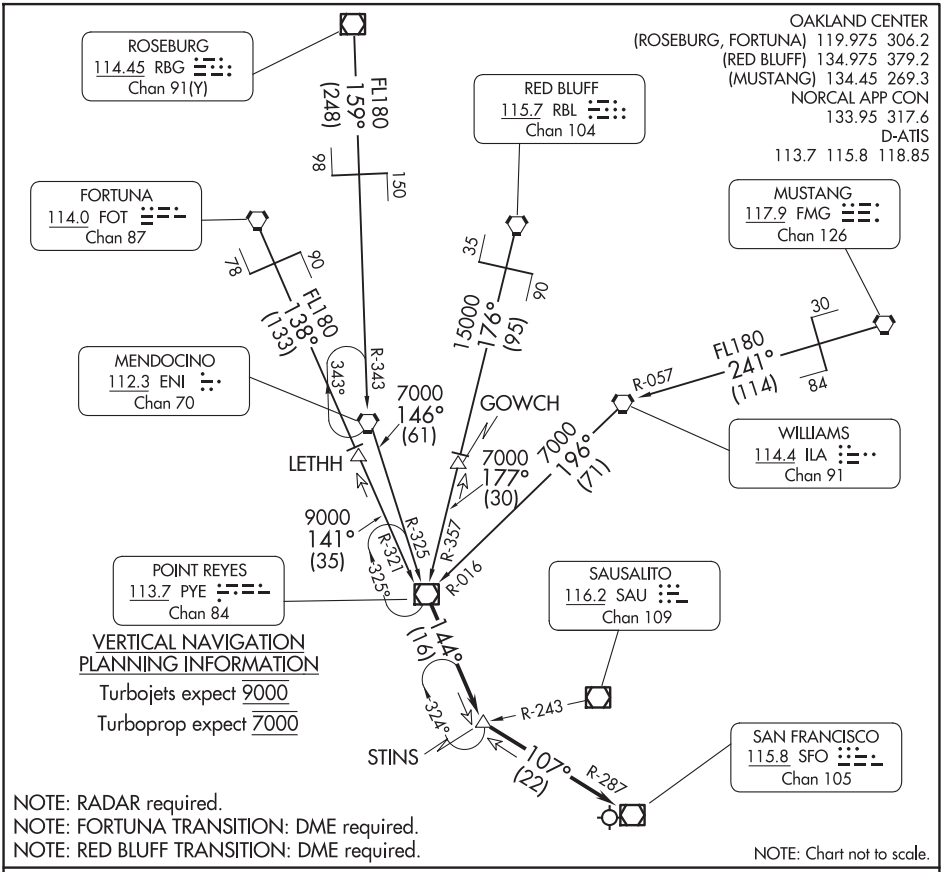
RADAR required.

NOTE: Expect runway assignment 10 NM prior to POZUR.

NOTE: Chart not to scale.

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025



SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

ARRIVAL ROUTE DESCRIPTION

FORTUNA TRANSITION (FOT.STINS4): From over FOT VORTAC on FOT R-138 and PYE R-321 to LETHH, then on PYE R-321 to PYE VOR/DME. Thence. . . .

MENDOCINO TRANSITION (ENI.STINS4): From over ENI VORTAC on ENI R-146 and PYE R-325 to PYE VOR/DME. Thence. . . .

MUSTANG TRANSITION (FMG.STINS4): From over FMG VORTAC on FMG R-241 and ILA R-057 to ILA VORTAC, then on ILA R-196 and PYE R-016 to PYE VOR/DME. Thence. . . .

RED BLUFF TRANSITION (RBL.STINS4): From over RBL VORTAC on RBL R-176 and PYE R-357 to GOWCH, then on PYE R-357 to PYE VOR/DME. Thence. . . .

ROSEBURG TRANSITION (RBG.STINS4): From over RBG VOR/DME on RBG R-159 and ENI R-343 to ENI VORTAC, then on ENI R-146 and PYE R-325 to PYE VOR/DME. Thence. . . .

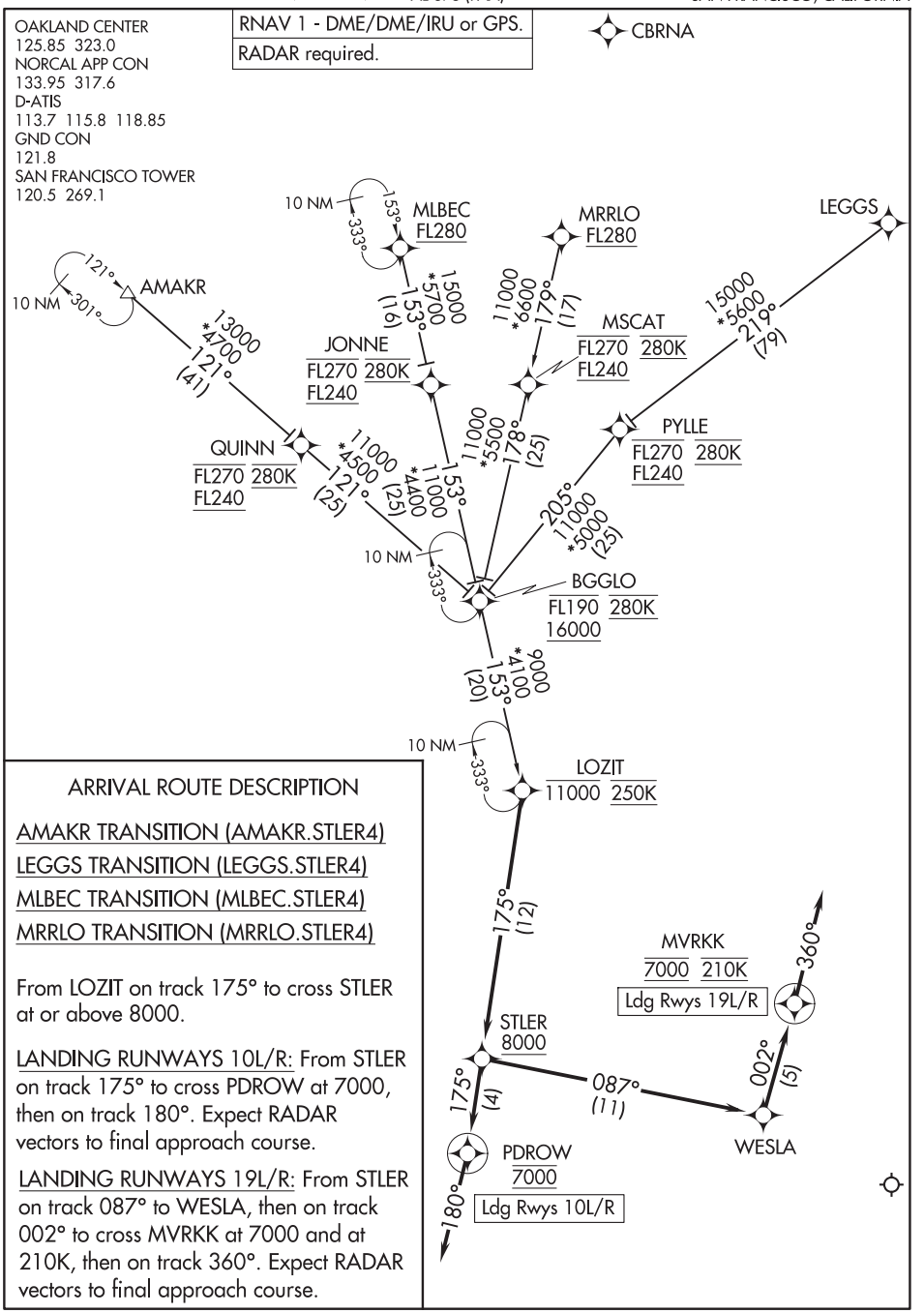
. . . .From over PYE VOR/DME on PYE R-144 to STINS, then on SFO R-287 to SFO VOR/DME. Expect RADAR vectors to final approach course.

(LOZIT.STLER4) 24193

STLER FOUR ARRIVAL (RNAV)

AL-375 (FAA)

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA



ARRIVAL ROUTE DESCRIPTION

AMAKR TRANSITION (AMAKR.STLER4)

LEGGS TRANSITION (LEGGS.STLER4)

MLBEC TRANSITION (MLBEC.STLER4)

MRRLO TRANSITION (MRRLO.STLER4)

From LOZIT on track 175° to cross STLER at or above 8000.

LANDING RUNWAYS 10L/R: From STLER on track 175° to cross PDROW at 7000, then on track 180°. Expect RADAR vectors to final approach course.

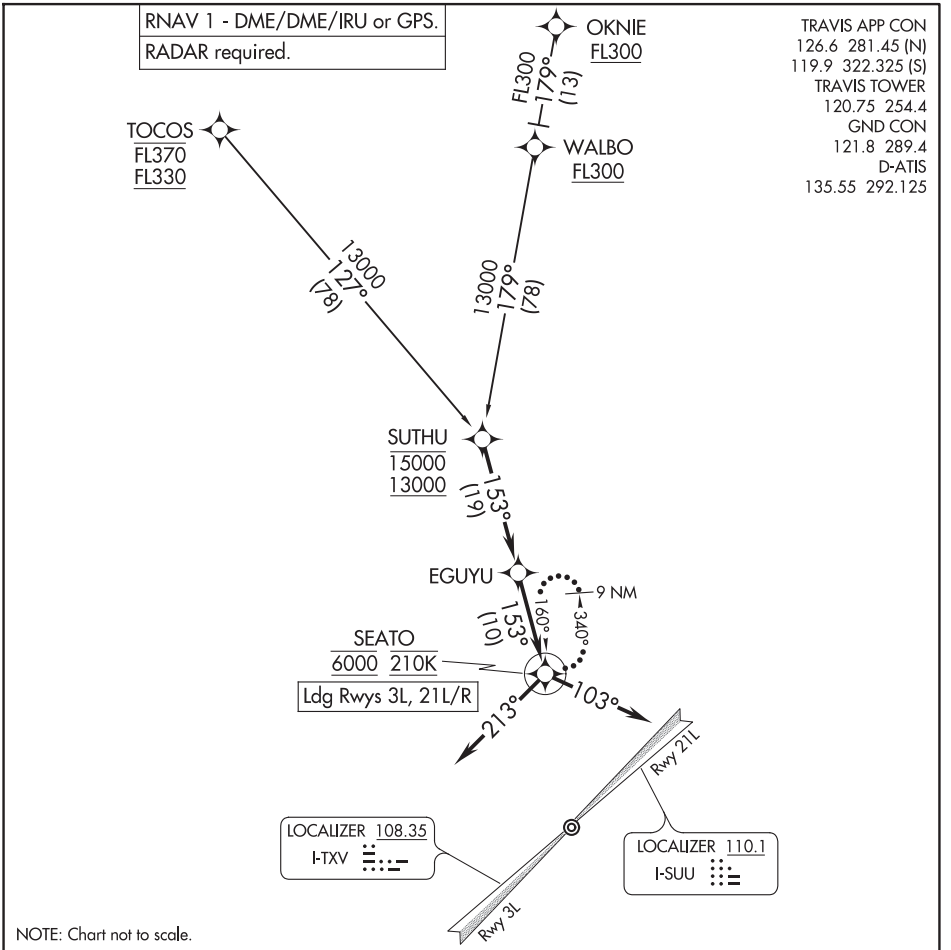
LANDING RUNWAYS 19L/R: From STLER on track 087° to WESLA, then on track 002° to cross MVRKK at 7000 and at 210K, then on track 360°. Expect RADAR vectors to final approach course.

STLER FOUR ARRIVAL (RNAV)

(LOZIT.STLER4) 11JUL24

SAN FRANCISCO, CALIFORNIA
SAN FRANCISCO INTL (SFO)

SW-2, 07 AUG 2025 to 02 OCT 2025



ARRIVAL ROUTE DESCRIPTION

OKNIE TRANSITION (OKNIE.SUTHU2)
TOCOS TRANSITION (TOCOS.SUTHU2)

From SUTHU on track 153° to EGUYU.

LANDING RUNWAY 3L: From EGUYU on track 153° to cross SEATO at 6000 and at 210K, then on heading 213°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 21L/R: From EGUYU on track 153° to cross SEATO at 6000 and at 210K, then on heading 103°. Expect RADAR vectors to final approach course.

LOST COMMUNICATIONS: From SEATO, execute ILS or LOC RWY 21L or TACAN RWY 3L approach. If unable, hold at SEATO as depicted, maintain 6000.

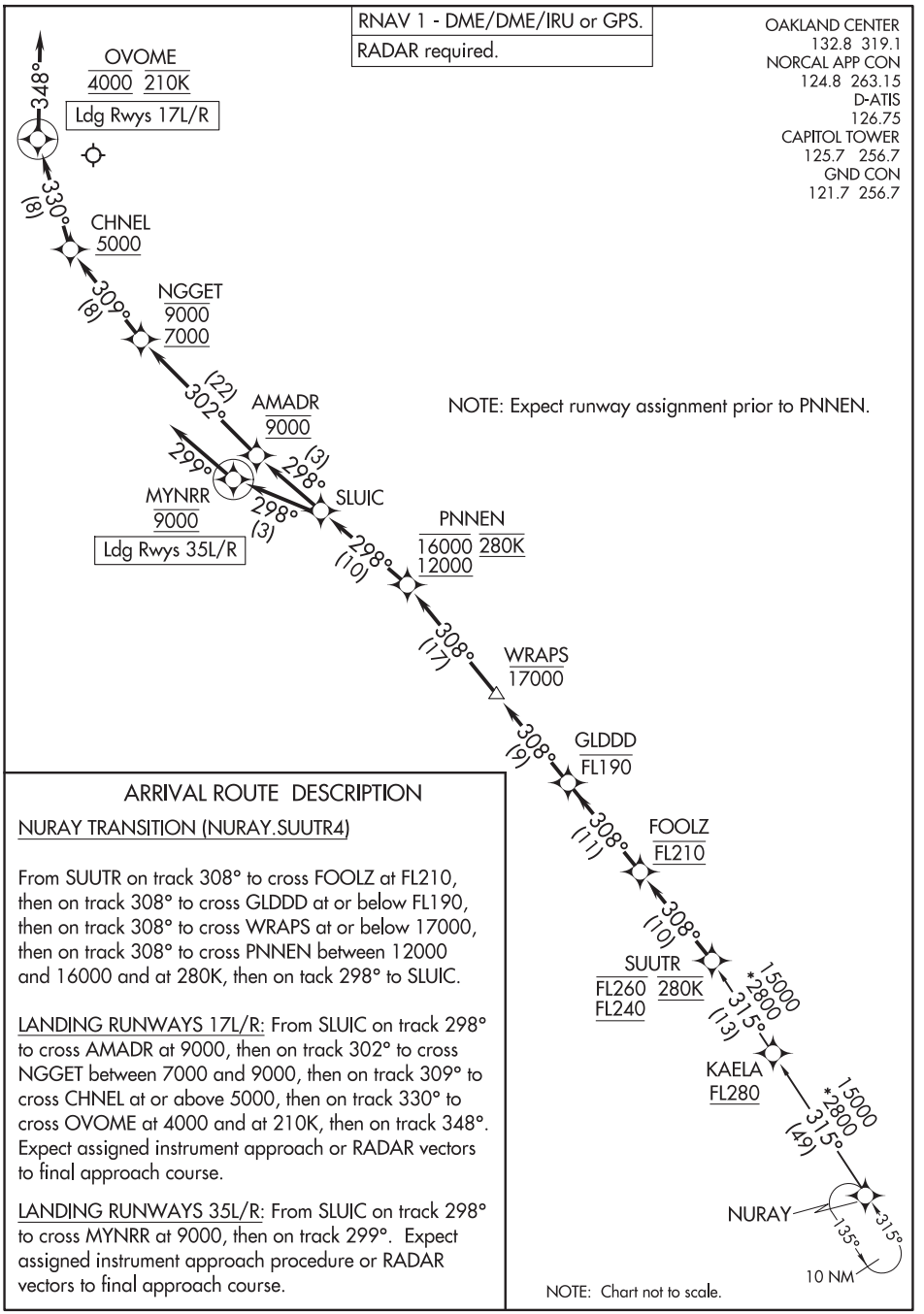
SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(SUUTR.SUUTR4) 22195

SUUTR FOUR ARRIVAL (RNAV)

AL-5490 (FAA)

SACRAMENTO INTL (SMF)
SACRAMENTO, CALIFORNIA



ARRIVAL ROUTE DESCRIPTION

NURAY TRANSITION (NURAY.SUUTR4)

From SUUTR on track 308° to cross FOOLZ at FL210, then on track 308° to cross GLDDD at or below FL190, then on track 308° to cross WRAPS at or below 17000, then on track 308° to cross PNNEN between 12000 and 16000 and at 280K, then on tack 298° to SLUIC.

LANDING RUNWAYS 17L/R: From SLUIC on track 298° to cross AMADR at 9000, then on track 302° to cross NGGET between 7000 and 9000, then on track 309° to cross CHNEL at or above 5000, then on track 330° to cross OVOME at 4000 and at 210K, then on track 348°. Expect assigned instrument approach or RADAR vectors to final approach course.

LANDING RUNWAYS 35L/R: From SLUIC on track 298° to cross MYNRR at 9000, then on track 299°. Expect assigned instrument approach procedure or RADAR vectors to final approach course.

SW-2, 07 AUG 2025 to 02 OCT 2025

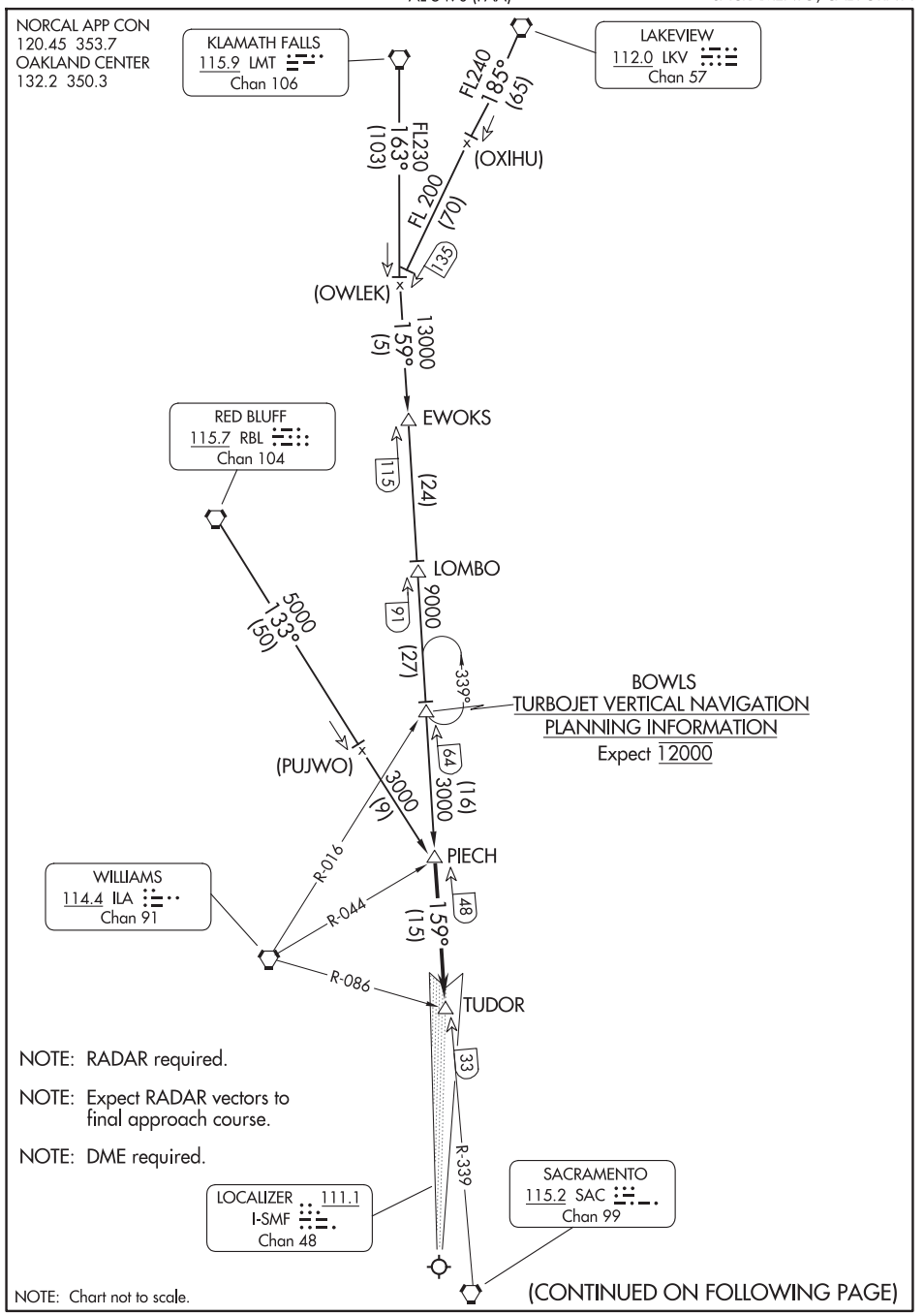
SUUTR FOUR ARRIVAL (RNAV)

SACRAMENTO, CALIFORNIA
SACRAMENTO INTL (SMF)

(SUUTR.SUUTR4) 14JUL22

TUDOR TWO ARRIVAL

AL-5490 (FAA)



TUDOR TWO ARRIVAL
SACRAMENTO, CALIFORNIA
SACRAMENTO INTL (SMF)

(TUDOR.TUDOR2) 09FEB12

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

ARRIVAL ROUTE DESCRIPTION

KLAMATH FALLS TRANSITION (LMT.TUDOR2): From over LMT VORTAC via LMT R-163 and SAC R-339 to PIECH INT. Thence . . . .

LAKEVIEW TRANSITION (LKV.TUDOR2): From over LKV VORTAC via LKV R-185 and SAC R-339 to PIECH INT. Thence . . . .

RED BLUFF TRANSITION (RBL.TUDOR2): From over RBL VORTAC via RBL R-133 to PIECH INT. Thence . . . .

. . . . From PIECH INT via SAC R-339 to TUDOR INT/DME. Expect RADAR vectors.

SW-2, 07 AUG 2025 to 02 OCT 2025

VNYRD ONE ARRIVAL (RNAV) Transition Routes

SW-2, 07 AUG 2025 to 02 OCT 2025

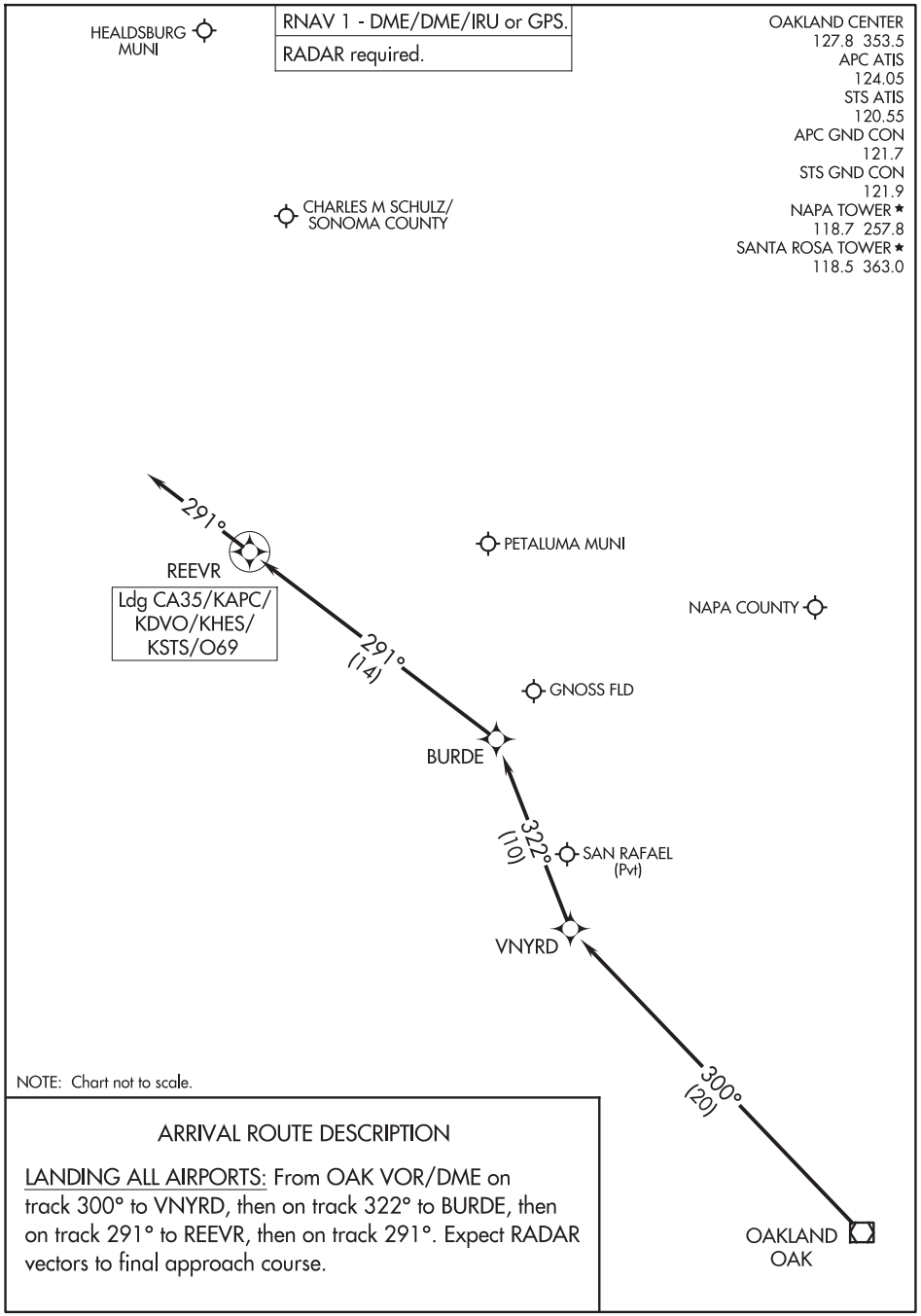
VNYRD ONE ARRIVAL (RNAV) Transition Routes

NAPA, CALIFORNIA

(OAK.VNYRD1) 24305 AL-281 (FAA)

VNYRD ONE ARRIVAL (RNAV) Arrival Routes

NAPA, CALIFORNIA



NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

LANDING ALL AIRPORTS: From OAK VOR/DME on track 300° to VNYRD, then on track 322° to BURDE, then on track 291° to REEVR, then on track 291°. Expect RADAR vectors to final approach course.

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

VNYRD ONE ARRIVAL (RNAV) Arrival Routes

NAPA, CALIFORNIA

WEBGO TWO ARRIVAL (RNAV)

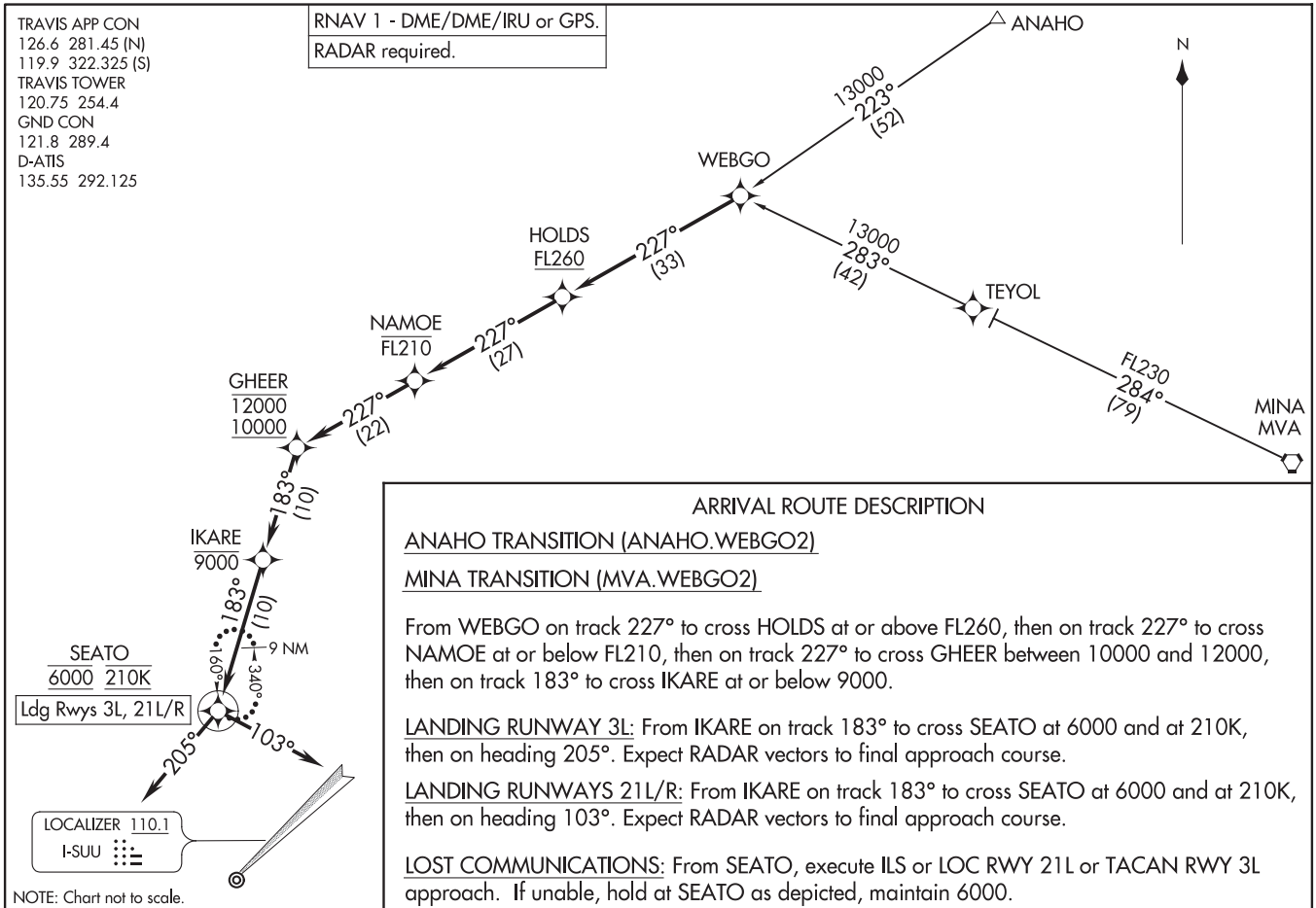
(WEBGO.WEBGO2) 19MAY22

(WEBGO.WEBGO2) 22139

WEBGO TWO ARRIVAL (RNAV)

TRAVIS APP CON
126.6 281.45 (N)
119.9 322.325 (S)
TRAVIS TOWER
120.75 254.4
GND CON
121.8 289.4
D-ATIS
135.55 292.125

RNAV 1 - DME/DME/IRU or GPS.
RADAR required.



NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

ANAHO TRANSITION (ANAHO.WEBGO2)

MINA TRANSITION (MVA.WEBGO2)

From WEBGO on track 227° to cross HOLDS at or above FL260, then on track 227° to cross NAMOE at or below FL210, then on track 227° to cross GHEER between 10000 and 12000, then on track 183° to cross IKARE at or below 9000.

LANDING RUNWAY 3L: From IKARE on track 183° to cross SEATO at 6000 and at 210K, then on heading 205°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 21L/R: From IKARE on track 183° to cross SEATO at 6000 and at 210K, then on heading 103°. Expect RADAR vectors to final approach course.

LOST COMMUNICATIONS: From SEATO, execute ILS or LOC RWY 21L or TACAN RWY 3L approach. If unable, hold at SEATO as depicted, maintain 6000.

FAIRFIELD, CALIFORNIA
TRAVIS AFB (KSUU)

Z45

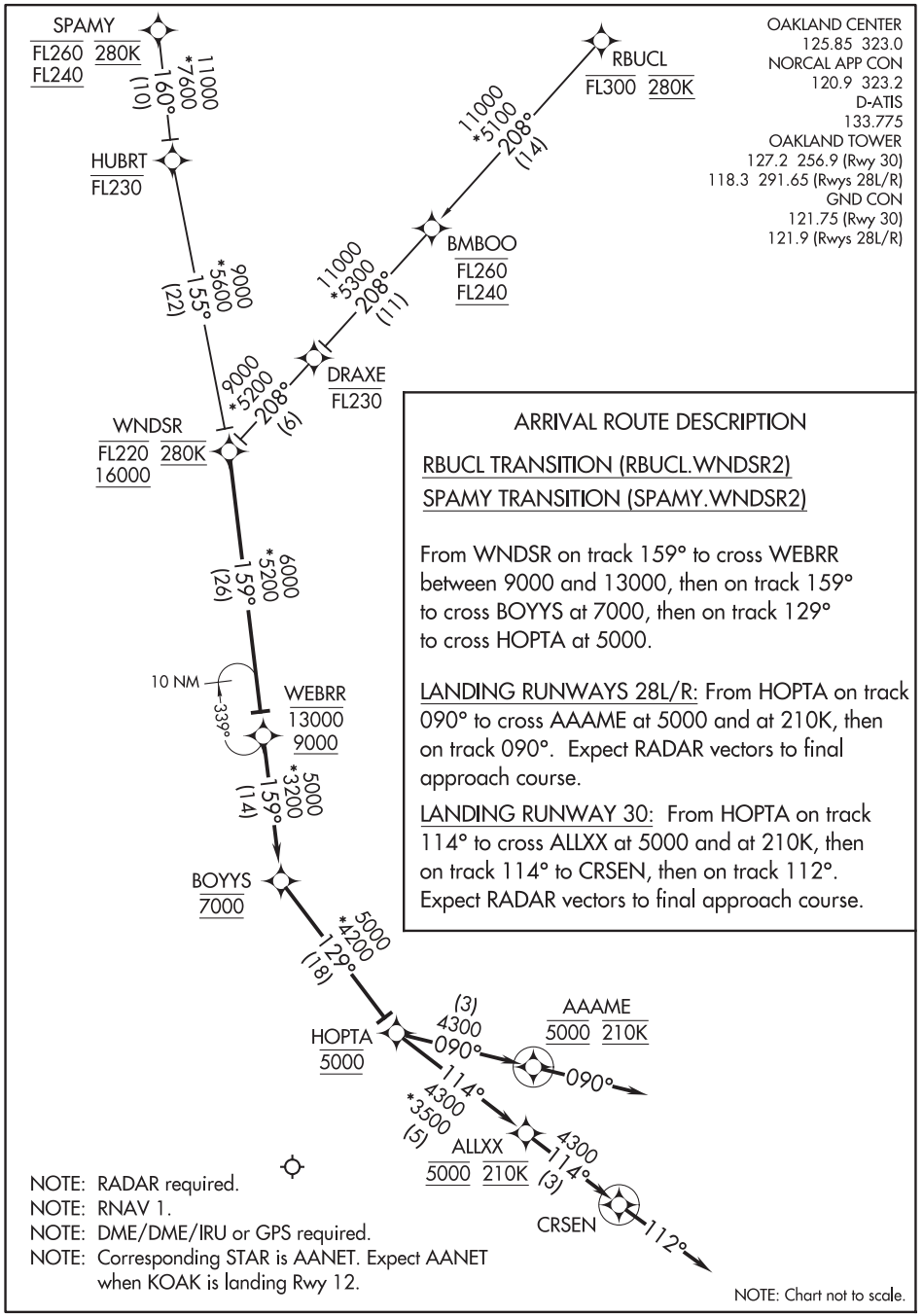
AL-488 (FAA)

(WNDSR.WNDSR2) 25163

WNDSR TWO ARRIVAL (RNAV)

AL-294 (FAA)

OAKLAND INTL (OAK)
OAKLAND, CALIFORNIA



ARRIVAL ROUTE DESCRIPTION

RBUCL TRANSITION (RBUCL.WNDSR2)
SPAMY TRANSITION (SPAMY.WNDSR2)

From WNDSR on track 159° to cross WEBRR between 9000 and 13000, then on track 159° to cross BOYYS at 7000, then on track 129° to cross HOPTA at 5000.

LANDING RUNWAYS 28L/R: From HOPTA on track 090° to cross AAAME at 5000 and at 210K, then on track 090°. Expect RADAR vectors to final approach course.

LANDING RUNWAY 30: From HOPTA on track 114° to cross ALLXX at 5000 and at 210K, then on track 114° to CRSEN, then on track 112°. Expect RADAR vectors to final approach course.

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Corresponding STAR is AANET. Expect AANET when KOAK is landing Rwy 12.

NOTE: Chart not to scale.

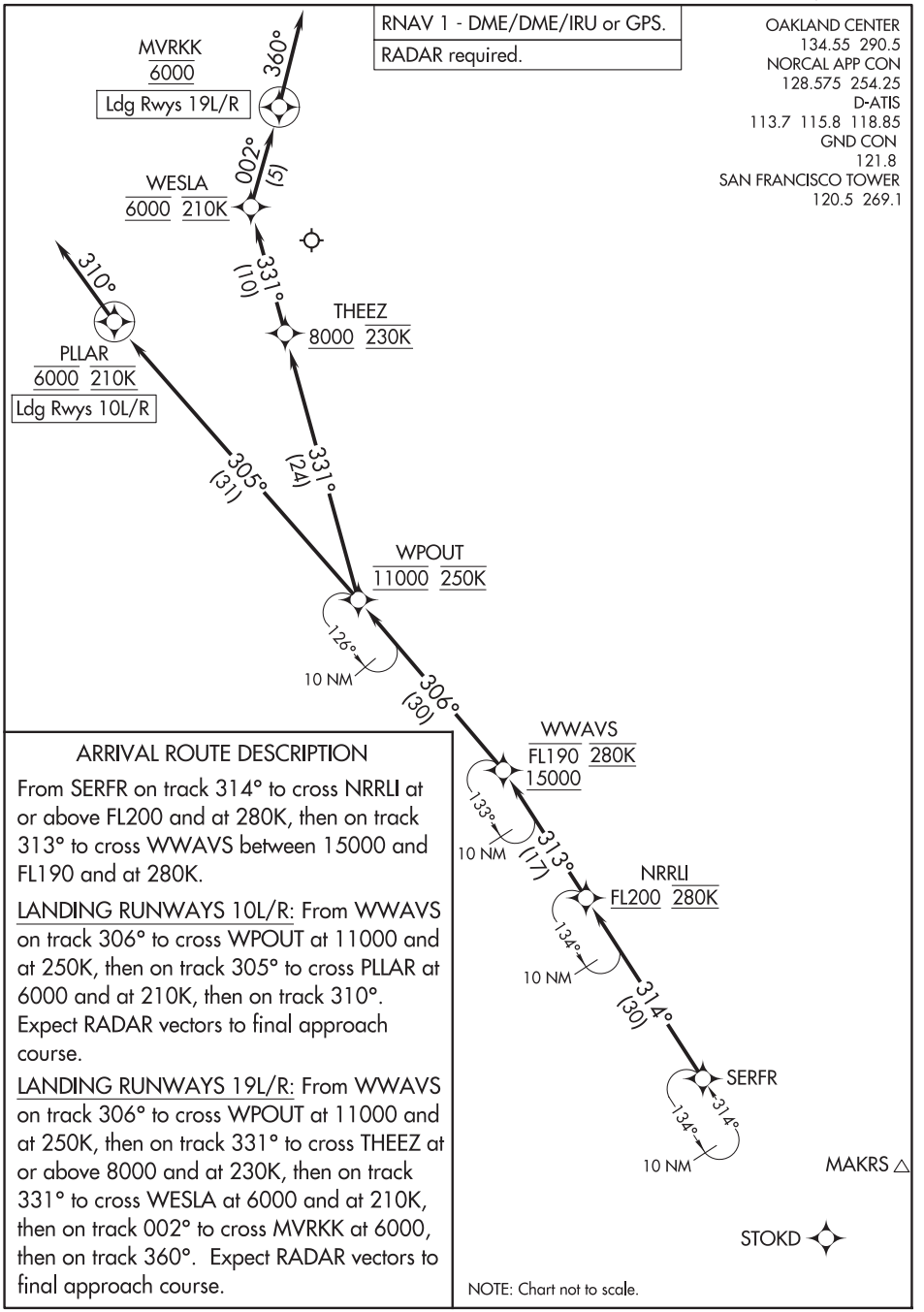
WNDSR TWO ARRIVAL (RNAV)

(WNDSR.WNDSR2) 15OCT15

OAKLAND, CALIFORNIA
OAKLAND INTL (OAK)

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025



ARRIVAL ROUTE DESCRIPTION

From SERFR on track 314° to cross NRRLI at or above FL200 and at 280K, then on track 313° to cross WWAVS between 15000 and FL190 and at 280K.

LANDING RUNWAYS 10L/R: From WWAVS on track 306° to cross WPOUT at 11000 and at 250K, then on track 305° to cross PLLAR at 6000 and at 210K, then on track 310°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 19L/R: From WWAVS on track 306° to cross WPOUT at 11000 and at 250K, then on track 331° to cross THEEZ at or above 8000 and at 230K, then on track 331° to cross WESLA at 6000 and at 210K, then on track 002° to cross MVRKK at 6000, then on track 360°. Expect RADAR vectors to final approach course.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(YOSEM.YOSEM3) 17173

YOSEM THREE ARRIVAL (RNAV)

AL-375 (FAA)

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA

SW-2, 07 AUG 2025 to 02 OCT 2025

YOSEM THREE ARRIVAL (RNAV)
(YOSEM.YOSEM3) 30APR15
SAN FRANCISCO, CALIFORNIA
SAN FRANCISCO INTL (SFO)

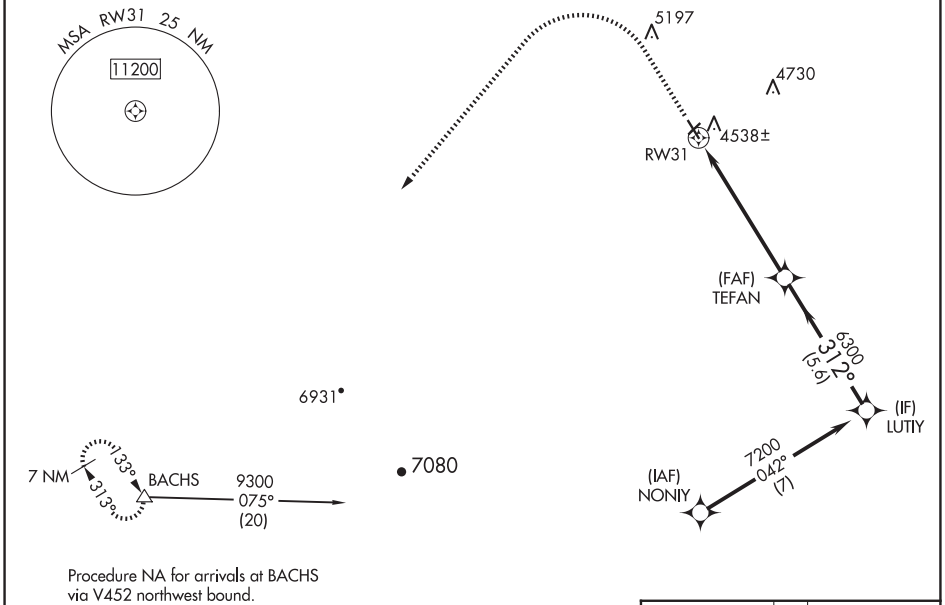
WAAS	APP CRS	Rwy Idg	4228
CH 70620	312°	TDZE	4378
W31A		Apt Elev	4378

RNAV (GPS) RWY 31
ALTURAS MUNI (AAT)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (-9°F) or above 54°C (130°F). Rwy 31 helicopter visibility reduction below 1 SM NA. DME/DME RNP- 0.3 NA. Procedure NA at night.

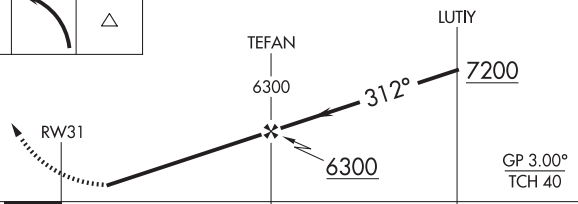
MISSED APPROACH: Climb to 5400, then climbing left turn to 9000 direct BACHS and hold.

ASOS	SEATTLE CENTER	UNICOM
124.175	127.6 346.35	122.8 (CTAF) L



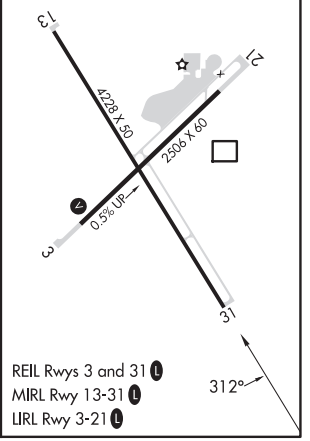
Procedure NA for arrivals at BACHS via V452 northwest bound.

5400 | 9000 | BACHS | VGSI and RNAV glidepath not coincident.



CATEGORY	A	B	C	D
LPV DA	4830-1⅜	452 (500-1⅜)	NA	
LNAV/VNAV DA	4880-1⅜	502 (600-1⅜)	NA	
LNAV MDA	5120-1 742 (800-1)	5120-1¼ 742 (800-1¼)	NA	
C CIRCLING	5120-1 742 (800-1)	5200-1¼ 822 (900-1¼)	NA	

ELEV 4378 TDZE 4378



REIL Rwys 3 and 31 L
MIRL Rwy 13-31 L
LIRL Rwy 3-21 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(BACHS2.BACHS) 23278

BACHS TWO DEPARTURE (OBSTACLE) (RNAV)

AL-6436 (FAA)

ALTURAS MUNI (AAT)
ALTURAS, CALIFORNIA

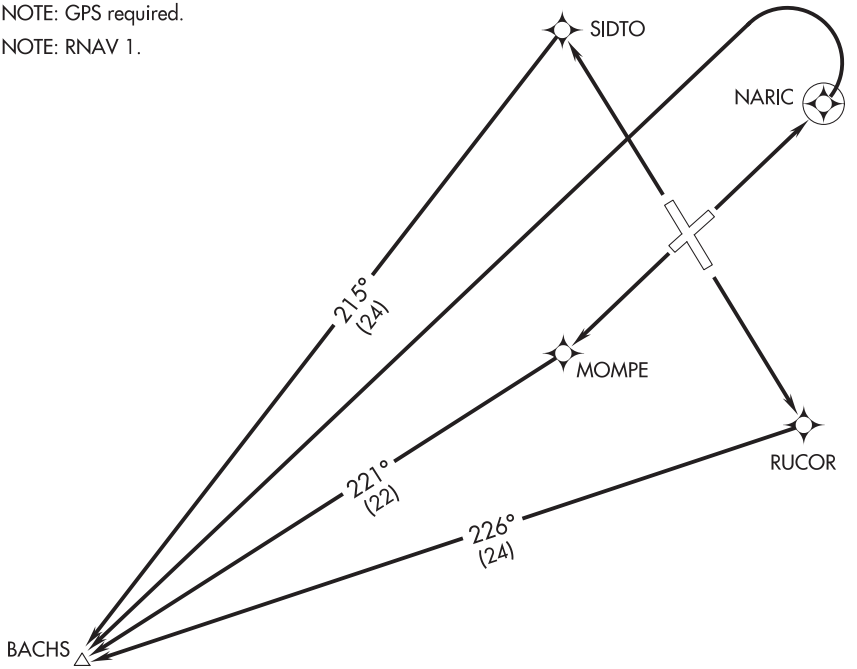
SEATTLE CENTER
127.6 346.35
CTAF
122.8

TAKEOFF MINIMUMS

Rwy 3: Standard with minimum climb of 340′ per NM to 5900.
Rwy 13: Standard with minimum climb of 230′ per NM to 8200.
Rwy 21: Standard with minimum climb of 365′ per NM to 6000.
Rwy 31: Standard with minimum climb of 450′ per NM to 5800.

NOTE: GPS required.

NOTE: RNAV 1.



TAKEOFF OBSTACLE NOTES

Rwy 3: Trees, buildings, poles and a road with vehicles beginning 1′ from DER, right and left of centerline, up to 100′ AGL/4659′ MSL.
Rwy 21: Trees and road with vehicles beginning 1′ from DER, right and left of centerline, to 100′ AGL/4469′ MSL.
Rwy 13: Trees and a road with vehicles beginning 1′ from DER, right and left of centerline, up to 100′ AGL/4519′ MSL.
Rwy 31: Trees and road with vehicles beginning 1′ from DER, right and left of centerline, up to 100′ AGL/4469′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 3: Climb to 9000 direct NARIC, then climbing left turn direct BACHS.

TAKEOFF RUNWAY 13: Climb to 9000 direct RUCOR, turn right via 226° track to BACHS.

TAKEOFF RUNWAY 21: Climb to 9000 direct MOMPE, then via 221° track to BACHS.

TAKEOFF RUNWAY 31: Climb to 9000 direct SIDTO, turn left via 215° track to BACHS.

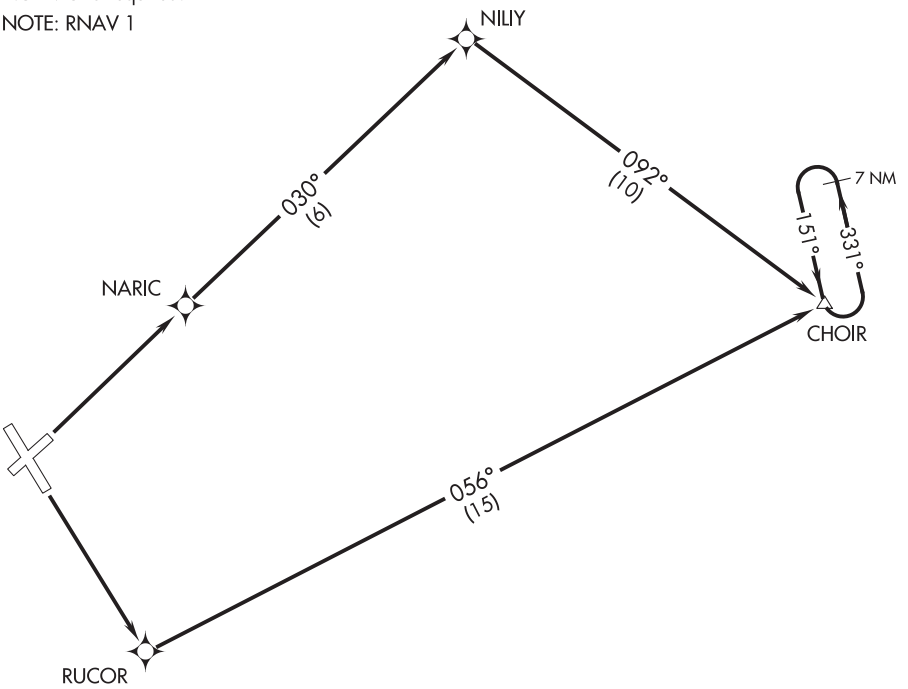
SW-2, 07 AUG 2025 to 02 OCT 2025

TOP ALTITUDE: ASSIGNED BY ATC

SEATTLE CENTER
127.6 346.35
CTAF 122.8

TAKEOFF MINIMUMS
Rwy 3: Standard with minimum climb of 367′ per NM to 11000.
Rwy 13: Standard with minimum climb of 389′ per NM to 11000.
Rwys 21 and 31: NA - ATC.

NOTE: GPS required.
NOTE: RNAV 1



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 3: Climb to 11000 direct NARIC and via 030° track to NILIY and via 092° track to CHOIR, thence....

TAKEOFF RUNWAY 13: Climb to 11000 direct RUCOR and via 056° track to CHOIR, thence....

....climb in holding, (if required) before proceeding on course.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

HERLONG, CALIFORNIA

RNAV (GPS) RWY 27

APCH CRS	Rwy ldg	10,000
266°	TDZE	4012
	Arpt Elev	4012

AL-6624 (USA)

AMEDEE AAF (KAHC)

RNP APCH - GPS.

T A NA * Circling NA for CAT CD north of Rwy 9-27.

MISSED APPROACH: Climbing left turn to 10,000 direct JEBED and track 010° to IYELE and hold, continue climb-in-hold to 10,000. When authorized by ATC, climb-in-hold to 14,000.

AWOS-3	OAKLAND CENTER	CTAF
118.825	128.8 285.5	126.2 241.9

VDP NA when using Susanville altimeter setting.

WIDUT

10,000 130° (12.8)

7 NM

010° 190°

RENO MOA, NV

(IAF) IYELE 10,000 270K

8000 199° (7.8)

7560 7000 6000 5000

4342

4226

5193 5863 6004 5725

RW27

5900 6500 7000 266° (2) (1.9) (4.6)

(FAF) WEBMA YESUY COKGA

(IF) JEBED

8000 342° (6.2)

Procedure NA at SEDTO for CAT D

(IAF) SEDTO 11,000 200K

Procedure not authorized at night.

When local altimeter setting not received, use Susanville altimeter setting.

6202

11,000 335° (36.4)

MUSTANG FMG

MSA RW27 25 NM 10,000

NOT FOR CIVIL USE

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

10,000 JEBED tr 010° IYELE

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 87).

JEBED 8000

COKGA 266° 7000

YESUY 6500

WEBMA

1.4 NM to RW27

RW27 3.10° 5900 TCH 50

5.6 NM

ELEV 4012 TDZE 4012

6 10,000 x 150 266° 27 P

CATEGORY	A	B	C	D
LNAV MDA	4540-1 528 (600-1)		4540-1½ 528 (600-1½)	
C CIRCLING	4540-1 528 (600-1)	4680-1 668 (700-1)	4680-1¾ 668 (700-1¾)	4680-2 668 (700-2)
SUSANVILLE ALTIMETER SETTING MINIMUMS				
LNAV MDA	4620-1 608 (700-1)		4620-2 608 (700-2)	
C CIRCLING	4620-1 608 (700-1)	4760-1 748 (800-1)	4760-2¼ 748 (800-2¼)	4760-2½ 748 (800-2½)

HERLONG, CALIFORNIA

40°16'N - 120°09'W

AMEDEE AAF (KAHC)

Amdt 3 13JUL23

TERPS

RNAV (GPS) RWY 27

LOC/DME I-ACV	APP CRS	Rwy Idg	5846
109.5	316°	TDZE	221
Chan 32		Apt Elev	222

ILS or LOC RWY 32

CALIFORNIA REDWOOD COAST-HUMBOLDT COUNTY (ACV)

T
A NA — Circling NA northeast of Rwy 14-32. DME required.

MALSR

MISSED APPROACH: Climb to 800 then climbing left turn to 3000 direct FOT VORTAC and hold.

ASOS	SEATTLE CENTER	UNICOM
118.525	124.85 306.3	123.0 (CTAF) L

ALTERNATE MISSED APCH FIX
ARCATA ACV 115.05 Chan 97(Y)
R-293-113° 293°

CULDU
5700 to VOR/DME 135° (12.6)
1405
ARCATA 115.05 ACV Chan 97(Y)
3578
4092
3000
1000
251
ULAMY I-ACV 6.1
885
3404
4260
619±
ZUVKU I-ACV 7.5
3690
3988
LOCALIZER 109.5 I-ACV Chan 32
5700 to VOMAC 136° (18.7)
VOLEW I-ACV 10.3
5074±
3200 316° (2.1)
1937
3700 316° (3.3)
3000
SAWGU INT I-ACV 12.4
2386
JEBGA INT I-ACV 15.7
5484
R-035
4700 316° (3.4)
(IF/IAF) VOMAC INT I-ACV 19.1
R-341-161°
341°
3086
R-049
5700
063° (14.4)
R-063
5259
3729
1 min
136°
316°
1000
5000
FORTUNA 114.0 FOT Chan 87
2340
5700 NoPT
316° (9.9)
136°
5905
4410
2613
(IF/IAF) YAGER I-ACV 28.9

MSA ACV 25 NM
5900
110°
220°
2300
7200
010°

ELEV 222 D TDZ 221

800 3000 FOT — Use I-ACV DME when on the localizer course. VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 43).

*LOC only

VOMAC I-ACV 19.1 — One Minute Holding Pattern
JEBGA I-ACV 15.7
SAWGU I-ACV 12.4
VOLEW I-ACV 10.3
ZUVKU I-ACV 7.5
ULAMY I-ACV 6.1
*I-ACV 3
I-ACV 1.1
136° 316° 5700
316°
4700
3700
3200
1860*
2320*
3200
GS 3.00°
TCH 47
1.9 3.1 NM 1.4 NM 2.8 NM 2.1 NM 3.3 NM 3.4 NM

CATEGORY	A	B	C	D
S-ILS 32	441/18 220 (300-½)			
S-LOC 32	880/24 659 (700-½)		880-1⅜ 659 (700-1⅜)	
C CIRCLING	880-1 658 (700-1)		880-1⅞ 658 (700-1⅞)	880-2 658 (700-2)

14
61
0.7% UP
6046 X 150
4501 X 150
0.5% UP
32
316°

CL Rwy 14 L
TDZ/CL Rwy 32 L
MIRL Rwy 1-19
HIRL Rwy 14-32 L
REIL Rwy 14 L
REIL Rwy 1

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS	APP CRS	Rwy Idg	4501
CH 63200	013°	TDZE	204
W01A		Apt Elev	222

RNAV (GPS) RWY 1

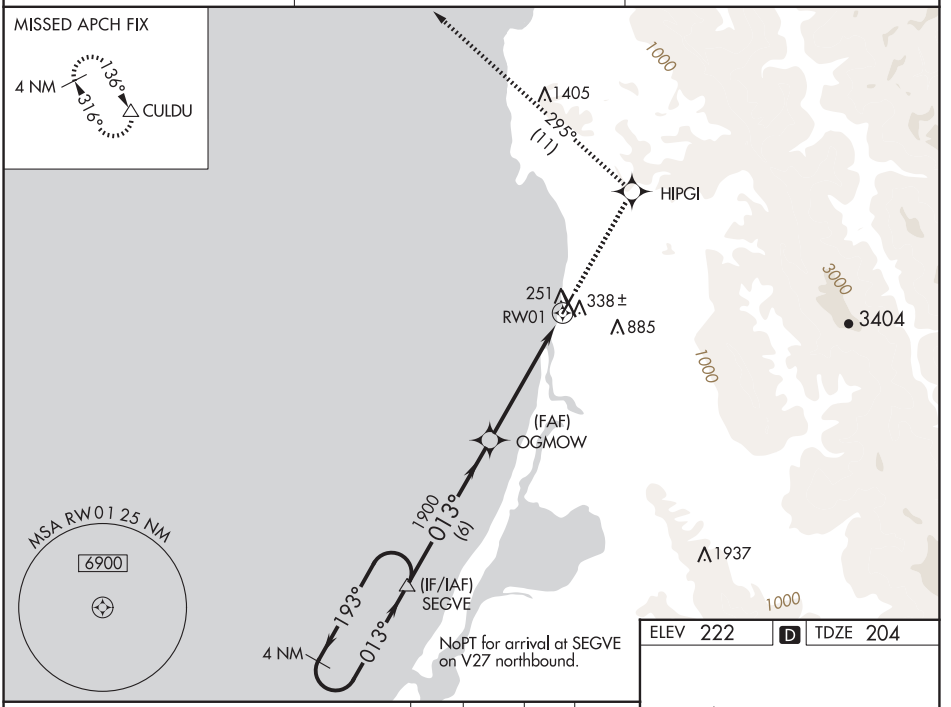
CALIFORNIA REDWOOD COAST-HUMBOLDT COUNTY (ACV)

RNP APCH - GPS.

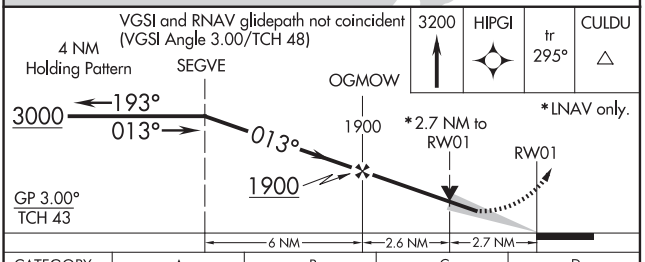
T A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -2°C or above 54°C. Circling NA northeast of Rwy 14-32.

MISSED APPROACH: Climb to 3200 direct HIPGI and on track 295° to CULDU and hold.

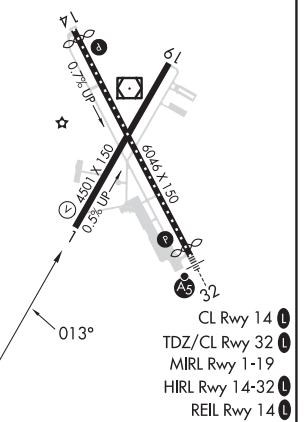
ASOS	SEATTLE CENTER	UNICOM
118.525	124.85 306.3	123.0 (CTAF) L



ELEV 222 D TDZE 204



CATEGORY	A	B	C	D
LPV DA	870-2½ 666 (700-2½)			
LNAV/VNAV DA	838-2½ 634 (700-2½)			
LNAV MDA	1080-1 876 (900-1)	1080-1¼ 876 (900-1¼)	1080-2½ 876 (900-2½)	
C CIRCLING	1080-1¼ 858 (900-1¼)		1080-2½ 858 (900-2½)	1080-2¾ 858 (900-2¾)



SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS	APP CRS	Rwy Idg	5601
CH 62801	136°	TDZE	205
W14A		Apt Elev	222

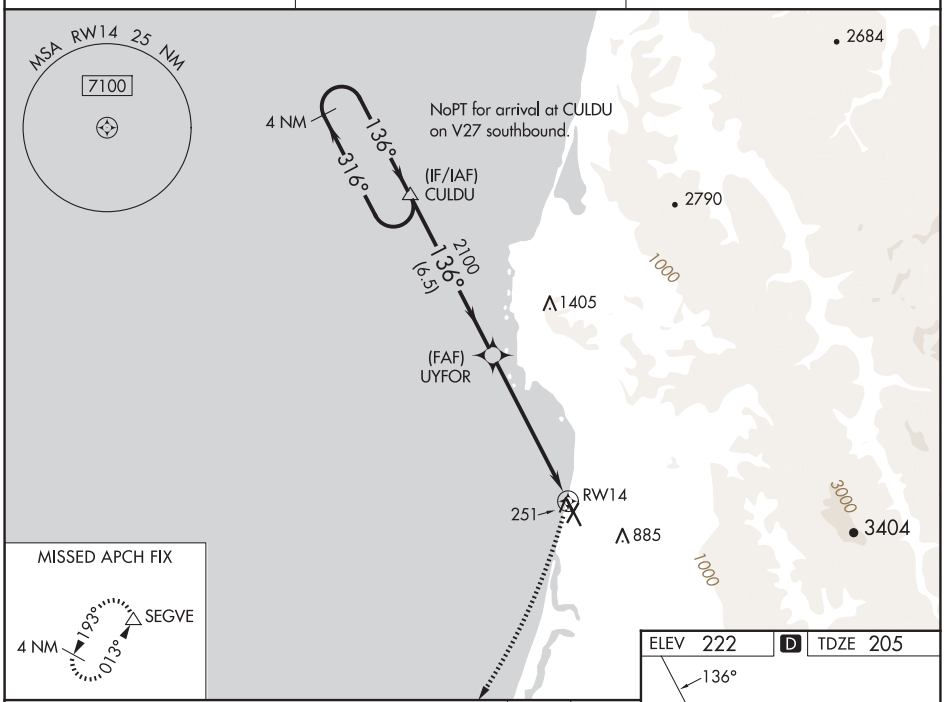
RNAV (GPS) RWY 14

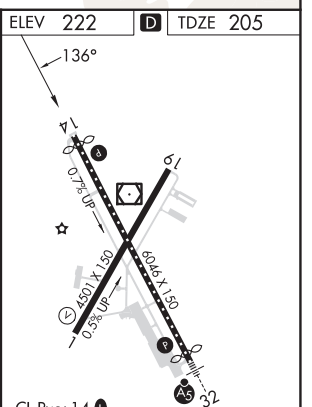
CALIFORNIA REDWOOD COAST-HUMBOLDT COUNTY (ACV)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -2°C (29°F) or above 54°C (130°F). Circling NA northeast of Rwy 14-32. DME/DME RNP-0.3 NA. Rwy 14 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climbing right turn to 3000 direct SEGVE and hold.

ASOS	SEATTLE CENTER	UNICOM
118.525	124.85 306.3	123.0 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	455/45 250 (300-⅞)			
LNAV/VNAV DA	570-1¼ 365 (400-1¼)			
LNAV MDA	820/55 615 (600-1)		820-1¾ 615 (600-1¾)	
C CIRCLING	820-1 598 (600-1)		840-1¾ 618 (700-1¾)	880-2 658 (700-2)

ARCATA/EUREKA, CALIFORNIA | AL-519 (FAA) | 25051

WAAS	APP CRS	Rwy Idg	5846
CH 63108	316°	TDZE	221
W32A		Apt Elev	222

RNAV (GPS) RWY 32

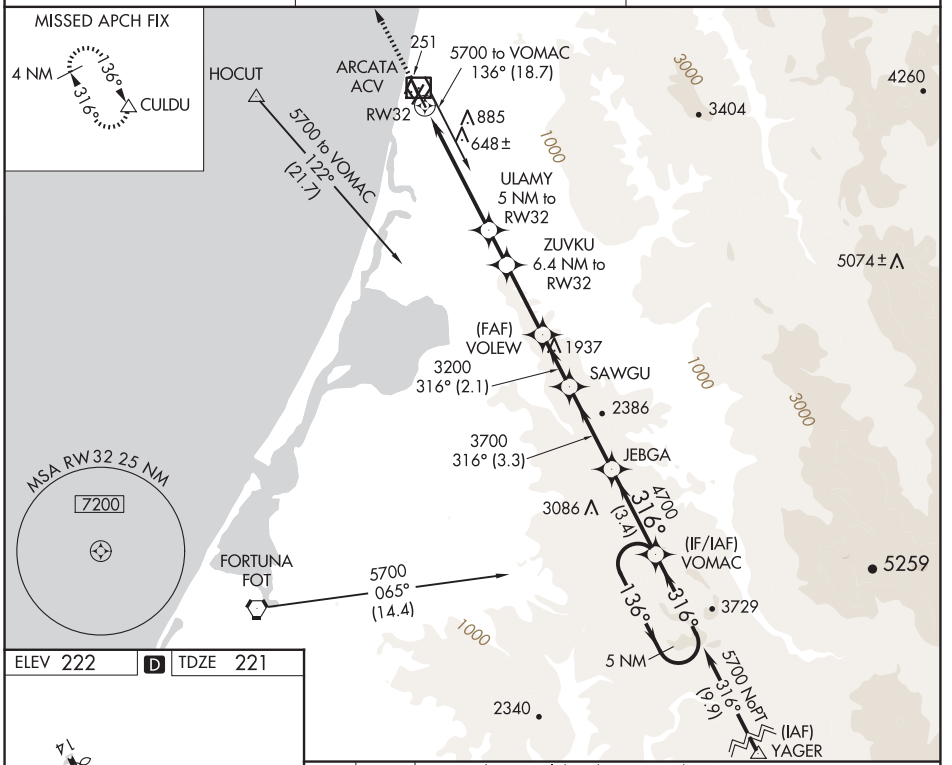
CALIFORNIA REDWOOD COAST-HUMBOLDT COUNTY (ACV)

T A — Baro-VNAV NA. Circling NA northeast of Rwy 14-32. DME/DME RNP-0.3 NA.

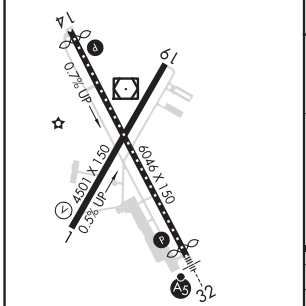
MALSR

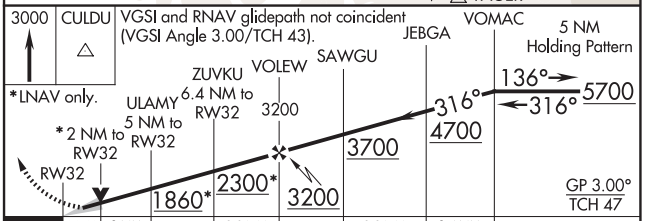
MISSED APPROACH: Climb to 3000 direct CULDU and hold.

ASOS	SEATTLE CENTER	UNICOM
118.525	124.85 306.3	123.0 (CTAF) L



ELEV 222 | D | TDZE 221





CATEGORY	A	B	C	D
LPV DA	441/18 220 (300-½)			
LNAV/VNAV DA	1056-2½ 835 (900-2½)			
LNAV MDA	900/24 679 (700-½)	900/40 679 (700-¾)	900-1½ 679 (700-1½)	
C CIRCLING	900-1 678 (700-1)		900-2 678 (700-2)	900-2¼ 678 (700-2¼)

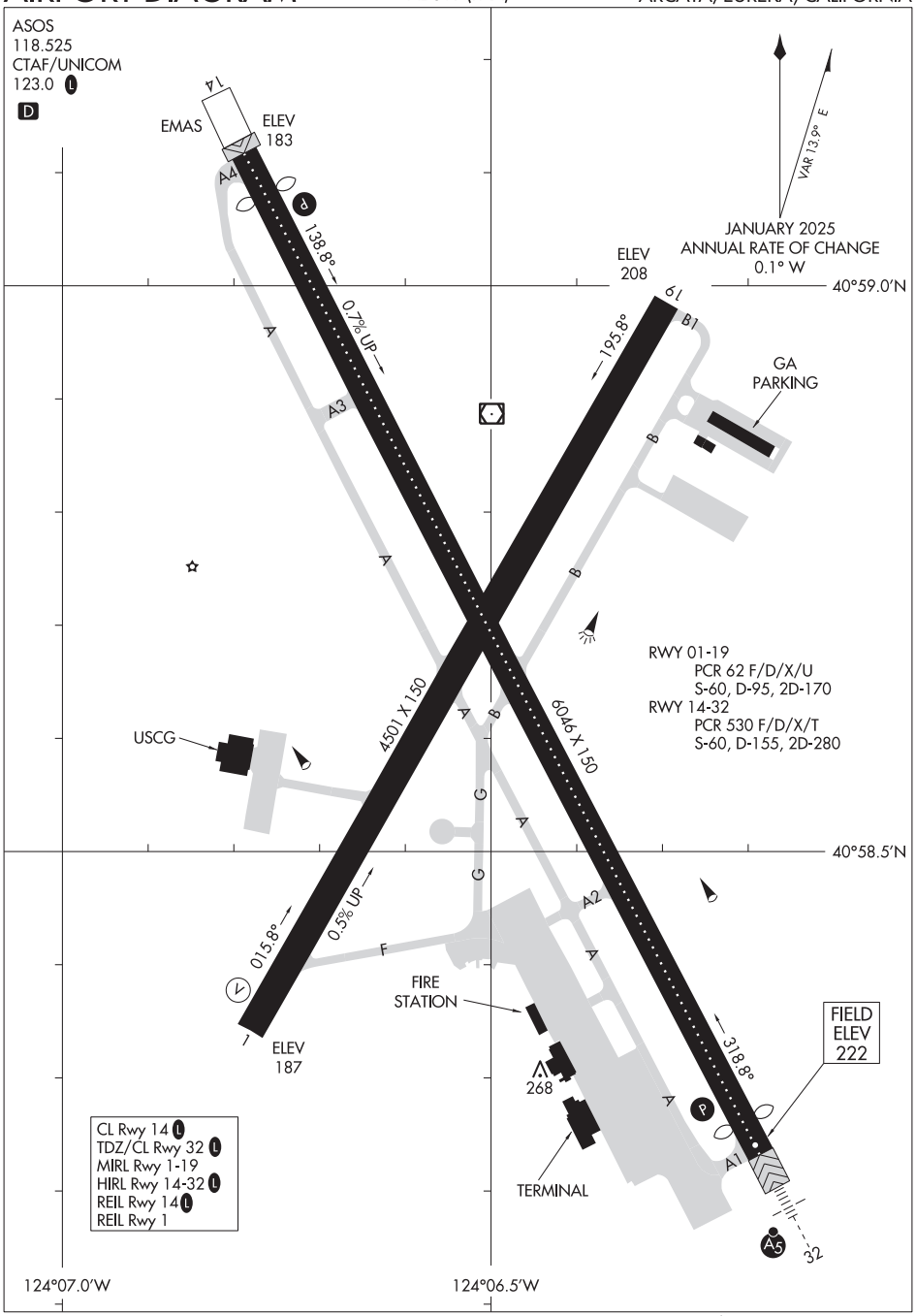
ARCATA/EUREKA, CALIFORNIA
Amdt 2A 26APR18

CALIFORNIA REDWOOD COAST-HUMBOLDT COUNTY (ACV)
40°59′N-124°07′W

RNAV (GPS) RWY 32

SW-2, 07 AUG 2025 to 02 OCT 2025

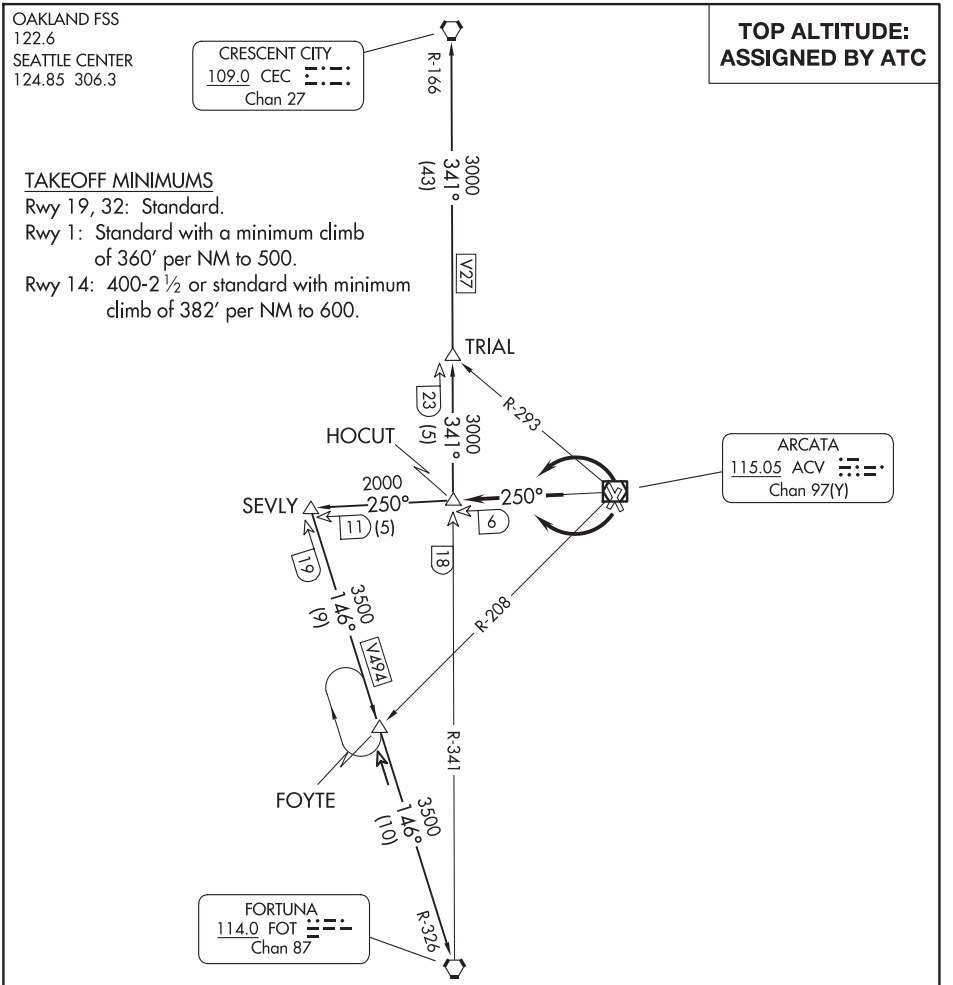
SW-2, 07 AUG 2025 to 02 OCT 2025



SW-2, 07 AUG 2025 to 02 OCT 2025

(HOCUT5.HOCUT) 23334
HOCUT FIVE DEPARTURE

CALIFORNIA REDWOOD COAST-HUMBOLDT COUNTY (ACV)
AL-519 (FAA)
ARCATA/EUREKA, CALIFORNIA



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 1 and 32: Climbing left turn on ACV R-250, thence. . . .
TAKEOFF RUNWAYS 14 and 19: Climbing right turn on ACV R-250, thence. . . .
. . . .on (transition) or (assigned route).

CRESCENT CITY TRANSITION (HOCUT5.CEC): From over HOCUT INT on FOT R-341 and CEC R-166 to CEC VORTAC.

FORTUNA TRANSITION (HOCUT5.FOT): From over HOCUT INT on ACV R-250 to SEVLY INT, then via FOT R-326 to FOT VORTAC.

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LOC I-MER	APP CRS	Rwy Ldg	11802
109.5	306°	TDZE	181
		Apt Elev	190

ILS or LOC RWY 31
CASTLE (MER)

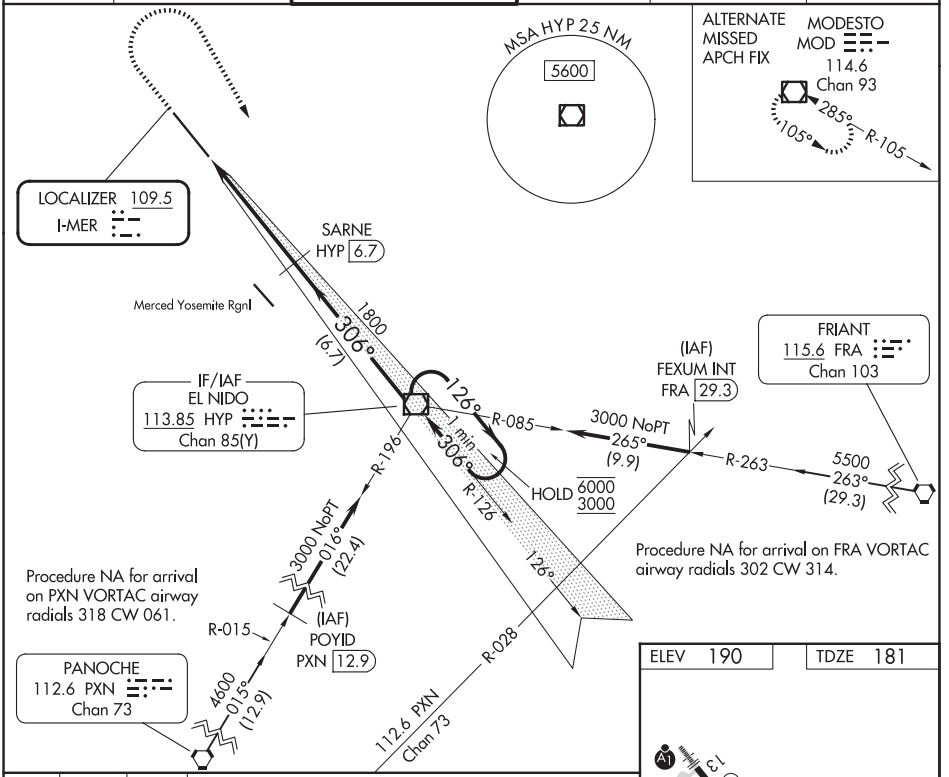
DME required for LOC only.

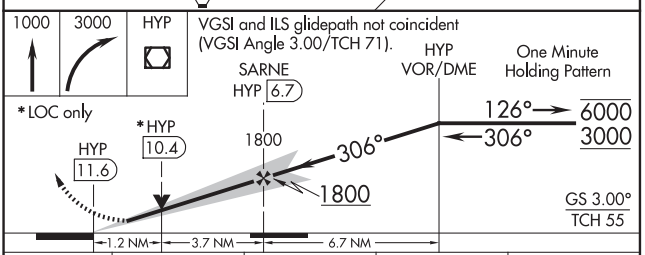
Circling NA southwest of Rwy 13-31. DME from HYP VOR/DME. Simultaneous reception of I-MER and HYP DME required.

ALSF-1

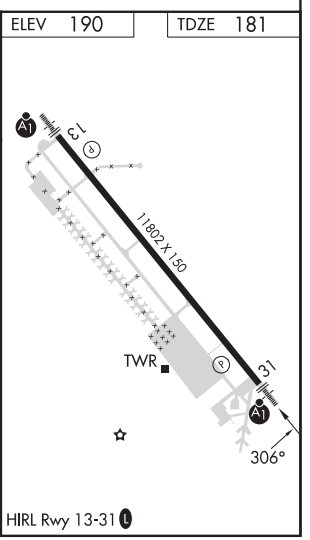
MISSED APPROACH: Climb to 1000 then climbing right turn to 3000 direct HYP VOR/DME and hold.

ATIS	NORCAL APP CON	CASTLE TOWER ★	GND CON	UNICOM	
124.475	120.95 269.45	118.175 (CTAF) 235.775	133.575	122.95	123.0 L





CATEGORY	A	B	C	D
S-ILS 31	381-½ 200 (200-½)			
S-LOC 31	620-½ 439 (500-½)		620-¾ 439 (500-¾)	
CIRCLING	660-1 470 (500-1)		720-1½ 530 (600-1½)	800-2 610 (700-2)



SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

ATWATER, CALIFORNIA | AL-568 (FAA) | 25219

WAAS CH 50211 W13A	APP CRS 126°	Rwy Ldg 11802 TDZE 190 Apt Elev 190

RNAV (GPS) RWY 13
CASTLE (MER)

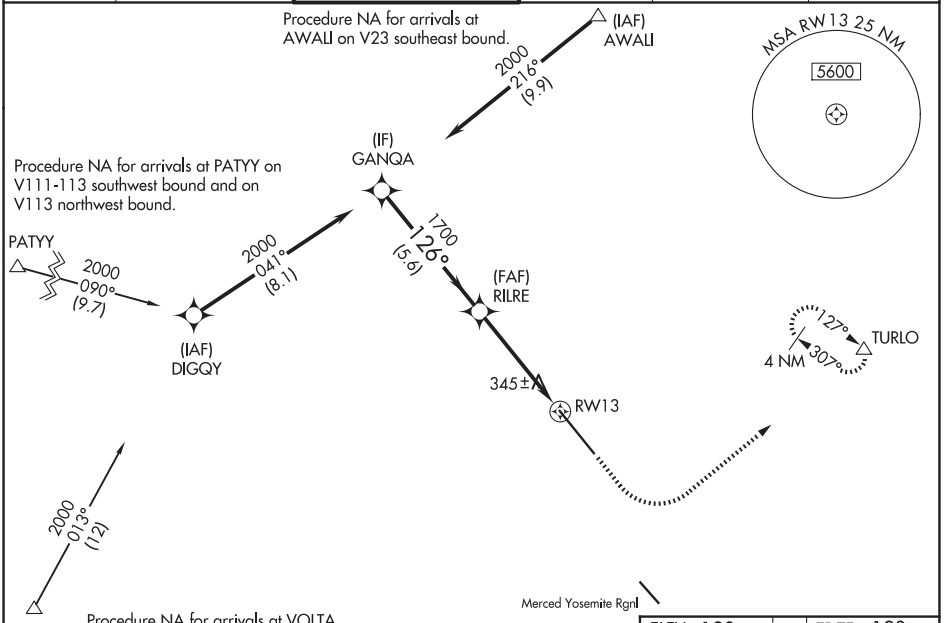
RNP APCH.

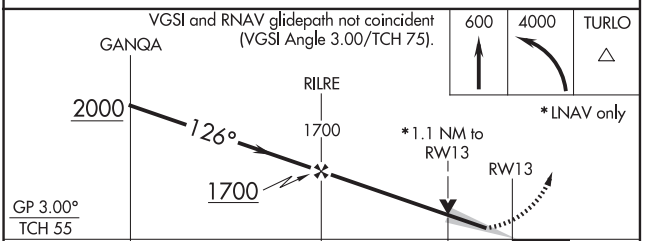
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. For inoperative ALS, increase LNAV/VNAV all Cats visibility to 1⅜ SM, increase LNAV Cats A/B visibility to 1 SM, and increase LNAV Cat C/D visibility to 1⅛ SM.

ALSF-1

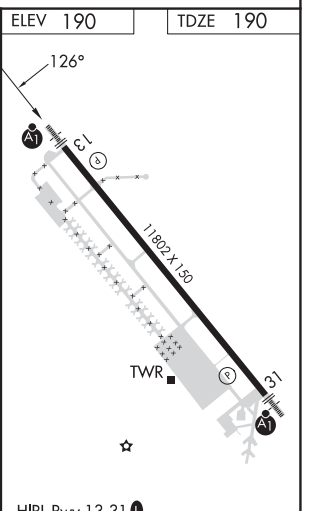
MISSED APPROACH: Climb to 600 then climbing left turn to 4000 direct TURLO and hold, continue climb-in-hold to 4000.

ATIS	NORCAL APP CON	CASTLE TOWER ★	GND CON	UNICOM	
124.475	120.95 269.45	118.175 (CTAF) 235.775	133.575	122.95	123.0 L





CATEGORY	A	B	C	D
LPV DA	390-¾ 200 (200-¾)			
LNAV/VNAV DA	655-1 465 (500-1)			
LNAV MDA	600-¾ 410 (500-¾)			



ATWATER, CALIFORNIA
Amdt 1A 30JAN20

37°23'N-120°34'W

CASTLE (MER)
RNAV (GPS) RWY 13

SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 31
CASTLE (MER)

WAAS CH 87110 W31A	APP CRS 306°	Rwy Ldg 11802 TDZE 181 Apt Elev 190

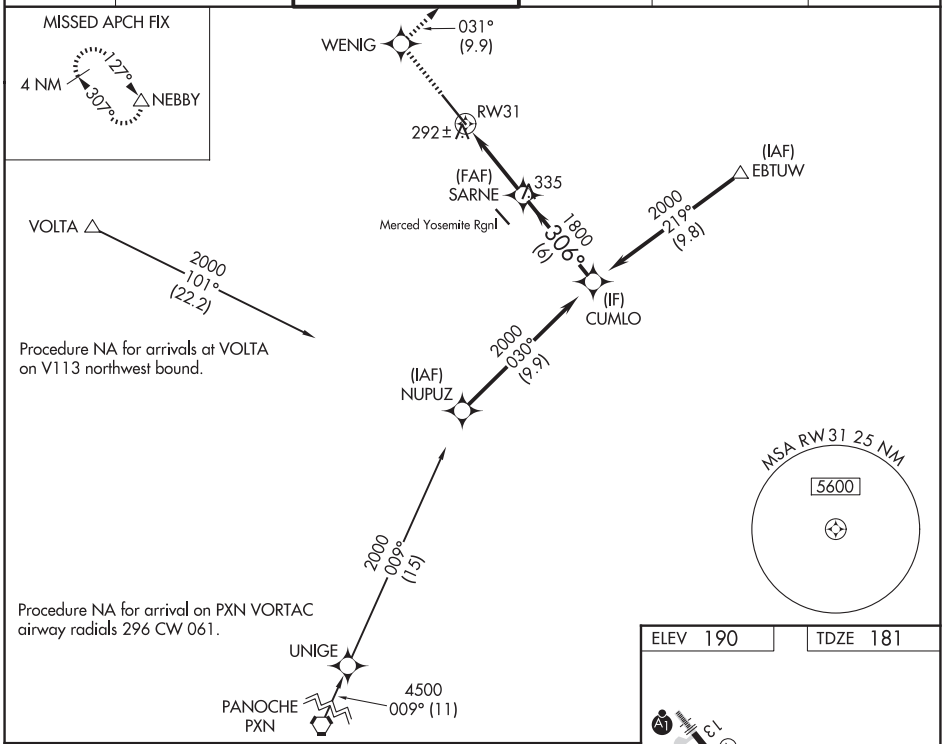
RNP APCH.

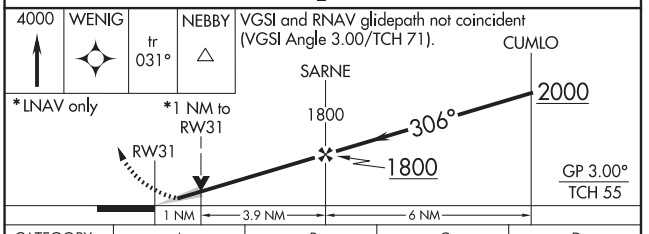
T Circling NA southwest of Rwy 13-31. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. For inoperative ALS, increase LNAV/VNAV all Cats visibility to ⅞ SM and LNAV Cats C/D visibility to 1 SM.

ALSF-1

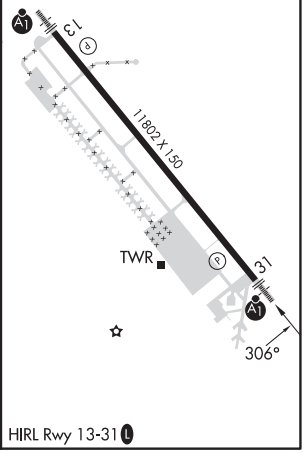
MISSED APPROACH: Climb to 4000 direct WENIG and on track 031° to NEBBY and hold, continue climb-in-hold to 4000.

ATIS	NORCAL APP CON	CASTLE TOWER ★	GND CON	UNICOM	
124.475	120.95 269.45	118.175 (CTAF) 235.775	133.575	122.95	123.0 L





CATEGORY	A	B	C	D
LPV DA	381-½	200 (200-½)		
LNAV/VNAV DA	498-½	317 (400-½)		
LNAV MDA	560-½	379 (400-½)	560-⅝	379 (400-⅝)
CIRCLING	660-1	470 (500-1)	720-1½ 530 (600-1½)	800-2 610 (700-2)



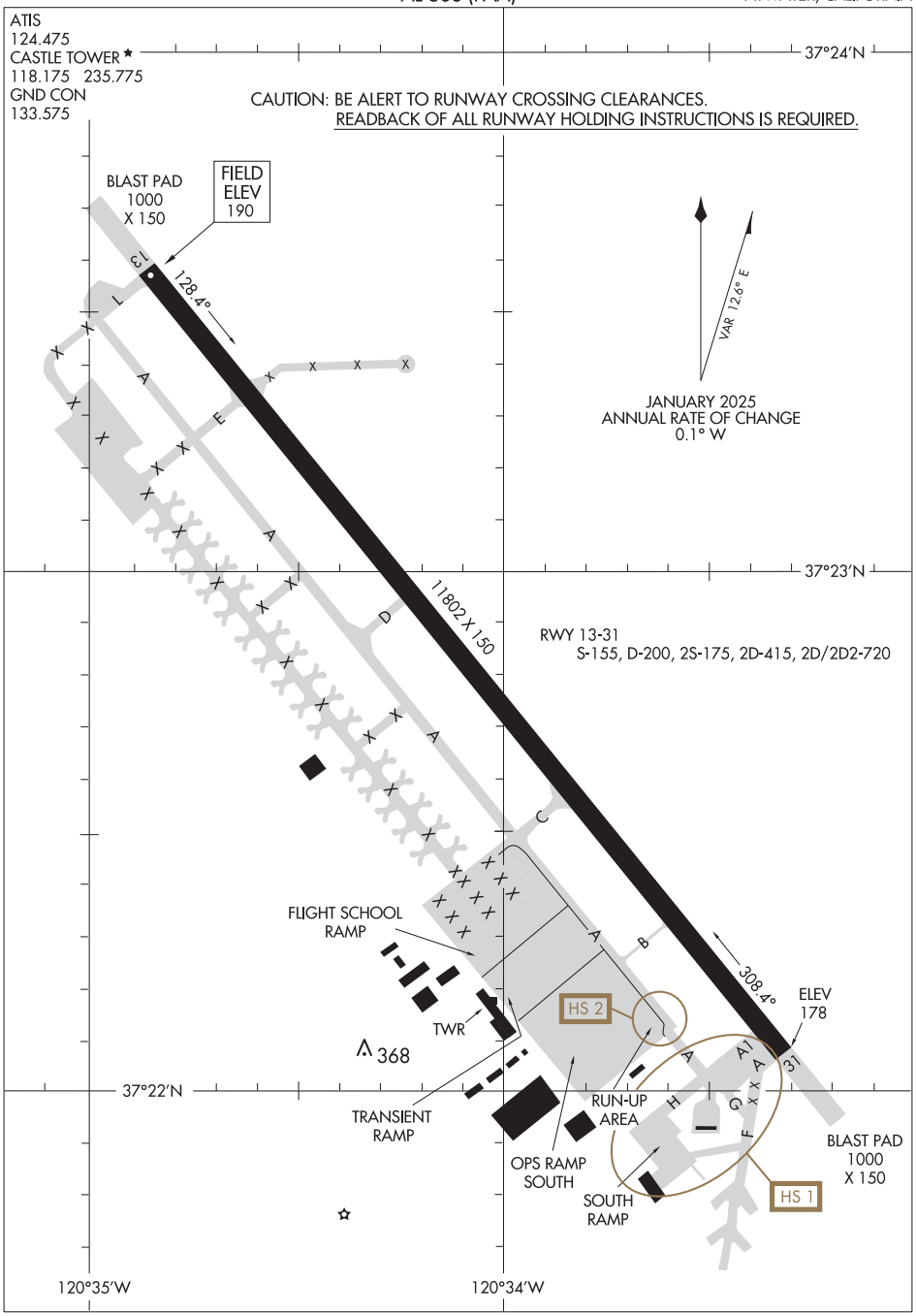
SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

25107

AIRPORT DIAGRAM

AL-568 (FAA)

CASTLE (MER)
ATWATER, CALIFORNIA



SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

AIRPORT DIAGRAM
25107

ATWATER, CALIFORNIA
CASTLE (MER)

WAAS	APP CRS	Rwy Idg	3500
CH **90515**	**068°**	TDZE	**1532**
W07A		Apt Elev	**1538**

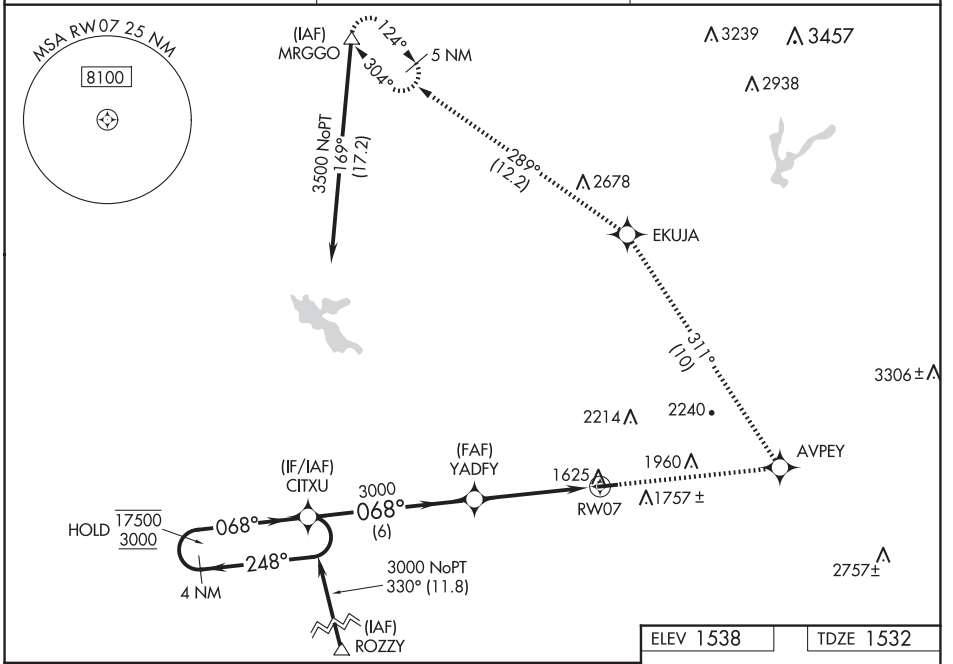
RNAV (GPS) RWY 7
AUBURN MUNI (AUN)

RNP APCH.

Circling Rwy 25 NA at night. Rwy 7 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C or above 54°C.

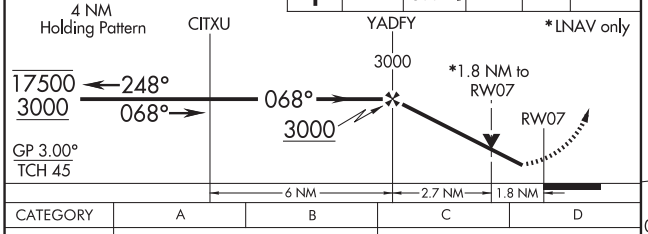
MISSED APPROACH: Climb to 5000 direct AVPEY and left turn on track 311° to EKUJA and on track 289° to MRGGO and hold.

AWOS-3	NORCAL APP CON	UNICOM
119.375	**125.4 317.5**	**122.7** (CTAF) L

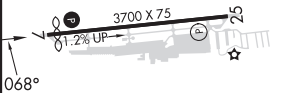


VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 21).

5000 | AVPEY | tr 311° | EKUJA | tr 289° | MRGGO



ELEV 1538 | TDZE 1532



CATEGORY	A	B	C	D
LPV DA	1848-1¼ 316 (400-1¼)		NA	
LNAV/VNAV DA	1968-1¾ 436 (500-1¾)		NA	
LNAV MDA	2100-1 568 (600-1)		NA	
C CIRCLING	2200-1 662 (700-1)	2400-1¼ 862 (900-1¼)	NA	

MIRL Rwy 7-25 L

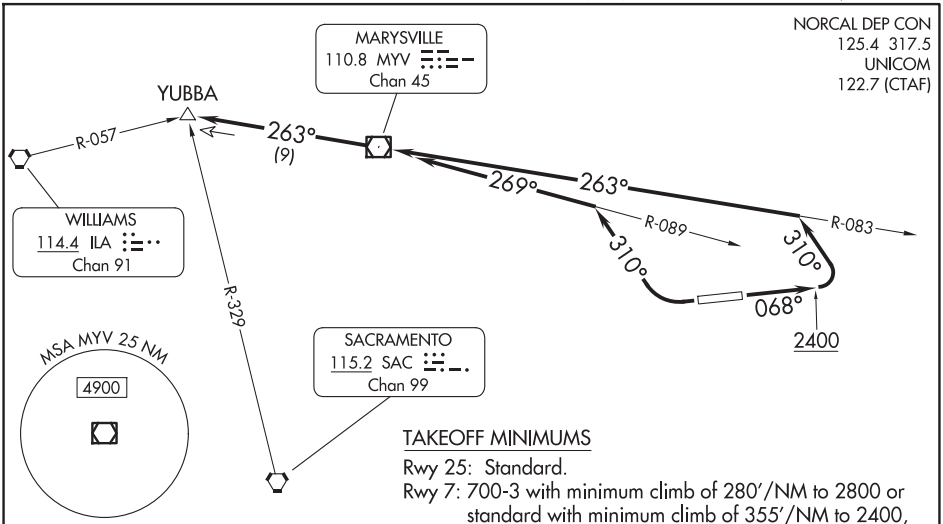
SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(YUBBA1.YUBBA) 24025

YUBBA ONE DEPARTURE (OBSTACLE)

AL-9143 (FAA)

AUBURN MUNI (AUN)
AUBURN, CALIFORNIA



TAKEOFF MINIMUMS

Rwy 25: Standard.

Rwy 7: 700-3 with minimum climb of 280'/NM to 2800 or standard with minimum climb of 355'/NM to 2400, or 1100-3 for climb in visual conditions.

TAKEOFF OBSTACLE NOTES

Rwy 7: Tree 98' from DER, 447' left of centerline, 1541' MSL. Building, tree beginning 99' from DER, 234' right of centerline, up to 24' AGL/1553' MSL. Tree 959' from DER, 241' right of centerline,1578' MSL. Tree 992' from DER, 431' right of centerline, 1602' MSL. Trees beginning 1035' from DER, 139' right of centerline, up to 1614' MSL. Trees beginning 1103' from DER, 244' right of centerline, up to 1587' MSL. Trees beginning 1266' from DER, 263' right of centerline, up to 1676' MSL. Pole, electrical system, trees beginning 1366' from DER, 253' right of centerline, up to 60' AGL/1679' MSL. Trees beginning 1514' from DER, 56' right of centerline, up to 1681' MSL. Tree 5369' from DER, 1805' left of centerline, 1684' MSL. Trees beginning 5546' from DER, 1593' left of centerline, up to 1735' MSL. Trees beginning 1 NM from DER, 1140' left of centerline, up to 1779' MSL. Trees beginning 1.1 NM from DER, 1983' right of centerline, up to 1726' MSL. Tree, pole beginning 1.3 NM from DER, 1113 ' right of centerline, up to 1773' MSL. Trees beginning 1.4 NM from DER, 918' left of centerline, up to 1796' MSL. Trees, transmission line, tank, building beginning 1.5 NM from DER, 372' left of centerline, up to 1801' MSL. Trees beginning 1.6 NM from DER, 535' left of centerline, up to 1915' MSL. Tree, traverse way beginning 1.7 NM from DER, 1523' left of centerline, up to 1859' MSL. Electrical system, trees beginning 2.1 NM from DER, 2928' left of centerline, up to 62' AGL/2059' MSL. Tree 2.2 NM from DER, 3991' left of centerline, 2151' MSL. Trees beginning 2.3 NM from DER, 3015' left of centerline, up to 2105' MSL. Tree 2.4 NM from DER, 4231' left of centerline, 1986' MSL.

Rwy 25: Rising terrain 26' from DER, 286' right of centerline, 1496' MSL. Trees beginning 31' from DER, 477' left of centerline, up to 1532' MSL. Tree, rising terrain, fences, vertical structure, building beginning 89' from DER, 199' right of centerline, up to 1529' MSL. Trees beginning 774' from DER, 419' right of centerline, up to 1538' MSL. Tree 1023' from DER, 652' right of centerline, 1539' MSL. Trees beginning 1678' from DER, 207' right of centerline, up to 1547' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 7: Climb on heading 068° to 2400, then climbing left turn heading 310° to intercept MYV VOR/DME R-083 to MYV VOR/DME and on MYV VOR/DME R-263 to YUBBA INT before proceeding on course.

TAKEOFF RUNWAY 25: Climbing right turn on heading 310° to intercept MYV VOR/DME R-089 to MYV VOR/DME and on MYV VOR/DME R-263 to YUBBA INT before proceeding on course.

VCOA RUNWAY 7: Obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Auburn Muni Airport at or above 2500 on heading 275° to intercept MYV VOR/DME R-094 to MYV VOR/DME and on MYV VOR/DME R-263 to YUBBA INT before proceeding on course.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

MARYSVILLE, CALIFORNIA

ILS or LOC Y RWY 15

LOC I-BAB	APCH CRS	Rwy ldg	12,001
109.5	145°	TDZE	113
		Arpt Elev	113

- (USAF)

BEALE AFB (KBAB)

RADAR or DME required

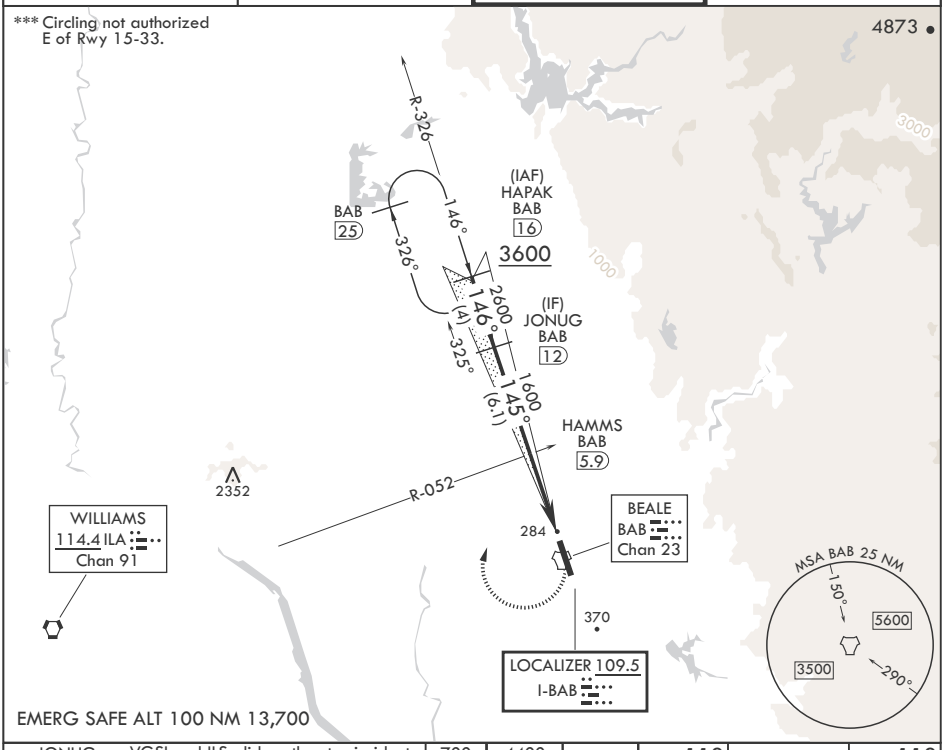
T * When ALS inop, increase RVR to 40 and vis to 3/4 mile.
** When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE vis to 1 3/8 miles.

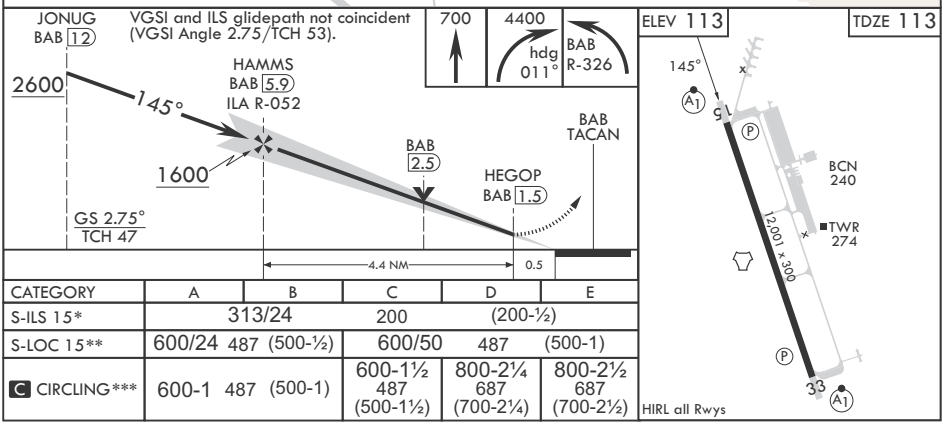
ALSF-1 (A1)

MISSED APPROACH: Climb to 700 on heading 145°, then climbing right turn to 4400 heading 011° to intercept BAB R-326 to HAPAK and hold, continue climb-in-hold to 4400.

ATIS★	NORCAL APP CON	TOWER★	GND CON
124.55 273.5	125.4 259.1	119.4 284.75	121.6 257.75

*** Circling not authorized E of Rwy 15-33.





CATEGORY	A	B	C	D	E
S-ILS 15*	313/24		200	(200-½)	
S-LOC 15**	600/24	487 (500-½)	600/50	487	(500-1)
C CIRCLING***	600-1	487 (500-1)	600-1½ 487 (500-1½)	800-2¼ 687 (700-2¼)	800-2½ 687 (700-2½)

HIRL all Rwys

MARYSVILLE, CALIFORNIA

39°08'N - 121°26'W

BEALE AFB (KBAB)

Amdt 6 25JAN24

ILS or LOC Y RWY 15

SW-2, 07 AUG 2025 to 02 OCT 2025

MARYSVILLE, CALIFORNIA

ILS or LOC Y RWY 33

LOC I-MIZ	APCH CRS	Rwy ldg	12,001
109.5	325°	TDZE	105
		Arpt Elev	113

- (USAF)

BEALE AFB (KBAB)

RADAR or DME required

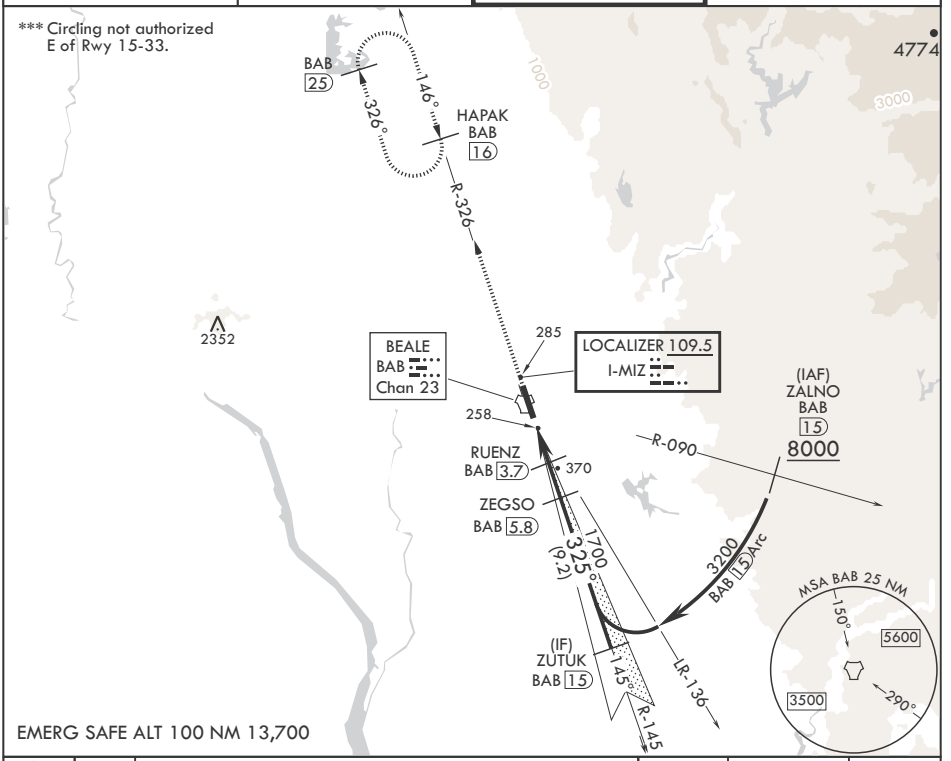
▼ * When ALS inop, increase RVR to 40 and vis to 3/4 mile.
** When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile; CAT CDE RVR to 60 and vis to 1 1/8 miles.

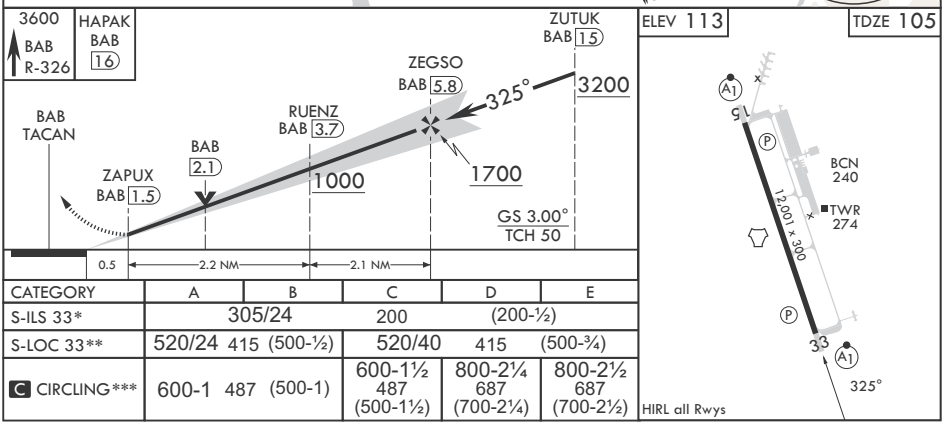
ALSF-1 (A1)

MISSED APPROACH: Climb to 3600 intercept BAB TACAN R-326 to HAPAK and hold.

ATIS★	NORCAL APP CON	TOWER★	GND CON
124.55 273.5	125.4 259.1	119.4 284.75	121.6 257.75

*** Circling not authorized E of Rwy 15-33.





CATEGORY	A	B	C	D	E
S-ILS 33*	305/24		200	(200-½)	
S-LOC 33**	520/24	415 (500-½)	520/40	415	(500-¾)
C CIRCLING***	600-1	487 (500-1)	600-1½ 487 (500-1½)	800-2¼ 687 (700-2¼)	800-2½ 687 (700-2½)

MARYSVILLE, CALIFORNIA

39°08'N - 121°26'W

BEALE AFB (KBAB)

Amdt 6 22FEB24

ILS or LOC Y RWY 33

SW-2, 07 AUG 2025 to 02 OCT 2025

MARYSVILLE, CALIFORNIA

RNAV (GPS) RWY 15

APCH CRS	Rwy ldg	12,001
145°	THRE	113
	Arpt Elev	113

- (USAF)

BEALE AFB (KBAB)

RNP APCH

T * When ALS inop, increase RVR to 60, vis to 1 1/8 miles.
** When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile; CAT CDE vis to 1 3/8 miles.

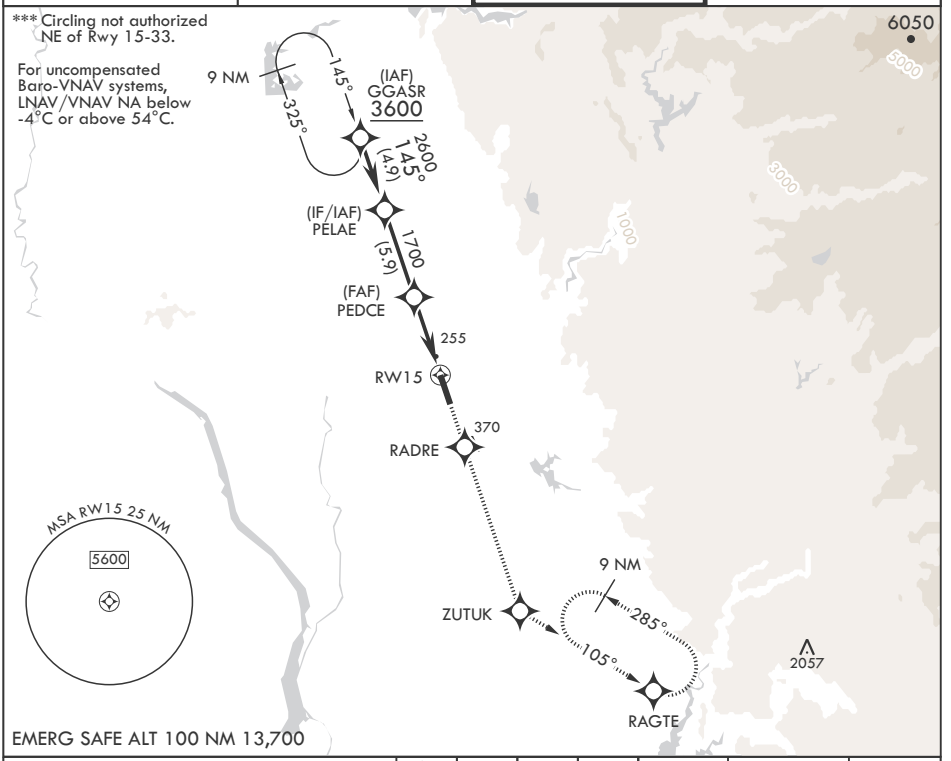
ALSF-1 (A1)

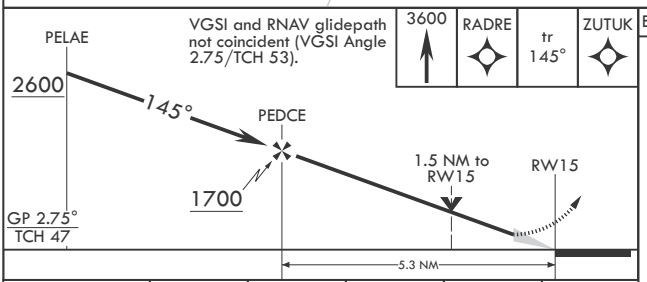
MISSED APPROACH: Climb to 3600 direct RADRE, track 145° to ZUTUK, track 105° to RAGTE and hold, continue climb-in-hold to 3600.

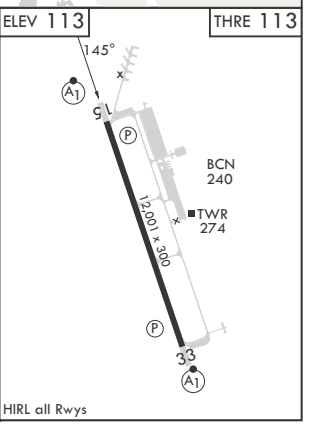
ATIS★	NORCAL APP CON	TOWER★	GND CON
124.55 273.5	125.4 259.1	119.4 284.75	121.6 257.75

*** Circling not authorized NE of Rwy 15-33.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -4°C or above 54°C.







CATEGORY	A	B	C	D	E
LNAV/VNAV DA*	530/40		417	(500-¾)	
LNAV MDA**	600/24 487 (500-½)		600/50	487 (500-1)	
C CIRCLING***	600-1 487 (500-1)		600-1½ 487 (500-1½)	800-2¼ 687 (700-2¼)	800-2½ 687 (700-2½)

MARYSVILLE, CALIFORNIA

Amdt 2 25JAN24

39°08'N - 121°26'W

BEALE AFB (KBAB)

RNAV (GPS) RWY 15

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

25051

MARYSVILLE, CALIFORNIA

RNAV (GPS) RWY 33

APCH CRS	Rwy ldg	12,001
325°	THRE	105
	Arpt Elev	113

- (USAF)

BEALE AFB (KBAB)

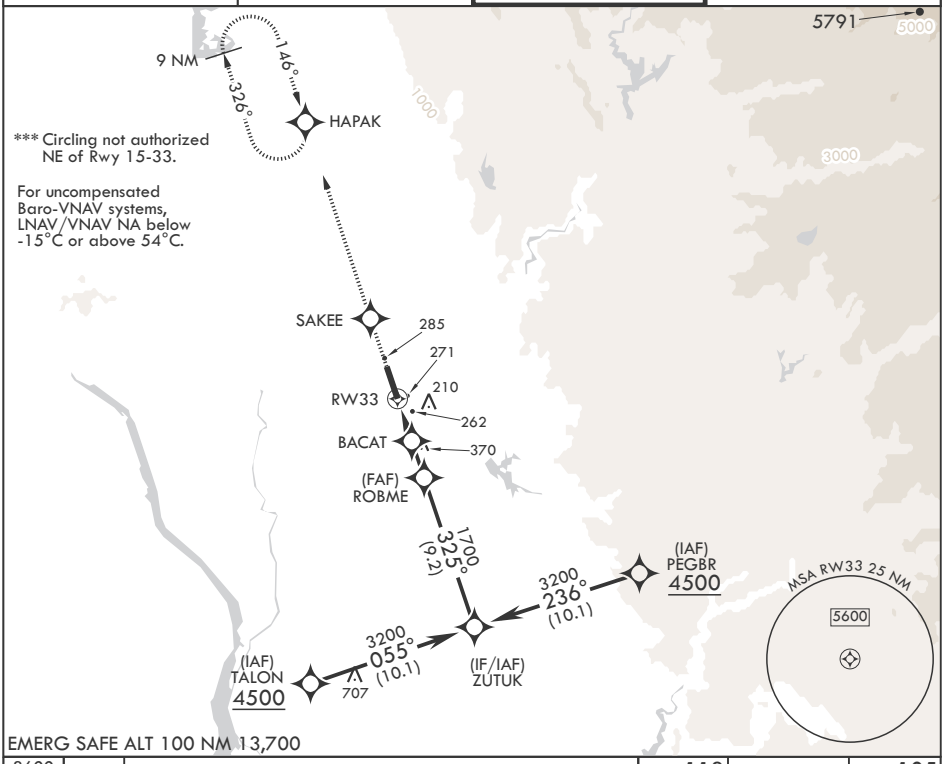
RNP APCH

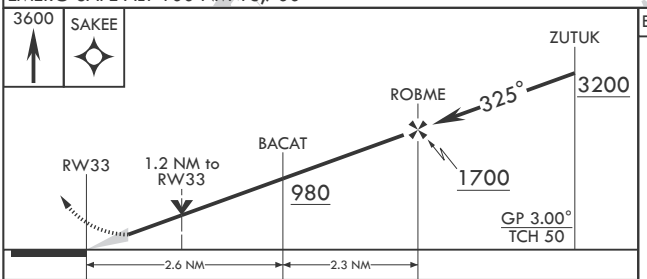
* When ALS inop, increase vis to 1 1/4 miles.
** When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE vis to 1 1/4 miles.

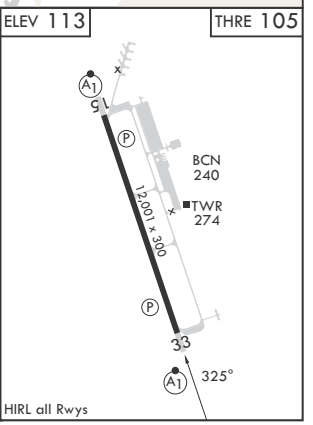
ALSF-1

MISSED APPROACH: Climb to 3600 direct SAKEE, track 326° to HAPAK and hold.

ATIS★	NORCAL APP CON	TOWER★	GND CON
124.55 273.5	125.4 259.1	119.4 284.75	121.6 257.75







CATEGORY	A	B	C	D	E
LNAV/VNAV DA*	540/40		435	(500-¾)	
LNAV MDA**	540/24	435 (500-½)	540/40	435	(500-¾)
C CIRCLING***	600-1	487 (500-1)	600-1½ 487 (500-1½)	800-2¼ 687 (700-2¼)	800-2½ 687 (700-2½)

MARYSVILLE, CALIFORNIA

39°08'N - 121°26'W

BEALE AFB (KBAB)

Amdt 2 22FEB24

RNAV (GPS) RWY 33

SW-2, 07 AUG 2025 to 02 OCT 2025

MARYSVILLE, CALIFORNIA

TACAN Y RWY 15

TACAN BAB Chan 23	APCH CRS 153°	Rwy ldg 12,001 TDZE 113 Arpt Elev 113

- (USAF)

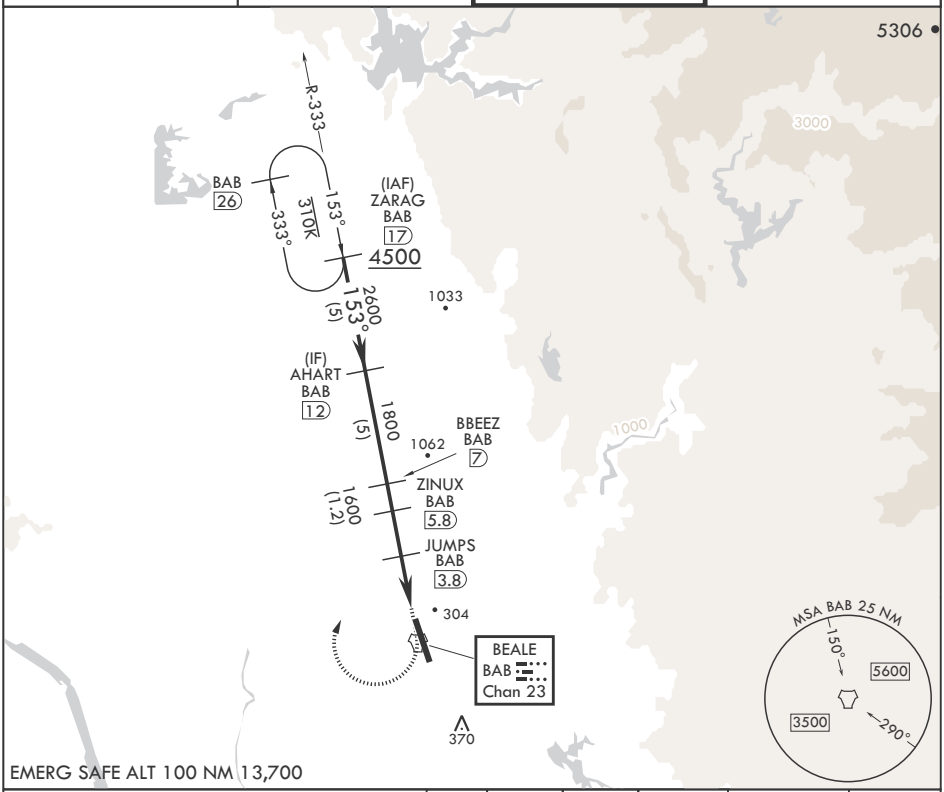
BEALE AFB (KBAB)

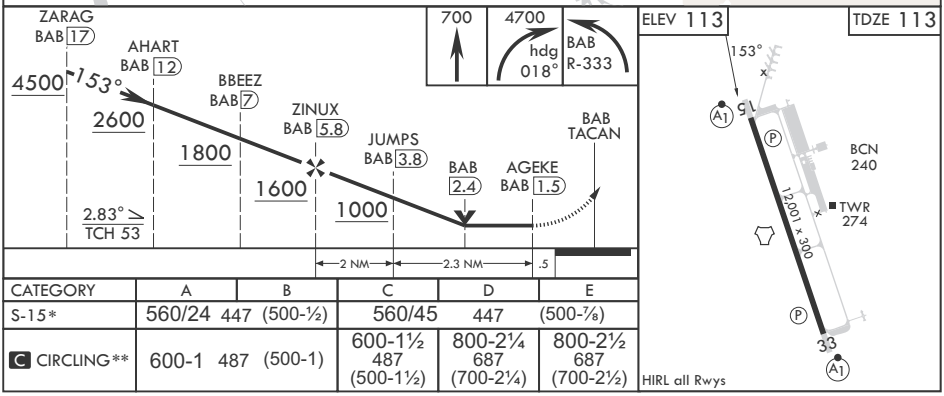
* When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE vis to 1 3/8 miles.
** Circling not authorized E of Rwy 15-33.

ALSF-1

MISSED APPROACH: Climb to 700 on heading 153°, then climbing right turn to 4700 heading 018° to intercept BAB R-333 to ZARAG and hold, continue climb-in-hold to 4700.

ATIS★	NORCAL APP CON	TOWER★	GND CON
124.55 273.5	125.4 259.1	119.4 284.75	121.6 257.75





CATEGORY	A	B	C	D	E
S-15*	560/24 447 (500-½)		560/45	447	(500-⅞)
C CIRCLING**	600-1 487 (500-1)		600-1½ 487 (500-1½)	800-2¼ 687 (700-2¼)	800-2½ 687 (700-2½)

MARYSVILLE, CALIFORNIA

Amdt 6 22FEB24

39°08'N - 121°26'W

BEALE AFB (KBAB)

TACAN Y RWY 15

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

25051

MARYSVILLE, CALIFORNIA

TACAN Y RWY 33

TACAN BAB Chan 23	APCH CRS 317°	Rwy ldg 12,001 TDZE 105 Arpt Elev 113

- (USAF)

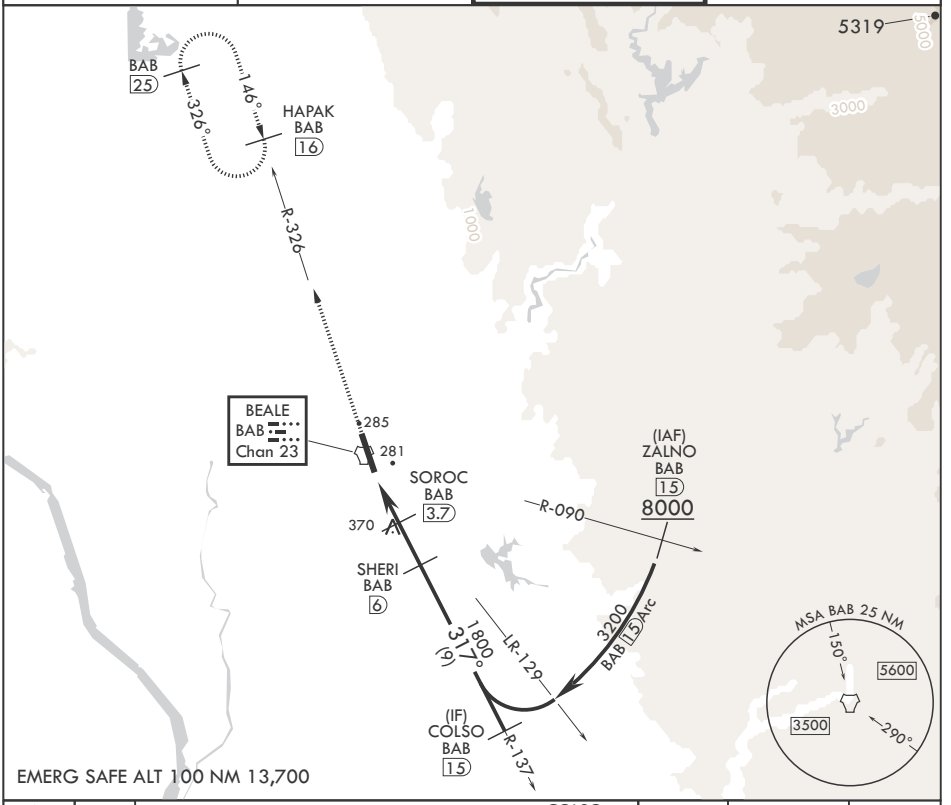
BEALE AFB (KBAB)

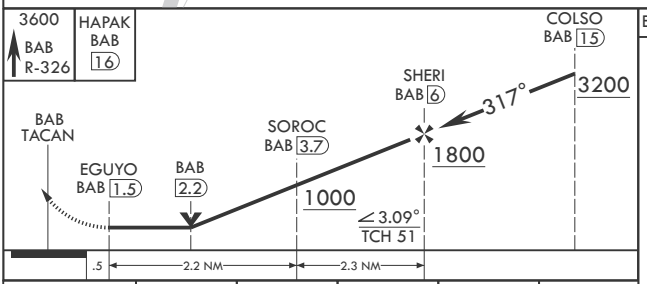
* When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE vis to 1 1/4 miles.
** Circling not authorized E of Rwy 15-33.

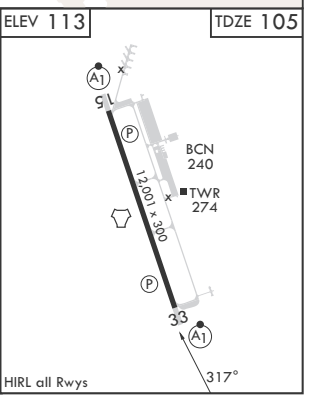
ALSF-1

MISSED APPROACH: Climb to 3600 intercept BAB TACAN R-326 to HAPAK and hold.

ATIS★	NORCAL APP CON	TOWER★	GND CON
124.55 273.5	125.4 259.1	119.4 284.75	121.6 257.75







CATEGORY	A	B	C	D	E
S-33*	540/24 435 (500-½)		540/40	435	(500-¾)
C CIRCLING**	600-1 487 (500-1)		600-1½ 487 (500-1½)	800-2¼ 687 (700-2¼)	800-2½ 687 (700-2½)

MARYSVILLE, CALIFORNIA

39°08'N - 121°26'W

BEALE AFB (KBAB)

Amdt 6 25JAN24

TACAN Y RWY 33

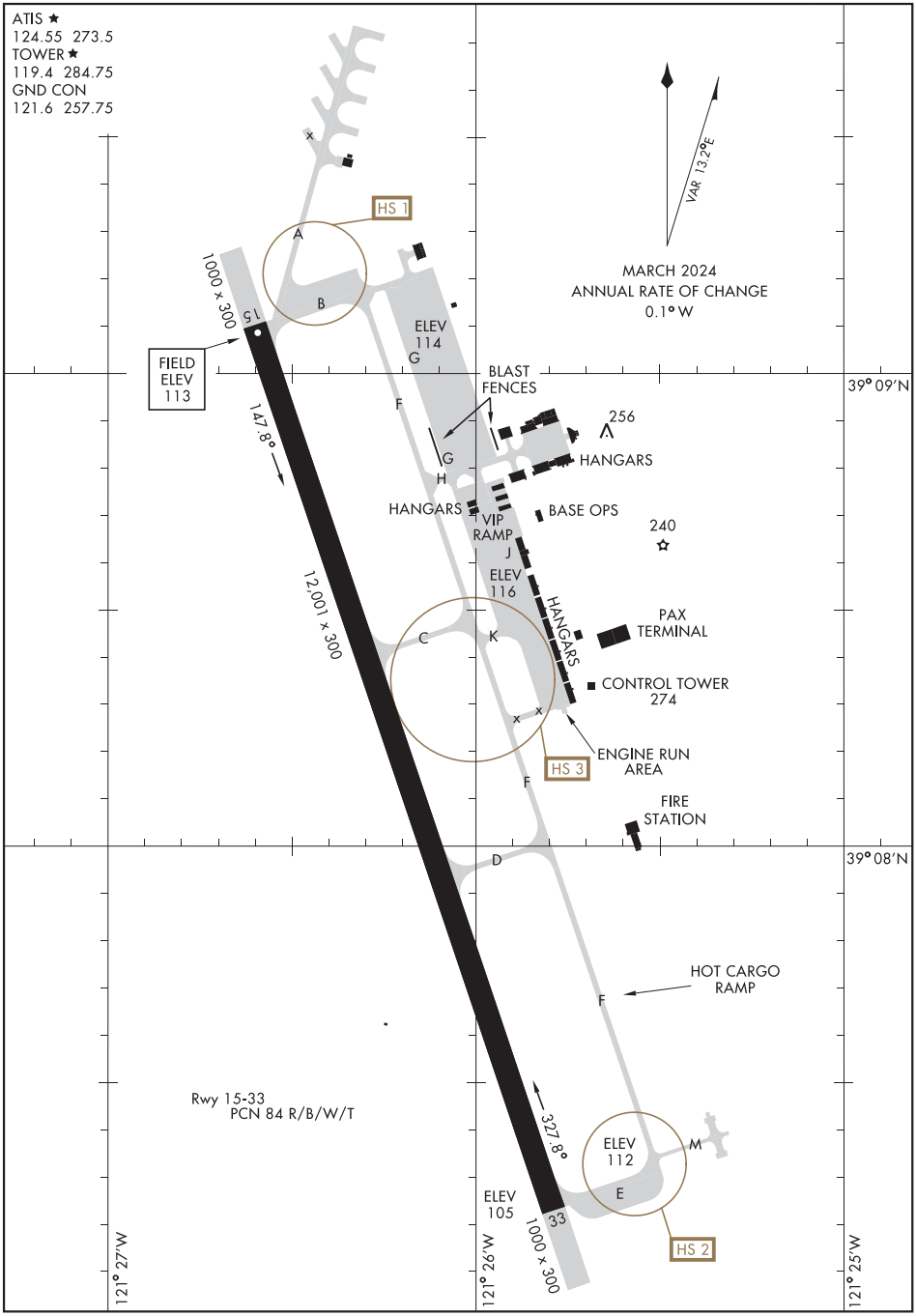
SW-2, 07 AUG 2025 to 02 OCT 2025

AIRPORT DIAGRAM

[USAF]

BEALE AFB (KBAB)

MARYSVILLE, CALIFORNIA



AIRPORT DIAGRAM

MARYSVILLE, CALIFORNIA

BEALE AFB (KBAB)

SW-2, 07 AUG 2025 to 02 OCT 2025

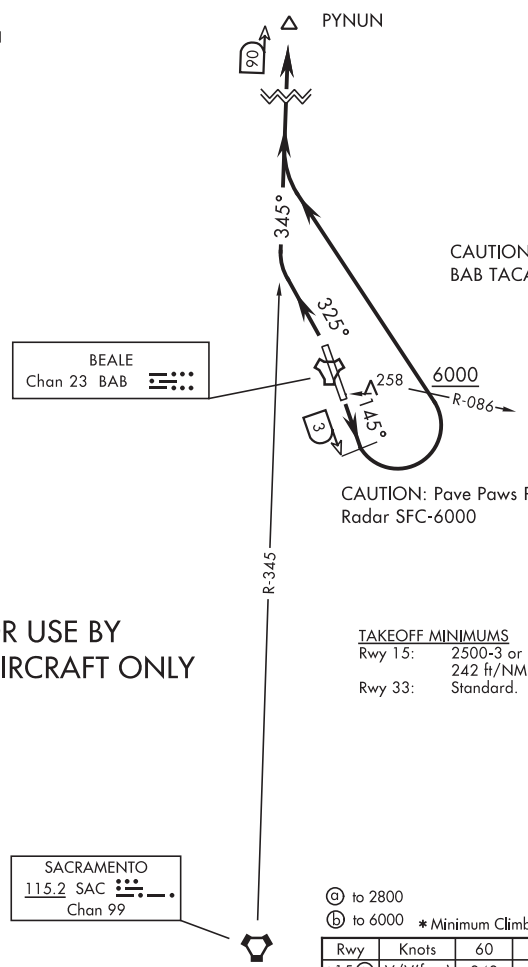
PYNUN-SEVEN DEPARTURE (PYNUN7.PYNUN)

SW-2, 07 AUG 2025 to 02 OCT 2025

ATIS ★
124.55 273.5
GND CON
121.6 257.75
BEALE TOWER ★
119.4 284.75
NORCAL DEP CON
125.4 259.1

[USAF]

6768



ⓐ to 2800
ⓑ to 6000 ∗ Minimum Climb Rate † ATC Climb Rate

Rwy	Knots	60	120	180	240	300	360
∗15ⓐ	V/V(fpm)	242	484	726	968	1210	1452
†15ⓑ	V/V(fpm)	590	1180	1770	2360	2950	3540

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 15: Fly heading 145° until BAB TACAN 3 DME, turn left heading 300° to intercept SAC VORTAC R-345 to PYNUN. Cross BAB R-086 at or above 6000. Then via assigned route.

TAKEOFF RWY 33: Fly heading 325° intercept SAC VORTAC R-345 to PYNUN. Then via assigned route.

RNAV (GPS) Y RWY 26

NERVINO (Ø02)

APP CRS	Rwy Idg	4651
267°	TDZE	4896
	Apt Elev	4900

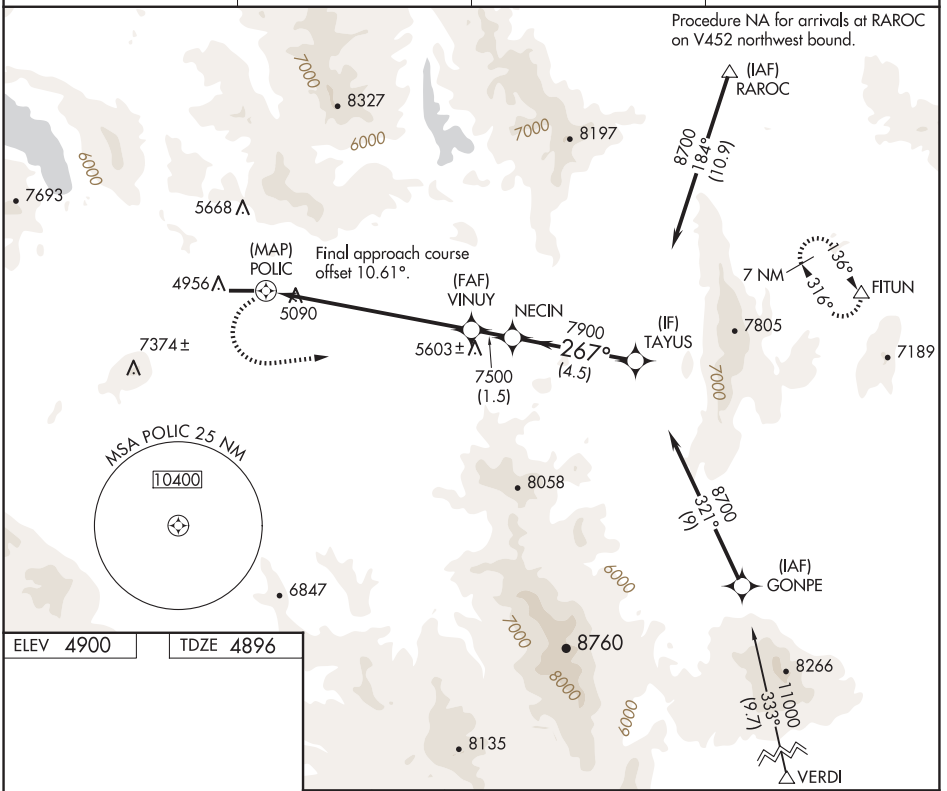
Procedure NA at night. Use Reno/Stead altimeter setting; when not received, use Reno/Tahoe Intl altimeter setting and increase all MDA 180 feet. DME/DME RNP- 0.3 NA. 8, 26 Rwy helicopter visibility reduction below 1 SM NA.

NA

-13°C

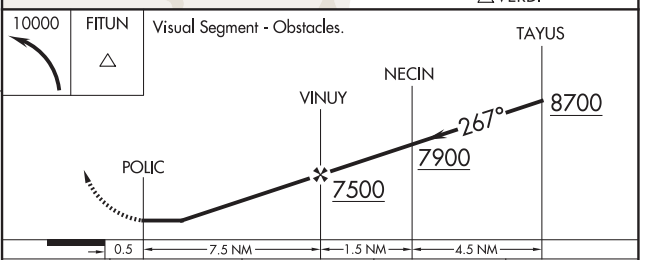
MISSED APPROACH: Climbing left turn to 10000 direct FITUN and hold.

AWOS-2	RTS AWOS-3	NORCAL APP CON	UNICOM
119.35	135.175	126.3 353.9	122.8 (CTAF) L



ELEV 4900 TDZE 4896

MIRL Rwy 8-26 L



CATEGORY	A	B	C	D
LNAV MDA	7300-1¼ 2404 (2400-1¼)	7300-1½ 2404 (2400-1½)	7300-3 2404 (2400-3)	
CIRCLING	7300-1¼ 2400 (2400-1¼)	7300-1½ 2400 (2400-1½)	7300-3 2400 (2400-3)	

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

BECKWOURTH, CALIFORNIA AL-10032 (FAA) 24361

WAAS	APP CRS	Rwy Idg	4651
CH 49203	256°	TDZE	4896
W26A		Apt Elev	4900

RNAV (GPS) Z RWY 26

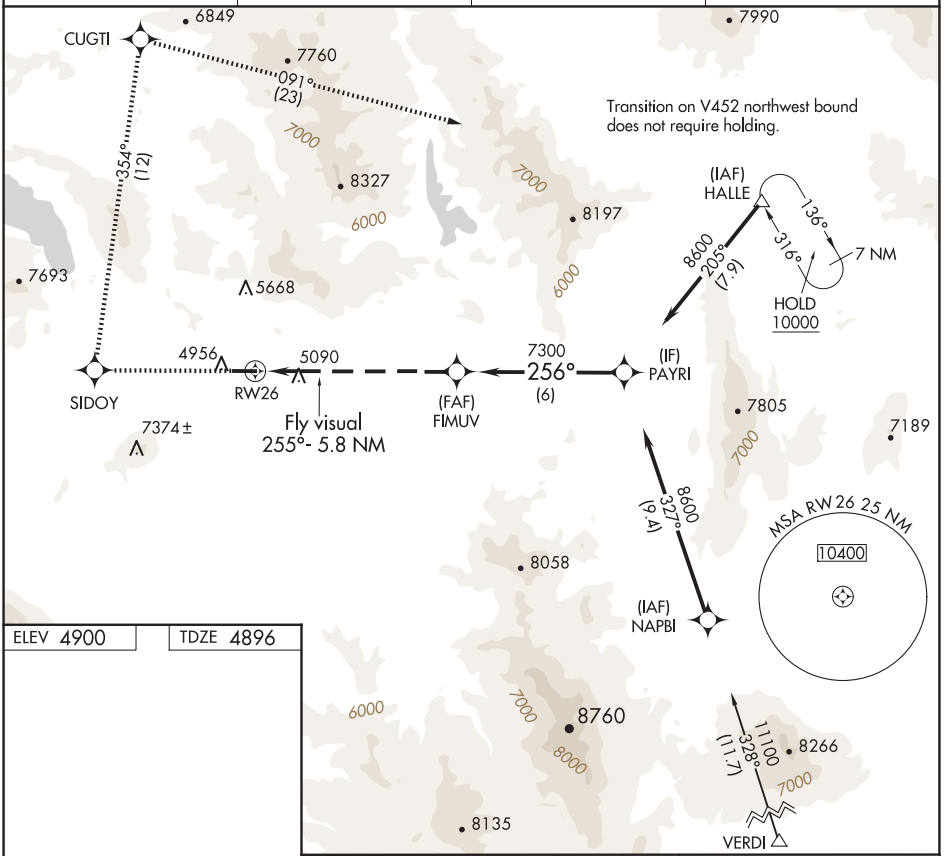
NERVINO (OØ2)

T
NA
-13°C

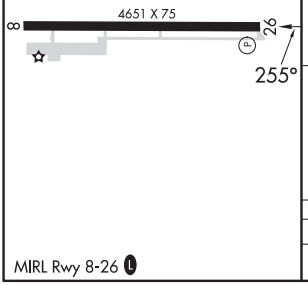
Use Reno/Stead altimeter setting; when not received, use Reno/Tahoe Intl altimeter setting and increase DA 180 feet.
DME/DME RNP -0.3 NA.
Helicopter visibility reduction below ¾ SM not authorized.

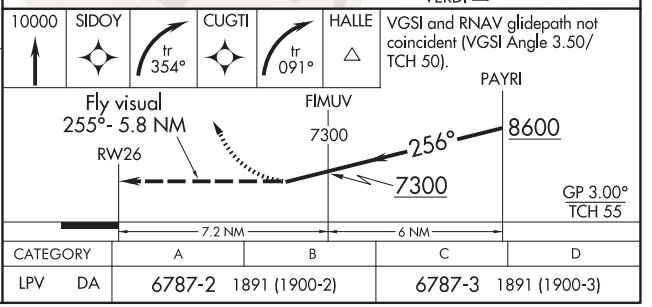
MISSED APPROACH: Climb to 10000 direct SIDOY and right turn on track 354° to CUGTI and right turn on track 091° to HALLE and hold.

AWOS-2	RTS AWOS-3	NORCAL APP CON	UNICOM
119.35	135.175	126.3 353.9	122.8 (CTAF) L



ELEV 4900 TDZE 4896





CATEGORY	A	B	C	D
LPV DA	6787-2 1891 (1900-2)		6787-3 1891 (1900-3)	

MIRL Rwy 8-26 L

BECKWOURTH, CALIFORNIA
Orig-B 24JUL14

39°49'N-120°21'W

NERVINO (OØ2)

RNAV (GPS) Z RWY 26

SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS	Rwy Ldg	6743
301°	TDZE	4111
	Apt Elev	4124

RNAV (RNP) RWY 30

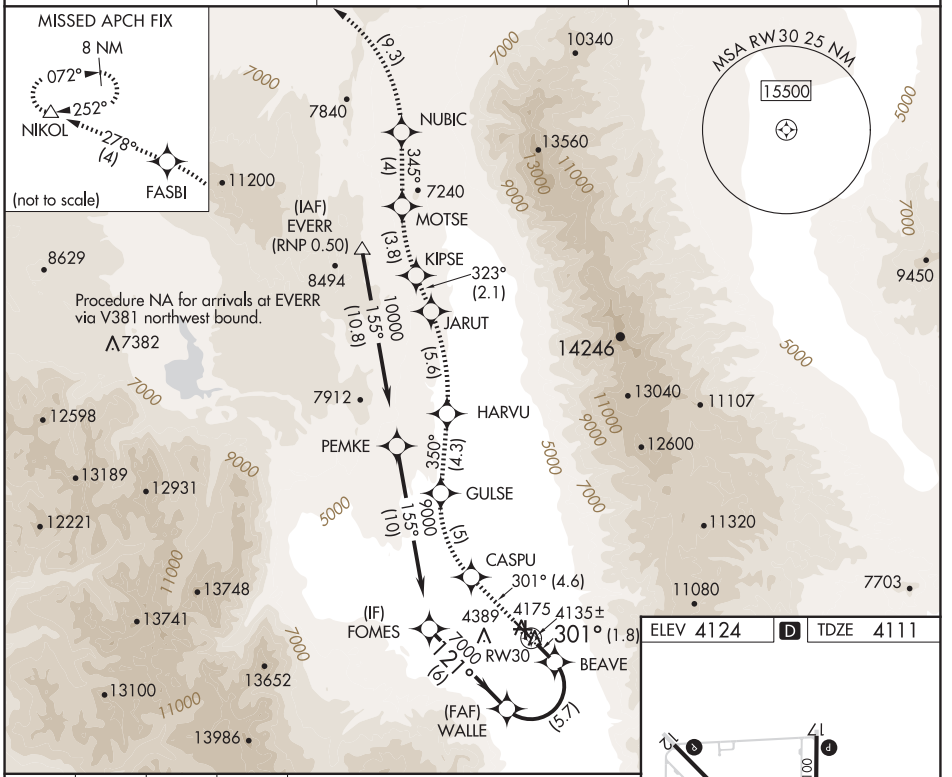
BISHOP (BIH)

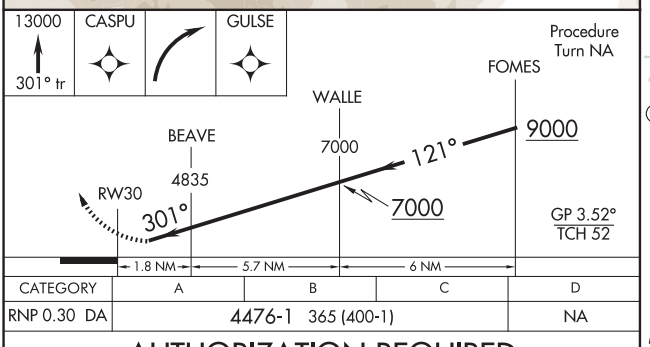
RNP AR APCH, RF required.

T NA For uncompensated Baro-VNAV systems, procedure NA below -12°C or above 54°C.

MISSED APPROACH: Climb to 13000 via 301° track to CASPU, right turn to GULSE, 350° track to HARVU, left turn to JARUT, 323° track to KIPSE, right turn to MOTSE, 345° track to NUBIC, left turn to FASBI, 278° track to NIKOL and hold.

ASOS	OAKLAND CENTER	UNICOM
119.025	125.75 284.65	123.0 (CTAF) L





CATEGORY	A	B	C	D
RNP 0.30 DA	4476-1	365 (400-1)		NA

AUTHORIZATION REQUIRED

MIRL Rwys 8-26, 12-30, and 17-35 L
REIL Rwys 12, 17, 30 and 35

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

BISHOP, CALIFORNIA | AL-5737 (FAA) | 25051

APP CRS	Rwy Idg	7098
120°	TDZE	4123
	Apt Elev	4124

RNAV (GPS) Y RWY 12

BISHOP (BIH)

RNP APCH-GPS.

Rwy 12, helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: (Do not exceed 250 KIAS until NEBSE) Climb to 13000 direct KUPLE and on track 160° to ROCOS and on track 115° to PULIE and on track 051° to WEBAT and on track 322° to NEBSE and on track 264° to BIH VOR/DME and hold.

ASOS	OAKLAND CENTER	UNICOM
119.025	125.75 284.65	123.0 (CTAF) L

Procedure NA for arrivals at NIKOL on V244-T298 westbound and on V381 northwest bound.

(IAF) RBRTS 12700 115° (6.5) CORUB 9700 115° (12) (IF) HEGIT 8700 115° (3.5) MUBOE 7900 116° (2.6) (FAF) JAAKE 120° (MAP) HOSUM

(IAF) NIKOL 12700 157° (18) FAVEK 9700 157° (6.7) (IF) HEGIT

HOSUM 120° (13.1) 264° NEBSE 250K 322° (5.2) TEVOC 341° (5) WEBAT 115° (9) BISHOP MOA 051° (6.8) PULIE 160° (7.3) ROCOS 326° 8 NM KUPLE 146° BISHOP BIH 4175 4389 MSA HOSUM 25 NM 15500

10240 11200 9000 7240 13560 8629 8494 7382 14246 13040 11107 12598 7912 12600 13189 12931 12221 11320 13748 11080 13741 13652 13100 13986 9083 8959± 8965 8080 6109 14240 9480 5000 7000 11000

ELEV 4124 D TDZ 4123

120° 17 35 7498 X 100 5600 X 100 5567 X 100 4171 0.4% UP 0.3% UP

MIRL Rwys 8-26, 12-30, and 17-35 L
REIL Rwys 12, 17, 30 and 35

Visual Segment - Obstacles.

13000 | KUPLE | tr 160° | ROCOS

HEGIT 9700 115° MUBOE 8700 116° JAAKE 7900 120° HOSUM

3.5 NM | 2.6 NM | 8.5 NM | 1 NM

CATEGORY	A	B	C	D
LNAV MDA	6600-1¼ 2477 (2500-1¼)	6600-1½ 2477 (2500-1½)	6600-3 2477 (2500-3)	NA

BISHOP, CALIFORNIA
Orig-F 08SEP22

37°22'N-118°22'W

BISHOP (BIH)

RNAV (GPS) Y RWY 12

SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS		
120°	Rwy Idg	7098
	TDZE	4123
	Apt Elev	4124

RNAV (GPS) Z RWY 12

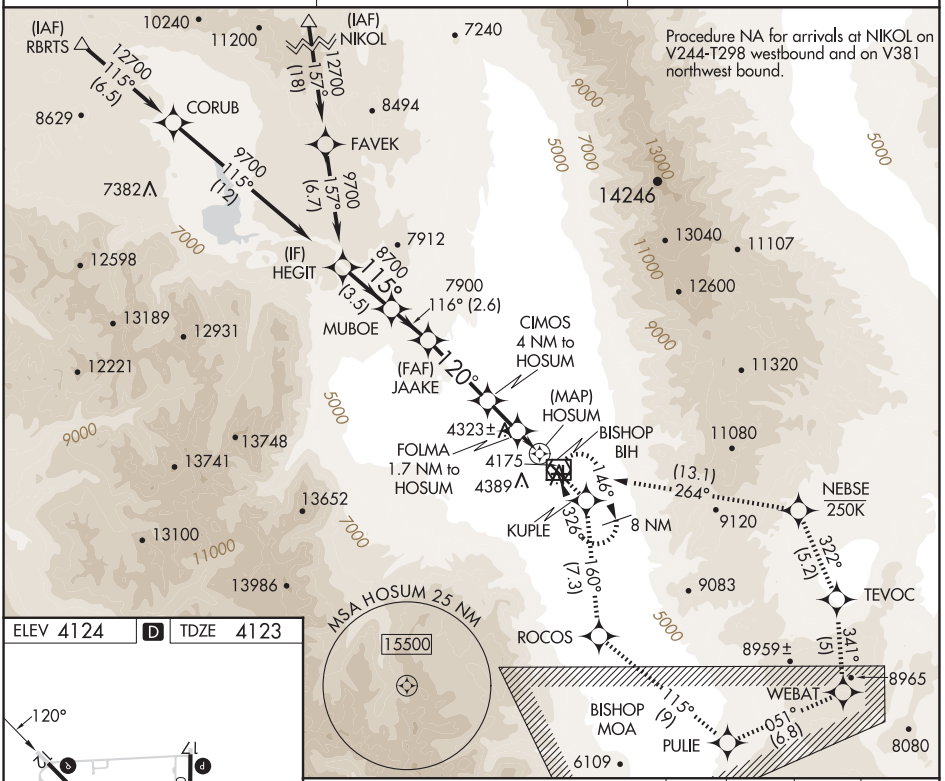
BISHOP (BIH)

RNP APCH-GPS.

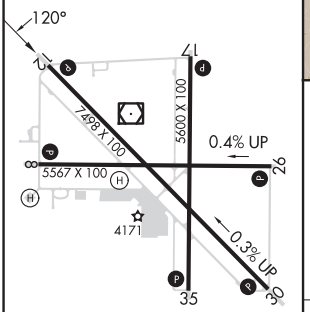
T A Rwy 12, helicopter visibility reduction below ¾ SM NA. Missed approach requires minimum climb of 325 feet per NM to 11000; if unable, see RNAV (GPS) Y RWY 12.

MISSED APPROACH: (Do not exceed 250 KIAS until NEBSE) Climb to 13000 direct KUPLE and on track 160° to ROCOS and on track 115° to PULIE and on track 051° to WEBAT and on track 341° to TEVOC and on track 322° to NEBSE and on track 264° to BIH VOR/DME and hold.

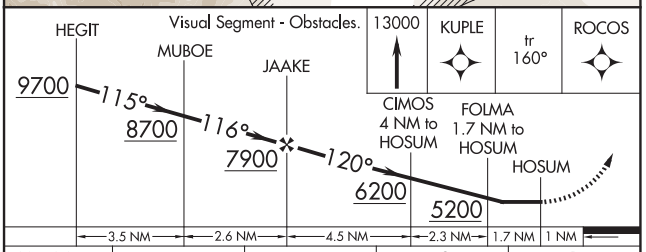
ASOS	OAKLAND CENTER	UNICOM
119.025	125.75 284.65	123.0 (CTAF) L



ELEV 4124 D TDZ 4123



MIRL Rwys 8-26, 12-30, and 17-35 L
REIL Rwys 12, 17, 30 and 35



CATEGORY	A	B	C	D
LNAV MDA	4580-1¼ 457 (500-1¼)			NA
C CIRCLING	6420-1¼ 2296 (2300-1¼)	6420-1½ 2296 (2300-1½)	6420-3 2296 (2300-3)	NA

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

BISHOP, CALIFORNIA | AL-5737 (FAA) | 25051

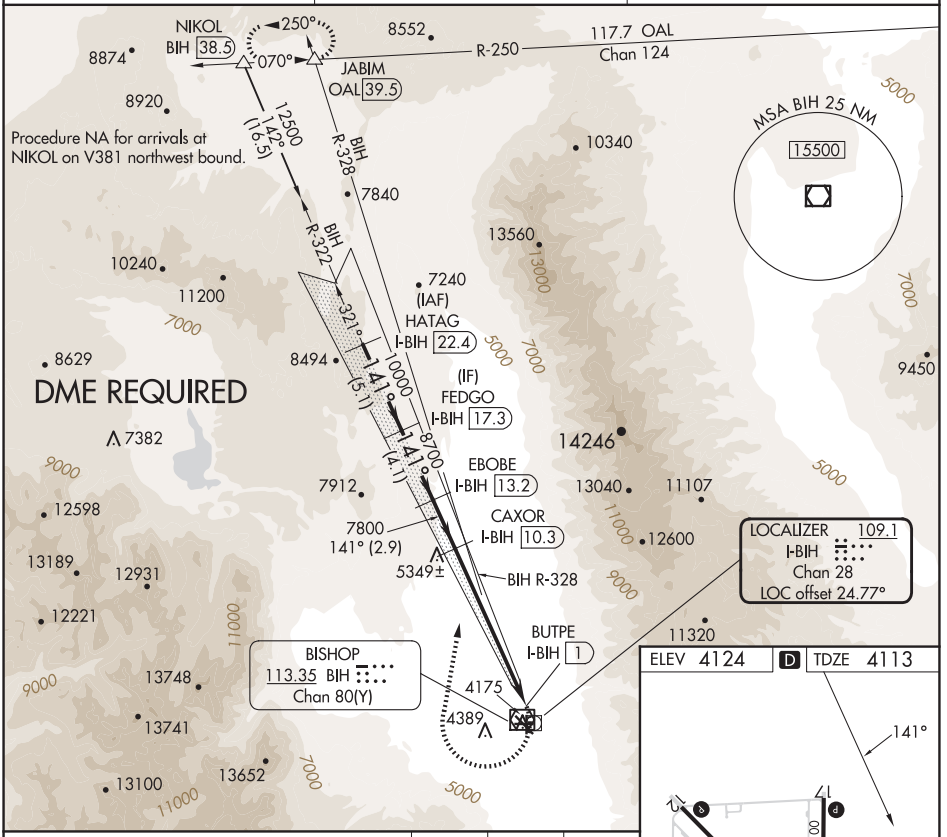
LOC/DME I-BIH	APP CRS	Rwy Idg	5600
109.1	141°	TDZE	4113
Chan 28		Apt Elev	4124

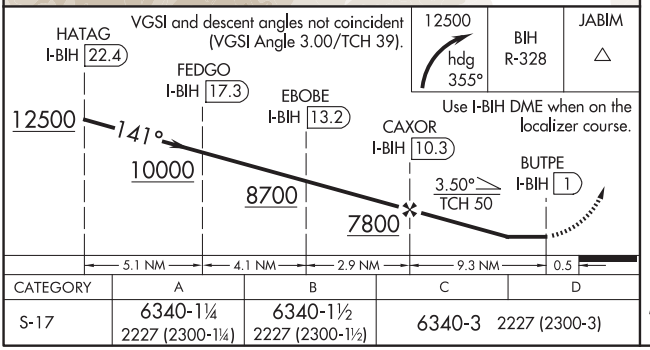
LDA RWY 17
BISHOP (BIH)

DME required.

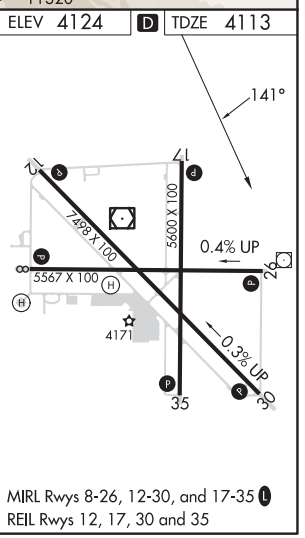
MISSED APPROACH: Climbing right turn to 12500 on heading 355° and on BIH VOR/DME R-328 to JABIM INT/OAL 39.5 DME and hold.

ASOS	OAKLAND CENTER	UNICOM
119.025	125.75 284.65	123.0 (CTAF) L





CATEGORY	A	B	C	D
S-17	6340-1¼ 2227 (2300-1¼)	6340-1½ 2227 (2300-1½)	6340-3 2227 (2300-3)	



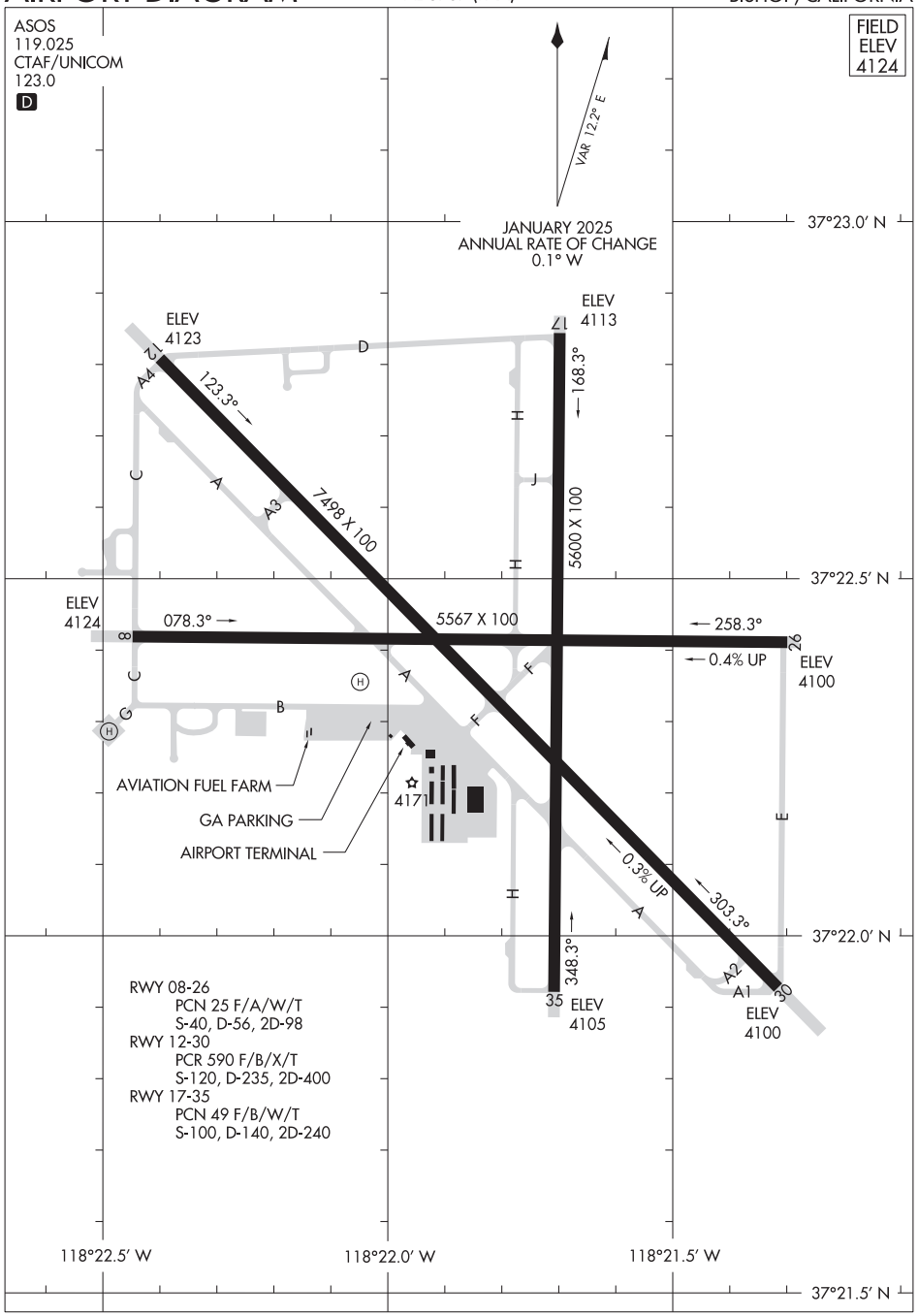
MIRL Rwys 8-26, 12-30, and 17-35 L
REIL Rwys 12, 17, 30 and 35

BISHOP, CALIFORNIA
Orig-D 15AUG19

37°22'N-118°22'W

BISHOP (BIH)
LDA RWY 17

SW-2, 07 AUG 2025 to 02 OCT 2025



SW-2, 07 AUG 2025 to 02 OCT 2025

BYRON, CALIFORNIA | AL-9141 (FAA) | 21112

RNAV (GPS) RWY 30

BYRON (C83)

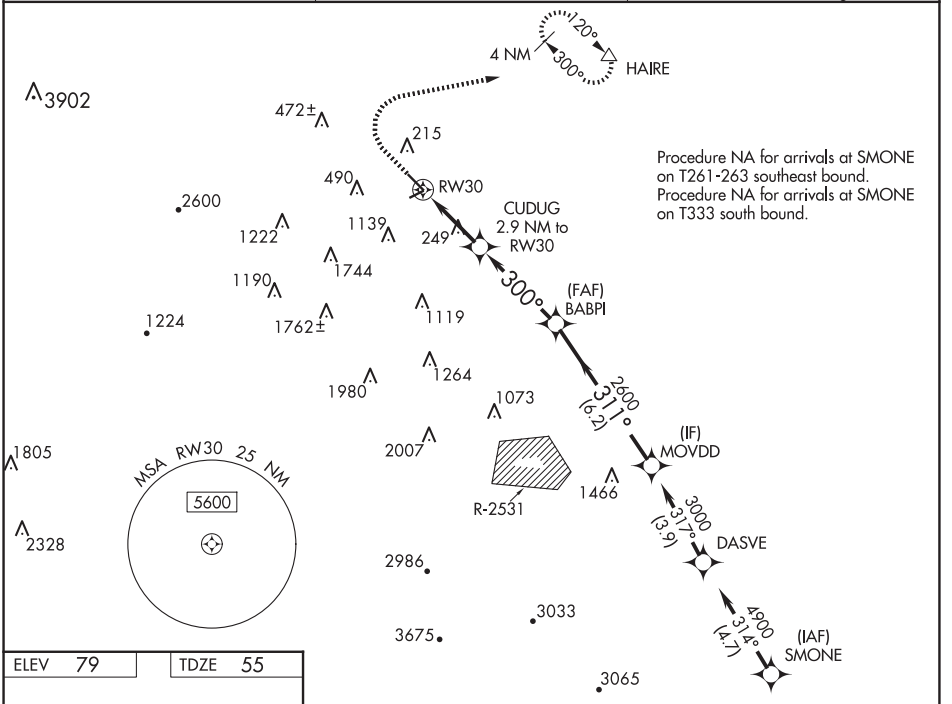
WAAS	APP CRS	Rwy Idg	4500
CH 65902	300°	TDZE	55
W30A		Apt Elev	79

RNP APCH.

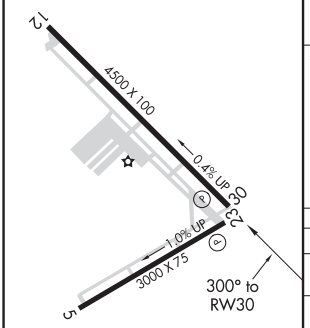
T A W For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 15°C (59°F). Circling NA southwest of Rwy 12-30.

MISSED APPROACH: Climb to 1000, then climbing right turn 4000 direct HAIRE and hold, continue climb-in-hold 4000.

AWOS-3	NORCAL APP CON	UNICOM
123.775	123.85 278.3	123.050 (CTAF) L



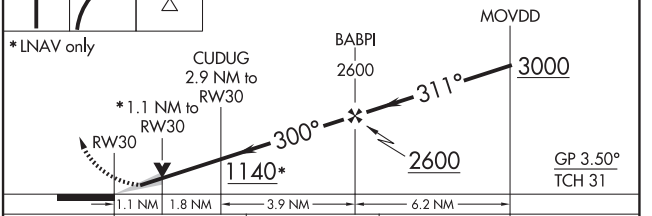
ELEV 79 | TDZE 55



REIL Rwy 30 L
MIRL Rwys 5-23 and 12-30 L

1000 | 4000 | HAIRE

VGSI and RNAV glidepath not coincident (VGSI Angle 3.50/ TCH 25).



CATEGORY	A	B	C	D
LPV DA	325-⅞ 270 (300-⅞)			
LNAV/VNAV DA	404-1⅛ 349 (400-1⅛)			
LNAV MDA	500-1 445 (500-1)		500-1⅜ 445 (500-1⅜)	
CIRCLING	600-1 521 (600-1)		680-1¾ 601 (700-1¾)	820-2½ 741 (800-2½)

BYRON, CALIFORNIA
Amdt 1B 03DEC20

37°50'N-121°38'W

BYRON (C83)

RNAV (GPS) RWY 30

SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 34

ROGERS FLD (OØ5)

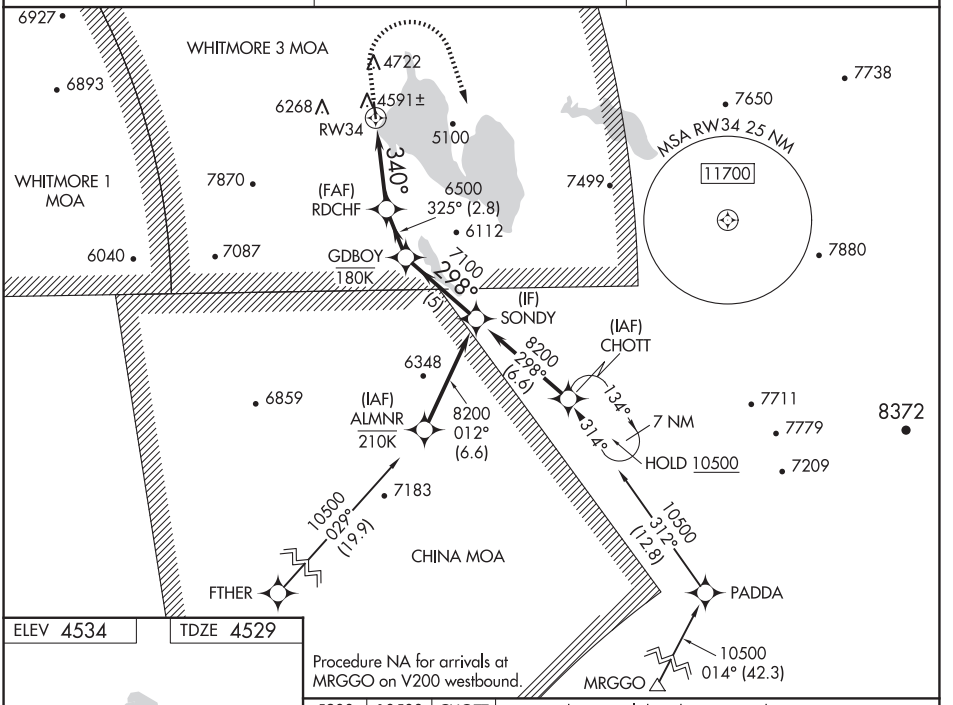
WAAS	APP CRS		
CH **68560**	**340°**	Rwy Idg	**5020**
W34B		TDZE	**4529**
		Apt Elev	**4534**

RNP APCH - GPS.

When local altimeter setting not received, procedure NA.
Rwy 34 helicopter visibility reduction below ¾ SM NA.
Circling NA for Cat C west of Rwy 16-34. Circling NA at night.

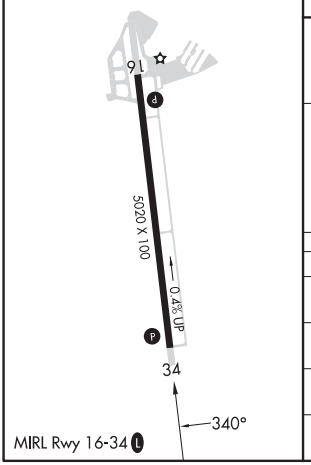
MISSED APPROACH: (Do not exceed 165K until initial turn completion) Climb to 5200 then climbing right turn to 10500 direct CHOTT and hold, continue climb-in-hold to 10500.
*Missed approach requires a minimum climb of 377 feet per NM to 7680 feet.

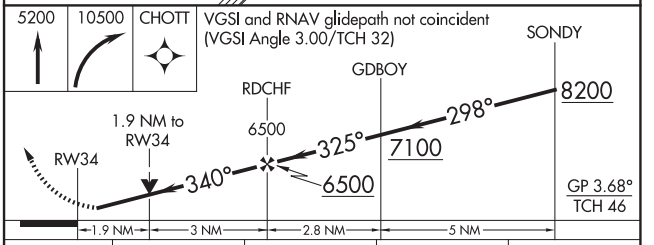
AWOS-3	OAKLAND CENTER	UNICOM
118.275	**132.2 350.3**	**122.8** (CTAF) L



Procedure NA for arrivals at MRGGO on V200 westbound.

ELEV 4534	TDZE 4529





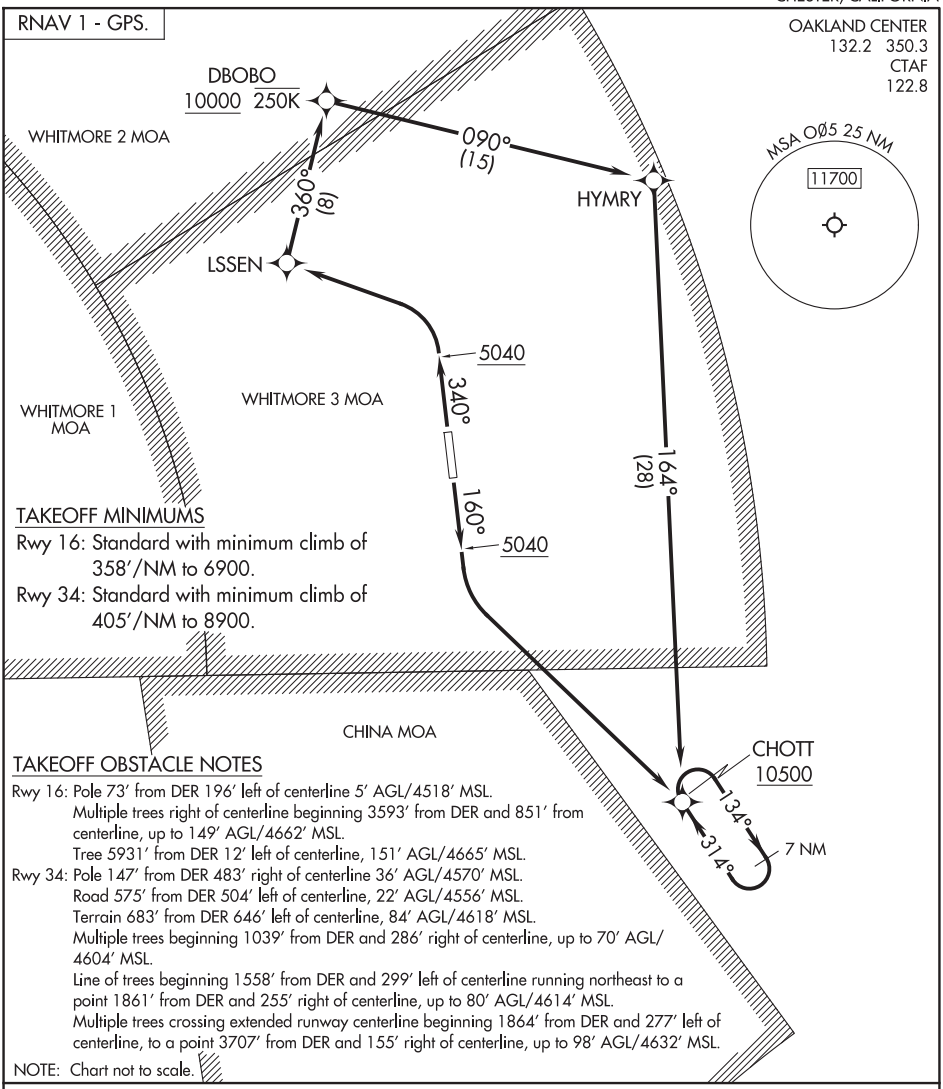
CATEGORY	A	B	C	D
LPV DA*	4779-¾ 250 (300-¾)		4829-⅞ 300 (300-⅞)	NA
LNAV MDA*	5160-1 631 (700-1)		5160-1¾ 631 (700-1¾)	NA
LNAV MDA	5360-1 831 (900-1)	5360-1¼ 831 (900-1¼)	5360-2½ 831 (900-2½)	NA
CIRCLING	5440-1¼ 906 (1000-1¼)	5660-1½ 1126 (1200-1½)	5660-3 1126 (1300-3)	NA

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(CHOTT1.CHOTT) 24305 AL-10031 (FAA-O)

CHOTT ONE DEPARTURE (OBSTACLE) (RNAV)

ROGERS FLD (Ø5)
CHESTER, CALIFORNIA



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 160° to 5040, then climbing left turn to 10500 direct CHOTT, thence. . . .

TAKEOFF RUNWAY 34: Climb on heading 340° to 5040, then climbing left turn to 10500 direct LSSEN, then on depicted route to CHOTT, thence. . . .

. . . .continue climb in CHOTT holding pattern to cross CHOTT at or above 10500 before proceeding on course.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

ILS or LOC RWY 13L

CHICO RGNL (CIC)

LOC/DME I-CIC	APP CRS	Rwy ldg	6724
111.3	131°	TDZE	240
Chan 50		Apt Elev	240

DME required.

TA Circling NA east of Rwy 13L/31R.

MALSR

MISSED APPROACH: Climb to 1000 then climbing right turn to 6000 on heading 155° and RBL R-122 to DURHA INT/ RBL 34.2 DME and hold, continue climb-in-hold to 6000.

ATIS	OAKLAND CENTER	CHICO TOWER ★	GND CON	UNICOM
119.675	132.2 350.3	121.0 (CTAF) L 239.3	121.9	122.95

Procedure NA for arrivals on Red Bluff VORTAC airway radials 122 CW 140.

IAF RED BLUFF 115.7 RBL Chan 104

3000 105° (11.8)

R-105 311°

(IF) ZOTWY INT I-CIC 14.8 RBL 11.8

2700 131° (5.9)

NORDE I-CIC 8.8

CUBUN I-CIC 3.8

LOCALIZER 111.3 I-CIC Chan 50

MSA RBL 27 NM: 6700, 8100, 9300, 5200; 090°, 180°, 270°, 360°

MISSED APCH FIX: 115.7 RBL Chan 104; R-122; 122°; 302°; R-001; DURHA RBL 34.2; 114.4 IIA Chan 91

R-122

2000 1000 4000± 3995 2150 446 324± 547 1817 765 1355

ELEV 240 D TDZE 240

131° 13L 31R TWR 312 3000 X 60 6724 X 150 0.4% UP 0.5% UP 31L

REIL Rwy 31R L

HIRL Rwy 13L-31R L

1000	6000 hdg R-155	RBL R-122	DURHA

ZOTWY INT I-CIC 14.8 — NORDE I-CIC 8.8 — CUBUN I-CIC 3.8 — *I-CIC 2.2 — I-CIC 1.3

3000 131° 2700 2700 *1080 *LOC only

GS 3.00° TCH 52

5.9 NM 5.1 NM 1.6 NM 0.9 NM

CATEGORY	A	B	C	D
S-ILS 13L	440-½ 200 (200-½)			
S-LOC 13L	580-½ 340 (400-½)			
C CIRCLING	640-1 400 (400-1)	700-1 460 (500-1)	700-1½ 460 (500-1½)	800-2 560 (600-2)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 13L

CHICO RGNL (CIC)

WAAS	APP CRS	Rwy Idg	6724
CH 65912	131°	TDZE	240
W13A		Apt Elev	240

RNP APCH.

Circling NA east of Rwy 13L-31R. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. For inop ALS, increase LNAV/VNAV all Cats visibility to ⅞ SM, and increase LNAV Cats C/D visibility to 1 SM.

MALSR

MISSED APPROACH: Climb to 3600 direct UNJED and hold, continue climb-in-hold to 3600.

ATIS	OAKLAND CENTER	CHICO TOWER★	GND CON	UNICOM
119.675	132.2 350.3	121.0 (CTAF) L 239.3	121.9	122.95

Procedure NA for arrival on Red Bluff VORTAC airway radials 122 CW 185.

(IAF) RED BLUFF RBL

3000 107° (11.8)

(IF) ZOTWY

2700 131° (5.9)

(FAF) NORDE

CUBUN 2.5 NM to RW13L

RW13L

MSA RW13L 25 NM

8300

MISSED APCH FIX

UNJED

132° 312° 4 NM

4000± ●

3995

2150 ●

2964

446

349±

547

1817

2129

765

1355

1000

2000

3000

ELEV 240 D TDZE 240

131°

13L

13R

31L

31R

TWR 312

6724 X 150

3000 X 60

0.4% UP

0.5% UP

REIL Rwy 31R L

HIRL Rwy 13L-31R L

ZOTWY NORDE CUBUN 2.5 NM to RW13L

3000 131° 2700 2700 *1080

*1 NM to RW13L

RW13L

GP 3.00° TCH 52

5.9 NM 5.1 NM 1.5 NM 1 NM

3600 UNJED

*LNAV only

CATEGORY	A	B	C	D
LPV DA	440-½ 200 (200-½)			
LNAV/VNAV DA	530-½ 290 (300-½)			
LNAV MDA	600-½ 360 (400-½)		600-⅝ 360 (400-⅝)	
C CIRCLING	640-1 400 (400-1)	700-1 460 (500-1)	700-1½ 460 (500-1½)	800-2 560 (600-2)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 31R

CHICO RGNL (CIC)

WAAS	APP CRS	Rwy Idg	6724
CH 77912	311°	TDZE	226
W31A		Apt Elev	240

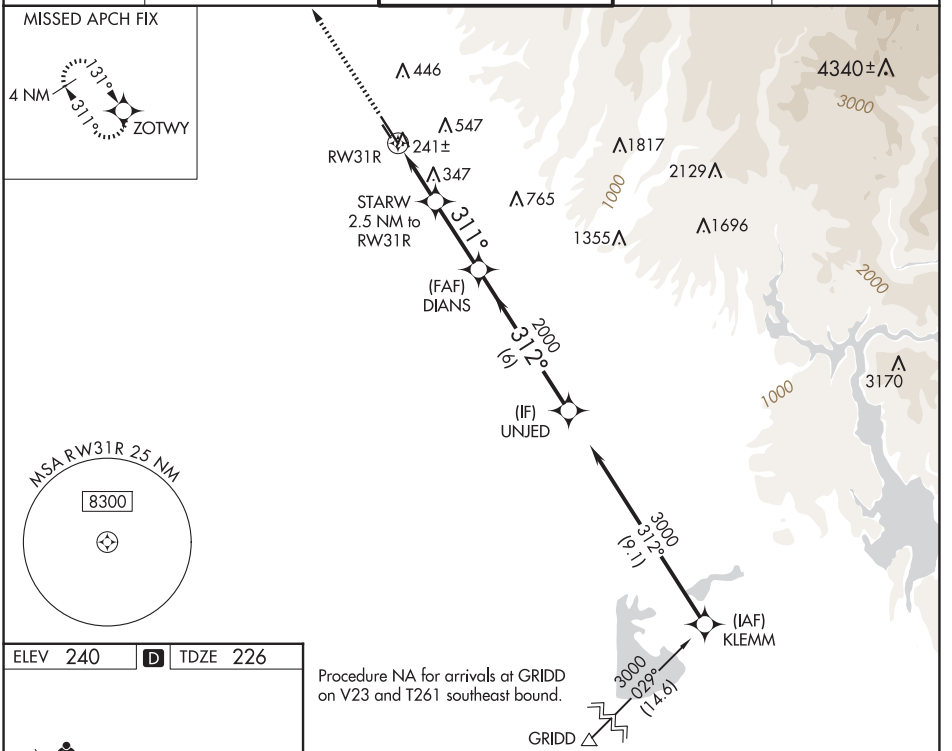
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 48°C.

MISSED APPROACH: Climb to 3000 direct ZOTWY and hold.

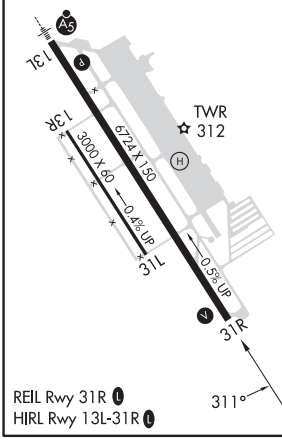
ATIS	OAKLAND CENTER	CHICO TOWER ★	GND CON	UNICOM
119.675	132.2 350.3	121.0 (CTAF) L 239.3	121.9	122.95

MISSED APCH FIX

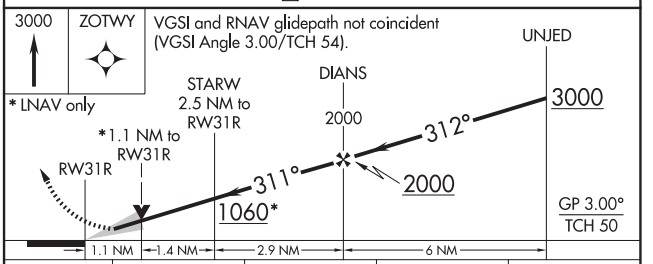


Procedure NA for arrivals at GRIDD on V23 and T261 southeast bound.

ELEV 240 D TDZE 226



REIL Rwy 31R L
HIRL Rwy 13L-31R L



CATEGORY	A	B	C	D
LPV DA	476-1 250 (300-1)			
LNAV/VNAV DA	733-1¾ 507 (500-1¾)			
LNAV MDA	600-1 374 (400-1)			600-1¼ 374 (400-1¼)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

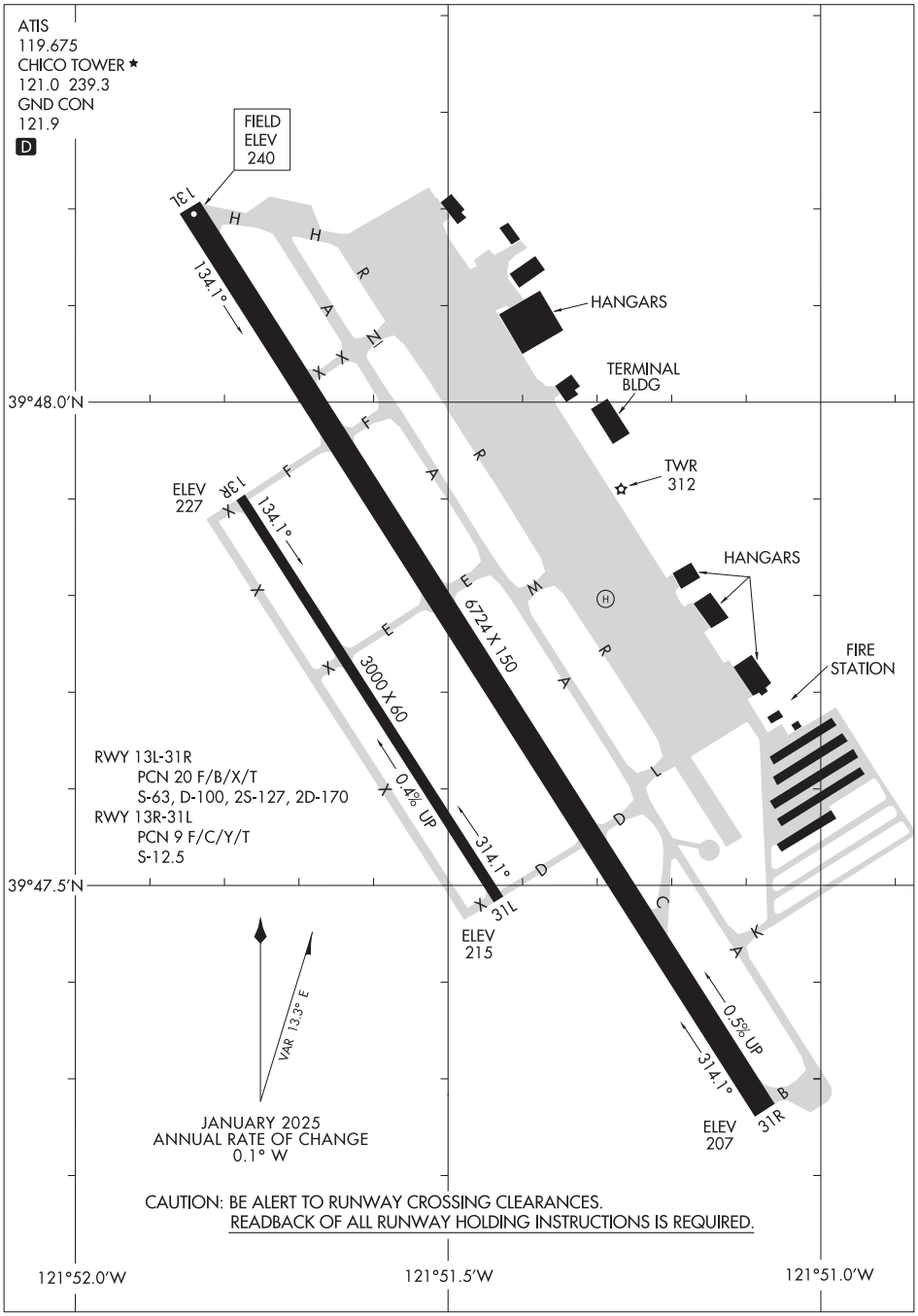
25107

AIRPORT DIAGRAM

CHICO RGNL (CIC)

CHICO, CALIFORNIA

AL-557 (FAA)



SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

AIRPORT DIAGRAM

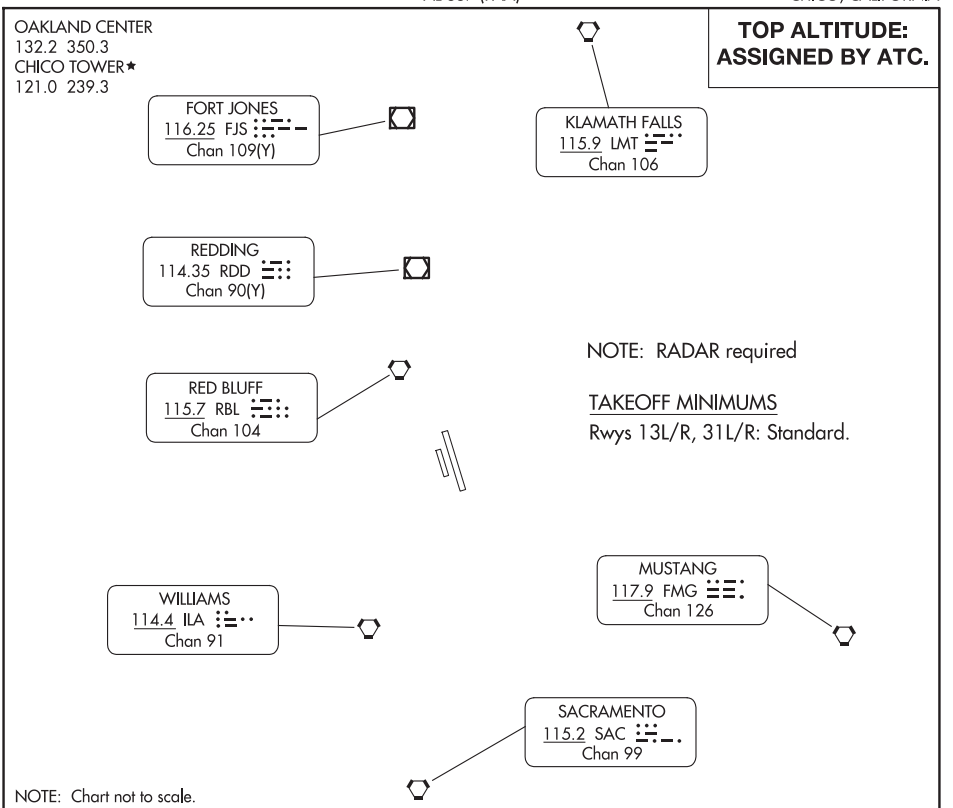
CHICO, CALIFORNIA

CHICO RGNL (CIC)

25107

CHICO FIVE DEPARTURE

AL-557 (FAA)



SW-2, 07 AUG 2025 to 02 OCT 2025

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 13L/R: Climb on a heading between 140° CW 310° from departure end of runway to assigned altitude. Thence. . . .

TAKEOFF RUNWAYS 31L/R: Climb on a heading between 320° CCW 132° from departure end of runway to assigned altitude. Thence. . . .

. . . .RADAR vectors to assigned route. Maintain assigned altitude, expect filed altitude/flight level 10 minutes after departure.

LOST COMMUNICATIONS

For aircraft assigned a heading between 120° CW through 250°: if not in contact with Oakland Center after reaching 3000, continue climb to 5000 or higher assigned altitude and proceed to ILA VORTAC, thence. . . .

For aircraft assigned a heading between 255° CW through 320°: if not in contact with Oakland Center after reaching 3000, continue climb to 5000 or higher assigned altitude and proceed to RBL VORTAC, thence. . . .

. . . .Proceed on assigned route.

CLOVERDALE, CALIFORNIA | AL-9503 (FAA) | 25107

APP CRS	Rwy Idg	2909
314°	TDZE	276
	Apt Elev	276

RNAV (GPS) RWY 32

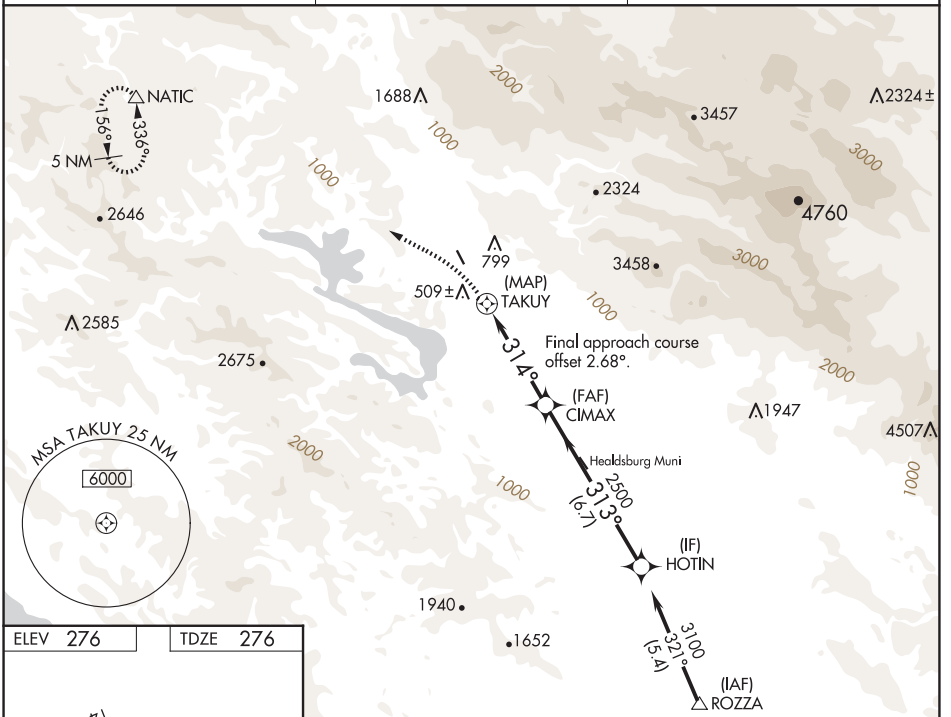
CLOVERDALE MUNI (O69)

RNP APCH-GPS.

Circling Cat C NA northeast of Rwy 14-32. Helicopter visibility reduction below 1 SM NA. Procedure NA at night. Use Santa Rosa altimeter setting.

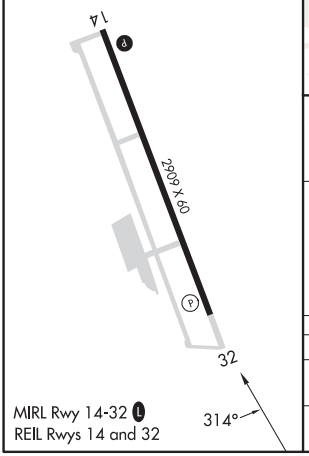
MISSED APPROACH: Climbing left turn to 6000 direct NATIC and hold, continue climb-in-hold to 6000.

STS ASOS	OAKLAND CENTER	UNICOM
120.55	127.8 353.5	122.8 (CTAF) L

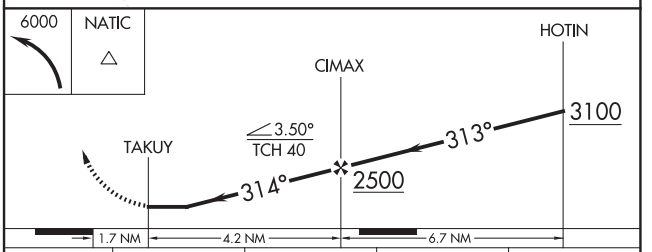


Procedure NA for arrivals at ROZZA on V301 north bound, V108 northwest bound and V494 west bound.

ELEV 276 | TDZE 276



MIRL Rwy 14-32 L
REIL Rwys 14 and 32



CATEGORY	A	B	C	D
LNAV MDA	1320-2 1044 (1100-2)		1320-3 1044 (1100-3)	NA
C CIRCLING	1500-2 1224 (1300-2)	2180-2 1904 (2000-2)	2180-3 1904 (2000-3)	NA

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 30

NEW COALINGA MUNI (C80)

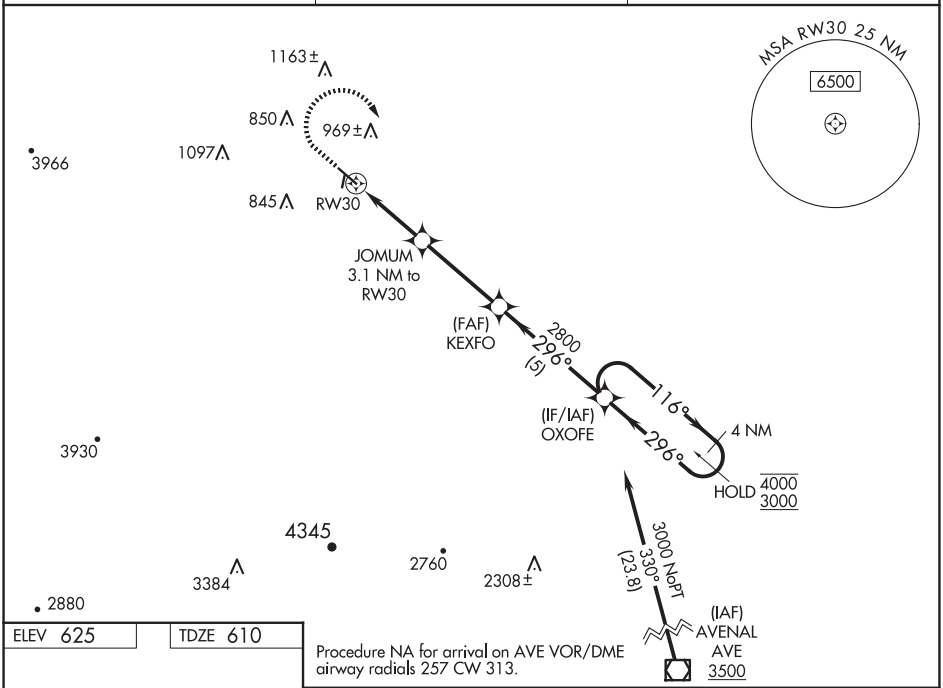
WAAS	APP CRS	Rwy Idg	5000
CH 69544	296°	TDZE	610
W30A		Apt Elev	625

RNP APCH - GPS.

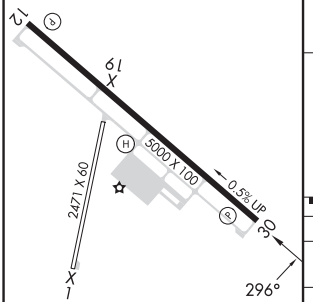
Circling to Rwy 1, 19 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 54°C.

MISSED APPROACH: Climb to 1200, then climbing right turn to 3000 direct OXOFE and hold.

AWOS-3	OAKLAND CENTER	UNICOM
119.275	128.7 307.0	122.7 (CTAF) L

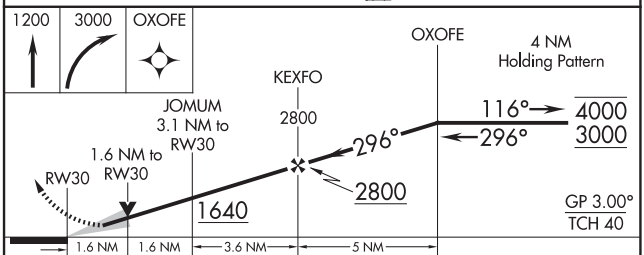


ELEV 625 TDZE 610



MIRL Rwy 12-30 L

REIL Rwys 12 and 30 L



CATEGORY	A	B	C	D
LPV DA	936-1 326 (400-1)			
LNAV/VNAV DA	1030-1⅛ 420 (500-1⅛)			
LNAV MDA	1140-1 530 (600-1)		1140-1½ 530 (600-1½)	
CIRCLING	1160-1 535 (600-1)	1320-1 695 (700-1)	1420-2¼ 795 (800-2¼)	1700-3 1075 (1100-3)

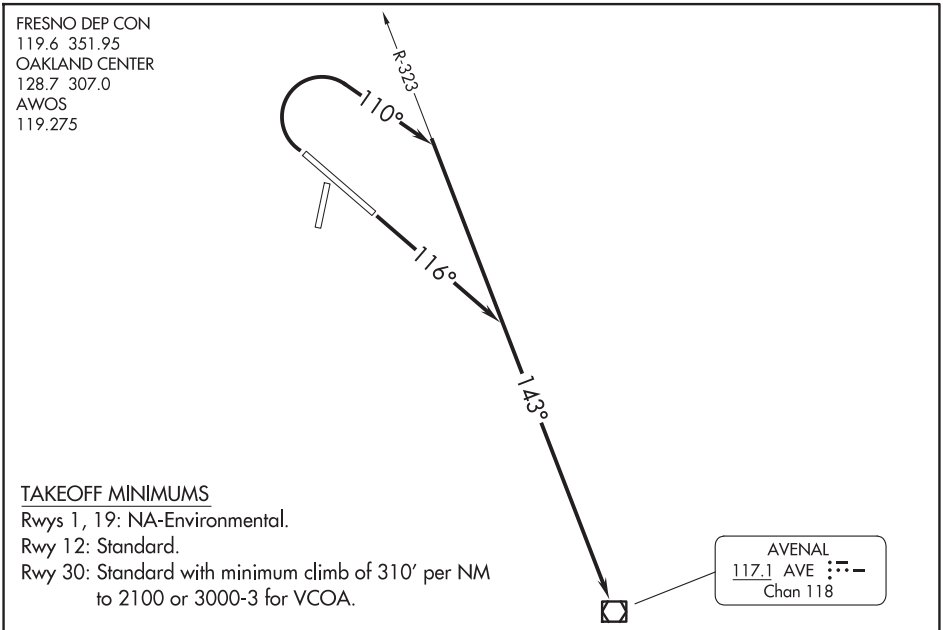
SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(AVE1.AVE) 23278

AVENAL ONE DEPARTURE(OBSTACLE)

AL-9514 (FAA)

NEW COALINGA MUNI (C8Ø)
COALINGA, CALIFORNIA



TAKEOFF MINIMUMS

Rwys 1, 19: NA-Environmental.
Rwy 12: Standard.
Rwy 30: Standard with minimum climb of 310′ per NM to 2100 or 3000-3 for VCOA.

TAKEOFF OBSTACLE NOTES

Rwy 12: Vehicle on road beginning 9′ from DER, 362′ left of centerline, up to 614′ MSL.
Navaid 15′ from DER, 125′ right of centerline, 2′ AGL/603′ MSL.
Vehicle on road beginning 76′ from DER, 506′ right of centerline, up to 614′ MSL.
Rwy 30: Navaid 14′ from DER, 125′ left of centerline, 1′ AGL/626′ MSL.
Terrain 43′ from DER, 472′ right of centerline, 627′ MSL.
Vehicle on road beginning 145′ from DER, 456′ right of centerline, up to 645′ MSL.
Vehicle on road 202′ from DER, 446′ left of centerline, 643′ MSL.
Vehicle on road 330′ from DER, 378′ right of centerline, 646′ MSL.
Vehicle on road beginning 384′ from DER, 1′ left of centerline, up to 644′ MSL.
Vehicle on road 532′ from DER, 362′ right of centerline, 647′ MSL.
Vehicle on road beginning 655′ from DER, on and left of centerline, up to 646′ MSL.
Vehicle on road beginning 679′ from DER, on and right of centerline, up to 648′ MSL.
Vehicle on road beginning 731′ from DER, 113′ left of centerline, up to 648′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 12: Climb on heading 116° to intercept AVE VOR/DME R-323 to AVE VOR/DME then proceed on course.

TAKEOFF RUNWAY 30: Climbing right turn to heading 110° to intercept AVE VOR/DME R-323 to AVE VOR/DME then proceed on course.

VCOA RUNWAY 30: Obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross New Coalinga Muni Airport at or above 3500 before proceeding on course.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS	Rwy Idg	4289
354°	TDZE	2105
	Apt Elev	2121

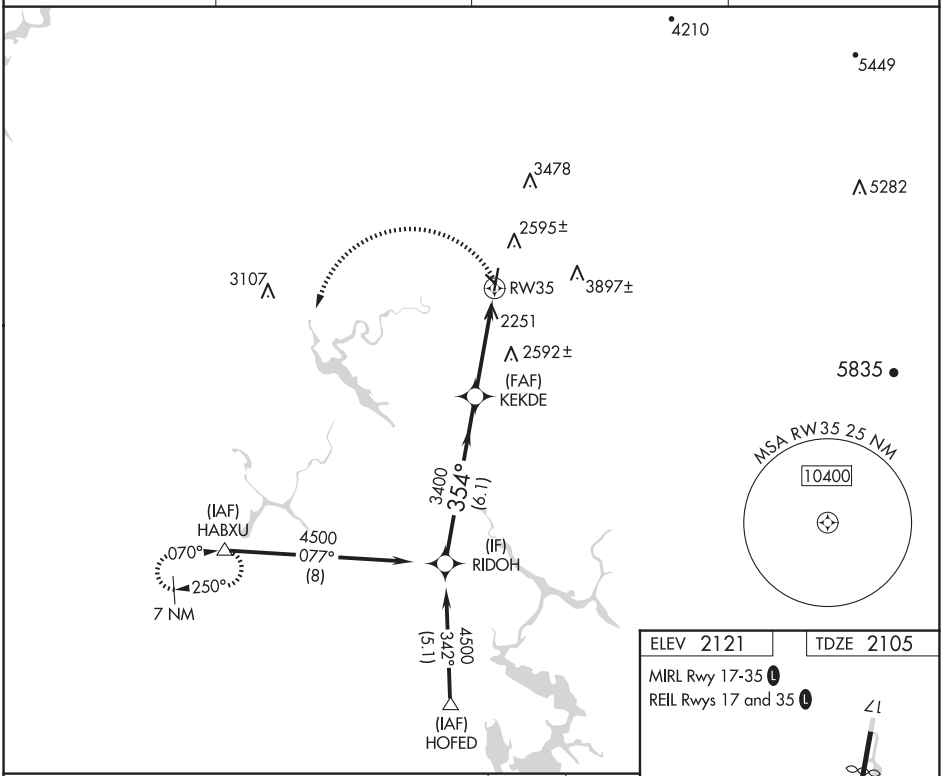
RNAV (GPS) RWY 35
COLUMBIA (O22)

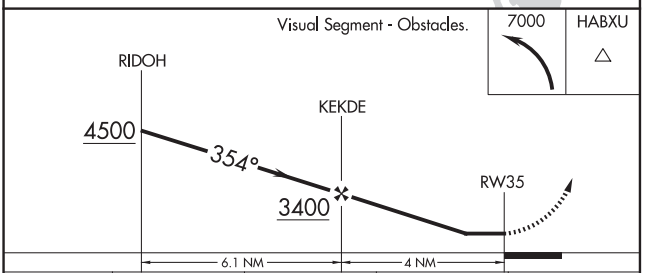
RNP APCH.

Circling NA to Rwys 11 and 29. Circling NA east of Rwy 17-35. Procedure NA at night. Rwy 35 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climbing left turn to 7000 direct HABXU and hold, continue climb-in-hold to 7000.

AWOS-3	NORCAL APP CON	OAKLAND CENTER	UNICOM
124.65	125.1 363.2 (NORTH/WEST)	121.25 327.0 (EAST/SOUTH)	122.975 (CTAF) L



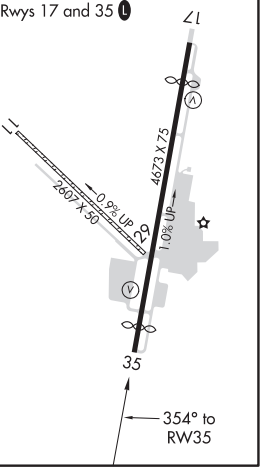


CATEGORY	A	B	C	D
LNAV MDA	3140-1¼ 1035 (1100-1¼)	3140-1½ 1035 (1100-1½)	3140-3 1035 (1100-3)	NA
C CIRCLING	3140-1¼ 1019 (1100-1¼)	3140-1½ 1019 (1100-1½)	3140-3 1019 (1100-3)	NA

ELEV 2121 TDZE 2105

MIRL Rwy 17-35 L

REIL Rwys 17 and 35 L



SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(FICHU4.HABXU) 23026

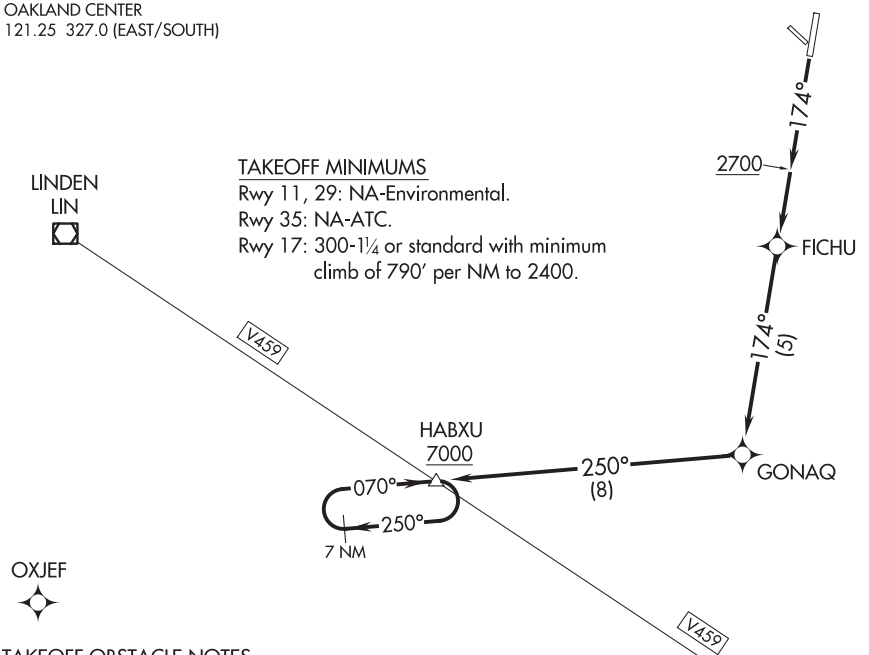
FICHU FOUR DEPARTURE (OBSTACLE) (RNAV)

AL-6786 (FAA)

COLUMBIA (O22)
COLUMBIA, CALIFORNIA

NORCAL DEP CON
125.1 363.2 (NORTH/WEST)
OAKLAND CENTER
121.25 327.0 (EAST/SOUTH)

RNAV 1 - GPS.



TAKEOFF MINIMUMS
Rwy 11, 29: NA-Environmental.
Rwy 35: NA-ATC.
Rwy 17: 300-1¼ or standard with minimum climb of 790′ per NM to 2400.

TAKEOFF OBSTACLE NOTES
Rwy 17: Vegetation 31′ from DER, 196′ right of centerline, 2083′ MSL.
Tree 148′ from DER, 387′ right of centerline, 2108′ MSL.
Trees beginning 180′ from DER, 287′ left of centerline, up to 2126′ MSL.
Tree 262′ from DER, 527′ right of centerline, 2163′ MSL.
Trees beginning 353′ from DER, 240′ left of centerline, up to 2127′ MSL.
Trees, traverse way, pole, terrain, vegetation beginning 414′ from DER, 46′ right of centerline, up to 2188′ MSL.
Tree 456′ from DER, 325′ left of centerline, 2130′ MSL.
Trees beginning 492′ from DER, 109′ left of centerline, up to 2133′ MSL.
Trees beginning 725′ from DER, 26′ left of centerline, up to 2171′ MSL.
Trees beginning 1259′ from DER, 57′ left of centerline, up to 2181′ MSL.
Tree 1527′ from DER, 892′ right of centerline, 2205′ MSL.
Tree 1620′ from DER, 859′ right of centerline, 2220′ MSL.
Trees beginning 1665′ from DER, 895′ right of centerline, up to 2238′ MSL.
Tree 2151′ from DER, 983′ left of centerline, 2212′ MSL.
Trees, tower beginning 2195′ from DER, 442′ left of centerline, up to 2273′ MSL.
Tree 5936′ from DER, 560′ left of centerline, 2239′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb on heading 174° to 2700, then climb direct to FICHU, then on track 174° to GONAQ, then on track 250° to HABXU, maintain 7000. Continue climb in hold in HABXU holding pattern to cross HABXU at or above MEA for route of flight.

SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS	Rwy Ldg	N/A
138°	TDZE	N/A
	Apt Elev	49

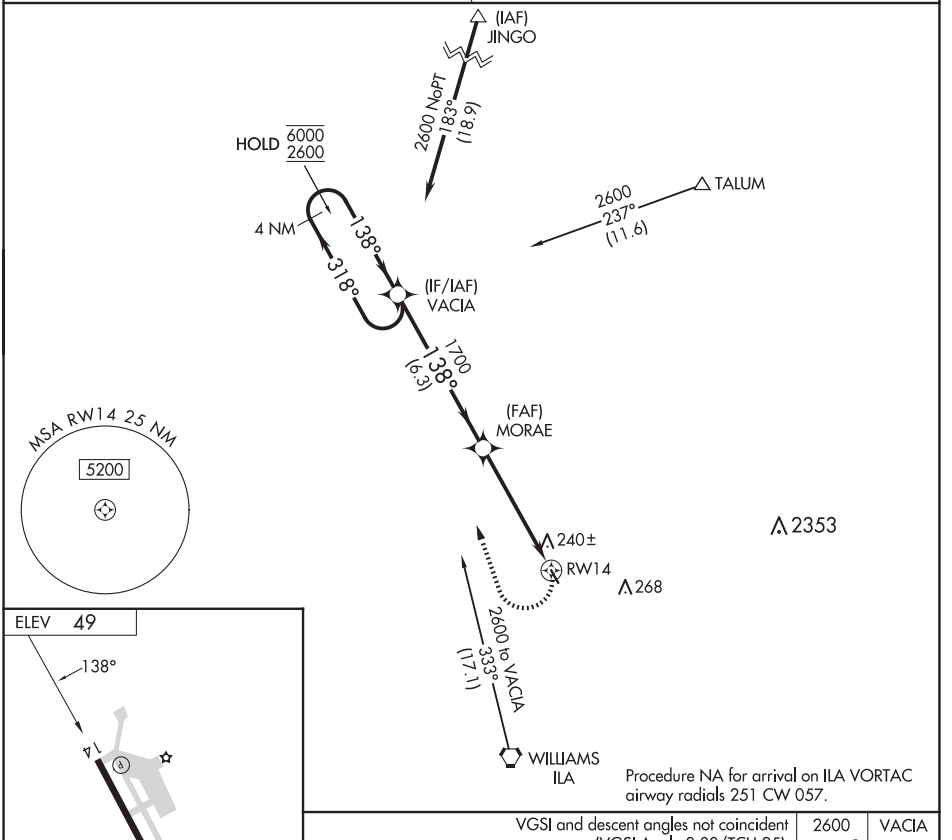
RNAV (GPS)-B
COLUSA COUNTY (O∅8)

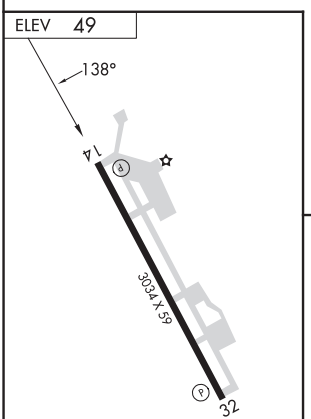
RNP APCH - GPS.

T ANA Circling Rwy 32 NA at night. Rwy 14, 32 helicopter visibility reduction below 1 SM NA. Obtain local altimeter setting on CTAF; when not received, use Sacramento Intl altimeter setting and increase all MDAs 100 feet and Cat C visibility ½ SM.

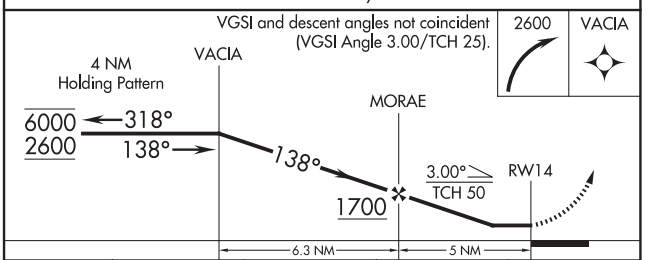
MISSED APPROACH: Climbing right turn to 2600 direct VACIA and hold.

OAKLAND CENTER	UNICOM
132.2 350.3	122.8 (CTAF) L





MIRL Rwy 14-32 L



CATEGORY	A	B	C	D
C CIRCLING	600-1 551 (600-1)		620-1½ 571 (600-1½)	NA

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

COLUSA, CALIFORNIA | AL-5147 (FAA) | 25163

WAAS	APP CRS	Rwy Ldg 3034
CH 65840	318°	TDZE 49
W32A		Apt Elev 49

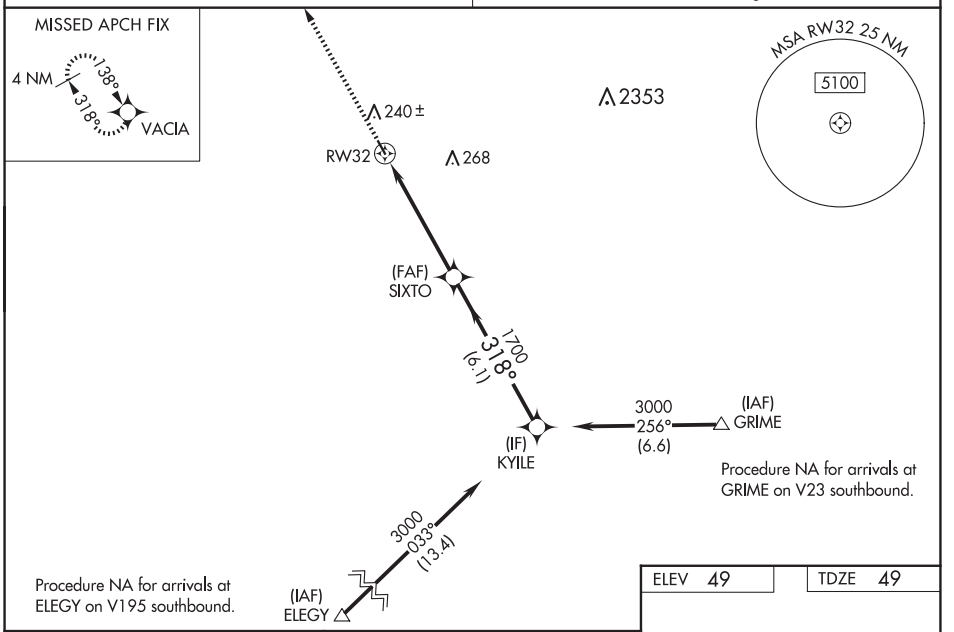
RNAV (GPS) RWY 32
COLUSA COUNTY (0Ø8)

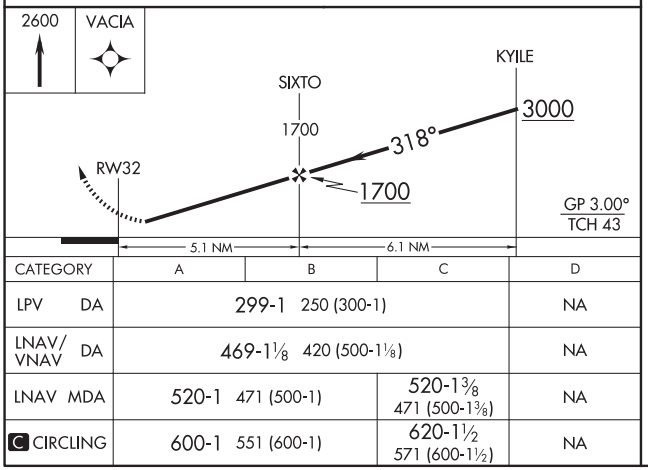
RNP APCH - GPS.

T NA Baro-VNAV NA when using Sacramento Intl altimeter setting. Rwy 32 helicopter visibility reduction below 1 SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Procedure NA at night. Obtain local altimeter setting on CTAF; when not received, use Sacramento Intl altimeter setting: increase LPV DA to 381 feet, increase LNAV/VNAV DA to 551 feet and all visibilities ¼ SM; increase all MDAs 100 feet and LNAV Cat C visibility ¼ SM and Circling Cat C visibility ½ SM.

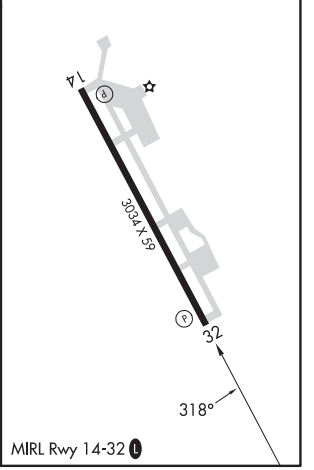
MISSED APPROACH: Climb to 2600 direct VACIA and hold.

OAKLAND CENTER	UNICOM
132.2 350.3	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	299-1 250 (300-1)			NA
LNAV/VNAV DA	469-1⅛ 420 (500-1⅛)			NA
LNAV MDA	520-1 471 (500-1)		520-1⅜ 471 (500-1⅜)	NA
C CIRCLING	600-1 551 (600-1)		620-1½ 571 (600-1½)	NA



SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

VORTAC ILA	APP CRS	Rwy Ldg	N/A
114.4	356°	TDZE	N/A
Chan 91		Apt Elev	49

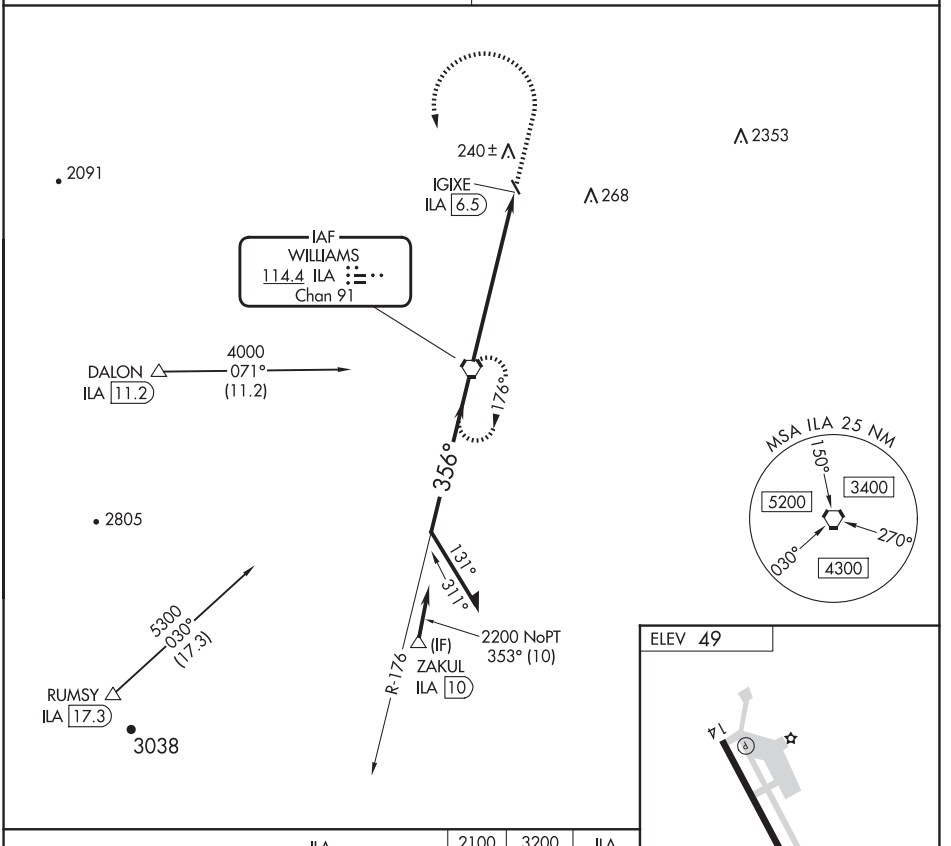
VOR-A
COLUSA COUNTY (0Ø8)

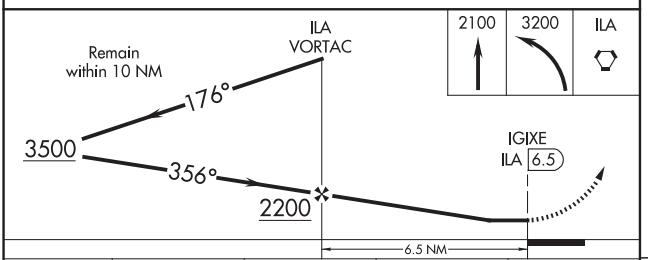
DME required.

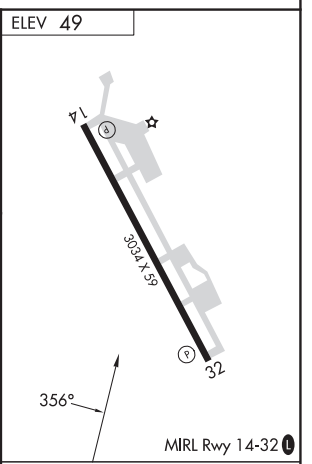
T NA Circling Rwy 32 NA at night. Obtain local altimeter setting on CTAF; when not received, use Sacramento Intl altimeter setting and increase all MDAs 100 feet and visibility Cat C ½ SM.

MISSED APPROACH: Climb to 2100 then climbing left turn to 3200 direct ILA VORTAC and hold.

OAKLAND CENTER	UNICOM
132.2 350.3	122.8 (CTAF) L







CATEGORY	A	B	C	D
C CIRCLING	600-1	551 (600-1)	620-1½	NA
			571 (600-1½)	

FAF to MAP 6.5 NM

Knots	60	90	120	150	180
Min:Sec	6:30	4:20	3:15	2:36	2:10

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 19R

BUCHANAN FLD (CCR)

WAAS CH 86424 W19A	APP CRS 191°	Rwy Ldg 4400 TDZE 22 Apt Elev 26

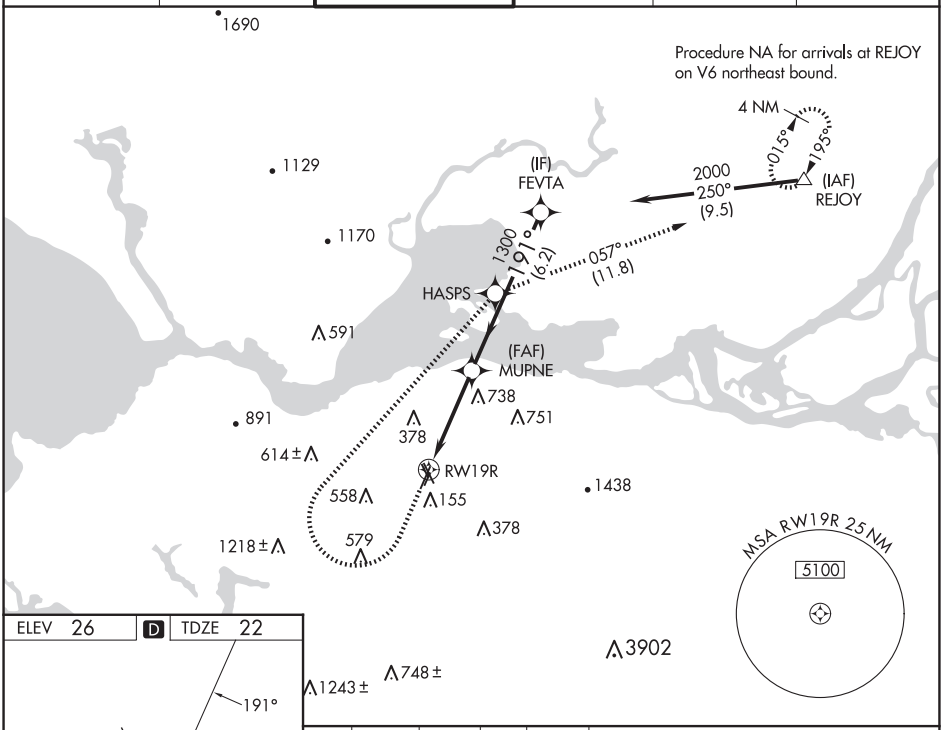
RNP APCH - GPS.

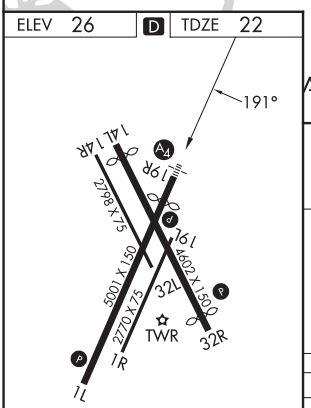
Circling to Rwy 1L, 1R, 32R, 32L and 19L NA at night. Circling NA west of Rwys 1L and 19R. Rwy 19R helicopter visibility reduction below ¾ SM NA. Inop table does not apply to LPV all Cats. For inop ALS, increase LNAV Cat C and D visibility to 3 SM.

MALS

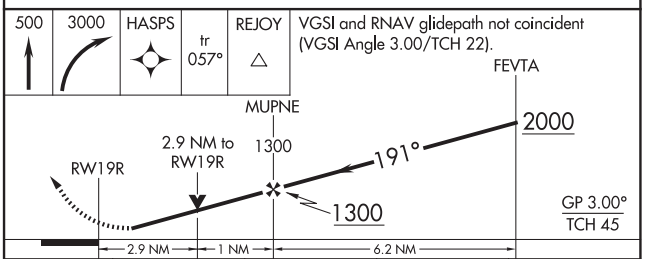
MISSED APPROACH: (Do not exceed 190K until HASPS) Climb to 500 then climbing right turn to 3000 direct HASPS then on track 057° direct REJOY and hold.

ATIS	TRAVIS APP CON	CONCORD TOWER★	GND CON	CLNC DEL	UNICOM
124.7	119.9 322.325	119.7 (CTAF) 257.8	121.9	118.025	122.95





HIRL Rwy 1L-19R
REIL Rwys 1L and 32R
MIRL Rwy 14L-32R



CATEGORY	A	B	C	D
LPV DA	298-¾ 276 (300-¾)			
LNAV MDA	980-1 958 (1000-1)	980-1¼ 958 (1000-1¼)	980-2½ 958 (1000-2½)	
C CIRCLING	980-1¼ 954 (1000-1¼)	980-1½ 954 (1000-1½)	980-3 954 (1000-3)	1300-3 1274 (1300-3)

37°59′N-122°03′W

SW-2, 07 AUG 2025 to 02 OCT 2025

LDA RWY 19R
BUCHANAN FLD (CCR)

LOC/DME I-CCR	APP CRS	Rwy Ldg	4400
108.5	185°	TDZE	22
Chan 22		Apt Elev	26

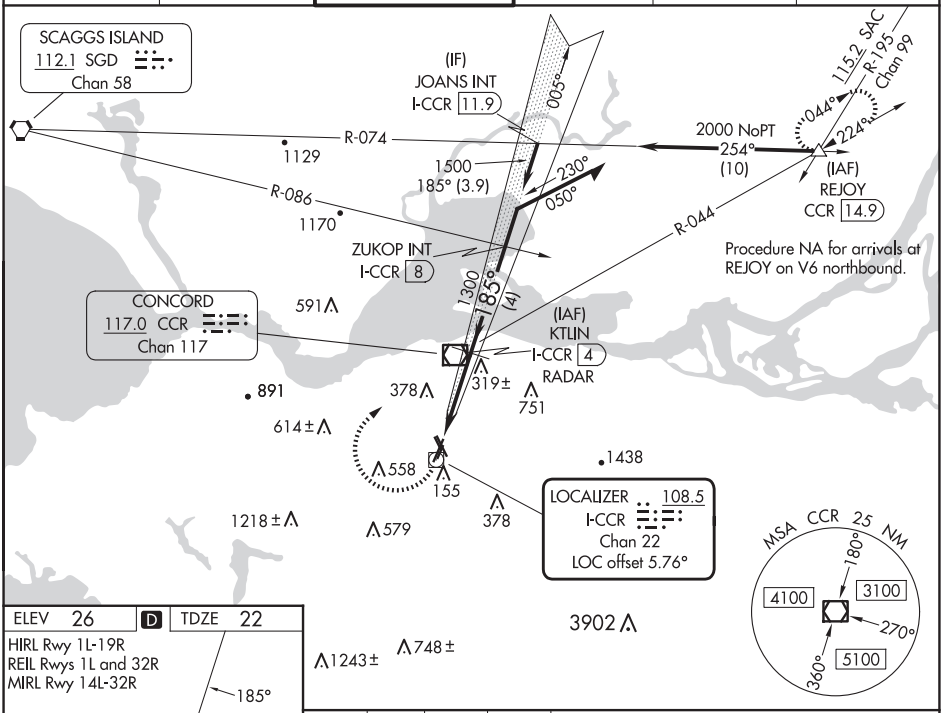
DME required.

Circling NA west of Rwy 1L-19R. Circling Rwy 1L, 1R, 19L, 32L, 32R NA at night. Rwy 19R helicopter visibility reduction below ¾ SM NA. For inop ALS, increase S-19R Cats C/D visibility to 2 SM.
*For inop ALS, increase S-19R Cats C/D visibility to 1⅛ SM.

MALS

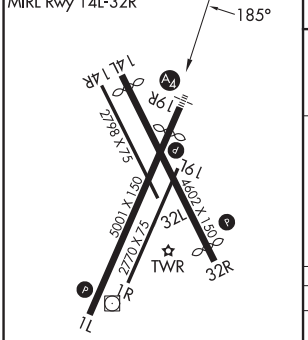
MISSED APPROACH: Climbing right turn to 3000 direct CCR VOR/DME then on CCR VOR/DME R-044 to REJOY/CCR 14.9 DME and hold.
*Missed approach requires minimum climb of 282 feet per NM to 1800.

ATIS	TRAVIS APP CON	CONCORD TOWER*	GND CON	CLNC DEL	UNICOM
124.7	119.9 322.325	119.7 (CTAF) L 257.8	121.9	118.025	122.95



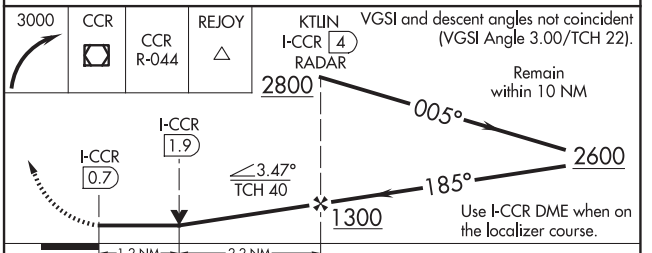
ELEV 26 | D | TDZE 22

HIRL Rwy 1L-19R
REIL Rwy 1L and 32R
MIRL Rwy 14L-32R



FAF to MAP 3.4 NM

Knots	60	90	120	150	180
Min:Sec	3:24	2:16	1:42	1:22	1:08



CATEGORY	A	B	C	D
S-19R*	440-¾ 418 (500-¾)		440-1 418 (500-1)	
S-19R	780-¾ 758 (800-¾)	780-1 758 (800-1)	780-1⅞ 758 (800-1⅞)	
C CIRCLING	780-1 754 (800-1)	780-1¼ 754 (800-1¼)	960-2¾ 934 (1000-2¾)	1300-3 1274 (1300-3)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

CONCORD, CALIFORNIA | AL-5320 (FAA) | 25163

VOR RWY 19R
BUCHANAN FLD (CCR)

VOR/DME CCR	APP CRS	Rwy Ldg	4400
117.0	172°	TDZE	22
Chan 117		Apt Elev	26

T Inop table does not apply. Circling NA west of Rwy 1L-19R. Circling Rwy 1L, 1R, 19L, 32L, 32R NA at night. Rwy 19R helicopter visibility reduction below ¾ SM NA. DME required.

MALS

MISSED APPROACH: Climbing right turn to 3000 direct CCR VOR/DME then on CCR VOR/DME R-044 to REJOY/CCR 14.9 DME and hold.
* Missed approach requires minimum climb of 320 feet per NM to 1700.

ATIS	TRAVIS APP CON	CONCORD TOWER ★	GND CON	CLNC DEL	UNICOM
124.7	119.9 322.325	119.7 (CTAF) L 257.8	121.9	118.025	122.95

SCAGGS ISLAND
112.1 SGD
Chan 58

IAF
CONCORD
117.0 CCR
Chan 117

(IF)
FAWNE INT
SGD 19.5
CCR 8.5

Procedure NA for arrivals at REJOY on V6 northbound.

HUKVI INT
CCR 4

(IAF)
REJOY
CCR 14.9

115.2 SAC
R-195
Chan 99

MSA CCR 25 NM
180° 3100
270° 5100
360° 4100

Procedure NA for arrivals at COLLI on V6 southbound.

ELEV 26 | D | TDZE 22

HIRL Rwy 1L-19R
REIL Rwys 1L and 32R
MIRL Rwy 14L-32R

172°

3000	CCR	CCR R-044	REJOY

CCR VOR/DME 2800

Remain within 10 NM

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 22).

CCR 3.10° 1.3 TCH 40

CCR 3.2

1.9 NM | 1.3 NM | 4 NM

CATEGORY	A	B	C	D
S-19R*	640-1 618 (700-1)		640-1¾ 618 (700-1¾)	
S-19R	1020-1¼ 998 (1000-1¼)	1020-1½ 998 (1000-1½)	1020-3 998 (1000-3)	
C CIRCLING	1020-1¼ 994 (1000-1¼)	1020-1½ 994 (1000-1½)	1020-3 994 (1000-3)	NA

FAF to MAP 3.2 NM

Knots	60	90	120	150	180
Min:Sec	3:12	2:08	1:36	1:17	1:04

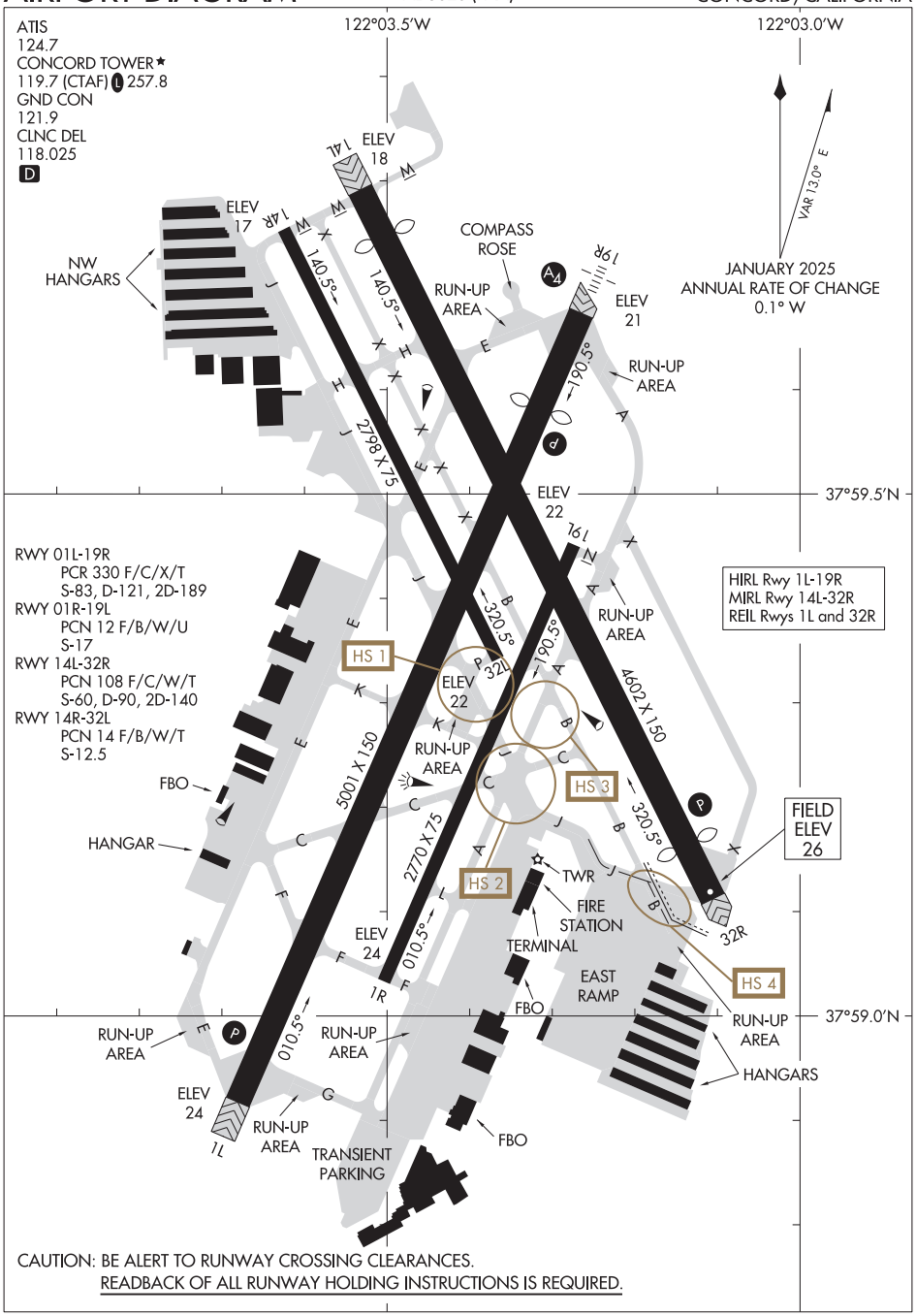
CONCORD, CALIFORNIA
Amdt 14B 14JUL22

37°59'N-122°03'W

BUCHANAN FLD (CCR)
VOR RWY 19R

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

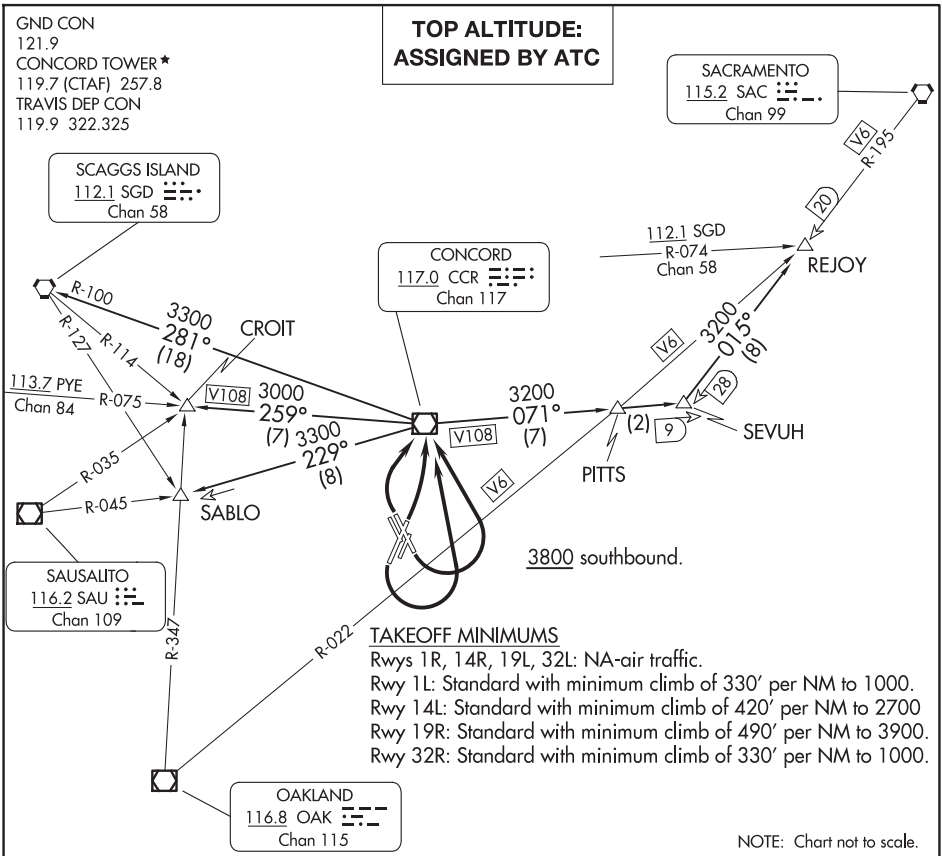

ATIS
124.7
CONCORD TOWER ★
119.7 (CTAF) L 257.8
GND CON
121.9
CLNC DEL
118.025
D
122°03.5'W
122°03.0'W
37°59.5'N
37°59.0'N
VAR 13.0° E
JANUARY 2025
ANNUAL RATE OF CHANGE
0.1° W
ELEV 18
ELEV 17
ELEV 21
ELEV 22
ELEV 24
NW HANGARS
COMPASS ROSE
RUN-UP AREA
140.5°
190.5°
320.5°
010.5°
2798 X 75
5001 X 150
4602 X 150
2770 X 75
HS 1
HS 2
HS 3
HS 4
RWY 01L-19R
PCR 330 F/C/X/T
S-83, D-121, 2D-189
RWY 01R-19L
PCN 12 F/B/W/U
S-17
RWY 14L-32R
PCN 108 F/C/W/T
S-60, D-90, 2D-140
RWY 14R-32L
PCN 14 F/B/W/T
S-12.5
HIRL Rwy 1L-19R
MIRL Rwy 14L-32R
REIL Rwys 1L and 32R
FIELD ELEV 26
FBO
HANGAR
TWR
FIRE STATION
TERMINAL
EAST RAMP
HANGARS
TRANSIENT PARKING
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

(BCHN2.CCR) 23334

BUCHANAN TWO DEPARTURE

AL-5320 (FAA)

BUCHANAN FLD (CCR)
CONCORD, CALIFORNIA



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 1L, 14L, 19R: Climbing left turn direct CCR VOR/DME, thence. . . .

TAKEOFF RUNWAY 32R: Climbing right turn direct CCR VOR/DME, thence. . . .

. . . .on (transition) or (assigned route).

CROIT TRANSITION (BCHN2.CROIT): From over CCR VOR/DME on CCR R-259 to CROIT INT.

PITTS TRANSITION (BCHN2.PITTS): From over CCR VOR/DME on CCR R-071 to PITTS INT.

REJOY TRANSITION (BCHN2.REJOY): From over CCR VOR/DME on CCR R-071 and SAC R-195 to REJOY INT.

SABLO TRANSITION (BCHN2.SABLO): From over CCR VOR/DME on CCR R-229 to SABLO INT.

SCAGGS ISLAND TRANSITION (BCHN2.SGD): From over CCR VOR/DME on CCR R-281 and SGD R-100 to SGD VORTAC.

LOC I-CEC	APP CRS	Rwy Idg	5002
108.7	119°	TDZE	60
		Apt Elev	61

ILS or LOC RWY 12

JACK MC NAMARA FLD (CEC)

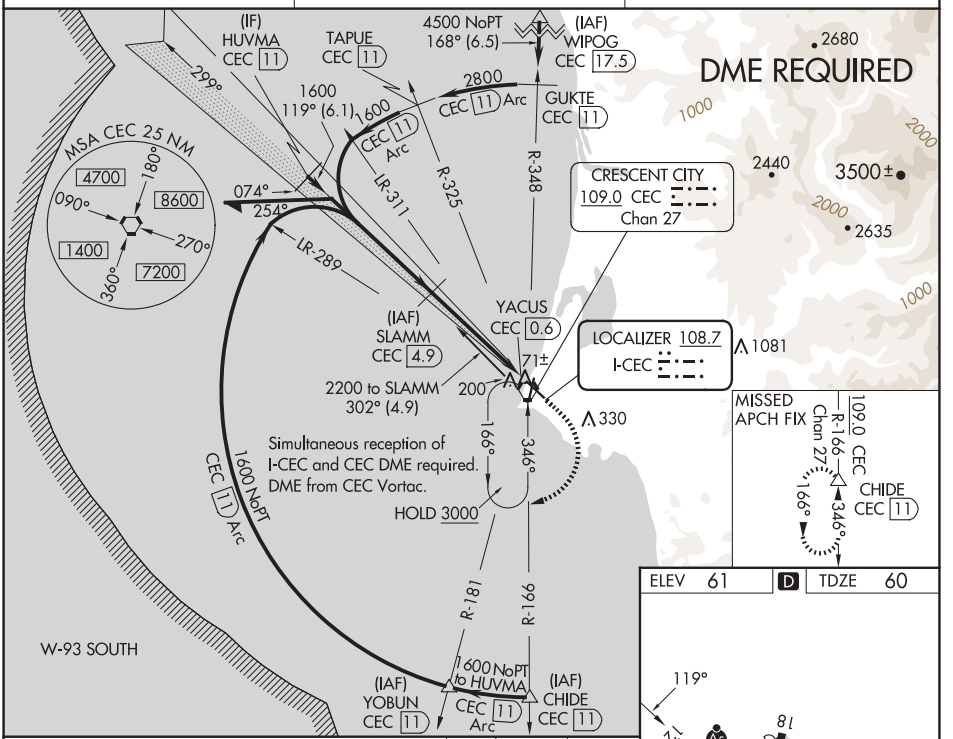
T
NA

DME required. S-ILS 12: ½ mile visibility authorized with use of FD or AP or HUD to DA. Inop table does not apply to S-ILS 12, except with use of FD or AP or HUD to DA. For inop MALSR, increase S-LOC 12 all Cats visibility ¼ mile. When local altimeter setting not received, use Brookings altimeter setting and increase DA to 407 feet and all MDA 100 feet; increase S-LOC 12 Cat C/D, and Circling Cat D visibilities ¼ mile. For inop MALSR, when using Brookings altimeter setting, increase S-ILS 12 all Cats visibility to 1 mile. Night Landing: Rwy 36 operational VGSI required, remain on or above VGSI glidepath until threshold. Circling to Rwy 18, 30 NA at night.

MALSR

MISSED APPROACH: Climb to 700 then climbing right turn to 3000 on CEC VORTAC R-166 to CHIDE/CEC 11 DME and hold, continue climb-in-hold to 3000.

ASOS	SEATTLE CENTER	UNICOM
119.925	124.85 306.3	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-ILS 12		310-¾	250 (300-¾)	
S-LOC 12		380-¾	320 (400-¾)	
C CIRCLING	540-1	479 (500-1)	640-1½ 579 (600-1½)	640-2 579 (600-2)

HIRL Rwy 12-30 L
REIL Rwys 18, 30 and 36 L
MIRL Rwy 18-36 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS	APP CRS	Rwy Idg	5002
CH 90310	119°	TDZE	60
W12A		Apt Elev	61

RNAV (GPS) RWY 12

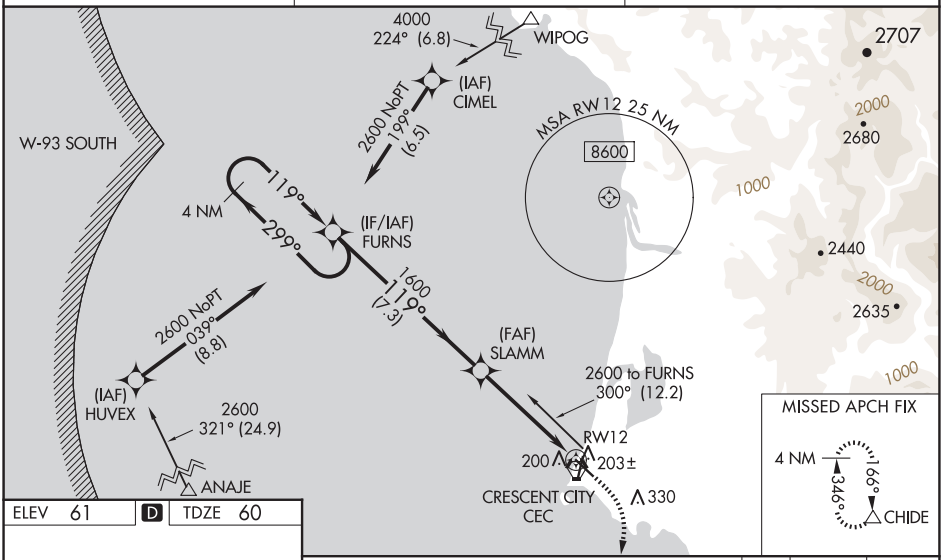
JACK MC NAMARA FLD (CEC)

Inop table does not apply to LPV all Cats. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 0°C (32°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Brookings altimeter setting and increase LPV DA to 407 feet, LNAV/VNAV DA to 484 feet and all MDA 100 feet; increase LPV all Cats visibility to ⅞ mile, LNAV/VNAV all Cats visibility to 1⅛ mile, LNAV Cat C/D to 1⅛ mile, and Circling Cat C to 2 miles, Cat D to 2¼ miles. For inop MALSR, increase LNAV/VNAV all Cats visibility to 1 mile and LNAV Cat A/B visibility to 1 mile, Cat C/D to 1⅛ mile. For inop MALSR, when using Brookings altimeter setting, increase LPV all Cats visibility to 1⅛ mile, LNAV/VNAV all Cats visibility to 1⅜ mile, and LNAV Cat A/B to 1 mile, Cat C/D to 1¾ mile. VDP and Baro-VNAV NA when using Brookings altimeter setting. Night landing: Rwy 18, 30 NA. Night landing: Rwy 36, operational VGSI required, remain on or above VGSI glidepath until threshold.

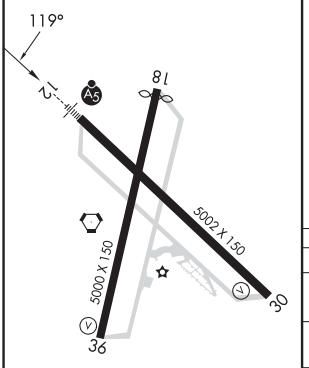
MALSR

MISSED APPROACH: Climb to 600 then climbing right turn to 3000 direct CHIDE and hold, continue climb-in-hold to 3000.

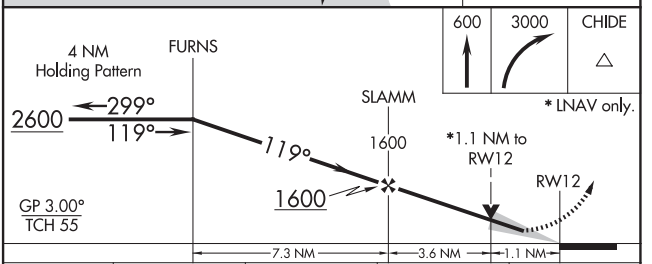
ASOS	SEATTLE CENTER	UNICOM
119.925	124.85 306.3	122.8 (CTAF)



ELEV 61 D TDZE 60



HIRL Rwy 12-30 (L)
REIL Rwys 18, 30 and 36 (L)
MIRL Rwy 18-36 (L)



CATEGORY	A	B	C	D
LPV DA	310-¾	250 (300-¾)		
LNAV/VNAV DA	387-¾	327 (400-¾)		
LNAV MDA	460-¾	400 (400-¾)	460-⅞	400 (400-⅞)
C CIRCLING	540-1	479 (500-1)	640-1½ 579 (600-1½)	640-2 579 (600-2)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS CH 72927 W36A	APP CRS 359°	Rwy Idg 4850 / TDZE 59 / Apt Elev 61

RNAV (GPS) RWY 36

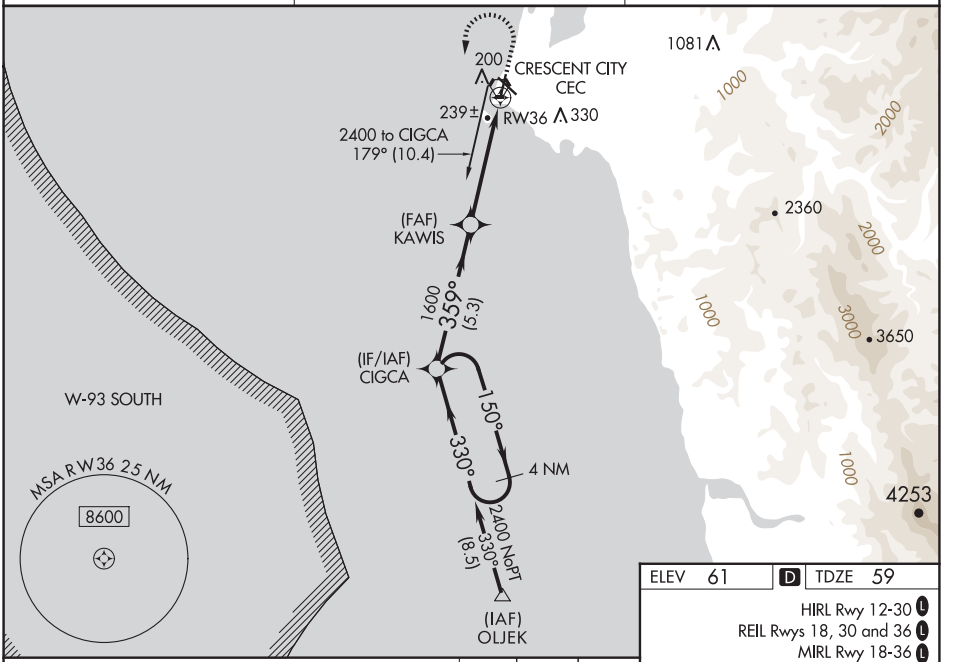
JACK MC NAMARA FLD (CEC)

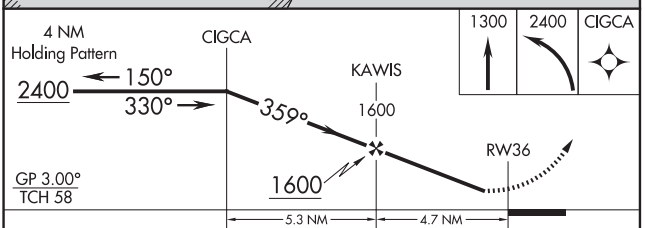
RNP APCH.

Baro-VNAV NA when using Brookings altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. When local altimeter setting not received, use Brookings altimeter setting and increase LPV DA to 406 and LNAV/VNAV DA to 505 and all MDA 100 feet; increase LPV all Cats and LNAV Cat C/D and Circling Cat D visibilities ¼ SM, increase LNAV/VNAV all Cats visibility ⅜ SM, and Circling Cat C visibility ½ SM. Rwy 36 helicopter visibility reduction below 1 SM NA. Straight-In Rwy 36 at night, operational VGSI required, remain on or above VGSI glidepath until threshold. Circling Rwy 18, 30 NA at night.

MISSED APPROACH: Climb to 1300 then climbing left turn to 2400 direct CIGCA and hold.

ASOS	SEATTLE CENTER	UNICOM
119.925	124.85 306.3	122.8 (CTAF) L

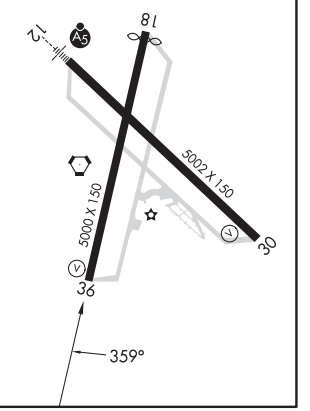




CATEGORY	A	B	C	D
LPV DA	309-1 250 (300-1)			
LNAV/VNAV DA	408-1⅛ 349 (400-1⅛)			
LNAV MDA	500-1 441 (500-1)		500-1⅜ 441 (500-1⅜)	
C CIRCLING	540-1 479 (500-1)		640-1½ 579 (600-1½)	640-2 579 (600-2)

ELEV 61 D TDZE 59

HIRL Rwy 12-30 L
REIL Rwys 18, 30 and 36 L
MIRL Rwy 18-36 L



SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

VORTAC CEC	APP CRS	Rwy Idg	5002
109.0	131°	TDZE	60
Chan 27		Apt Elev	61

VOR/DME RWY 12

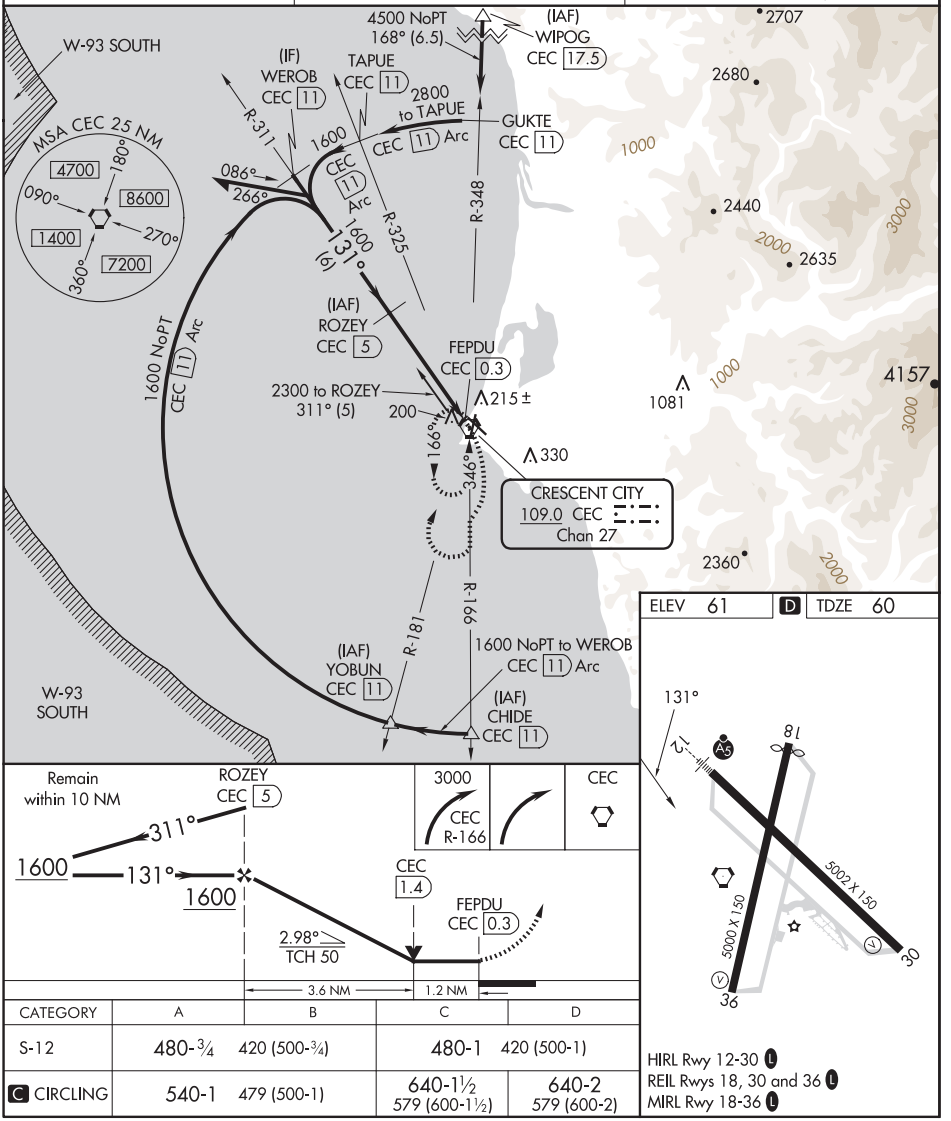
JACK MC NAMARA FLD (CEC)

T A VDP NA with Brookings altimeter setting. When local altimeter setting not received, use Brookings altimeter setting and increase all MDA 100 feet; increase S-12 Cat C/D, and Circling Cat D visibility ¼ mile, and Circling Cat C visibility ½ mile. For inop MALSR, increase S-12 Cats A/B visibility to 1 mile, Cats C/D visibility to 1⅛ mile. For inop MALSR when using Brookings altimeter setting, increase S-12 Cats A/B visibility to 1 mile, Cats C/D visibility to 1⅜ mile. Night Landing: Rwy 18, 30 NA. Night Landing: Rwy 36 operational VGSI required, remain on or above VGSI glidepath until threshold.

MALSR

MISSED APPROACH: Climbing right turn to 3000 on CEC VORTAC R-166 then right turn direct CEC VORTAC and hold.

ASOS	SEATTLE CENTER	UNICOM
119.925	124.85 306.3	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-12	480-¾	420 (500-¾)	480-1	420 (500-1)
C CIRCLING	540-1	479 (500-1)	640-1½ 579 (600-1½)	640-2 579 (600-2)

HIRL Rwy 12-30 L
REIL Rwys 18, 30 and 36 L
MIRL Rwy 18-36 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

VORTAC CEC	APP CRS	Rwy Idg	4850
109.0	346°	TDZE	59
Chan 27		Apt Elev	61

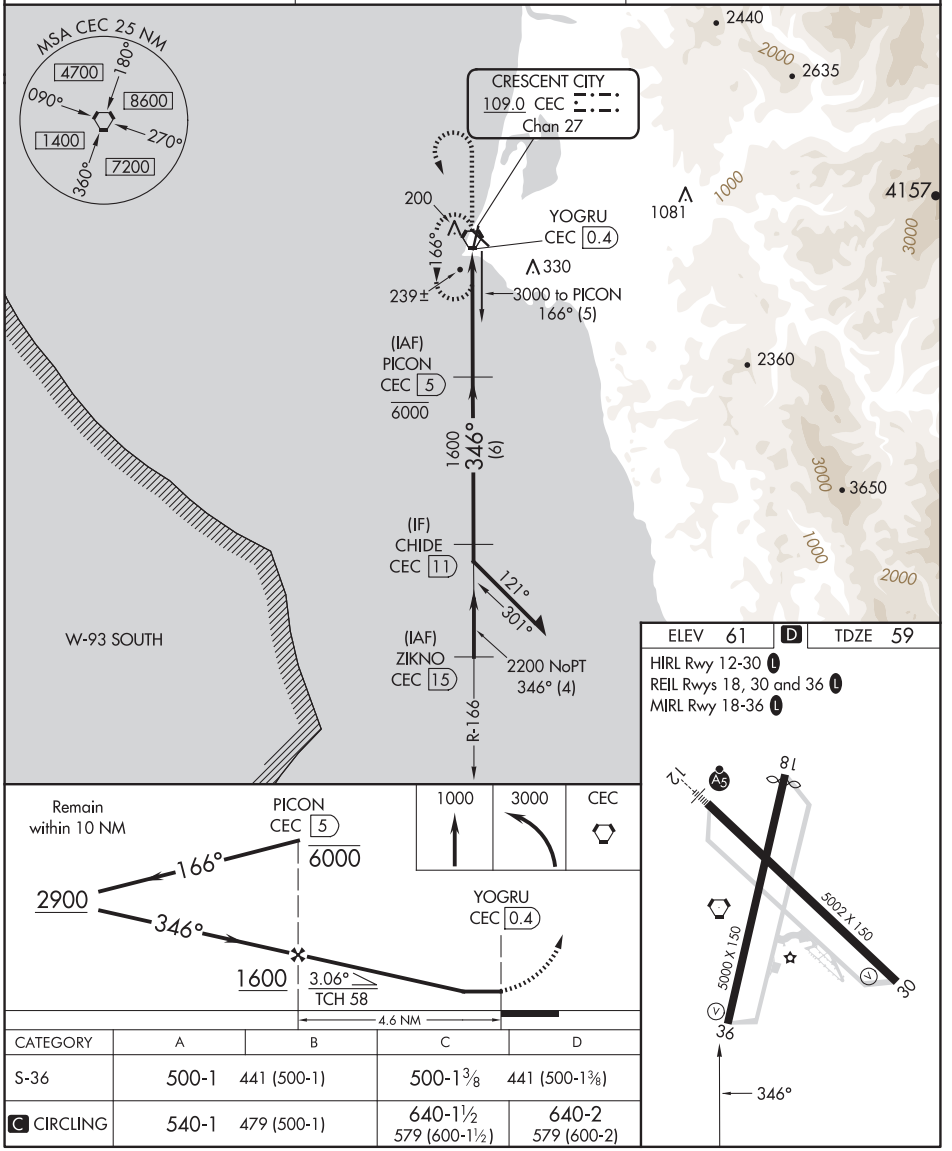
VOR/DME RWY 36

JACK MC NAMARA FLD (CEC)

T A When local altimeter setting not received, use Brookings altimeter setting and increase all MDA 100 feet; increase S-36 Cat C/D and Circling Cat D visibilities ¼ mile and Circling Cat C visibility ½ mile. Helicopter visibility reduction below 1 SM NA. Night landing: Rwy 36 operational VGSI required, remain on or above VGSI glidepath until threshold. Night landing: Rwy 18, 30 NA .

MISSED APPROACH: Climb to 1000 then climbing left turn to 3000 direct CEC VORTAC and hold, continue climb-in-hold to 3000.

ASOS	SEATTLE CENTER	UNICOM
119.925	124.85 306.3	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-36	500-1	441 (500-1)	500-1 3/8	441 (500-1 3/8)
C CIRCLING	540-1	479 (500-1)	640-1 1/2 (579 (600-1 1/2))	640-2 (579 (600-2))

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

VORTAC CEC	APP CRS	Rwy Idg	5002
109.0	131°	TDZE	60
Chan 27		Apt Elev	61

VOR RWY 12

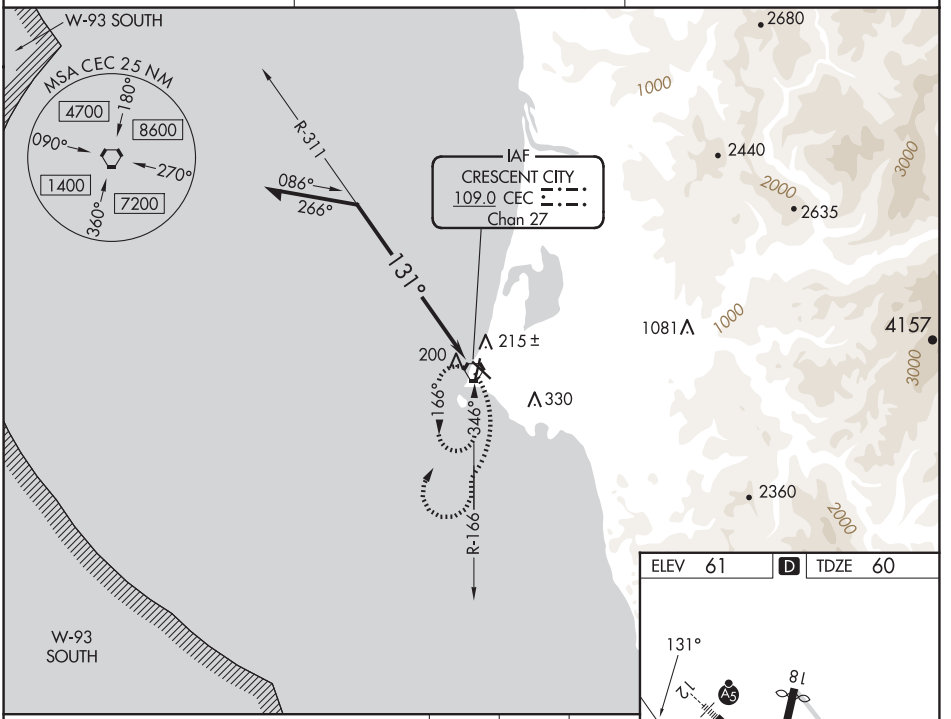
JACK MC NAMARA FLD (CEC)

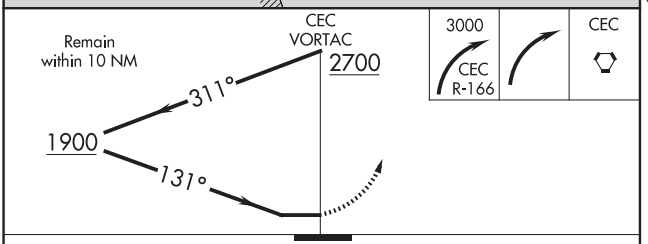
When local altimeter setting not received, use Brookings altimeter setting and increase all MDA 100 feet; increase S-12 Cat C/D visibility ⅜ mile, Circling Cat D visibility ¼ mile and Circling Cat C visibility ½ mile. For inop MALSR increase S-12 Cat A/B visibility to 1 mile, and Cat C/D visibility to 1⅜ mile. For inop MALSR when using Brookings altimeter setting, increase S-12 Cat A/B visibility to 1 mile, and Cat C/D visibility to 1⅝ mile. Night Landing: Rwy 36 operational VGSI required, remain on or above VGSI glidepath until threshold. Night Landing: Rwy 18, 30 NA.

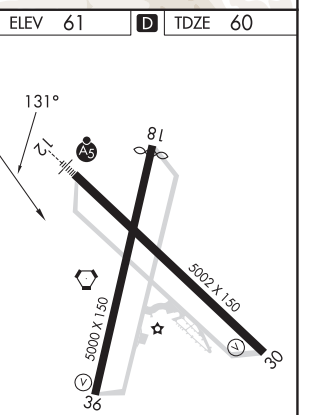
MALSR

MISSED APPROACH: Climbing right turn to 3000 on CEC VORTAC R-166 then right turn direct CEC VORTAC and hold.

ASOS	SEATTLE CENTER	UNICOM
119.925	124.85 306.3	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-12	520-¾	460 (500-¾)	520-1	460 (500-1)
C CIRCLING	540-1	479 (500-1)	640-1½ 579 (600-1½)	640-2 579 (600-2)

HIRL Rwy 12-30 L
MIRL Rwy 18-36 L
REIL Rwys 18, 30 and 36 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS	Rwy Idg	3176
167°	TDZE	70
	Apt Elev	70

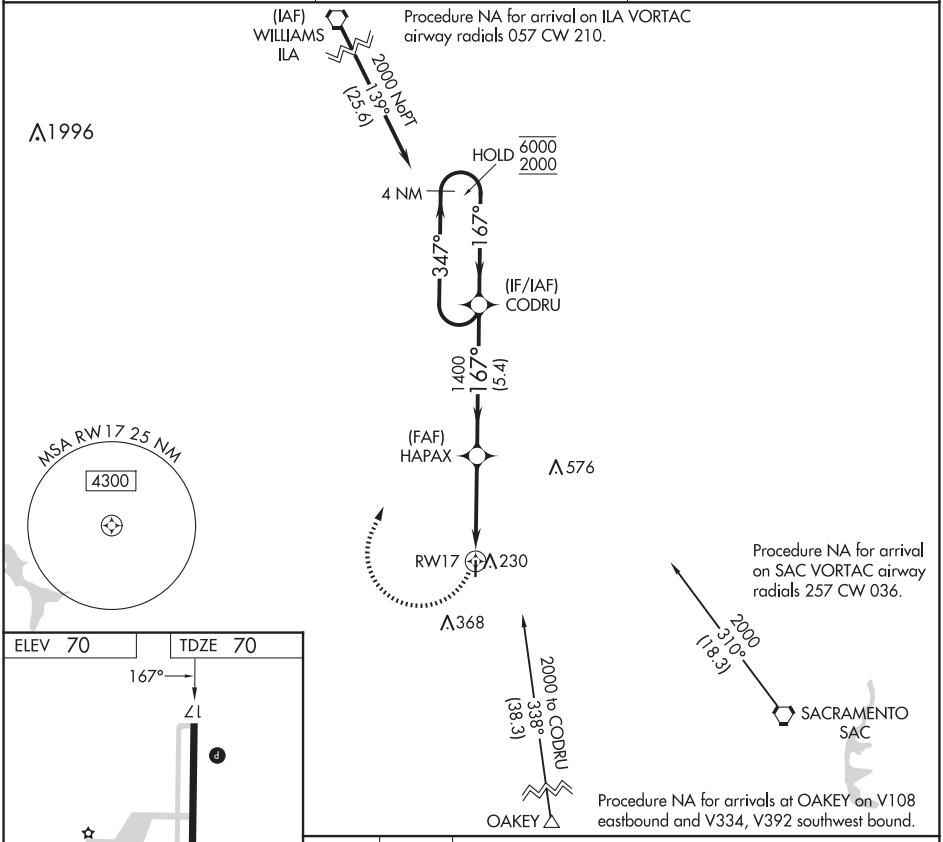
RNAV (GPS) RWY 17
UNIVERSITY (EDU)

RNP APCH - GPS.

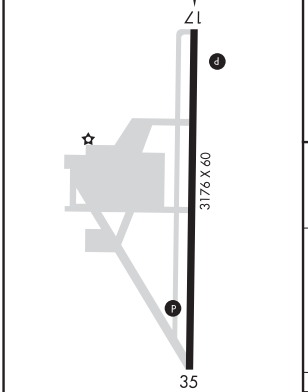
Rwy 17 helicopter visibility reduction below 1 SM NA. Procedure NA at night.

MISSED APPROACH: Climbing right turn to 2000 direct CODRU and hold.

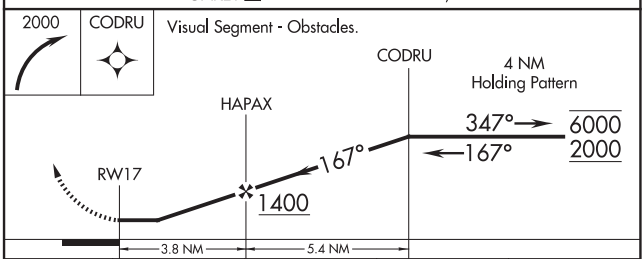
AWOS-3	TRAVIS APP CON	UNICOM
119.025	126.6 281.45	123.075 (CTAF)



ELEV 70 TDZE 70



MIRL Rwy 17-35 (L)
REIL Rwys 17 and 35 (L)



CATEGORY	A	B	C	D
LNAV MDA	520-1 450 (500-1)		NA	

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

DAVIS, CALIFORNIA AL-6030 (FAA) 24249

WAAS	APP CRS	Rwy Idg	3176
CH 73046	347°	TDZE	70
W35A		Apt Elev	70

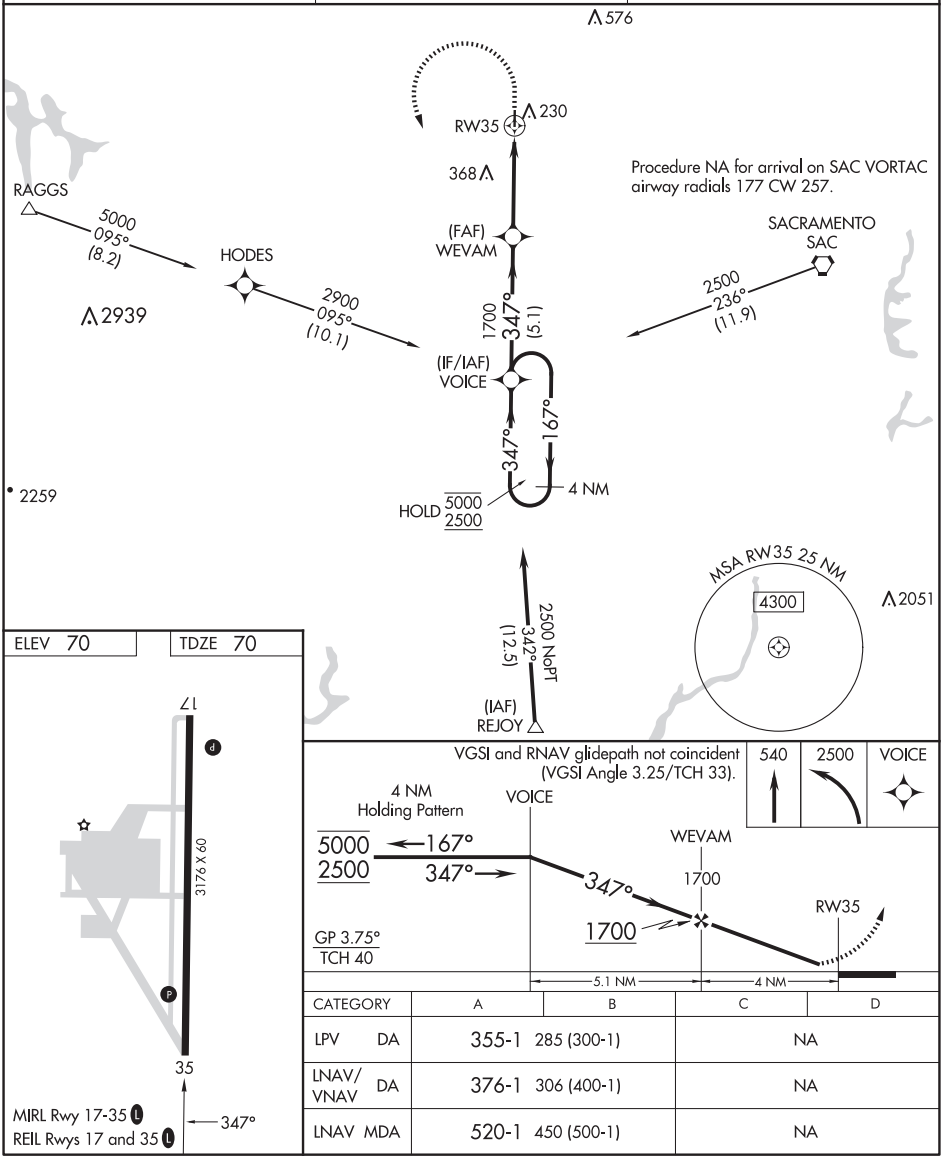
RNAV (GPS) RWY 35
UNIVERSITY (EDU)

RNP APCH - GPS.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Procedure NA at night. Rwy 35 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 540, then climbing left turn to 2500 direct VOICE and hold, continue climb-in-hold to 2500.

AWOS-3	TRAVIS APP CON	UNICOM
119.025	126.6 281.45	123.075 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	355-1	285 (300-1)	NA	
LNAV/VNAV DA	376-1	306 (400-1)	NA	
LNAV MDA	520-1	450 (500-1)	NA	

DAVIS, CALIFORNIA
Orig 05SEP24

38°32'N-121°47'W

UNIVERSITY (EDU)
RNAV (GPS) RWY 35

SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS	APP CRS	Rwy Idg	6000
CH **99719**	**164°**	TDZE	**99**
W16A		Apt Elev	**100**

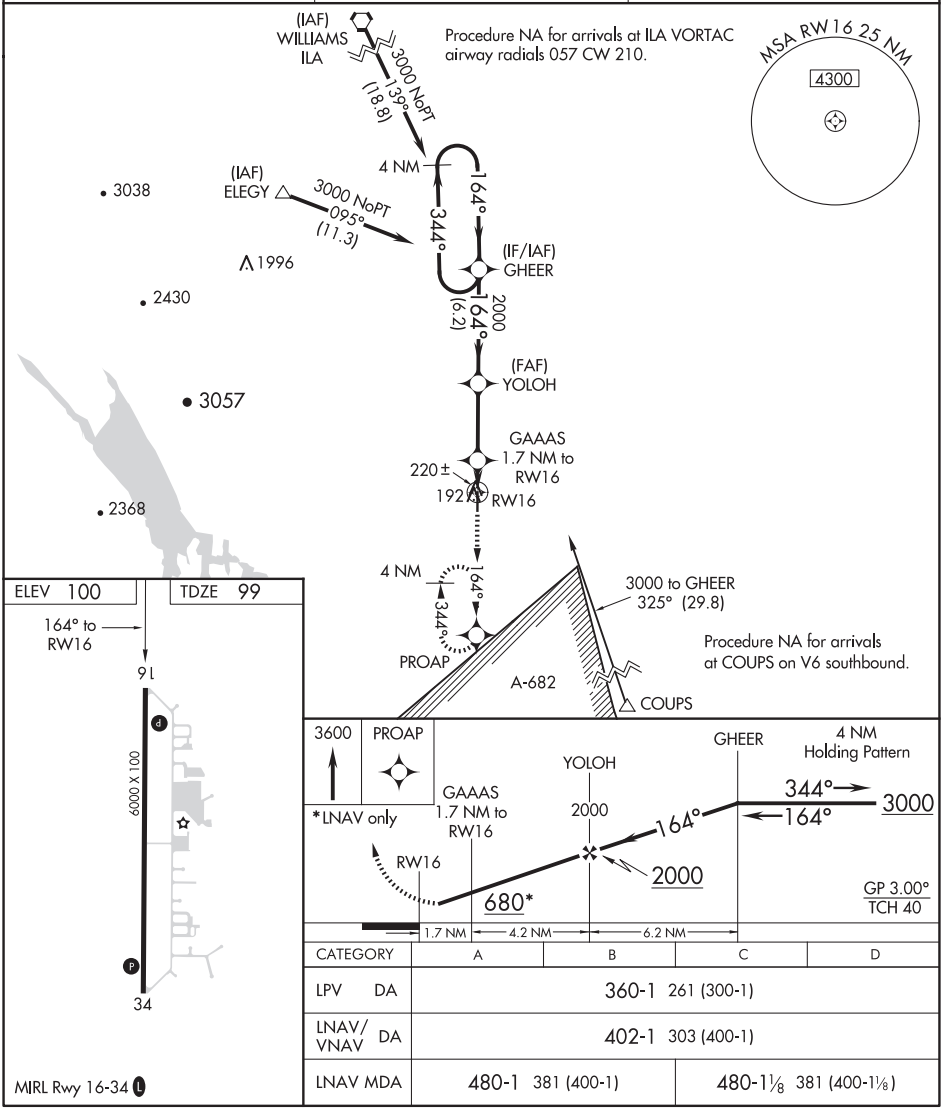
RNAV (GPS) RWY 16
YOLO COUNTY (DWA)

RNP APCH.

T NA When local altimeter setting not received, use Travis AFB altimeter setting and increase all DA 50 feet and all MDA 60 feet, and increase LNAV/VNAV all Cats and LNAV Cat C and D visibility ¼ mile. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 43°C (109°F). Baro-VNAV NA when using Travis AFB altimeter setting.

MISSED APPROACH: Climb to 3600 direct PROAP and hold, continue climb-in-hold to 3600.

AWOS-3P	TRAVIS APP CON	UNICOM
125.775	**126.6 281.45**	**123.0** (CTAF) L



CATEGORY	A	B	C	D
LPV DA	360-1 261 (300-1)			
LNAV/VNAV DA	402-1 303 (400-1)			
LNAV MDA	480-1 381 (400-1)		480-1⅛ 381 (400-1⅛)	

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 34

YOLO COUNTY (DWA)

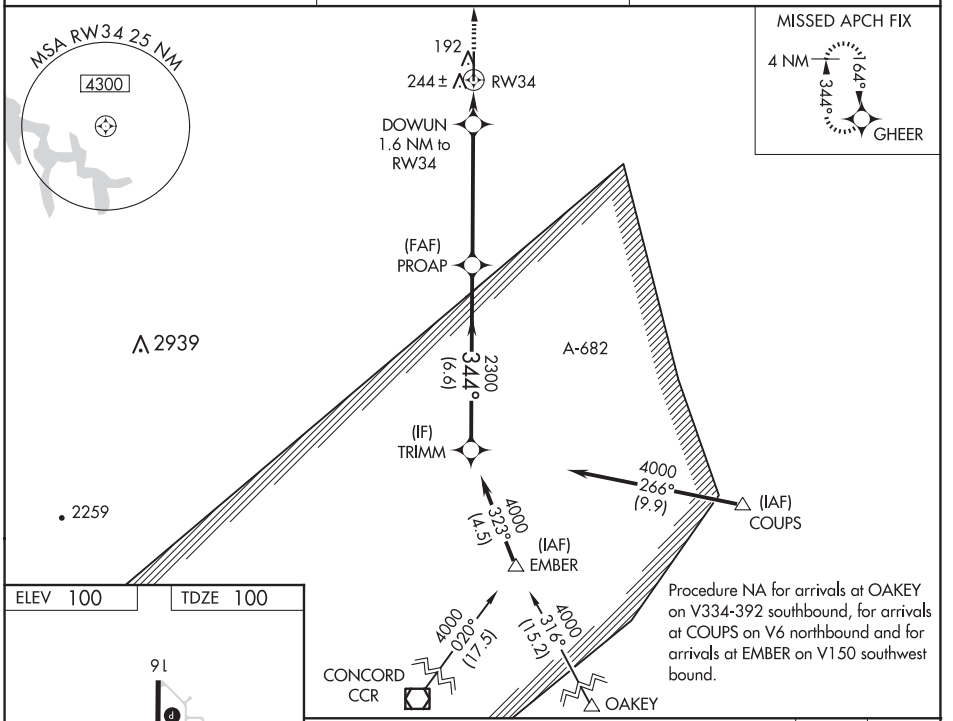
WAAS	APP CRS	Rwy Idg	6000
CH 58319	344°	TDZE	100
W34A		Apt Elev	100

RNP APCH.

T NA When local altimeter setting not received, use Travis AFB altimeter setting and increase all DA 50 feet and all MDA 60 feet, and increase LPV visibility all Cats ⅛ mile, LNAV/VNAV visibility all Cats ¼ mile, and LNAV Cat C and D visibility ¼ mile. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 42°C (107°F). Baro-VNAV NA when using Travis AFB altimeter setting.

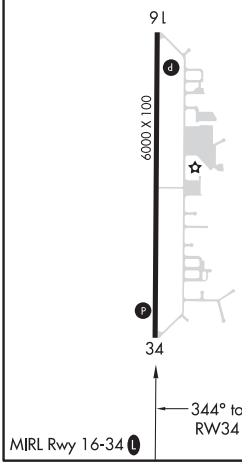
MISSED APPROACH: Climb to 3000 direct GHEER and hold.

AWOS-3P	TRAVIS APP CON	UNICOM
125.775	126.6 281.45	123.0 (CTAF) L

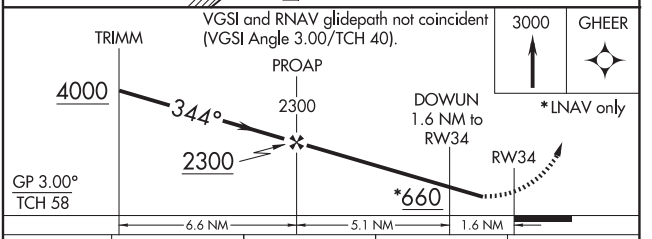


Procedure NA for arrivals at OAKEY on V334-392 southbound, for arrivals at COUPS on V6 northbound and for arrivals at EMBER on V150 southwest bound.

ELEV 100 TDZE 100



MIRL Rwy 16-34 L



CATEGORY	A	B	C	D
LPV DA	415-1 315 (400-1)			
LNAV/VNAV DA	425-1 325 (400-1)			
LNAV MDA	500-1 400 (400-1)		500-1⅛ 400 (400-1⅛)	

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS	Rwy Ldg	3011
115°	TDZE	11
	Apt Elev	11

RNAV (GPS) RWY 12

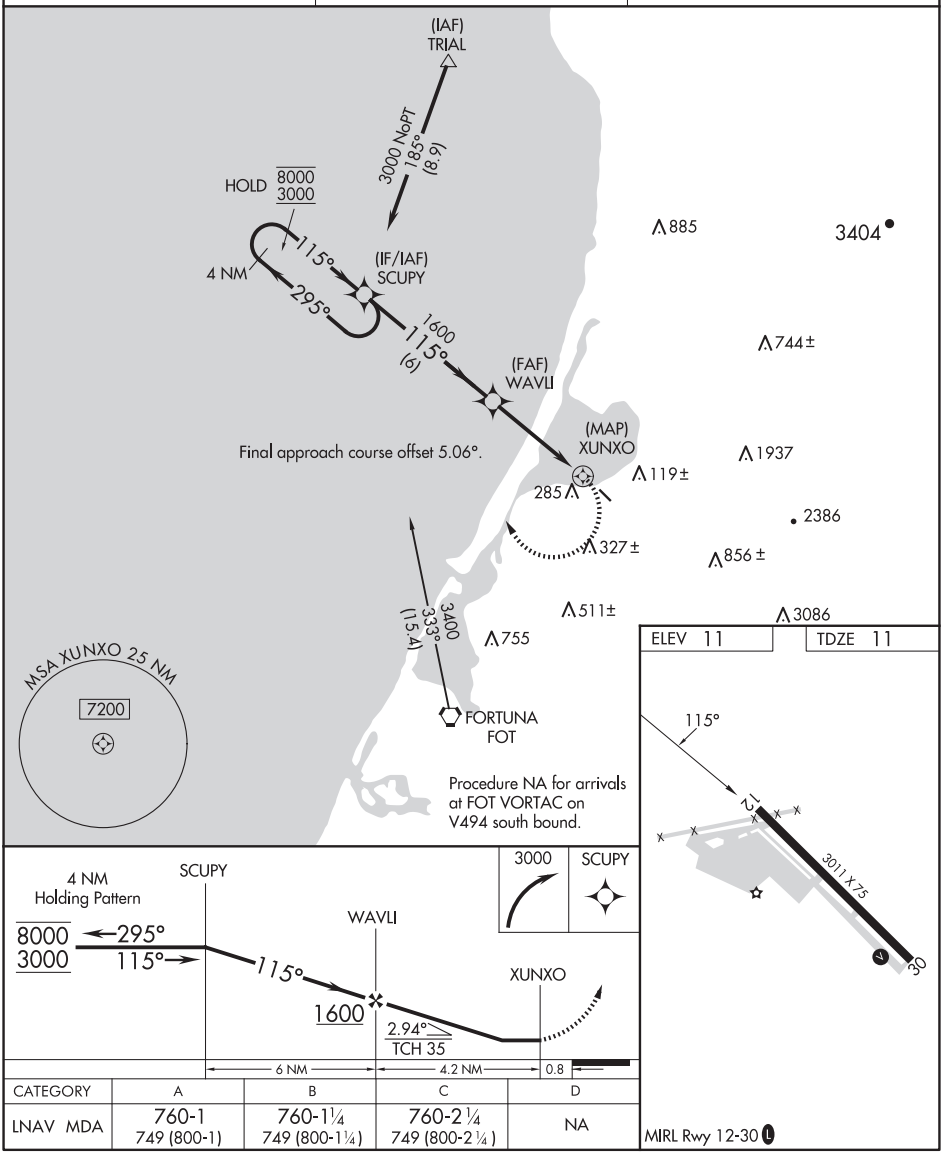
MURRAY FLD (EKA)

RNP APCH.

T NA Procedure NA at night. Rwy 12 helicopter visibility reduction below 1 SM NA. Use Arcata altimeter setting, when not received use Crescent City altimeter setting and increase all MDA 100 feet and increase LNAV Cat C visibility ¼ SM.

MISSED APPROACH: Climbing right turn to 3000 direct SCUPY and hold.

ACV ASOS	SEATTLE CENTER	UNICOM
118.525	124.85 306.3	122.7 (CTAF) L



CATEGORY	A	B	C	D
LNAV MDA	760-1 749 (800-1)	760-1¼ 749 (800-1¼)	760-2¼ 749 (800-2¼)	NA

MIRL Rwy 12-30 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

EUREKA, CALIFORNIA | AL-5888 (FAA) | 25163

APP CRS	Rwy Ldg	N/A
020°	TDZE	N/A
	Apt Elev	11

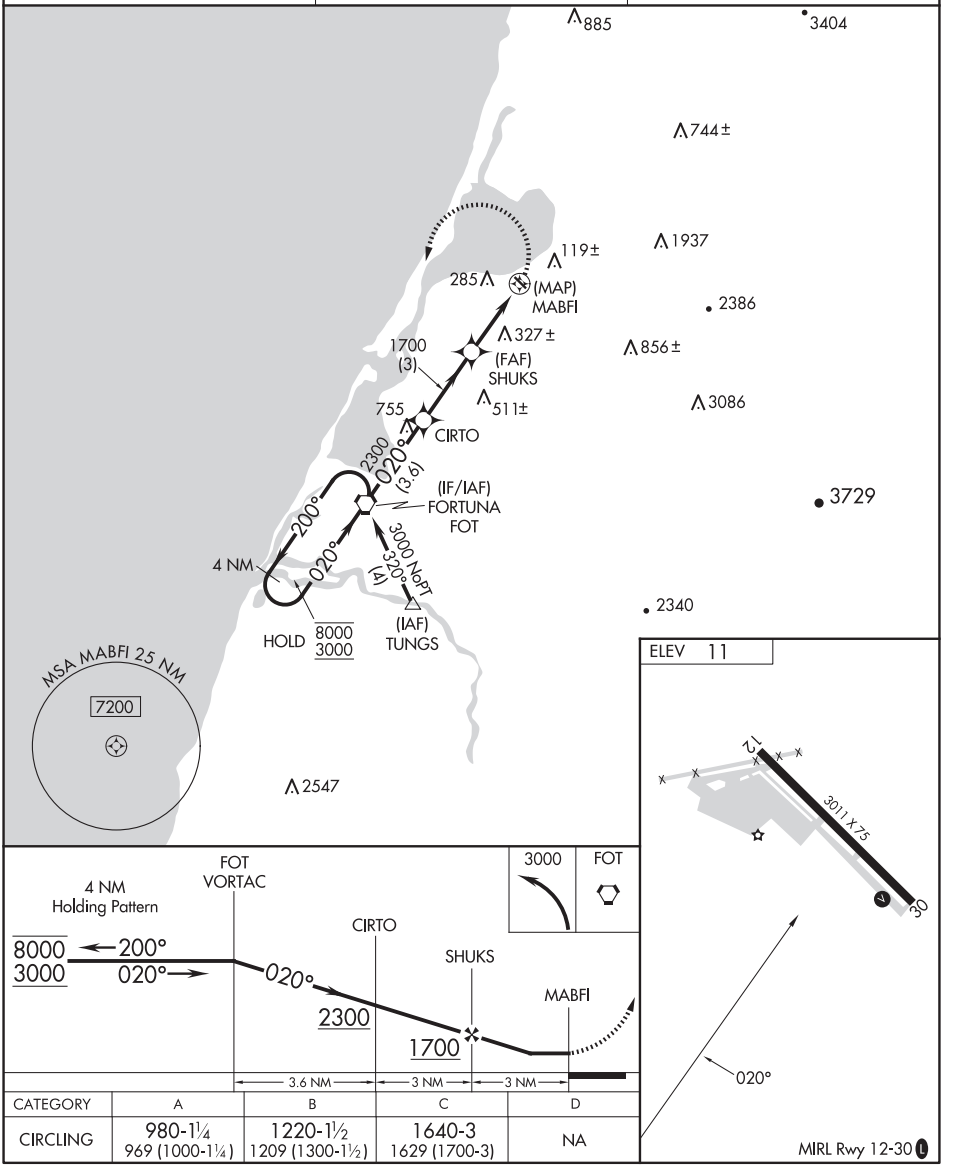
RNAV (GPS)-B
MURRAY FLD (EKA)

RNP APCH-GPS.

T NA Procedure NA at night. Use Arcata altimeter setting when not received, use Crescent City altimeter setting and increase all MDA 100 feet. Circling Cat C NA when using Crescent City altimeter. Rwy 12, 30 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climbing left turn to 3000 direct FOT VORTAC and hold.

ACV ASOS	SEATTLE CENTER	UNICOM
118.525	124.85 306.3	122.7 (CTAF) L



CATEGORY	A	B	C	D
CIRCLING	980-1¼ 969 (1000-1¼)	1220-1½ 1209 (1300-1½)	1640-3 1629 (1700-3)	NA

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS		
044°	Rwy Idg	N/A
	TDZE	N/A
	Apt Elev	157

RNAV (GPS)-B

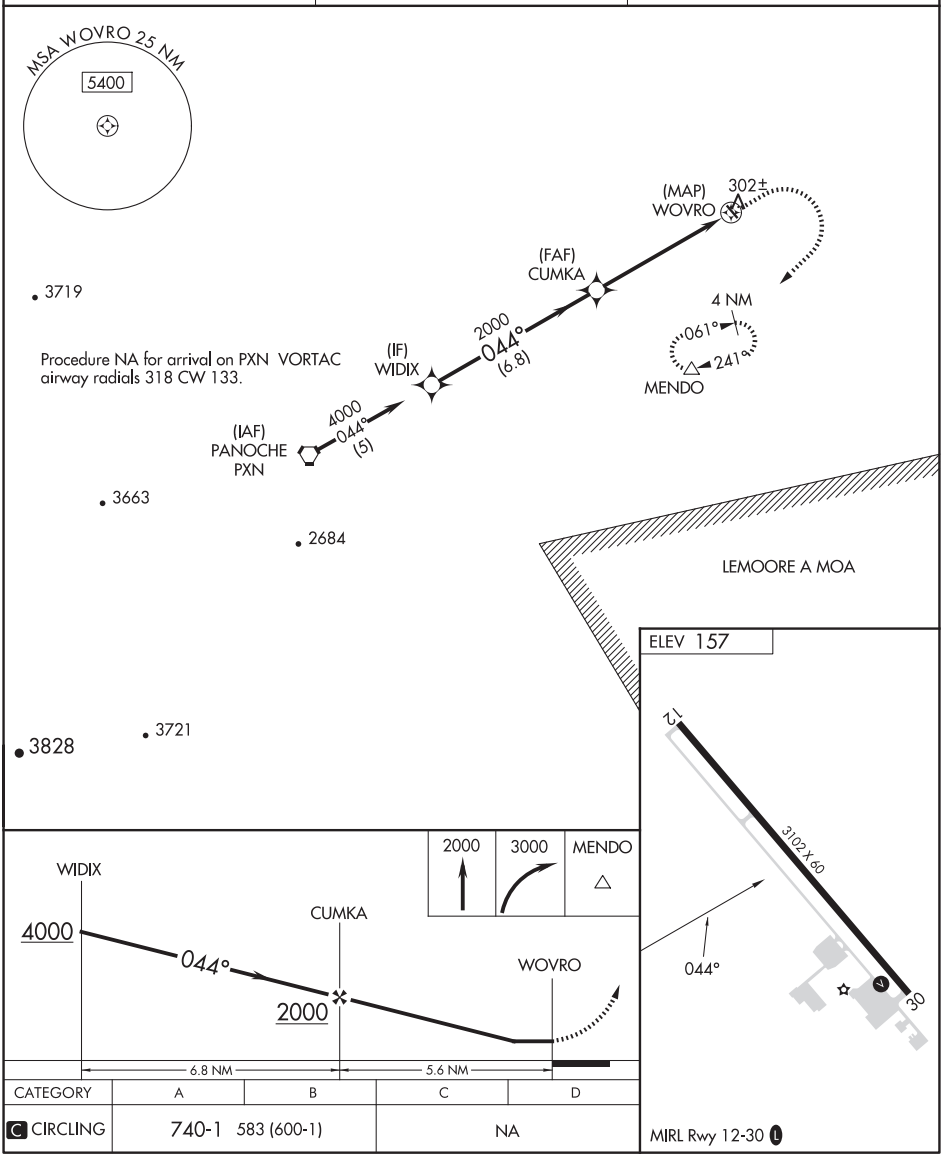
FIREBAUGH (F34)

RNP APCH.

NA Procedure NA at night. Use Madera altimeter setting, when not received, use Merced Yosemite Rgnl altimeter setting.

MISSED APPROACH: Climb to 2000 then climbing right turn to 3000 direct MENDO and hold.

MAE ASOS	NORCAL APP CON	CTAF
134.725	120.95 269.45	122.9 L



CATEGORY	A	B	C	D
C CIRCLING	740-1 583 (600-1)		NA	

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

FORTUNA, CALIFORNIA AL-960 (FAA) 25051

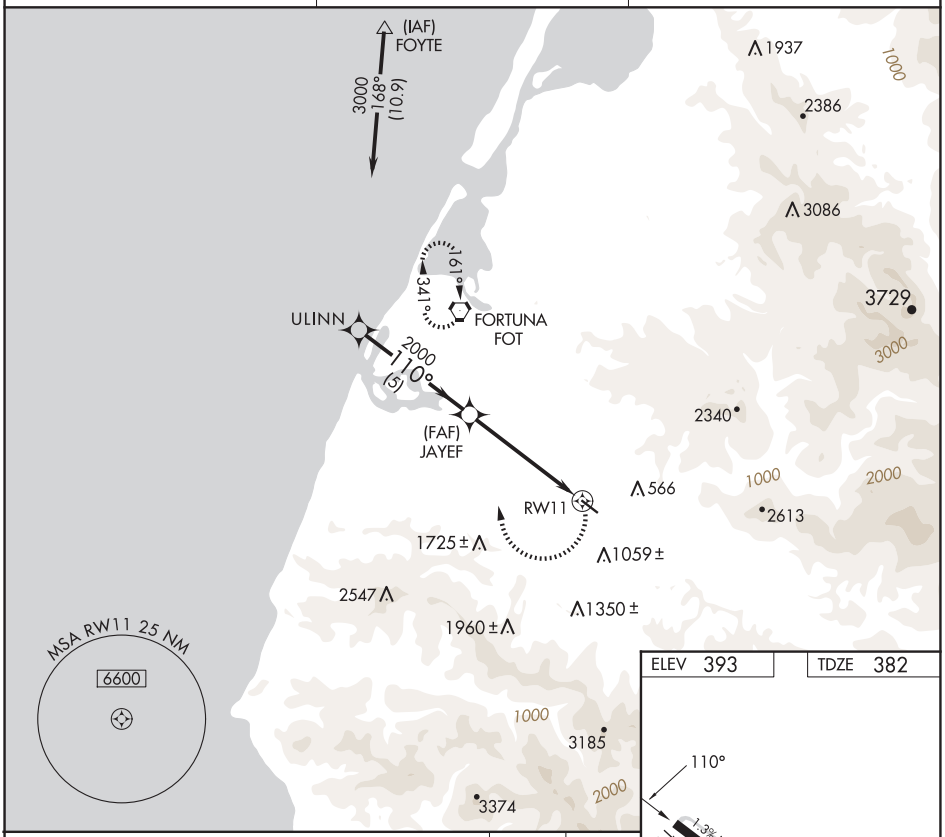
APP CRS	Rwy Idg	4004
110°	TDZE	382
	Apt Elev	393

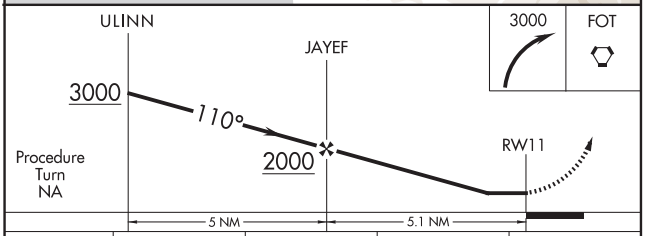
GPS RWY 11
ROHNERVILLE (FOT)

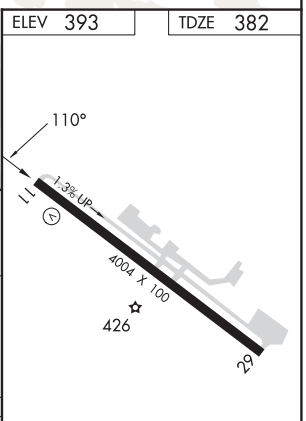
NA — When local altimeter setting not received, use Arcata altimeter setting. Circling NA for Cat D north of Rwy 11-29.

MISSED APPROACH: Climbing right turn to 3000 direct FOT VORTAC and hold.

AWOS-3	SEATTLE CENTER	CTAF
133.8	124.85 306.3	122.9 L







CATEGORY	A	B	C	D
S-11	1140-1 758 (800-1)	1160-1¼ 778 (800-1¼)	1200-2½ 818 (900-2½)	1560-3 1178 (1200-3)
CIRCLING	1140-1 747 (800-1)	1360-1½ 967 (1000-1½)	1720-3 1327 (1400-3)	1780-3 1387 (1400-3)

REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L

FORTUNA, CALIFORNIA
Orig-B 09SEP21

40°33′N-124°08′W

ROHNERVILLE (FOT)
GPS RWY 11

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS	Rwy Idg	4004
276°	TDZE	392
	Apt Elev	393

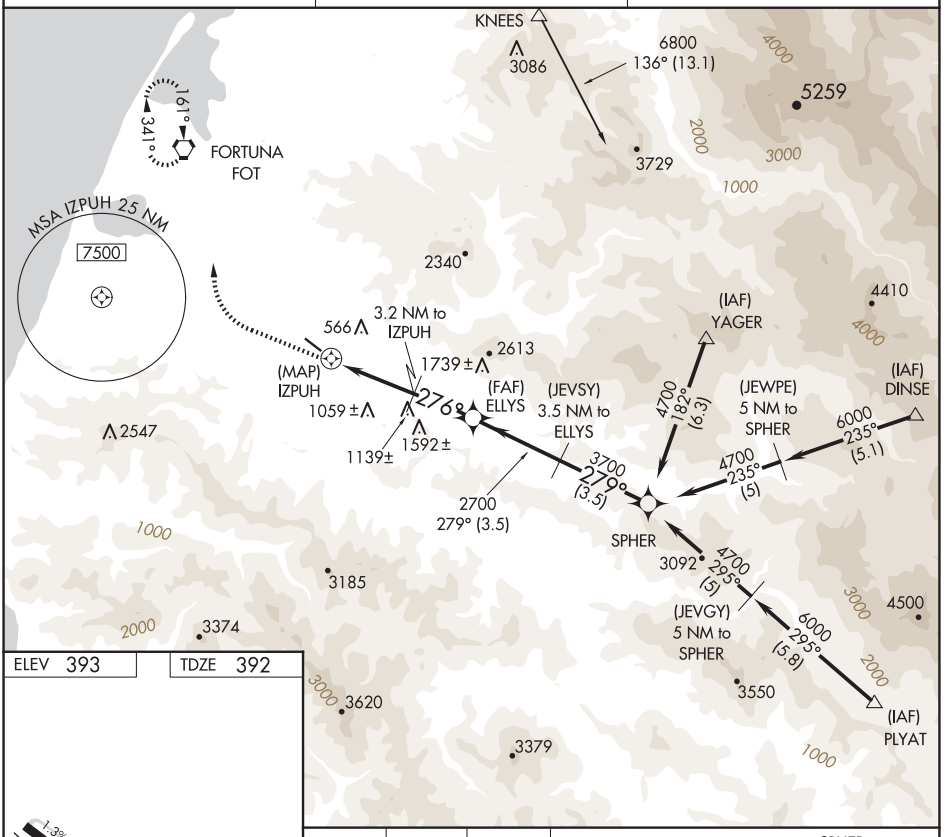
GPS RWY 29
ROHNERVILLE (FOT)

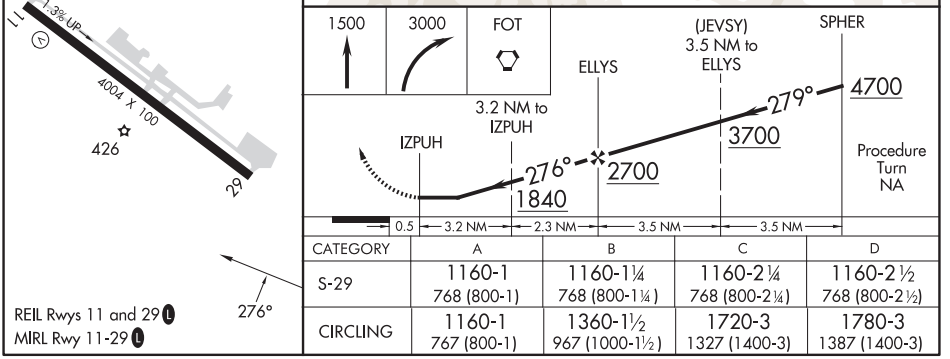
NA

When local altimeter setting not received, use Arcata altimeter setting. Circling NA for Cat D north of Rwy 11-29.

MISSED APPROACH: Climb to 1500 then climbing right turn to 3000 direct FOT VORTAC and hold.

AWOS-3	SEATTLE CENTER	CTAF
133.8	124.85 306.3	122.9 L





CATEGORY	A	B	C	D
S-29	1160-1 768 (800-1)	1160-1¼ 768 (800-1¼)	1160-2¼ 768 (800-2¼)	1160-2½ 768 (800-2½)
CIRCLING	1160-1 767 (800-1)	1360-1½ 967 (1000-1½)	1720-3 1327 (1400-3)	1780-3 1387 (1400-3)

REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 12

FRESNO CHANDLER EXEC (FCH)

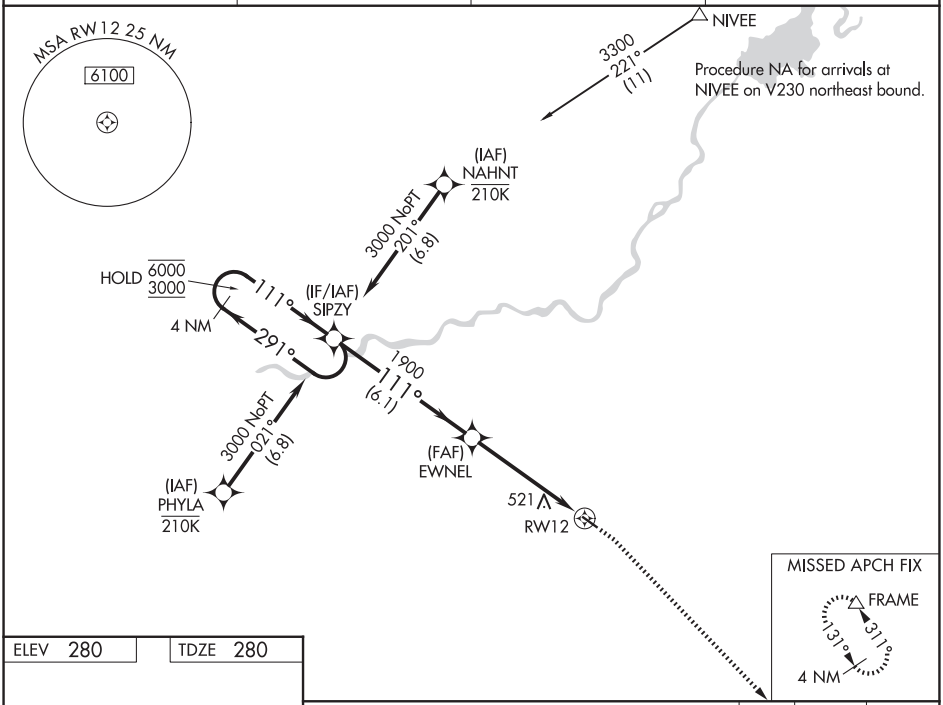
WAAS	APP CRS	Rwy Ldg	3212
CH 49242	111°	TDZE	280
W12A		Apt Elev	280

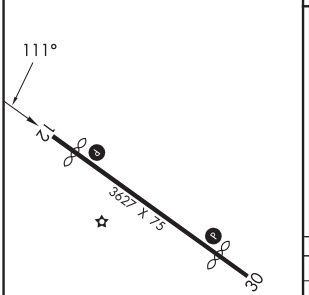
RNP APCH-GPS.

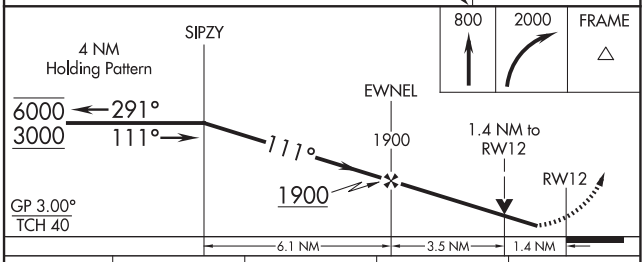
Circling Rwy 30 NA at night. Rwy 12 helicopter visibility reduction below ¾ SM NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1° C or above 54°C.

MISSED APPROACH: Climb to 800 then climbing right turn to 2000 direct FRAME and hold.

AWOS-3	FRESNO APP CON	CLNC DEL	UNICOM
135.225	119.0 323.25	119.0	123.0 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	530-1 250 (300-1)			NA
LNAV/VNAV DA	809-1½ 529 (600-1½)			NA
LNAV MDA	780-1 500 (500-1)		780-1⅜ 500 (500-1⅜)	NA
CIRCLING	960-1 680 (700-1)		960-2 680 (700-2)	NA

MIRL Rwy 12-30 L
REIL Rwys 12 and 30 L

SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 30

FRESNO CHANDLER EXEC (FCH)

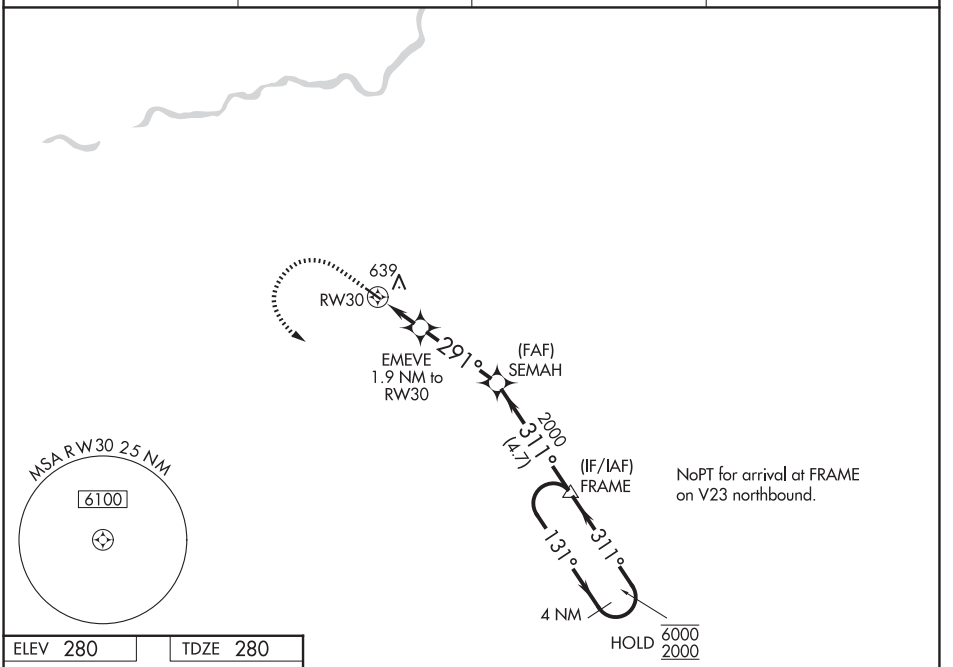
APP CRS	Rwy Ldg	3089
291°	TDZE	280
	Apt Elev	280

RNP APCH.

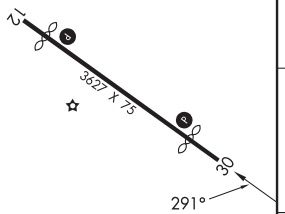
T Straight-in Rwy 30 NA at night, Circling Rwy 30 NA at night. Rwy 30 helicopter visibility reduction below 1 SM NA.

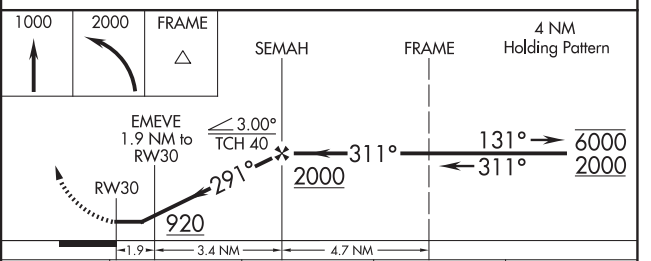
MISSED APPROACH: Climb to 1000 then climbing left turn to 2000 direct FRAME and hold.

AWOS-3	FRESNO APP CON	CLNC DEL	UNICOM
135.225	119.0 323.25	119.0	123.0 (CTAF) L



ELEV 280 TDZE 280





CATEGORY	A	B	C	D
LNAV MDA	800-1	520 (600-1)	800-1⅜ 520 (600-1⅜)	NA
CIRCLING	960-1	680 (700-1)	960-2 680 (700-2)	NA

MIRL Rwy 12-30 L
REIL Rwys 12 and 30 L

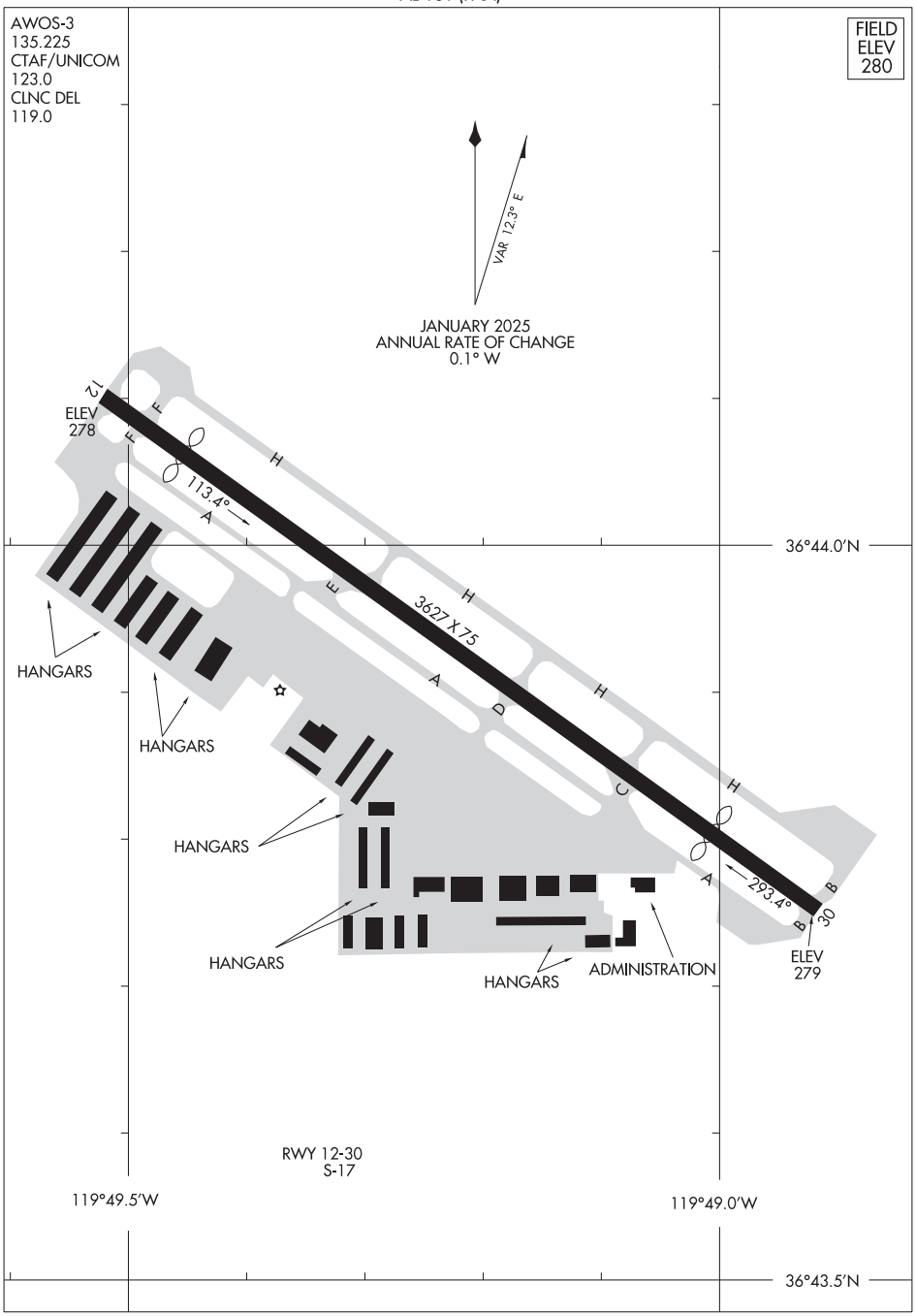
SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

25219

AIRPORT DIAGRAM

AL-161 (FAA)

FRESNO CHANDLER EXEC (FCH)
FRESNO, CALIFORNIA



SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

AIRPORT DIAGRAM
25219

FRESNO, CALIFORNIA
FRESNO CHANDLER EXEC (FCH)

ILS Y or LOC Y RWY 29R

FRESNO YOSEMITE INTL (FAT)

LOC/DME I-FAT	APP CRS		29R	29L
111.3	292°	Rwy Ldg	9227	8008
Chan 50		TDZE	333	331
		Apt Elev	336	336

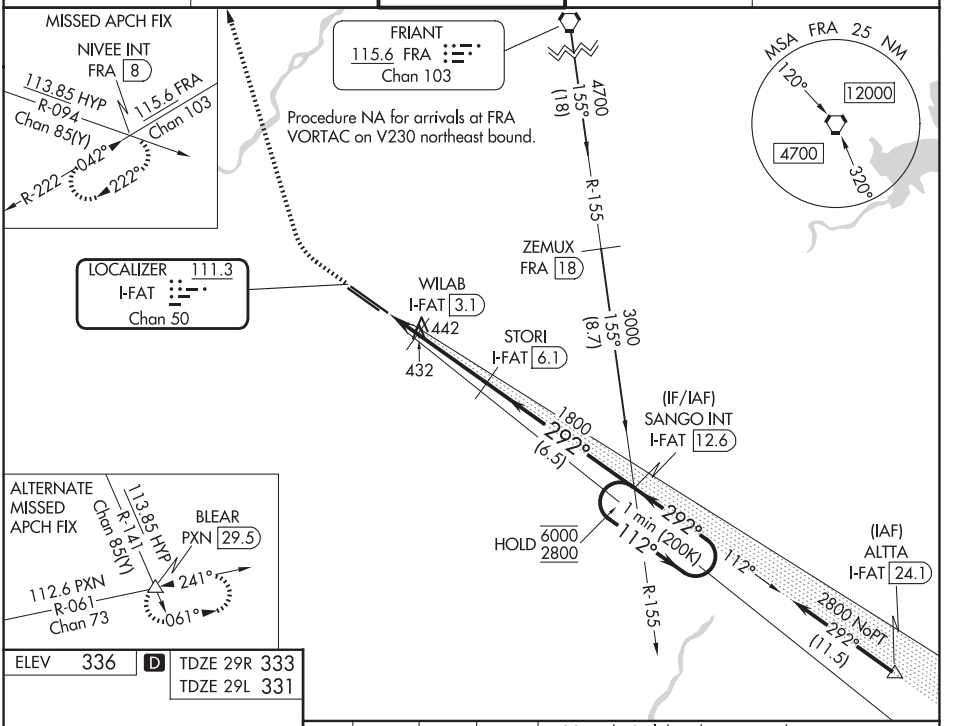
DME required for LOC only.

For inop ALS, increase S-ILS 29R Cat E visibility to RVR 4000 and S-LOC 29R Cats C, D and E visibility to RVR 5500. Hold in lieu of PT NA for Cat E aircraft.

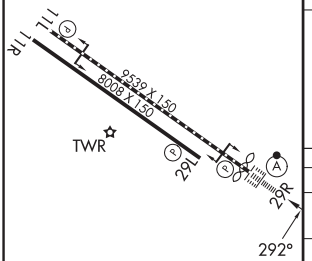
ALSF-2 Rwy 29R

MISSED APPROACH: Climb to 800 then climbing right turn to 5500 on heading 330° and FRA VORTAC R-222 to NIVEE INT/FRA 8 DME and hold, continue climb-in-hold to 5500.

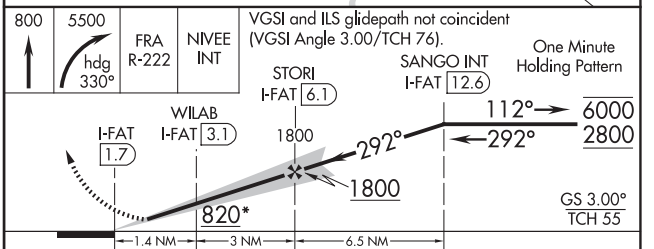
ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	119.6 351.95	118.2 251.1	121.7 348.6	124.35 348.6



ELEV 336	D	TDZE 29R 333
		TDZE 29L 331



REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZ/CL Rwy 29R



CATEGORY	A	B	C	D	E
S-ILS 29R	533/18 200 (200-½)				
S-LOC 29R	700/24 367 (400-½)		700/35 367 (400-⅝)		
SIDESTEP 29L	700/55 369 (400-1)		700-1½ 369 (400-1½)	700-2 369 (400-2)	
CIRCLING	820-1 484 (500-1)		920-1½ 584 (600-1½)	920-2 584 (600-2)	1140-2¾ 804 (900-2¾)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

FRESNO, CALIFORNIA AL-162 (FAA) 25219

LOC/DME I-FAT	APP CRS	Rwy Ldg	9227
111.3	292°	TDZE	333
Chan 50		Apt Elev	336

ILS Y RWY 29R (SA CAT I)

FRESNO YOSEMITE INTL (FAT)

Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH.

ALSF-2

MISSED APPROACH: Climb to 800 then climbing right turn to 5500 on heading 330° and FRA VORTAC R-222 to NIVEE INT/FRA 8 DME and hold, continue climb-in-hold to 5500.

ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	119.6 351.95	118.2 251.1	121.7 348.6	124.35 348.6

MISSED APCH FIX
NIVEE INT
FRA 8
113.85 HYP R-094 Chan 85(Y)
115.6 FRA Chan 103
R-222 042° 222°

FRIANT
115.6 FRA
Chan 103

Procedure NA for arrivals at FRA VORTAC on V230 northeast bound.

4700 155° (18) R-155

MSA FRA 25 NM
120° 12000
4700 320°

ZEMUX
FRA 18

LOCALIZER 111.3
I-FAT
Chan 50

3000 155° (8.7)

442
432

STORI
I-FAT 6.1

1800 292° (6.5)

(IF/IAF)
SANGO INT
I-FAT 12.6

ALTERNATE MISSED APCH FIX
113.85 HYP R-141 Chan 85(Y)
BLEAR
PXN 29.5
112.6 PXN R-061 Chan 73
241° 061°

HOLD 6000 2800
1 min (200K)
292° 112°
R-155

112°
2800 NoPT
292° (11.5)

(IAF)
ALTTA
I-FAT 24.1

ELEV 336 D TDZ 333

800 5500 hdg 330° FRA R-222 NIVEE INT

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 76).

SANGO INT I-FAT 12.6 One Minute Holding Pattern
STORI I-FAT 6.1
1800
112° 6000
292° 2800
292°
1800
GS 3.00° TCH 55

1049' 4.4 NM 6.5 NM

CATEGORY	A	B	C	D
S-ILS 29R	RA 151/14 150 DA 483			

11L 11R
9539 X 150
8008 X 150
TWR
29L 29R

REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZ/CL Rwy 29R

SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

FRESNO, CALIFORNIA
Amdt 39A 24MAR22

36°47'N-119°43'W

FRESNO YOSEMITE INTL (FAT)
ILS Y RWY 29R (SA CAT I)

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

ILS Y RWY 29R (CAT II & III)

FRESNO YOSEMITE INTL (FAT)

LOC/DME I-FAT	APP CRS	Rwy Ldg	9227
111.3	292°	TDZE	333
Chan 50		Apt Elev	336

CAT II: RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown.

ALSF-2

MISSED APPROACH: Climb to 800 then climbing right turn to 5500 on heading 330° and FRA VORTAC R-222 to NIVEE INT/FRA 8 DME and hold, continue climb-in-hold to 5500.

ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	119.6 351.95	118.2 251.1	121.7 348.6	124.35 348.6

MISSED APCH FIX
NIVEE INT
FRA 8
113.85 HYP R-094 Chan 85(Y)
115.6 FRA Chan 103
R-222 042° 222°

FRIANT
115.6 FRA
Chan 103

Procedure NA for arrivals at FRA VORTAC on V230 northeast bound.

4700
155° (18)
R-155

MSA FRA 25 NM
120° 12000
4700
320°

ZEMUX
FRA 18

LOCALIZER 111.3
I-FAT
Chan 50

3000
155° (8.7)

442
432

STORI
I-FAT 6.1

1800
292° (6.5)

(IF/IAF)
SANGO INT
I-FAT 12.6

ALTERNATE MISSED APCH FIX
113.85 HYP R-141 Chan 85(Y)
BLEAR
PXN 29.5
112.6 PXN R-061 Chan 73
241° 061°

HOLD 6000 2800
1 min (200K)
292° 112°
R-155

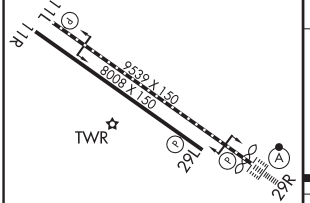
(IAF)
ALTTA
I-FAT 24.1
112°
2800 NoPT
292° (11.5)

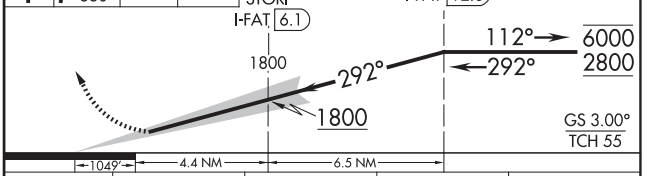
ELEV 336 D TDZE 333

800	5500 hdg 330°	FRA R-222	NIVEE INT

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 76).

One Minute Holding Pattern





CATEGORY	A	B	C	D
S-ILS 29R	CAT II RA 101/12 100 DA 433			
S-ILS 29R	CAT III RVR 06			

REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZ/CL Rwy 29R

CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 11L

FRESNO YOSEMITE INTL (FAT)

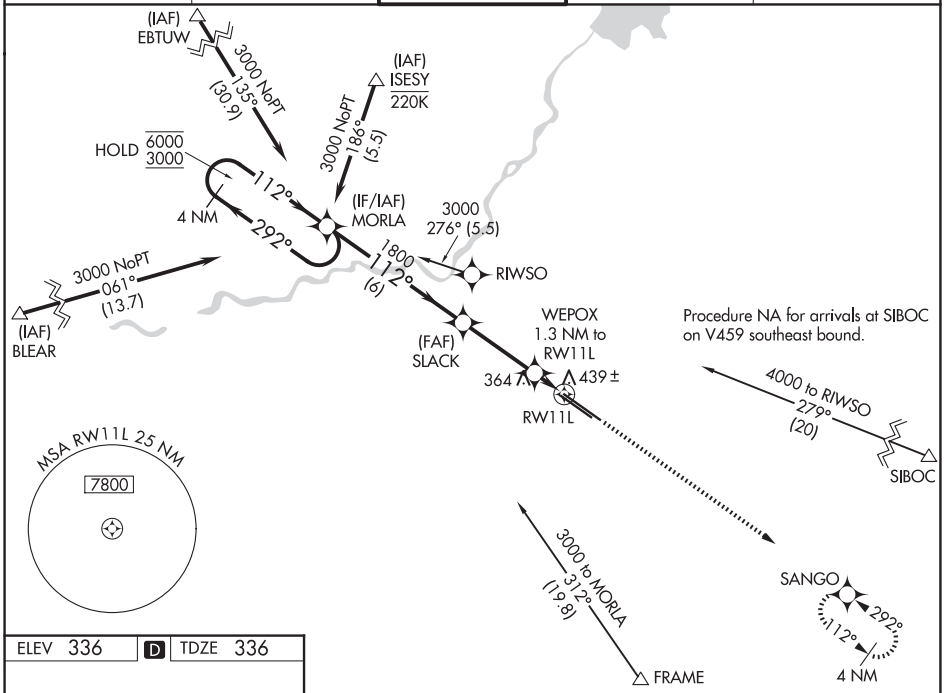
WAAS	APP CRS	Rwy Ldg	9279
CH 77505	112°	TDZE	336
W11A		Apt Elev	336

RNP APCH.

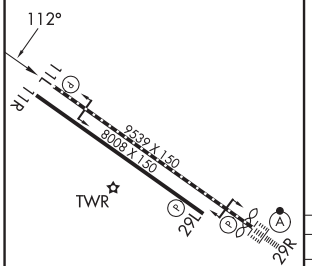
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1°C or above 54°C .

MISSED APPROACH: Climb to 2600 direct SANGO and hold.

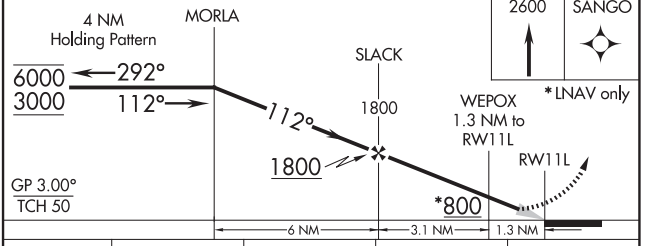
ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	119.6 351.95	118.2 251.1	121.7 348.6	124.35 348.6



ELEV 336 D TDZE 336



REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZ/CL Rwy 29R



CATEGORY	A	B	C	D
LPV DA	536/40 200 (200-¾)			
LNAV/VNAV DA	620/45 284 (300-⅞)			
LNAV MDA	700/55 364 (400-1)			
CIRCLING	820-1 484 (500-1)		920-1½ 584 (600-1½)	920-2 584 (600-2)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS CH 78330 W11B	APP CRS 112°	Rwy Ldg 8008 TDZE 333 Apt Elev 336

RNAV (GPS) RWY 11R

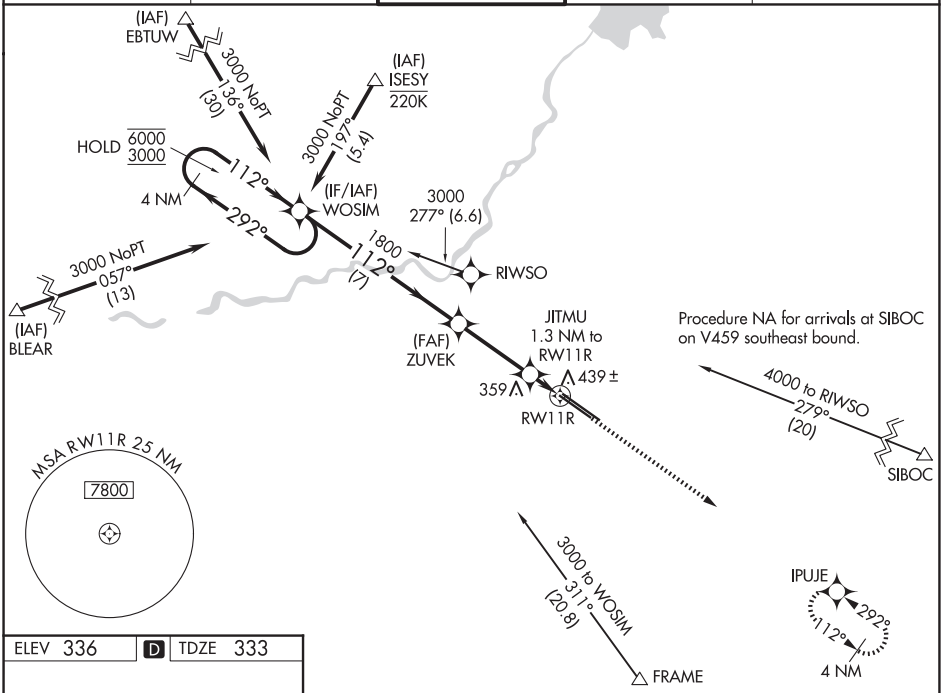
FRESNO YOSEMITE INTL (FAT)

RNP APCH.

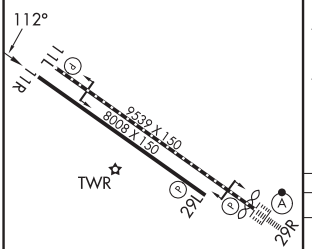
Rwy 11R helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1°C or above 54°C.

MISSED APPROACH: Climb to 2600 direct IPUJE and hold.

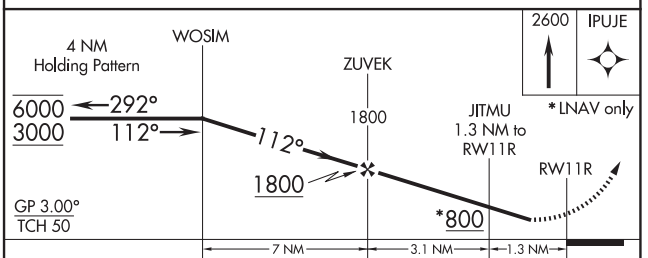
ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	119.6 351.95	118.2 251.1	121.7 348.6	124.35 348.6



ELEV 336 | D | TDZE 333



REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZ/CL Rwy 29R



CATEGORY	A	B	C	D
LPV DA	584-¾ 251 (300-¾)			
LNAV/VNAV DA	620-⅞ 287 (300-⅞)			
LNAV MDA	700-1 367 (400-1)			
CIRCLING	820-1 484 (500-1)		920-1½ 584 (600-1½)	920-2 584 (600-2)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 29L

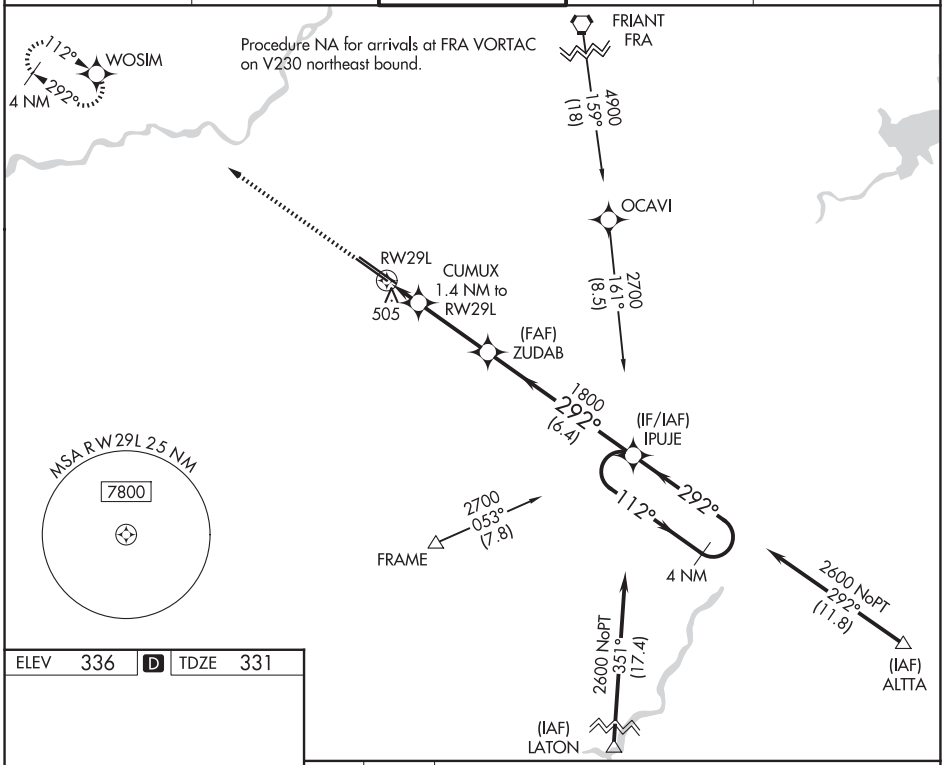
FRESNO YOSEMITE INTL (FAT)

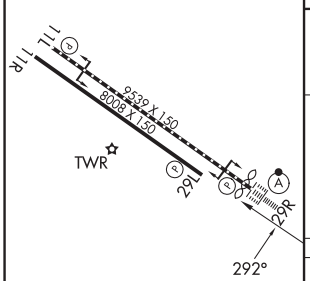
WAAS	APP CRS	Rwy Ldg	8008
CH 50530	292°	TDZE	331
W29B		Apt Elev	336

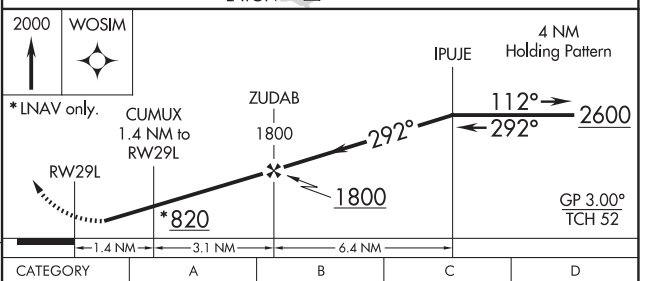
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 0°C (32°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 2000 direct WOSIM and hold.

ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	119.6 351.95	118.2 251.1	121.7 348.6	124.35 348.6







CATEGORY	A	B	C	D
LPV DA	581-¾ 250 (300-¾)			
LNAV/VNAV DA	667-1⅛ 336 (400-1⅛)			
LNAV MDA	760-1 429 (500-1)		760-1¼ 429 (500-1¼)	
CIRCLING	820-1 484 (500-1)		920-1½ 584 (600-1½)	920-2 584 (600-2)

REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZ/CL Rwy 29R

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 29R

FRESNO YOSEMITE INTL (FAT)

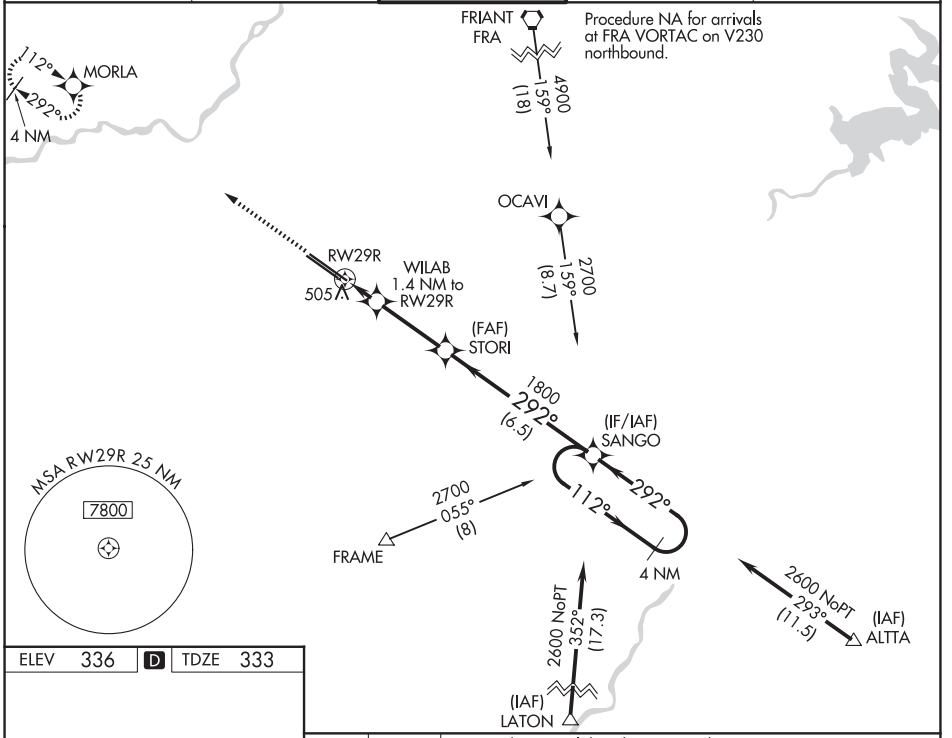
WAAS CH 81803 W29A	APP CRS 292°	Rwy Ldg 9227 TDZE 333 Apt Elev 336

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 0°C (32°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.

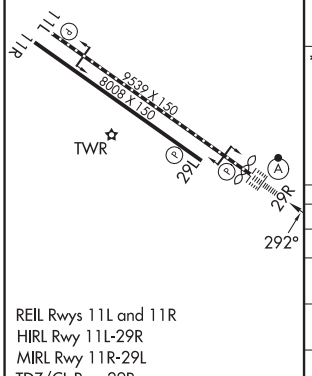
ALSF-2

MISSED APPROACH: Climb to 2000 direct MORLA and hold.

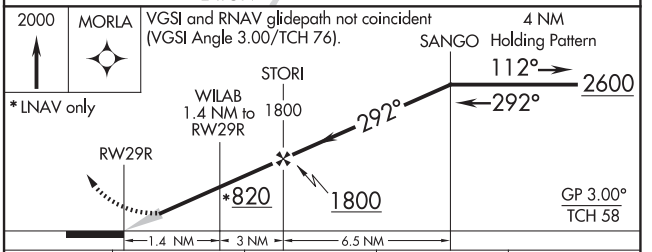
ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	119.6 351.95	118.2 251.1	121.7 348.6	124.35 348.6



ELEV 336 D TDZE 333



REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZ/CL Rwy 29R



CATEGORY	A	B	C	D
LPV DA	533/18	200 (200-½)		
LNAV/VNAV DA	689/30	356 (400-⅝)		
LNAV MDA	760/24	427 (500-½)	760/40	427 (500-¾)
CIRCLING	820-1	484 (500-1)	920-1½ 584 (600-1½)	920-2 584 (600-2)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

FRESNO, CALIFORNIA

AL-162 (FAA)

25219

LOC Y RWY 11L

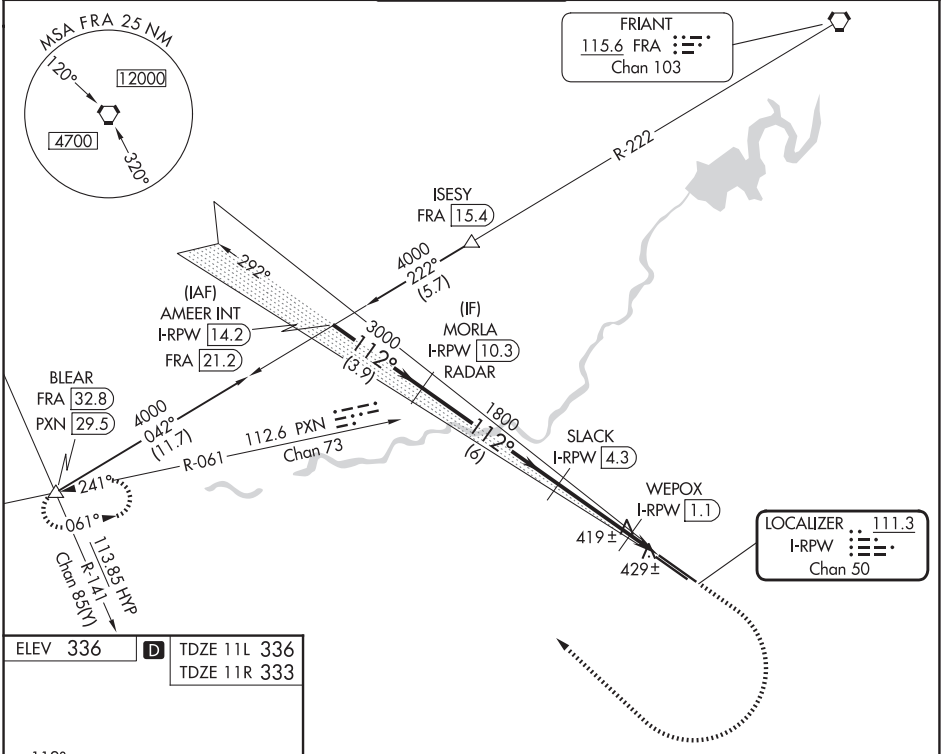
FRESNO YOSEMITE INTL (FAT)

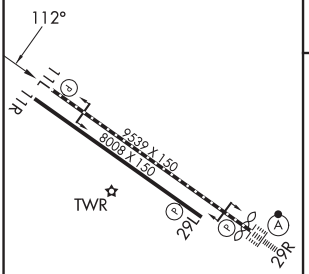
LOC/DME I-RPW	APP CRS		11L	11R
111.3	112°	Rwy Ldg	9279	8008
Chan 50		TDZE	336	333
		Apt Elev	336	336

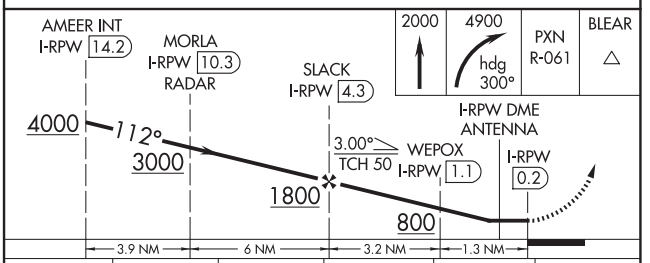
DME required.

MISSED APPROACH: Climb to 2000 then climbing right turn to 4900 on heading 300° and PXN VORTAC R-061 to BLEAR INT/PXN VORTAC 29.5 DME and hold.

ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	119.6 351.95	118.2 251.1	121.7 348.6	124.35 348.6







CATEGORY	A	B	C	D	E
S-LOC 11L	680/55 344 (400-1)				
SIDESTEP 11R	680-1 347 (400-1)		680-1½ 347 (400-1½)	680-2 347 (400-2)	

REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZ/CL Rwy 29R

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

TACAN RWY 11L

FRESNO YOSEMITE INTL (FAT)

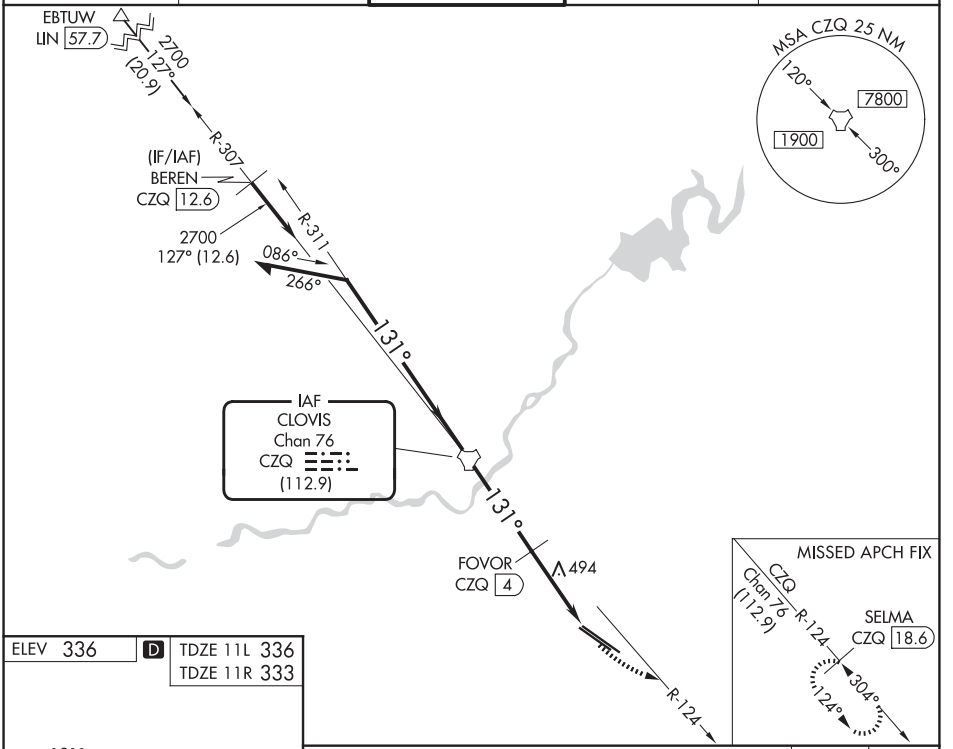
TACAN	APP CRS		11L	11R
CZQ Chan **76** (**112.9**)	**131°**	Rwy Ldg	**9279**	**8008**
		TDZE	**336**	**333**
		Apt Elev	**336**	**336**

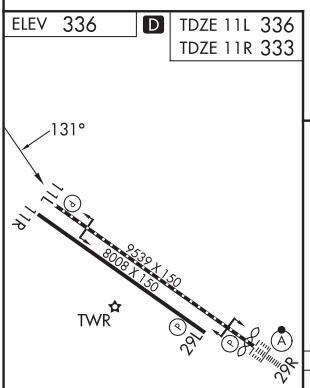
DME required.

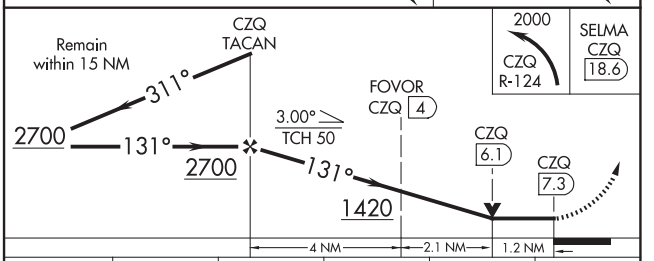
Rwy 11L helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climbing left turn to 2000 on CZQ TACAN R-124 to SELMA/CZQ 18.6 DME and hold.

ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	**119.6 351.95**	**118.2 251.1**	**121.7 348.6**	**124.35 348.6**







CATEGORY	A	B	C	D	E
S-11L	760/55 424 (500-1)		760-1¼ 424 (500-1¼)		
SIDESTEP 11R	760-1 427 (500-1)		760-1½ 427 (500-1½)	760-2 427 (500-2)	
CIRCLING	820-1 484 (500-1)		920-1½ 584 (600-1½)	920-2 584 (600-2)	1140-2¾ 804 (900-2¾)

REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZ/CL Rwy 29R

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

FRESNO, CALIFORNIA AL-162 (FAA) 25219

TACAN RWY 29R

FRESNO YOSEMITE INTL (FAT)

TACAN	APP CRS		29R	29L
CZQ Chan 76 (112.9)	307°	Rwy Ldg	9227	8008
		TDZE	333	331
		Apt Elev	336	336

T A Rwy 29R helicopter visibility reduction below RVR 4000 NA. For inop ALS, increase S-29R Cat A/B visibility to RVR 5500 and Cat E visibility to 1¼ mile.

ALSF-2 Rwy 29R (A)

MISSED APPROACH: Climb to 5500 on heading 330° and FRA VORTAC R-222 to NIVEE INT/FRA 8 DME and hold, continue climb-in-hold to 5500.

ATIS	FRESNO APP CON	FRESNO TOWER	GND CON	CLNC DEL
121.35 273.6	119.6 351.95	118.2 251.1	121.7 348.6	124.35 348.6

OXVEV CZQ 7 △

115.6 FRA Chan 103 R-222

FRIANT 115.6 FRA Chan 103

Procedure NA for arrivals at FRA VORTAC on V459 northwest bound.

5500 161° (28.3)

MISSED APCH FIX

NIVEE INT FRA 8

113.85 HYP R-094 Chan 85(Y)

115.6 FRA Chan 103

R-222 042° 222°

CLOVIS Chan 76 CZQ (112.9)

R-127

R-161

505 A

JULTI CZQ 10.6

URFEZ CZQ 13.1

1800 307° (6)

(IF/IAF) IXDEB CZQ 19.1

307° 1 min 127° R-127

HOLD 6000 2000

ALTERNATE MISSED APCH FIX

OXVEV CZQ 7

127° 307° R-307 CZQ Chan 76 (112.9)

MSA CZQ 25 NM

120° 7800 300° 1900

ELEV 336 D TDZ 29R 333 TDZ 29L 331

11L 11R 9539 X 150 8005 X 150 TWR 29L 29R 307°

5500 hdg 330°	FRA R-222	NIVEE INT

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 76).

One Minute Holding Pattern

IXDEB CZQ 19.1 URFEZ CZQ 13.1 JULTI CZQ 10.6 CZQ 9.8 CZQ 8.7 3.03° TCH 55 307° 1800 980 127° 307° 6000 2000

1.1 NM 0.8 NM 2.5 NM 6 NM

CATEGORY	A	B	C	D	E
S-29R	760/40 427 (500-¾)				
SIDESTEP 29L	760/55 429 (500-1)		760-1½ 429 (500-1½)	760-2 429 (500-2)	
CIRCLING	820-1 484 (500-1)		920-1½ 584 (600-1½)	920-2 584 (600-2)	1140-2¾ 804 (900-2¾)

REIL Rwys 11L and 11R
HIRL Rwy 11L-29R
MIRL Rwy 11R-29L
TDZ/CL Rwy 29R

FRESNO, CALIFORNIA Amdt 3 10OCT19

36°47'N-119°43'W

FRESNO YOSEMITE INTL (FAT)

TACAN RWY 29R

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

(BULL3.NTELL) 23334

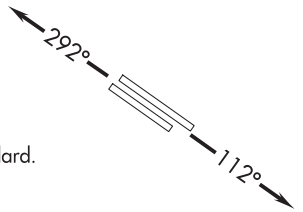
BULLDOG THREE DEPARTURE

AL-162 (FAA)

FRESNO YOSEMITE INTL (FAT)
FRESNO, CALIFORNIA

ATIS
121.35 273.6
CLNC DEL
124.35 348.6
GND CON
121.7 348.6
FRESNO TOWER
118.2 251.1
FRESNO DEP CON
132.35 323.25

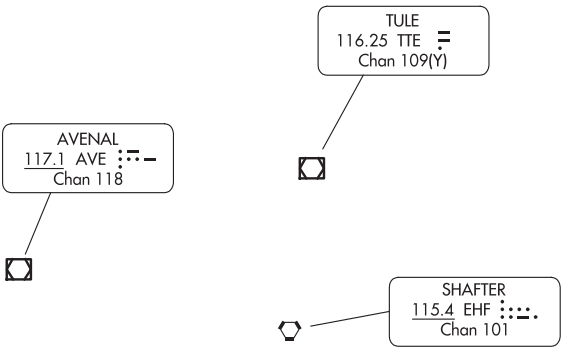
TOP ALTITUDE: ASSIGNED BY ATC



TAKEOFF MINIMUMS
Rwys 11L/R, 29L/R: Standard.

NOTE: RADAR required.

FRAME △



NOTE: Chart not to scale.

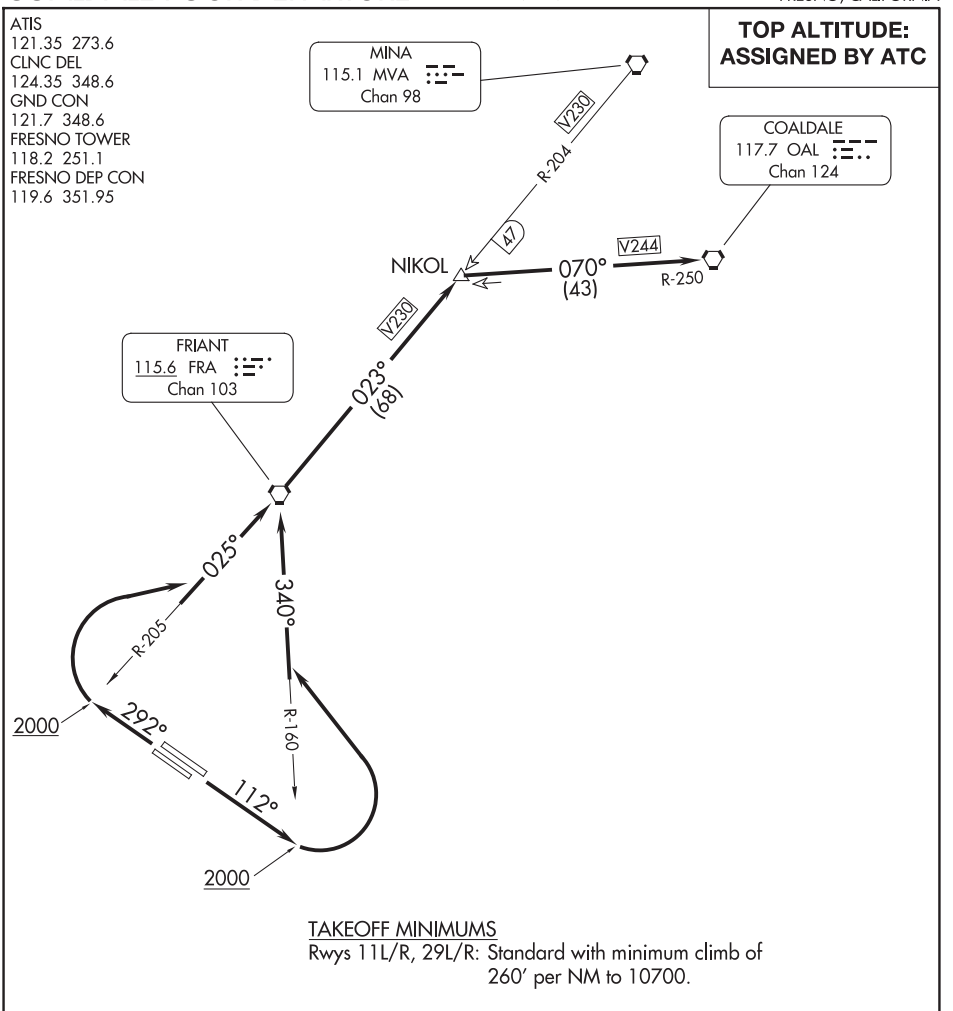
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 11L/R: Climb heading 112° thence. . . .

TAKEOFF RUNWAYS 29L/R: Climb heading 292° thence. . . .

. . . .maintain ATC assigned altitude; expect clearance to filed altitude five minutes after departure.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 11L/R: Climb on heading 112° to 2000′, then climbing left turn to intercept FRA R-160 to FRA VORTAC, thence. . . .

TAKEOFF RUNWAYS 29L/R: Climb on heading 292° to 2000′, then climbing right turn to intercept FRA R-205 to FRA VORTAC, thence. . . .

. . . .continue climb to 14300 on FRA VORTAC R-023 and MVA VORTAC R-204 to NIKOL INT and on OAL VORTAC R-250 to OAL VORTAC. Maintain ATC assigned altitude.

SW-2, 07 AUG 2025 to 02 OCT 2025

(YOSE3.NTELL) 23334

YOSEMITE THREE DEPARTURE

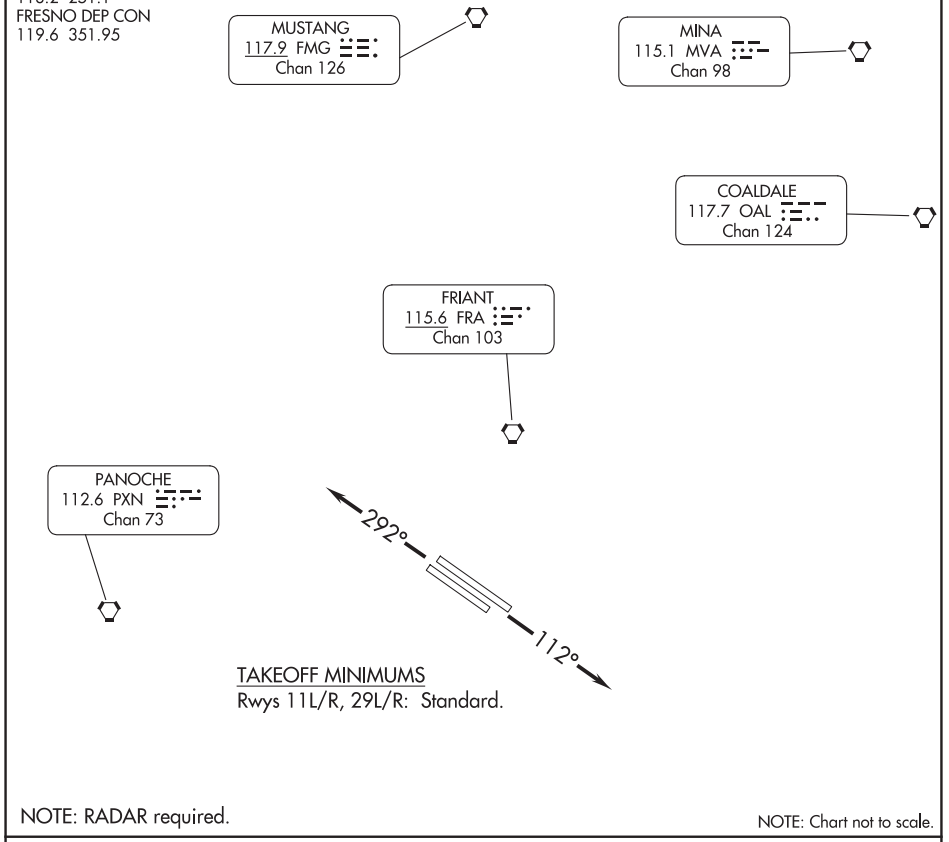
AL-162 (FAA)

FRESNO YOSEMITE INTL (FAT)
FRESNO, CALIFORNIA

SW-2, 07 AUG 2025 to 02 OCT 2025

ATIS
121.35 273.6
CLNC DEL
124.35 348.6
GND CON
121.7 348.6
FRESNO TOWER
118.2 251.1
FRESNO DEP CON
119.6 351.95

TOP ALTITUDE: ASSIGNED BY ATC



TAKEOFF MINIMUMS
Rwys 11L/R, 29L/R: Standard.

NOTE: RADAR required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 11L/R: Climb heading 112°, thence. . . .

TAKEOFF RUNWAYS 29L/R: Climb heading 292°, thence. . . .

. . . .maintain ATC assigned altitude; expect clearance to filed altitude five minutes after departure.

LOST COMMUNICATIONS: If not in contact with Fresno Departure Control within two minutes of takeoff, aircraft enroute to FRA, MVA, FMG and OAL proceed direct FRA VORTAC, cross FRA VORTAC at or above 9000, thence via assigned route to filed altitude.

WAAS	APP CRS	Rwy Idg	4657
CH **90240**	**071°**	TDZE	3131
W07A		Apt Elev	3158

RNAV (GPS) RWY 7

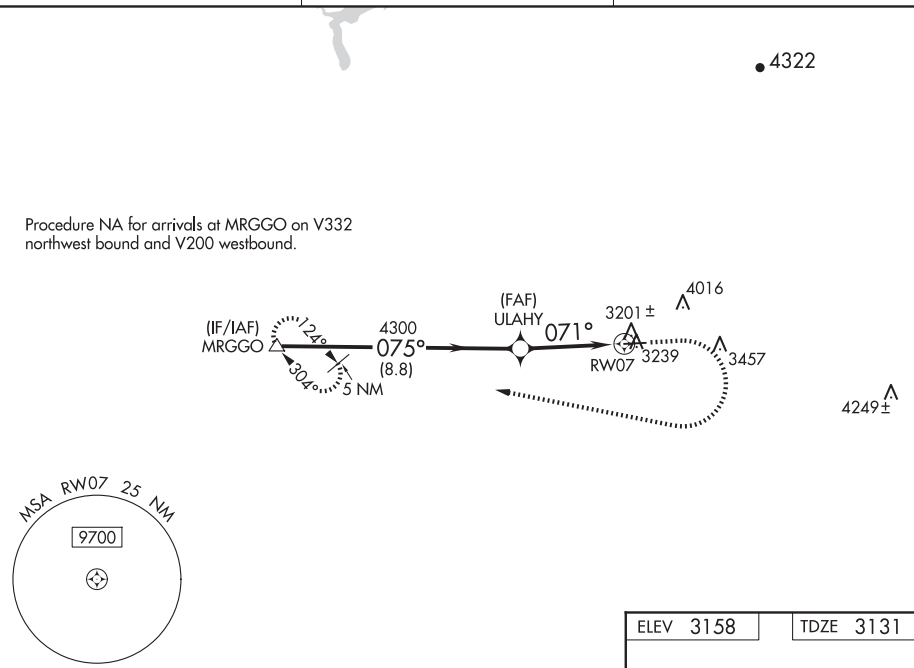
NEVADA COUNTY (GOO)

RNP APCH.

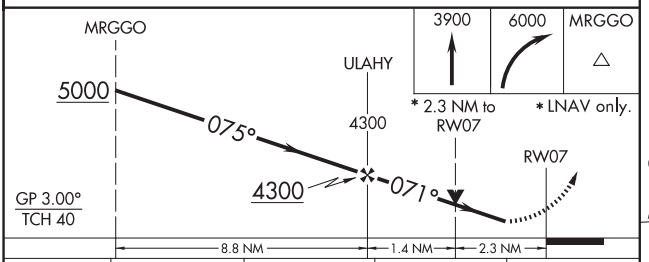
Circling NA north of Rwy 7-25. Circling Rwy 25 NA at night. Rwy 7 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C or above 54°C.

MISSED APPROACH: (Do not exceed 250K until MRGGO) Climb to 3900 then climbing right turn to 6000 direct MRGGO and hold.

AWOS-3	NORCAL APP CON	UNICOM
121.325	**125.4 259.1**	**122.725** (CTAF)



ELEV 3158 TDZE 3131



CATEGORY	A	B	C	D
LPV DA	3606-1⅜ 475 (500-1⅜)			
LNAV/VNAV DA	3772-1⅞ 641 (700-1⅞)			
LNAV MDA	3860-1 729 (800-1)		3860-2 729 (800-2)	
C CIRCLING	3860-1 702 (800-1)		3880-2 722 (800-2)	3880-2¼ 722 (800-2¼)

MIRL Rwy 7-25 L

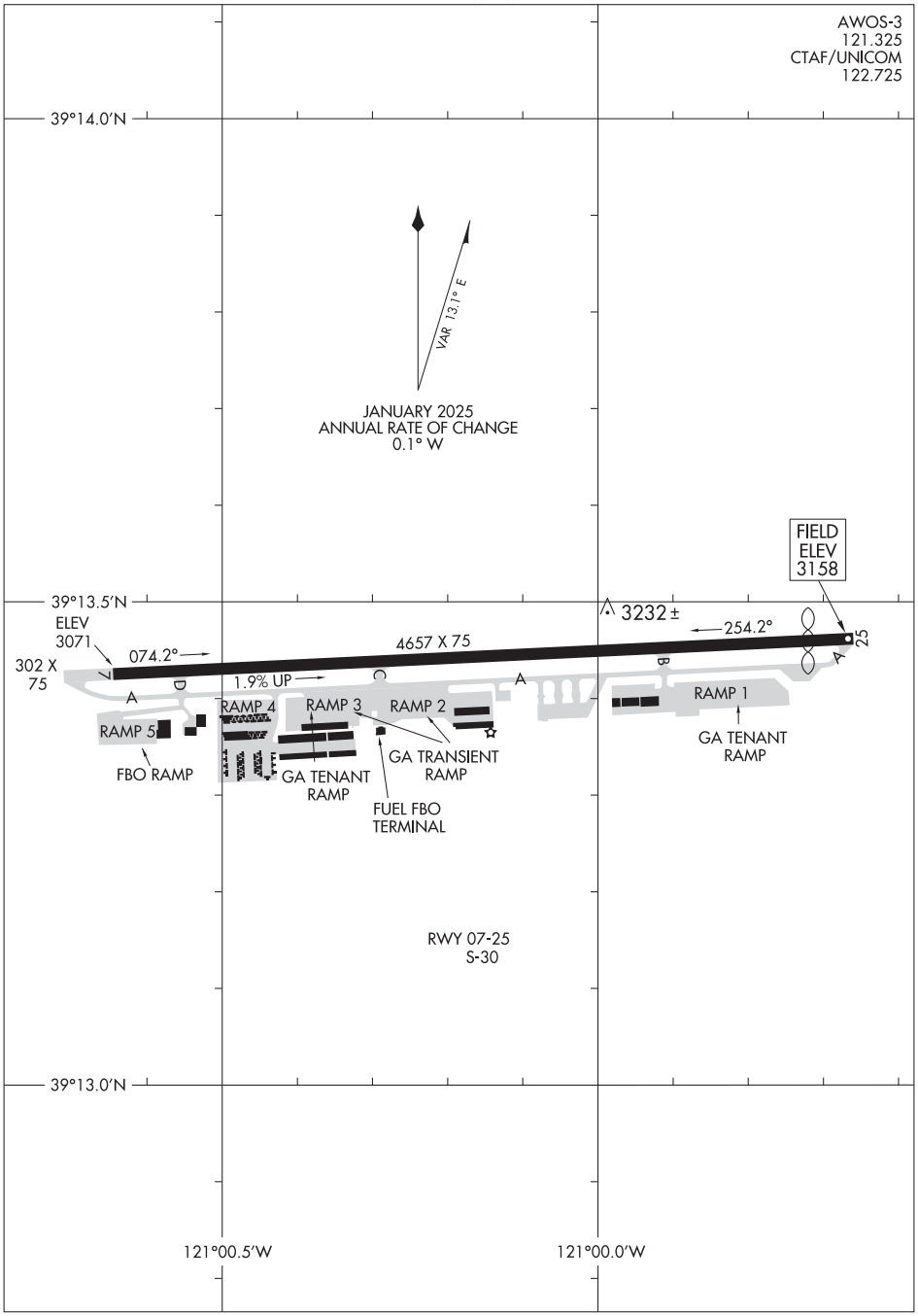
SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

25107

AIRPORT DIAGRAM

AL-6659 (FAA)

NEVADA COUNTY (GOO)
GRASS VALLEY, CALIFORNIA



SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

AIRPORT DIAGRAM
25107

GRASS VALLEY, CALIFORNIA
NEVADA COUNTY (GOO)

RNAV (GPS) RWY 9

PINE MOUNTAIN LAKE (E45)

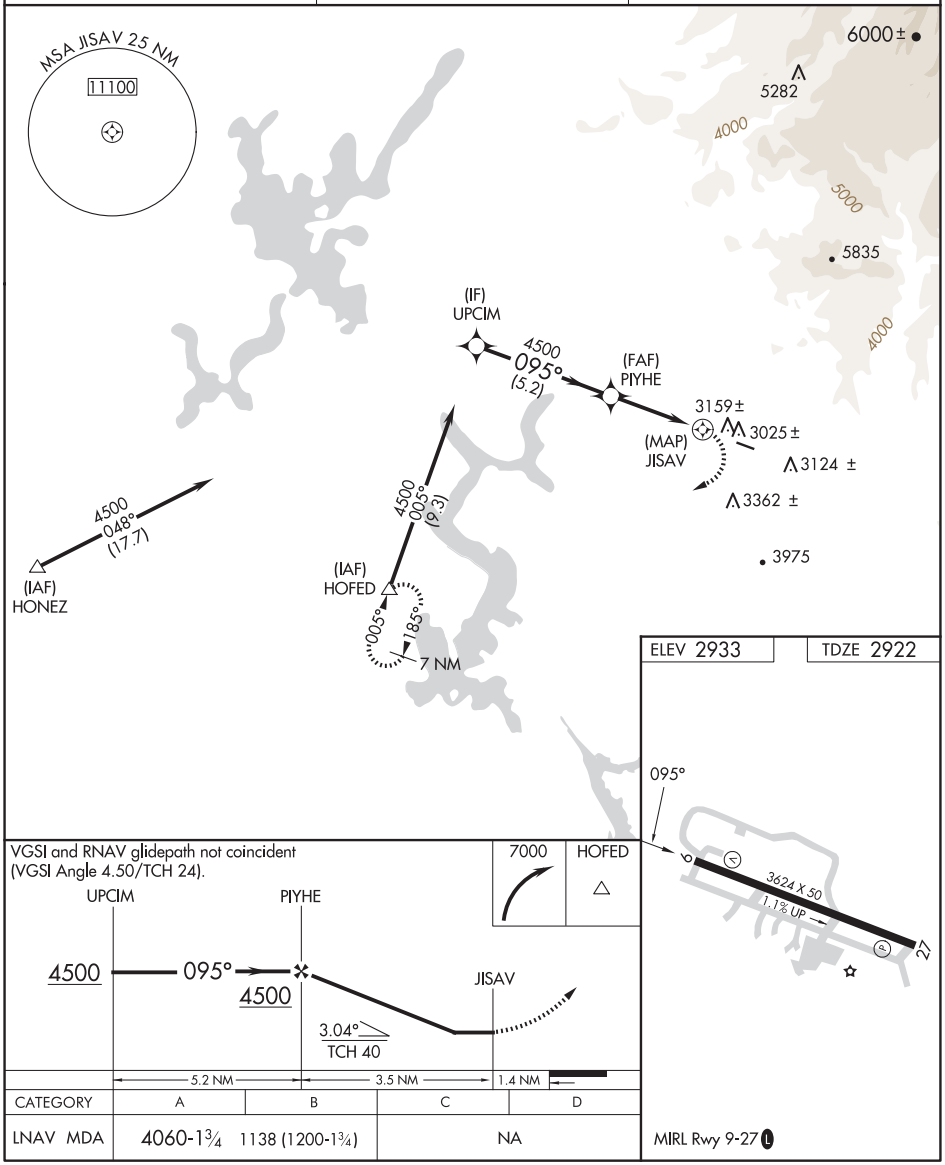
APP CRS	Rwy Idg	3624
095°	TDZE	2922
	Apt Elev	2933

RNP APCH-GPS.

Procedure NA at night. Rwy 9 helicopter visibility reduction below 1 SM NA. Use Columbia altimeter setting.

MISSED APPROACH: Climbing right turn to 7000 direct HOFED and hold, continue climb-in-hold to 7000.

O22 AWOS-3	OAKLAND CENTER	CTAF
124.65	121.25 327.0	122.9 L



SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

GROVELAND, CALIFORNIA

AL-9084 (FAA)

25107

GPS RWY 27

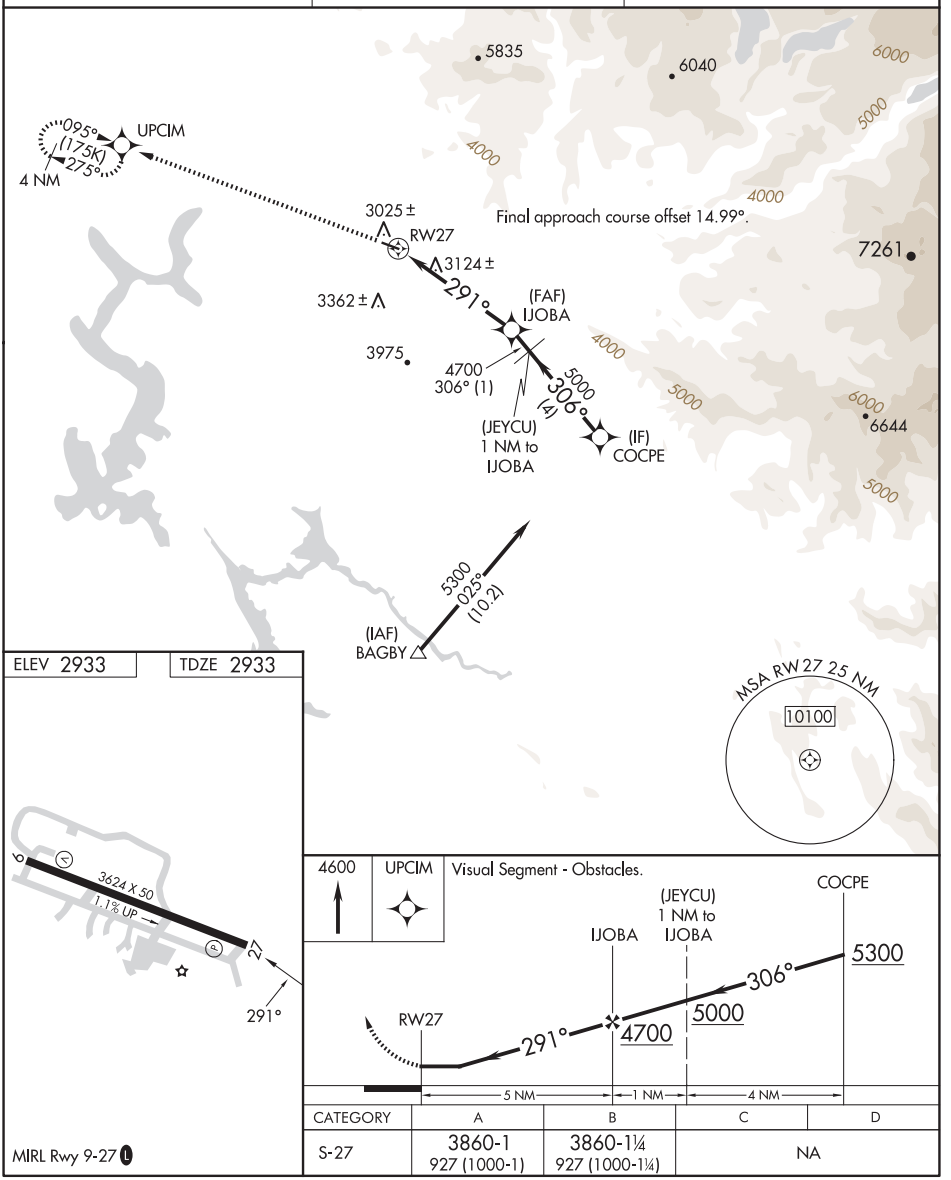
PINE MOUNTAIN LAKE (E45)

APP CRS	Rwy Idg	3624
291°	TDZE	2933
	Apt Elev	2933

NA — Procedure NA at night. Rwy 27 helicopter visibility reduction below 1 SM NA. Use Columbia altimeter setting.

MISSED APPROACH: Climb to 4600 direct UPCIM and hold.

O22 AWOS-3	OAKLAND CENTER	CTAF
124.65	121.25 327.0	122.9 (L)



CATEGORY	A	B	C	D
S-27	3860-1 927 (1000-1)	3860-1¼ 927 (1000-1¼)	NA	

MIRL Rwy 9-27 (L)

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 12

HALF MOON BAY (HAF)

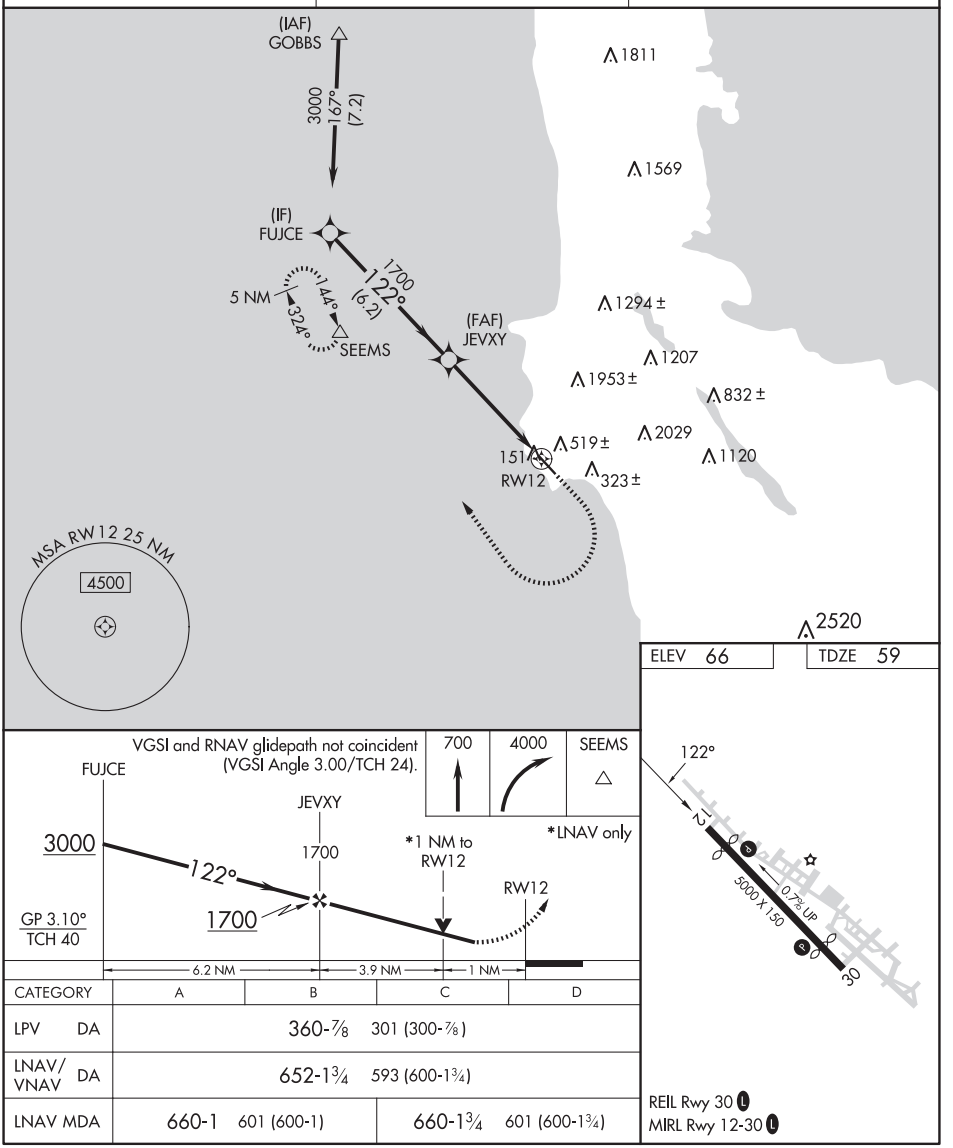
WAAS	APP CRS	Rwy Idg	4248
CH 99742	122°	TDZE	59
W12A		Apt Elev	66

RNP APCH.

Rwy 12 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15° C or above 54° C.

MISSED APPROACH: Climb to 700 then climbing right turn to 4000 direct SEEMS and hold, continue climb-in-hold to 4000.

AWOS	NORCAL APP CON	UNICOM
127.275	135.1 307.2	122.8 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	360-⅞ 301 (300-⅞)			
LNAV/VNAV DA	652-1¾ 593 (600-1¾)			
LNAV MDA	660-1 601 (600-1)		660-1¾ 601 (600-1¾)	

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

HALF MOON BAY, CALIFORNIA | AL-6675 (FAA) | 23110

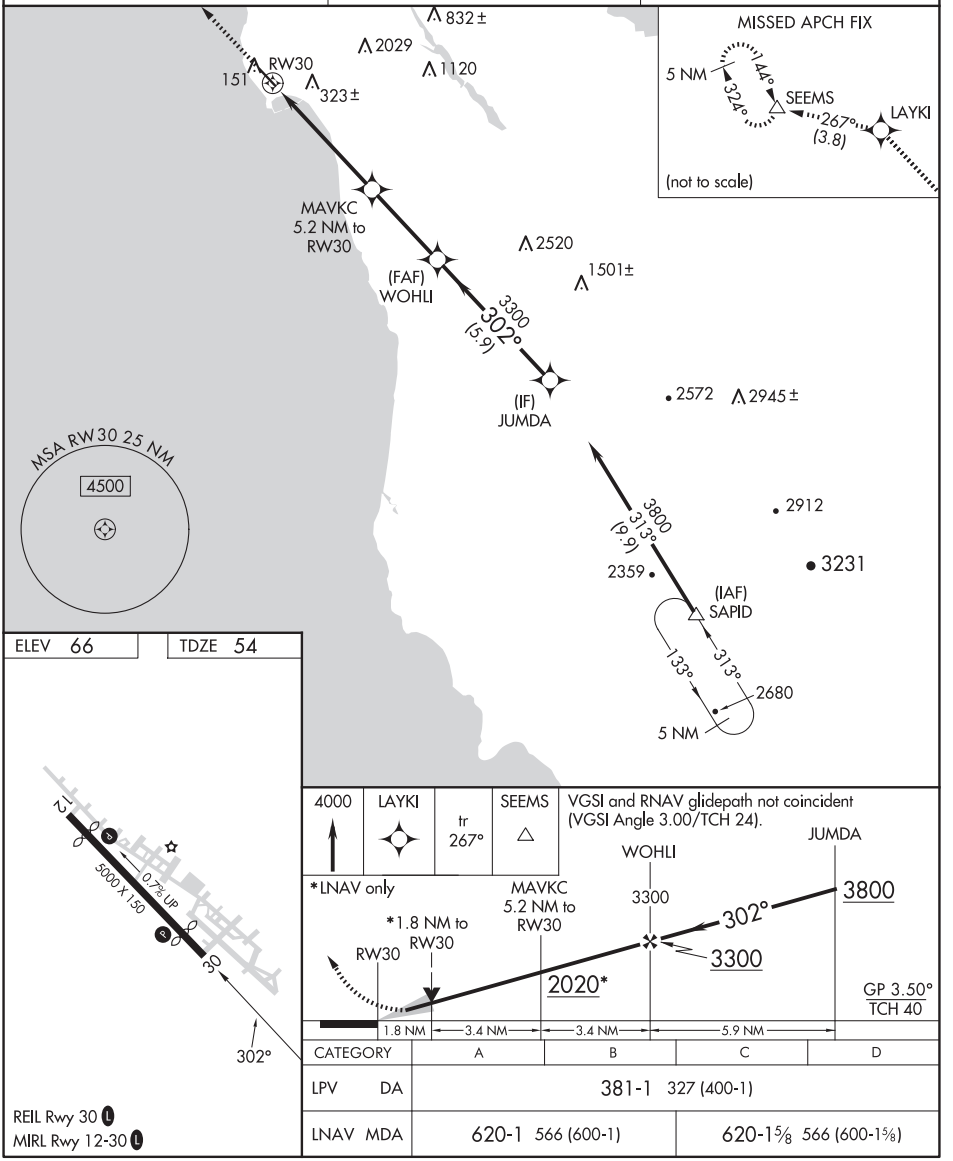
WAAS	APP CRS	Rwy Idg	4238
CH 50302	302°	TDZE	54
W30A		Apt Elev	66

RNAV (GPS) RWY 30
HALF MOON BAY (HAF)

RNP APCH.

MISSED APPROACH: Climb to 4000 direct LAYKI and on track 267° to SEEMS and hold, continue climb-in-hold to 4000.

AWOS-3	NORCAL APP CON	UNICOM
127.275	135.1 307.2	122.8 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	381-1 327 (400-1)			
LNAV MDA	620-1 566 (600-1)		620-1⅝ 566 (600-1⅝)	

REIL Rwy 30 L
MIRL Rwy 12-30 L

HALF MOON BAY, CALIFORNIA
Amdt 1A 18JUL19

37°31′N-122°30′W

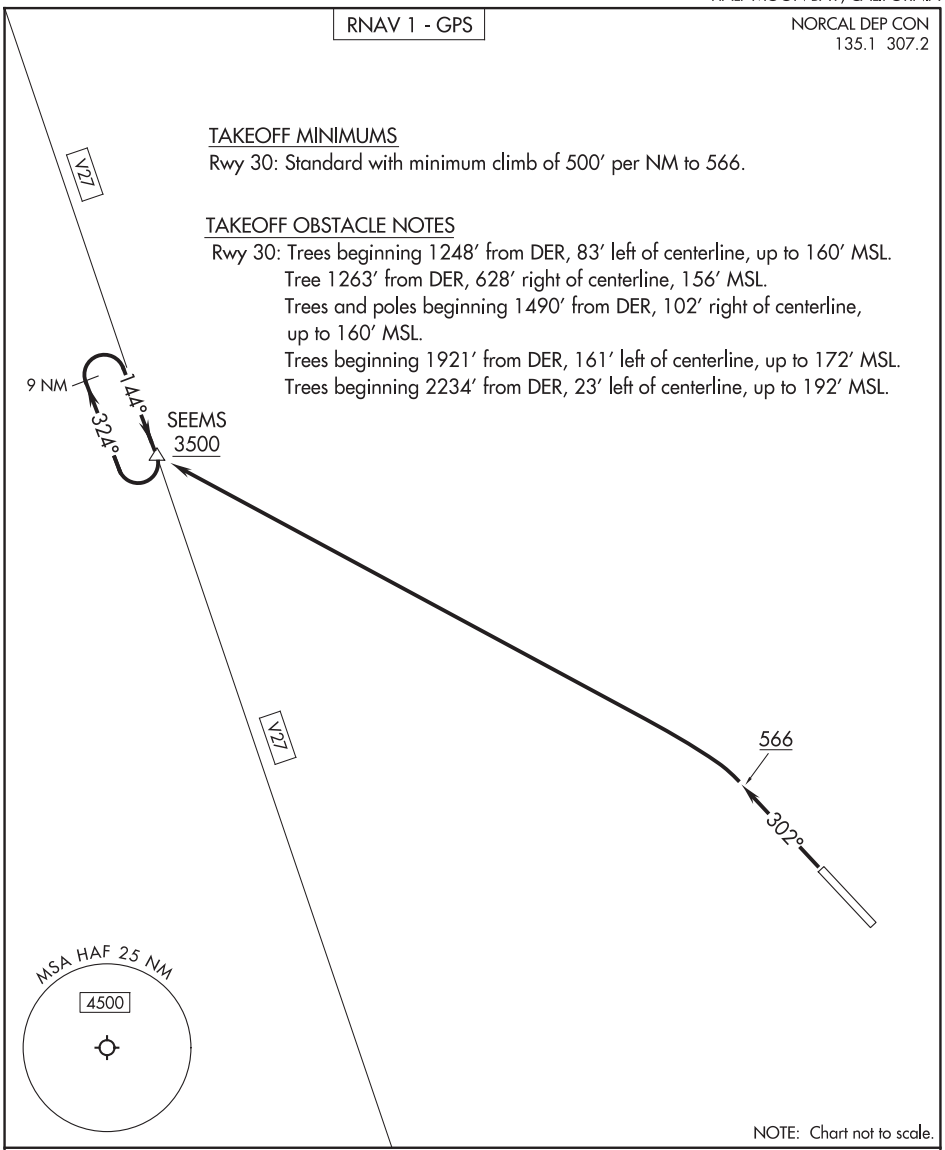
HALF MOON BAY (HAF)
RNAV (GPS) RWY 30

SW-2, 07 AUG 2025 to 02 OCT 2025

SEEMS ONE DEPARTURE (OBSTACLE) (RNAV)

RNAV 1 - GPS

NORCAL DEP CON
135.1 307.2



TAKEOFF MINIMUMS

Rwy 30: Standard with minimum climb of 500′ per NM to 566.

TAKEOFF OBSTACLE NOTES

Rwy 30: Trees beginning 1248′ from DER, 83′ left of centerline, up to 160′ MSL.
Tree 1263′ from DER, 628′ right of centerline, 156′ MSL.
Trees and poles beginning 1490′ from DER, 102′ right of centerline, up to 160′ MSL.
Trees beginning 1921′ from DER, 161′ left of centerline, up to 172′ MSL.
Trees beginning 2234′ from DER, 23′ left of centerline, up to 192′ MSL.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 30: Climb on heading 302° to 566, then climbing left turn direct SEEMS, continue climb in SEEMS holding pattern to at/above 3500 before proceeding on course.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 32

HANFORD MUNI (HJO)

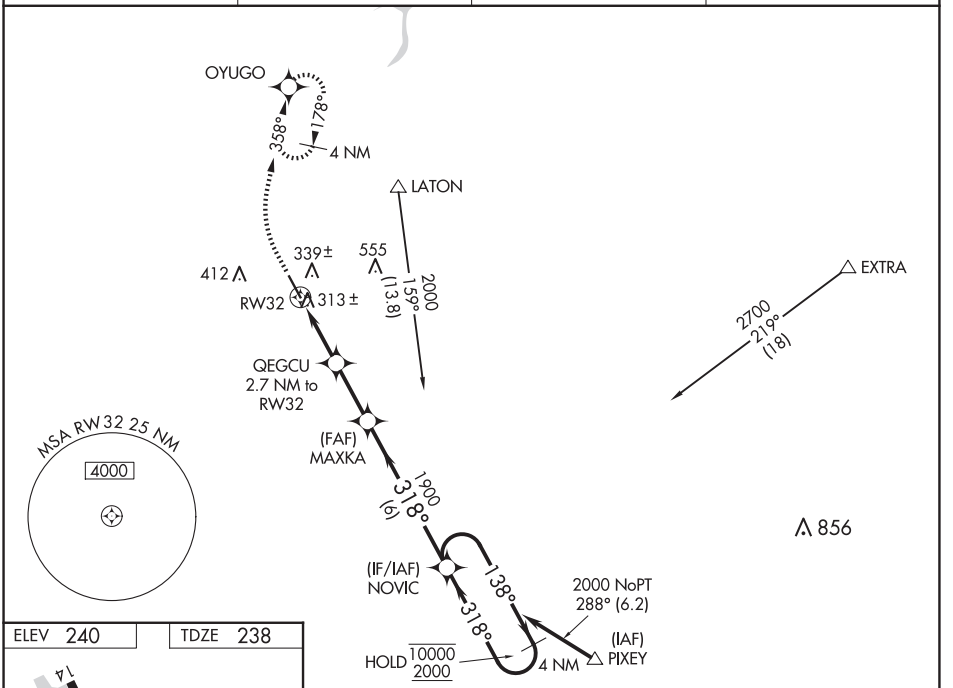
WAAS CH 70344 W32A	APP CRS 318°	Rwy Ldg 5179 TDZE 238 Apt Elev 240

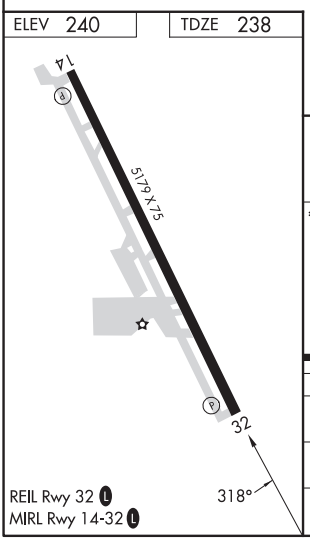
RNP APCH.

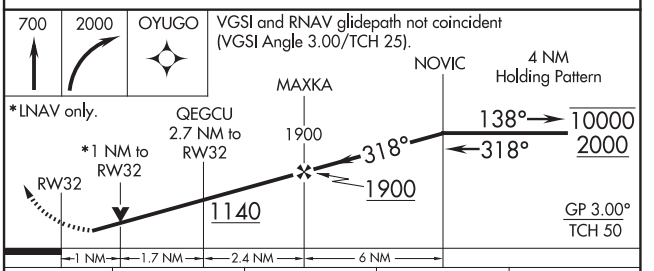
T Rwy 32 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -3°C or above 54°C.

MISSED APPROACH: Climb to 700 then climbing right turn to 2000 direct OYUGO and hold, continue climb-in-hold to 2000.

ASOS	FRESNO APP CON	CLNC DEL	UNICOM
134.75	123.9	123.9	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	488-¾ 250 (300-¾)			NA
LNAV/VNAV DA	488-¾ 250 (300-¾)			NA
LNAV MDA	580-1 342 (400-1)		580-1½ 342 (400-1½)	NA

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS)-B

HANFORD MUNI (HJO)

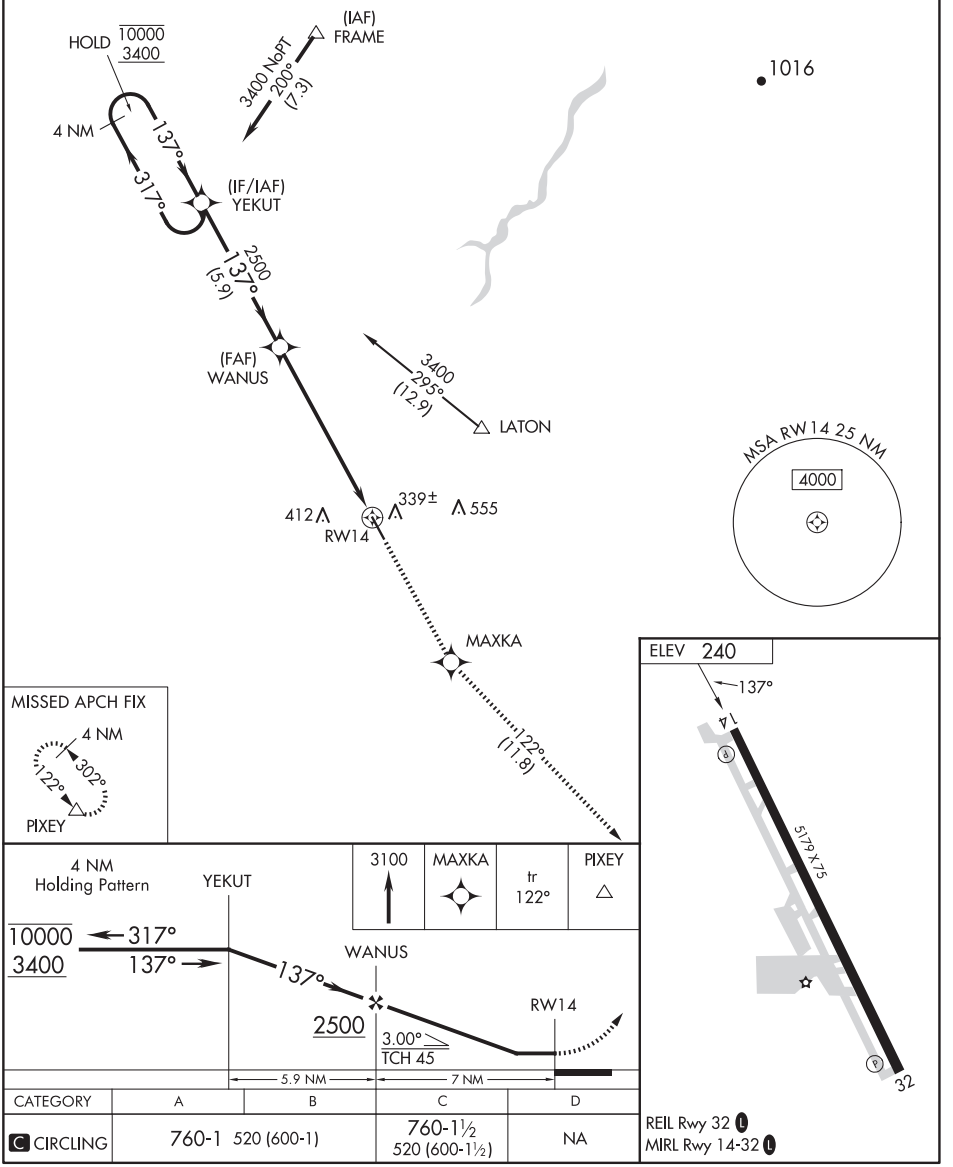
APP CRS	Rwy Ldg	N/A
137°	TDZE	N/A
	Apt Elev	240

RNP APCH.

Circling Rwy 14 NA at night.

MISSED APPROACH: Climb to 3100 direct MAXKA and on track 122° to PIXEY and hold.

ASOS	FRESNO APP CON	CLNC DEL	UNICOM
134.75	123.9	123.9	122.8 (CTAF) L



CATEGORY	A	B	C	D
C CIRCLING	760-1 520 (600-1)		760-1½ 520 (600-1½)	NA

REIL Rwy 32 L
MIRL Rwy 14-32 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 28L

HAYWARD EXEC (HWD)

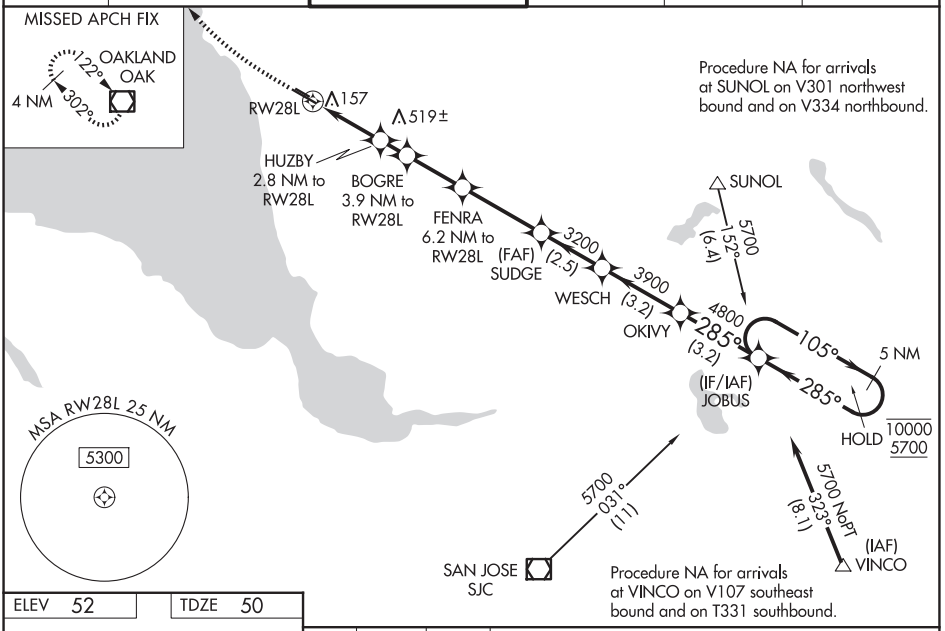
WAAS CH 40330 W28A	APP CRS 285°	Rwy Ldg 5018 / TDZE 50 / Apt Elev 52

RNP APCH - GPS.

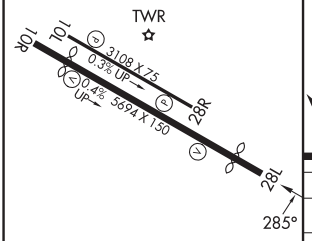
Baro-VNAV NA. Circling Rwy 10L, 28R NA at night. Rwy 28L helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use OAK altimeter setting and increase LPV DA to 370 feet; increase LNAV/VNAV DA to 461 feet; increase all MDAs 40 feet and LNAV visibility Cat C/D ¼ SM, and Circling visibility Cat D ¼ SM. Circling NA north of Rwy 10L-28R.

MISSED APPROACH: Climb to 600 then climbing right turn to 2100 direct OAK VOR/DME and hold.

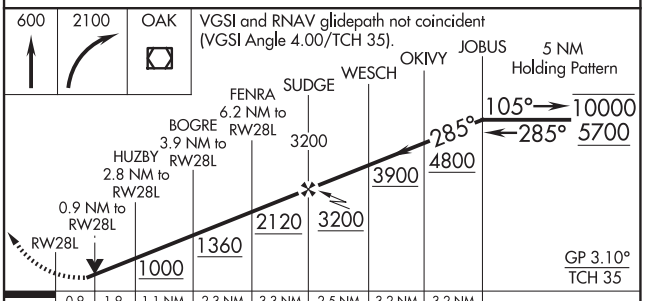
ATIS	NORCAL APP CON	HAYWARD TOWER★	GND CON	CLNC DEL	UNICOM
126.7	124.4 351.8	120.2 (CTAF) L 257.8	121.4	128.05	122.95



ELEV 52	TDZE 50



MIRL Rwy 10R-28L L
MIRL Rwy 10L-28R
REIL Rwys 10R and 28L



CATEGORY	A	B	C	D
LPV DA	348-1 298 (300-1)			
LNAV/VNAV DA	439-1⅛ 389 (400-1⅛)			
LNAV MDA	460-1 410 (500-1)		460-1⅛ 410 (500-1⅛)	
CIRCLING	540-1 488 (500-1)		540-1½ 488 (500-1½)	920-2¾ 868 (900-2¾)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

LOC/DME I-HWD	APP CRS	Rwy Ldg	5018
111.5	288°	TDZE	50
Chan 52		Apt Elev	52

LOC RWY 28L

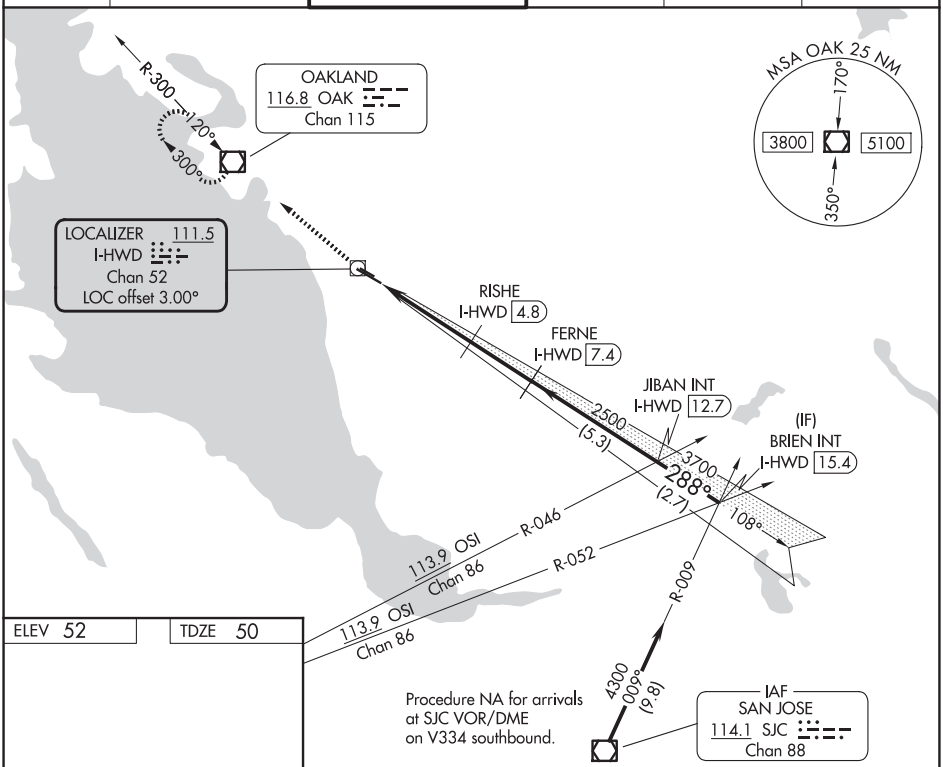
HAYWARD EXEC (HWD)

DME required.

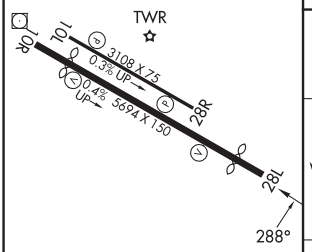
T Rwy 28L helicopter visibility reduction below ¾ SM NA. Circling Rwy 10L, 28R NA at night. Circling NA north of Rwy 10L-28R. When local altimeter setting not received, use OAK altimeter setting and increase all MDAs 40 feet and Circling visibility Cat D 1¼ SM.

MISSED APPROACH: Climb to 2100 direct OAK VOR/DME and hold.

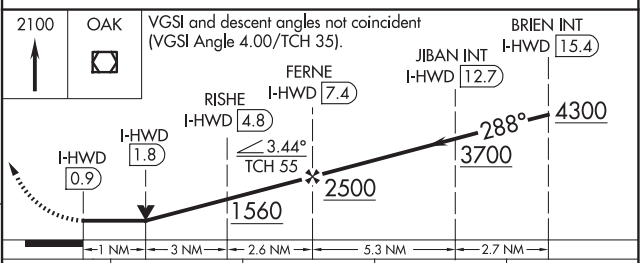
ATIS	NORCAL APP CON	HAYWARD TOWER ★	GND CON	CLNC DEL	UNICOM
126.7	124.4 351.8	120.2 (CTAF) L 257.8	121.4	128.05	122.95



ELEV 52 TDZ 50



MIRL Rwy 10R-28L L
MIRL Rwy 10L-28R
REIL Rwys 10R and 28L



CATEGORY	A	B	C	D
S-28L	500-1 450 (500-1)		500-1⅜ 450 (500-1⅜)	
CIRCLING	540-1 488 (500-1)		540-1½ 488 (500-1½)	920-2¾ 868 (900-2¾)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS	APP CRS	Rwy Idg	6350
CH 70746	127°	TDZE	215
W13A		Apt Elev	231

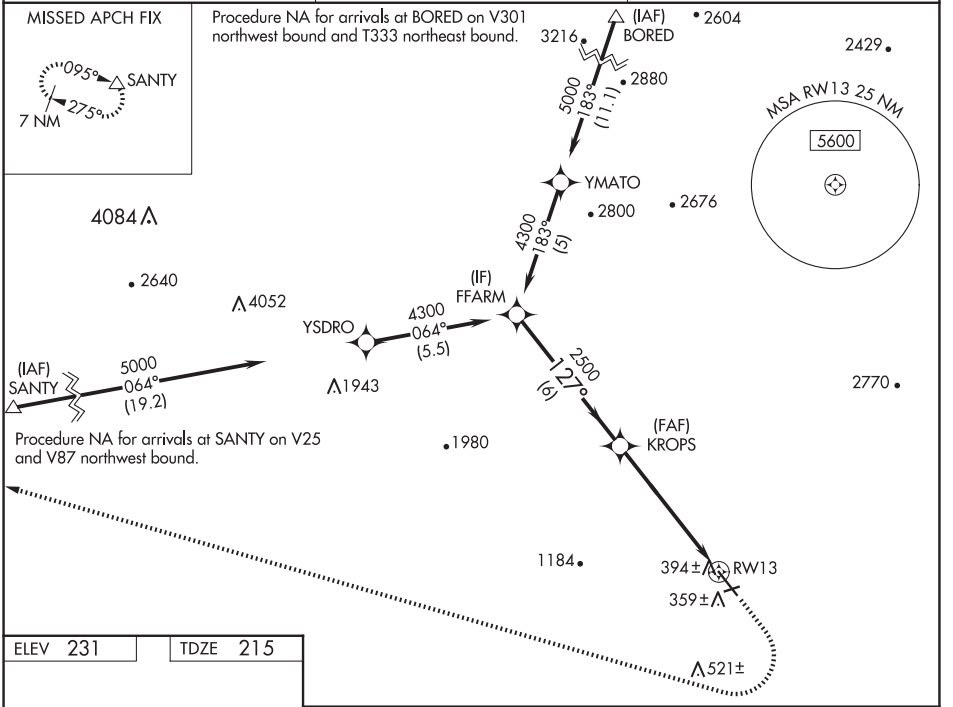
RNAV (GPS) RWY 13
HOLLISTER MUNI (CVH)

RNP APCH - GPS.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

MISSED APPROACH: (Do not exceed 200 KIAS untill SANTY)
Climb to 1100 then climbing right turn to 7000 direct SANTY and hold.
*Missed approach requires minimum climb of 245 feet per NM to 1900.

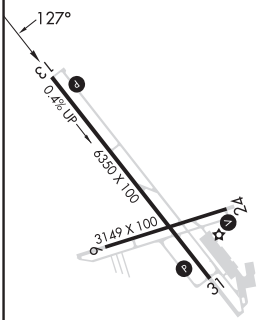
AWOS-3	NORCAL APP CON	UNICOM
120.425	124.525 348.675	123.0 (CTAF) L



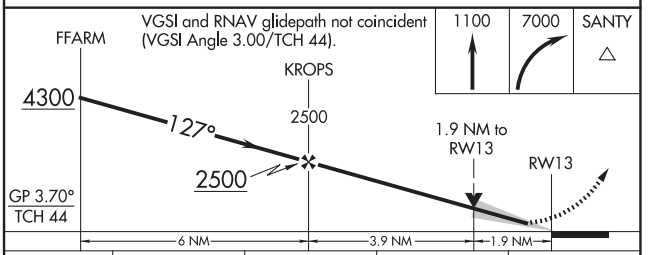
SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

ELEV 231 TDZE 215



MIRL Rwys 6-24 and 13-31 L
REIL Rwys 13, 24 and 31 L



CATEGORY	A	B	C	D
LPV DA	535-⅞ 320 (400-⅞)			NA
LNAV/VNAV DA	1055-2½ 840 (900-2½)			NA
LNAV/VNAV DA*	564-1 349 (400-1)			NA
LNAV MDA	840-1 625 (700-1)		840-1¾ 625 (700-1¾)	NA

HOLLISTER, CALIFORNIA | AL-6785 (FAA) | 24249

WAAS	APP CRS	Rwy Idg	6350
CH 93806	307°	TDZE	231
W31A		Apt Elev	231

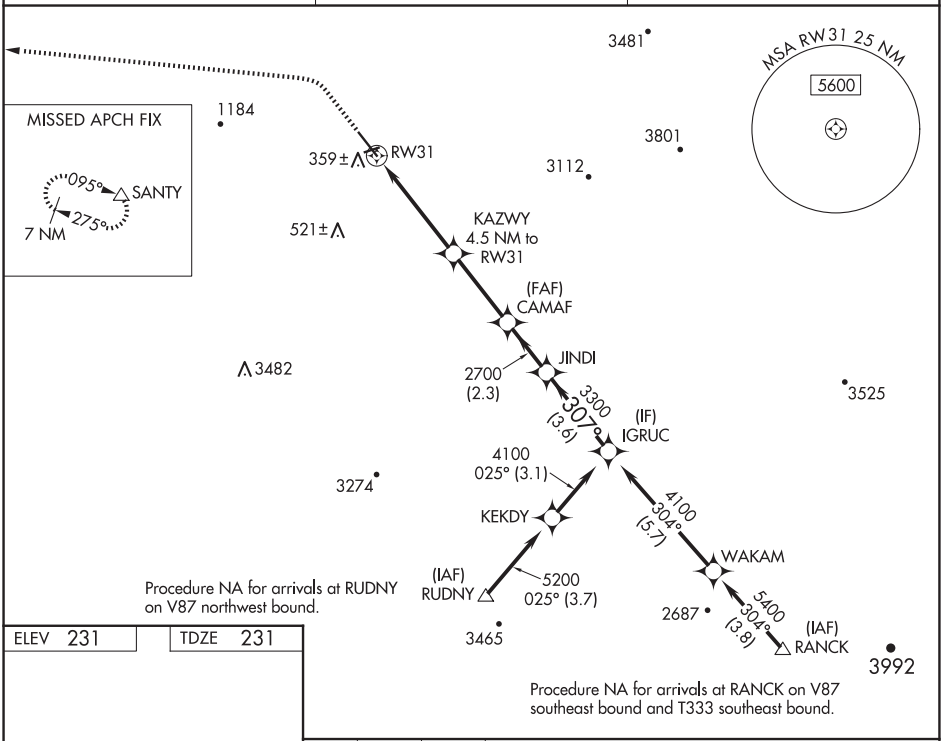
RNAV (GPS) RWY 31
HOLLISTER MUNI (CVH)

RNP APCH - GPS.

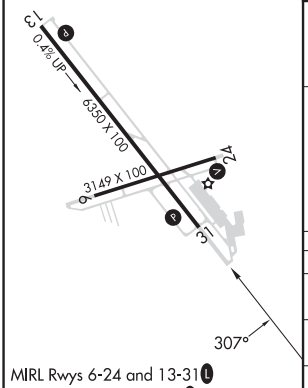
Rwy 31 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

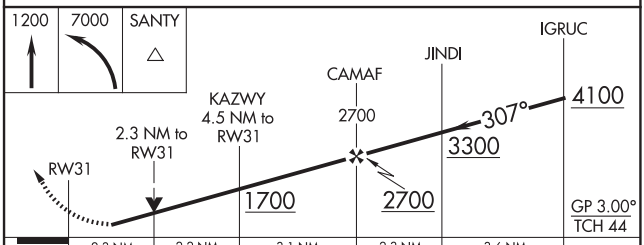
MISSED APPROACH: Climb to 1200, then climbing left turn to 7000 direct SANTY and hold, continue climb-in-hold to 7000.

AWOS-3	NORCAL APP CON	UNICOM
120.425	124.525 348.675	123.0 (CTAF) L



ELEV 231 | TDZE 231





CATEGORY	A	B	C	D
LPV DA	657-1¼ 426 (500-1¼)			NA
LNAV/VNAV DA	750-1⅜ 519 (600-1⅜)			NA
LNAV MDA	1000-1 769 (800-1)	1000-1¼ 769 (800-1¼)	1000-2½ 769 (800-2½)	NA

HOLLISTER, CALIFORNIA
Amdt 2 05SEP24

36°54'N-121°25'W

HOLLISTER MUNI (CVH)
RNAV (GPS) RWY 31

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS	Rwy Idg	3401
006°	TDZE	1690
	Apt Elev	1694

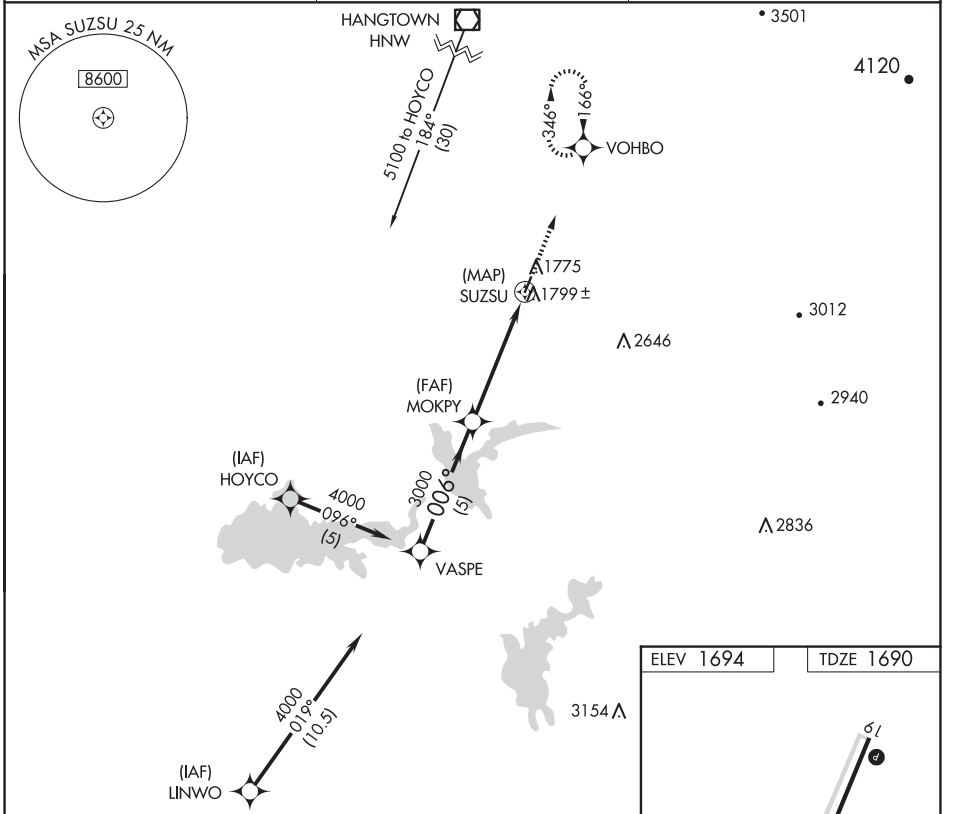
GPS RWY 1

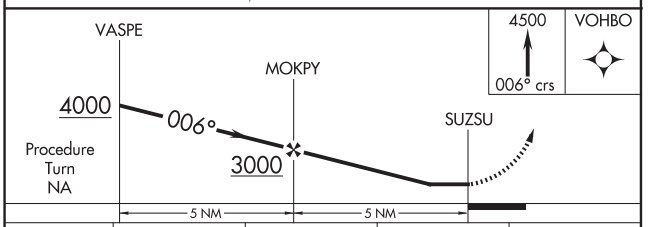
WESTOVER FLD AMADOR COUNTY (JAQ)

T NA — When local altimeter setting not received, use Sacramento Exec altimeter setting.

MISSED APPROACH: Climb to 4500 on 006° course to VOHBO and hold.

AWOS-3	NORCAL APP CON	UNICOM
121.125	125.1 363.2	123.075 (CTAF) L





CATEGORY	A	B	C	D
S-1	2060-1	370 (400-1)	NA	
SACRAMENTO EXEC ALTIMETER SETTING MINIMUMS				
S-1	2380-1	690 (700-1)	NA	

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

JACKSON, CALIFORNIA AL-9086 (FAA) 21196

VOR/DME LIN	APP CRS	Rwy Idg	3401
114.8	012°	TDZE	1690
Chan 95		Apt Elev	1694

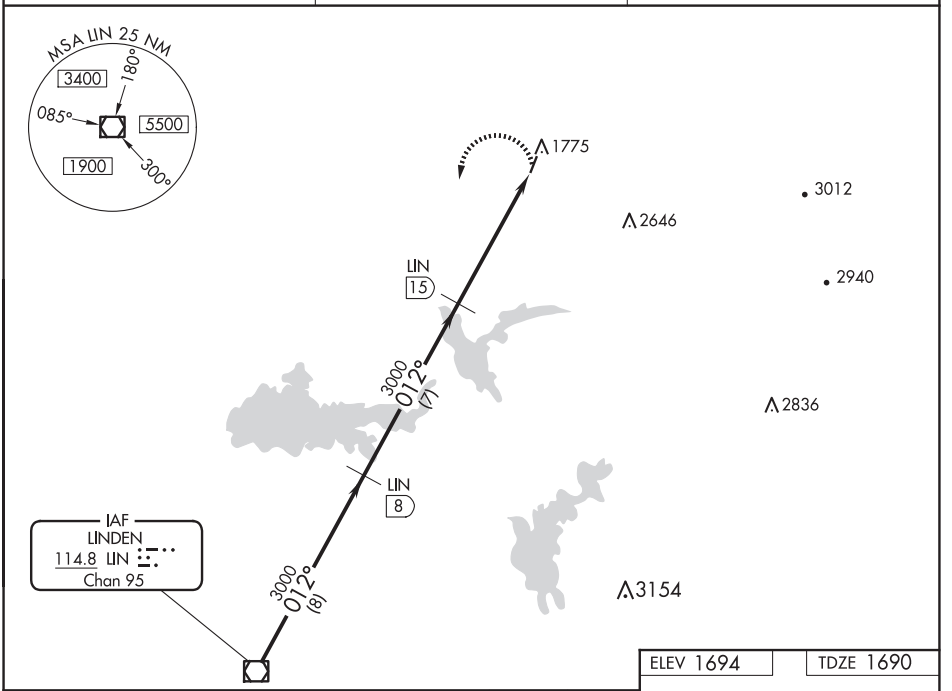
VOR/DME RWY 1

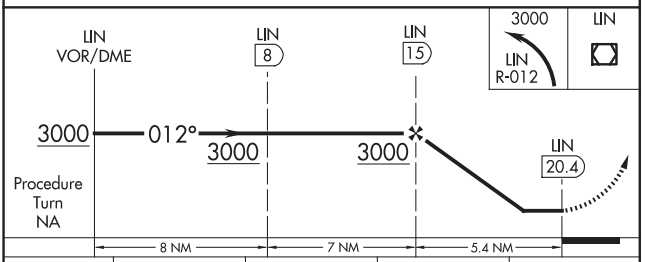
WESTOVER FLD AMADOR COUNTY (JAQ)

T NA — If local altimeter not received, use Sacramento Exec altimeter setting. Circling Rwy 19 NA at night.

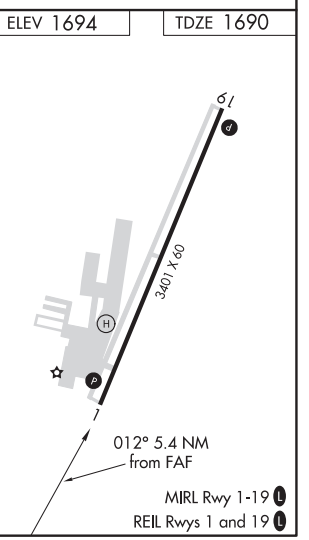
MISSED APPROACH: Climbing left turn to 3000 via LIN R-012 to LIN VOR/DME.

AWOS-3	NORCAL APP CON	UNICOM
121.125	125.1 363.2	123.075 (CTAF) L





CATEGORY	A	B	C	D
S-1	2080-1 390 (400-1)	2080-1¼ 390 (400-1¼)	NA	
CIRCLING	2200-1 506 (600-1)	2200-1¼ 506 (600-1¼)	NA	
SACRAMENTO EXEC ALTIMETER SETTING MINIMUMS				
S-1	2380-1 690 (700-1)	2380-1¼ 690 (700-1¼)	NA	
CIRCLING	2520-1 826 (900-1)	2520-1¼ 826 (900-1¼)	NA	



JACKSON, CALIFORNIA
Amdt 1D 15JUL21

38°23'N-120°48'W

WESTOVER FLD AMADOR COUNTY (JAQ)

VOR/DME RWY 1

SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS	APP CRS	Rwy Idg	4479
CH 53544	115°	TDZE	373
W11A		Apt Elev	374

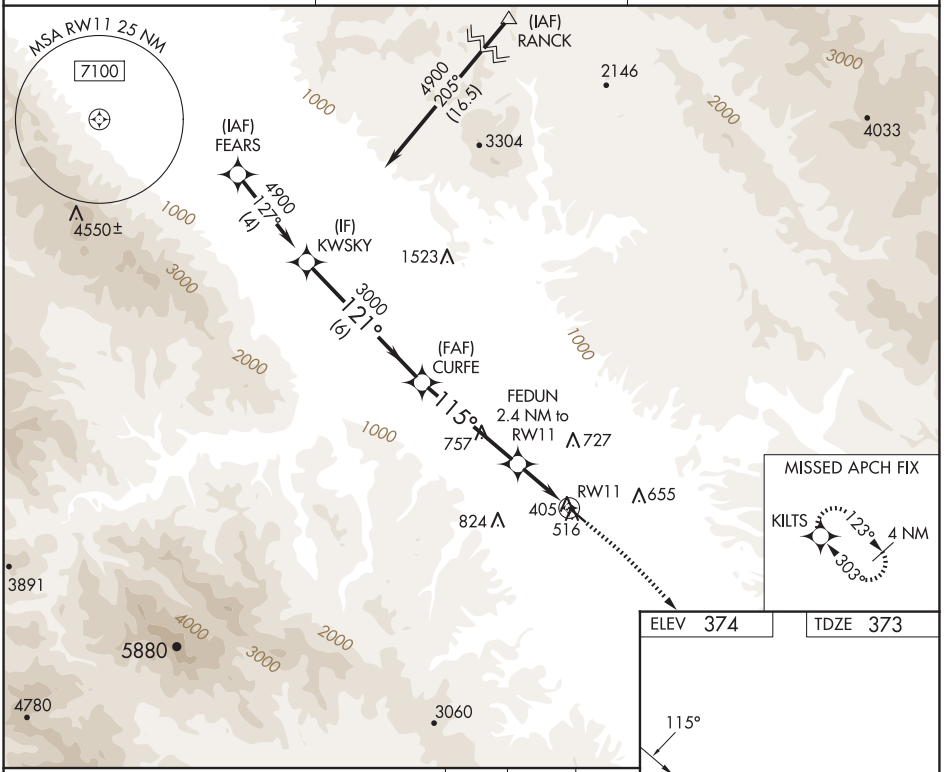
RNAV (GPS) RWY 11
MESA DEL REY (KIC)

RNP APCH - GPS.

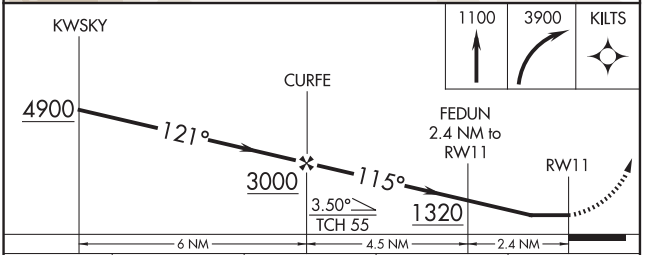
NA Rwy 11 helicopter visibility reduction below 1 SM NA. Use MRY altimeter setting; when not received, use SNS altimeter setting and increase all MDAs 20 feet.

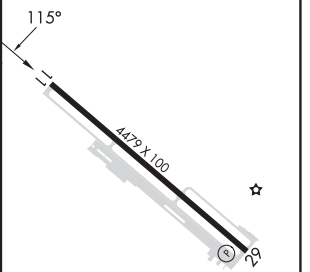
MISSED APPROACH: Climb to 1100 then climbing right turn to 3900 direct KILTS and hold.

MRY ASOS	OAKLAND CENTER	CTAF
119.25	128.7 307.0	122.9



ELEV 374	TDZE 373





CATEGORY	A	B	C	D
LP MDA	780-1	407 (500-1)	780-1 1/8	NA
			407 (500-1 1/8)	
LNAV MDA	860-1	487 (500-1)	860-1 3/8	NA
			487 (500-1 3/8)	

REIL Rwy 29
MIRL Rwy 11-29

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

KING CITY, CALIFORNIA | AL-9936 (FAA) | 24361

WAAS	APP CRS	Rwy Idg	4479
CH 99544	296°	TDZE	374
W29A		Apt Elev	374

RNAV (GPS) RWY 29

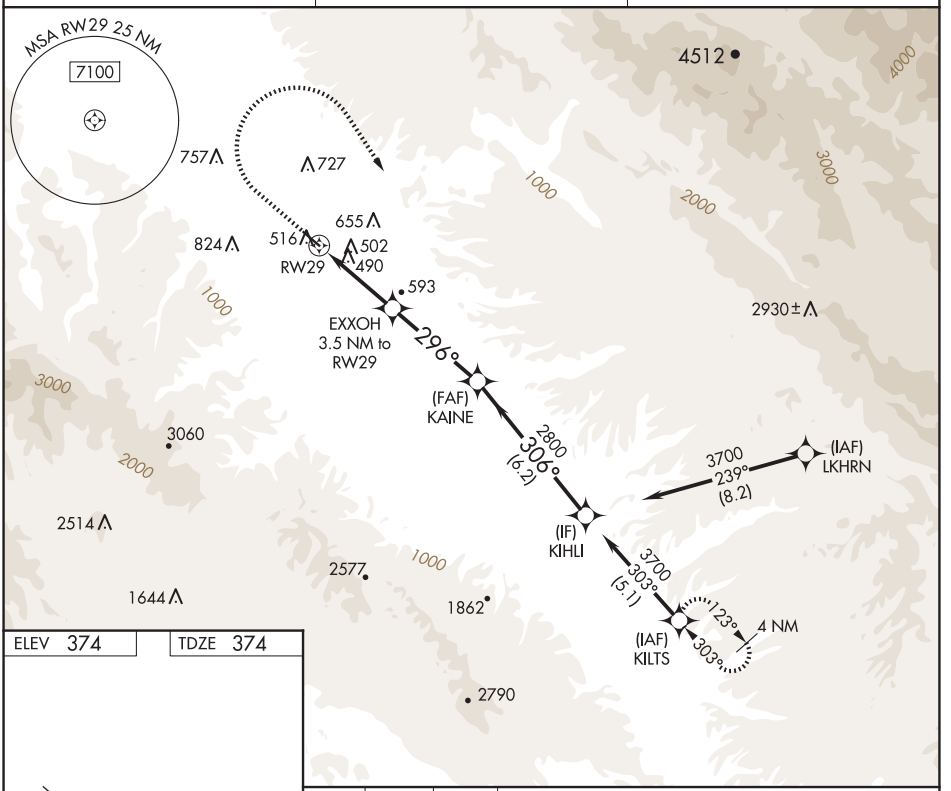
MESA DEL REY (KIC)

RNP APCH - GPS.

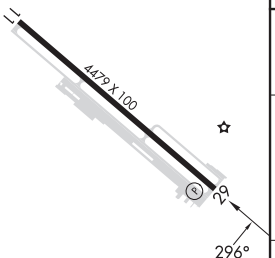
NA Use MRY altimeter setting; when not received, use SNS altimeter setting and increase all MDAs 20 feet.

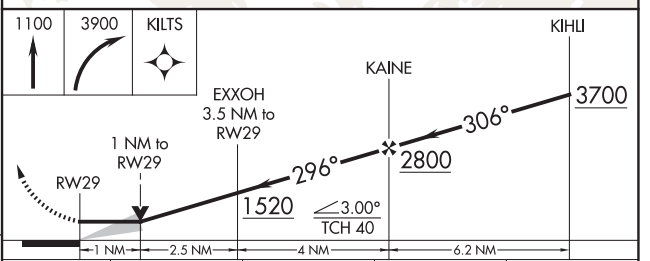
MISSED APPROACH: (Do not exceed 170K until KILTS) Climb to 1100 then climbing right turn to 3900 direct KILTS and hold.

MRY ASOS	OAKLAND CENTER	CTAF
119.25	128.7 307.0	122.9



ELEV 374 | TDZE 374





CATEGORY	A	B	C	D
LP MDA	840-1	466 (500-1)	840-1⅜ 466 (500-1⅜)	NA
LNAV MDA	880-1	506 (600-1)	880-1⅜ 506 (600-1⅜)	NA

REIL Rwy 29
MIRL Rwy 11-29

KING CITY, CALIFORNIA
Orig 26DEC24

36°14′N-121°07′W

MESA DEL REY (KIC)

RNAV (GPS) RWY 29

SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS)-A

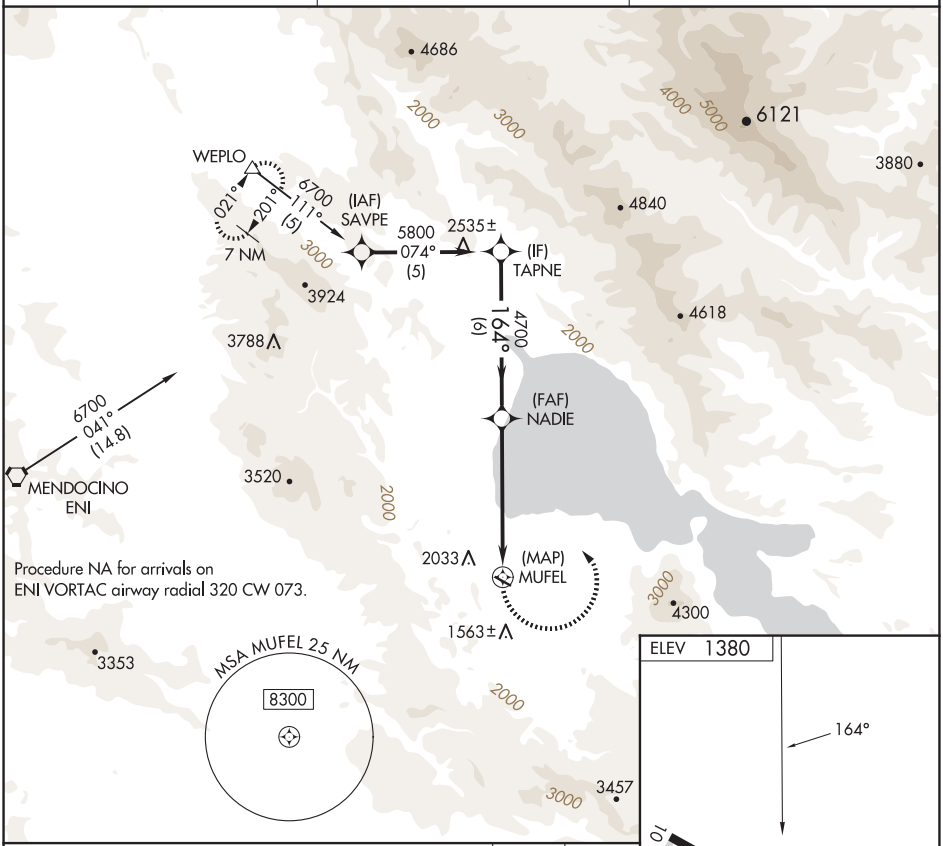
LAMPSON FLD (102)

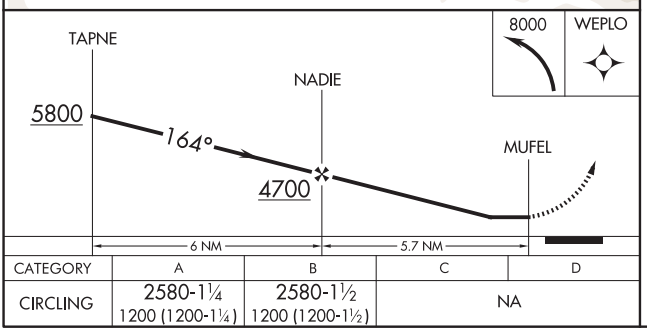
APP CRS	Rwy Idg	N/A
164°	TDZE	N/A
	Apt Elev	1380

Circling NA south of Rwy 10-28. DME/DME RNP-0.3 NA. Procedure NA at night. When local altimeter setting not received, use Ukiah altimeter setting and increase all MDA 560 feet.

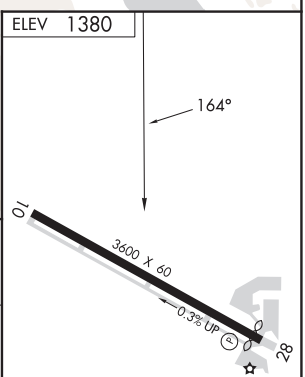
MISSED APPROACH: Climbing left turn to 8000 direct WEPLO and hold.

AWOS-3	OAKLAND CENTER	UNICOM
118.35	127.8 353.5	122.8 (CTAF) L





CATEGORY	A	B	C	D
CIRCLING	2580-1¼ 1200 (1200-1¼)	2580-1½ 1200 (1200-1½)	NA	



MIRL Rwy 10-28 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(LAKPT3.ENI) 21336

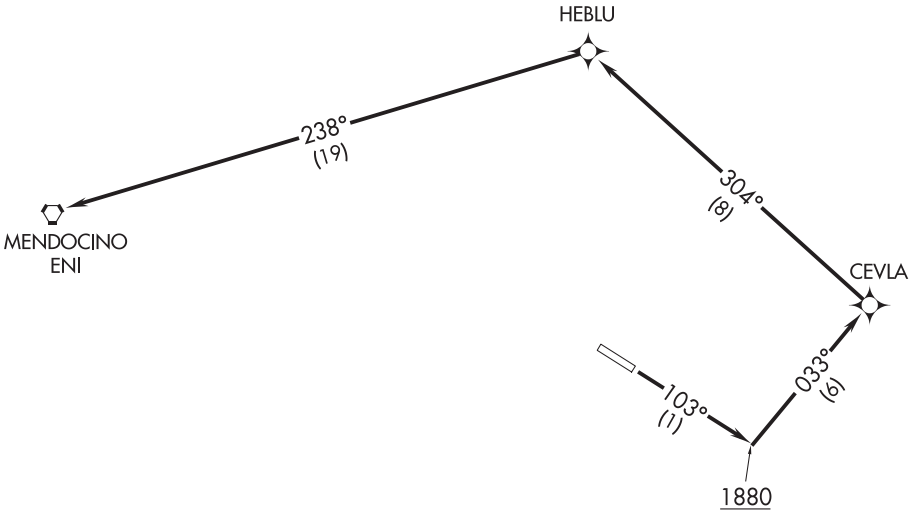
LAKEPORT THREE DEPARTURE (RNAV)

AL-6939 (FAA)

LAMPSON FLD (102)
LAKEPORT, CALIFORNIA

OAKLAND CENTER
127.8 353.5

TOP ALTITUDE: 6000



NOTE: GPS required.

NOTE: RNAV 1.

NOTE: Takeoff Rwy 10: Do not exceed 175K until passing HEBLU.

TAKEOFF MINIMUMS
Rwy 10: Standard with minimum climb of 496′ per NM to 4500.
Rwy 28: NA- Rapidly rising terrain.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 10: Climb heading 103° to 1880, then climb on 033° course to CEVLA, then via 304° track to HEBLU, then via 238° track to ENI VORTAC, thence . . . .

. . . . via assigned route, expect clearance to filed altitude 10 minutes after departure.

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

LEMOORE, CALIFORNIA

RNAV (GPS) RWY 14L

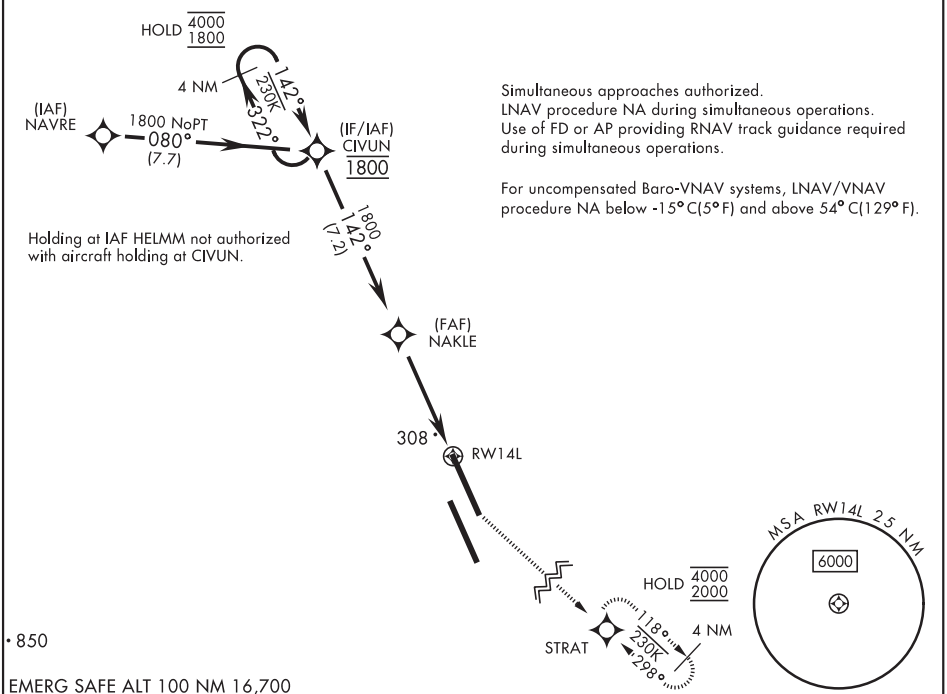
WAAS	APCH CRS	Rwy Idg 13,502
Chan 70209	142°	TDZE 219
W14A		Arpt Elev 228

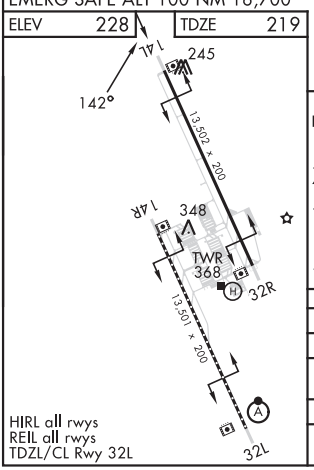
[USN] LEMOORE NAS (REEVES FIELD) (KNLC)

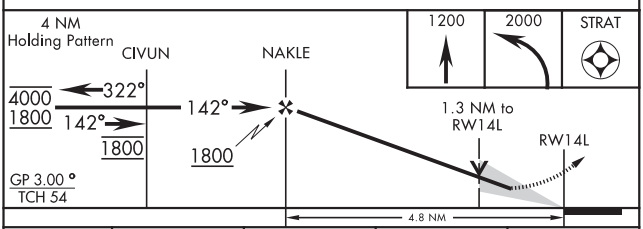
RNP APCH-GPS

MISSED APPROACH: Climb to 1200, then climbing left turn to 2000 direct STRAT and hold.

ATIS ★	APP CON	TOWER ★	GND CON	CLNC DEL	ASR/PAR
121.575 327.15	124.1 269.025 (N) 118.15 269.025 (S)	128.3 340.2	121.65 305.2	124.1 371.9	







CATEGORY	A	B	C	D
LPV DA	419-¾	200	(200-¾)	
LNAV/VNAV DA	582-1	363	(400-1)	
LNAV MDA	680-1 461 (500-1)		680-1⅜ 461 (500-1⅜)	
CIRCLING	680-1 452 (500-1)		680-1½ 452 (500-1½)	780-2 552 (600-2)

LEMOORE, CALIFORNIA 36°20'N-119°57'W LEMOORE NAS (REEVES FIELD) (KNLC)

Amdt 7 12JUN25

RNAV (GPS) RWY 14L

SW-2, 07 AUG 2025 to 02 OCT 2025

LEMOORE, CALIFORNIA

RNAV (GPS) RWY 14R

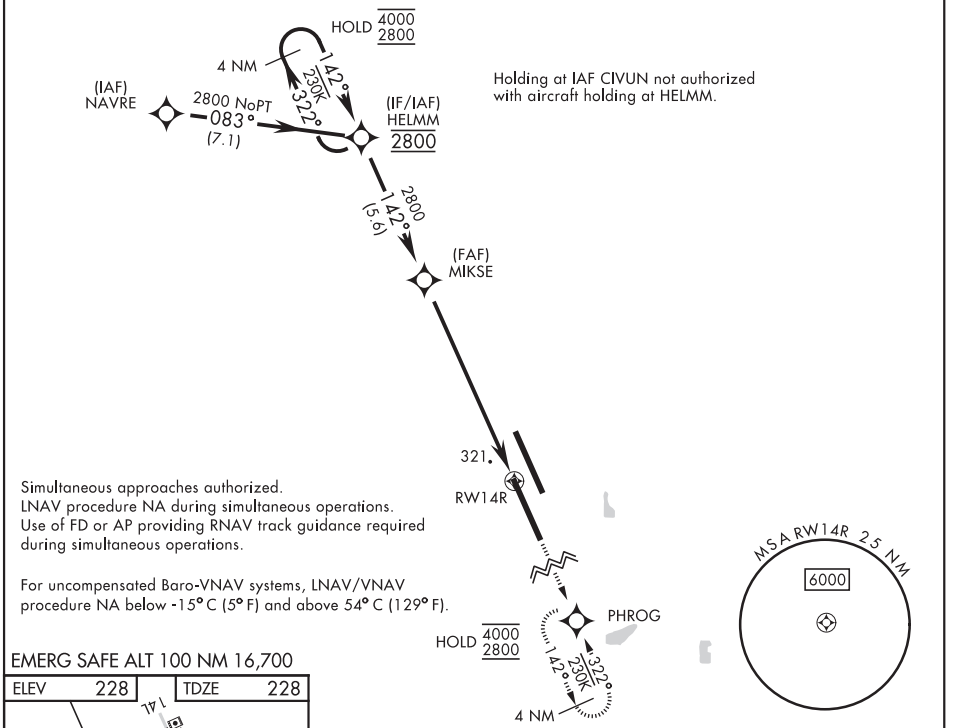
WAAS	APCH CRS	Rwy Idg 13,501
Chan 75978	142°	TDZE 228
W14B		Arpt Elev 228

[USN] LEMOORE NAS (REEVES FIELD) (KNLC)

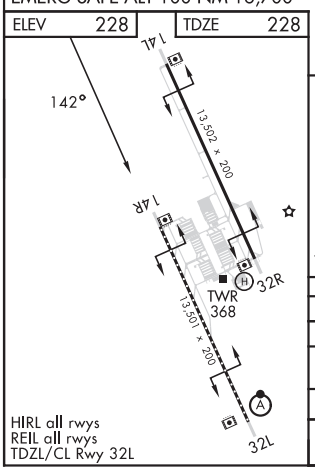
RNP APCH - GPS

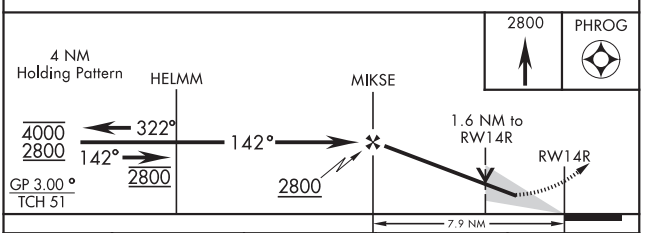
MISSED APPROACH: Climb to 2800 direct PHROG and hold.

ATIS ★	APP CON	TOWER ★	GND CON	CLNC DEL	ASR/PAR
121.575 327.15	124.1 269.025 (N) 118.15 269.025 (S)	128.3 360.2	121.65 305.2	124.1 371.9	



EMERG SAFE ALT 100 NM 16,700





CATEGORY	A	B	C	D
LPV DA	428-¾ 200 (200-¾)			
LNAV/VNAV DA	594-1 366 (400-1)			
LNAV MDA	780-1 552 (600-1)		780-1⅝ 552 (600-1⅝)	
CIRCLING	780-1 552 (600-1)		780-1⅝ 552 (600-1⅝)	780-2 552 (600-2)

LEMOORE, CALIFORNIA 36°20'N-119°57'W LEMOORE NAS (REEVES FIELD) (KNLC)

Amdt 8 12JUN25

RNAV (GPS) RWY 14R

SW-2, 07 AUG 2025 to 02 OCT 2025

LEMOORE, CALIFORNIA

RNAV (GPS) RWY 32L

WAAS	APCH CRS	Rwy Idg 13,501	[USN]	LEMOORE NAS (REEVES FIELD) (KNLC)
Chan 50085 W32A	322°	TDZE 227 Arpt Elev 228		

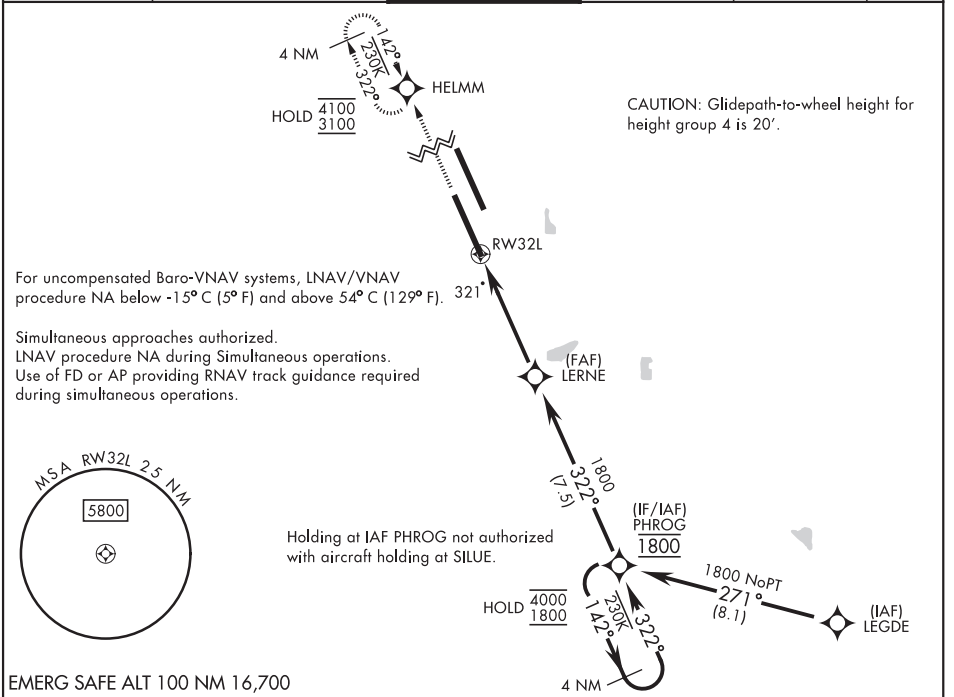
RNP APCH - GPS

▼ * When ALS inop, increase vis to ¾ mile.
** When ALS inop, increase vis to 1 mile.
*** When ALS inop, increase CAT AB vis to 1 mile, CAT CD vis to 1⅜ miles.

ALSF-2

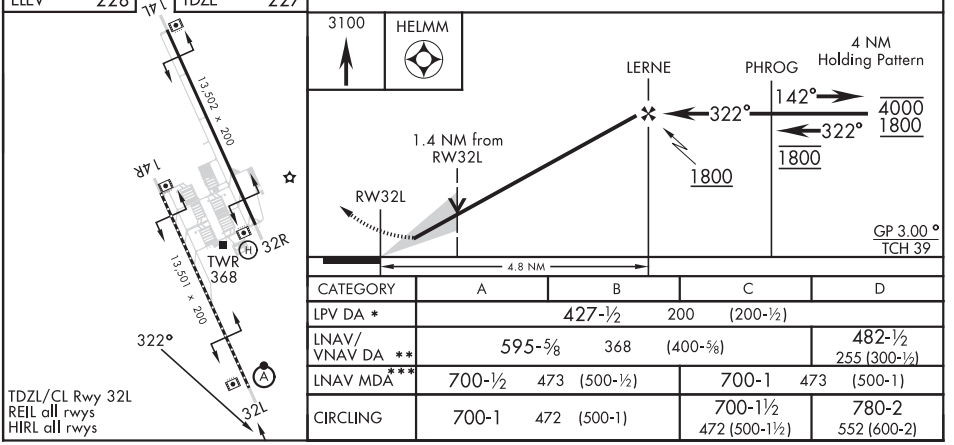
MISSED APPROACH: Climb to 3100 direct HELMM and hold.

ATIS ★	APP CON	TOWER ★	GND CON	CLNC DEL	ASR/PAR
121.575 327.15	124.1 269.025 (N) 118.15 269.025 (S)	128.3 340.2	121.65 305.2	124.1 371.9	



EMERG SAFE ALT 100 NM 16,700

ELEV 228	TDZE 227



CATEGORY	A	B	C	D
LPV DA *	427-½ 200 (200-½)			
LNAV/VNAV DA **	595-⅝ 368 (400-⅝)			482-½ 255 (300-½)
LNAV MDA ***	700-½ 473 (500-½)		700-1 473 (500-1)	
CIRCLING	700-1 472 (500-1)		700-1½ 472 (500-1½)	780-2 552 (600-2)

LEMOORE, CALIFORNIA 36°20'N-119°57'W LEMOORE NAS (REEVES FIELD) (KNLC)

Amdt 7 12JUN25

RNAV (GPS) RWY 32L

SW-2, 07 AUG 2025 to 02 OCT 2025

25163

LEMOORE, CALIFORNIA

RNAV (GPS) RWY 32R

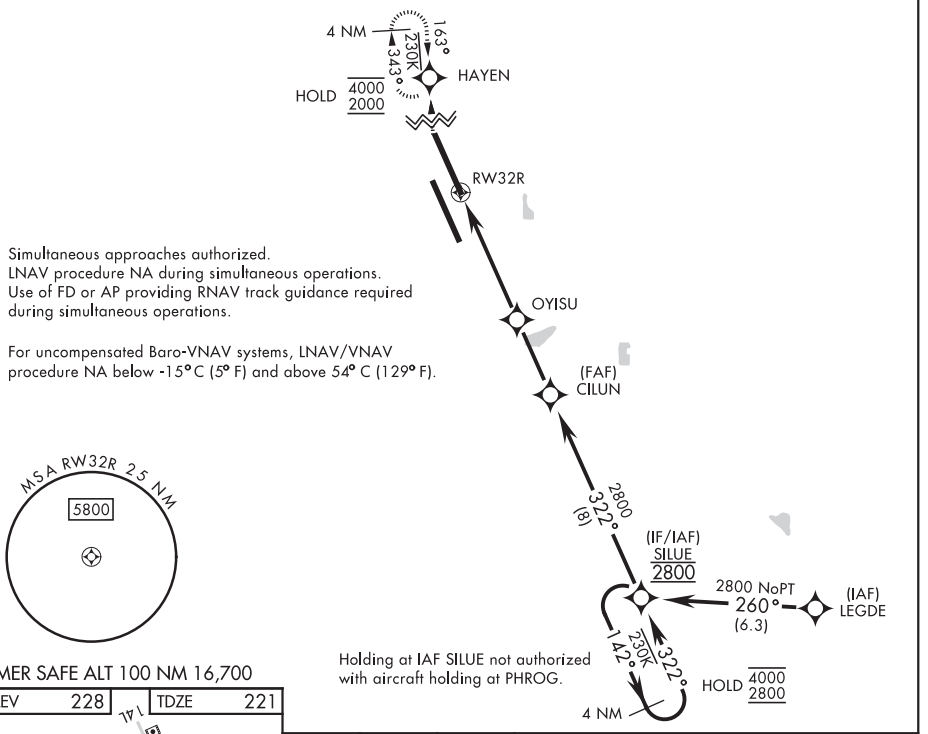
WAAS	APCH CRS	Rwy Idg 13,502
Chan 60335	322°	TDZE 221
W32B		Arpt Elev 228

[USN] LEMOORE NAS (REEVES FIELD) (KNLC)

RNP APCH - GPS

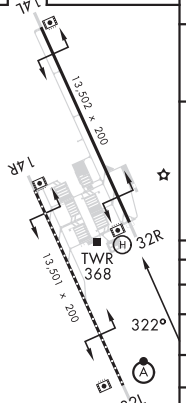
MISSED APPROACH: Climb to 1200, then climbing right turn to 2000 direct HAYEN and hold.

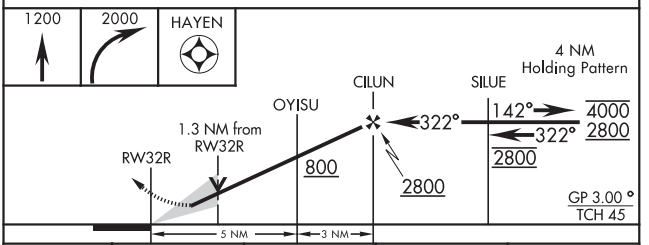
ATIS★	APP CON	TOWER★	GND CON	CLNC DEL	ASR/PAR
121.575 327.15	124.1 269.025 (N) 118.15 269.025 (S)	128.3 360.2	121.65 305.2	124.1 371.9	



EMER SAFE ALT 100 NM 16,700

ELEV 228	TDZE 221





CATEGORY	A	B	C	D
LPV DA	421-¾	200 (200-¾)		
LNAV/VNAV DA	587-1	366 (400-1)		
LNAV MDA	680-1 459 (500-1)		680-1⅜ 459 (500-1⅜)	
CIRCLING	680-1 452 (500-1)		680-1½ 452 (500-1½)	780-2 552 (600-2)

HIRL all rwys
REIL all rwys
TDZL/CL Rwy 32L

LEMOORE, CALIFORNIA 36° 20'N-119° 57'W LEMOORE NAS (REEVES FIELD) (KNLC)

Amdt 7 12JUN25

RNAV (GPS) RWY 32R

SW-2, 07 AUG 2025 to 02 OCT 2025

LEMOORE, CALIFORNIA

TACAN Y RWY 14L

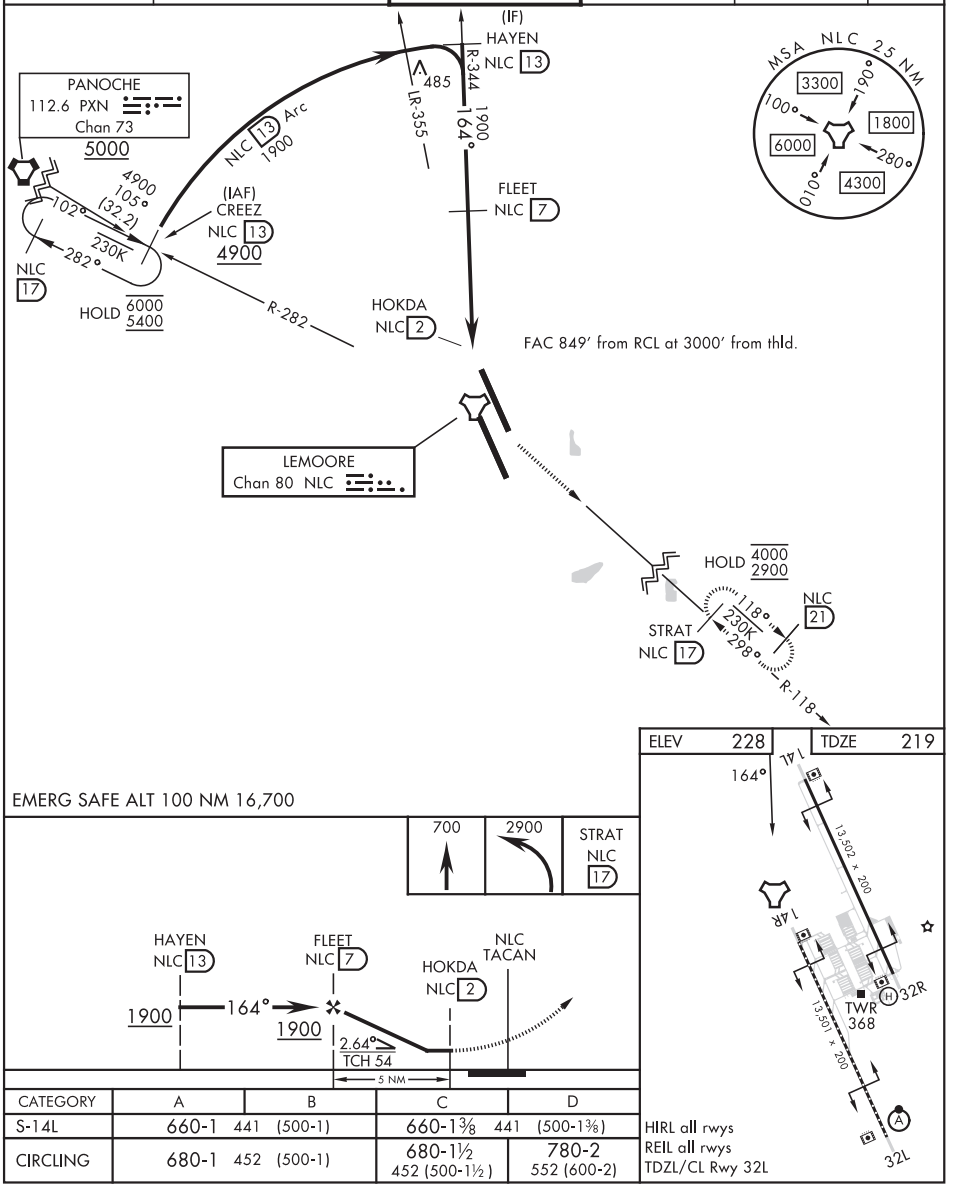
TACAN	APCH CRS	Rwy Idg	TDZE	Arpt Elev
NLC Chan 80	164°	13,502	219	228

[USN]

LEMOORE NAS (REEVES FIELD) (KNLC)

MISSED APPROACH: Climb to 700 then climbing left turn to 2900 direct STRAT and hold.

ATIS ★	APP CON	TOWER ★	GND CON	CLNC DEL	ASR/PAR
121.575 327.15	124.1 269.025 (N) 118.15 269.025 (S)	128.3 340.2	121.65 305.2	124.1 371.9	



EMERG SAFE ALT 100 NM 16,700

CATEGORY	A	B	C	D
S-14L	660-1 441 (500-1)		660-1⅜ 441 (500-1⅜)	
CIRCLING	680-1 452 (500-1)		680-1½ 452 (500-1½)	780-2 552 (600-2)

HIRL all rwys
REIL all rwys
TDZL/CL Rwy 32L

LEMOORE, CALIFORNIA

Amdt 7 12JUN25

36°20'N-119°57'W

LEMOORE NAS (REEVES FIELD) (KNLC)

TACAN Y RWY 14L

SW-2, 07 AUG 2025 to 02 OCT 2025

LEMOORE, CALIFORNIA

TACAN Y RWY 14R

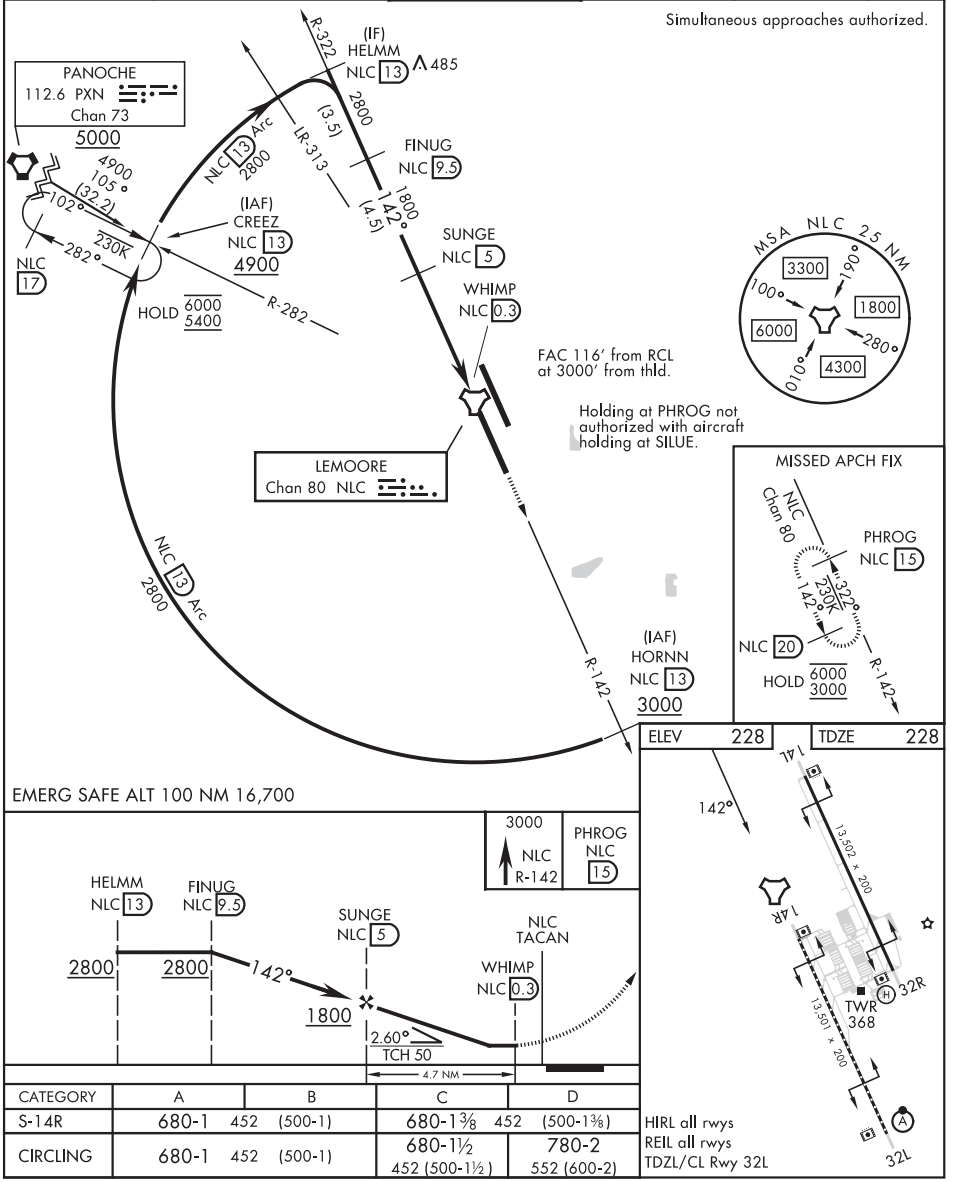
LEMOORE NAS (REEVES FIELD) (KNLC)

TACAN	APCH CRS	Rwy Idg / TDZE / Arpt Elev	[USN]
NLC Chan 80	142°	13,501 / 228 / 228	

MISSED APPROACH: Climb to 3000 via R-142 to PHROG and hold.

ATIS★	APP CON	TOWER★	GND CON	CLNC DEL	ASR/PAR
121.575 327.15	124.1 269.025 (N) 118.15 269.025 (S)	128.3 360.2	121.65 305.2	124.1 371.9	

Simultaneous approaches authorized.



CATEGORY	A	B	C	D
S-14R	680-1 452 (500-1)		680-1⅜ 452 (500-1⅜)	
CIRCLING	680-1 452 (500-1)		680-1½ 452 (500-1½)	780-2 552 (600-2)

HIRL all rwys
REIL all rwys
TDZL/CL Rwy 32L

36°20'N-119°57'W

SW-2, 07 AUG 2025 to 02 OCT 2025

LEMOORE, CALIFORNIA

TACAN Y RWY 32L

TACAN	APCH CRS	Rwy Idg	TDZE	Arpt Elev
NLC Chan 80	322°	13,501	227	228

[USN]

LEMOORE NAS (REEVES FIELD) (KNLC)

* When ALS inop, increase vis to 1 mile.

ALSF-2

MISSED APPROACH: Climb to 2900 via NLC R-322 to HELMM and hold.

ATIS ★	APP CON	TOWER ★	GND CON	CLNC DEL	ASR/PAR
121.575 327.15	124.1 269.025 (N) 118.15 269.025 (S)	128.3 340.2	121.65 305.2	124.1 371.9	

Simultaneous approaches authorized.

Holding at HELMM not authorized with aircraft holding at CIVUN.

NLC 17 142° 230K 322°

HELMM NLC 13

HOLD 6000 2900

LEMOORE Chan 80 NLC

SUZIQ NLC 3.4

330°

OWLES NLC 5

PHARO NLC 7

1800 (6) 322°

(IF) HORNN NLC 13

3000 (7)

(IAF) TULAR NLC 20

HOLD FL200 3000 230K 142° 3000 322°

(IAF) HAWKK NLC 30 11,000

NLC 26

11,000 026° (19.2)

R-142

11,000 295° (38.7)

(AVE transition requires VOR)

AVENAL 117.1 AVE Chan 118

SHAFTER 115.4 EHF Chan 101

MSA NLC 2.5 NM

3300 190° 100° 1800 6000 280° 010° 4300

EMERG SAFE ALT 100 NM 16,700

ELEV 228 | TDZE 227

14L 13,502 × 200

14R

32R TWR 368

13,501 × 200

322°

32L

HIRL all rwys
REIL all rwys
TDZL/CL Rwy 32L

2900 NLC R-322 | HELMM NLC 13

HORNN NLC 13 3000

PHARO NLC 7 322°

NLC TACAN

SUZIQ NLC 3.4

OWLES NLC 5

3.38° TCH 50 1800 1080

1.6 NM | 2 NM

CATEGORY	A	B	C	D
S-32L *	580-½ 353 (400-½)		580-⅝ 353 (400-⅝)	
CIRCLING	680-1 452 (500-1)		680-1½ 452 (500-1½)	780-2 552 (600-2)

LEMOORE, CALIFORNIA
Amdt 9 12JUN25

36°20'N-119°57'W

LEMOORE NAS (REEVES FIELD) (KNLC)

TACAN Y RWY 32L

SW-2, 07 AUG 2025 to 02 OCT 2025

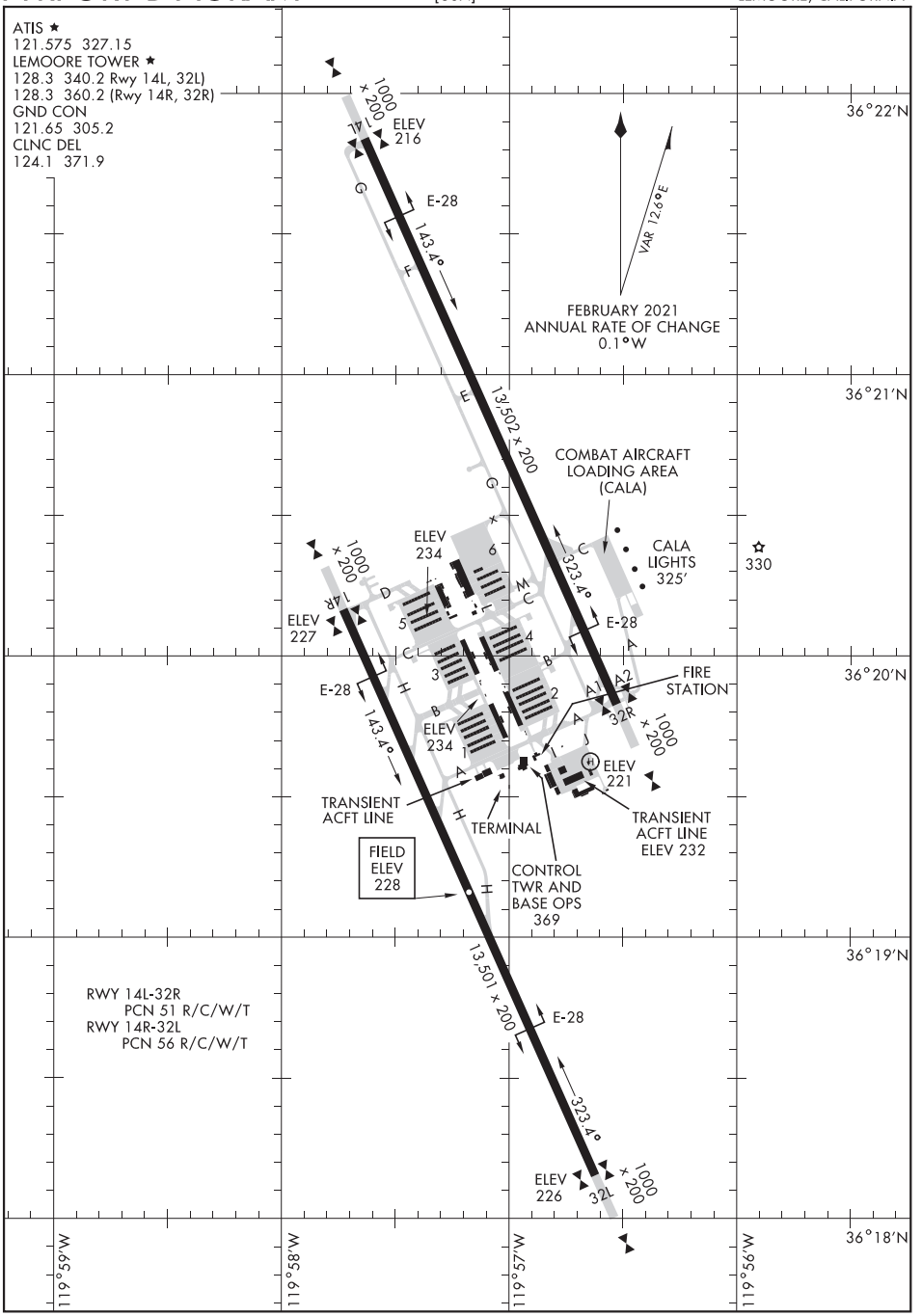
24361

AIRPORT DIAGRAM

LEMOORE NAS (REEVES FIELD) (KNLC)

[USN]

LEMOORE, CALIFORNIA



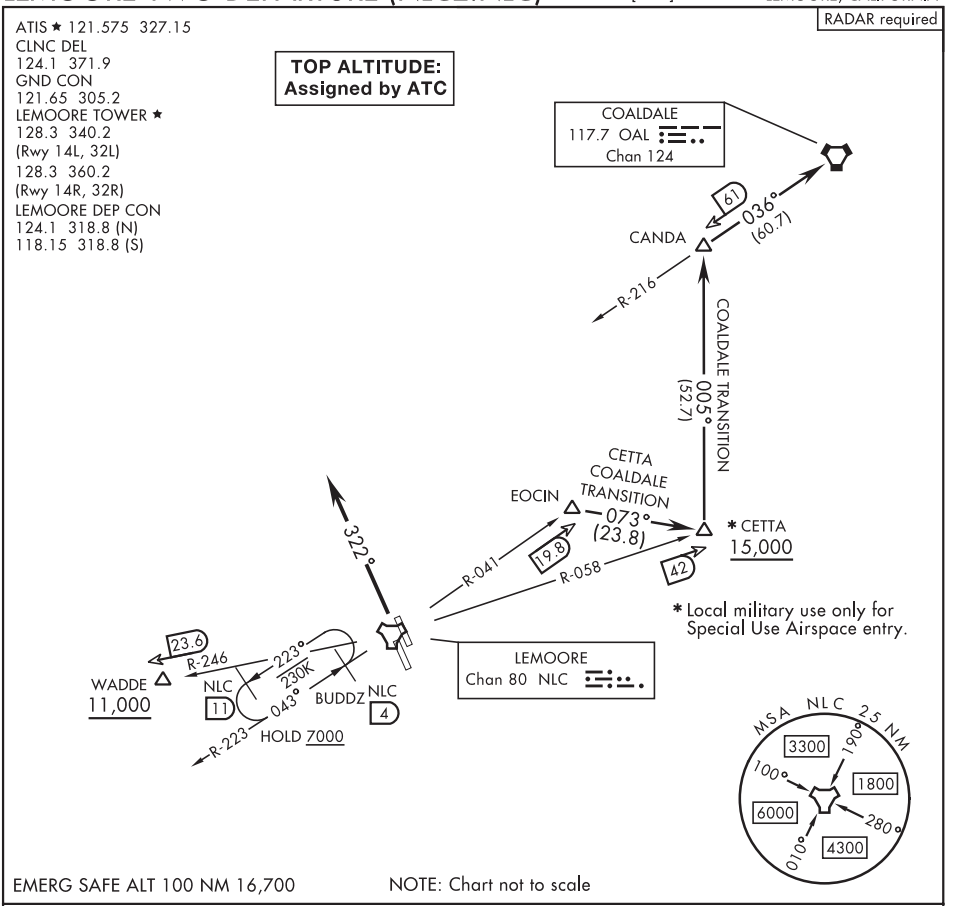
AIRPORT DIAGRAM

LEMOORE, CALIFORNIA

LEMOORE NAS (REEVES FIELD) (KNLC)

SW-2, 07 AUG 2025 to 02 OCT 2025

LEMOORE-TWO DEPARTURE (NLC2.NLC)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 32L/32R: Climb to 2000 via hdg 322° then RADAR vectors to join assigned transition or route.

CETTA TRANSITION (NLC2.CETTA): From EOCIN direct CETTA then as filed. Cross CETTA at or above 15,000.

COALDALE TRANSITION (NLC2.OAL): From EOCIN direct CETTA, direct CANDA, direct COALDALE VORTAC. Cross CETTA at or above 15,000.

WADDE TRANSITION (NLC2.WADDE): From WADDE then as filed. Cross WADDE at or above 11,000.

LOST COMMUNICATIONS: If no transmissions are received within 8 DME of NLC TACAN, fly departure heading to intercept NLC 10 DME arc, arc to respective departure radial then via departure radial to assigned departure fix. Then via assigned route. Once established on departure radial climb to filed altitude.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

25163

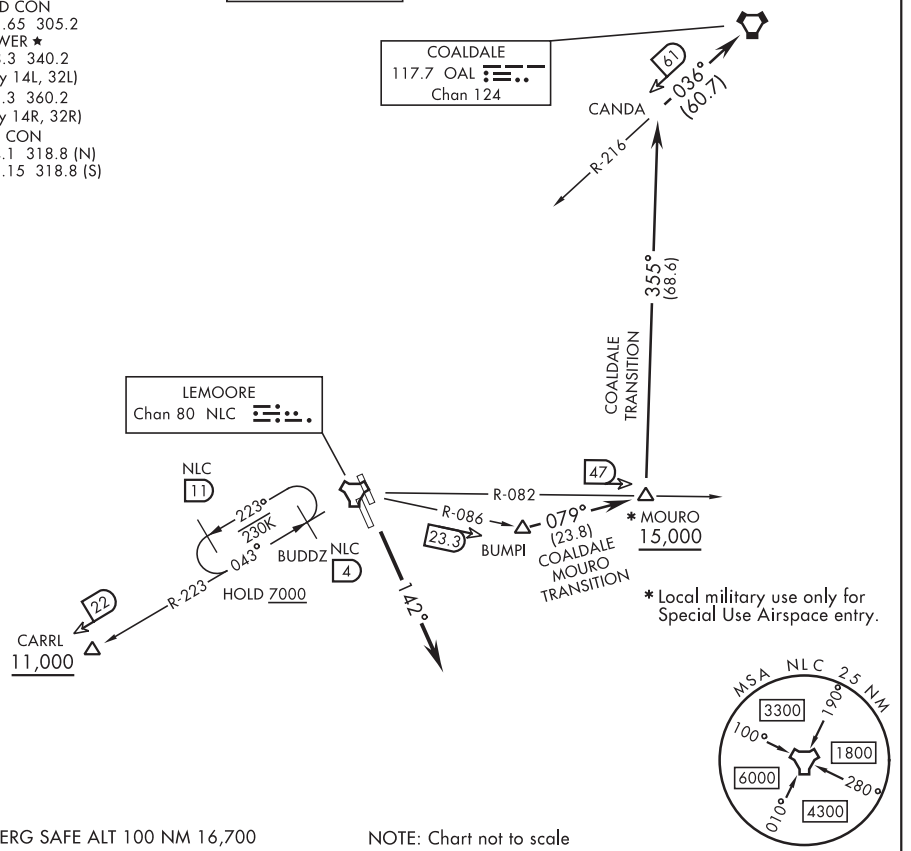
LEMOORE NAS (REEVES FIELD) (KNLC)
[USN]
LEMOORE, CALIFORNIA

REEVES-FIVE DEPARTURE (REVES5.NLC)

RADAR required

ATIS ★ 121.575 327.15
CLNC DEL
124.1 371.9
GND CON
121.65 305.2
TOWER ★
128.3 340.2
(Rwy 14L, 32L)
128.3 360.2
(Rwy 14R, 32R)
DEP CON
124.1 318.8 (N)
118.15 318.8 (S)

TOP ALTITUDE: Assigned by ATC



EMERG SAFE ALT 100 NM 16,700

NOTE: Chart not to scale

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14L/14R: Climb to 2000 via hdg 142° then radar vectors to join assigned transition or route.

CARRL TRANSITION (REVES5.CARRL): From CARRL thence as filed. Cross CARRL at or above 11,000.

COALDALE TRANSITION (REVES5.OAL): From BUMPI direct MOURO, direct CANDA, direct COALDALE VORTAC. Cross MOURO at or above 15,000.

MOURO TRANSITION (REVES5.MOURO): From BUMPI direct MOURO then as filed.

LOST COMMUNICATIONS: If no transmissions are received within 8 DME of NLC TACAN, fly departure heading to intercept NLC 10 DME arc, arc to respective departure radial then via departure radial to assigned departure fix. Then via assigned route. Once estalished on departure radial climb to filed altitude.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

LOC/DME I-LHM	APP CRS	Rwy Idg	6001
108.75	151°	TDZE	121
Chan 24 (Y)		Apt Elev	121

ILS or LOC RWY 15

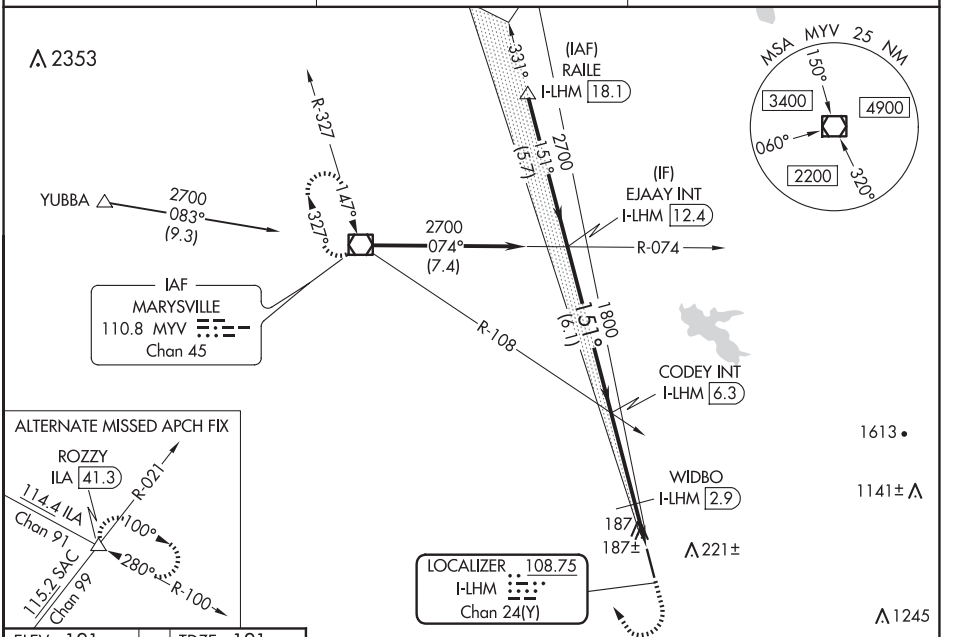
LINCOLN RGNL/KARL HARDER FLD (LHM)

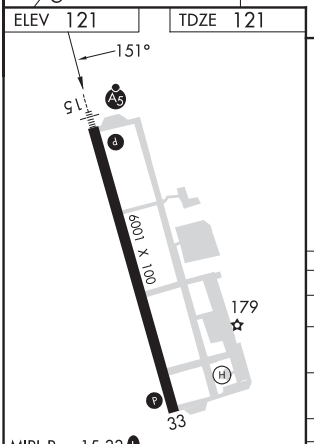
When local altimeter setting not received, use Beale AFB altimeter setting and increase DA to 361 feet and all MDAs 40 feet; increase S-LOC 15 Cat C/D and Circling Cat D visibility ¼ SM. VDP NA with Beale AFB altimeter setting. WIDBO fix minimums: for inop ALS, increase S-LOC 15 Cat D visibility to 1 mile.

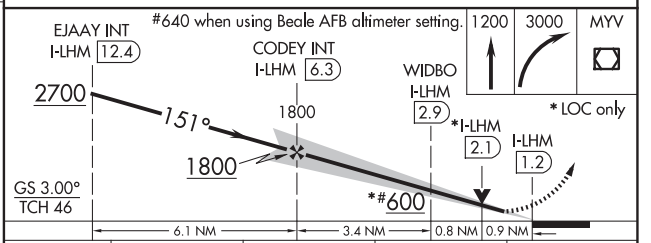
MALSR

MISSED APPROACH: Climb to 1200 then climbing right turn to 3000 direct MYV VOR/DME and hold.

AWOS-3	NORCAL APP CON	UNICOM
124.25	125.4 259.1	123.0 (CTAF)







CATEGORY	A	B	C	D
S-ILS 15	321-½ 200 (200-½)			
S-LOC 15	600-½ 479 (500-½)		600-¾ 479 (500-¾)	600-1 479 (500-1)
CIRCLING	600-1 479 (500-1)		600-1½ 479 (500-1½)	760-2 639 (700-2)
WIDBO FIX MINIMUMS				
S-LOC 15	460-½ 339 (400-½)			460-¾ 339 (400-¾)
CIRCLING	520-1 399 (400-1)	580-1 459 (500-1)	600-1½ 479 (500-1½)	760-2 639 (700-2)

FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

LINCOLN, CALIFORNIA AL-5850 (FAA) 21140

WAAS	APP CRS	Rwy Idg	6001
CH 82618	151°	TDZE	121
W15A		Apt Elev	121

RNAV (GPS) RWY 15

LINCOLN RGNL/KARL HARDER FLD (LHM)

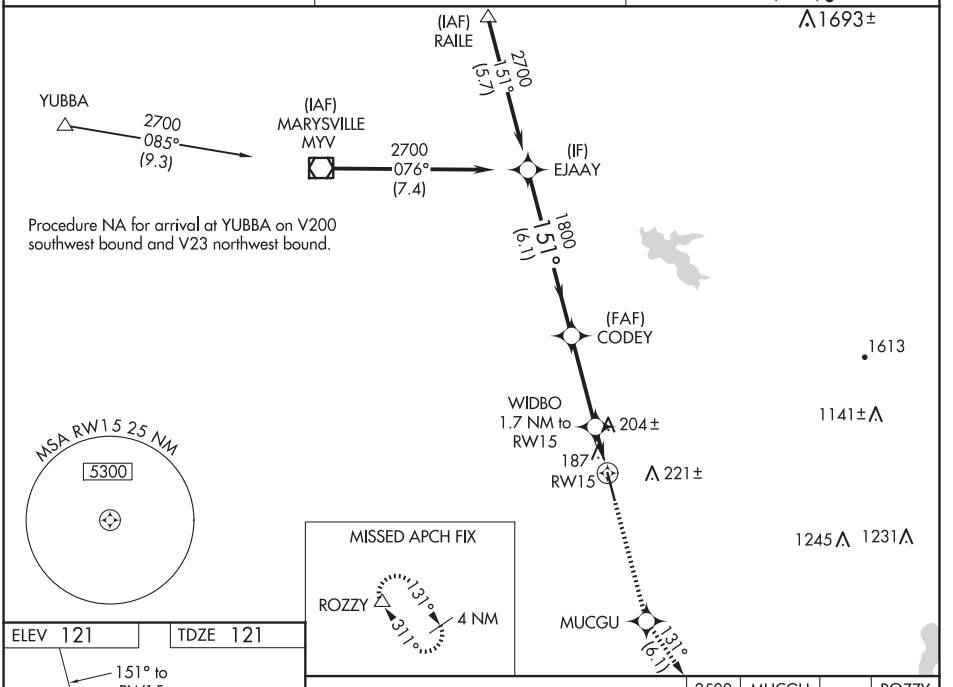
RNP APCH.

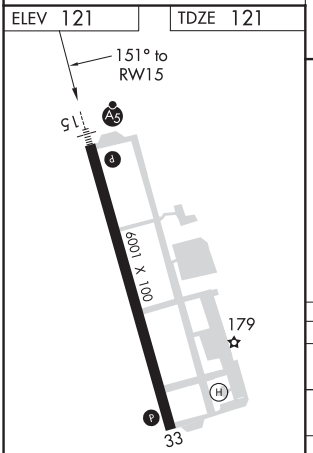
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 48°C. VDP and Baro-VNAV NA when using Beale AFB altimeter setting. When local altimeter setting not received, use Beale AFB altimeter setting and increase LPV DA to 361 feet; increase LNAV/VNAV DA to 492 feet; increase all MDAs 40 feet and increase Circling Cat D visibility ¼ SM. For inop ALS when using Beale AFB altimeter setting, increase LNAV Cat D visibility to 1¼.

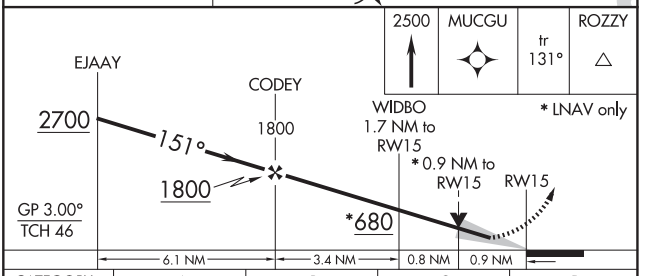
MALSR

MISSED APPROACH: Climb to 2500 direct MUCGU and on track 131° to ROZZY and hold.

AWOS-3	NORCAL APP CON	UNICOM
124.25	125.4 259.1	123.0 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	321-½	200 (200-½)		
LNAV/VNAV DA	452-¾	331 (400-¾)		
LNAV MDA	460-½	339 (400-½)		460-1 339 (400-1)
CIRCLING	520-1 399 (400-1)	580-1 459 (500-1)	600-1½ 479 (500-1½)	760-2 639 (700-2)

LINCOLN, CALIFORNIA
Orig-B 20MAY21

38°55'N-121°21'W

LINCOLN RGNL/KARL HARDER FLD (LHM)

RNAV (GPS) RWY 15

SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS	Rwy Idg	6001
331°	TDZE	121
	Apt Elev	121

RNAV (GPS) RWY 33

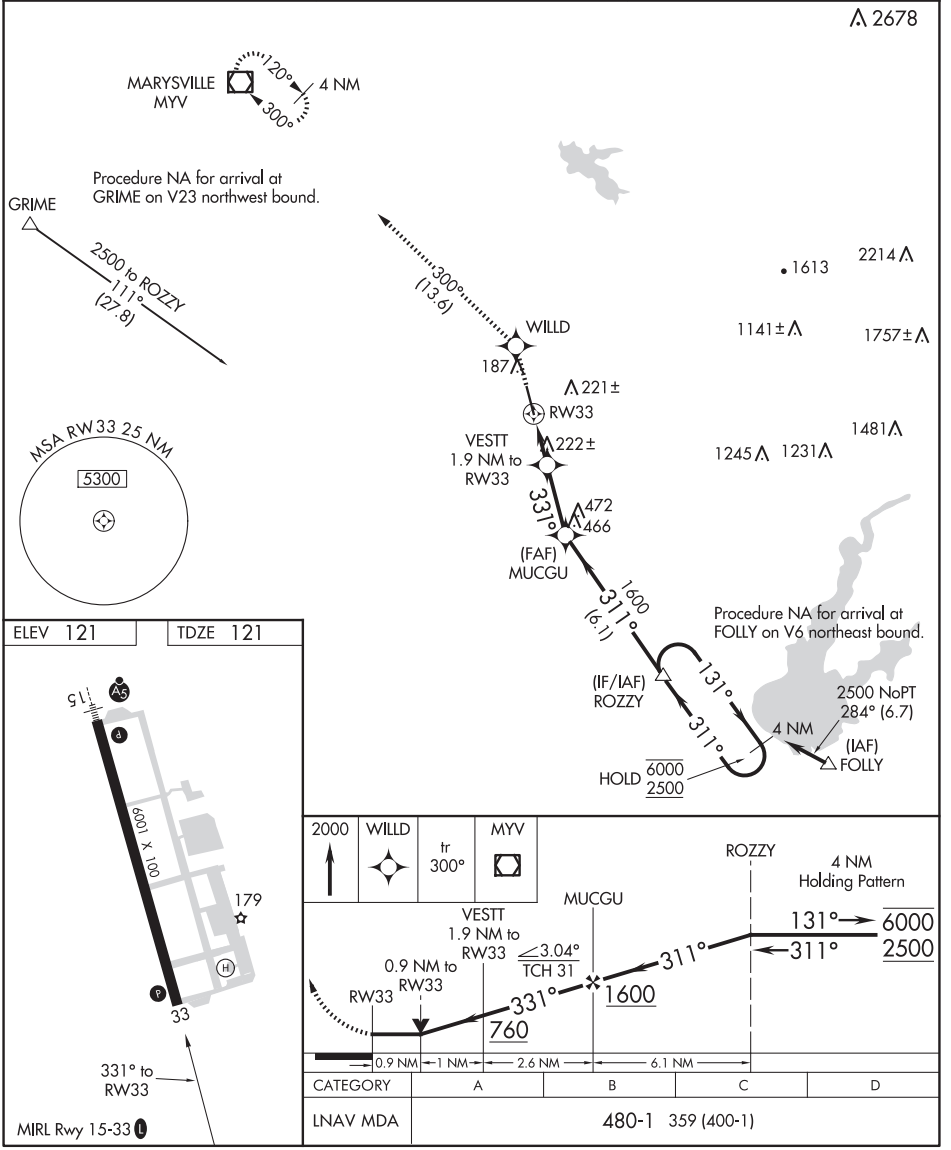
LINCOLN RGNL/KARL HARDER FLD (LHM)

RNP APCH.

T A Rwy 33 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Beale AFB altimeter setting and increase all MDA 40 feet, and increase LNAV Cat C/D visibility ⅛ mile. VDP NA with Beale AFB altimeter setting.

MISSED APPROACH: Climb to 2000 direct WILLD and on track 300° to MYV VOR/DME and hold.

AWOS-3	NORCAL APP CON	UNICOM
124.25	125.4 259.1	123.0 (CTAF) L



SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 29

LITTLE RIVER (LLR)

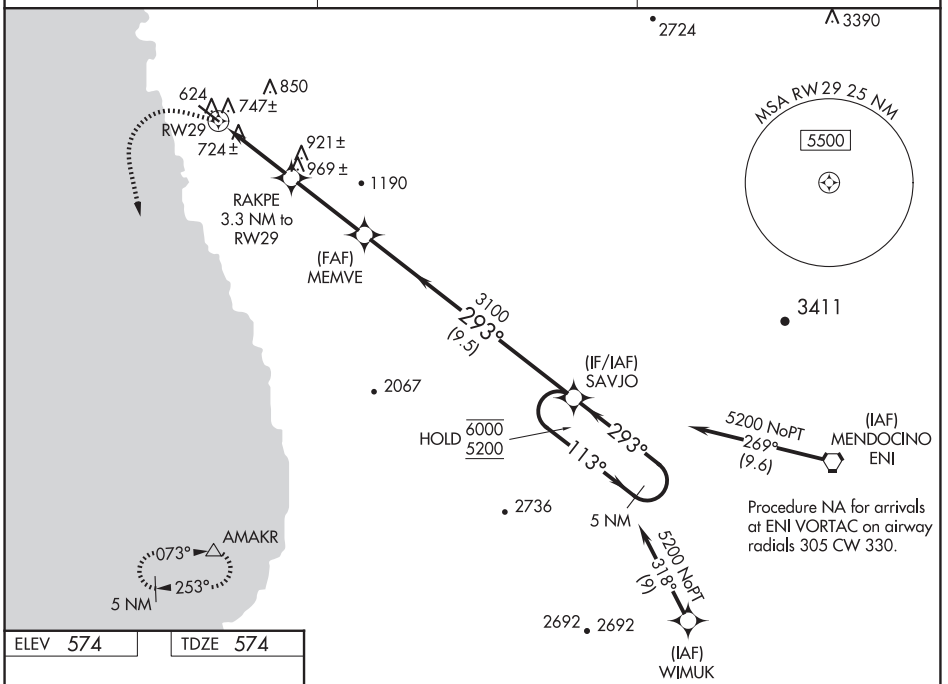
WAAS	APP CRS	Rwy Ldg	5249
CH 77829	293°	TDZE	574
W29A		Apt Elev	574

RNP APCH.

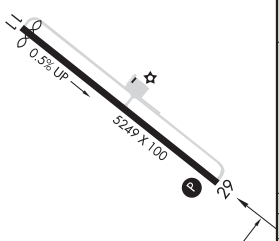
Circling NA northeast of Rwy 11-29.
Procedure NA at night.
Rwy 29 helicopter visibility reduction below 1 SM NA.

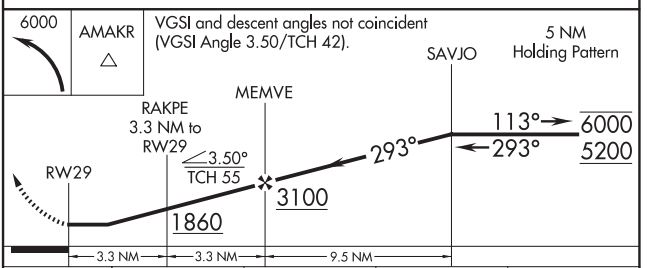
MISSED APPROACH: Climbing left turn to 6000 direct AMAKR and hold, continue climb-in-hold to 6000.

AWOS-3	OAKLAND CENTER	AUNICOM
121.125	132.2 350.3	122.7 (CTAF) L



ELEV 574 TDZE 574

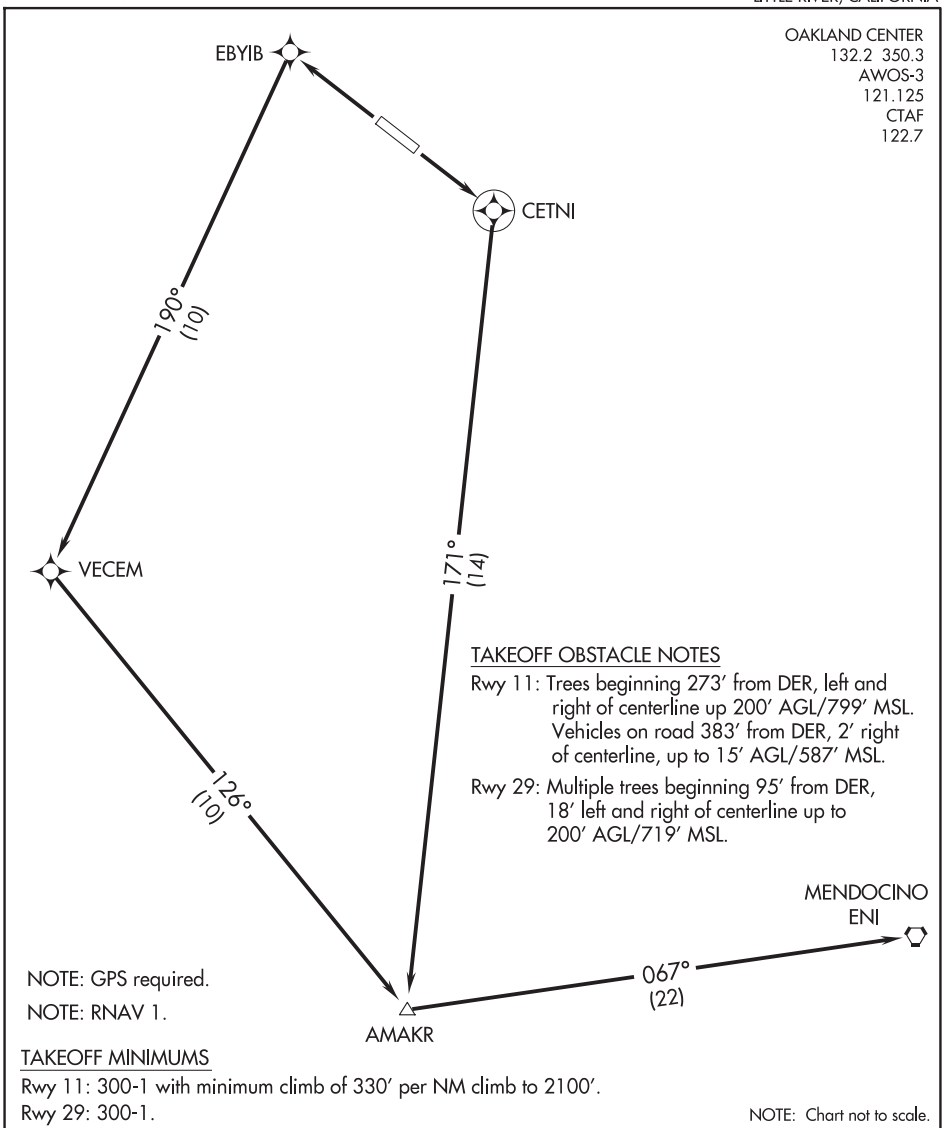




CATEGORY	A	B	C	D
LP MDA	980-1 406 (500-1)		980-1⅛ 406 (500-1⅛)	
LNAV MDA	1000-1 426 (500-1)		1000-1¼ 426 (500-1¼)	
C CIRCLING	1040-1 466 (500-1)		1080-1½ 506 (600-1½)	1400-2¾ 826 (900-2¾)

MIRL Rwy 11-29 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025



SW-2, 07 AUG 2025 to 02 OCT 2025

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 11: Climb to 6000 direct CETNI and via track 171° to AMAKR and left turn via track 067° to ENI VORTAC, thence . . . .

TAKEOFF RUNWAY 29: Climb to 6000 direct EBYIB and left turn via track 190° to VECEM and via track 126° to AMAKR and via track 067° to ENI VORTAC, thence . . . .

. . . . via assigned route.

LIVERMORE, CALIFORNIA | AL-6075 (FAA) | 25219

LOC/DME I-LVK	APP CRS	Rwy Ldg	5253
110.5	255°	TDZE	400
Chan 42		Apt Elev	400

ILS RWY 25R

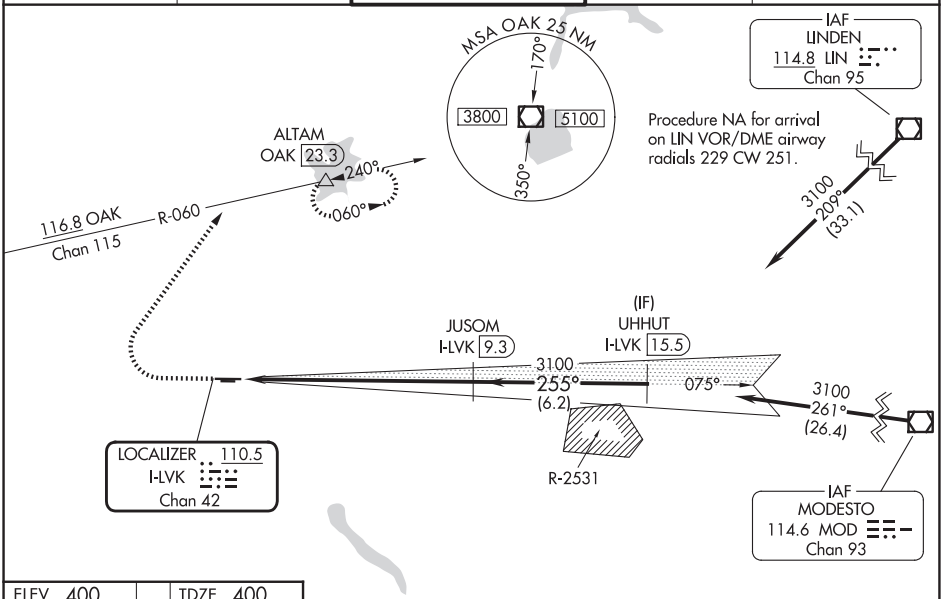
LIVERMORE MUNI (LVK)

DME required.

MALSR

MISSED APPROACH: Climb to 1200 then climbing right turn to 5000 on heading 020° and OAK VOR/DME R-060 to ALTAM/OAK VOR/DME 23.3 DME and hold, continue climb-in-hold to 5000.
*Missed approach requires a minimum climb of 358 feet per NM to 3600, if unable to meet climb gradient, see LOC RWY 25R.

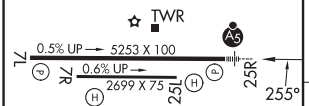
ATIS	NORCAL APP CON	LIVERMORE TOWER *	GND CON	UNICOM
119.65	123.85 278.3	118.1 (CTAF) L 239.25	121.6	122.95

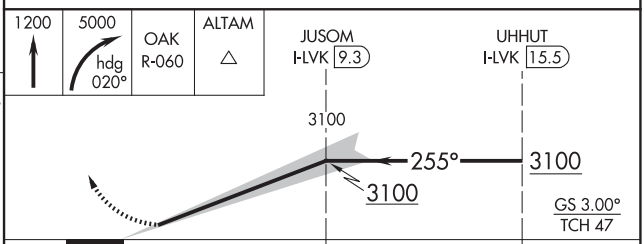


SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

ELEV 400	TDZE 400





CATEGORY	A	B	C	D
S-ILS 25R	600-½ 200 (200-½)			

HIRL Rwy 7L-25R L
MIRL Rwy 7R-25L

LIVERMORE, CALIFORNIA
Amdt 9A 10SEP20

37°42'N-121°49'W

LIVERMORE MUNI (LVK)
ILS RWY 25R

RNAV (GPS) RWY 25R

LIVERMORE MUNI (LVK)

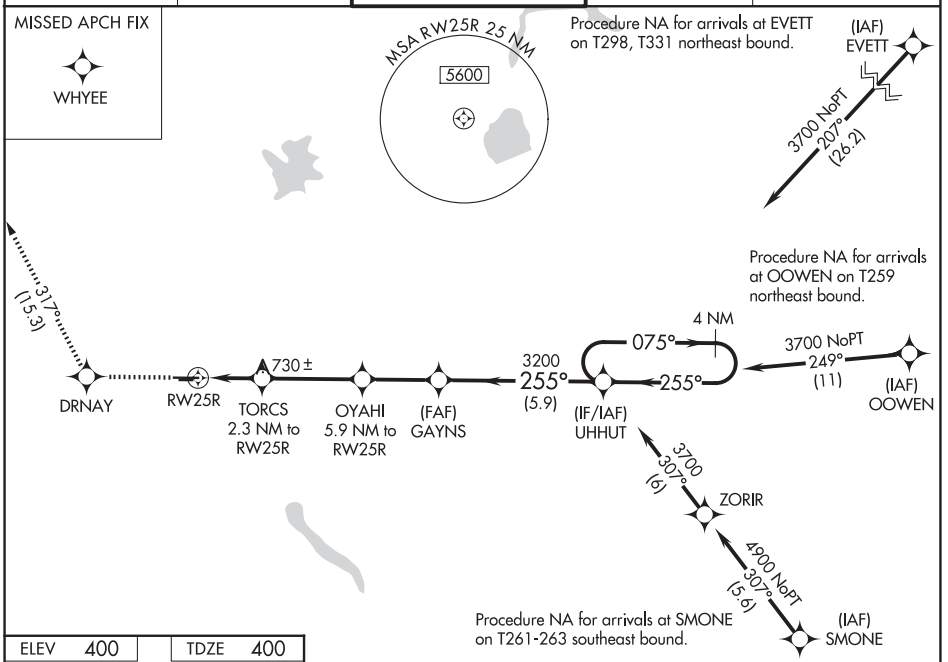
WAAS	APP CRS	Rwy Ldg	5253
CH 50214	255°	TDZE	400
W25A		Apt Elev	400

Circling to Rwy 25L NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -5°C (23°F) or above 54°C (130°F). Circling NA north of Rwy 7L-25R. RADAR Required. DME/DME RNP-0.3 NA. For inop ALS, increase LNAV Cat C/D to 1⅝ SM.

MALSR

MISSED APPROACH: Climb to 4000 direct DRNAY and on track 317° to WHYEE.

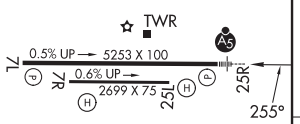
ATIS	NORCAL APP CON	LIVERMORE TOWER ★	GND CON	UNICOM
119.65	123.85 278.3	118.1 (CTAF) L 239.25	121.6	122.95



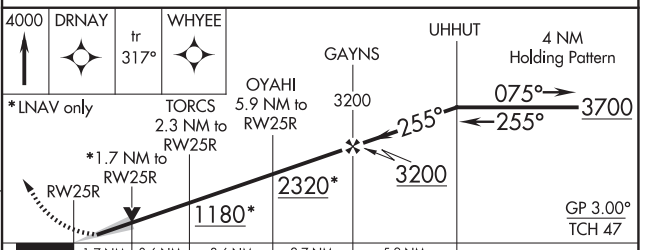
SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

ELEV 400 TDZE 400



MIRL Rwy 7R-25L
HIRL Rwy 7L-25R L



CATEGORY	A	B	C	D
LPV DA	600-½ 200 (200-½)			
LNAV/VNAV DA	843-⅞ 443 (500-⅞)			
LNAV MDA	980-½ 580 (600-½)		980-1¼ 580 (600-1¼)	
CIRCLING	980-1 580 (600-1)		1140-2 740 (800-2)	1780-3 1380 (1400-3)

LIVERMORE, CALIFORNIA | AL-6075 (FAA) | 25219

LOC/DME I-LVK	APP CRS	Rwy Ldg	5253
110.5	255°	TDZE	400
Chan 42		Apt Elev	400

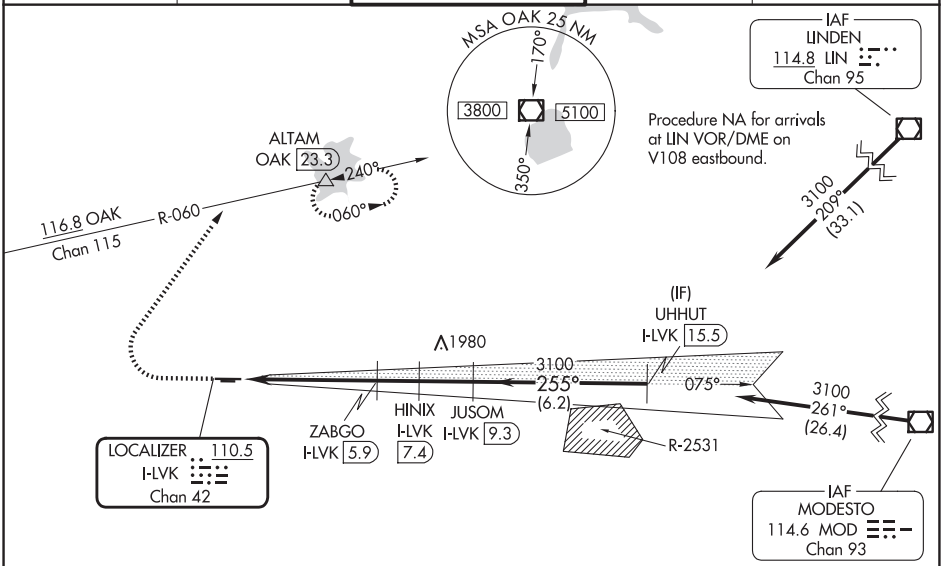
LOC RWY 25R
LIVERMORE MUNI (LVK)

Circling to Rwy 25L NA at night.
Inop table does not apply to S-25R Cats C/D.
Circling NA north of Rwy 7L-25R.
DME required.

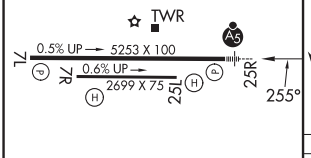
MALSR

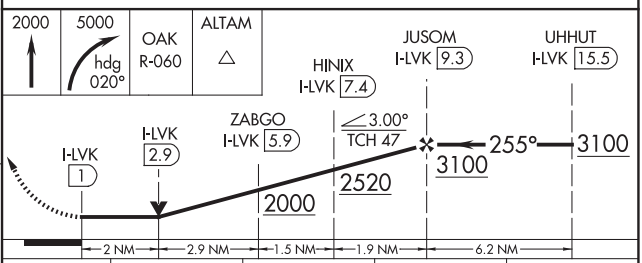
MISSED APPROACH: Climb to 2000 then climbing right turn to 5000 on heading 020° and OAK VOR/DME R-060 to ALTAM/OAK VOR/DME 23.3 DME and hold, continue climb-in-hold to 5000.
*Missed approach requires minimum climb of 235 feet per NM to 3600.

ATIS	NORCAL APP CON	LIVERMORE TOWER *	GND CON	UNICOM
119.65	123.85 278.3	118.1 (CTAF) L 239.25	121.6	122.95



ELEV 400	TDZE 400





CATEGORY	A	B	C	D
S-LOC 25R*	1080-½ 680 (700-½)		1080-1½ 680 (700-1½)	
S-LOC 25R	2000-¾ 1600 (1600-¾)	2000-1 1600 (1600-1)	2000-3 1600 (1600-3)	
CIRCLING	2000-1¼ 1600 (1600-1¼)	2000-1½ 1600 (1600-1½)	2000-3 1600 (1600-3)	

HIRL Rwy 7L-25R L
MIRL Rwy 7R-25L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

(LVK3.ALTAM) 24025

LIVERMORE THREE DEPARTURE (OBSTACLE)

LIVERMORE MUNI (LVK)
LIVERMORE, CALIFORNIA
AL-6075 (FAA)

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 7L/R: Climb heading 075° to 1000, then climbing left turn heading 340° and on SAC VORTAC R-177 to ALTAM, thence . . . . .

TAKEOFF RUNWAYS 25L/R: Climb heading 255° to 1200, then climbing right turn heading 020° and on OAK VOR/DME R-060 to ALTAM, thence . . . .

VCOA ALL RUNWAYS: Obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Livermore Airport at or above 3100, thence . . . .

. . . . continue climb on course to the MEA/MCA for route of flight.

TAKEOFF MINIMUMS

Rwys 7L/R: Standard with minimum climb of 375' per NM to 3500 or 2900-3 for VCOA.
Rwys 25L/R: Standard with minimum climb of 295' per NM to 3400 or 2900-3 for VCOA.

(CONTINUED ON FOLLOWING PAGE)

LIVERMORE THREE DEPARTURE (OBSTACLE)
LIVERMORE, CALIFORNIA
LIVERMORE MUNI (LVK)

(LVK3.ALTAM) 07DEC17

SW-2, 07 AUG 2025 to 02 OCT 2025

TAKEOFF OBSTACLE NOTES

Rwy 7L: Sign 20′ from DER, 475′ right of centerline, up to 3′ AGL/403′ MSL.
Bush 48′ from DER, 501′ left of centerline, 403′ MSL.
Poles, buildings, electrical system, antenna on building, tree, and tanks beginning 447′ from DER, 567′ right of centerline, up to 42′ AGL/445′ MSL.
Hangar and building beginning 459′ from DER, 558′ left of centerline, up to 414′ MSL.
Tree 708′ from DER, 603′ left of centerline, 421′ MSL.
Trees beginning 711′ from DER, 567′ left of centerline, up to 439′ MSL.
Trees beginning 1623′ from DER, 690′ left of centerline, up to 450′ MSL.
Tree 1626′ from DER, 796′ left of centerline, 455′ MSL.
Trees beginning 1732′ from DER, 528′ right of centerline, up to 461′ MSL.
Tree 1767′ from DER, 816′ left of centerline, 463′ MSL.
Tree 2217′ from DER, 1040′ right of centerline, 465′ MSL.
Tree 2368′ from DER, 1027′ right of centerline, 466′ MSL.
Tree 3922′ from DER, 1480′ left of centerline, 528′ MSL.

Rwy 7R: Building 3′ from DER, 287′ right of centerline, 411′ MSL.
Terrain 3′ from DER, 9′ left of centerline, 396′ MSL.
Buildings beginning 29′ from DER, 287′ right of centerline, up to 412′ MSL.
Buildings and hangar beginning 137′ from DER, 287′ right of centerline, up to 413′ MSL.
Tower and navaid beginning 308′ from DER, 249′ left of centerline, up to 39′ AGL/432′ MSL.
Building 435′ from DER, 287′ right of centerline, 414′ MSL.
Buildings beginning 463′ from DER, 287′ right of centerline, up to 416′ MSL.
Building 668′ from DER, 287′ right of centerline, 417′ MSL.
Building 701′ from DER, 403′ right of centerline, 418′ MSL.
Buildings beginning 799′ from DER, 287′ right of centerline, up to 436′ MSL.
Tree 1146′ from DER, 399′ right of centerline, 438′ MSL.
Buildings and trees beginning 1169′ from DER, 344′ right of centerline, up to 445′ MSL.
Hangar and pole beginning 1402′ from DER, 66′ right of centerline, up to 446′ MSL.
Trees beginning 2349′ from DER, 672′ right of centerline, up to 467′ MSL.
Tree 3980′ from DER, 1563′ right of centerline, 497′ MSL.

Rwy 25L: Tree 388′ from DER, 532′ left of centerline, 442 MSL.

Rwy 25R: Sign 34′ from DER, 203′ right of centerline, 5′ AGL/376′ MSL.
Terrain beginning 43′ from DER, 486′ right of centerline, up to 378′ MSL.
Fences beginning 169′ from DER, 413′ right of centerline, up to 379′ MSL.
Tree 305′ from DER, 298′ right of centerline, 385′ MSL.
Tree 349′ from DER, 580′ right of centerline, 411′ MSL.
Tree 464′ from DER, 509′ right of centerline, 417′ MSL.
Trees beginning 477′ from DER, 426′ right of centerline, up to 424′ MSL.
Pole 662′ from DER, 411′ left of centerline, 33′ AGL/400′ MSL.
Trees beginning 805′ from DER, 248′ right of centerline, up to 427′ MSL.
Trees beginning 1405′ from DER, 747′ right of centerline, up to 432′ MSL.
Tree 1426′ from DER, 186′ left of centerline, 411′ MSL.
Tree 1596′ from DER, 244′ left of centerline, 413′ MSL.
Tree 1719′ from DER, 127′ left of centerline, 421′ MSL.
Trees beginning 1946′ from DER, 50′ right of centerline, up to 436′ MSL.

SW-2, 07 AUG 2025 to 02 OCT 2025

LODI, CALIFORNIA | AL-6044 (FAA) | 23054

RNAV (GPS)-B
LODI (103)

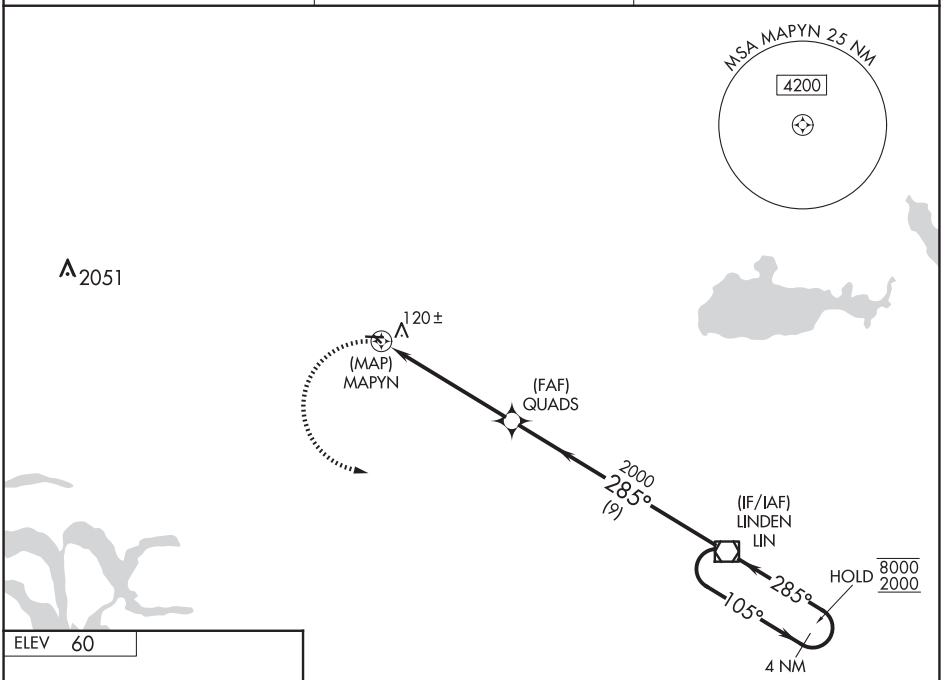
APP CRS	Rwy Idg	N/A
285°	TDZE	N/A
	Apt Elev	60

RNP APCH.

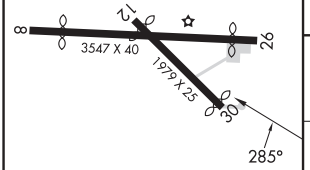
T NA Procedure NA at night.
Use Stockton altimeter setting; when not received, use Sacramento Intl altimeter setting and increase all MDA 40 feet.

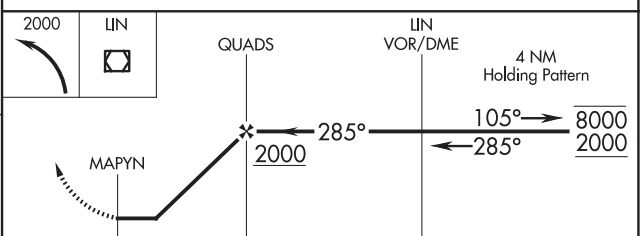
MISSED APPROACH: Climbing left turn to 2000 direct LIN VOR/DME and hold.

SCK ASOS	NORCAL APP CON	CTAF
118.25	125.1 363.2	122.9



NoPT for arrival on LIN VOR/DME airway radials 124 CW 158.





CATEGORY	A	B	C	D
C CIRCLING	640-1	580 (600-1)	NA	

LIRL Rwy 8-26

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS	APP CRS	Rwy Idg	3801
CH 53715	137°	TDZE	121
W14A		Apt Elev	121

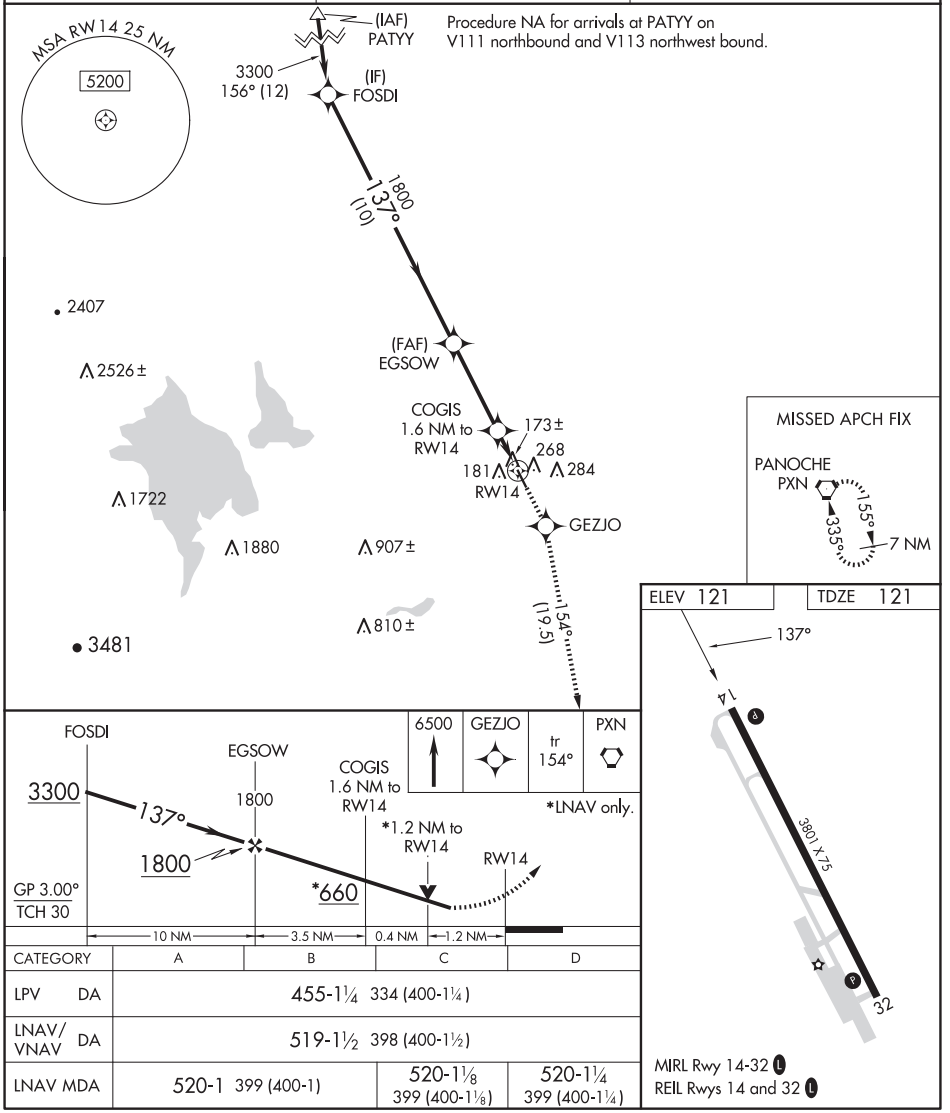
RNAV (GPS) RWY 14
LOS BANOS MUNI (LSN)

RNP APCH.

NA Rwy 14 helicopter visibility reduction below ¾ SM NA. Baro-VNAV and VDP NA when using Merced Yosemite Rgnl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. When local altimeter setting not received, use Merced Yosemite Rgnl altimeter setting and increase all DA/MDA 60 feet, and all visibility ¼ SM.

MISSED APPROACH: Climb to 6500 direct GEZJO and on track 154° to PXN VORTAC and hold, continue climb-in-hold to 6500.

AWOS-3	NORCAL APP CON	UNICOM
118.675	120.95 269.45	122.8 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	455-1¼ 334 (400-1¼)			
LNAV/VNAV DA	519-1½ 398 (400-1½)			
LNAV MDA	520-1 399 (400-1)		520-1⅛ 399 (400-1⅛)	520-1¼ 399 (400-1¼)

MIRL Rwy 14-32 L
REIL Rwys 14 and 32 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

LOS BANOS, CALIFORNIA | AL-5819 (FAA) | 22363

APP CRS	Rwy Idg	3801
317°	TDZE	121
	Apt Elev	121

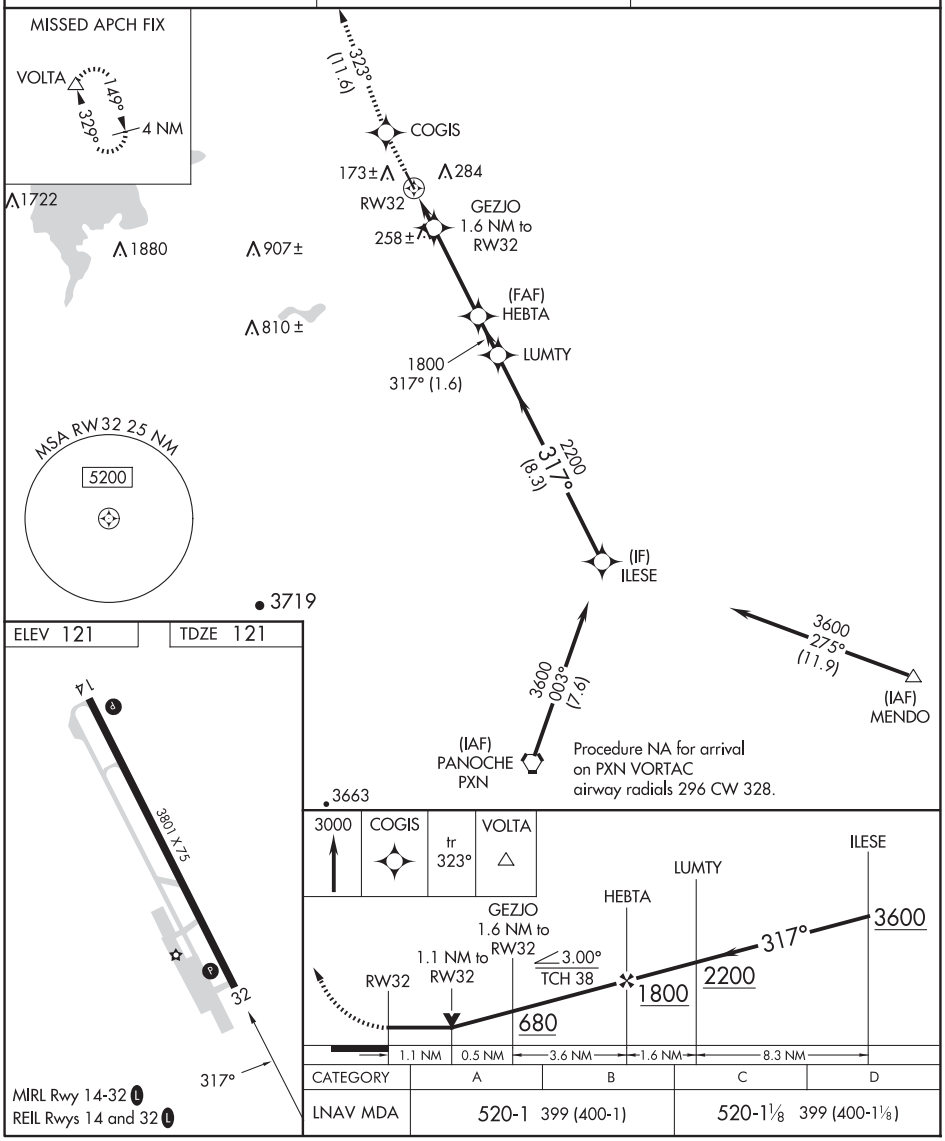
RNAV (GPS) RWY 32
LOS BANOS MUNI (LSN)

RNP APCH.

Rwy 32 helicopter visibility reduction below ¾ SM NA. VDP NA when using Merced Yosemite Rgnl altimeter setting. When local altimeter setting not received, use Merced Yosemite Rgnl altimeter setting and increase all MDA 60 feet, and all visibility ¼ SM.

MISSED APPROACH: Climb to 3000 direct COGIS and on track 323° to VOLTA and hold.

AWOS-3	NORCAL APP CON	UNICOM
118.675	120.95 269.45	122.8 (CTAF) L



CATEGORY	A	B	C	D
LNAV MDA	520-1 399 (400-1)		520-1⅛ 399 (400-1⅛)	

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 12

MADERA MUNI (MAE)

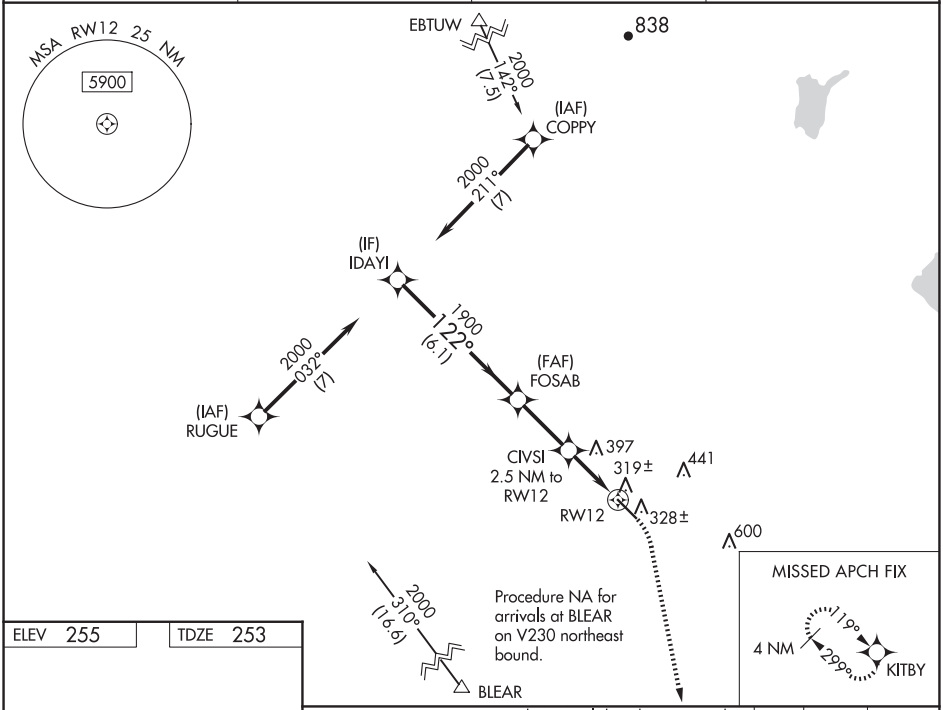
WAAS CH 62909 W12A	APP CRS 122°	Rwy Idg 5545 TDZE 253 Apt Elev 255

RNP APCH - GPS.

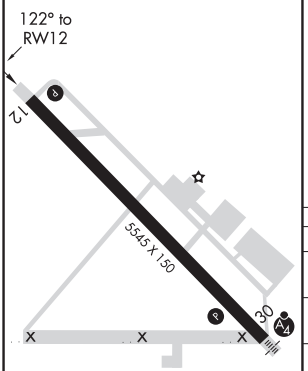
T A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -2°C or above 54°C.

MISSED APPROACH: Climb to 800 then climbing right turn to 2000 direct KITBY and hold.

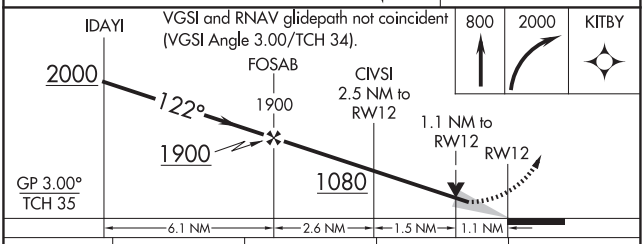
ASOS	FRESNO APP CON	CLNC DEL	UNICOM
134.725	119.45	119.45	122.8 (CTAF) L



ELEV 255 TDZ 253



REIL Rwy 12 L
MIRL Rwy 12-30 L



CATEGORY	A	B	C	D
LPV DA	503-¾ 250 (300-¾)			NA
LNAV/VNAV DA	503-¾ 250 (300-¾)			NA
LNAV MDA	620-1 367 (400-1)			NA
C CIRCLING	680-1 425 (500-1)	720-1 465 (500-1)	760-1½ 505 (600-1½)	NA

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

MADERA, CALIFORNIA | AL-6399 (FAA) | 22223

RNAV (GPS) RWY 30

MADERA MUNI (MAE)

WAAS	APP CRS		
CH **90209**	**302°**	Rwy Idg	**5545**
W30A		TDZE	**255**
		Apt Elev	**255**

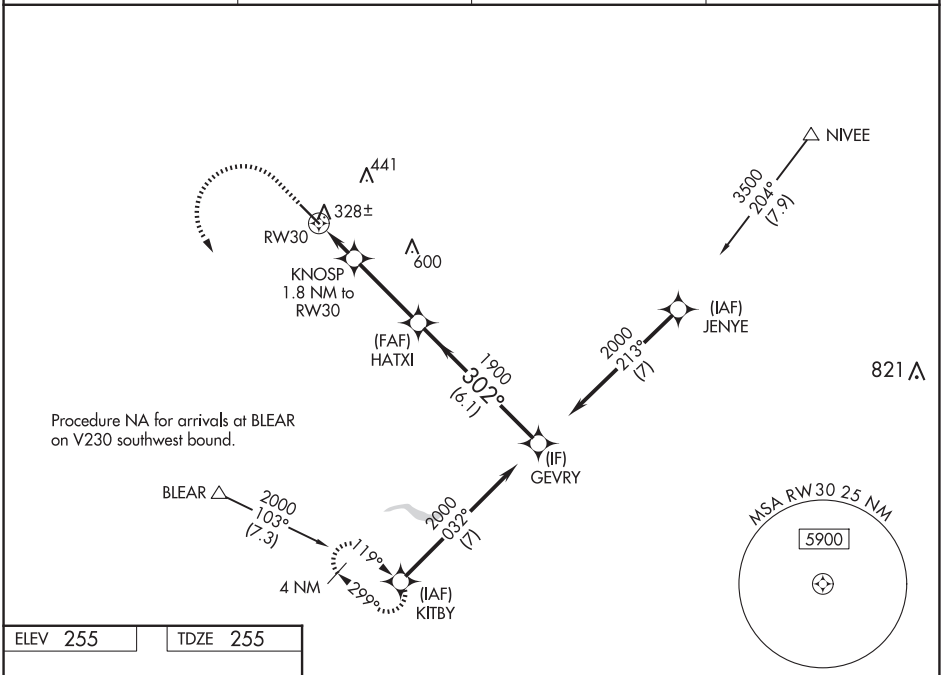
RNP APCH - GPS.

T A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -2°C or above 54°C. Inop table does not apply to LPV and LNAV/VNAV Cat A/B/C.

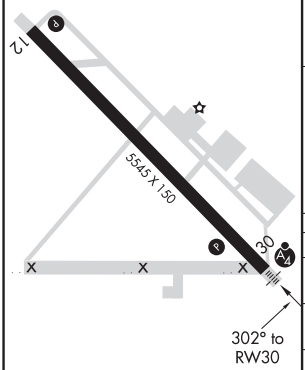
MALSF

MISSED APPROACH: Climb to 800 then climbing left turn to 2000 to KITBY and hold.

ASOS	FRESNO APP CON	CLNC DEL	UNICOM
134.725	**119.45**	**119.45**	**122.8** (CTAF) L



ELEV 255 | TDZE 255

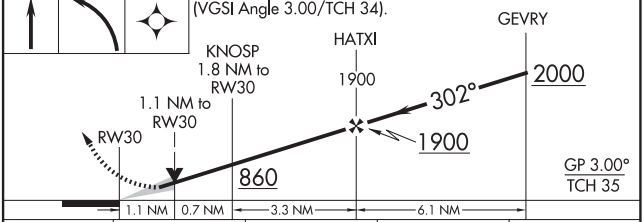


REIL Rwy 12 L

MIRL Rwy 12-30 L

800 | 2000 | KITBY

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 34).



CATEGORY	A	B	C	D
LPV DA	505-¾ 250 (300-¾)			NA
LNAV/VNAV DA	505-¾ 250 (300-¾)			NA
LNAV MDA	640-¾ 385 (400-¾)		640-⅞ 385 (400-⅞)	NA
C CIRCLING	680-1 425 (500-1)	720-1 465 (500-1)	760-1½ 505 (600-1½)	NA

MADERA, CALIFORNIA
Amdt 2B 11AUG22

36°59′N-120°07′W

MADERA MUNI (MAE)

RNAV (GPS) RWY 30

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS	Rwy Idg	7000
259°	TDZE	7097
	Apt Elev	7135

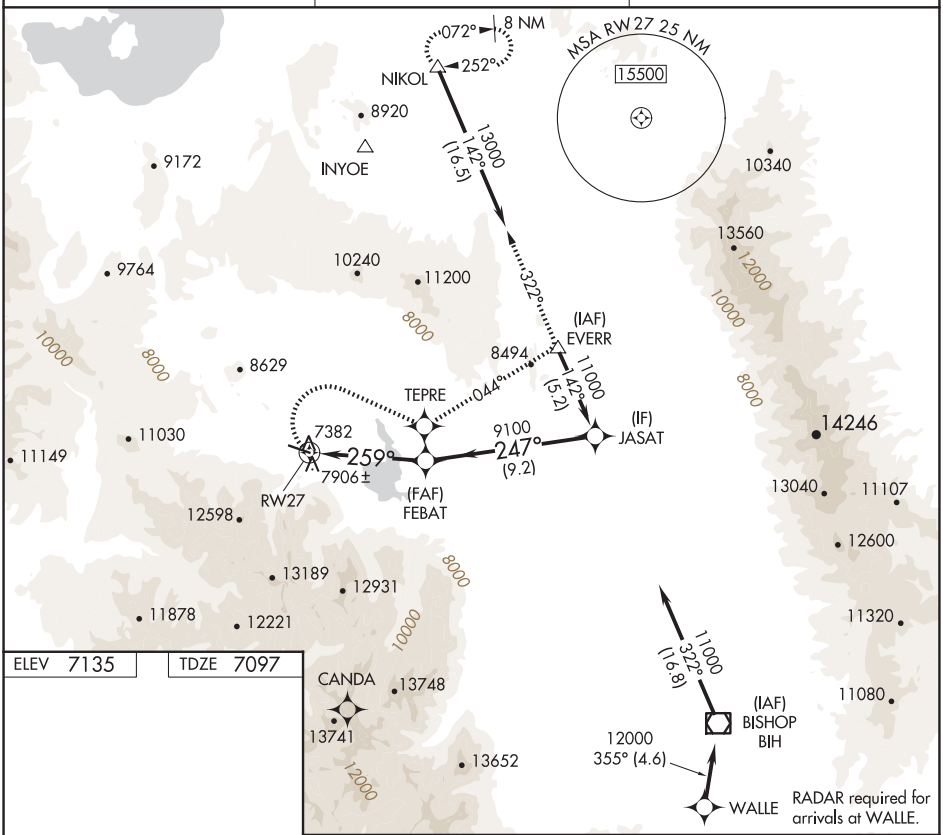
RNAV (GPS) RWY 27

MAMMOTH YOSEMITE (MMH)

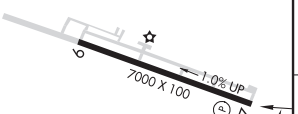
Circling NA at night. Circling NA south of Rwy 9-27. DME/DME RNP-0.3 NA. When local altimeter setting not received, procedure NA.

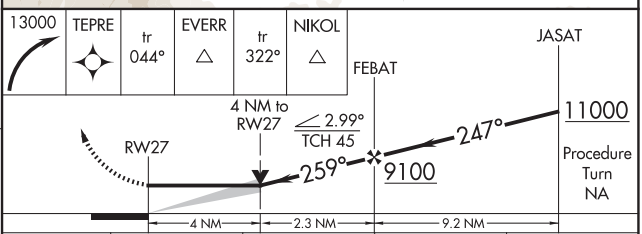
MISSED APPROACH: Climbing right turn to 13000 direct TEPRE and via track 044° to EVERR and via track 322° to NIKOL and hold.

AWOS-3	OAKLAND CENTER	UNICOM
118.05	125.75 284.65	122.8 (CTAF) L



ELEV 7135 TDZE 7097





CATEGORY	A	B	C	D
LNAV MDA	8380-1¼ 1283 (1300-1¼)	8380-1½ 1283 (1300-1½)	8380-3 1283 (1300-3)	NA
CIRCLING	8380-1¼ 1245 (1300-1¼)	8380-1½ 1245 (1300-1½)	8540-3 1405 (1500-3)	NA

REIL Rwy 27 L
MIRL Rwy 9-27 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(NIKOL2.NIKOL) 23278

NIKOL TWO DEPARTURE (OBSTACLE)

AL-6841 (FAA)

MAMMOTH YOSEMITE (MMH)
MAMMOTH LAKES, CALIFORNIA

OAKLAND CENTER
125.75 284.65
UNICOM
122.8
AWOS-3
118.05

MINA
115.1 MVA
Chan 98

R-204

TAKEOFF MINIMUMS

Rwy 9: Standard with minimum climb of 370' per NM to 10500.
Rwy 27: Standard with minimum climb of 500' per NM to 12700.

NOTE: Do not exceed 250K until established on 054° heading.
NOTE: Rwy 27 NA at night.

NIKOL

38

V381

322°

054°

274°

8600

094°

9500

054°

R-322

BISHOP
113.35 BIH
Chan 80(Y)

TAKEOFF OBSTACLE NOTES

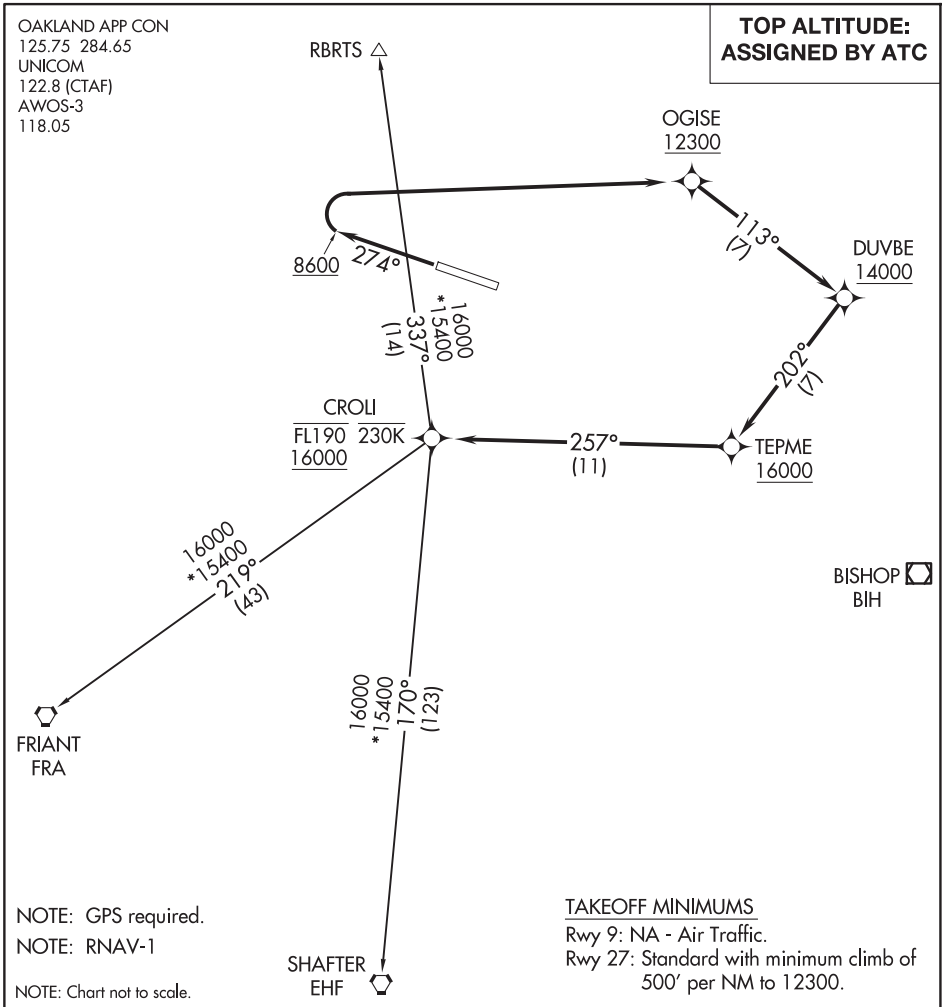
Rwy 9: Vehicles on roadway beginning 11' from DER, 460' right of centerline, up to 17' AGL/7078' MSL.
Trees beginning 1956' from DER, 554' left of centerline, up to 100' AGL/7186' MSL.
Trees beginning 3994' from DER, 963' right of centerline, up to 100' AGL/7252' MSL.
Rwy 27: Vehicles on roadway and bushes beginning 178' from DER, 269' left of centerline, up to 17' AGL/7160' MSL.
Building 386' from DER, 434' right of centerline, 21' AGL/7155' MSL.
Terrain and trees beginning 1.9 NM from DER, 334' right of centerline, up to 68' AGL/7970' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb on heading 094° to 9500, then climbing left turn heading 054° to intercept BIH R-322 to NIKOL INT. Maintain 13000.

TAKEOFF RUNWAY 27: Climb on heading 274° to 8600, then climbing right turn heading 054° to intercept BIH R-322 to NIKOL INT. Maintain 13000.



SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 27: Climb heading 274° to 8600, then right turn direct to cross OGISE at or above 12300, then on track 113° to cross DUVBE at or above 14000, then on track 202° to cross TEPME at or above 16000, then on track 257° to cross CROLI at or above 16000 and at or below FL190, thence. . . .

. . . .on (transition) maintain 16000, expect filed altitude 10 minutes after departure.

SHAFTER TRANSITION (CROLI1.EHF)

FRIANT TRANSITION (CROLI1.FRA)

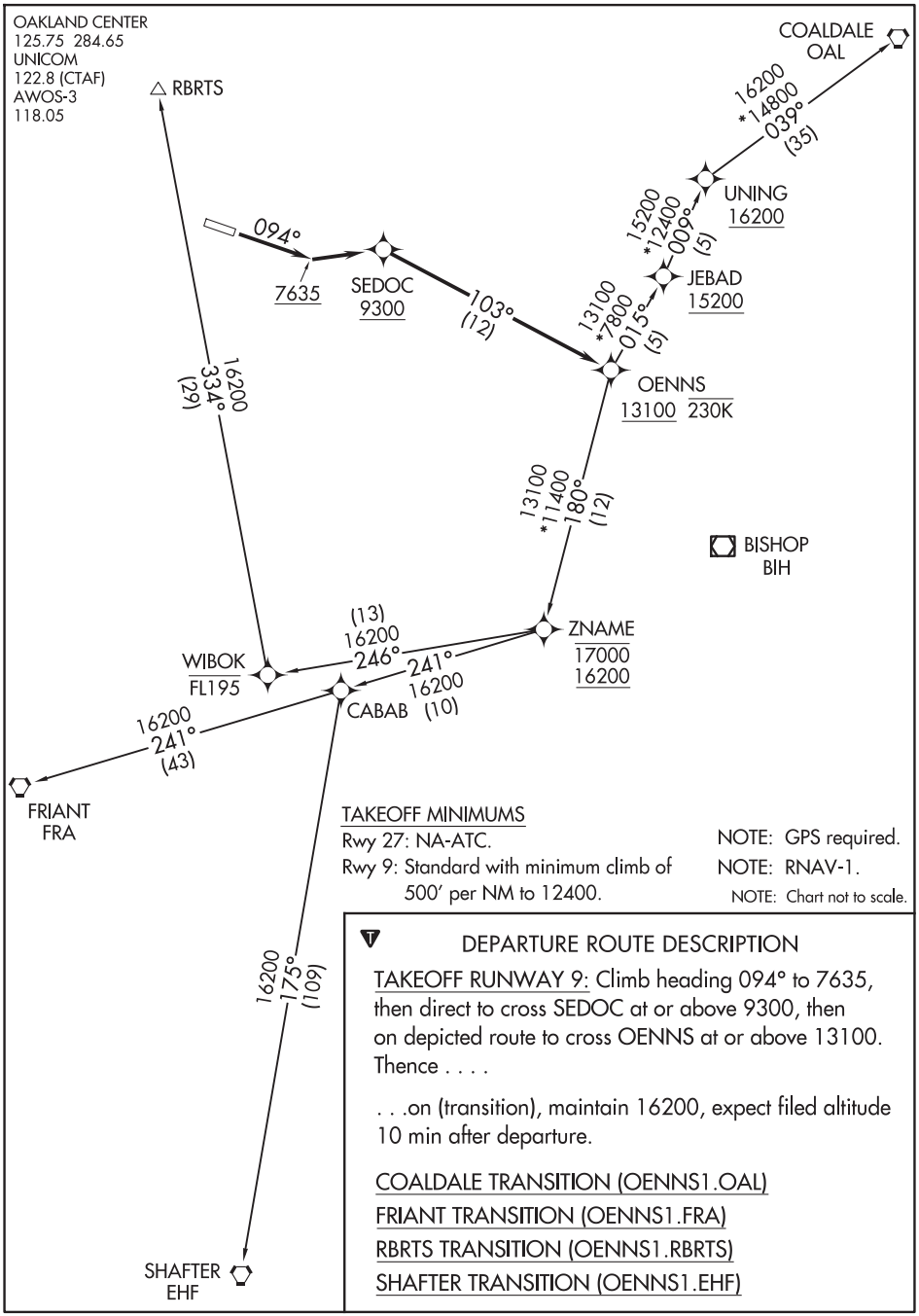
RBRTS TRANSITION (CROLI1.RBRTS)

(OENNS1.OENNS) 18312

OENNS ONE DEPARTURE (RNAV)

AL-6841 (FAA)

MAMMOTH YOSEMITE (MMH)
MAMMOTH LAKES, CALIFORNIA



TAKEOFF MINIMUMS

Rwy 27: NA-ATC.

Rwy 9: Standard with minimum climb of 500′ per NM to 12400.

NOTE: GPS required.

NOTE: RNAV-1.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb heading 094° to 7635, then direct to cross SEDOC at or above 9300, then on depicted route to cross OENNS at or above 13100. Thence . . . .

. . .on (transition), maintain 16200, expect filed altitude 10 min after departure.

COALDALE TRANSITION (OENNS1.OAL)

FRIANT TRANSITION (OENNS1.FRA)

RBRTS TRANSITION (OENNS1.RBRTS)

SHAFTER TRANSITION (OENNS1.EHF)

OENNS ONE DEPARTURE (RNAV)
(OENNS1.OENNS) 05MAR15

MAMMOTH LAKES, CALIFORNIA
MAMMOTH YOSEMITE (MMH)

SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 11

MARINA MUNI (OAR)

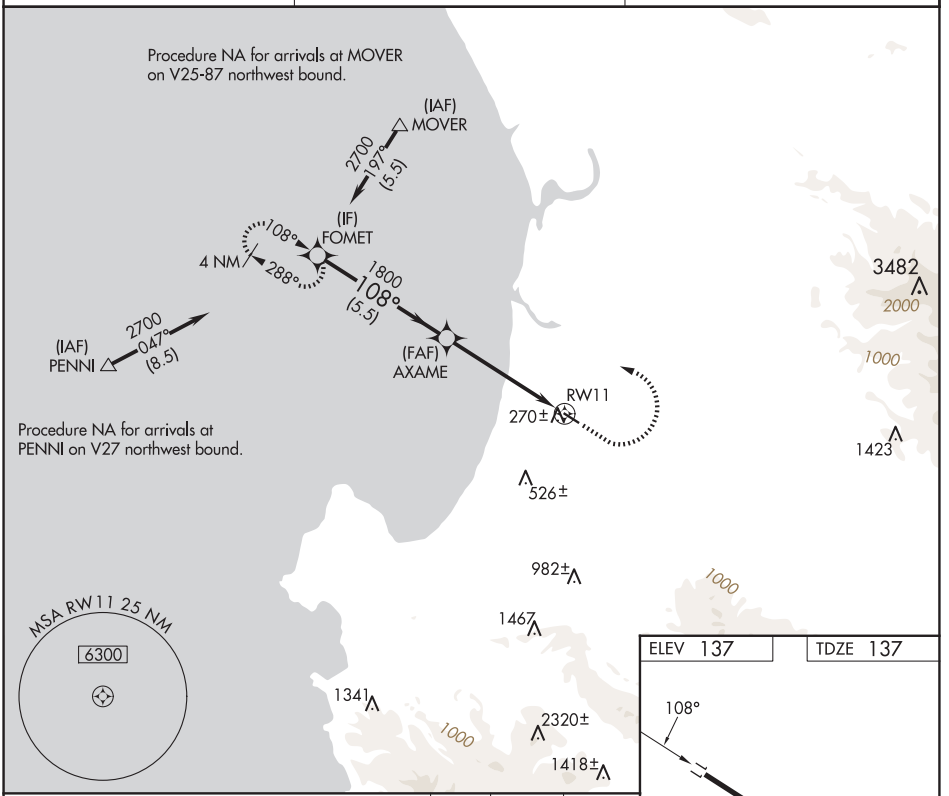
APP CRS	Rwy Ldg	3483
108°	TDZE	137
	Apt Elev	137

RNP APCH.

T A NA Rwy 11 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 600, then climbing left turn to 2700 direct FOMET and hold, continue climb-in-hold to 2700.

AWOS-3PT	NORCAL APP CON	UNICOM
134.025	133.0 251.15	122.7 (CTAF) L



CATEGORY	A	B	C	D
LNAV MDA	520-1	383 (400-1)	NA	
C CIRCLING	640-1 503 (600-1)	760-1 623 (700-1)	NA	

MIRL Rwy 11-29 L

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

MARINA, CALIFORNIA | AL-5271 (FAA) | 25163

RNAV (GPS) RWY 29

MARINA MUNI (OAR)

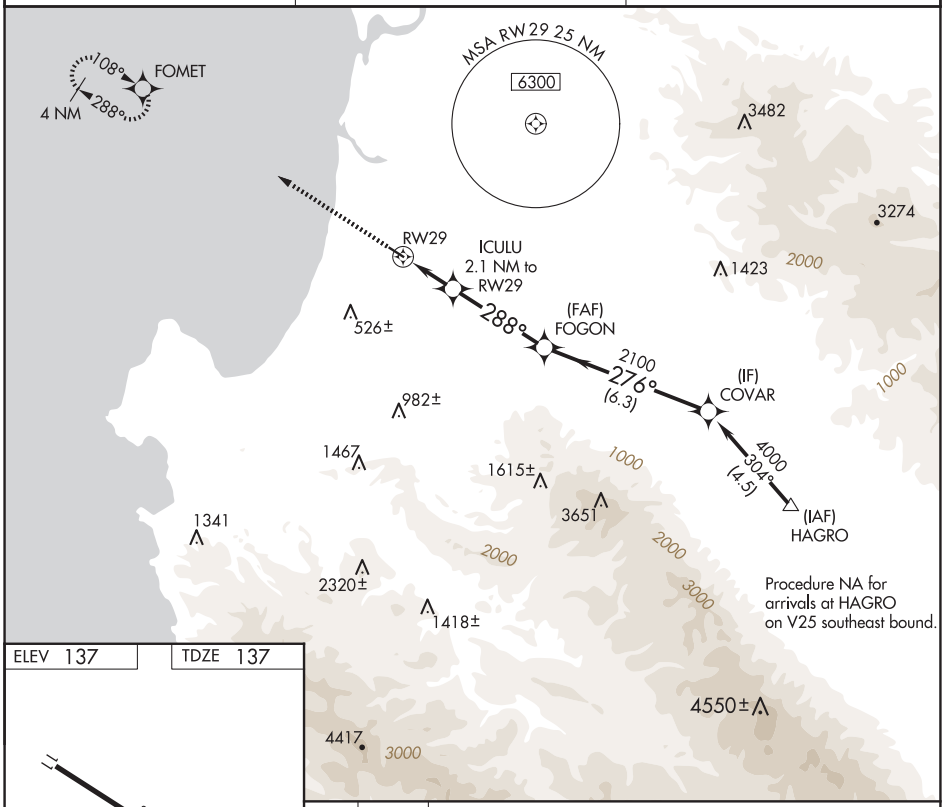
APP CRS	Rwy Ldg	3483
288°	TDZE	137
	Apt Elev	137

RNP APCH.

NA

MISSED APPROACH: Climb to 2700 direct FOMET and hold, continue climb-in-hold to 2700.

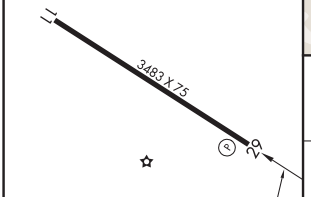
AWOS-3PT	NORCAL APP CON	UNICOM
134.025	133.0 251.15	122.7 (CTAF) L



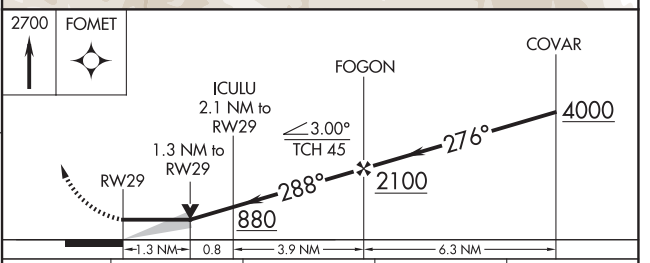
SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

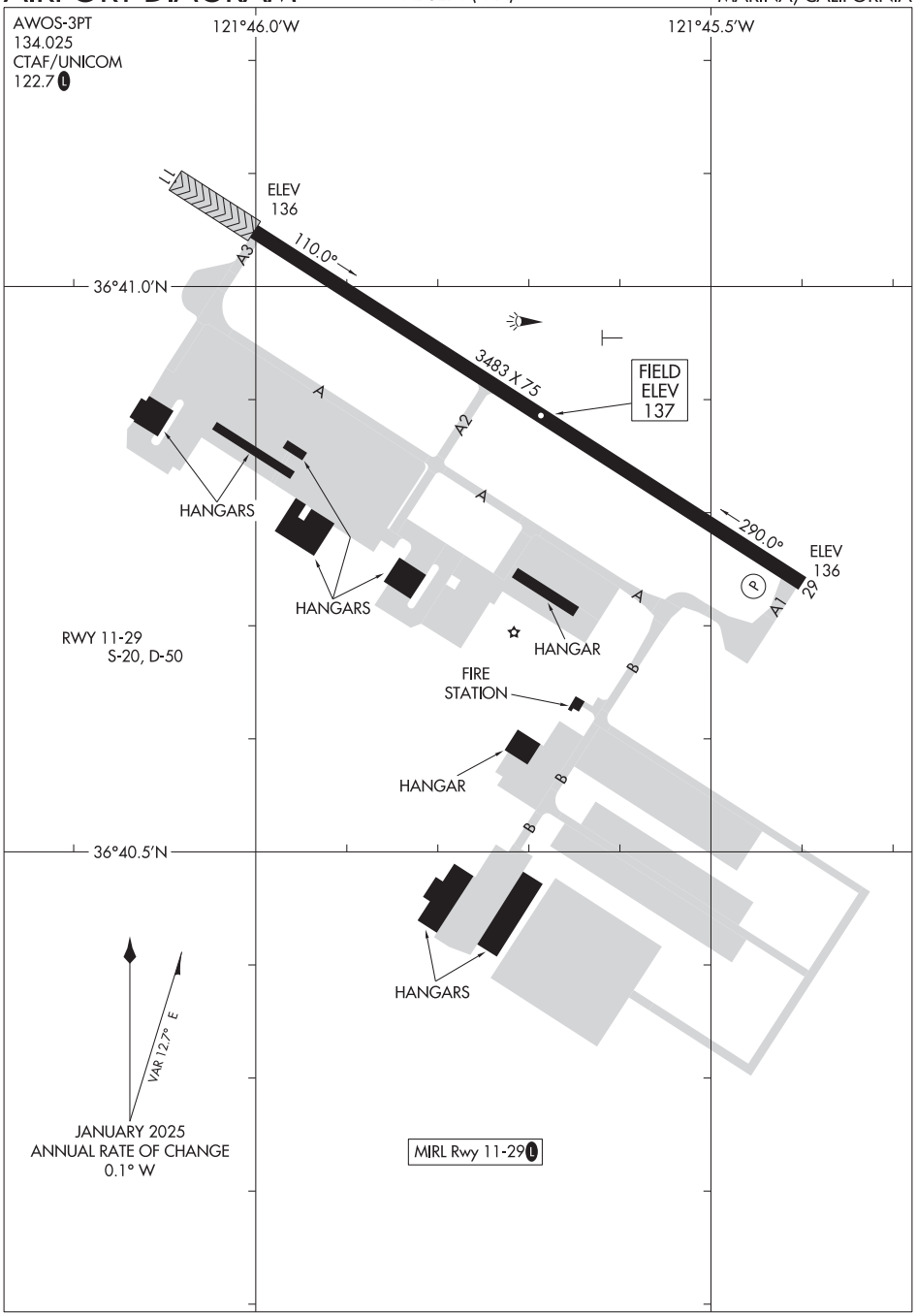
ELEV 137 | TDZE 137



MIRL Rwy 11-29 L



CATEGORY	A	B	C	D
LNAV MDA	600-1 463 (500-1)		NA	
C CIRCLING	640-1 503 (600-1)	760-1 623 (700-1)	NA	



SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

MARIPOSA, CALIFORNIA AL-9969 (FAA) 24361

APP CRS	Rwy Idg	N/A
290°	TDZE	N/A
	Apt Elev	2254

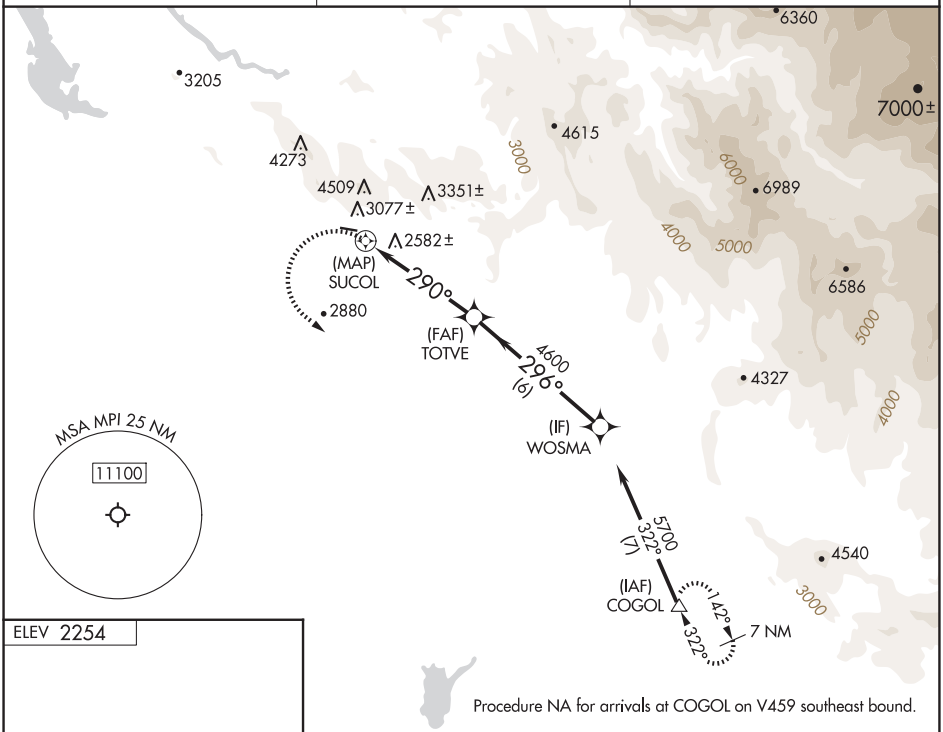
RNAV (GPS)-A
MARIPOSA-YOSEMITE (MPI)

RNP APCH - GPS.

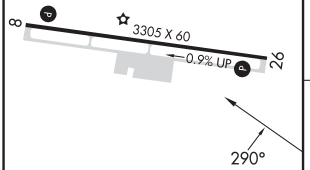
Circling NA north of Rwy 8-26. When local altimeter setting not received, use MER altimeter setting and increase all MDAs 360 feet. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 7000 direct COGOL and hold.

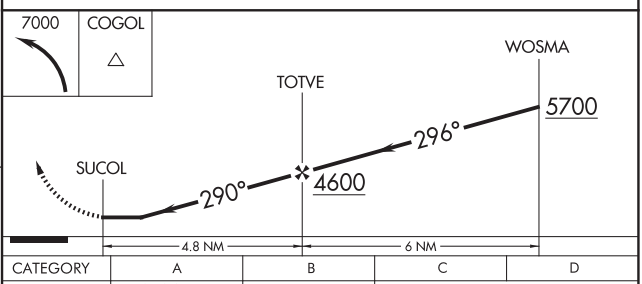
AWOS-3	OAKLAND CENTER	UNICOM
135.6	121.25 327.0	122.7 (CTAF) L



ELEV 2254



MIRL Rwy 8-26 L



CATEGORY	A	B	C	D
C CIRCLING	4100-1¼ 1846 (1900-1¼)	4180-1½ 1926 (2000-1½)	NA	

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS	Rwy Idg	N/A
098°	TDZE	N/A
	Apt Elev	2254

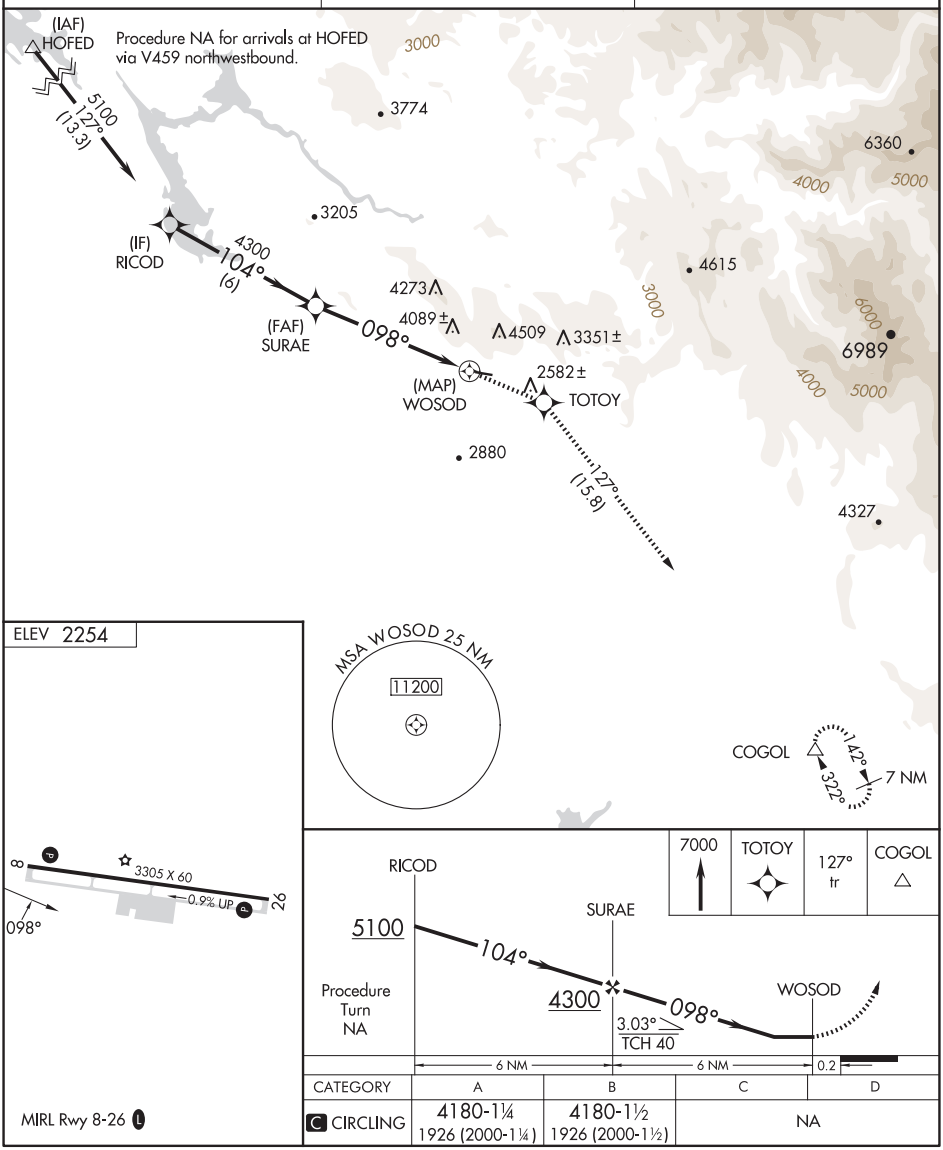
RNAV (GPS)-B
MARIPOSA-YOSEMITE (MPI)

NA

DME/DME RNP-0.3 NA.
Circling NA north of Rwy 8-26. Procedure NA at night.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 7000 direct TOTOY and via 127° track to COGOL and hold.

AWOS-3	OAKLAND CENTER	UNICOM
135.6	121.25 327.0	122.7 (CTAF) L



SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

MARYSVILLE, CALIFORNIA | AL-664 (FAA) | 23110

LOC I-MYV	APP CRS	Rwy Idg / TDZE / Apt Elev
110.5	141°	6007 / 64 / 64

ILS or LOC RWY 14

YUBA COUNTY (MYV)

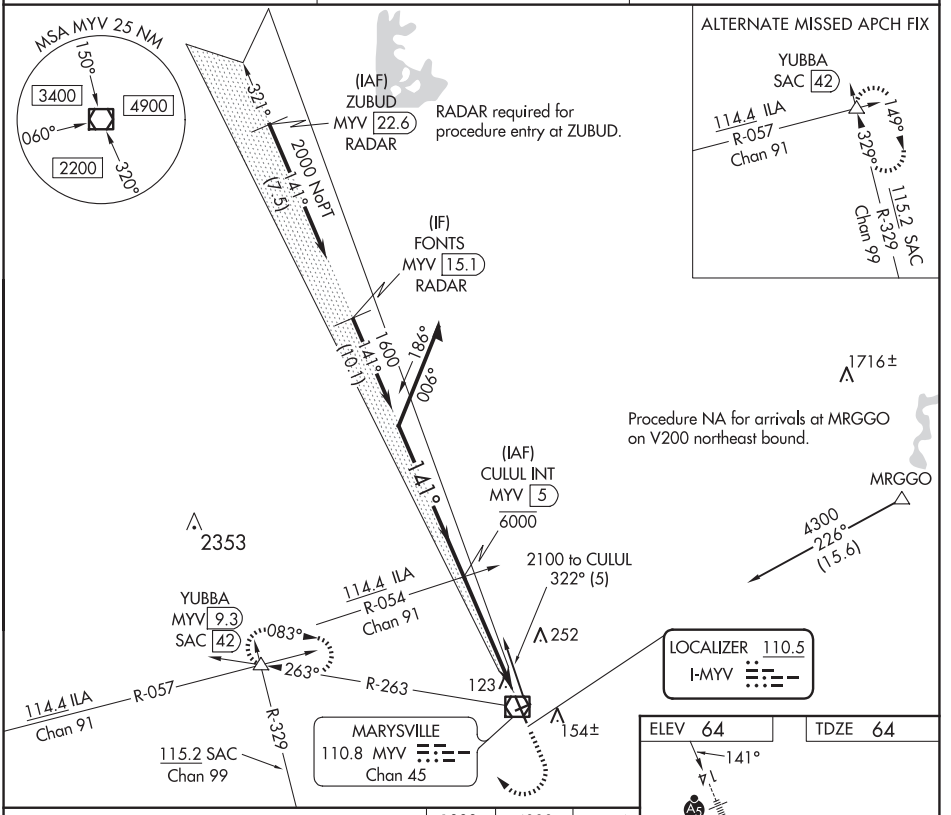
NA

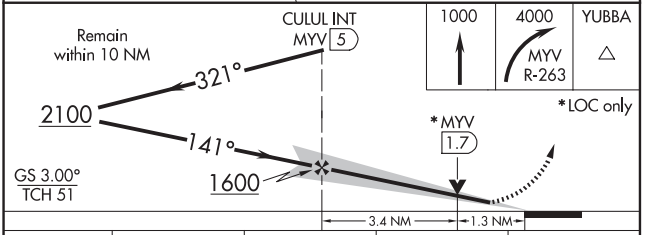
Circling Rwy 5, 23 NA at night.
Autopilot coupled approach NA below 695.

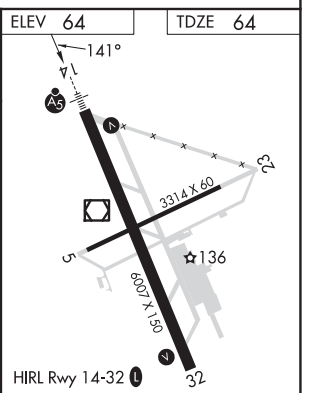
MALSR

MISSED APPROACH: Climb to 1000 then climbing right turn to 4000 on MYV VOR/DME R-263 to YUBBA INT/ MYV 9.3 DME and hold, continue climb in hold to 4000.

ASOS	NORCAL APP CON	UNICOM
118.475	125.4 259.1	123.05 (CTAF) L







CATEGORY	A	B	C	D
S-ILS 14	264-½ 200 (200-½)			
S-LOC 14	520-½ 456 (500-½)		520-⅞ 456 (500-⅞)	
C CIRCLING	540-1 476 (500-1)		560-1½ 496 (500-1½)	620-2 556 (600-2)

FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 14

YUBA COUNTY (MYV)

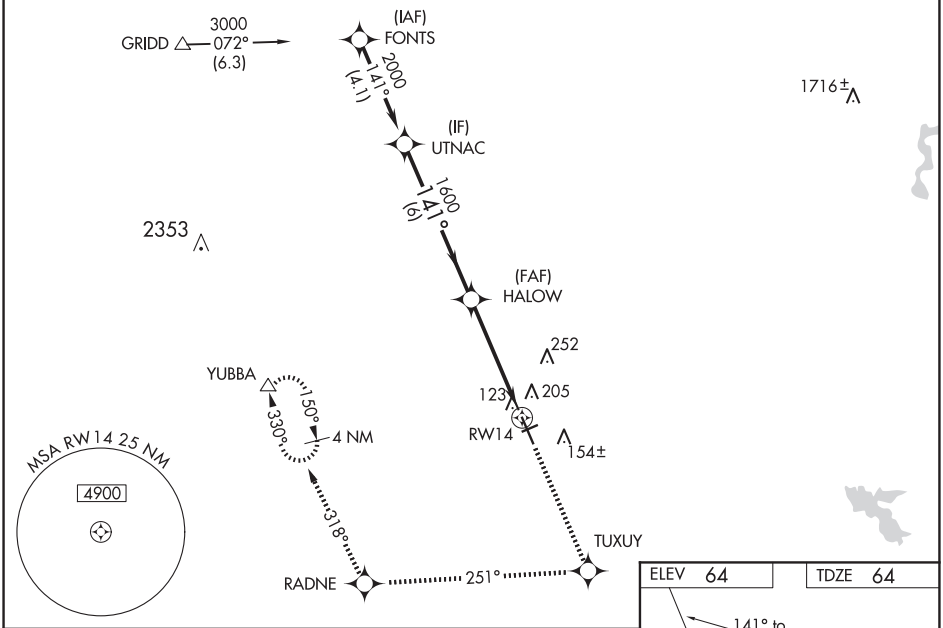
WAAS CH 42814 W14A	APP CRS 141°	Rwy Idg 6007 TDZE 64 Apt Elev 64

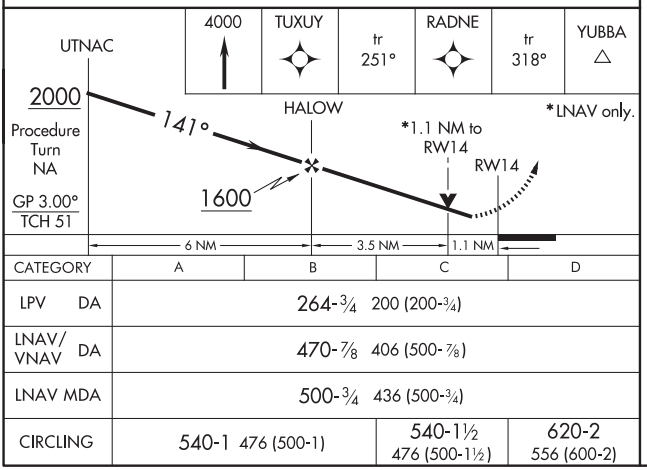
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA. Baro-VNAV and VDP NA when using Lincoln altimeter setting. When local altimeter setting not received, use Lincoln altimeter setting and increase LPV DA to 308 feet, LNAV/VNAV DA to 514 feet and all MDA 60 feet; increase LNAV/VNAV all Cats visibility ⅛ mile, LNAV Cats C/D visibility ⅛ mile. Inop table does not apply to LPV all Cats. For inop MALSR increase LNAV Cats A/B visibility ¼ mile. Night landing: Rwy 5, 23 NA.

MALSR

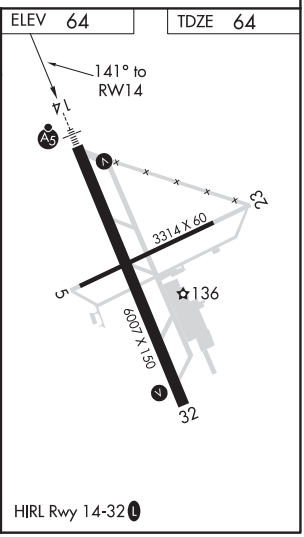
MISSED APPROACH: Climb to 4000 direct TUXUY and via track 251° to RADNE and via track 318° to YUBBA and hold.

ASOS	NORCAL APP CON	UNICOM
118.475	125.4 259.1	123.05 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	264-¾ 200 (200-¾)			
LNAV/VNAV DA	470-⅞ 406 (500-⅞)			
LNAV MDA	500-¾ 436 (500-¾)			
CIRCLING	540-1 476 (500-1)		540-1½ 476 (500-1½)	620-2 556 (600-2)



HIRL Rwy 14-32 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

MARYSVILLE, CALIFORNIA | AL-664 (FAA) | 20310

RNAV (GPS) RWY 32

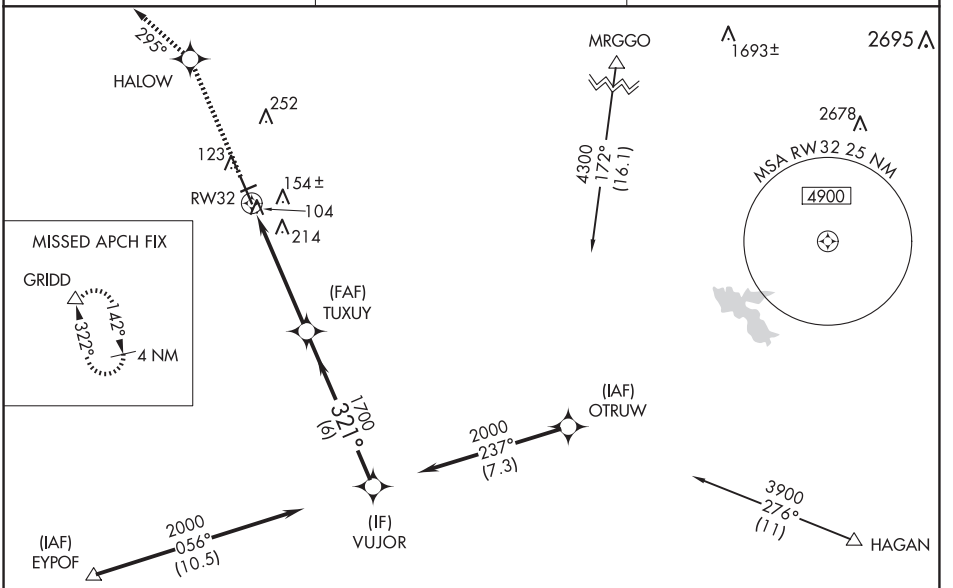
YUBA COUNTY (MYV)

WAAS	APP CRS	Rwy Idg	6007
CH 87014	321°	TDZE	63
W32A		Apt Elev	64

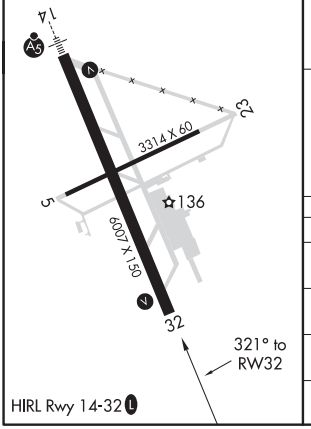
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Lincoln altimeter setting and increase LPV DA to 357 feet, LNAV/VNAV DA to 418 feet and all MDA 60 feet; increase LPV and LNAV/VNAV all Cats visibility ⅛ mile, LNAV Cats C/D visibility ¼ mile. Night landing: Rwy 5, 23 NA. Baro-VNAV and VDP NA when using Lincoln altimeter setting.

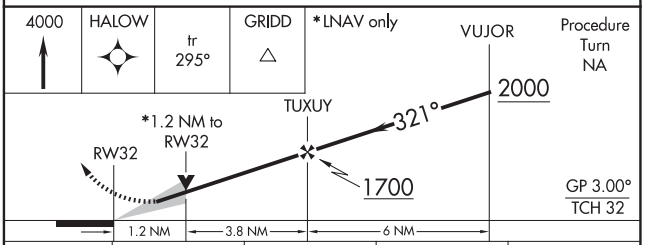
MISSED APPROACH: Climb to 4000 direct HALOW and via track 295° to GRIDD and hold.

ASOS	NORCAL APP CON	UNICOM
118.475	125.4 259.1	123.05 (CTAF) L



ELEV 64 | TDZE 63





CATEGORY	A	B	C	D
LPV DA	313-⅞ 250 (300-⅞)			
LNAV/VNAV DA	374-1⅛ 311 (400-1⅛)			
LNAV MDA	480-1 417 (500-1)		480-1⅛ 417 (500-1⅛)	
CIRCLING	540-1 476 (500-1)		540-1½ 476 (500-1½)	620-2 556 (600-2)

MARYSVILLE, CALIFORNIA
Orig-D 12NOV15

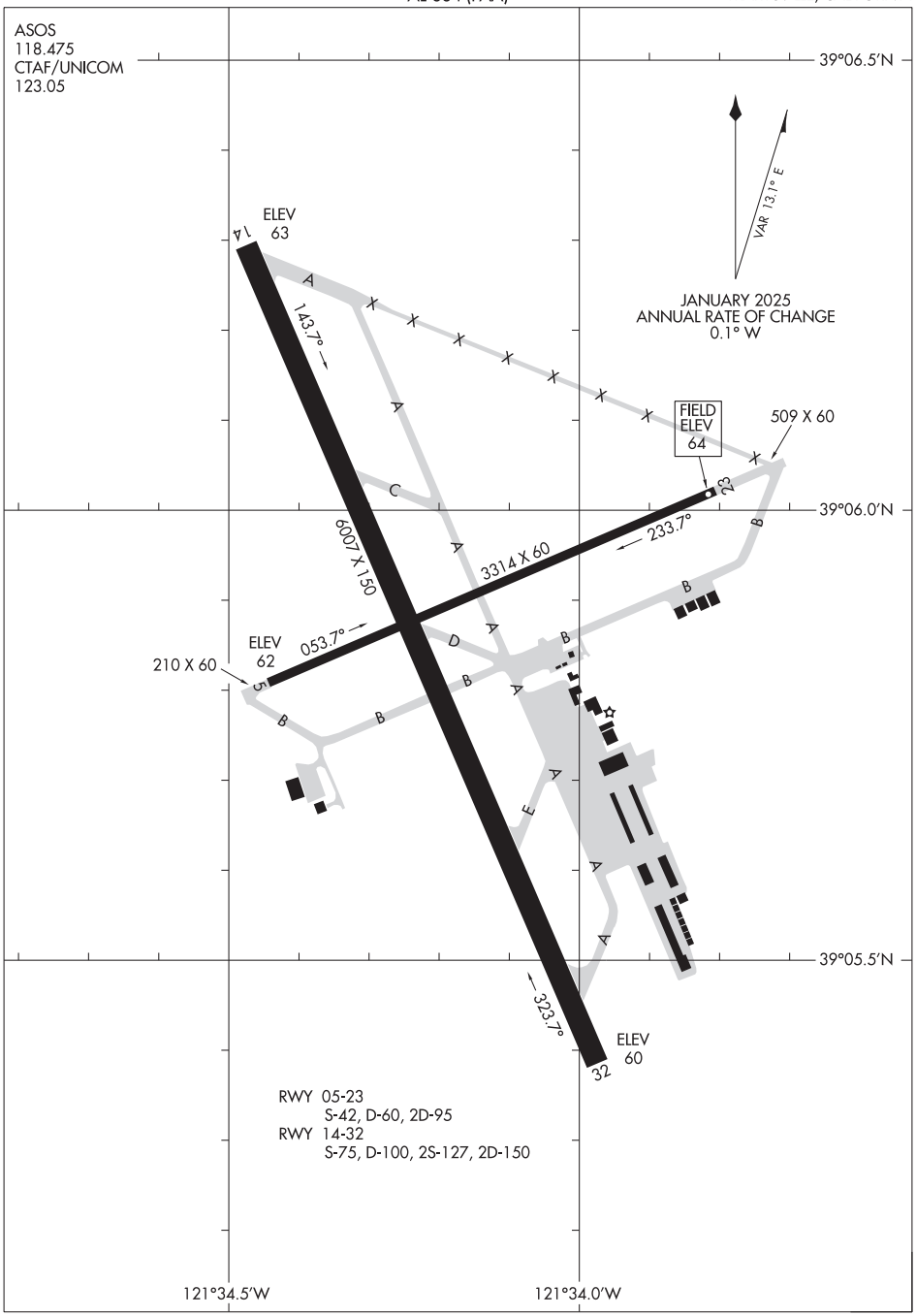
39°06'N-121°34'W

YUBA COUNTY (MYV)

RNAV (GPS) RWY 32

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025



SW-2, 07 AUG 2025 to 02 OCT 2025

MERCED, CALIFORNIA AL-665 (FAA) 25219

LOC/DME I-MCE	APP CRS	Rwy Ldg	5914
109.3	304°	TDZE	155
Chan 30		Apt Elev	155

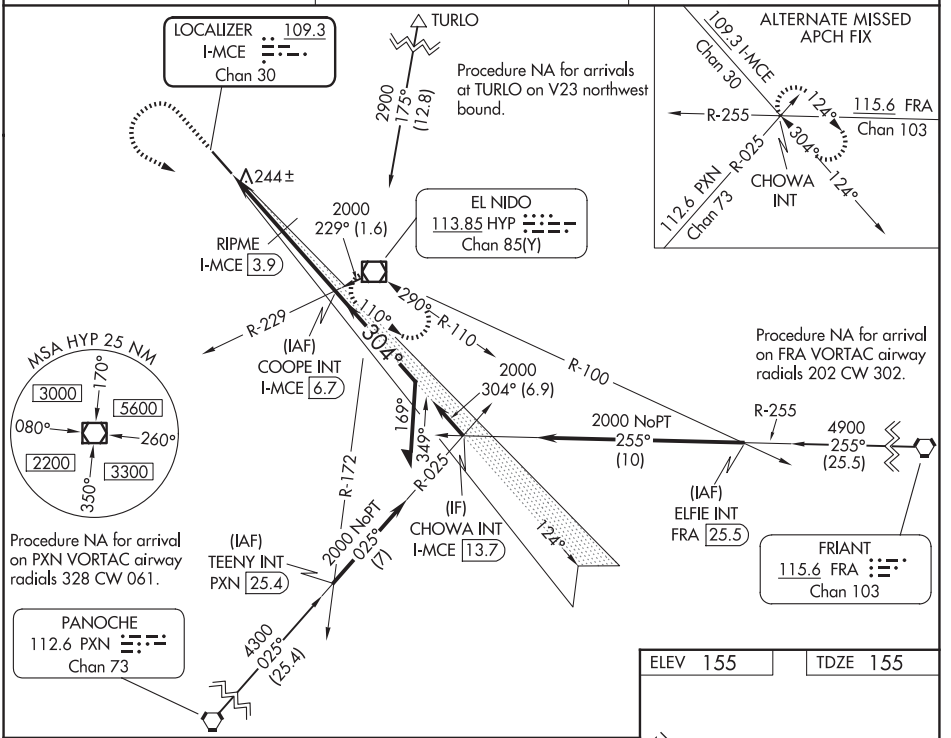
ILS or LOC RWY 30
MERCED YOSEMITE RGNL (MCE)

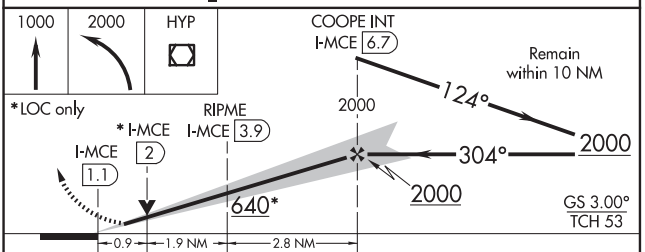
NA — For inop ALS, increase S-LOC visibility to 1 SM.

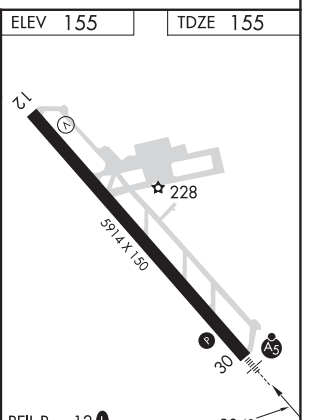
MALSR

MISSED APPROACH: Climb to 1000 then climbing left turn to 2000 direct HYP VOR/DME and hold.

ASOS	NORCAL APP CON	UNICOM
132.175	120.95 269.45	122.7 (CTAF) L







CATEGORY	A	B	C	D
S-ILS 30	355-½ 200 (200-½)			
S-LOC 30	640-¾ 485 (500-¾)		640-1 485 (500-1)	
RIPME FIX MINIMUMS				
S-LOC 30	500-¾ 345 (400-¾)			

FAF to MAP 5.6 NM

Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

MERCED, CALIFORNIA
Amdt 15 15AUG19

37°17'N-120°31'W

MERCED YOSEMITE RGNL (MCE)
ILS or LOC RWY 30

WAAS	APP CRS	Rwy Ldg	5914
CH 93923	123°	TDZE	155
W12A		Apt Elev	155

RNAV (GPS) RWY 12

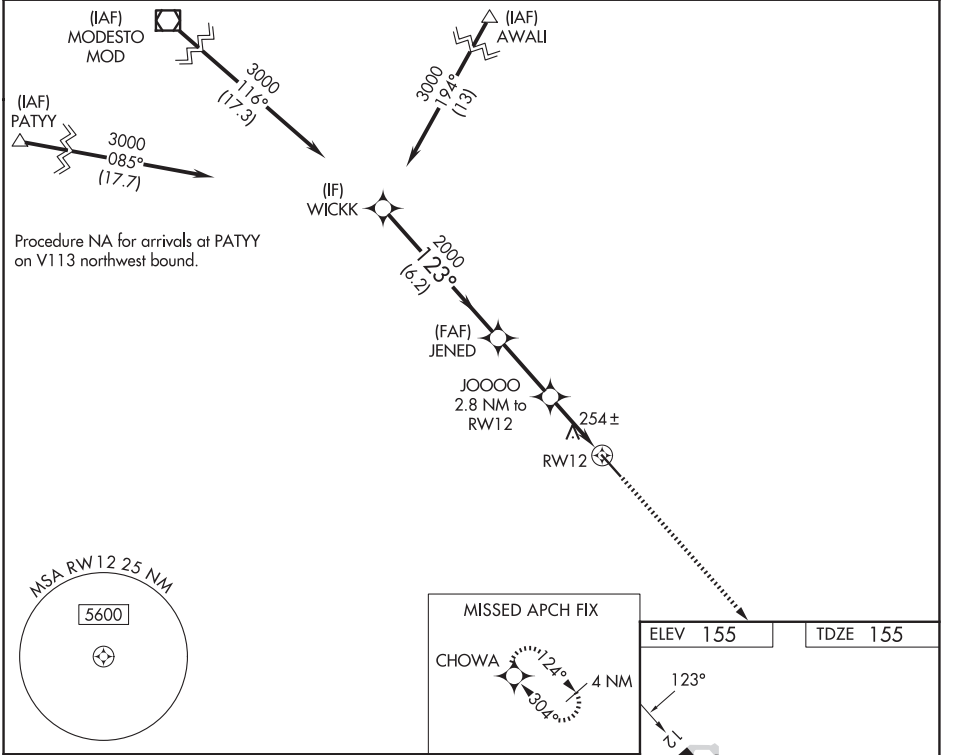
MERCED YOSEMITE RGNL (MCE)

RNP APCH.

T Rwy 12 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -3°C or above 54°C.

MISSED APPROACH: Climb to 3600 direct CHOWA and hold.

ASOS	NORCAL APP CON	UNICOM
132.175	120.95 269.45	122.7 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	405-¾	250 (300-¾)		
LNAV/VNAV DA	434-⅞	279 (300-⅞)		
LNAV MDA	520-1	365 (400-1)		

REIL Rwy 12 L
HIRL Rwy 12-30 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 30

MERCED YOSEMITE RGNL (MCE)

WAAS	APP CRS	Rwy Ldg	5914
CH 93709	304°	TDZE	155
W30A		Apt Elev	155

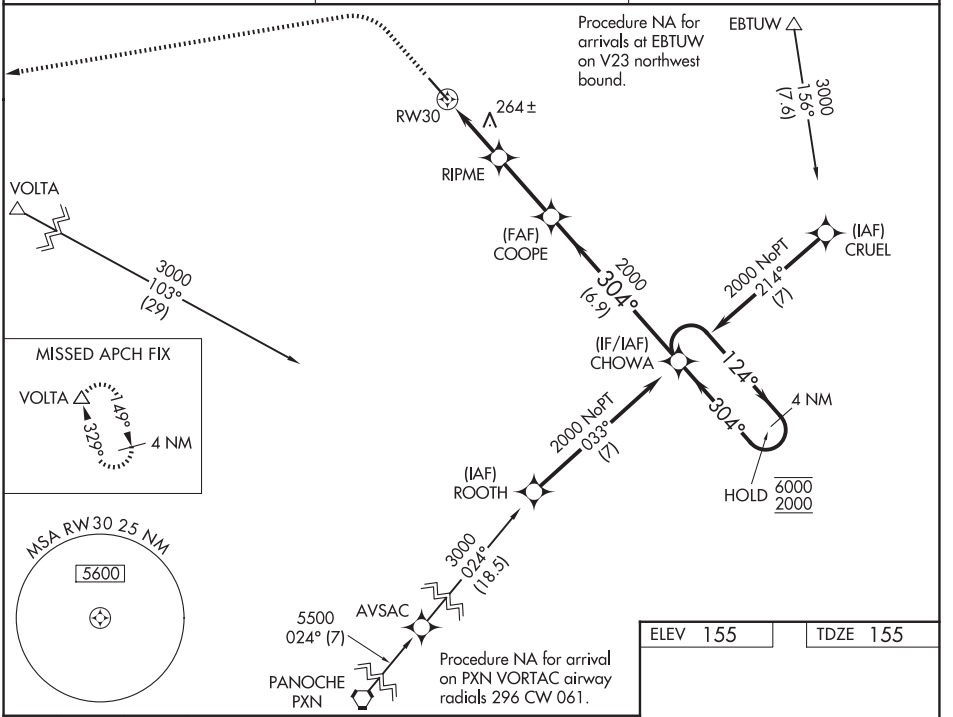
RNP APCH.

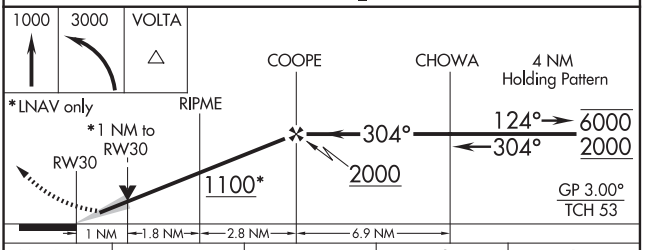
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -3°C or above 54°C. For inoperative ALS, increase LNAV Cats C/D visibility to 1⅜ SM. Circling NA northeast of Rwy 12-30.

MALSR

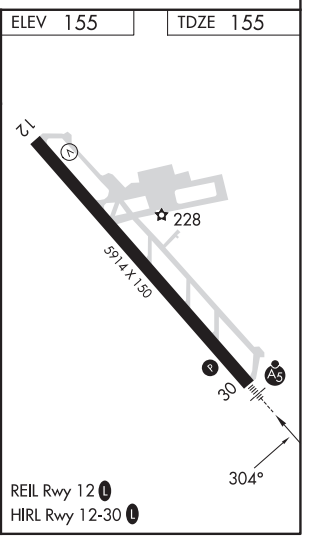
MISSED APPROACH: Climb to 1000 then climbing left turn to 3000 direct VOLTA and hold.

ASOS	NORCAL APP CON	UNICOM
132.175	120.95 269.45	122.7 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	355-½ 200 (200-½)			
LNAV/VNAV DA	544-⅝ 389 (400-⅝)			
LNAV MDA	520-½ 365 (400-½)		520-⅝ 365 (400-⅝)	
CIRCLING	560-1 405 (500-1)	620-1 465 (500-1)	620-1½ 465 (500-1½)	720-2 565 (600-2)



SW-2, 07 AUG 2025 to 02 OCT 2025

LOC/DME I-MCE	APP CRS	Rwy Ldg	5914
109.3	123°	TDZE	155
Chan 30		Apt Elev	155

LOC BC RWY 12

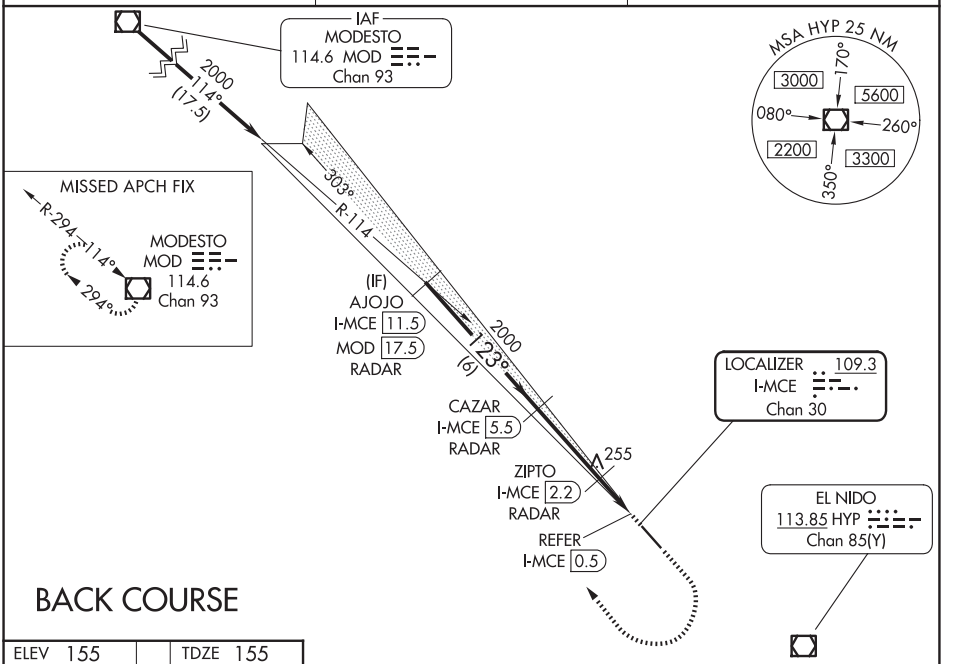
MERCED YOSEMITE RGNL (MCE)

DME or RADAR required.

T NA Rwy 12 helicopter visibility reduction below ¾ SM NA. Circling NA northeast of Rwy 12-30.

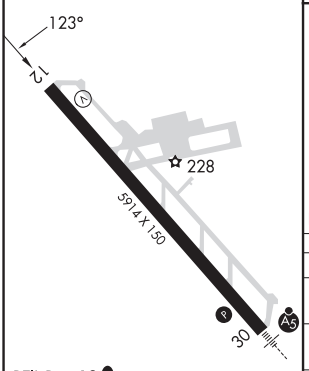
MISSED APPROACH: Climb to 1000 then climbing right turn to 3000 direct MOD VOR/DME and hold.

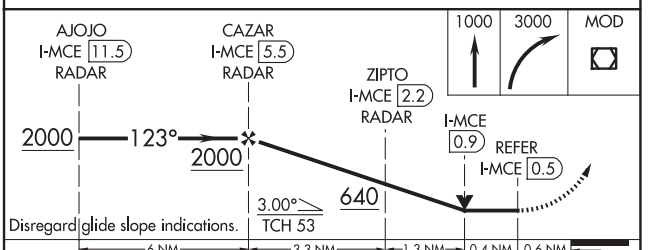
ASOS	NORCAL APP CON	UNICOM
132.175	120.95 269.45	122.7 (CTAF) L



BACK COURSE

ELEV 155	TDZE 155





CATEGORY	A	B	C	D
S-12	640-1 485 (500-1)		640-1⅜ 485 (500-1⅜)	
CIRCLING	640-1 485 (500-1)		640-1½ 485 (500-1½)	720-2 565 (600-2)
ZIPTO FIX MINIMUMS				
S-12	520-1 365 (400-1)	NA		
CIRCLING	560-1 405 (500-1)	620-1 465 (500-1)	620-1½ 465 (500-1½)	720-2 565 (600-2)

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

LOC I-MOD	APP CRS	Rwy Ldg	5904
111.9	288°	TDZE	91
		Apt Elev	99

ILS or LOC RWY 28R

MODESTO CITY-COUNTY-HARRY SHAM FLD (MOD)

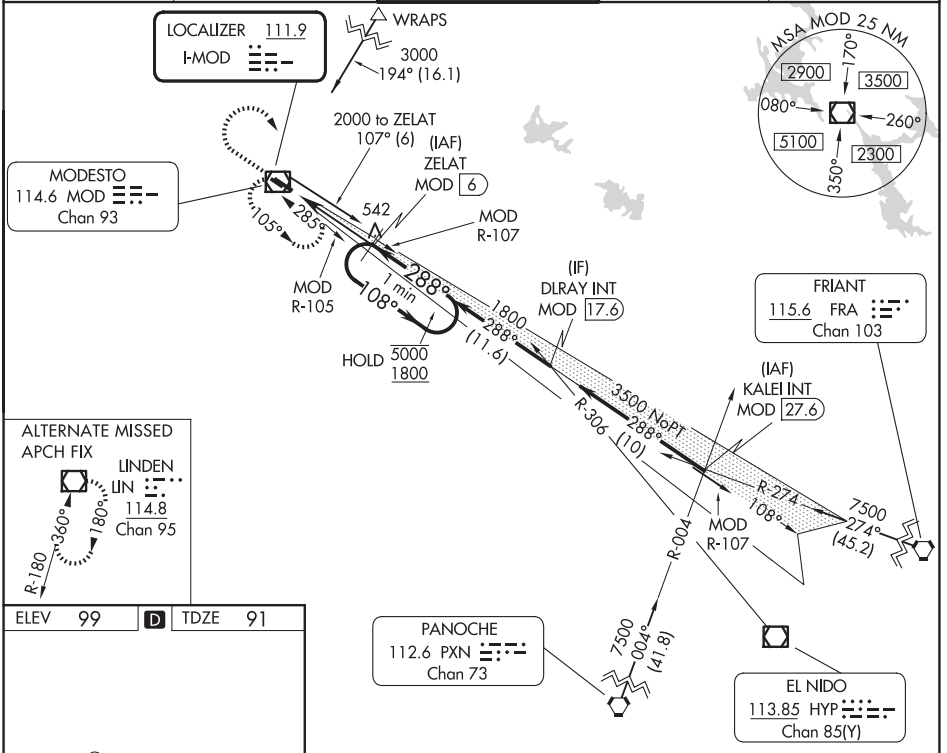
DME required for LOC only.

T A Autopilot coupled approach NA below 1080. DME from MOD VOR/DME. Simultaneous reception of I-MOD and MOD DME required. For inop ALS, increase S-LOC 28R Cat C/D visibility to 1⅜ SM.

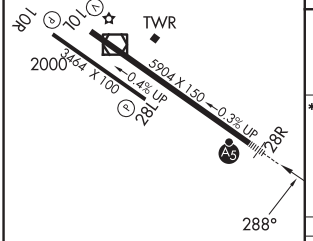
MALSR

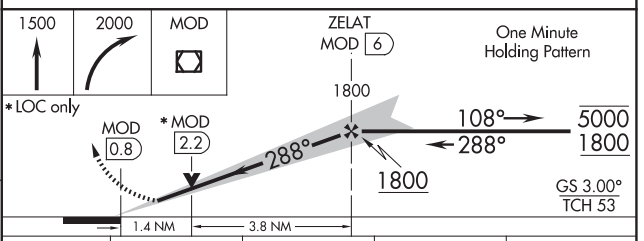
MISSED APPROACH: Climb to 1500 then climbing right turn to 2000 direct MOD VOR/DME and hold.

ATIS	NORCAL APP CON	MODESTO TOWER ★	GND CON	UNICOM
127.7	120.95 269.45	125.3 (CTAF) L 257.8	121.7	122.95



ELEV 99 D TDZ 91





CATEGORY	A	B	C	D
S-ILS 28R	291-½	200 (200-½)		
S-LOC 28R	580-½ 489 (500-½)		580-1 489 (500-1)	
CIRCLING	580-1 481 (500-1)	600-1 501 (600-1)	700-1¾ 601 (700-1¾)	820-2¼ 721 (800-2¼)

REIL Rwy 10L L
MIRL Rwy 10R-28L
HIRL Rwy 10L-28R L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS	APP CRS	Rwy Ldg	5904
CH 70609	288°	TDZE	91
W28A		Apt Elev	99

RNAV (GPS) RWY 28R

MODESTO CITY-COUNTY-HARRY SHAM FLD (MOD)

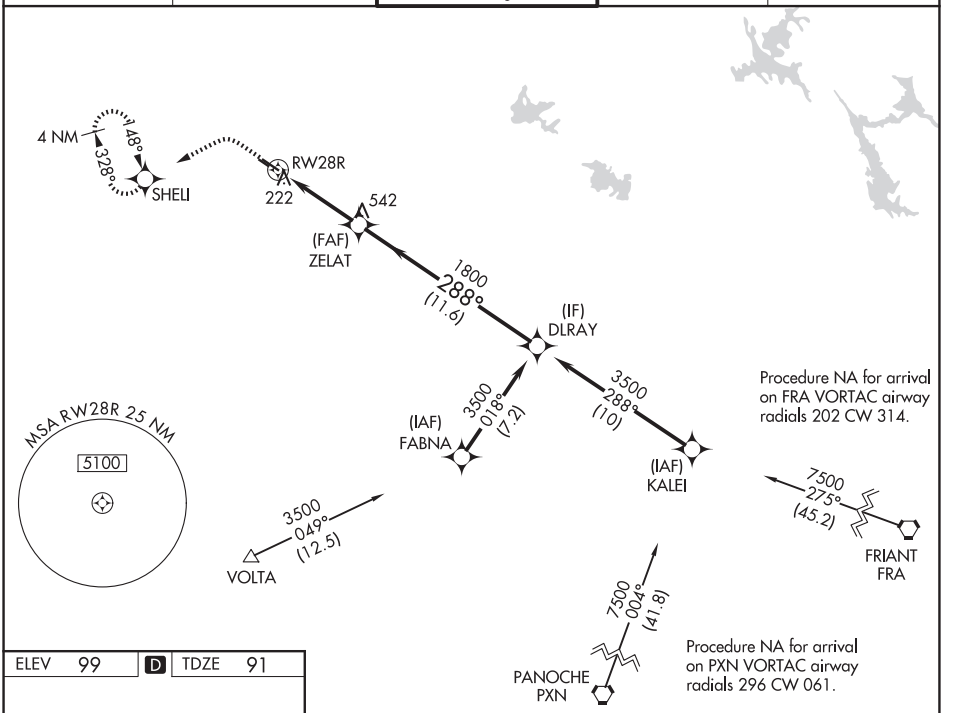
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1°C or above 54°C. For inoperative ALS, increase LNAV/VNAV all Cats visibility to ⅞ SM.

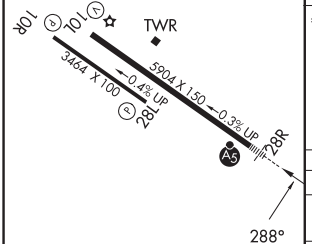
MALSR

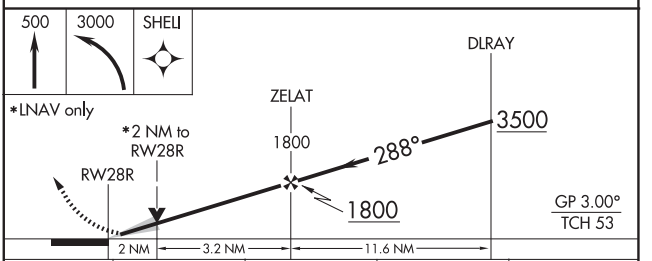
MISSED APPROACH: Climb to 500 then climbing left turn to 3000 direct SHELI and hold, continue climb-in-hold to 3000.

ATIS	NORCAL APP CON	MODESTO TOWER ★	GND CON	UNICOM
127.7	120.95 269.45	125.3 (CTAF) L 257.8	121.7	122.95



ELEV 99 D TDZE 91





CATEGORY	A	B	C	D
LPV DA	291-½ 200 (200-½)			
LNAV/VNAV DA	393-½ 302 (300-½)			
LNAV MDA	480-½ 389 (400-½)		480-⅝ 389 (400-⅝)	
CIRCLING	540-1 441 (500-1)	600-1 501 (600-1)	700-1¾ 601 (700-1¾)	820-2¼ 721 (800-2¼)

REIL Rwy 10L L
MIRL Rwy 10R-28L
HIRL Rwy 10L-28R L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

25219

AIRPORT DIAGRAM

MODESTO CITY-COUNTY-HARRY SHAM FLD (MOD)

AL-643 (FAA)

MODESTO, CALIFORNIA

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

AIRPORT DIAGRAM

MODESTO, CALIFORNIA

MODESTO CITY-COUNTY-HARRY SHAM FLD (MOD)

25219

NDB MOG 404	APP CRS 356°	Rwy Idg N/A TDZE N/A Apt Elev 2651

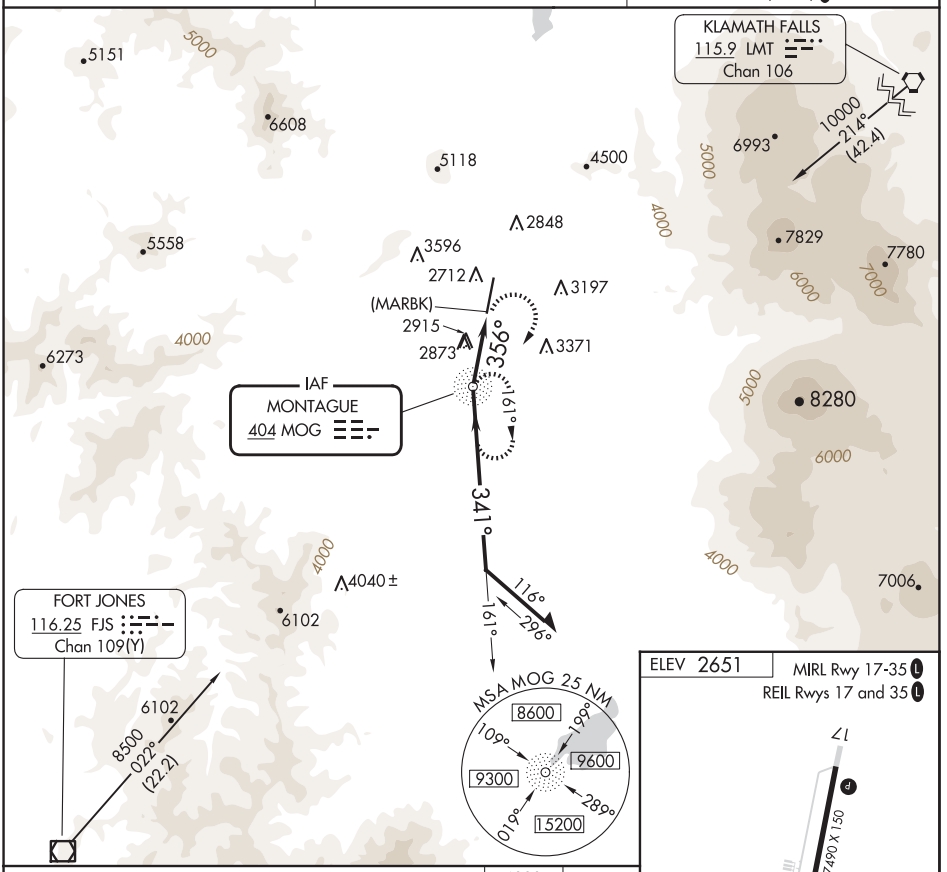
NDB or GPS-A

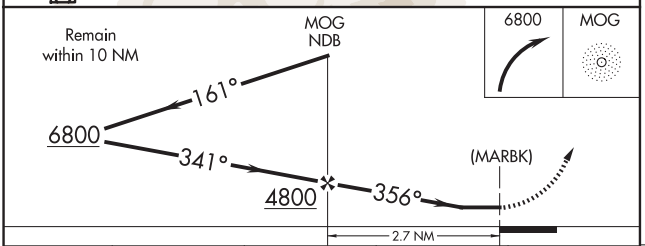
SISKIYOU COUNTY (SIY)

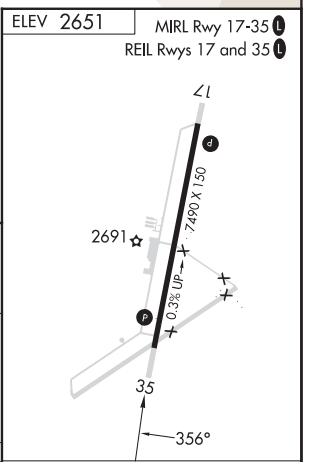
Use Siskiyou County altimeter setting; when not available, use Montague-Yreka Rohrer Fld altimeter setting; when neither received, procedure not authorized. Circling NA for Cats C and D west of Rwy 17-35.

MISSED APPROACH: Climbing right turn to 6800 direct MOG NDB and hold.

ASOS	SEATTLE CENTER	UNICOM
121.125	124.85 306.3	123.0 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	3760-1¼ 1109 (1200-1¼)	3760-1½ 1109 (1200-1½)	3980-3 1329 (1400-3)	4220-3 1569 (1600-3)

FAF to MAP 2.7 NM

Knots	60	90	120	150	180
Min:Sec	2:42	1:48	1:21	1:05	0:54

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

ILS or LOC RWY 10R

MONTEREY RGNL (MRY)

LOC/DME I-MRY	APP CRS	Rwy ldg	7000
110.7	098°	TDZE	198
Chan 44		Apt Elev	257

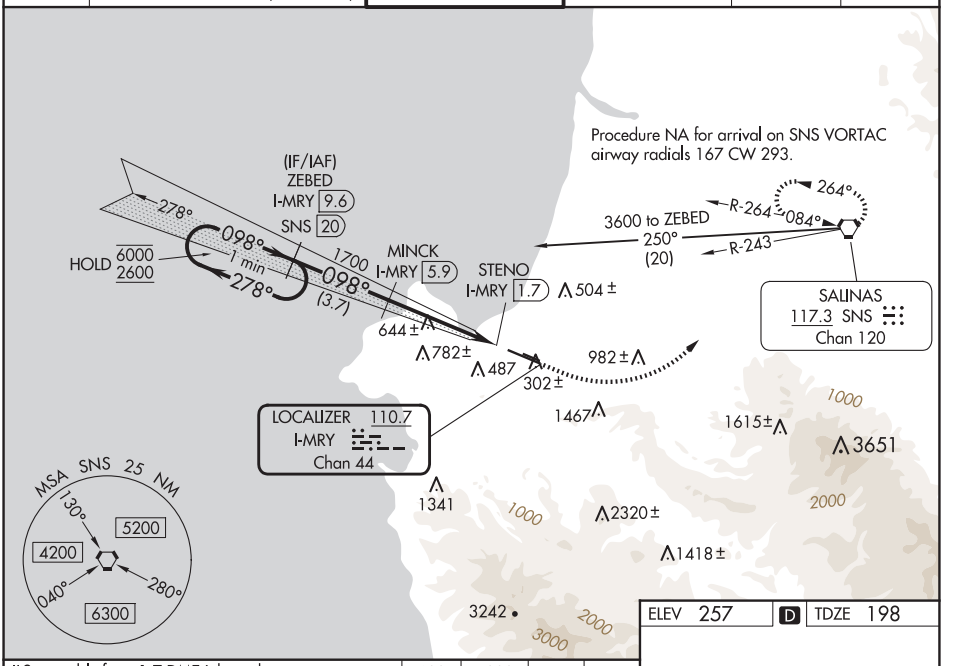
DME required.

T A Circling NA south of Rwy 10R-28L.
For inop ALS, increase S-ILS 10R all Cats visibility to RVR 6000, and increase S-LOC 10R Cat C and D visibility to 2 SM.

MALSR

MISSED APPROACH: Climb to 600 then climbing left turn to 5000 on heading 030° and on SNS VORTAC R-243 to SNS VORTAC and hold, continue climb-in-hold to 5000.
Missed approach requires minimum climb of 265 feet per NM to 1360.

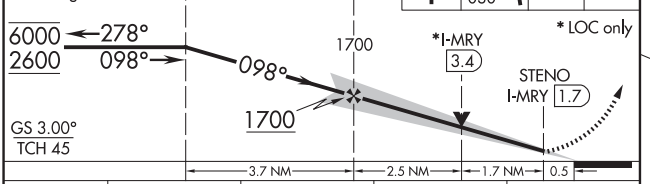
ATIS	NORCAL APP CON	MONTEREY TOWER ★	GND CON	CLNC DEL	UNICOM
119.25	133.0 251.15 (001°-135°) 127.15 307.125 (136°-360°)	118.4 (CTAF) L 257.8	120.875 348.6	135.45	122.95



ILS unusable from 1.7 DME inbound.

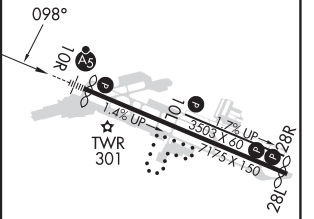
600	5000	SNS
↑	hdg 030°	R-243

SNS



CATEGORY	A	B	C	D
S-ILS 10R#	398/24 200 (200-½)			
S-ILS 10R	583/35 385 (400-⅝)			
S-LOC 10R	920/24 722 (700-½)		920-1⅝ 722 (700-1⅝)	
C CIRCLING	920-1 663 (700-1)		1280-3 1023 (1100-3)	NA

ELEV 257 D TDZE 198



MIRL Rwy 10L-28R
HIRL Rwy 10R-28L L
REIL Rwy 28L L
REIL Rwys 10L and 28R

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS	Rwy Idg	7000
278°	TDZE	257
	Apt Elev	257

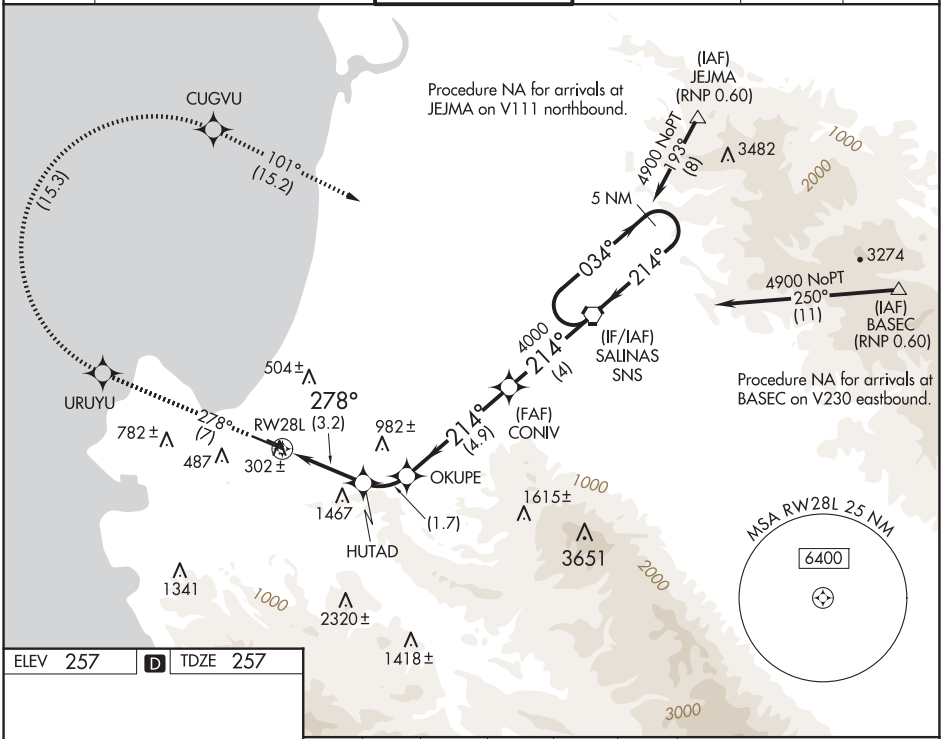
RNAV (RNP) Z RWY 28L

MONTEREY RGNL (MRY)

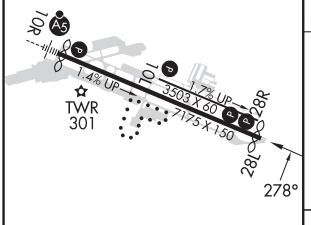
For uncompensated Baro-VNAV systems, procedure NA below 0°C (32°F) or above 48°C (120°F). RF required. GPS required.

MISSED APPROACH: Climb to 5500 on track 278° to URUYU, right turn to CUGVU, and on track 101° to SNS VORTAC and hold.

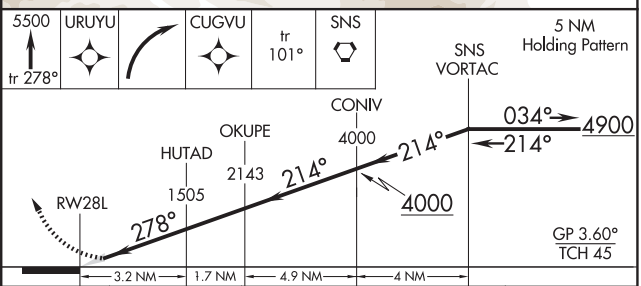
ATIS	NORCAL APP CON	MONTEREY TOWER*	GND CON	CLNC DEL	UNICOM
119.25	133.0 251.15 (001°-135°) 127.15 307.125 (136°-360°)	118.4 (CTAF) L 257.8	120.875 348.6	135.45	122.95



ELEV 257 D TDZE 257



MIRL Rwy 10L-28R
HIRL Rwy 10R-28L L
REIL Rwy 28L L
REIL Rwys 10L and 28R



CATEGORY	A	B	C	D
RNP 0.10 DA	527/45	270 (300-⅞)		NA
RNP 0.15 DA	767- 1½	510 (600-1½)		NA
RNP 0.20 DA	1236-3	979 (1000-3)		NA

AUTHORIZATION REQUIRED

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 10R

MONTEREY RGNL (MRY)

WAAS	APP CRS	Rwy Idg	7000
CH 69602	098°	TDZE	198
W10A		Apt Elev	257

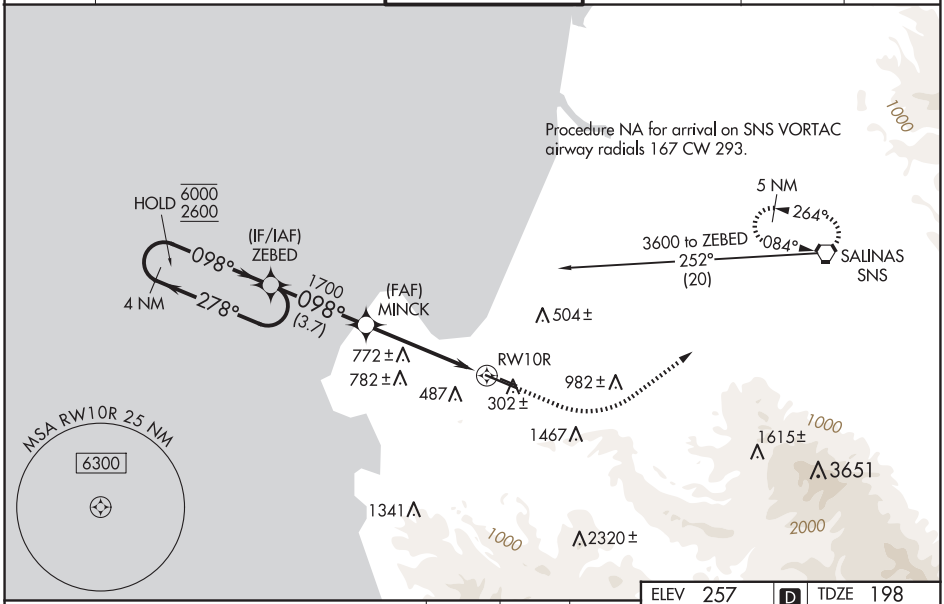
RNP APCH - GPS.

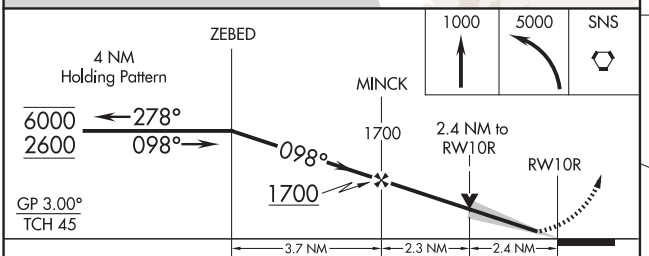
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 2°C or above 54°C. Circling NA south of Rwy 10R-28L. For inop ALS, increase LPV all Cats visibility to 1⅜ SM and LNAV Cat C/D visibility to 2½ SM.
*RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 1000 then climbing left turn to 5000 direct SNS VORTAC and hold, continue climb-in-hold to 5000.
*Missed approach requires minimun climb of 387 feet per NM to 1700.

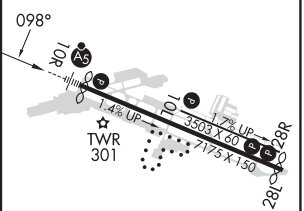
ATIS	NORCAL APP CON	MONTEREY TOWER★	GND CON	CLNC DEL	UNICOM
119.25	133.0 251.15 (001°-135°) 127.15 307.125 (136°-360°)	118.4 (CTAF) L 257.8	120.875 348.6	135.45	122.95





CATEGORY	A	B	C	D
LPV DA*	398/24 200 (200-½)			
LPV DA	677/50 479 (500-1)			
LNAV/VNAV DA	754/60 556 (500-1¼)			
LNAV MDA	980/24 782 (800-½)	980/40 782 (800-¾)	980-1¾ 782 (800-1¾)	
C CIRCLING	980-1 723 (800-1)	980-1¼ 723 (800-1¼)	1280-3 1023 (1100-3)	NA

ELEV 257 D TDZE 198



MIRL Rwy 10L-28R
HIRL Rwy 10R-28L L
REIL Rwy 28L L
REIL Rwys 10L and 28R

SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS CH 61237 W28A	APP CRS 261°	Rwy Idg 7000 TDZE 257 Apt Elev 257

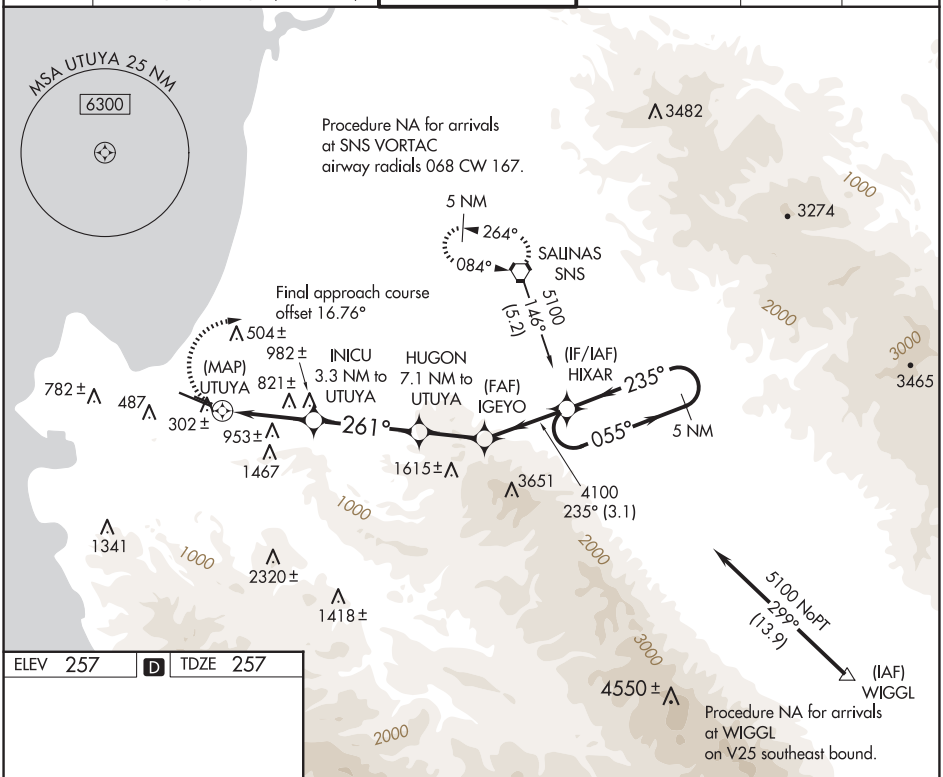
RNAV (GPS) Y RWY 28L

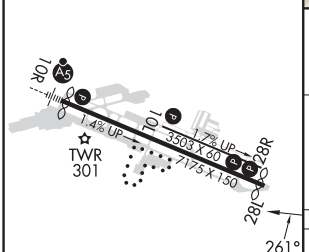
MONTEREY RGNL (MRY)

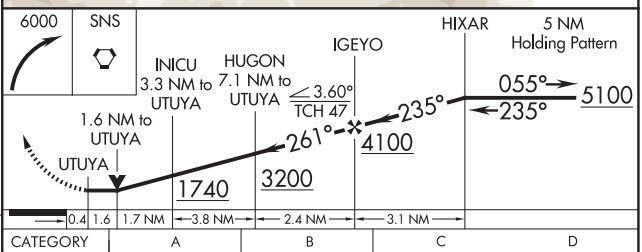
T Circling NA South of Rwy 28L-10R. DME/DME RNP-0.3 NA.
A Helicopter visibility reduction below RVR 4000 NA.

MISSED APPROACH: Climbing right turn to 6000 direct SNS VORTAC and hold, continue climb-in-hold to 6000.

ATIS	NORCAL APP CON	MONTEREY TOWER ★	GND CON	CLNC DEL	UNICOM
119.25	133.0 251.15 (001°-135°) 127.15 307.125 (136°-360°)	118.4 (CTAF) L 257.8	120.875 348.6	135.45	122.95







CATEGORY	A	B	C	D
LP MDA	1080/55 823 (900-1)	1080/60 823 (900-1¼)	1080-2½ 823 (900-2½)	NA
LNAV MDA	1120/55 863 (900-1)	1120/60 863 (900-1¼)	1120-2½ 863 (900-2½)	NA
C CIRCLING	1120-1¼ 863 (900-1¼)		1260-3 1003 (1100-3)	NA

MIRL Rwy 10L-28R
HIRL Rwy 10R-28L L
REIL Rwy 28L L
REIL Rwys 10L and 28R

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

LOC RWY 28L

MONTEREY RGNL (MRY)

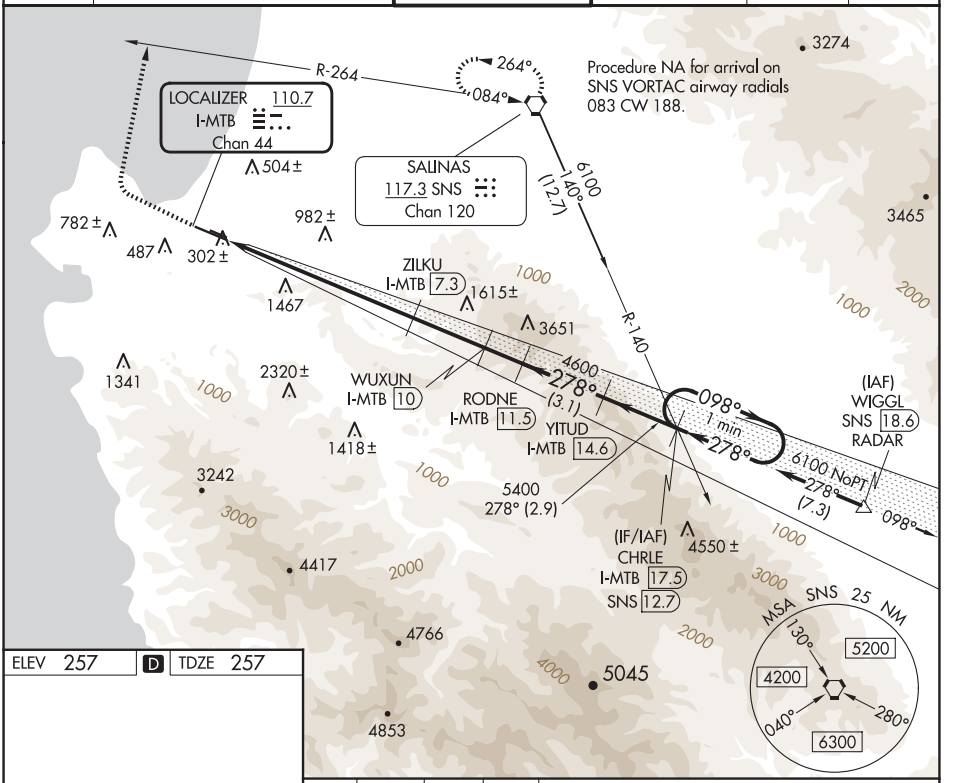
LOC/DME I-MTB	APP CRS	Rwy ldg	7000
110.7	278°	TDZE	257
Chan 44		Apt Elev	257

DME required. DME or RADAR required for procedure entry.

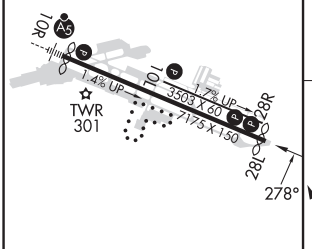
Circling NA south of Rwy 10R-28L. Rwy 28L helicopter visibility reduction below ¾ SM NA.

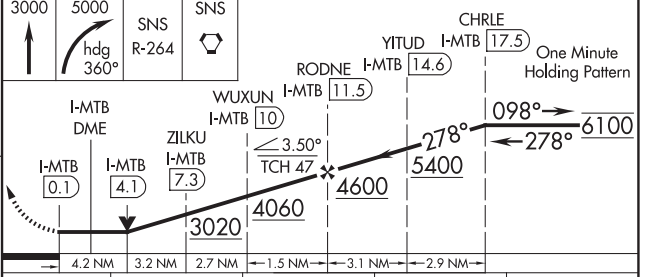
MISSED APPROACH: Climb to 3000 then climbing right turn to 5000 on heading 360° and SNS VORTAC R-264 to SNS VORTAC and hold.

ATIS	NORCAL APP CON	MONTEREY TOWER★	GND CON	CLNC DEL	UNICOM
119.25	133.0 251.15 (001°-135°) 127.15 307.125 (136°-360°)	118.4 (CTAF) L 257.8	120.875 348.6	135.45	122.95



ELEV 257	D	TDZE 257





CATEGORY	A	B	C	D
S-LOC 28L	1860-1¼ 1603 (1700-1¼)	1860-1½ 1603 (1700-1½)	1860-3	1603 (1700-3)
C CIRCLING	1860-1¼ 1603 (1700-1¼)	1860-1½ 1603 (1700-1½)	1860-3	1603 (1700-3)

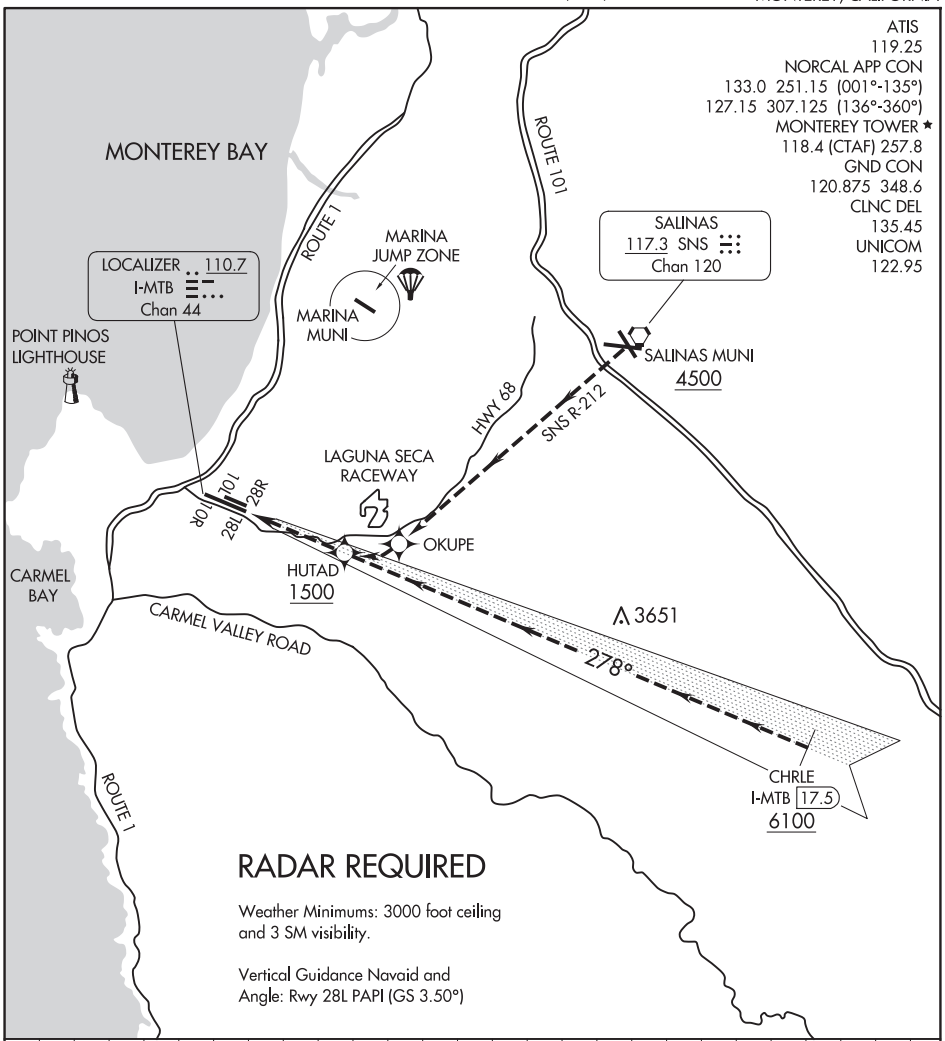
MIRL Rwy 10L-28R
HIRL Rwy 10R-28L L
REIL Rwy 28L L
REIL Rwys 10L and 28R

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RACEWAY VISUAL RWY 28L

AL-271 (FAA)

MONTEREY RGNL (MRY)
MONTEREY, CALIFORNIA



RACEWAY VISUAL APPROACH RWY 28L

PROCEDURE NOT AUTHORIZED AT NIGHT.

From the east, proceed to Salinas Municipal Airport, then proceed southwest, remaining east of State Highway 68 until abeam Laguna Seca Raceway.
From the southeast, proceed from CHRLE on 278° course to HUTAD (1 mile south of Laguna Seca Raceway).

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

25107

AIRPORT DIAGRAM

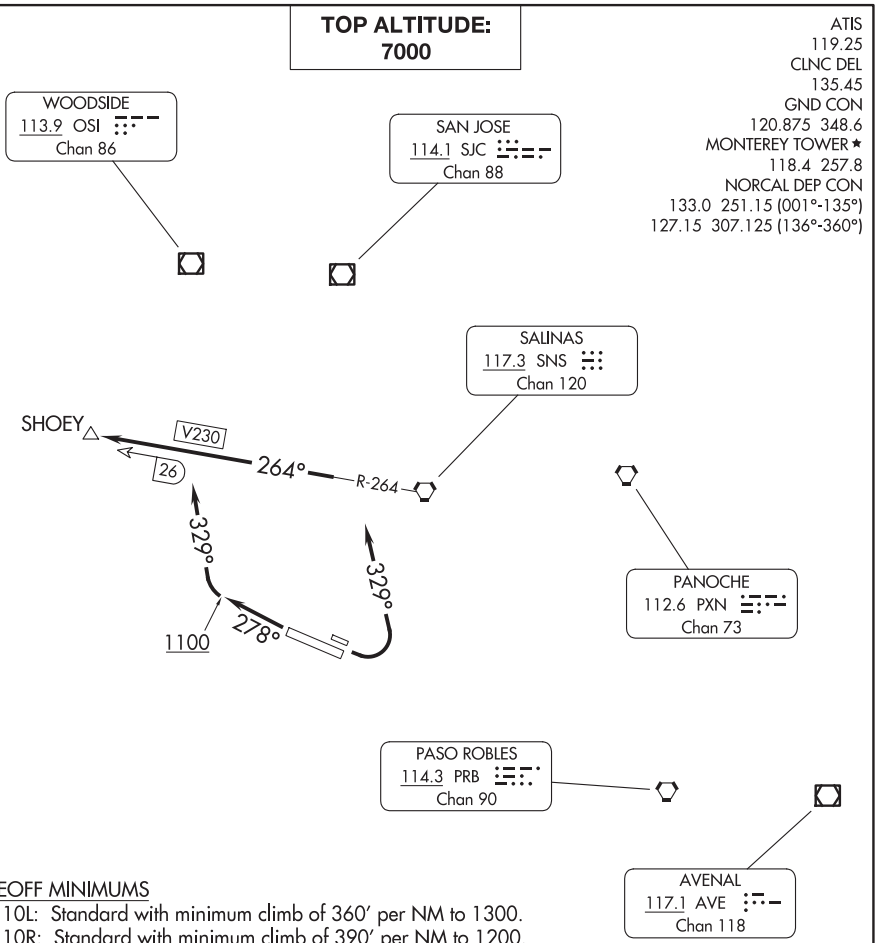
AL-271 (FAA)

MONTEREY RGNL (MRY)

MONTEREY, CALIFORNIA

SW-2, 07 AUG 2025 to 02 OCT 2025

AIRPORT DIAGRAM
25107
MONTEREY, CALIFORNIA
MONTEREY RGNL (MRY)



TAKEOFF MINIMUMS
Rwy 10L: Standard with minimum climb of 360′ per NM to 1300.
Rwy 10R: Standard with minimum climb of 390′ per NM to 1200.
Rwy 28L: Standard with minimum climb of 310′ per NM to 1100.
Rwy 28R: Standard.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 10L/R: Climbing left turn heading 329°. Thence. . . .

TAKEOFF RUNWAYS 28L/R: Climb heading 278° until leaving 1100 or as directed by Monterey Tower. Then climbing right turn heading 329°. Thence. . . .

. . . .intercept SNS R-264 westbound to SHOEY intersection. Maintain 7000 or assigned altitude. Expect clearance to filed altitude five minutes after departure.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(TORO7.TORO) 23334

TORO SEVEN DEPARTURE

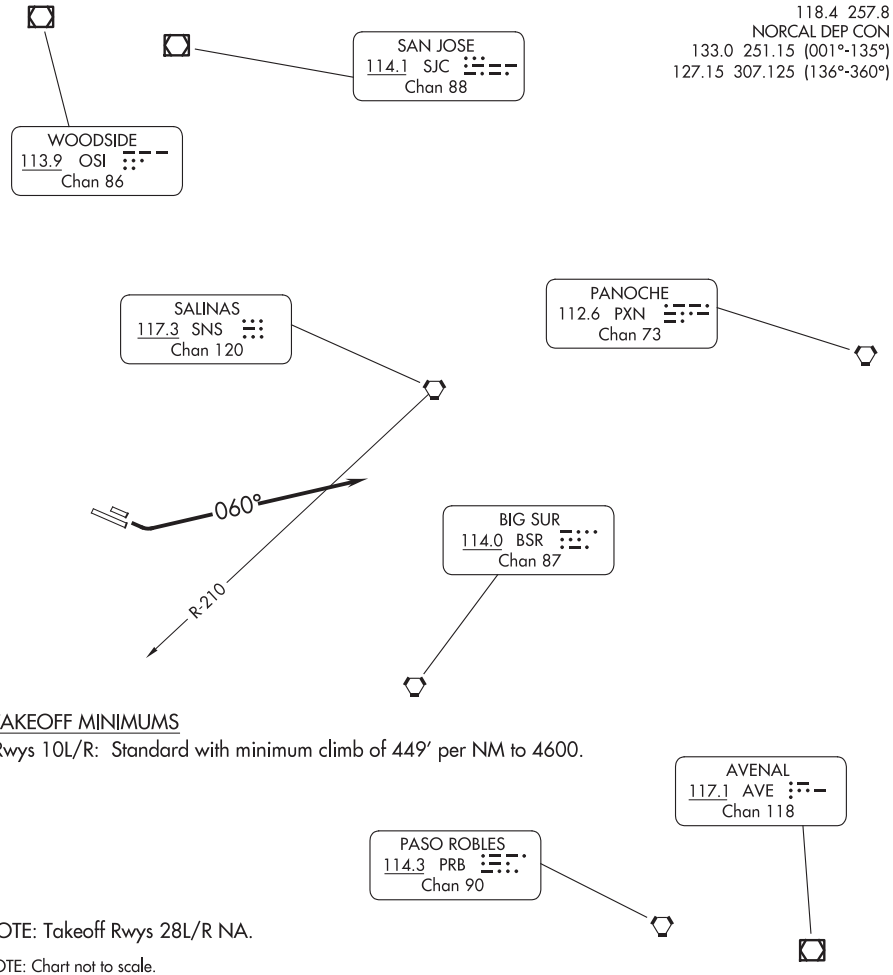
AL-271 (FAA)

MONTEREY RGNL (MRY)
MONTEREY, CALIFORNIA

SW-2, 07 AUG 2025 to 02 OCT 2025

TOP ALTITUDE: 7000

ATIS
119.25
GND CON
120.875 348.6
MONTEREY TOWER ★
118.4 257.8
NORCAL DEP CON
133.0 251.15 (001°-135°)
127.15 307.125 (136°-360°)



TAKEOFF MINIMUMS

Rwys 10L/R: Standard with minimum climb of 449′ per NM to 4600.

NOTE: Takeoff Rwys 28L/R NA.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 10L/R: Climbing left turn heading 060°. Expect vectors to filed route after passing SNS R-210. Maintain 7000 or assigned altitude. Expect clearance to filed altitude five minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received within one minute after departure, climb direct SNS VORTAC, then via assigned fix/route. Maintain 7000.

ILS or LOC RWY 32R

MOFFETT FEDERAL AIRFIELD (NUQ)

LOC/DME I-NUQ	APP CRS	Rwy Idg	9006
110.35	322°	TDZE	31
Chan 40 (Y)		Apt Elev	37

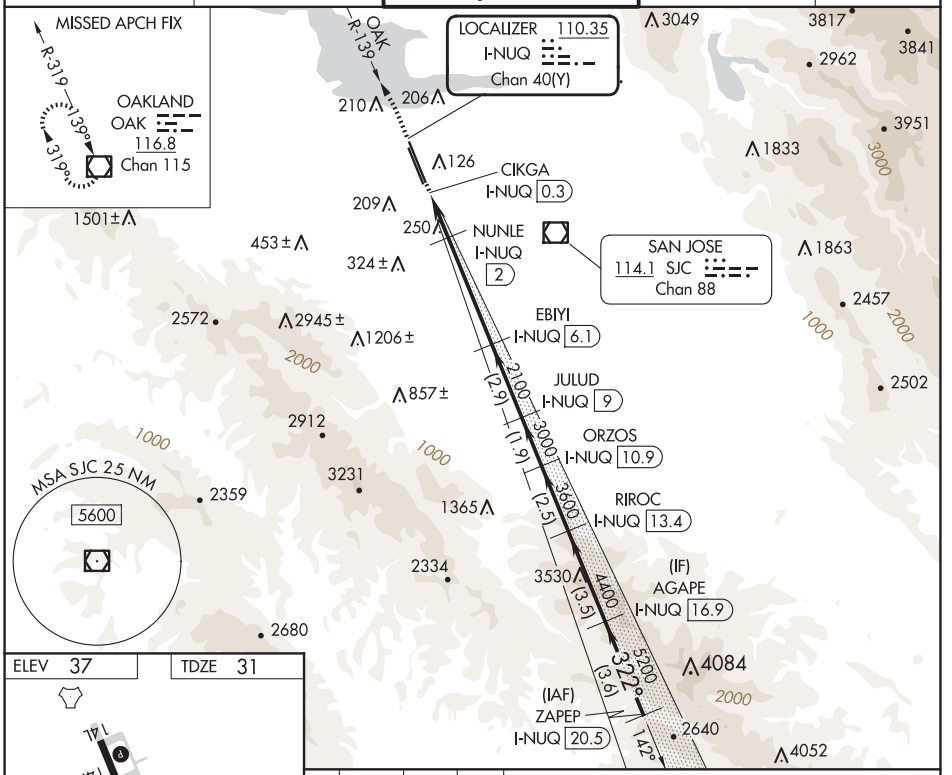
DME required. RADAR required for procedure entry.

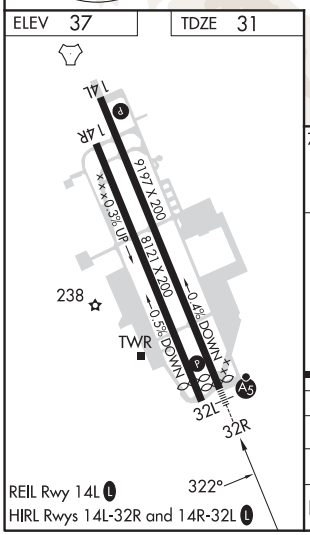
For inop ALS, increase S-ILS 32R visibility all Cats to 1⅜ SM and S-LOC 32R Cat A/B to 1 SM and C/D/E to 1⅜ SM.

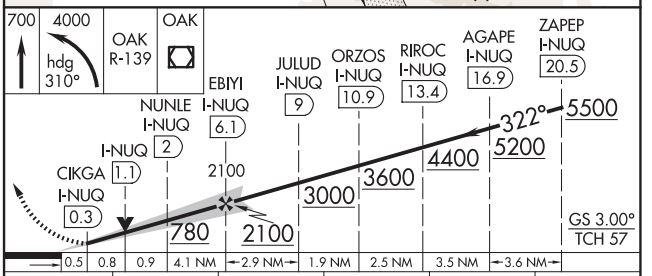
MALSR

MISSED APPROACH: Climb to 700 then climbing left turn to 4000 on heading 310° and on OAK VOR/DME R-139 to OAK VOR/DME and hold.

ATIS	NORCAL APP CON	MOFFETT TOWER ★	GND CON	CLNC DEL
124.175 283.0	120.1 290.25	119.55 L (CTAF) 259.65	121.85 278.95	296.75







CATEGORY	A	B	C	D	E
S-ILS 32R	483-⅞ 452 (500-⅞)				
S-LOC 32R	500-¾ 469 (500-¾)		500-1 469 (500-1)		
C CIRCLING	540-1 503 (600-1)	600-1 563 (600-1)	620-1½ 583 (600-1½)	780-2½ 743 (800-2½)	940-3 903 (1000-3)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

MOUNTAIN VIEW, CALIFORNIA | AL-410 (FAA) | 25051

RNAV (GPS) RWY 14L

MOFFETT FEDERAL AIRFIELD (NUQ)

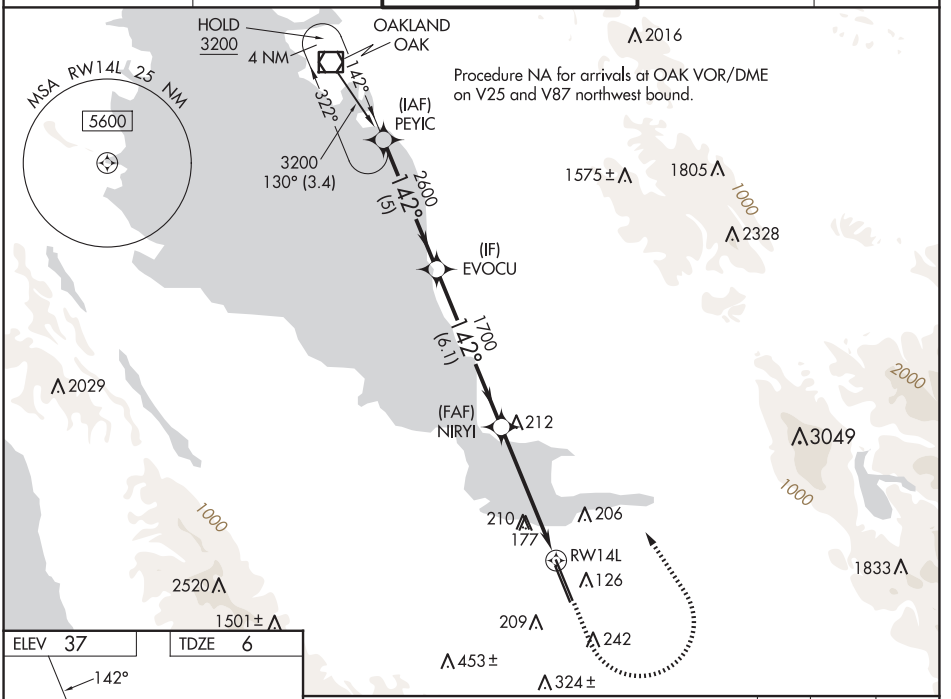
WAAS CH 70442 W14A	APP CRS 142°	Rwy Idg 9197 / TDZE 6 / Apt Elev 37

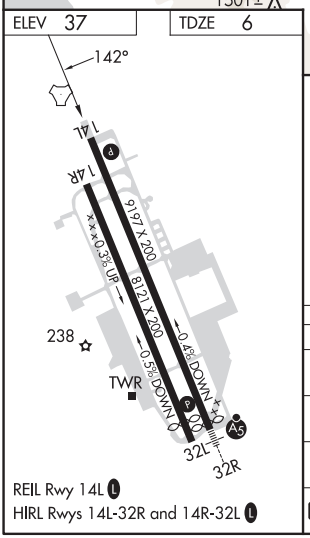
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 0°C or above 54°C .

MISSED APPROACH: Climb to 500 then climbing left turn to 3200 direct PEYIC and hold.

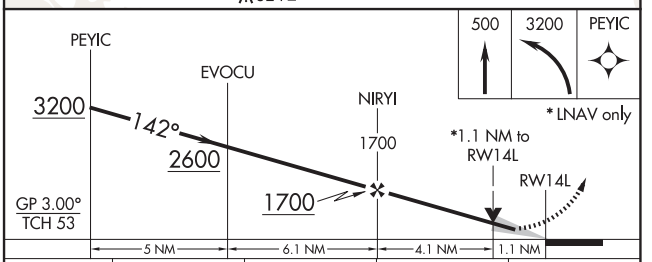
ATIS	NORCAL APP CON	MOFFETT TOWER ★	GND CON	CLNC DEL
124.175 283.0	120.1 290.25	119.55 L (CTAF) 259.65	121.85 278.95	296.75





REIL Rwy 14L L

HIRL Rwys 14L-32R and 14R-32L L



CATEGORY	A	B	C	D
LPV DA	256-¾ 250 (300-¾)			
LNAV/VNAV DA	326-⅞ 320 (300-⅞)			
LNAV MDA	440-1 434 (500-1)		440-1¼ 434 (500-1¼)	
C CIRCLING	540-1 503 (600-1)	600-1 563 (600-1)	620-1½ 583 (600-1½)	780-2¼ 743 (800-2¼)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS	APP CRS	Rwy Idg	8121
CH 81942	142°	TDZE	14
W14B		Apt Elev	37

RNAV (GPS) RWY 14R

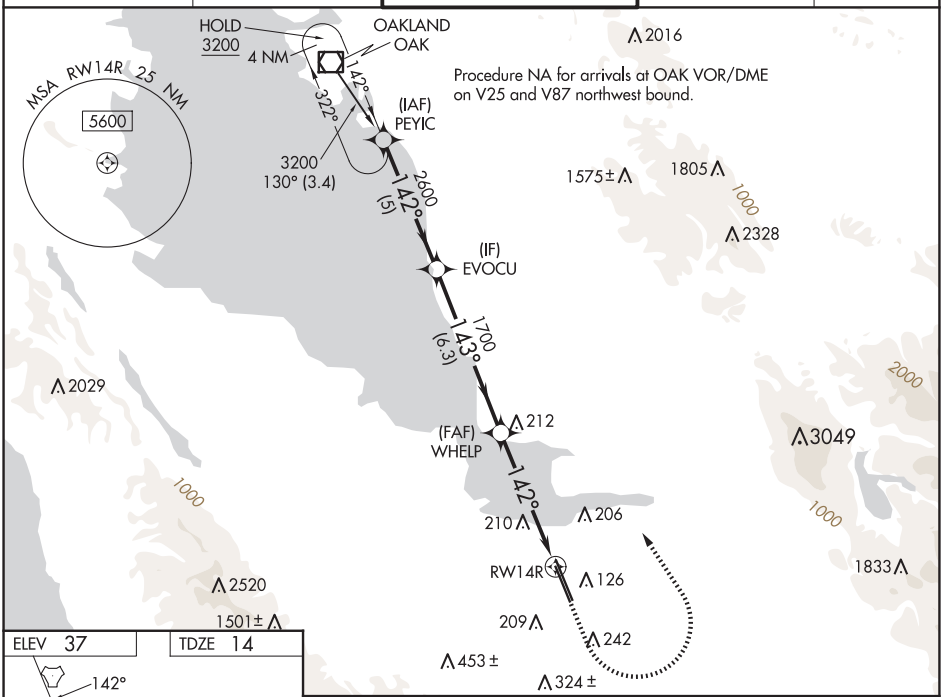
MOFFETT FEDERAL AIRFIELD (NUQ)

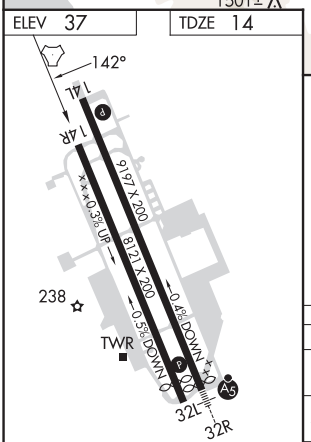
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 0°C or above 54°C.

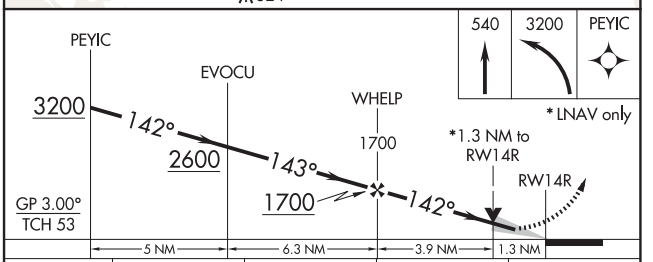
MISSED APPROACH: Climb to 540 then climbing left turn to 3200 direct PEYIC and hold.

ATIS	NORCAL APP CON	MOFFETT TOWER ★	GND CON	CLNC DEL
124.175 283.0	120.1 290.25	119.55 L (CTAF) 259.65	121.85 278.95	296.75





REIL Rwy 14L L
HIRL Rwys 14L-32R and 14R-32L L



CATEGORY	A	B	C	D
LPV DA	264-¾ 250 (300-¾)			
LNAV/VNAV DA	364-1 350 (400-1)			
LNAV MDA	460-1 446 (500-1)		460-1⅜ 446 (500-1⅜)	
C CIRCLING	540-1 503 (600-1)	600-1 563 (600-1)	620-1½ 583 (600-1½)	780-2¼ 743 (800-2¼)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

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WAAS	APP CRS	Rwy Idg	7521
CH 50242	322°	TDZE	37
W32A		Apt Elev	37

RNAV (GPS) RWY 32L

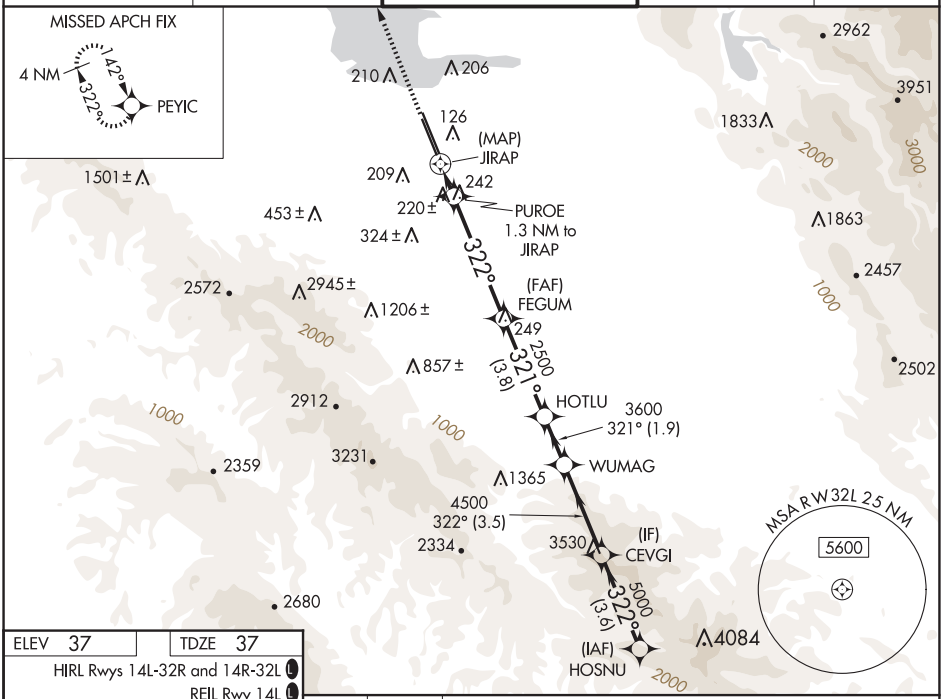
MOFFETT FEDERAL AIRFIELD (NUQ)

RNP APCH - GPS.

T A Rwy 32L helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 0°C or above 47°C .

MISSED APPROACH: Climb to 3200 direct PEYIC and hold.

ATIS	NORCAL APP CON	MOFFETT TOWER ★	GND CON	CLNC DEL
124.175 283.0	120.1 290.25	119.55 L (CTAF) 259.65	121.85 278.95	296.75



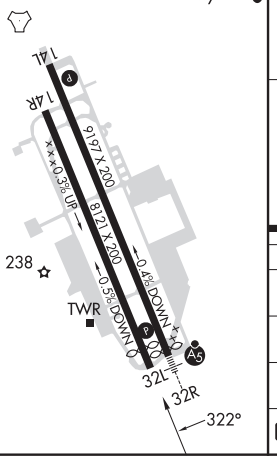
SW-2, 07 AUG 2025 to 02 OCT 2025

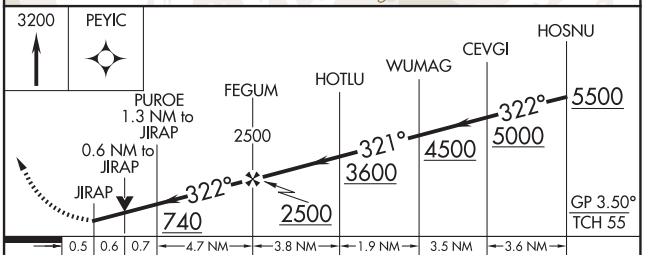
SW-2, 07 AUG 2025 to 02 OCT 2025

ELEV 37	TDZE 37

HIRL Rwys 14L-32R and 14R-32L L

REIL Rwy 14L L





CATEGORY	A	B	C	D
LPV DA	338-⅞ 301 (300-⅞)			
LNAV/VNAV DA	478-1⅜ 441 (500-1⅜)			
LNAV MDA	480-1 443 (500-1)		480-1⅜ 443 (500-1⅜)	
C CIRCLING	540-1 503 (600-1)	600-1 563 (600-1)	620-1½ 583 (600-1½)	780-2¼ 743 (800-2¼)

WAAS	APP CRS	Rwy Idg	9006
CH 53343	322°	TDZE	31
W32B		Apt Elev	37

RNAV (GPS) RWY 32R

MOFFETT FEDERAL AIRFIELD (NUQ)

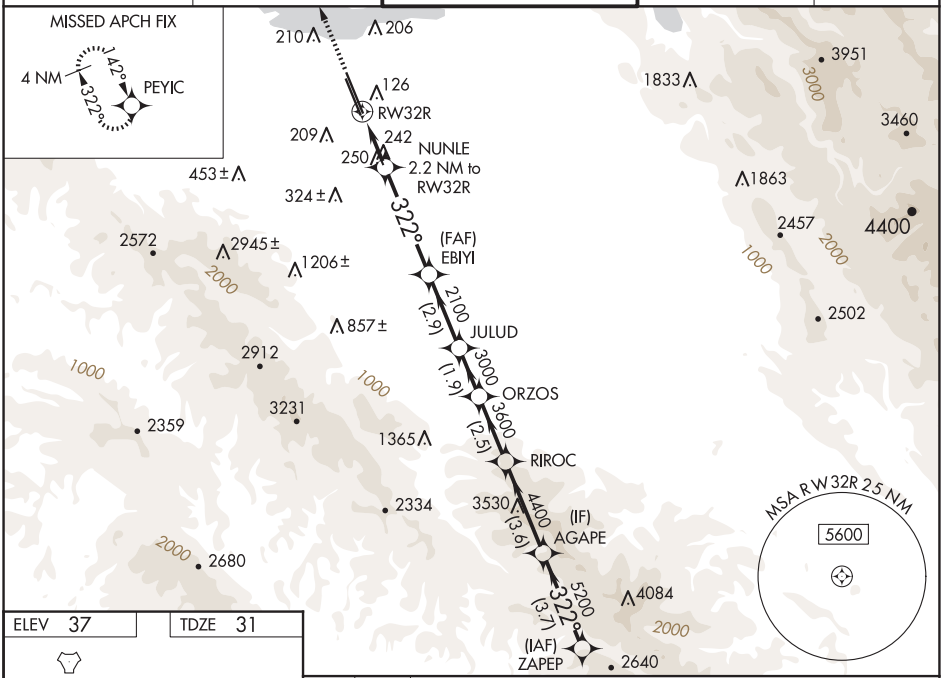
RNP APCH - GPS.

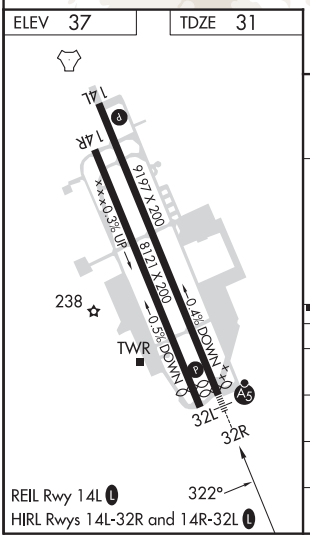
T A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Rwy 32R helicopter visibility reduction below ¾ SM NA. For inop ALS increase LPV all Cats visibility to 1¼ SM, LNAV/VNAV all Cats visibility to 1⅜ SM and LNAV Cats A/B to 1 SM and Cats C/D visibility to 1⅜ SM.

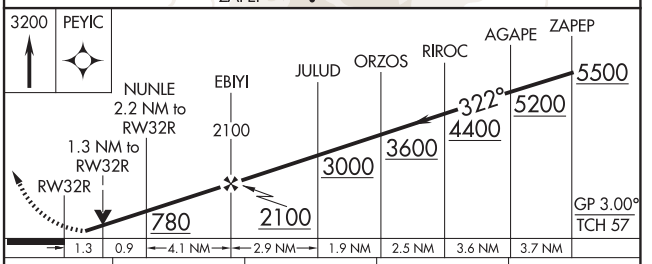
MALSR

MISSED APPROACH: Climb to 3200 direct PEYIC and hold.

ATIS	NORCAL APP CON	MOFFETT TOWER★	GND CON	CLNC DEL
124.175 283.0	120.1 290.25	119.55 L (CTAF) 259.65	121.85 278.95	296.75







CATEGORY	A	B	C	D
LPV DA	452-¾ 421 (500-¾)			
LNAV/VNAV DA	493-1 462 (500-1)			
LNAV MDA	500-¾ 469 (500-¾)		500-1 469 (500-1)	
C CIRCLING	540-1 503 (600-1)	600-1 563 (600-1)	620-1½ 583 (600-1½)	780-2½ 743 (800-2½)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

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LOC RWY 14L

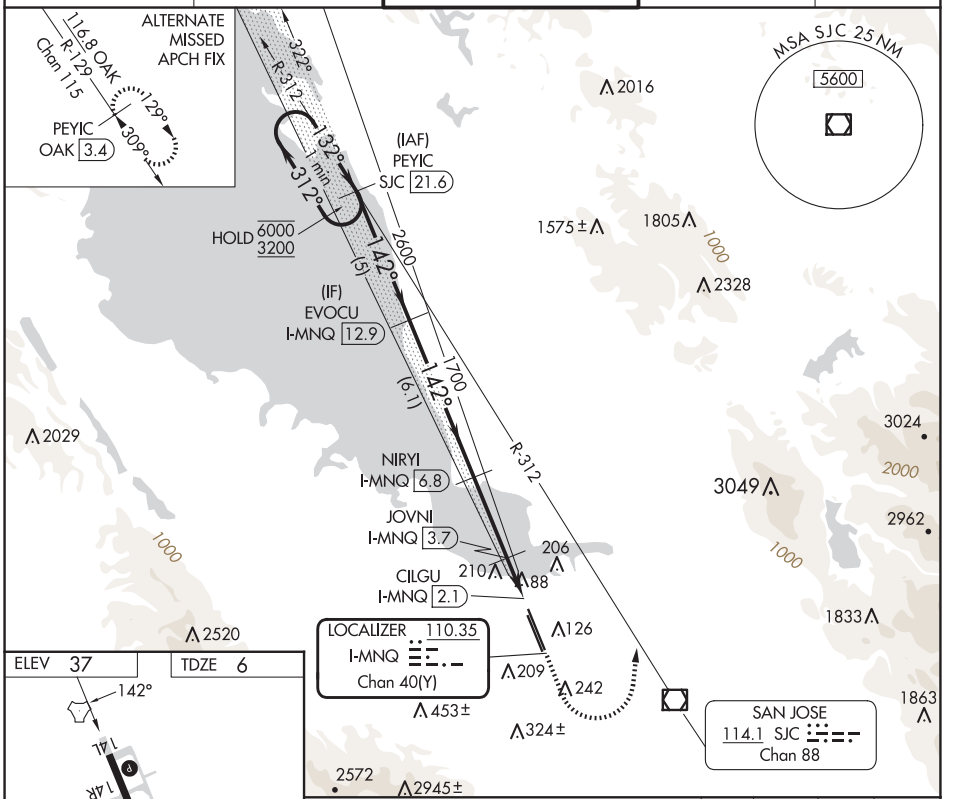
MOFFETT FEDERAL AIRFIELD (NUQ)

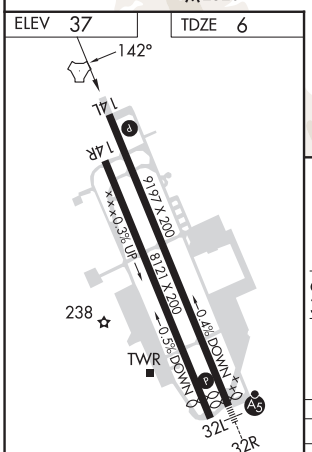
LOC/DME I-MNQ	APP CRS	Rwy Idg	9197
110.35	142°	TDZE	6
Chan 40 (Y)		Apt Elev	37

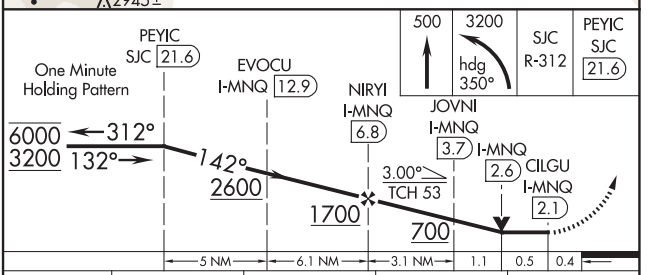
DME required. RADAR required for procedure entry.

MISSED APPROACH: Climb to 500 then climbing left turn to 3200 on heading 350° and SJC VOR/DME R-312 to PEYIC/SJC 21.6 DME and hold.

ATIS	NORCAL APP CON	MOFFETT TOWER ★	GND CON	CLNC DEL
124.175 283.0	120.1 290.25	119.55 L (CTAF) 259.65	121.85 278.95	296.75







CATEGORY	A	B	C	D
S-LOC 14L	360-1 354 (400-1)			
C CIRCLING	540-1 503 (600-1)	600-1 563 (600-1)	620-1½ 583 (600-1½)	780-2½ 743 (800-2½)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

TACAN	APP CRS	Rwy Idg	7521
NUQ Chan 123 (117.6)	321°	TDZE	36
		Apt Elev	37

TACAN RWY 32L

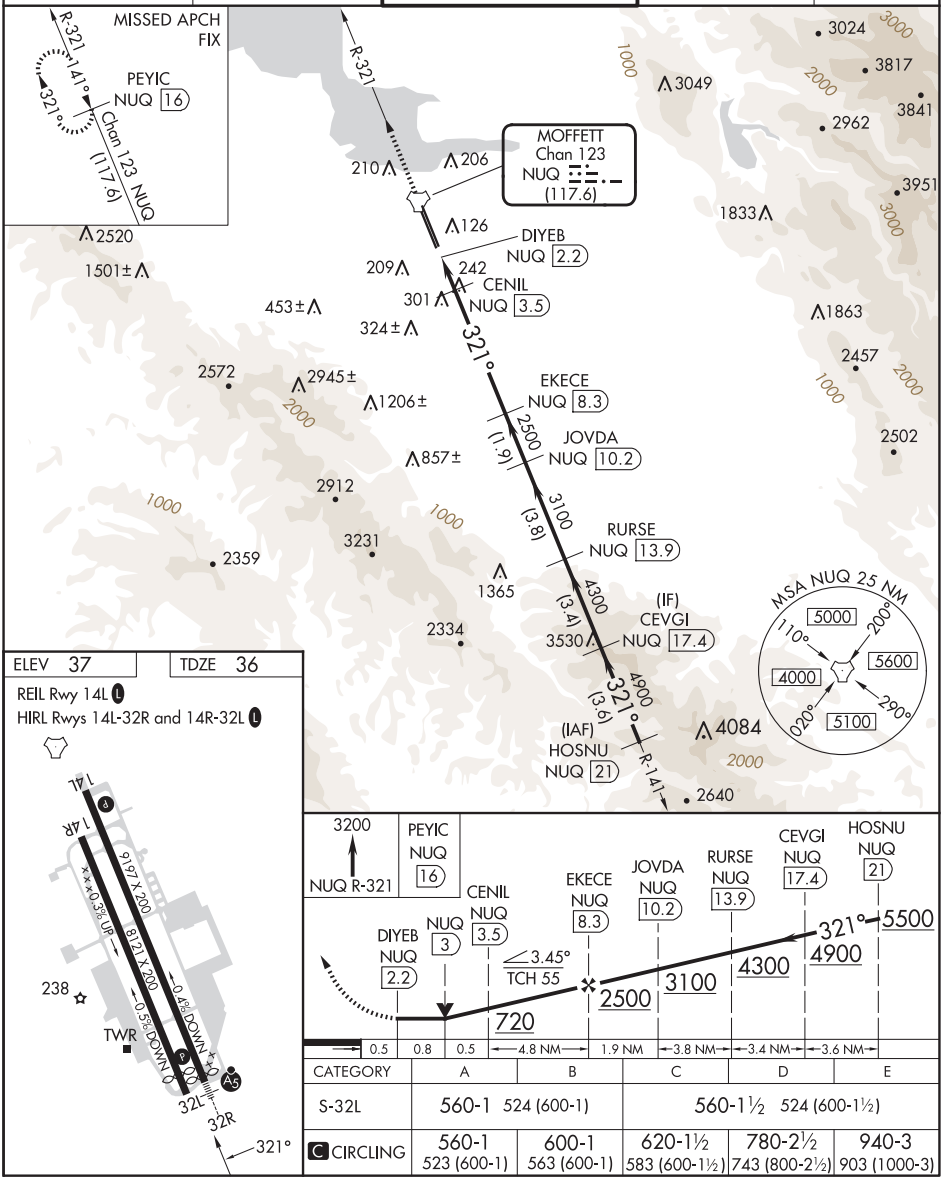
MOFFETT FEDERAL AIRFIELD (NUQ)

RADAR required for procedure entry.

Rwy 32L helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3200 on NUQ TACAN R-321 to PEYIC/16 DME and hold.

ATIS	NORCAL APP CON	MOFFETT TOWER ★	GND CON	CLNC DEL
124.175 283.0	120.1 290.25	119.55 L (CTAF) 259.65	121.85 278.95	296.75



CATEGORY	A	B	C	D	E
S-32L	560-1 524 (600-1)		560-1½ 524 (600-1½)		
C CIRCLING	560-1 523 (600-1)	600-1 563 (600-1)	620-1½ 583 (600-1½)	780-2½ 743 (800-2½)	940-3 903 (1000-3)

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MOUNTAIN VIEW, CALIFORNIA | AL-410 (FAA) | 25051

TACAN NUQ Chan 123 (117.6)	APP CRS 321°	Rwy Idg 9006 TDZE 31 Apt Elev 37

TACAN RWY 32R

MOFFETT FEDERAL AIRFIELD (NUQ)

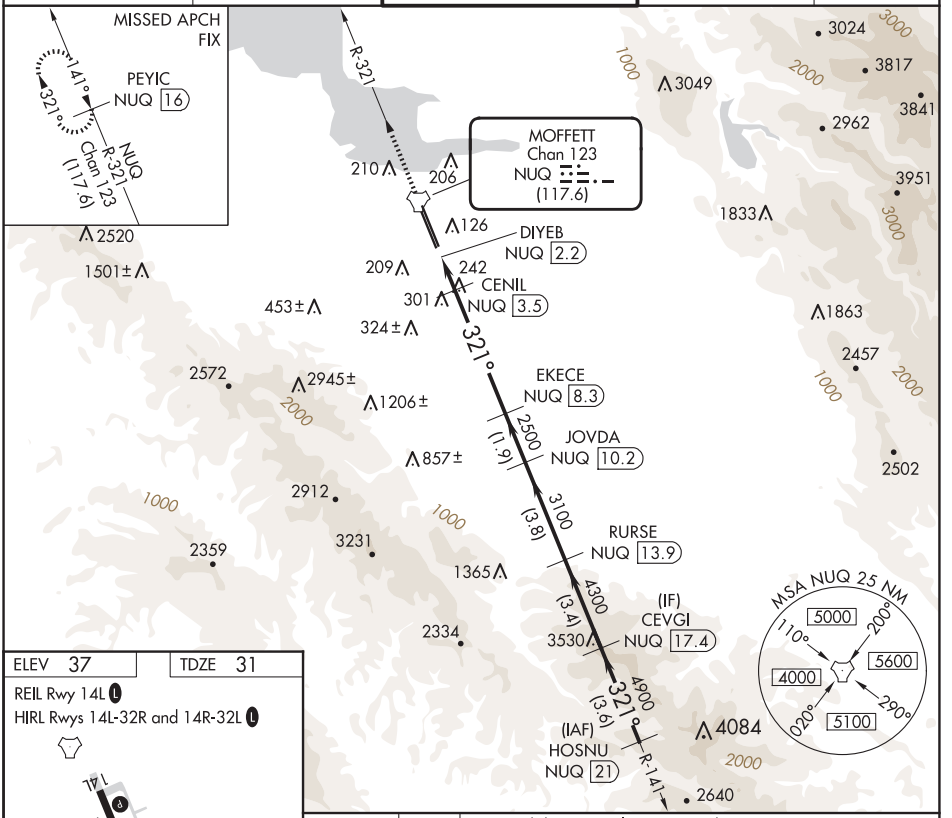
RADAR required for procedure entry.

For inop ALS, increase Cat E visibility to 1½ SM.

MALSR

MISSED APPROACH: Climb to 3200 on NUQ TACAN R-321 to PEYIC/16 DME and hold.

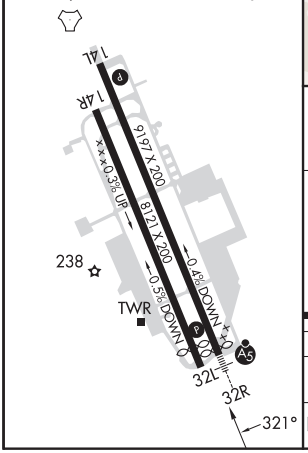
ATIS	NORCAL APP CON	MOFFETT TOWER ★	GND CON	CLNC DEL
124.175 283.0	120.1 290.25	119.55 L (CTAF) 259.65	121.85 278.95	296.75

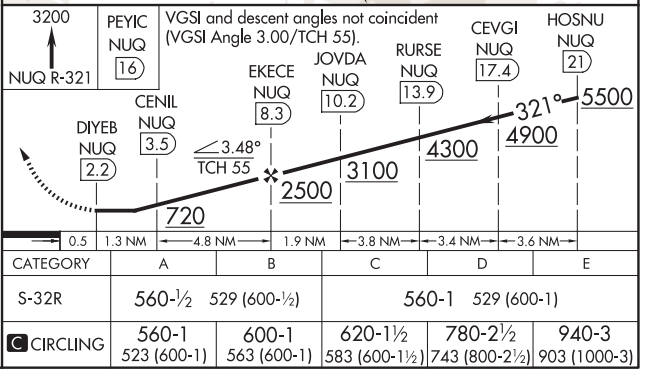


ELEV 37 | TDZE 31

REIL Rwy 14L L

HIRL Rwys 14L-32R and 14R-32L L





CATEGORY	A	B	C	D	E
S-32R	560-½ 529 (600-½)		560-1 529 (600-1)		
C CIRCLING	560-1 523 (600-1)	600-1 563 (600-1)	620-1½ 583 (600-1½)	780-2½ 743 (800-2½)	940-3 903 (1000-3)

MOUNTAIN VIEW, CALIFORNIA

Amdt 1A 05DEC19

37°25'N-122°03'W

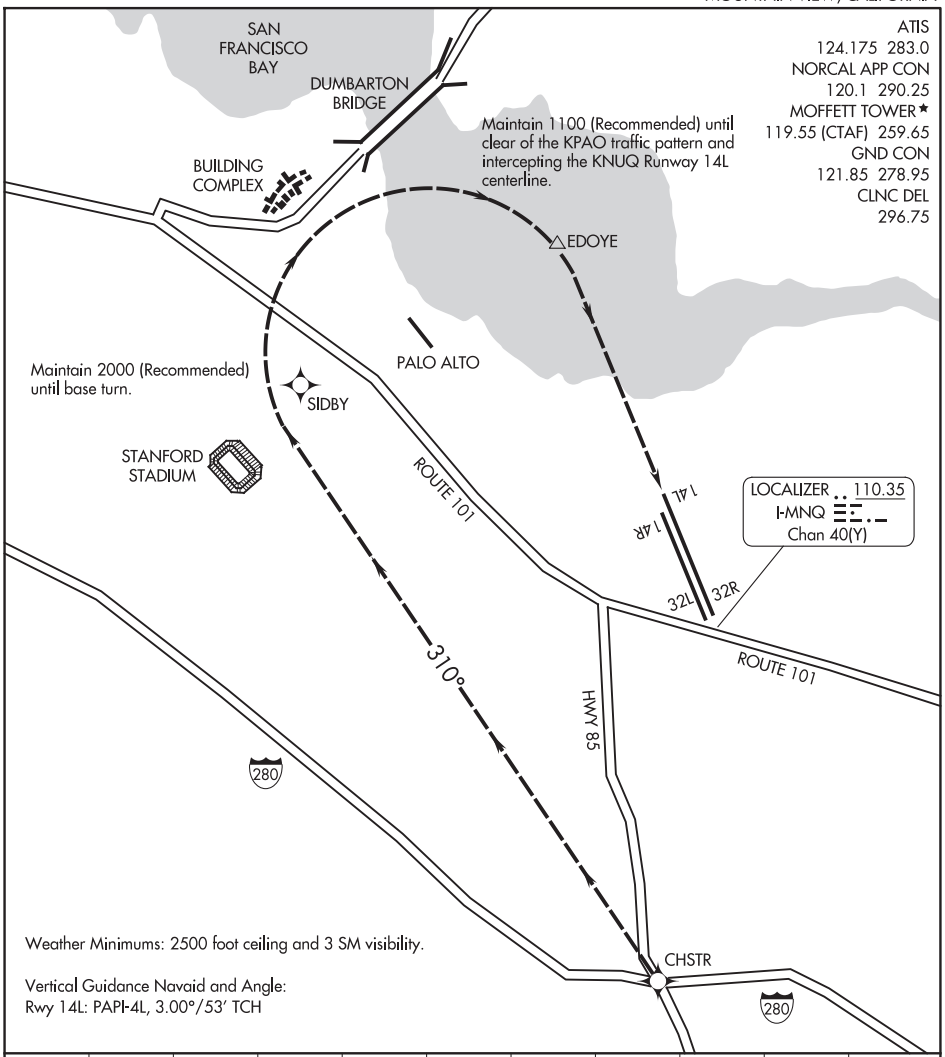
MOFFETT FEDERAL AIRFIELD (NUQ)

TACAN RWY 32R

SW-2, 07 AUG 2025 to 02 OCT 2025

DUMBARTON VISUAL RWY 14L

MOFFETT FEDERAL AIRFIELD (NUQ)
MOUNTAIN VIEW, CALIFORNIA



DUMBARTON VISUAL RWY 14L

PROCEDURE NOT AUTHORIZED AT NIGHT

From south of KNUQ depart the highway 85/I-280 interchange heading 310°, remain 2 NM west of the KPAO runways and 1/2 NM east of Stanford Stadium. On an extended west downwind, turn base at 2000 (recommended) after passing Stanford Stadium but prior to the Dumbarton Bridge. Remain south and east of the Dumbarton Bridge, maintain 1100 (recommended) until clear of the KPAO traffic pattern and intercepting the KNUQ Runway 14L centerline.

DUMBARTON VISUAL RWY 14L
MOUNTAIN VIEW, CALIFORNIA
MOFFETT FEDERAL AIRFIELD (NUQ)

Amdt 1 11JUL24

37°25'N-122°03'W

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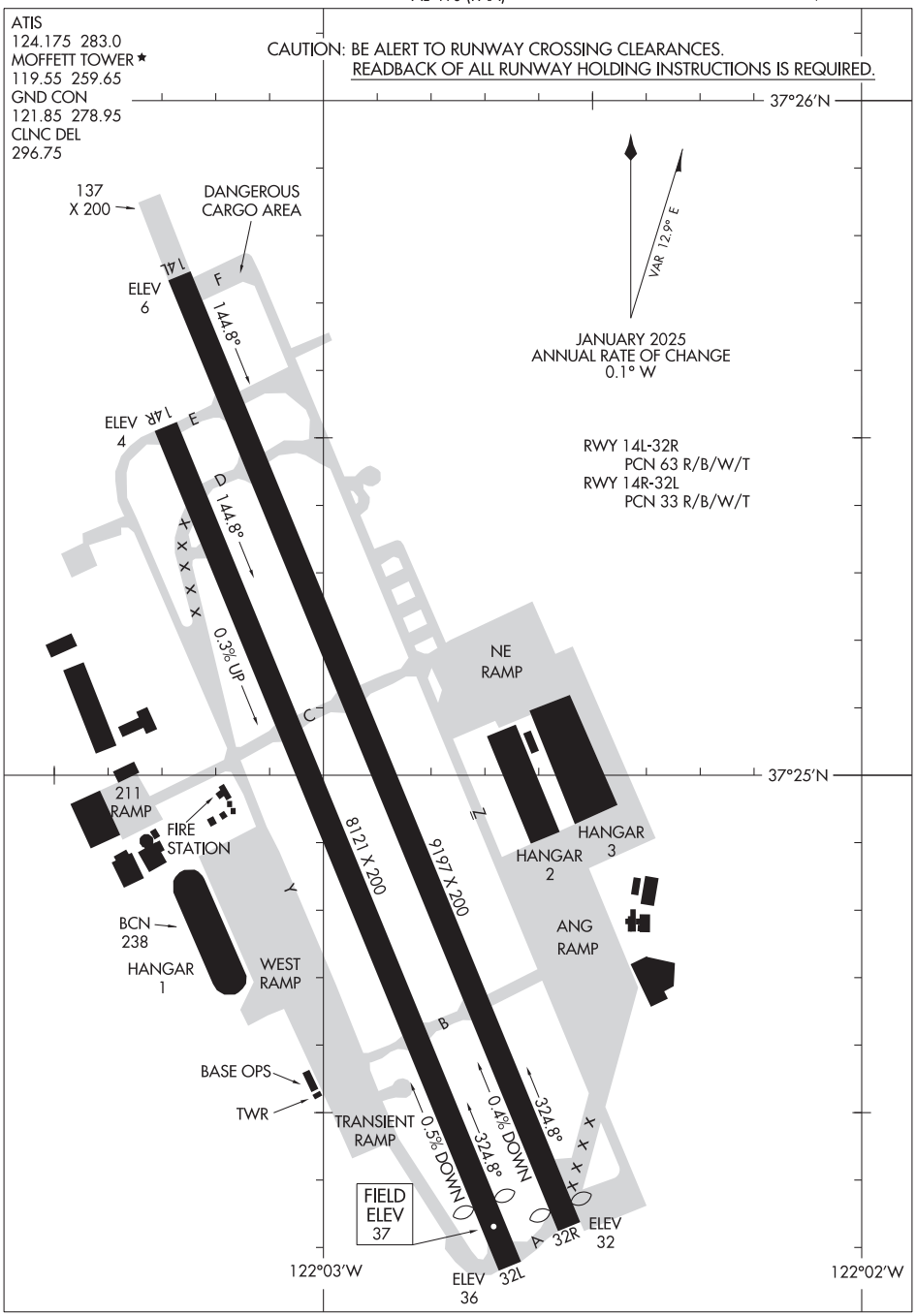
SW-2, 07 AUG 2025 to 02 OCT 2025

25107

AIRPORT DIAGRAM

AL-410 (FAA)

MOFFETT FEDERAL AIRFIELD (NUQ)
MOUNTAIN VIEW, CALIFORNIA



AIRPORT DIAGRAM
25107

MOUNTAIN VIEW, CALIFORNIA
MOFFETT FEDERAL AIRFIELD (NUQ)

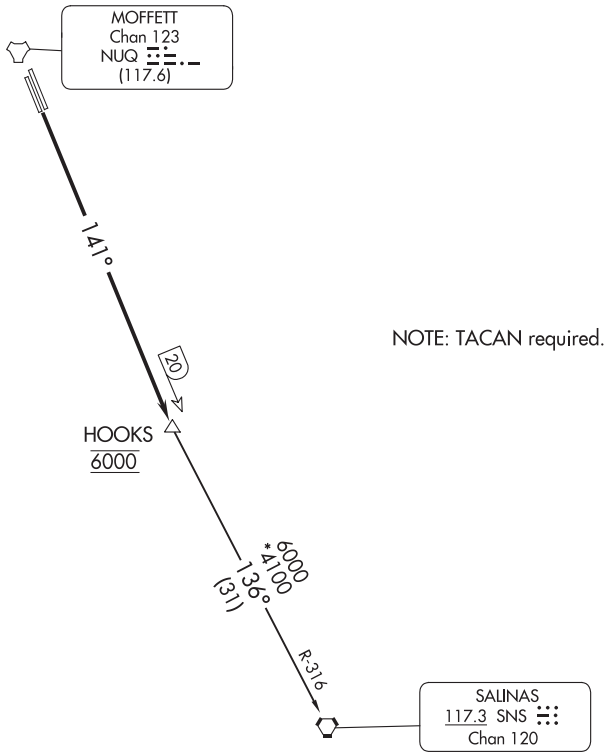
SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

HOOKS TWO DEPARTURE AL-410 (FAA)

ATIS
124.175 283.0
CLNC DEL
296.75
GND CON
121.85 278.95
MOFFETT TOWER*
119.55 (CTAF) 259.65
NORCAL DEP CON
120.1 290.25

TOP ALTITUDE: ASSIGNED BY ATC



TAKEOFF MINIMUMS
Rwy 14R/L: Standard with the following minimum climb gradients:
Rwy 14R: Obstacle climb of 314' per NM to 4900, ATC climb of 332' per NM to 6000.
Rwy 14L: Obstacle climb of 314' per NM to 4900, ATC climb of 328' per NM to 6000.
Rwy 32R/L: NA, ATC.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 14L/R: Climb via NUQ R-141 to cross HOOKS/NUQ 20 DME at 6000, thence. . . .

. . . . via transition.

VALLEY TRANSITION (HOOKS2.SNS): From over HOOKS DME on SNS R-316 to SNS VORTAC.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(OSI2.OSI) 23334

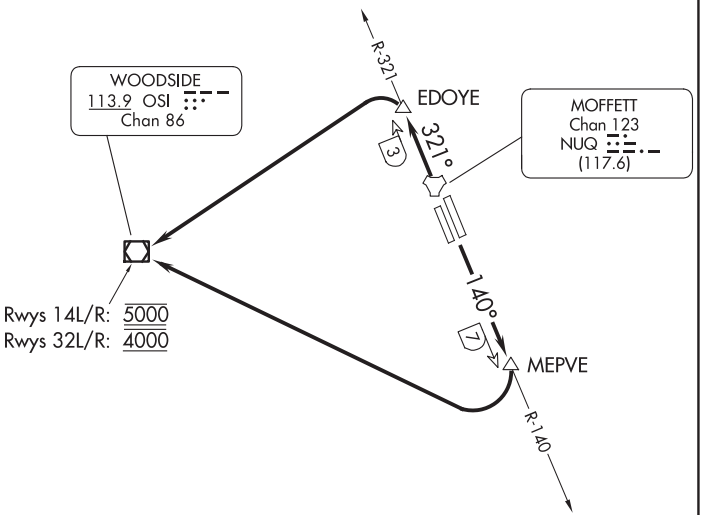
WOODSIDE TWO DEPARTURE

AL-410 (FAA)

MOFFETT FEDERAL AIRFIELD (NUQ)
MOUNTAIN VIEW, CALIFORNIA

ATIS
124.175 283.0
CLNC DEL
296.75
GND CON
121.85 278.95
MOFFETT TOWER ★
119.55 (CTAF) 259.65
NORCAL DEP CON
121.3 270.35

TOP ALTITUDE: ASSIGNED BY ATC



NOTE: TACAN required.

TAKEOFF MINIMUMS

Rwys 14L/R: Standard with minimum climb of 402′ per NM to 5000.
Rwy 32R: Standard with minimum climb of 250′ per NM to 4000.
Rwy 32L: Standard with minimum climb of 246′ per NM to 4000.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 14L/R: Climb via NUQ R-140 to MEPVE/NUQ 7 DME, then right turn direct to cross OSI VOR/DME at 5000, thence . . . .

TAKEOFF RUNWAYS 32L/R: Climb via NUQ R-321 to EDOYE/NUQ 3 DME, then turn left direct to cross OSI VOR/DME at 4000, thence . . . .

. . . . via RADAR vectors or assigned route.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

ILS or LOC Z RWY 1L

NAPA COUNTY (APC)

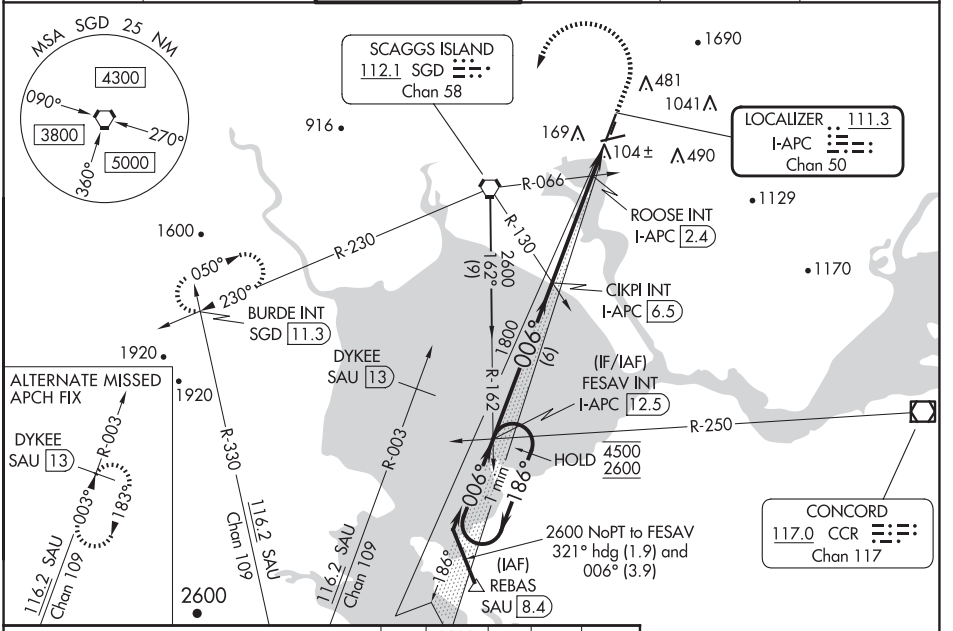
LOC/DME I-APC	APP CRS	Rwy Idg	5930
111.3	006°	TDZE	17
Chan 50		Apt Elev	36

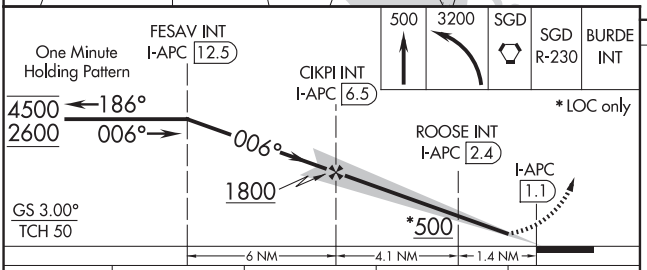
T A Autopilot coupled approach NA below 530. Inop table does not apply to S-ILS 1L. Circling Cats A/B/C NA northeast of Rwys 19R and 24. Circling Cat D NA east of Rwy 19L-1R. Circling Rwy 6 NA at night.

MALS A4

MISSED APPROACH: Climb to 500 then climbing left turn to 3200 direct SGD VORTAC and on SGD VORTAC R-230 to BURDE INT/SGD 11.3 DME and hold, continue climb-in-hold to 3200.

ATIS	OAKLAND CENTER	NAPA TOWER ★	GND CON	CLNC DEL	UNICOM
124.05	127.8 353.5	118.7 (CTAF) L 257.8	121.7	127.85	122.95



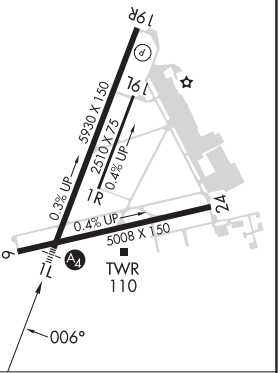


CATEGORY	A	B	C	D
S-ILS 1L	217-¾ 200 (200-¾)			
S-LOC 1L	500-¾ 483 (500-¾)		500-1⅛ 483 (500-1⅛)	
C CIRCLING	600-1 564 (600-1)	680-1 644 (700-1)	1280-3 1244 (1300-3)	1300-3 1264 (1300-3)
ROOSE FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)				
S-LOC 1L	360-¾ 343 (400-¾)			
C CIRCLING	600-1 564 (600-1)	680-1 644 (700-1)	1280-3 1244 (1300-3)	1300-3 1264 (1300-3)

ELEV 36 TDZE 17

MIRL Rwys 6-24 and 1L-19R L

REIL Rwy 6 L



FAF to MAP 5.5 NM

Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

NAPA, CALIFORNIA AL-281 (FAA) 23334

APP CRS	Rwy Idg	5008
062°	TDZE	21
	Apt Elev	36

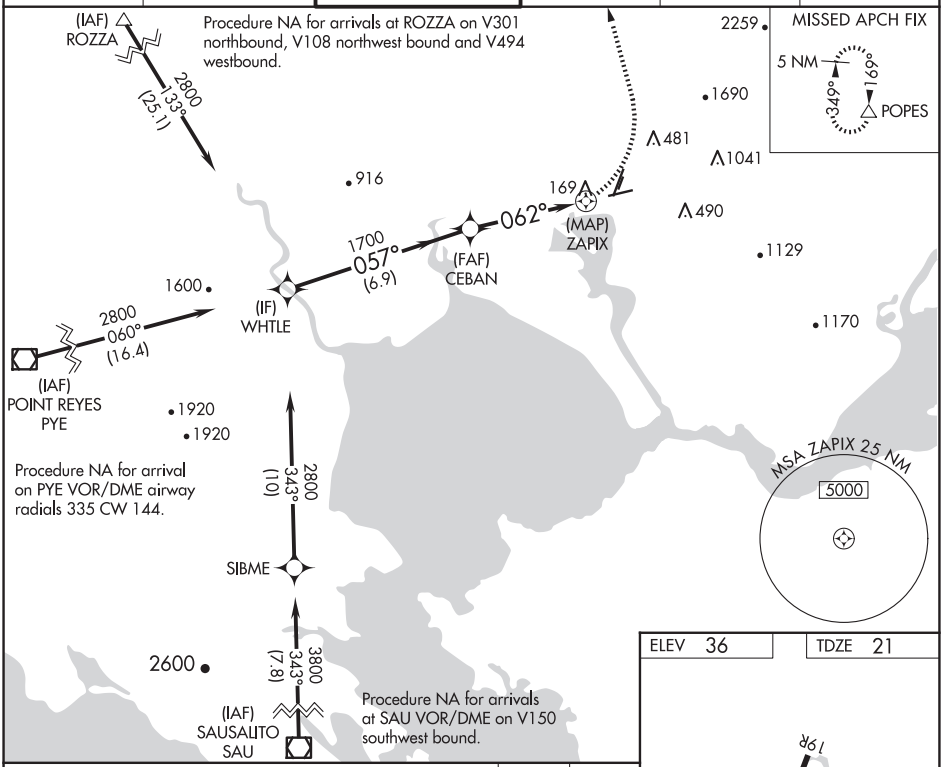
RNAV (GPS) RWY 6
NAPA COUNTY (APC)

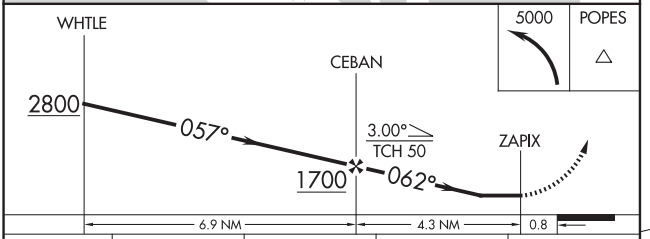
RNP APCH-GPS.

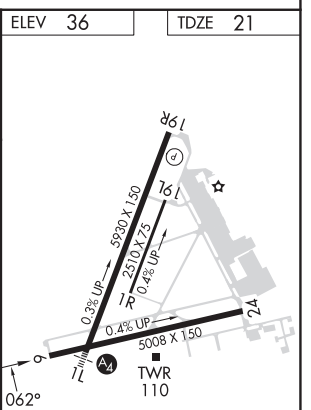
T A Rwy 6 helicopter visibility reduction below ¾ SM NA. Circling Cats A/B/C NA east of Rwy 19R and northwest of Rwy 24. Circling Cat D NA east of Rwy 19L-1R.

MISSED APPROACH: Climbing left turn to 5000 direct POPES and hold, continue climb-in-hold to 5000.
*Missed approach requires minimum climb of 410 feet per NM to 2200.

ATIS	OAKLAND CENTER	NAPA TOWER ★	GND CON	CLNC DEL	UNICOM
124.05	127.8 353.5	118.7 (CTAF) L 257.8	121.7	127.85	122.95







CATEGORY	A	B	C	D
LNAV MDA*	480-1	459 (500-1)	480-1⅜	459 (500-1⅜)
LNAV MDA	1340-1¼ 1319 (1400-1¼)	1340-1½ 1319 (1400-1½)	1340-3	1319 (1400-3)
C CIRCLING	1340-1¼ 1304 (1400-1¼)	1340-1½ 1304 (1400-1½)	1340-3	1304 (1400-3)

REIL Rwy 6 L
MIRL Rwys 6-24 and 1L-19R L

NAPA, CALIFORNIA
Amdt 3 24MAR22

38°13′N-122°17′W

NAPA COUNTY (APC)
RNAV (GPS) RWY 6

SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS	Rwy Idg	5930
166°	TDZE	30
	Apt Elev	36

RNAV (GPS) RWY 19R

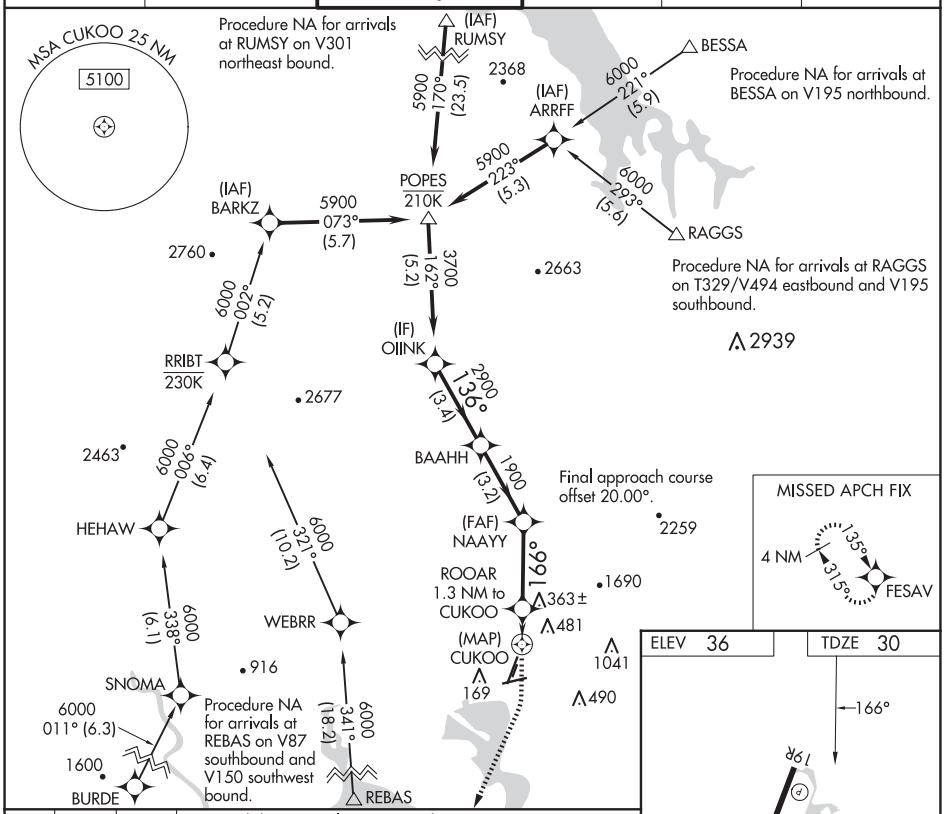
NAPA COUNTY (APC)

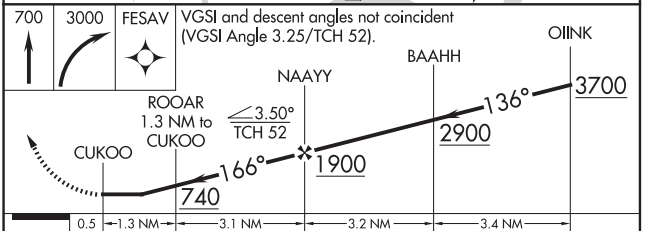
RNP APCH - GPS.

Rwy 19R helicopter visibility reduction below ¾ SM NA. Circling Cats A/B/C NA east of Rwy 19R and northwest of Rwy 24. Circling Cat D NA east of Rwy 19L-1R.

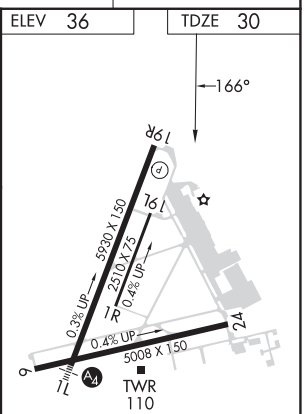
MISSED APPROACH: Climb to 700 then climbing right turn to 3000 direct FESAV and hold.

ATIS	OAKLAND CENTER	NAPA TOWER ★	GND CON	CLNC DEL	UNICOM
124.05	127.8 353.5	118.7 (CTAF) L 257.8	121.7	127.85	122.95





CATEGORY	A	B	C	D
LNAV MDA	680-1	650 (700-1)	680-1⅞	650 (700-1⅞)
C CIRCLING	680-1	644 (700-1)	1280-3 1244 (1300-3)	1300-3 1264 (1300-3)



REIL Rwy 6 L

MIRL Rwys 6-24 and 1L-19R L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

NAPA, CALIFORNIA | AL-281 (FAA) | 23334

RNAV (GPS) Y RWY 1L

NAPA COUNTY (APC)

WAAS	APP CRS		
CH 56613	006°	Rwy Idg	5930
W01A		TDZE	17
		Apt Elev	36

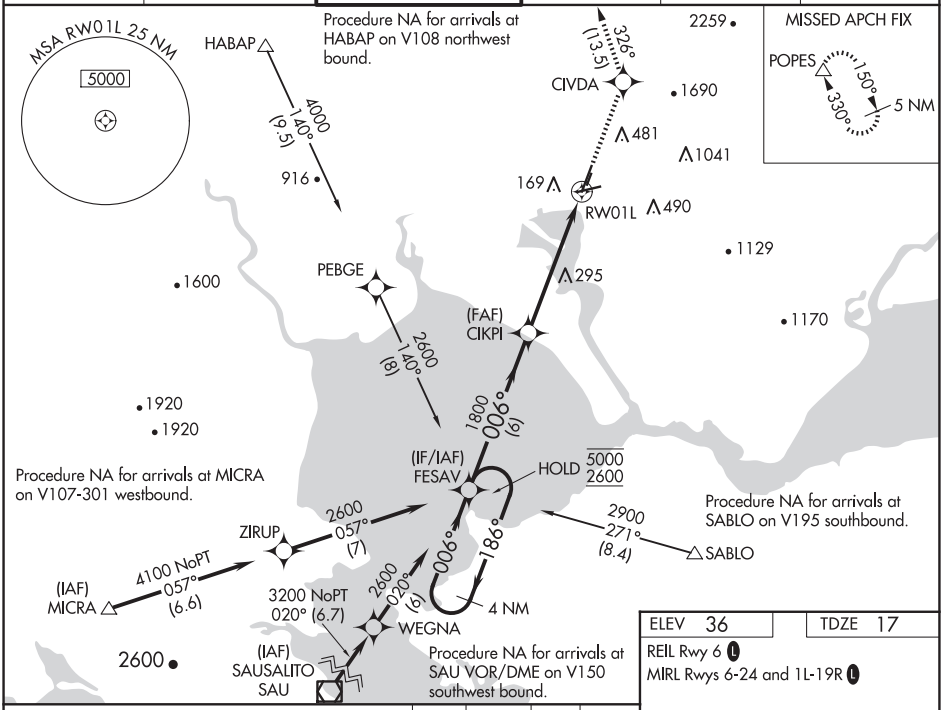
RNP APCH.

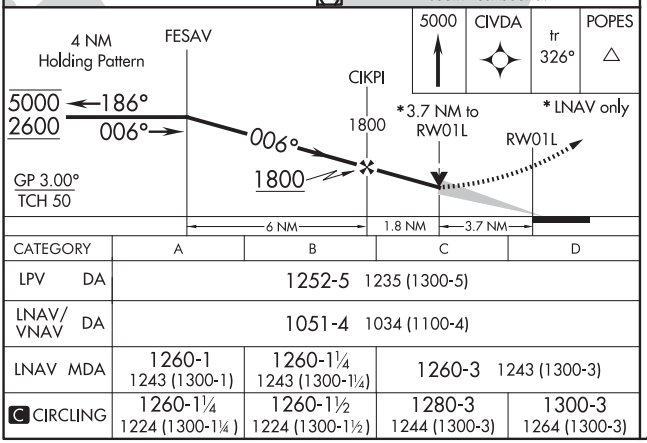
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -4°C or above 54°C. Circling Cats A/B/C NA northeast or Rwys 19R and 24. Circling Cat D NA east of Rwy 19L-1R. Inop table does not apply to LPV, LNAV/VNAV all Cats, and LNAV Cats C/D. Circling Rwy 6 NA at night.

MALS

MISSED APPROACH: Climb to 5000 direct CIVDA and on track 326° to POPES and hold, continue climb-in-hold to 5000.

ATIS	OAKLAND CENTER	NAPA TOWER ★	GND CON	CLNC DEL	UNICOM
124.05	127.8 353.5	118.7 (CTAF) L 257.8	121.7	127.85	122.95



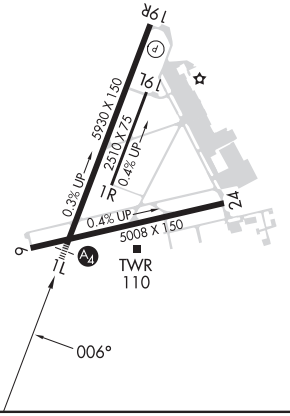


CATEGORY	A	B	C	D
LPV DA	1252-5 1235 (1300-5)			
LNAV/VNAV DA	1051-4 1034 (1100-4)			
LNAV MDA	1260-1 1243 (1300-1)	1260-1¼ 1243 (1300-1¼)	1260-3 1243 (1300-3)	
C CIRCLING	1260-1¼ 1224 (1300-1¼)	1260-1½ 1224 (1300-1½)	1280-3 1244 (1300-3)	1300-3 1264 (1300-3)

ELEV 36 | TDZE 17

REIL Rwy 6 L

MIRL Rwys 6-24 and 1L-19R L



NAPA, CALIFORNIA
Amdt 3 10OCT19

38°13'N-122°17'W

NAPA COUNTY (APC)
RNAV (GPS) Y RWY 1L

SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS	APP CRS	Rwy Idg	5930
CH 40313	006°	TDZE	17
W01B		Apt Elev	36

RNAV (GPS) Z RWY 1L

NAPA COUNTY (APC)

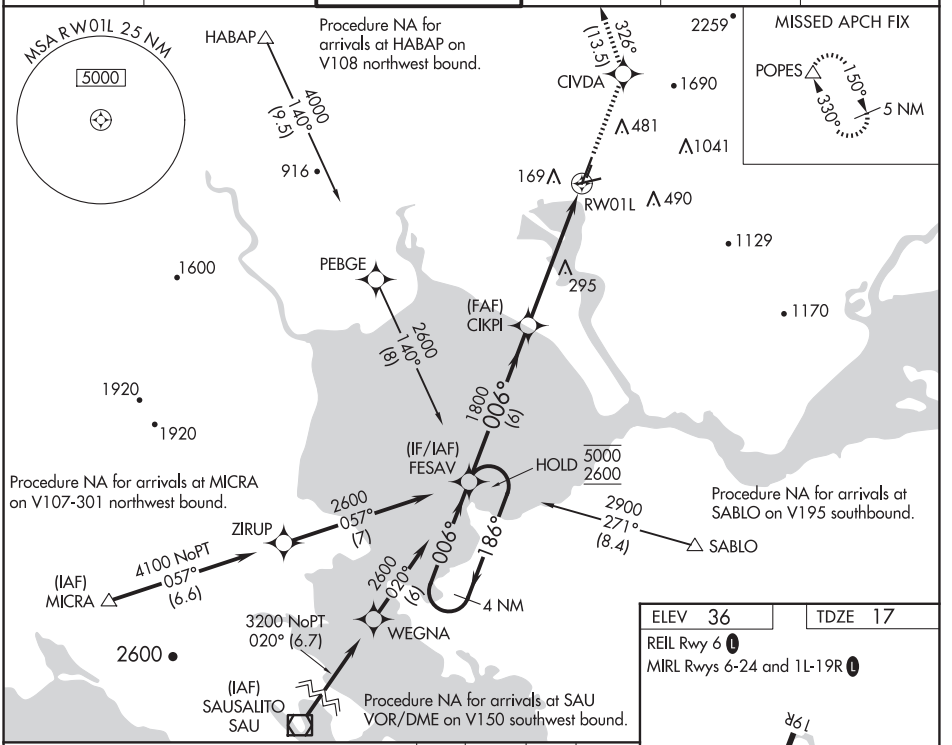
RNP APCH-GPS.

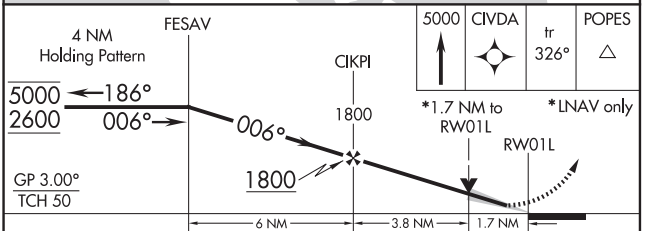
T For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -4°C or above 54°C. Inop table does not apply to LPV minimums. For inop ALS, increase visibility LNAV/VNAV to ⅞ SM. Missed approach requires minimum climb of 420 feet per NM to 2200. If unable to meet climb gradient see RNAV (GPS) Y RWY 1L.

MALS

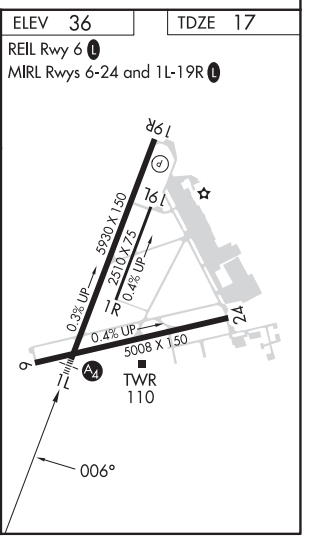
MISSED APPROACH: Climb to 5000 direct CIVDA and on track 326° to POPES and hold, continue climb-in-hold to 5000.

ATIS	OAKLAND CENTER	NAPA TOWER ★	GND CON	CLNC DEL	UNICOM
124.05	127.8 353.5	118.7 (CTAF) L 257.8	121.7	127.85	122.95





CATEGORY	A	B	C	D
LPV DA	217-¾ 200 (200-¾)			
LNAV/VNAV DA	330-¾ 313 (300-¾)			
LNAV MDA	560-¾ 543 (600-¾)		560-1⅜ 543 (600-1⅜)	



SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

NAPA, CALIFORNIA AL-281 (FAA) 23334

VOR RWY 6

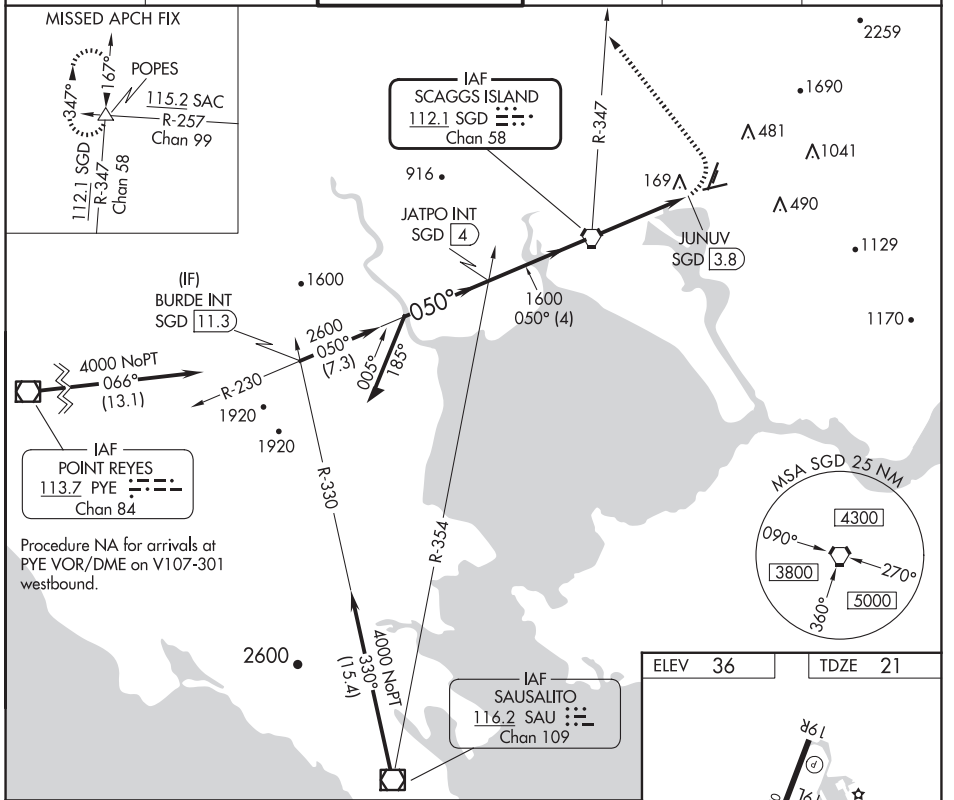
NAPA COUNTY (APC)

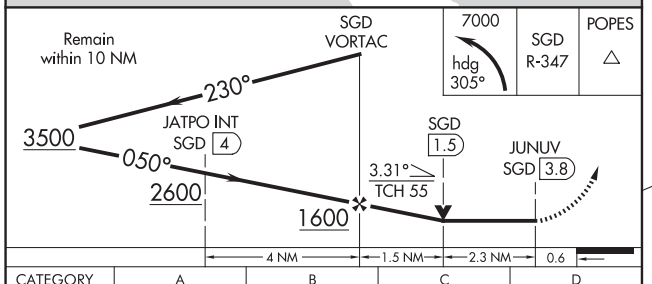
VORTAC SGD 112.1 Chan 58	APP CRS 050°	Rwy Idg 5008 TDZE 21 Apt Elev 36

Rwy 6 helicopter visibility reduction below ¾ SM NA. Circling Cats A/B/C NA east of Rwy 19R and northwest of Rwy 24. Circling Cat D NA east of Rwy 19L-1R.

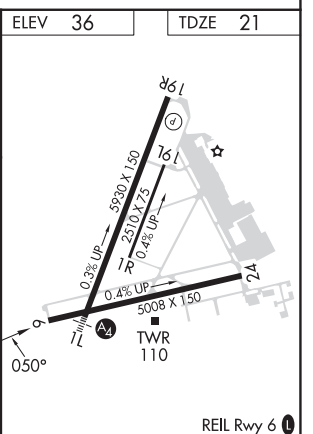
MISSED APPROACH: Climbing left turn to 7000 on heading 305° and SGD VORTAC R-347 to POPES INT and hold, continue climb-in-hold to 7000.

ATIS	OAKLAND CENTER	NAPA TOWER ★	GND CON	CLNC DEL	UNICOM
124.05	127.8 353.5	118.7 (CTAF) L 257.8	121.7	127.85	122.95





CATEGORY	A	B	C	D
S-6	1080-1¼ 1059 (1100-1¼)	1080-1½ 1059 (1100-1½)	1080-3	1059 (1100-3)
C CIRCLING	1080-1¼ 1044 (1100-1¼)	1080-1½ 1044 (1100-1½)	1280-3 1244 (1300-3)	1300-3 1264 (1300-3)

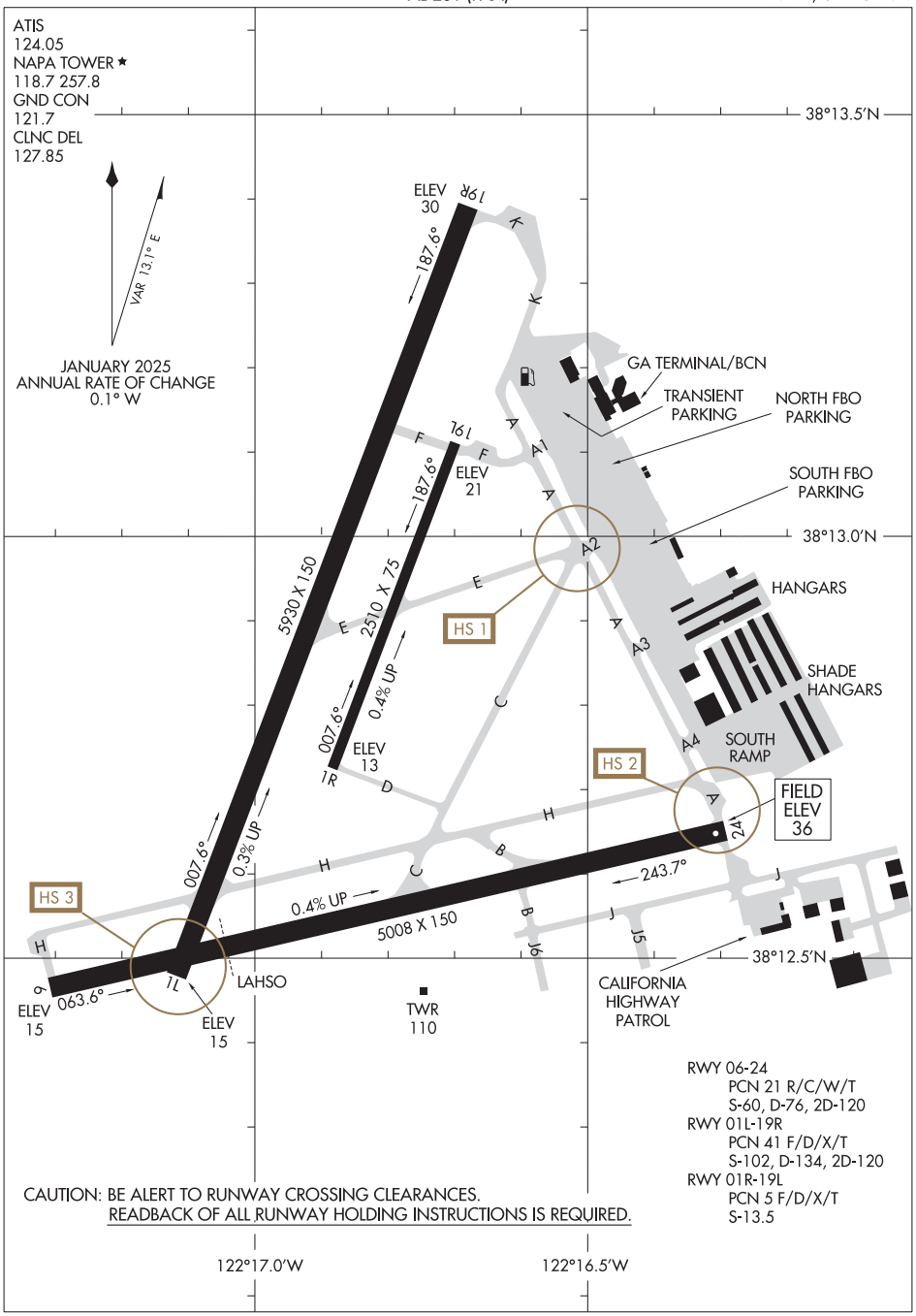


REIL Rwy 6 L
MIRL Rwys 6-24 and 1L-19R L

FAF to MAP 3.8 NM

Knots	60	90	120	150	180
Min:Sec	3:48	2:32	1:54	1:31	1:16

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025



SW-2, 07 AUG 2025 to 02 OCT 2025

(NAPAA4.NAPAA) 23334

NAPAA FOUR DEPARTURE (OBSTACLE)

AL-281 (FAA)

NAPA COUNTY (APC)
NAPA, CALIFORNIA

OAKLAND CENTER
127.8 353.5
ATIS
124.05
GND CON
121.7
CLNC DEL
127.85
NAPA TOWER★
118.7 (CTAF) 257.8

TAKEOFF MINIMUMS

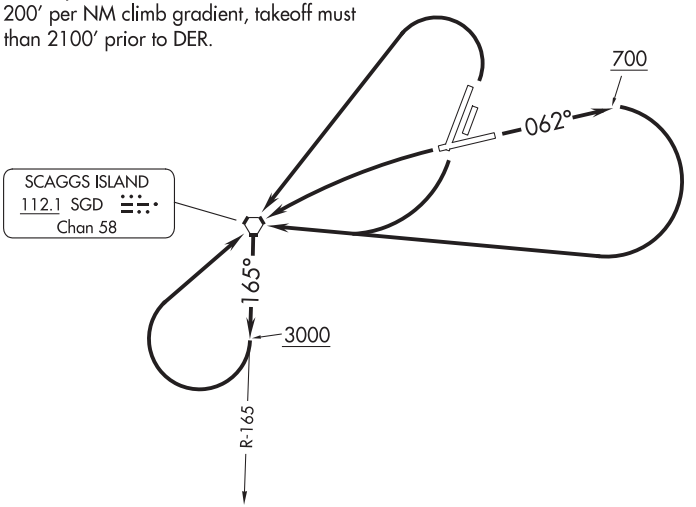
Rwys 19L/R: Standard.

Rwy 1L: Standard with minimum climb of 310′ per NM to 900 or 2400-3 for VCOA.

Rwy 1R: Standard with minimum climb of 360′ per NM to 700 or 2400-3 for VCOA.

Rwy 6: Standard with minimum climb of 440′ per NM to 1700 or 2400-3 for VCOA.

Rwy 24: 300-1⅛ or standard with minimum climb of 255′ per NM to 300, or alternatively, with standard takeoff minimums and a normal 200′ per NM climb gradient, takeoff must occur no later than 2100′ prior to DER.



(CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 6: Climb on heading 062° to 700, then turn right direct SGD VORTAC, thence. . . .

TAKEOFF RUNWAYS 1L/R, 24: Turn left direct SGD VORTAC, thence. . . .

TAKEOFF RUNWAYS 19L/R: Turn right direct SGD VORTAC, thence. . . .

VCOA RUNWAYS 1L/R, 6: Obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Napa County Airport at or above 2300, then direct SGD VORTAC, thence. . . .

. . . .aircraft departing SGD VORTAC on R-165 climb on course. All other aircraft continue climb on SGD VORTAC R-165 to 3000, then turn right direct SGD VORTAC before proceeding on course.

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

TAKEOFF OBSTACLE NOTES

Rwy 1L: Terrain beginning 7′ from DER, 340′ left of centerline up to 37′ MSL.
Lighting 10′ from DER, 51′ right of centerline, 1′ AGL/30′ MSL.
Vehicles on road beginning 105′ from DER, 317′ right of centerline, up to 41′ MSL.
Vehicles on road and terrain, beginning 105′ from DER, 298′ left of centerline, up to 43′ MSL.
Vehicles on road 203′ from DER, 300′ left of centerline, 44′ MSL.
Vehicles on road beginning 363′ from DER, 302′ left of centerline, up to 45′ MSL.
Vehicles on road 559′ from DER, 544′ right of centerline, 44′ MSL.
Trees beginning 3205′ from DER, 790′ right of centerline, up to 124′ MSL.
Trees beginning 4610′ from DER, 306′ right of centerline, up to 168′ MSL.
Tree 1.1 NM from DER, 2025′ right of centerline, 226′ MSL.
Trees beginning 1.1 NM from DER, 1674′ right of centerline, up to 249′ MSL.
Tree 1.1 NM from DER, 1839′ right of centerline, 253′ MSL.
Trees and terrain beginning 1.1 NM from DER, 1648′ right of centerline, up to 282′ MSL.
Trees, terrain and fence beginning 1.1 NM from DER, 1634′ right of centerline, up to 298′ MSL.
Tree and fence beginning 1.7 NM from DER, 3269′ right of centerline, up to 345′ MSL.
Electrical system, terrrain, fence and tree beginning 1.8 NM from DER, 606′ right of centerline, up to 129′ AGL/446′ MSL.
Trees and terrain beginning 2 NM from DER, 542′ right of centerline, up to 526′ MSL.
Terrrain, fence and tree beginning 2 NM from DER, 1089′ right of centerline, up to 528′ MSL
Fence, trees, terrrain and building beginning 2.1 NM from DER, 2007′ right of centerline, up to 5′ AGL/554′ MSL.
Terrrain and trees beginning 2.1 NM from DER, 2139′ right of centerline, up to 581′ MSL
Tree 2.2 NM from DER, 3913′ right of centerline, 585′ MSL.
Trees, terrrain and fence, beginning 2.2 NM from DER, 2013′ right of centerline, up to 587′ MSL.
Trees and terrain beginning 2.3 NM from DER, 2566′ right of centerline, up to 599′ MSL.

Rwy 1R: Lighting 43′ from DER, 493′ right of centerline, 1′ AGL/25′ MSL.
Sign 51′ from DER, 420′ left of centerline, 2′ AGL/23′ MSL.
Poles and vehicles on road beginning 262′ from DER, 63′ right of centerline, up to 36′ AGL/59′ MSL.
Vehicles on road 639′ from DER, 436′ left of centerline, 38′ MSL.
Vehicles on road beginning 640′ from DER, 95′ left of centerline, up to 39′ MSL.
Tree 812′ from DER, 673′ right of centerline, 70′ MSL.
Tree 1870′ from DER, 470′ right of centerline, 71′ MSL.
Tree 1.2 NM from DER, 2507′ right of centerline, 240′ MSL.
Tree 1.2 NM from DER, 2314′ right of centerline, 243′ MSL.
Trees beginning 1.2 NM from DER, 2143′ right of centerline, up to 286′ MSL.
Trees, fence and terrain beginning 1.3 NM from DER, 2073′ right of centerline, up to 309′ MSL.
Tree 1.3 NM from DER, 2552′ right of centerline, 322′ MSL.
Trees and terrain beginning 1.3 NM from DER, 1204′ right of centerline, up to 368′ MSL.
Trees, terrain and fence beginning 1.4 NM from DER, 1286′ right of centerline, up to 391′ MSL.
Trees beginning 1.4 NM from DER, 1312′ right of centerline, up to 400′ MSL.
Trees, terrrain, building and fence beginning 1.4 NM from DER, 2008′ right of centerline, up to 417′ MSL.
Electrical system, fence and terrrain beginning 2.1 NM from DER, 2329′ right of centerline, up to 129′ AGL/446′ MSL.
Transmission line 2.2 NM from DER, 3214′ right of centerline, 123′ AGL/542′ MSL.
Electrical system, fence, pole, terrrain and trees beginning 2.2 NM from DER, 1515′ right of centerline, up to 116′ AGL/544′ MSL.
Terrrain and fence beginning 2.3 NM from DER, 2076′ right of centerline, up to 551′ MSL.
Trees, fence, terrrain and building beginning 2.3 NM from DER, 1494′ right of centerline, up to 561′ MSL.
Terrrain and tree beginning 2.4 NM from DER, 1626′ right of centerline, up to 581′ MSL.
Terrrain and tree beginning 2.4 NM from DER, 2067′ right of centerline, up to 612′ MSL.
Terrain and trees beginning 2.4 NM from DER, 2564′ right of centerline, up to 643′ MSL.
Tree 2.4 NM from DER, 3917′ right of centerline, 671′ MSL.
Trees beginning 2.5 NM from DER, 1954′ right of centerline, up to 687′ MSL.

(CONTINUED ON FOLLOWING PAGE)

SW-2, 07 AUG 2025 to 02 OCT 2025

(CONTINUED)

TAKEOFF OBSTACLE NOTES

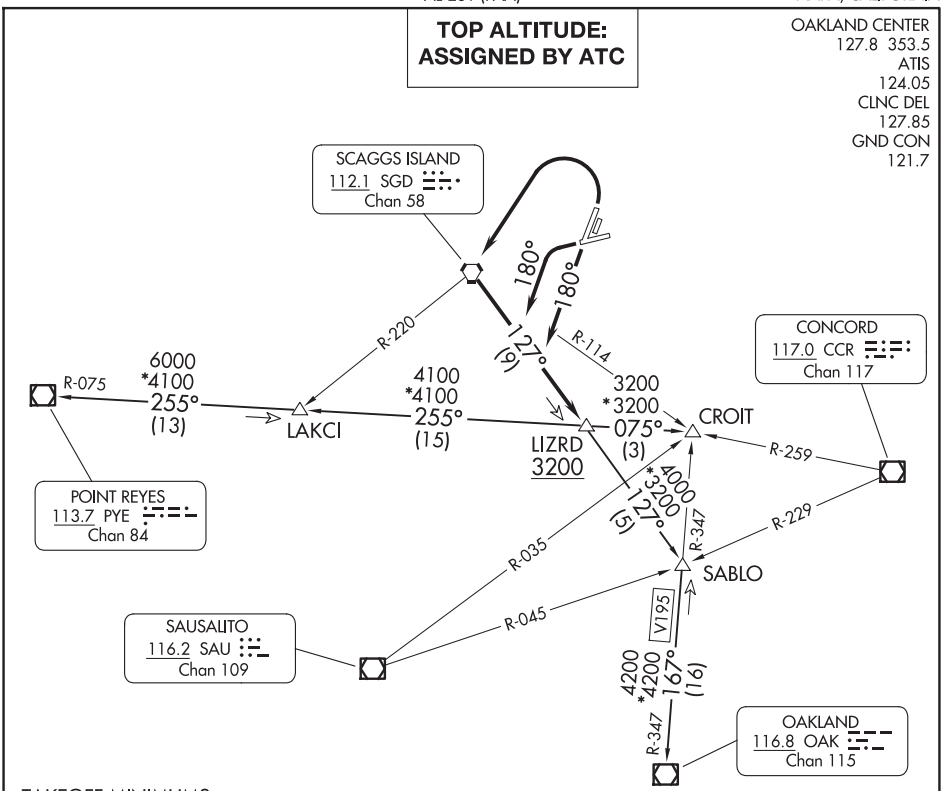
Rwy 6: Pole 1′ from DER, 59′ left of centerline, 3′ AGL/37′ MSL.
Pole 2′ from DER, 60′ right of centerline, 2′ AGL/36′ MSL.
Pole 98′ from DER, 480′ left of centerline, 34′ AGL/67′ MSL.
Pole 333′ from DER, 476′ left of centerline, 34′ AGL/68′ MSL.
Pole and vehicles on road beginning 573′ from DER, 0′ left of centerline, up to 33′ AGL/69′ MSL.
Building 773′ from DER, 660′ right of centerline, 29′ AGL/70′ MSL.
Buildings and pole beginning 1104′ from DER, 472′ right of centerline, up to 37′ AGL/80′ MSL.
Trees beginning 1288′ from DER, 516′ left of centerline, up to 98′ MSL.
Trees beginning 2082′ from DER, 98′ right of centerline, up to 113′ MSL.
Trees beginning 2306′ from DER, 53′ right of centerline, up to 130′ MSL.
Tree 4681′ from DER, 1103′ left of centerline, 180′ MSL.
Trees beginning 4859′ from DER, 1063′ left of centerline, up to 187′ MSL.
Terrain 5855′ from DER, 2050′ right of centerline, 195′ MSL.
Trees and fence beginning 5865′ from DER, 1761′ left of centerline, up to 211′ MSL.
Trees, terrrain and fence beginning 6068′ from DER, 1419′ right of centerline, up to 281′ MSL.
Tree 1 NM from DER, 2035′ left of centerline, 212′ MSL.
Trees beginning 1 NM from DER, 1796′ left of centerline, up to 224′ MSL.
Tree 2 NM from DER, 2933′ left of centerline, 340′ MSL.
Tree 2 NM from DER, 2803′ left of centerline, 359′ MSL.
Trees beginning 2.1 NM from DER, 3827′ right of centerline, up to 386′ MSL.
Terrain 2.2 NM from DER, 3202′ right of centerline, up to 405′ MSL.
Terrain beginning 2.3 NM from DER, 911′ right of centerline, up to 464′ MSL.
Fence and terrrain beginning 2.4 NM′ from DER, 3273′ left of centerline, up to 4′ AGL/452′ MSL.
Terrain 2.4 NM from DER, 3353′ left of centerline, 457′ MSL.
Terrain and trees beginning 2.4 NM from DER, 61′ left of centerline, up to 525′ MSL.
Fence beginning 2.5 NM from DER, 100′ right of centerline, up to 6′ AGL/519′ MSL.

Rwy 19L: Sign and terrain beginning 14′ from DER, 125′ left of centerline, up to 2′ AGL/14′ MSL.
Lighting 15′ from DER, 429′ right of centerline, 1′ AGL/14′ MSL.
Terrain 49′ from DER, 483′ left of centerline, 17′ MSL.
Navaid 1278′ from DER, 816′ left of centerline, 35′ AGL/52′ MSL.
Tree 3852′ from DER, 1304′ left of centerline, 111′ MSL.

Rwy 19R: Lighting 9′ from DER, 4′ left of centerline, 1′ AGL/15′ MSL.
Pole 10′ from DER, 44′ right of centerline, 1′ AGL/15′ MSL.
Lighting 10′ from DER, 96′ left of centerline, 3′ AGL/17′ MSL.
Vehicles on road beginning 350′ from DER, 584′ left of centerline, up to 34′ MSL.
Tree 3158′ from DER, 764′ left of centerline, 101′ MSL.
Tree 3503′ from DER, 1006′ left of centerline, 104′ MSL..

Rwy 24: Vehicles on road and general utility beginning 56′ from DER, 125′ right of centerline, up to 21′ MSL.
General utility 59′ from DER, 122′ left of centerline, 4′ AGL/17′ MSL.
Vehicles on road beginning 60′ from DER, 18′ left of centerline, up to 25′ MSL.
Vehicles on road beginning 167′ from DER, 9′ right of centerline, up to 22′ MSL.
Vehicles on road beginning 354′ from DER, 259′ right of centerline, up to 26′ MSL.
Trees beginning 1455′ from DER, 776′ left of centerline, up to 76′ MSL.
Trees beginning 2324′ from DER, 540′ left of centerline, up to 90′ MSL.
Tree 2650′ from DER, 527′ left of centerline, 93′ MSL.
Tree 4552′ from DER, 554′ left of centerline, 135′ MSL.
Vehicles on road and bridge beginning 4943′ from DER, 1631′ right of centerline, up to 165′ AGL/170′ MSL.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025



TAKEOFF MINIMUMS
Rwy 6: NA-Obstacles.
Rwys 19L/R: Standard
Rwys 1L/R: Standard with minimum climb of 370′ per NM to 1200′.
Rwy 24: Standard with minimum climb of 255′ per NM to 3000′.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 1L/R: Climbing left turn direct SGD VORTAC, proceed outbound on the SGD R-127 to LIZRD INT. Cross LIZRD INT at or above 3200. Thence. . . .
TAKEOFF RUNWAYS 19L/R: Climb on heading 180° to intercept and proceed outbound on the SGD R-127 to LIZRD INT. Cross LIZRD INT at or above 3200. Thence. . . .
TAKEOFF RUNWAY 24: Climbing left turn on heading 180° to intercept and proceed outbound on the SGD R-127 to LIZRD INT. Cross LIZRD INT at or above 3200. Thence. . . .

. . . . on (transition) or (assigned route). Maintain ATC assigned altitude.

CROIT TRANSITION (LIZRD5.CROIT): From over LIZRD on PYE R-075 to CROIT.
OAKLAND TRANSITION (LIZRD5.OAK): From over LIZRD on SGD R-127 and OAK R-347 to OAK VOR/DME.
POINT REYES TRANSITION (LIZRD5.PYE): From over LIZRD on PYE R-075 to PYE VOR/DME.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(MER3.SGD) 23334

MERLOT THREE DEPARTURE

AL-281 (FAA)

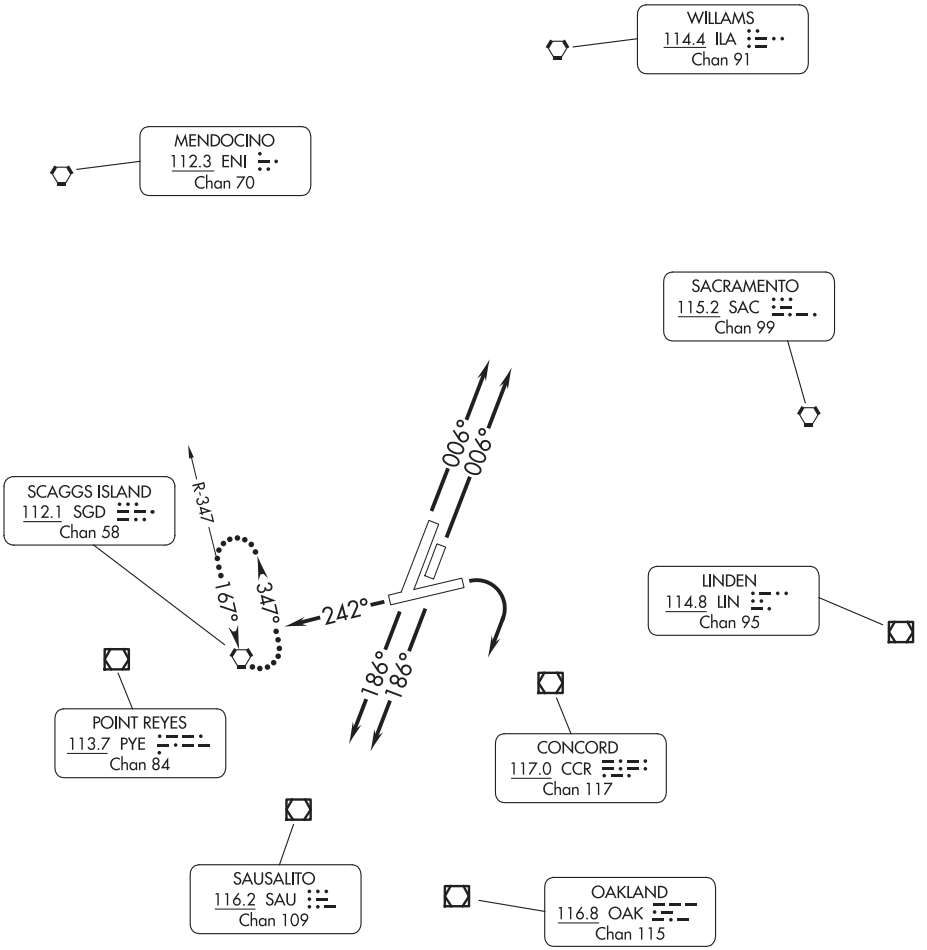
NAPA COUNTY(APC)
NAPA, CALIFORNIA

OAKLAND CENTER
127.8 353.5
ATIS
124.05
CLNC DEL
127.85
GND CON
121.7
NAPA TOWER★
118.7 (CTAF) 257.8

TOP ALTITUDE: ASSIGNED BY ATC

TAKEOFF MINUMUMS

Rwy 1L: Standard with mimimum climb of 420′ per NM to 2900.
Rwy 1R: Standard with mimimum climb of 460′ per NM to 3000.
Rwy 6: Standard with minimum climb of 430′ per NM to 1600.
Rwy 19L: Standard with mimimum climb of 320′ per NM to 1500.
Rwy 19R: Standard with mimimum climb of 330′ per NM to 1600.
Rwy 24: Standard with mimimum climb of 255′ per NM to 1300.



NOTE: RADAR required.

NOTE: Chart not to scale.

(CONTINUED ON FOLLOWING PAGE)

SW-2, 07 AUG 2025 to 02 OCT 2025

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 1L/R: Climb on heading 006° (or climbing left turn on ATC assigned heading 186° CW 006°); thence. . . .

TAKEOFF RUNWAY 6: Climbing right turn on assigned heading between 130° CW 242°; thence. . . .

TAKEOFF RUNWAYS 19L/R: Climb on heading 186° (or ATC assigned heading 130° CW 270°); thence. . . .

TAKEOFF RUNWAY 24: Climb on heading 242° (or ATC assigned heading 130° CW 270°); thence. . . .

. . . . expect vectors to join assigned route. Maintain ATC assigned altitude; expect filed altitude/flight level ten minutes after departure.

LOST COMMUNICATIONS

If not in contact with Oakland Center after reaching 4000, proceed to the SGD VORTAC and hold.

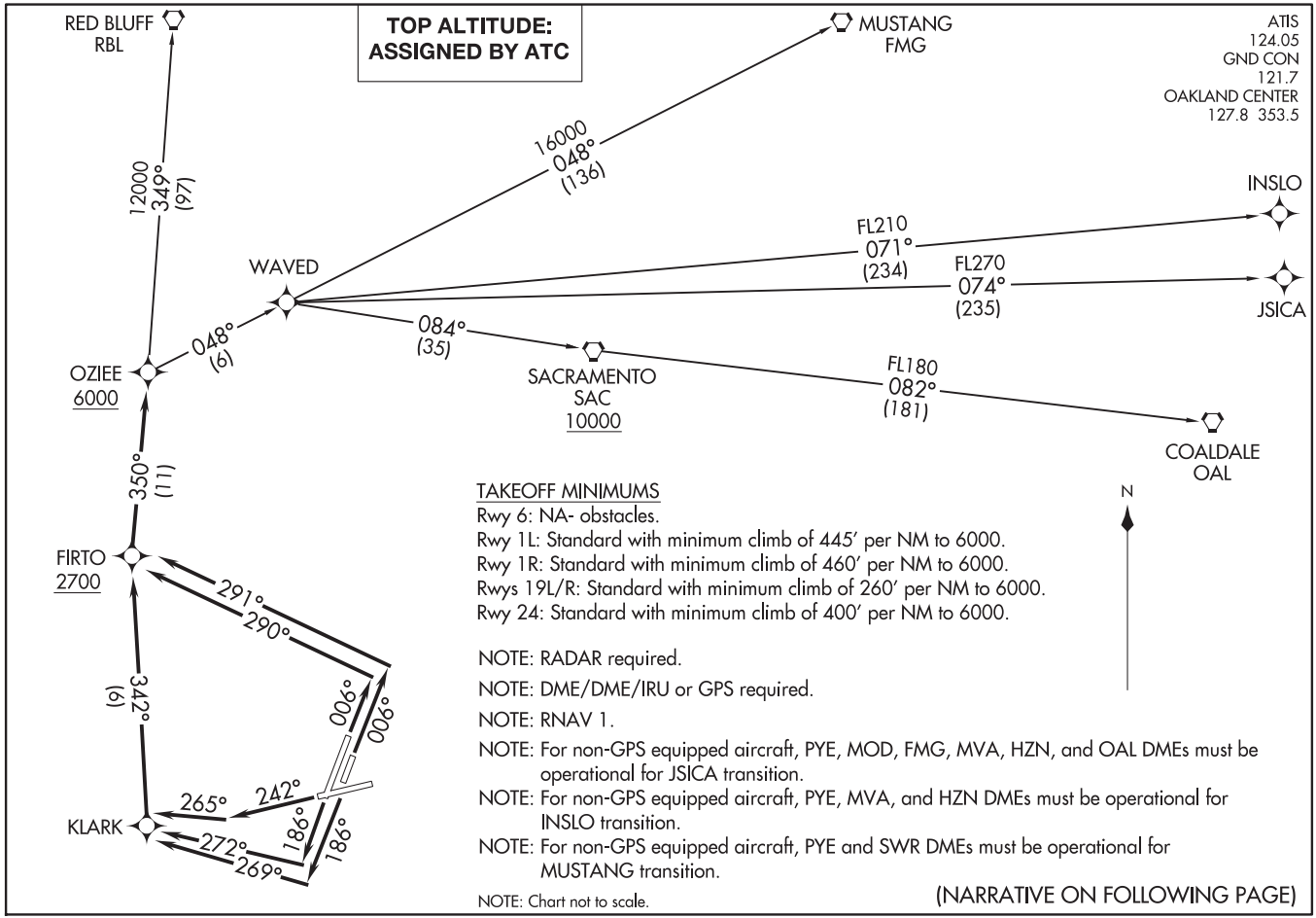
SW-2, 07 AUG 2025 to 02 OCT 2025

OZIEE FOUR DEPARTURE (RNAV)

(OZIEE4.OZIEE) 10OCT19

NAPA COUNTY (APC)

NAPA, CALIFORNIA



TAKEOFF MINIMUMS

Rwy 6: NA- obstacles.

Rwy 1L: Standard with minimum climb of 445′ per NM to 6000.

Rwy 1R: Standard with minimum climb of 460′ per NM to 6000.

Rwys 19L/R: Standard with minimum climb of 260′ per NM to 6000.

Rwy 24: Standard with minimum climb of 400′ per NM to 6000.

NOTE: RADAR required.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.

NOTE: For non-GPS equipped aircraft, PYE, MOD, FMG, MVA, HZN, and OAL DMEs must be operational for JSICA transition.

NOTE: For non-GPS equipped aircraft, PYE, MVA, and HZN DMEs must be operational for INSLO transition.

NOTE: For non-GPS equipped aircraft, PYE and SWR DMEs must be operational for MUSTANG transition.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

(OZIEE4.OZIEE) 19283

OZIEE FOUR DEPARTURE (RNAV)

AL-281 (FAA)

NAPA COUNTY (APC)

NAPA, CALIFORNIA

SW-2, 07 AUG 2025 to 02 OCT 2025

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1L: Climb on heading 006° to intercept course 290° to FIRTO at or above 2700, then on track 350° to OZIEE at or above 6000, thence. . . .

TAKEOFF RUNWAY 1R: Climb on heading 006° to intercept course 291° to FIRTO at or above 2700, then on track 350° to OZIEE at or above 6000, thence. . . .

TAKEOFF RUNWAY 19L: Climb on heading 186° to intercept course 269° to KLARK, then on track 342° to FIRTO at or above 2700, then on track 350° to OZIEE at or above 6000, thence. . . .

TAKEOFF RUNWAY 19R: Climb on heading 186° to intercept course 272° to KLARK, then on track 342° to FIRTO at or above 2700, then on track 350° to OZIEE at or above 6000, thence. . . .

TAKEOFF RUNWAY 24: Climb on heading 242° to intercept course 265° to KLARK, then on track 342° to FIRTO at or above 2700, then on track 350° to OZIEE at or above 6000, thence. . . .

. . . .on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

COALDALE TRANSITION (OZIEE4.OAL)

INSLO TRANSITION (OZIEE4.INSLO)

JSICA TRANSITION (OZIEE4.JSICA)

MUSTANG TRANSITION (OZIEE4.FMG)

RED BLUFF TRANSITION (OZIEE4.RBL)

WAAS CH **63244** **W13A**	APP CRS **140°**	Rwy Idg **3303** TDZE **4** Apt Elev **4**

RNAV (GPS) RWY 13

GNOSS FLD (DVO)

RNP APCH - GPS.

Circling NA southwest of Rwy 13-31. Circling Rwy 31 NA at night. Rwy 13 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climbing left turn to 4200 direct SGD VORTAC and hold, continue climb-in-hold to 4200.

AWOS-3P	OAKLAND CENTER	UNICOM
120.675	**127.8 353.5**	**123.075** (CTAF)

Procedure NA for arrivals at ROZZA on V301 northbound, V108 northwest bound and V494 westbound.

ROZZA
5000
132°
(4.8)
(IAF)
RACFE
3000
132°
(10.2)
(IF)
ORIBY
2000
140°
(4.7)
(FAF)
EYEJI
(MAP)
GOVLE
MSA GOVLE 25 NM
4300
Final approach course offset 6.56°.
5 NM
360°
180°
SCAGGS ISLAND
SGD
2760
1483
2677
2463
1365±
838
916
471±
1379
416±
1600
939±
523
673
1532
211±
1280

ELEV 4 TDZE 4

140°
13
3303 X 75
31

MIRL Rwy 13-31

VGSI and descent angles not coincident (VGSI Angle 3.50/TCH 28).

4200 SGD

ORIBY
EYEJI
3000
140°
2000
1.9 NM to GOVLE
GOVLE
3.69°
TCH 35
4.7 NM 2.9 NM 1.9 NM 0.2

CATEGORY	A	B	C	D
LP MDA	820-1 816 (900-1)	820-1¼ 816 (900-1¼)	NA	
LNAV MDA	1100-1¼ 1096 (1100-1¼)	1100-1½ 1096 (1100-1½)	NA	
C CIRCLING	1100-1¼ 1096 (1100-1¼)	1100-1½ 1096 (1100-1½)	NA	

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 10

OAKDALE (O27)

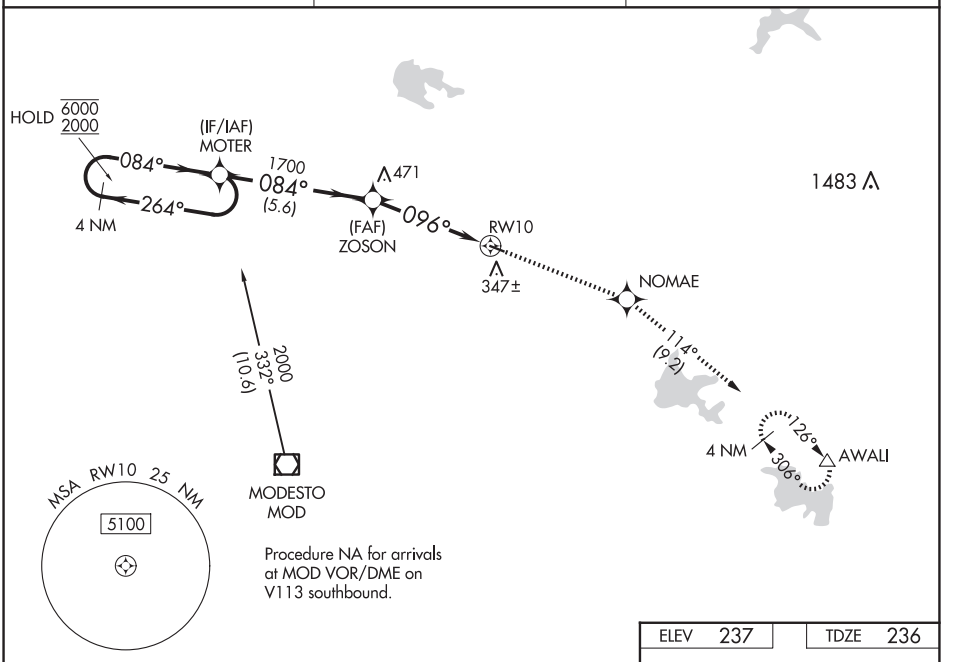
WAAS	APP CRS		
CH **42524**	**096°**	Rwy Idg	**3013**
W10A		TDZE	**236**
		Apt Elev	**237**

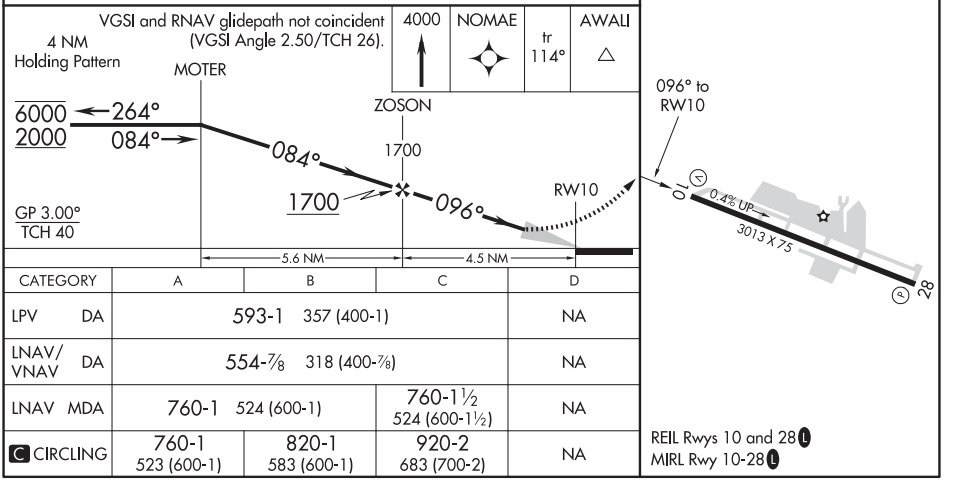
RNP APCH-GPS.

T A NA Baro-VNAV NA. Use Modesto altimeter setting; when not received, use Stockton Metro altimeter setting: increase LPV DA to 627 feet and all visibilities ⅛ SM; increase LNAV/VNAV DA to 588 feet and all visibilities ⅛ SM; increase all MDAs 40 feet and LNAV Cat C visibility ⅛ SM.

MISSED APPROACH: Climb to 4000 direct NOMAE and on track 114° to AWALI and hold, continue climb-in-hold to 4000.

MOD ASOS	NORCAL APP CON	UNICOM
127.7	**125.1 363.2**	**122.8** (CTAF) L





CATEGORY	A	B	C	D
LPV DA	593-1 357 (400-1)			NA
LNAV/VNAV DA	554-⅞ 318 (400-⅞)			NA
LNAV MDA	760-1 524 (600-1)		760-1½ 524 (600-1½)	NA
C CIRCLING	760-1 523 (600-1)	820-1 583 (600-1)	920-2 683 (700-2)	NA

REIL Rwys 10 and 28 L
MIRL Rwy 10-28 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

OAKDALE, CALIFORNIA | AL-6135 (FAA) | 21336

RNAV (GPS) RWY 28

OAKDALE (O27)

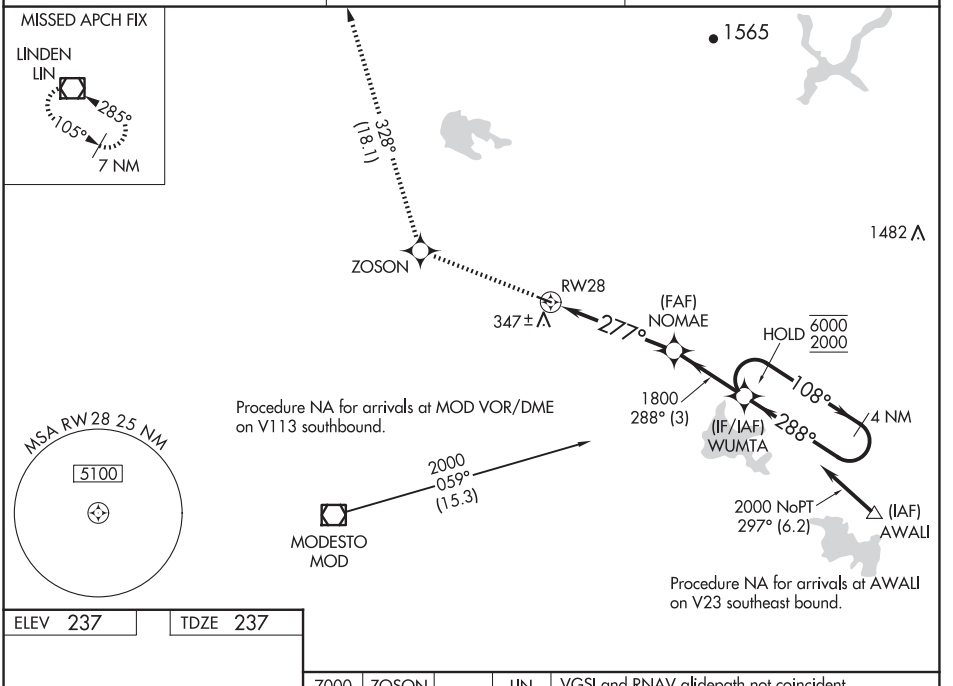
WAAS	APP CRS	Rwy Idg	3013
CH 70523	277°	TDZE	237
W28A		Apt Elev	237

RNP APCH-GPS.

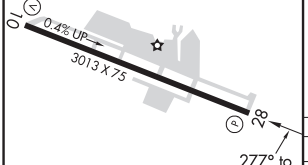
T NA Rwy 28 helicopter visibility reduction below ¾ SM NA. Baro-VNAV NA. Use Modesto altimeter setting; when not received, use Stockton altimeter setting: increase LPV DA to 581 feet and all visibilities ⅛ SM; increase LNAV/VNAV DA to 728 feet; increase all MDAs 40 feet.

MISSED APPROACH: Climb to 7000 direct ZOSON and on track 328° to LIN VOR/DME and hold, continue climb-in-hold to 7000.

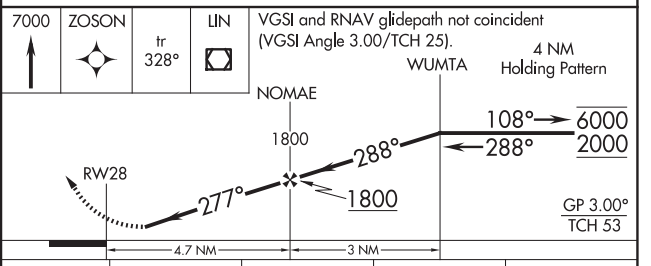
MOD ASOS	NORCAL APP CON	UNICOM
127.7	125.1 363.2	122.8 (CTAF) L



ELEV 237 | TDZE 237



REIL Rwys 10 and 28
MIRL Rwy 10-28 L



CATEGORY		A	B	C	D
LPV	DA	547-⅞ 310 (400-⅞)			NA
LNAV/VNAV	DA	694-1⅜ 457 (500-1⅜)			NA
LNAV	MDA	820-1 583 (600-1)		820-1¾ 583 (600-1¾)	NA
C CIRCLING		820-1 583 (600-1)		920-2 683 (700-2)	NA

OAKDALE, CALIFORNIA
Amdt 2A 02DEC21

37°45′N-120°48′W

OAKDALE (O27)

RNAV (GPS) RWY 28

SW-2, 07 AUG 2025 to 02 OCT 2025

ILS or LOC RWY 12

OAKLAND INTL (OAK)

LOC I-AAZ	APP CRS	Rwy Ldg	10000
111.9	116°	TDZE	9
		Apt Elev	9

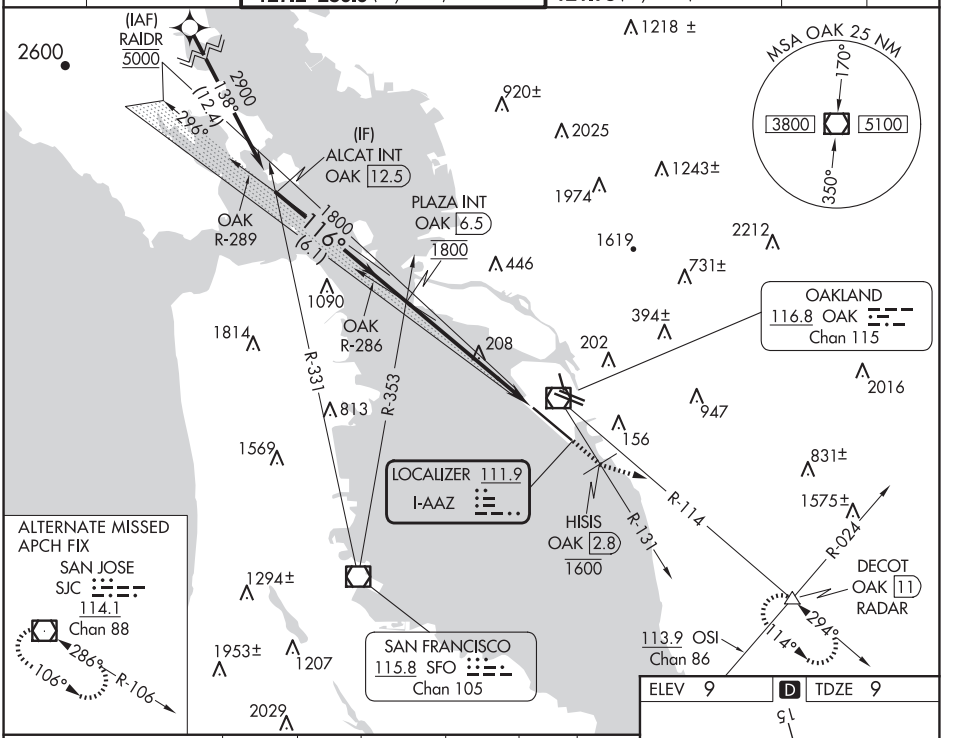
DME required. From RAIDR: RNAV 1-GPS required.

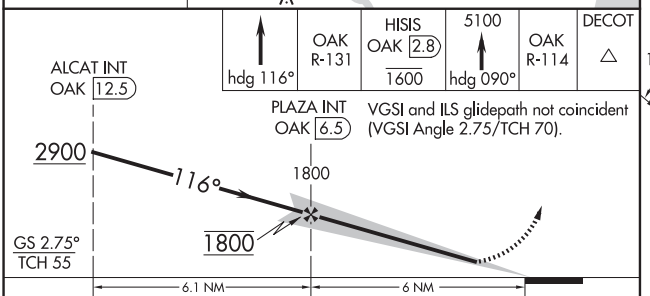
▼ A * RVR 1800 authorized with the use of FD or AP or HUD to DA.

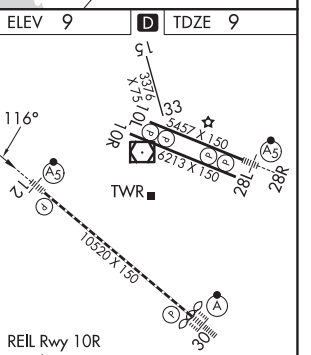
MALSR

MISSED APPROACH: Climb on heading 116° and on OAK VOR/DME R-131 to cross HISIS/OAK 2.8 DME at or below 1600 then climb to 5100 on heading 090° and on OAK VOR/DME R-114 to DECOT INT/ OAK 11 DME/RADAR and hold, continue climb-in-hold to 5100.

D-ATIS	NORCAL APP CON	OAKLAND TOWER	GND CON	CLNC DEL	CPDLC
133.775	125.35 263.15	118.3 291.65 (Rwys 10L/R-28L/R, 15-33) 127.2 256.9 (Rwy 12-30)	121.9 (Rwys 10L/R-28L/R, 15-33) 121.75 (Rwy 12-30)	121.1	







CATEGORY	A	B	C	D
S-ILS 12*	209/24		200 (200-½)	
S-LOC 12	460/24 451 (500-½)		460/45 451 (500-⅞)	
C CIRCLING	560-1 551 (600-1)		660-1¾ 651 (700-1¾)	1400-3 1391 (1400-3)

FAF to MAP 6 NM					
Knots	60	90	120	150	180
Min:Sec	6:00	4:00	3:00	2:24	2:00

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SW-2, 07 AUG 2025 to 02 OCT 2025

OAKLAND, CALIFORNIA

AL-294 (FAA)

25163

ILS or LOC RWY 28R

OAKLAND INTL (OAK)

LOC I-OAK	APP CRS		28R	28L
109.9	278°	Rwy Ldg	5457	6213
		TDZE	7	9
		Apt Elev	9	9

RNP APCH - GPS. From BBUBB or FFIST or MYSHN.

DME required.

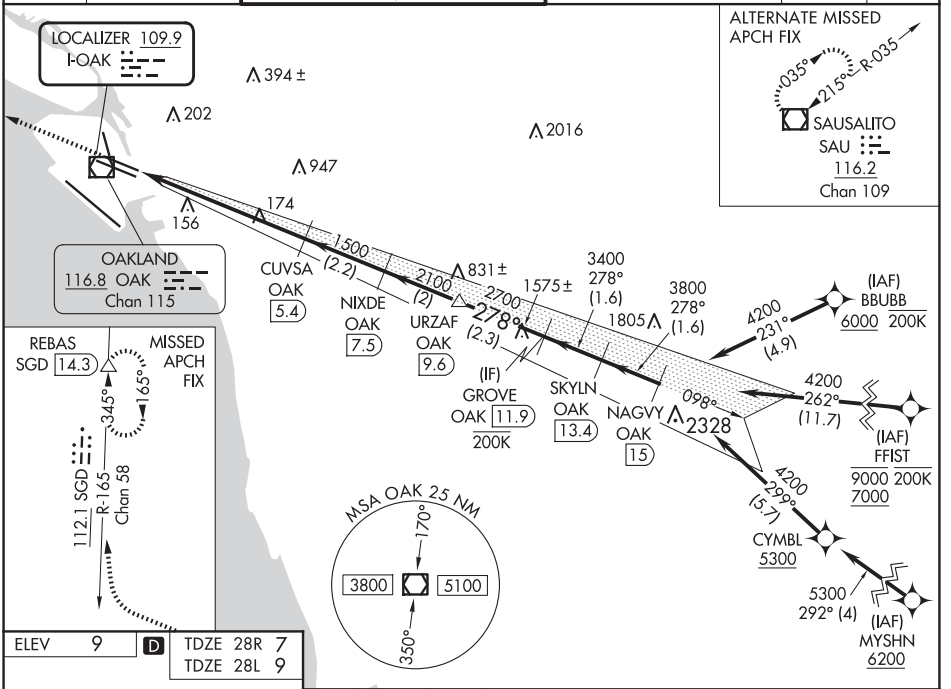
DME from OAK VOR/DME. Simultaneous reception of I-OAK and OAK DME required.

*RVR 1800 authorized with use of FD or AP or HUD to DA.

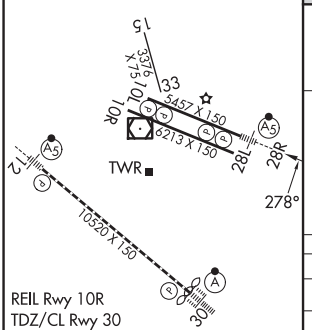
MALSR Rwy 28R

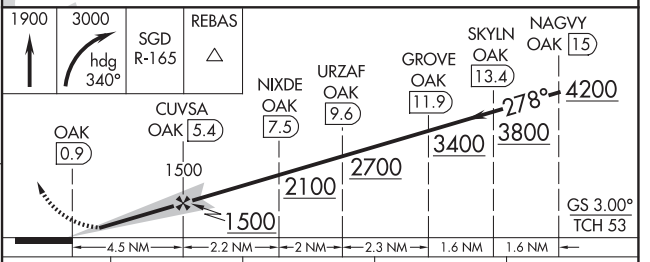
MISSED APPROACH: Climb to 1900 then climbing right turn to 3000 on heading 340° and SGD VORTAC R-165 to REBAS/SGD 14.3 DME and hold.

D-ATIS	NORCAL APP CON	OAKLAND TOWER	GND CON	CLNC DEL	CPDLC
133.775	125.35 263.15	118.3 291.65 (Rwys 10L/R-28L/R, 15-33) 127.2 256.9 (Rwy 12-30)	121.9 (Rwys 10L/R-28L/R, 15-33) 121.75 (Rwy 12-30)	121.1	



ELEV 9	D	TDZE 28R 7 TDZE 28L 9





CATEGORY	A	B	C	D
S-ILS 28R*	207/24 200 (200-½)			
S-LOC 28R	440/24 433 (500-½)		440/40 433 (500-¾)	
SIDESTEP 28L	440-1 431 (500-1)		440-1½ 431 (500-1½)	440-2 431 (500-2)
C CIRCLING	560-1 551 (600-1)		660-1¾ 651 (700-1¾)	1400-3 1391 (1400-3)

REIL Rwy 10R
TDZ/CL Rwy 30
MIRL Rwy 15-33
HIRL Rwys 12-30, 10L-28R, 10R-28L

FAF to MAP 4.5 NM

Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30

SW-2, 07 AUG 2025 to 02 OCT 2025

ILS or LOC RWY 30

OAKLAND INTL (OAK)

LOC/DME I-INB	APP CRS	Rwy Ldg	10000
108.7	296°	TDZE	9
Chan 24		Apt Elev	9

RNP APCH - GPS. From FFIST or MYSHN.
DME or RADAR required.
For inop ALS, increase S-LOC-30 Cat C and D visibility to 1⅜ SM.

ALSF-2

MISSED APPROACH: Climb to 600 then climbing left turn to 4000 on heading 260° and on SAU VOR/DME R-110 to SAU VOR/DME and hold, continue climb-in-hold to 4000.

D-ATIS	NORCAL APP CON	OAKLAND TOWER	GND CON	CLNC DEL	CPDLC
133.775	125.35 263.15	118.3 291.65 (Rwys 10L/R-28L/R, 15-33) 127.2 256.9 (Rwy 12-30)	121.9 (Rwys 10L/R-28L/R, 15-33) 121.75 (Rwy 12-30)	121.1	

MISSED APCH FIX
035°–215°–R-035
SAUSALITO
SAU
116.2
Chan 109

ALTERNATE MISSED APCH FIX
R-300–120°–300°
OAKLAND
OAK
116.8
Chan 115

OAKLAND
116.8 OAK
Chan 115

SAU R-110

LOCALIZER 108.7
I-INB
Chan 24

MSA OAK 25 NM
170°–3800–5100–350°

296°
MITOE
I-INB 8.3
RADAR
238
(IF)
WUVON
I-INB 10.5
RADAR
200K
2000
296° (2.2)
2700
264° (3)
ZOLUM
3500
254° (3.5)
PARBB
4500
4500
256°
(6.1)
PRFCT
6000
251°
(6.3)
(IAF)
FFIST
9000 200K
7000
2700
296°
(5.1)
4400
264°
(4.8)
FRNNY
5000
264°
(6)
(IAF)
MYSHN
6200
MYCAF
3049
2025
3902
1974
1243±
1619
2212
731±
394±
202
2016
947
156
831±
1575±
1805
2328

ELEV 9 D TDZE 9

10L 10R 15 33 28L 28R
3376 X 75
5457 X 150
5213 X 150
10520 X 150
TWR
A-5

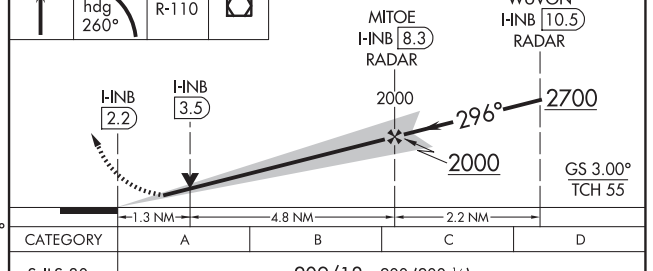
REIL Rwy 10R
TDZ/CL Rwy 30
MIRL Rwy 15-33
HIRL Rwys 12-30, 10L-28R, 10R-28L

FAF to MAP 6.1 NM

Knots	60	90	120	150	180
Min:Sec	6:06	4:04	3:03	2:26	2:02

600 | 4000 hdg 260° | SAU R-110 | SAU

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 71).



CATEGORY	A	B	C	D
S-ILS 30	209/18 200 (200-½)			
S-LOC 30	500/24 491 (500-½)		500/50 491 (500-1)	
C CIRCLING	560-1 551 (600-1)		660-1¾ 651 (700-1¾)	1400-3 1391 (1400-3)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

ILS RWY 12 (SA CAT I)

OAKLAND INTL (OAK)

LOC I-AAZ	APP CRS	Rwy Ldg	10000
111.9	116°	TDZE	9
		Apt Elev	9

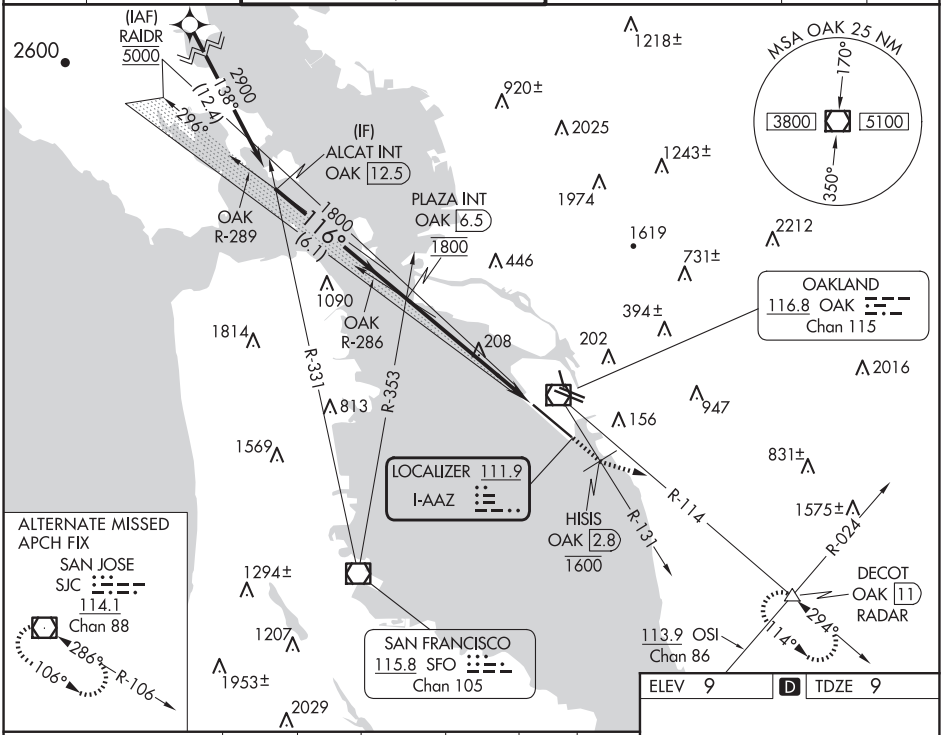
DME required. From RAIDR: RNAV 1-GPS required.

Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH.

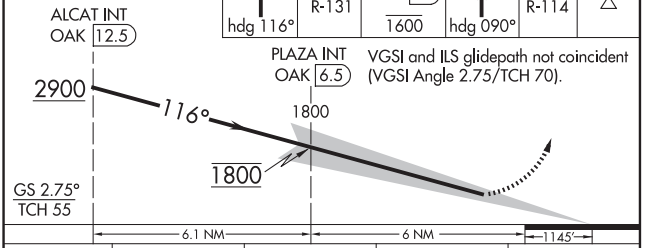
MALSR

MISSED APPROACH: Climb on heading 116° and on OAK VOR/DME R-131 to cross HISIS/OAK 2.8 DME at or below 1600 then climb to 5100 on heading 090° and on OAK VOR/DME R-114 to DECOT INT/ OAK 11 DME/RADAR and hold, continue climb-in-hold to 5100.

D-ATIS	NORCAL APP CON	OAKLAND TOWER	GND CON	CLNC DEL	CPDLC
133.775	125.35 263.15	118.3 291.65 (Rwys 10L/R-28L/R, 15-33) 127.2 256.9 (Rwy 12-30)	121.9 (Rwys 10L/R-28L/R, 15-33) 121.75 (Rwy 12-30)	121.1	



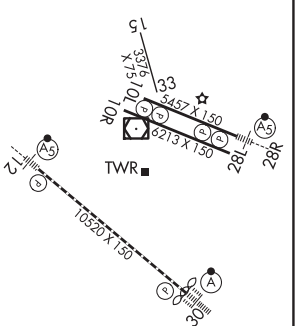
	OAK R-131	HISIS OAK 2.8 1600	5100	OAK R-114	DECOT △
	hdg 116°		hdg 090°		



CATEGORY	A	B	C	D
S-ILS 12	RA 153/14 150 DA 159			

SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

ELEV 9 D TDZE 9



REIL Rwy 10R
TDZ/CL Rwy 30
MIRL Rwy 15-33
HIRL Rwys 12-30, 10L-28R, 10R-28L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

LOC/DME I-INB	APP CRS	Rwy Ldg	10000
108.7	296°	TDZE	9
Chan 24		Apt Elev	9

ILS RWY 30 (SA CAT I)

OAKLAND INTL (OAK)

RNP APCH - GPS. From FFIST or MYSHN.

DME or RADAR required.

Requires specific OPSPEC, MSPEC, or LOA approval. Missed approach requires minimum climb of 213 feet per NM to 1540, if unable to meet climb gradient, see ILS or LOC RWY 30.

ALSF-2

MISSED APPROACH: Climb to 600 then climbing left turn to 4000 on heading 260° and on SAU VOR/DME R-110 to SAU VOR/DME and hold, continue climb-in-hold to 4000.

D-ATIS	NORCAL APP CON	OAKLAND TOWER	GND CON	CLNC DEL	CPDLC
133.775	125.35 263.15	118.3 291.65 (Rwys 10L/R-28L/R, 15-33) 127.2 256.9 (Rwy 12-30)	121.9 (Rwys 10L/R-28L/R, 15-33) 121.75 (Rwy 12-30)	121.1	

MISSED APCH FIX

035° 215° R-035

SAUSALITO SAU 116.2 Chan 109

ALTERNATE MISSED APCH FIX

R-300 120° 300°

OAKLAND OAK 116.8 Chan 115

2025 1974 1243± 3902 1619 2212 731± 394± 202 2016 947 156 831± 1575± 1805 2328

OAKLAND 116.8 OAK Chan 115

SAU R-110

LOCALIZER 108.7 I-INB Chan 24

MSA OAK 25 NM

170° 3800 5100 350°

296° 2000 296° (2.2) 2700 264° (3) 3500 254° (3.5) 238 MITOE I-INB 8.3 RADAR (IF) ZOLUM 4500 256° (6.1) PRFCT 6000 251° (6.3) (IAF) FFIST 9000 200K 7000

WUVON I-INB 10.5 RADAR 200K 2700 296° (5.1) PARBB 4500 4400 264° (4.8) FRNNY 116° 5000 264° (6) MYCAF (IAF) MYSHN 6200

3049

ELEV 9 D TDZ 9

15 33 28L 28R 10L 10R 12 30 3376 X 75 5457 X 150 6213 X 150 10520 X 150 TWR

REIL Rwy 10R
TDZ/CL Rwy 30
MIRL Rwy 15-33
HIRL Rwys 12-30, 10L-28R, 10R-28L

600	4000 hdg 260°	SAU R-110	SAU

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 71).

MITOE I-INB 8.3 RADAR 2000

WUVON I-INB 10.5 RADAR 2700

296° 2000

GS 3.00° TCH 55

1051' 6.1 NM 2.2 NM

CATEGORY	A	B	C	D
S-ILS 30	RA 150/14 150 DA 159			

SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

OAKLAND, CALIFORNIA AL-294 (FAA) 25163

ILS RWY 30 (CAT II & III)

OAKLAND INTL (OAK)

LOC/DME I-INB	APP CRS	Rwy Ldg	10000
108.7	296°	TDZE	9
Chan 24		Apt Elev	9

RNP APCH - GPS. From FFIST or MYSHN.

DME or RADAR required.

T Missed approach requires minimum climb of 213 feet per NM to 1540, if unable to meet climb gradient, see ILS or LOC RWY 30. CAT II: RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown.

ALSF-2

MISSED APPROACH: Climb to 600 then climbing left turn to 4000 on heading 260° and on SAU VOR/DME R-110 to SAU VOR/DME and hold, continue climb-in-hold to 4000.

D-ATIS	NORCAL APP CON	OAKLAND TOWER	GND CON	CLNC DEL	CPDLC
133.775	125.35 263.15	118.3 291.65 (Rwys 10L/R-28L/R, 15-33) 127.2 256.9 (Rwy 12-30)	121.9 (Rwys 10L/R-28L/R, 15-33) 121.75 (Rwy 12-30)	121.1	

MISSED APCH FIX

035°–215°–R-035

SAUSALITO SAU 116.2 Chan 109

ALTERNATE MISSED APCH FIX

R-300–120°–300°

OAKLAND OAK 116.8 Chan 115

2025 1974 1243± 3902 1619 2212 731± 394± 202 2016 947 156 831± 1575± 1805 2328

OAKLAND 116.8 OAK Chan 115

SAU R-110

LOCALIZER 108.7 I-INB Chan 24

MSA OAK 25 NM

170° 3800 5100 350°

296° 2000 296° (2.2) 2700 264° (3) 3500 254° (3.5) 4500 256° (6.1) 6000 251° (6.3) (IAF) FFIST 9000 200K 7000

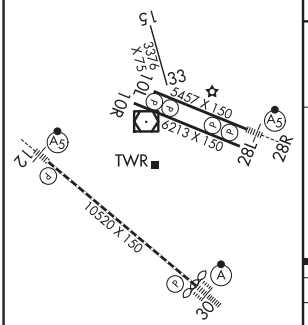
238 MITOE I-INB 8.3 RADAR (IF) WUVON I-INB 10.5 RADAR 200K

ZOLUM PARBB 4500 PRFCT

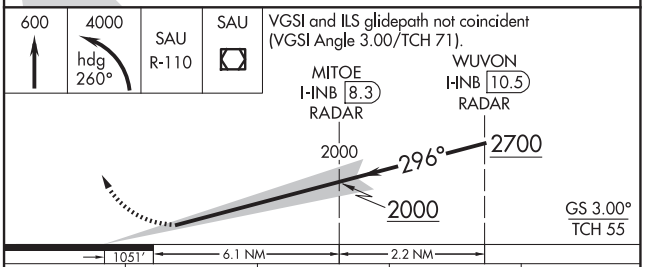
2700 296° (5.1) FRNNY 4400 264° (4.8) 116° MYCAF 5000 264° (6) (IAF) MYSHN 6200

3049

ELEV 9 D TDZE 9



REIL Rwy 10R
TDZ/CL Rwy 30
MIRL Rwy 15-33
HIRL Rwys 12-30, 10L-28R, 10R-28L



CATEGORY	A	B	C	D
S-ILS 30	CAT II RA 100/12 100 DA 109			
S-ILS 30	CAT III RVR 06			

CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

OAKLAND, CALIFORNIA
Amdt 32 12JUN25

37°43'N-122°13'W

OAKLAND INTL (OAK)

ILS RWY 30 (CAT II & III)

SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (RNP) Z RWY 12

OAKLAND INTL (OAK)

APP CRS	Rwy Ldg	10000
116°	TDZE	9
	Apt Elev	9

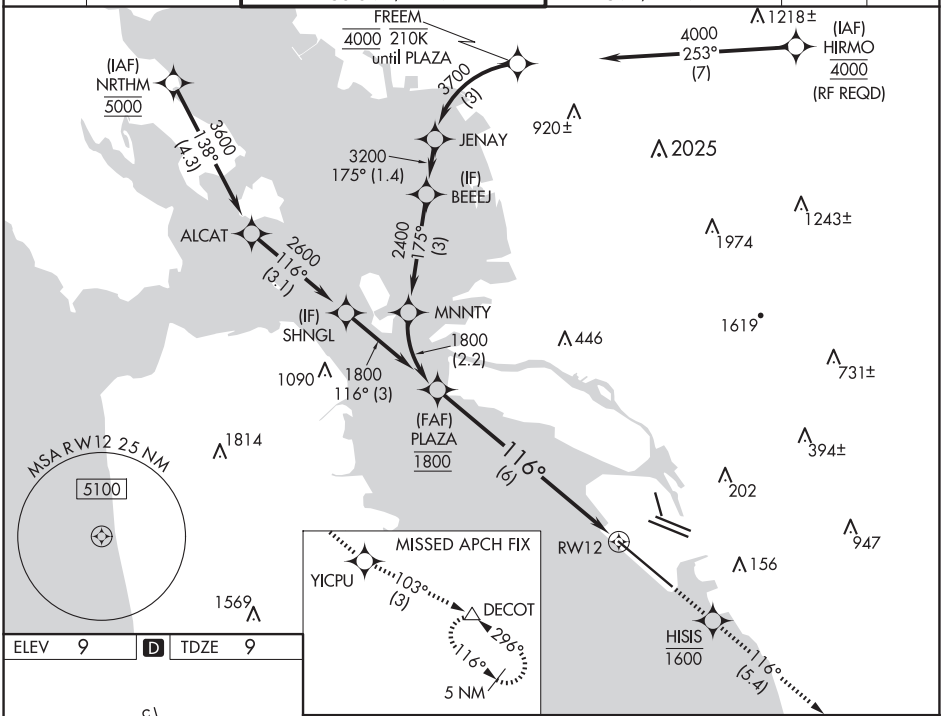
RNP AR APCH.

For uncompensated Baro-VNAV systems, procedure NA below 0°C or above 54°C. For inop ALS increase RNP 0.15 visibility all Cats to RVR 4500, RNP 0.30 visibility all Cats to RVR 5500.

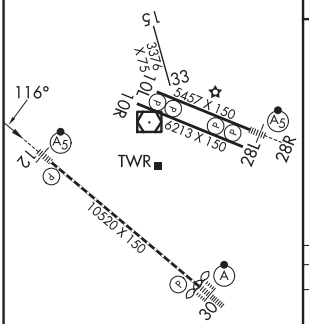
MALSR

MISSED APPROACH: Climb direct HISIS to cross HISIS at or below 1600 then climb to 5400 on track 116° to YICPU and on track 103° to DECOT and hold, continue climb-in-hold to 5400.

D-ATIS	NORCAL APP CON	OAKLAND TOWER	GND CON	CLNC DEL	CPDLC
133.775	125.35 263.15	118.3 291.65 (Rwys 10L/R-28L/R, 15-33) 127.2 256.9 (Rwy 12-30)	121.9 (Rwys 10L/R-28L/R, 15-33) 121.75 (Rwy 12-30)	121.1	

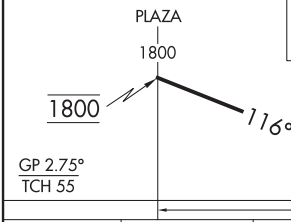


ELEV 9	D	TDZ 9



REIL Rwy 10R
TDZ/CL Rwy 30
MIRL Rwy 15-33
HIRL Rwys 12-30, 10L-28R, 10R-28L

See planview for multiple IF locations.



	HISIS	5400	YICPU	tr	DECOT
	1600	tr 116°		103°	△

VGSI and RNAV glidepath not coincident (VGSI Angle 2.75/TCH 70).

CATEGORY	A	B	C	D
RNP 0.15 DA	289/24 280 (300-½)			
RNP 0.30 DA	386/35 377 (400-⅝)			

AUTHORIZATION REQUIRED

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

OAKLAND, CALIFORNIA | AL-294 (FAA) | 25163

RNAV (RNP) Z RWY 28L

OAKLAND INTL (OAK)

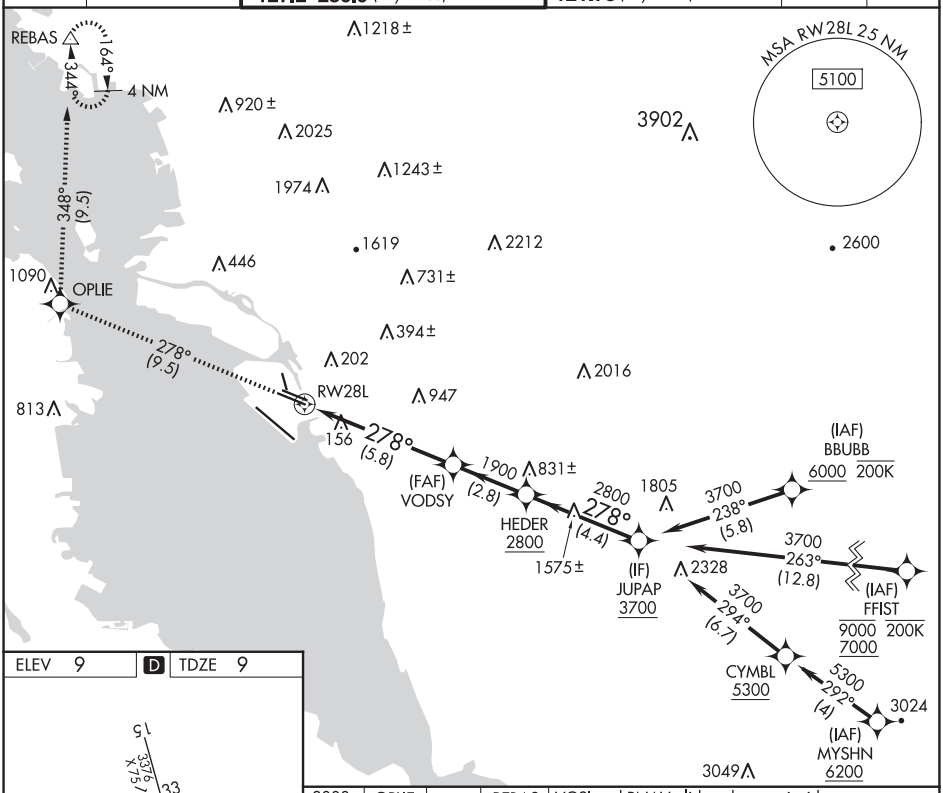
APP CRS	Rwy Ldg	6213
278°	TDZE	9
	Apt Elev	9

RNP AR APCH - GPS. Authorization required.

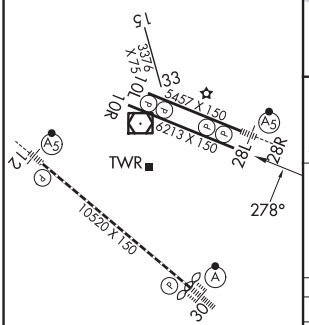
For uncompensated Baro-VNAV systems, procedure NA below 2°C or above 54°C.

MISSED APPROACH: Climb to 3000 on track 278° to OPLIE and on track 348° to REBAS and hold.

D-ATIS	NORCAL APP CON	OAKLAND TOWER	GND CON	CLNC DEL	CPDLC
133.775	125.35 263.15	118.3 291.65 (Rwys 10L/R-28L/R, 15-33) 127.2 256.9 (Rwy 12-30)	121.9 (Rwys 10L/R-28L/R, 15-33) 121.75 (Rwy 12-30)	121.1	



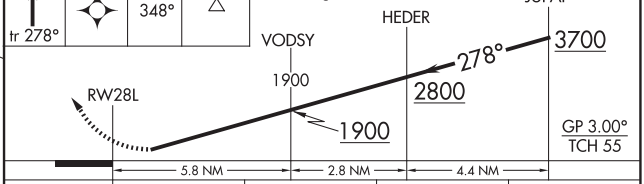
ELEV 9	D	TDZE 9



REIL Rwy 10R
TDZ/CL Rwy 30
MIRL Rwy 15-33
HIRL Rwys 12-30, 10L-28R, 10R-28L

3000	OPLIE	tr 348°	REBAS
tr 278°			

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 50).



CATEGORY	A	B	C	D
RNP 0.10 DA	306/45 297 (300-⅞)			
RNP 0.15 DA	359/55 350 (400-1)			
RNP 0.30 DA	425/60 416 (500-1¼)			

AUTHORIZATION REQUIRED

OAKLAND, CALIFORNIA
Amdt 3 12JUN25

37°43′N-122°13′W

OAKLAND INTL (OAK)

RNAV (RNP) Z RWY 28L

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (RNP) Z RWY 28R

OAKLAND INTL (OAK)

APP CRS	Rwy Ldg	5457
278°	TDZE	7
	Apt Elev	9

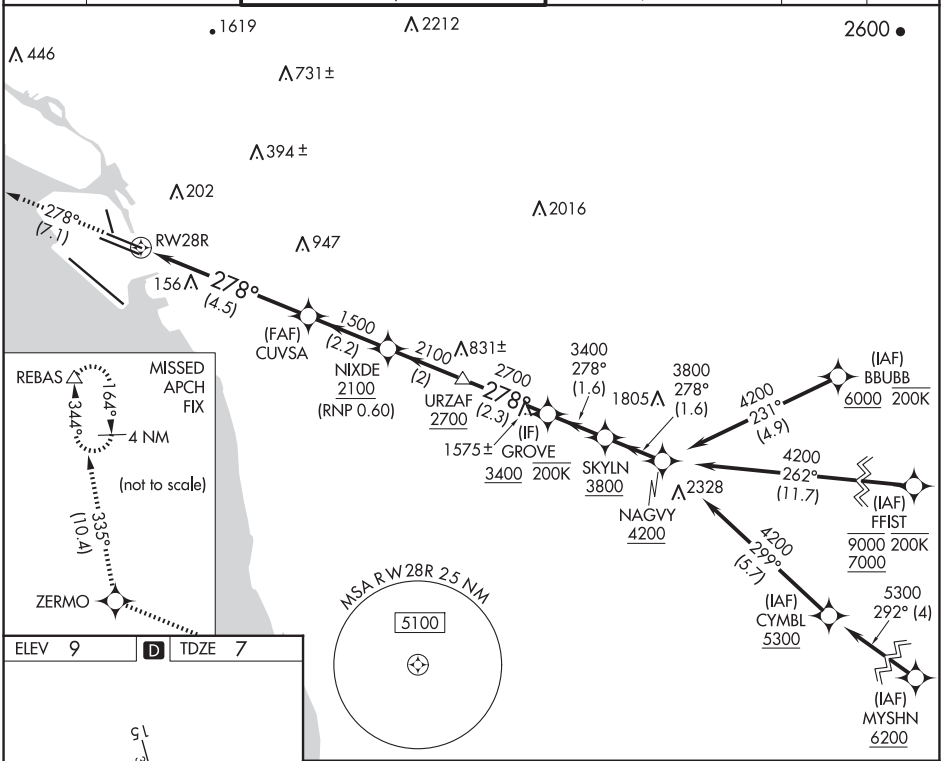
RNP AR APCH - GPS. Authorization required.

For uncompensated Baro-VNAV systems, procedure NA below 2°C or above 54°C. For inop ALS, increase RNP 0.30 all Cats visibility to RVR 6000.

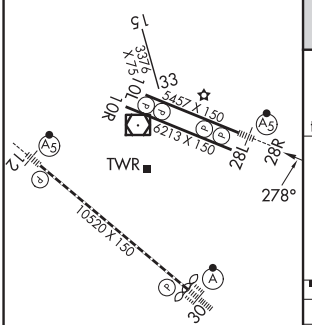
MALSR

MISSED APPROACH: Climb to 3000 on 278° track to ZERMO and on 335° track to REBAS and hold.

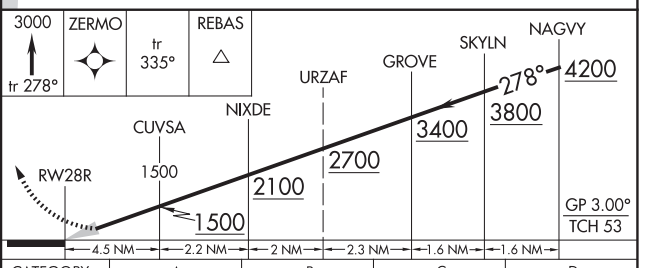
D-ATIS	NORCAL APP CON	OAKLAND TOWER	GND CON	CLNC DEL	CPDLC
133.775	125.35 263.15	118.3 291.65 (Rwys 10L/R-28L/R, 15-33) 127.2 256.9 (Rwy 12-30)	121.9 (Rwys 10L/R-28L/R, 15-33) 121.75 (Rwy 12-30)	121.1	



ELEV 9	D	TDZ 7



REIL Rwy 10R
TDZ/CL Rwy 30
MIRL Rwy 15-33
HIRL Rwys 12-30, 10L-28R, 10R-28L



CATEGORY	A	B	C	D
RNP 0.10 DA	332/26	325 (400-½)		
RNP 0.30 DA	418/40	411 (500-¾)		

AUTHORIZATION REQUIRED

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

OAKLAND, CALIFORNIA | AL-294 (FAA) | 25163

RNAV (RNP) Z RWY 30

OAKLAND INTL (OAK)

APP CRS	Rwy Ldg	10000
296°	TDZE	9
	Apt Elev	9

RNP AR APCH - GPS. Authorization required. From ALLXX or PARBB: RF.

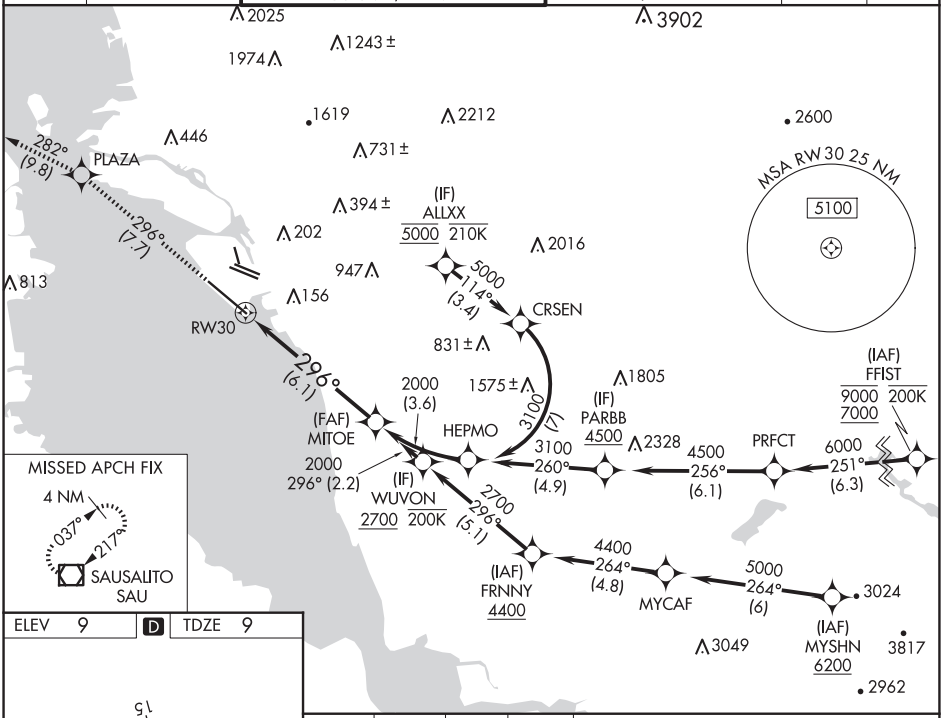
RADAR required.

For uncompensated Baro-VNAV systems, procedure NA below 2°C or above 54°C. For inop ALS, increase RNP 0.15 all Cats visibility to RVR 4500 and increase RNP 0.30 all Cats visibility to RVR 5500.

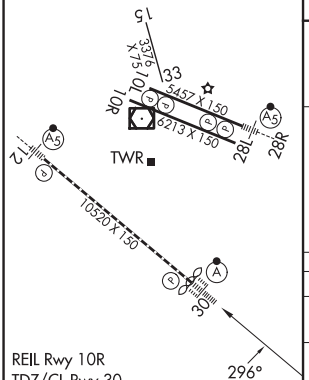
ALSF-2

MISSED APPROACH: Climb to 4000 on track 296° to PLAZA and on track 282° to SAU VOR/DME and hold, continue climb-in-hold to 4000.

D-ATIS	NORCAL APP CON	OAKLAND TOWER	GND CON	CLNC DEL	CPDLC
133.775	125.35 263.15	118.3 291.65 (Rwys 10L/R-28L/R, 15-33) 127.2 256.9 (Rwy 12-30)	121.9 (Rwys 10L/R-28L/R, 15-33) 121.75 (Rwy 12-30)	121.1	



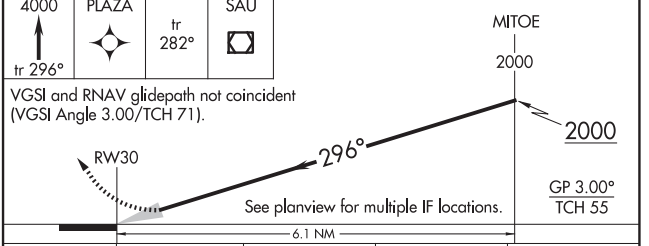
ELEV 9 | D | TDZE 9



REIL Rwy 10R
TDZ/CL Rwy 30
MIRL Rwy 15-33
HIRL Rwys 12-30, 10L-28R, 10R-28L

4000	PLAZA	tr	SAU
tr 296°		282°	

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 71).



CATEGORY	A	B	C	D
RNP 0.15 DA	281/24 272 (300-½)			
RNP 0.30 DA	385/35 376 (400-⅝)			

AUTHORIZATION REQUIRED

OAKLAND, CALIFORNIA
Amdt 4 12JUN25

37°43'N-122°13'W

OAKLAND INTL (OAK)

RNAV (RNP) Z RWY 30

SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS	Rwy Ldg	5336
109°	TDZE	6
	Apt Elev	9

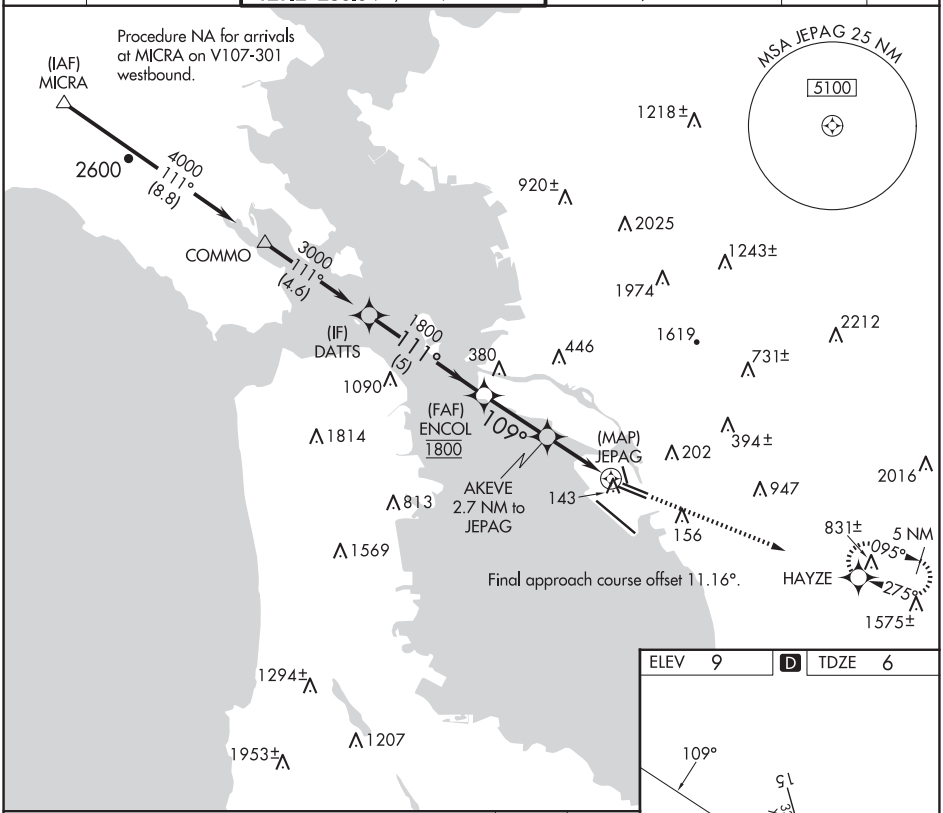
RNAV (GPS) RWY 10L

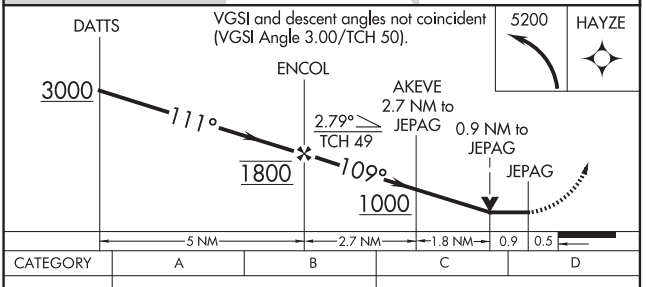
OAKLAND INTL (OAK)

DME/DME RNP-0.3 NA.
Helicopter visibility reduction below ¾ SM not authorized.

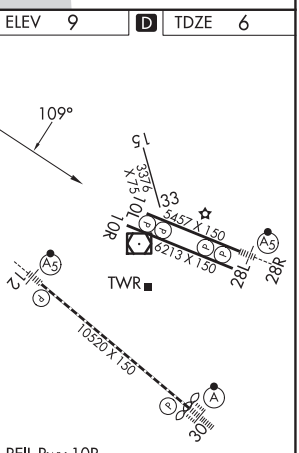
MISSED APPROACH: Climbing left turn to 5200 direct HAYZE and hold, continue climb-in-hold to 5200.

D-ATIS	NORCAL APP CON	OAKLAND TOWER	GND CON	CLNC DEL	CPDLC
133.775	125.35 263.15	118.3 291.65 (Rwys 10L/R-28L/R, 15-33) 127.2 256.9 (Rwy 12-30)	121.9 (Rwys 10L/R-28L/R, 15-33) 121.75 (Rwy 12-30)	121.1	





CATEGORY	A	B	C	D
LNAV MDA	500-1 494 (500-1)		500-1⅜ 494 (500-1⅜)	
C CIRCLING	560-1 551 (600-1)		660-1¾ 651 (700-1¾)	1380-3 1371 (1400-3)



SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 10R

OAKLAND INTL (OAK)

APP CRS	Rwy Ldg	6213
111°	TDZE	9
	Apt Elev	9

DME/DME RNP-0.3 NA.
Helicopter visibility reduction below ¾ SM not authorized.

MISSED APPROACH: Climbing left turn to 5200 direct HAYZE and hold, continue climb-in-hold to 5200.

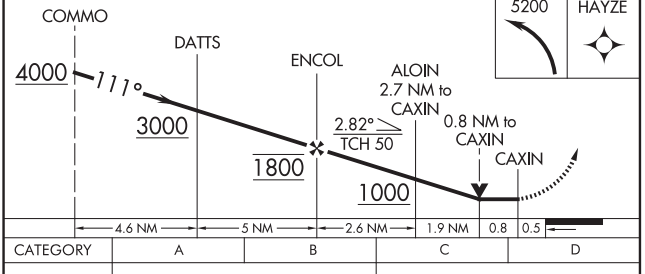
D-ATIS	NORCAL APP CON	OAKLAND TOWER	GND CON	CLNC DEL	CPDLC
133.775	125.35 263.15	118.3 291.65 (Rwys 10L/R-28L/R, 15-33) 127.2 256.9 (Rwy 12-30)	121.9 (Rwys 10L/R-28L/R, 15-33) 121.75 (Rwy 12-30)	121.1	

Procedure NA for arrivals at MICRA on V107-301 westbound.

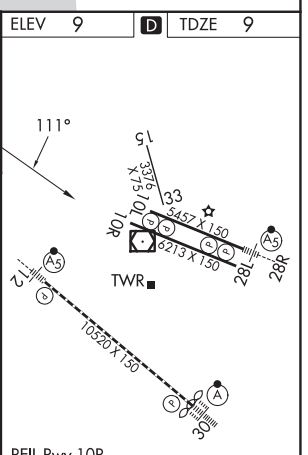
(IAF) MICRA
4000
2600
111° (8.8)
COMMO
3000
111° (4.6)
(IF) DATTS
1800
111° (5)
(FAF) ENCOL 1800
(MAP) CAXIN
ALOIN 2.7 NM to CAXIN
Final approach course offset 13.17°.
HAYZE
095° 5 NM
275°

1218±
920±
2025
1974
1243±
1619
2212
731±
380
446
1090
394±
1814
202
947
2016
813
143
156
831±
1569
1575±
1294±
1953±
1207

MSA CAXIN 25 NM
5100



CATEGORY	A	B	C	D
LNAV MDA	480-1 471 (500-1)		480-1⅜ 471 (500-1⅜)	
C CIRCLING	560-1 551 (600-1)		660-1¾ 651 (700-1¾)	1380-3 1371 (1400-3)



REIL Rwy 10R
TDZ/CL Rwy 30
MIRL Rwy 15-33
HIRL Rwys 12-30, 10L-28R, 10R-28L

SW-2, 07 AUG 2025 to 02 OCT 2025
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RNAV (GPS) Y RWY 12

OAKLAND INTL (OAK)

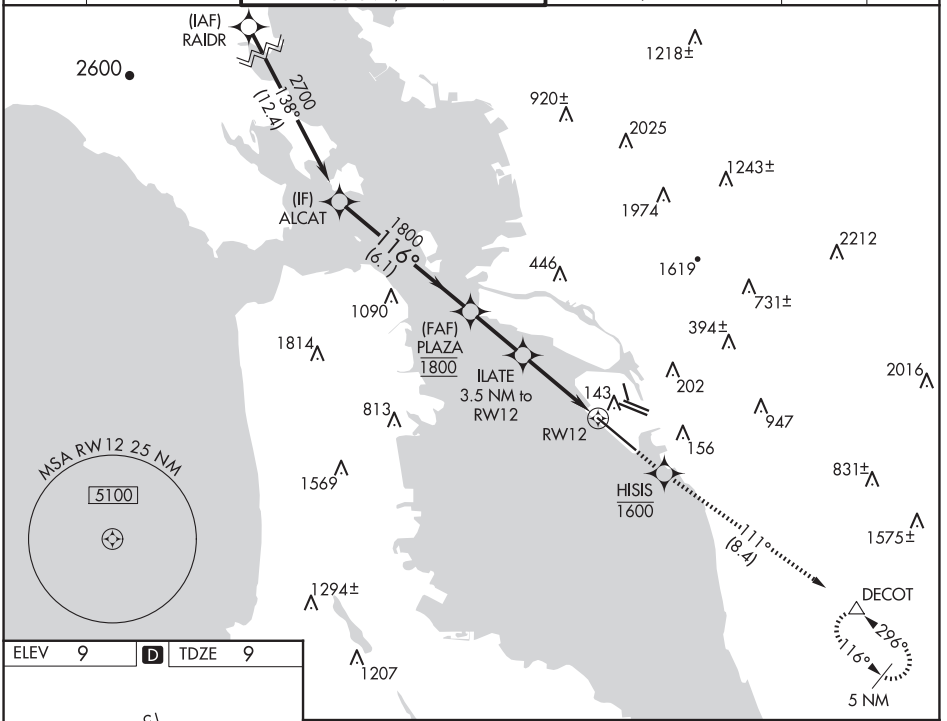
WAAS CH 86418 W12A	APP CRS 116°	Rwy Ldg 10000 TDZE 9 Apt Elev 9

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 0°C (32°F) or above 54°C (130°F).
DME/DME RNP-0.3 NA.
#RVR 1800 authorized with use of FD or AP or HUD to DA.

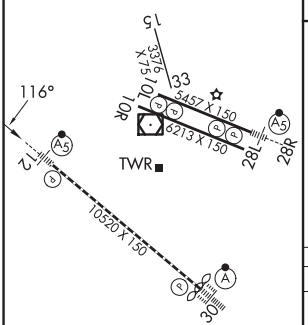
MALSR

MISSED APPROACH: Climb direct HISIS to cross HISIS at or below 1600, then climb to 5400 on track 111° to DECOT and hold, continue climb-in-hold to 5400.

D-ATIS	NORCAL APP CON	OAKLAND TOWER	GND CON	CLNC DEL	CPDLC
133.775	125.35 263.15	118.3 291.65 (Rwys 10L/R-28L/R, 15-33) 127.2 256.9 (Rwy 12-30)	121.9 (Rwys 10L/R-28L/R, 15-33) 121.75 (Rwy 12-30)	121.1	

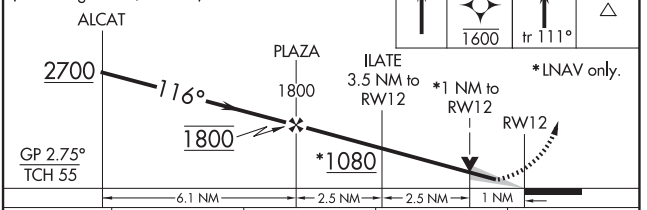


ELEV 9 D TDZE 9



REIL Rwy 10R
TDZ/CL Rwy 30
MIRL Rwy 15-33
HIRL Rwys 12-30, 10L-28R, 10R-28L

VGSI and RNAV glidepath not coincident (VGSI Angle 2.75/TCH 70).



CATEGORY	A	B	C	D
LPV DA#	209/24 200 (200-½)			
LNAV/VNAV DA	304/27 295 (300-⅝)			
LNAV MDA	360/24 351 (400-½)		360/30 351 (400-⅝)	
C CIRCLING	560-1 551 (600-1)		660-1¾ 651 (700-1¾)	1380-3 1371 (1400-3)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

OAKLAND, CALIFORNIA AL-294 (FAA) 25163

RNAV (GPS) Y RWY 28L

OAKLAND INTL (OAK)

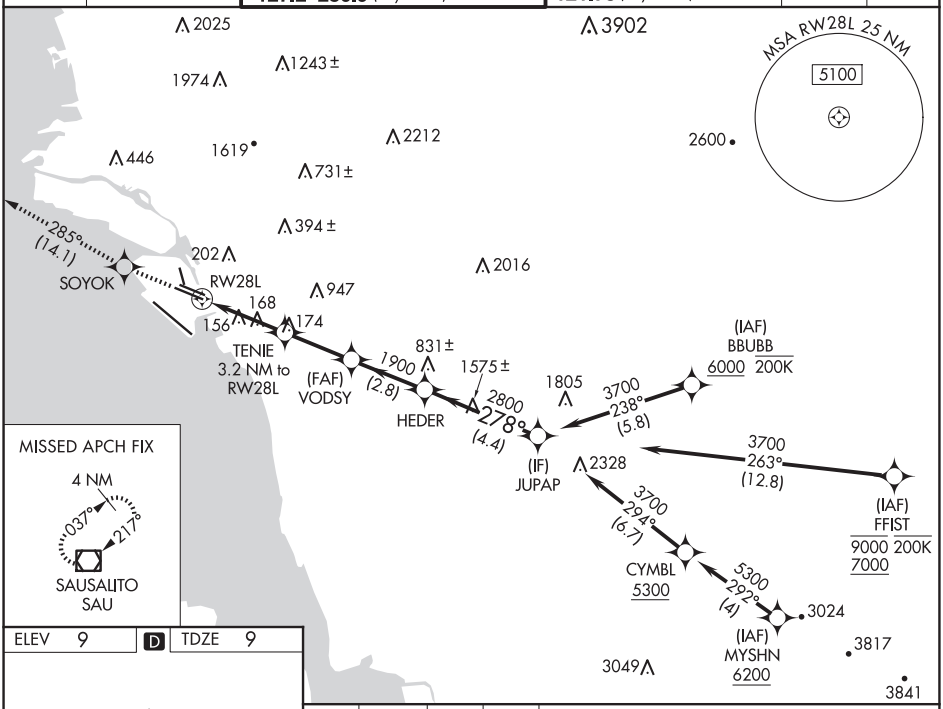
WAAS	APP CRS	Rwy Ldg	6213
CH 72700	278°	TDZE	9
W28A		Apt Elev	9

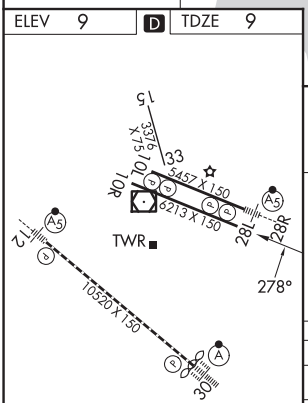
RNP APCH - GPS.

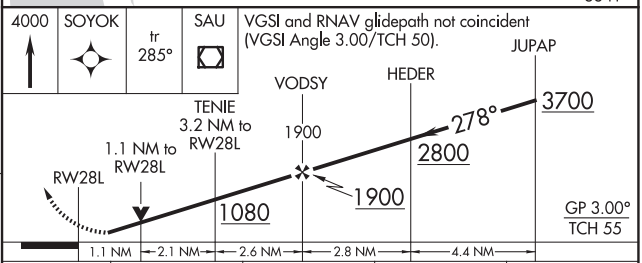
Rwy 28L helicopter visibility reduction below RVR 4000 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 2°C or above 54°C.

MISSED APPROACH: Climb to 4000 direct SOYOK and on track 285° to SAU VOR/DME and hold, continue climb-in-hold to 4000.

D-ATIS	NORCAL APP CON	OAKLAND TOWER	GND CON	CLNC DEL	CPDLC
133.775	125.35 263.15	118.3 291.65 (Rwys 10L/R-28L/R, 15-33) 127.2 256.9 (Rwy 12-30)	121.9 (Rwys 10L/R-28L/R, 15-33) 121.75 (Rwy 12-30)	121.1	







CATEGORY	A	B	C	D
LPV DA	259/40 250 (300-¾)			
LNAV/VNAV DA	387/55 378 (400-1)			
LNAV MDA	420/55 411 (500-1)		420/60 411 (500-1¼)	
C CIRCLING	560-1 551 (600-1)		660-1¾ 651 (700-1¾)	1400-3 1391 (1400-3)

REIL Rwy 10R
TDZ/CL Rwy 30
MIRL Rwy 15-33
HIRL Rwys 12-30, 10L-28R, 10R-28L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) Y RWY 28R

OAKLAND INTL (OAK)

WAAS CH 42535 W28B	APP CRS 278°	Rwy Ldg 5457 TDZE 7 Apt Elev 9

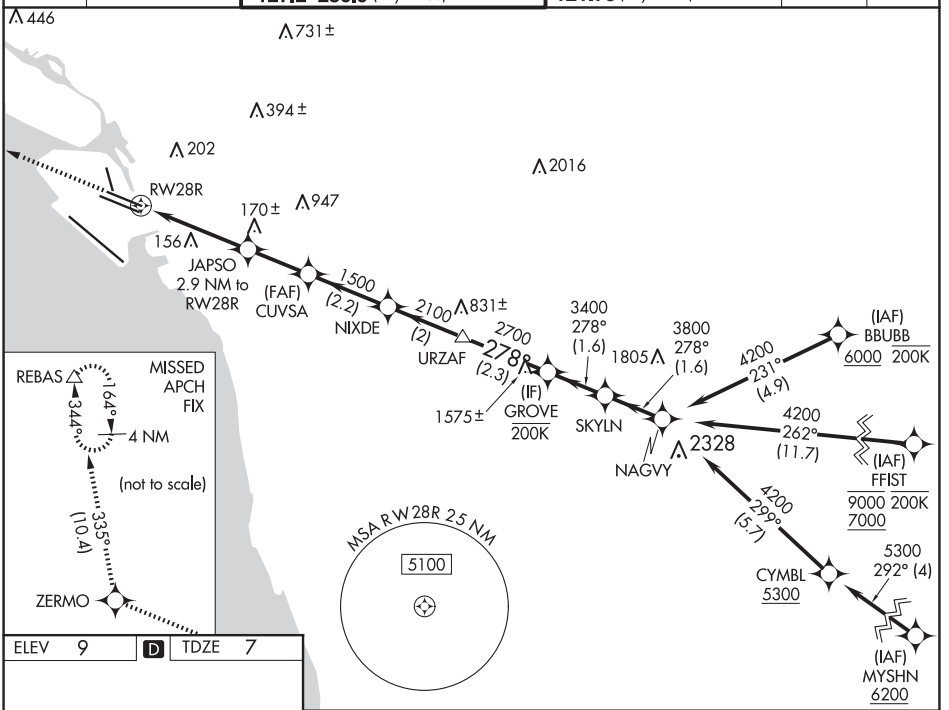
RNP APCH - GPS.

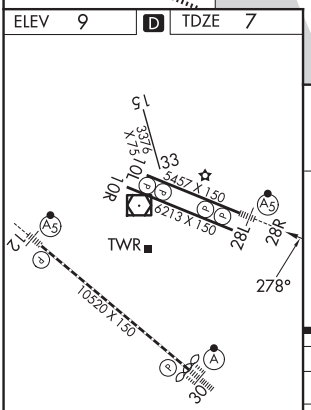
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 2°C or above 54°C. For inop ALS, LNAV/VNAV all Cats increase visibility to RVR 5500. *RVR 1800 authorized with use of FD or AP or HUD to DA.

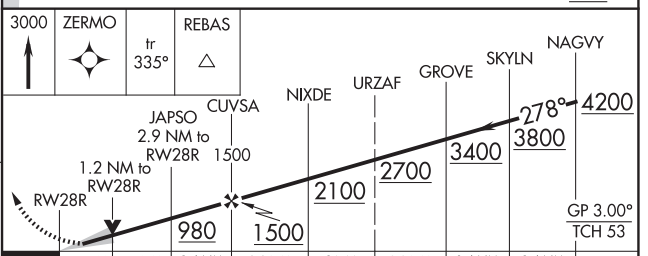
MALSR

MISSED APPROACH: Climb to 3000 direct ZERMO and on track 335° to REBAS and hold.

D-ATIS	NORCAL APP CON	OAKLAND TOWER	GND CON	CLNC DEL	CPDLC
133.775	125.35 263.15	118.3 291.65 (Rwys 10L/R-28L/R, 15-33) 127.2 256.9 (Rwy 12-30)	121.9 (Rwys 10L/R-28L/R, 15-33) 121.75 (Rwy 12-30)	121.1	







CATEGORY	A	B	C	D
LPV DA*	207/24 200 (200-½)			
LNAV/VNAV DA	387/35 380 (400-⅝)			
LNAV MDA	440/24 433 (500-½)		440/40 433 (500-¾)	
C CIRCLING	560-1 551 (600-1)		660-1¾ 651 (700-1¾)	1400-3 1391 (1400-3)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

OAKLAND, CALIFORNIA AL-294 (FAA) 25163

RNAV (GPS) Y RWY 30

OAKLAND INTL (OAK)

WAAS CH 93535 W30A	APP CRS 296°	Rwy Ldg 10000 TDZE 9 Apt Elev 9

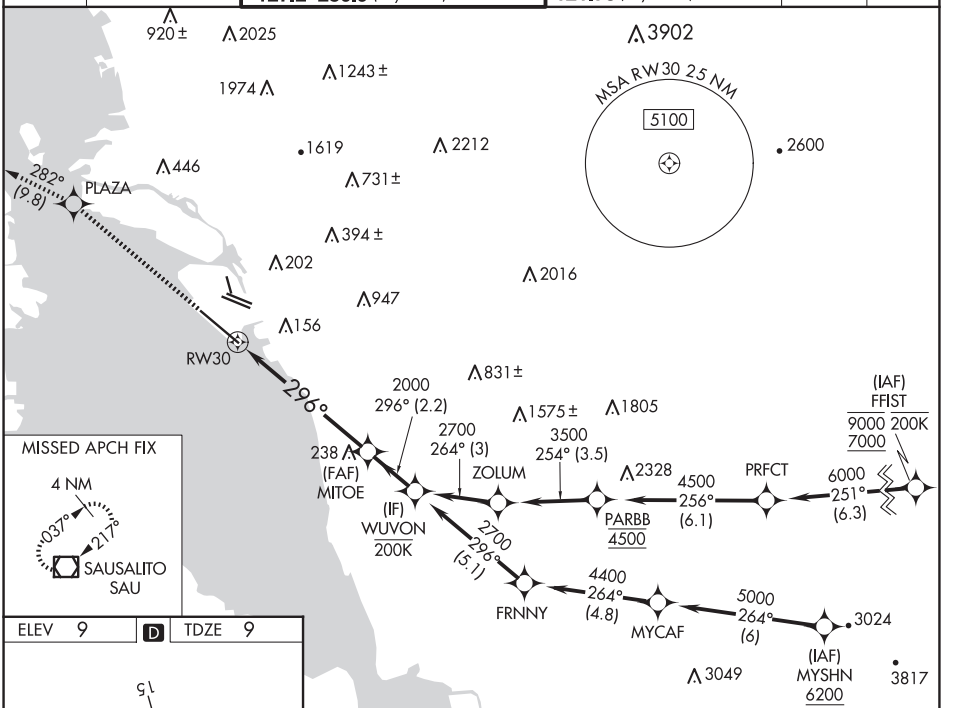
RNP APCH - GPS.

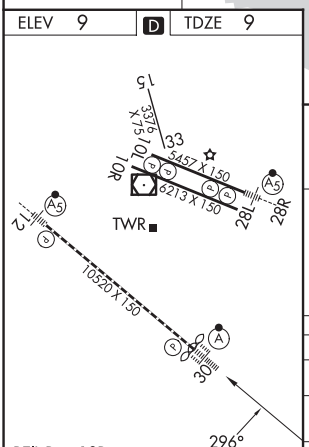
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 2°C or above 54°C. For inop ALS, increase LNAV/VNAV Cats A/B/C visibility to RVR 4000, Cat D visibility to RVR 4500, and LNAV Cats C/D visibility to 1⅜ SM.

ALSF-2

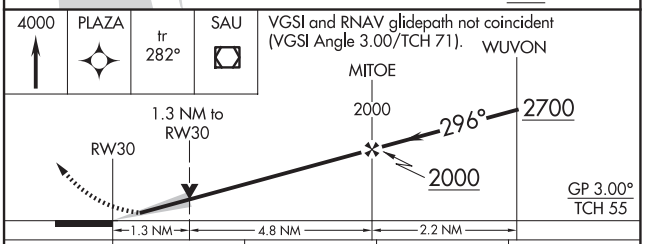
MISSED APPROACH: Climb to 4000 direct PLAZA and on track 282° to SAU VOR/DME and hold, continue climb-in-hold to 4000.

D-ATIS	NORCAL APP CON	OAKLAND TOWER	GND CON	CLNC DEL	CPDLC
133.775	125.35 263.15	118.3 291.65 (Rwys 10L/R-28L/R, 15-33) 127.2 256.9 (Rwy 12-30)	121.9 (Rwys 10L/R-28L/R, 15-33) 121.75 (Rwy 12-30)	121.1	





REIL Rwy 10R
TDZ/CL Rwy 30
MIRL Rwy 15-33
HIRL Rwys 12-30, 10L-28R, 10R-28L



CATEGORY	A	B	C	D
LPV DA	209/18 200 (200-½)			
LNAV/VNAV DA	259/24 250 (300-½)		265/24 256 (300-½)	283/24 274 (300-½)
LNAV MDA	500/24 491 (500-½)		500/50 491 (500-1)	
C CIRCLING	560-1 551 (600-1)		660-1¾ 651 (700-1¾)	1400-3 1391 (1400-3)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

VOR/DME OAK	APP CRS	Rwy Ldg	6213
116.8	108°	TDZE	9
Chan 115		Apt Elev	9

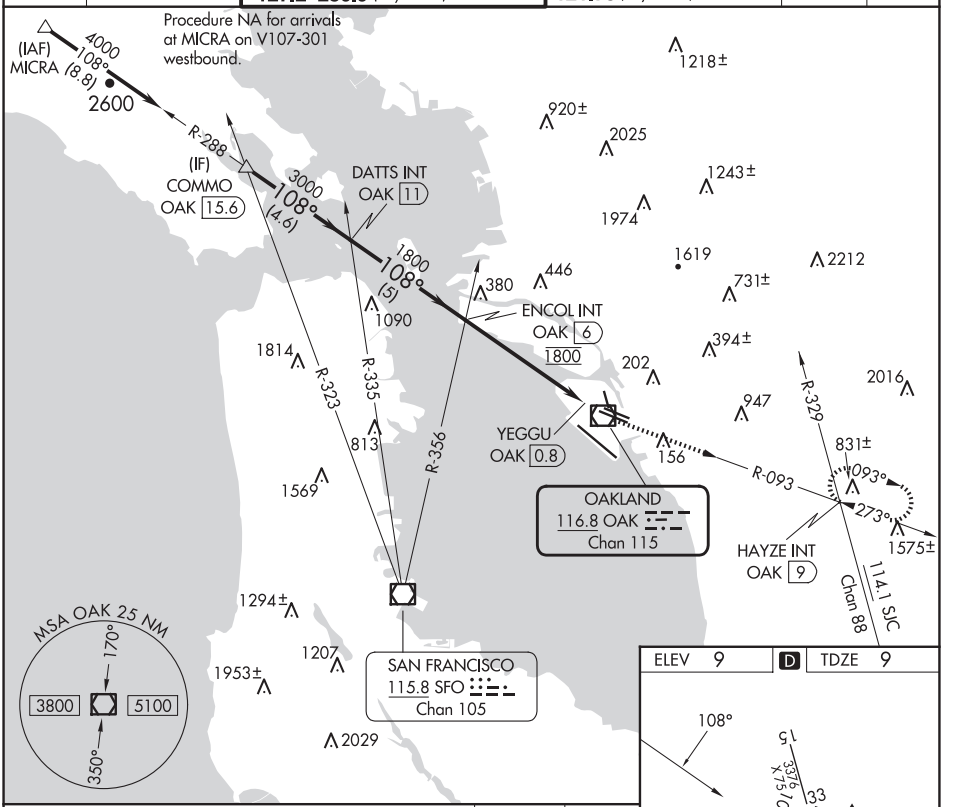
VOR RWY 10R

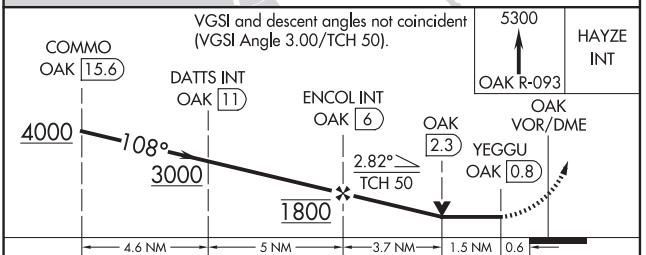
OAKLAND INTL (OAK)

Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 5300 on OAK VOR/DME R-093 to HAYZE INT/OAK 9 DME and hold, continue climb-in-hold to 5300.

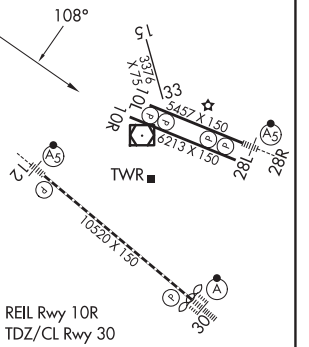
D-ATIS	NORCAL APP CON	OAKLAND TOWER	GND CON	CLNC DEL	CPDLC
133.775	125.35 263.15	118.3 291.65 (Rwys 10L/R-28L/R, 15-33) 127.2 256.9 (Rwy 12-30)	121.9 (Rwys 10L/R-28L/R, 15-33) 121.75 (Rwy 12-30)	121.1	





CATEGORY	A	B	C	D
S-10R	740-1	731 (800-1)	740-2	731 (800-2)
C CIRCLING	740-1	731 (800-1)	740-2 731 (800-2)	1380-3 1371 (1400-3)

ELEV 9	D	TDZE 9



REIL Rwy 10R
TDZ/CL Rwy 30
MIRL Rwy 15-33
HIRL Rwys 12-30, 10L-28R, 10R-28L

FAF to MAP 5.2 NM

Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

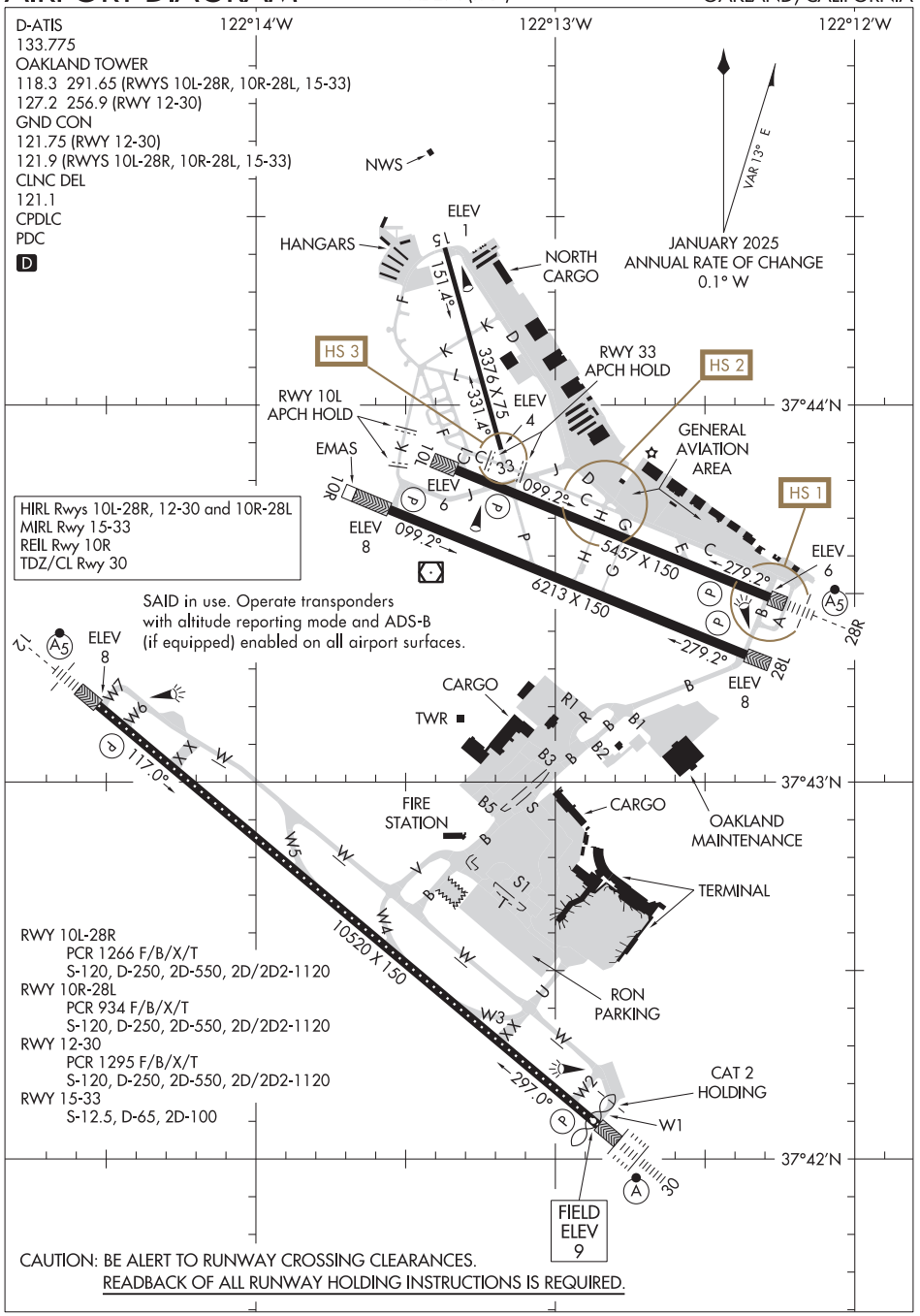
SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

25163

AIRPORT DIAGRAM

AL-294 (FAA)

OAKLAND INTL (OAK)
OAKLAND, CALIFORNIA



AIRPORT DIAGRAM
25163
OAKLAND, CALIFORNIA
OAKLAND INTL (OAK)

SW-2, 07 AUG 2025 to 02 OCT 2025

CNDEL FIVE DEPARTURE (RNAV)

NORCAL DEP CON
135.1 307.2
D-ATIS 133.775
CLNC DEL 121.1
CPDLC
GND CON
121.9 (Rwys 10L/R, 28L/28R, 15/33)
121.75 (Rwy 12/30)
OAKLAND TOWER
118.3 291.65 (Rwys 10L/R, 28L/28R, 15/33)
127.2 256.9 (Rwy 12/30)

TOP ALTITUDE: 10000

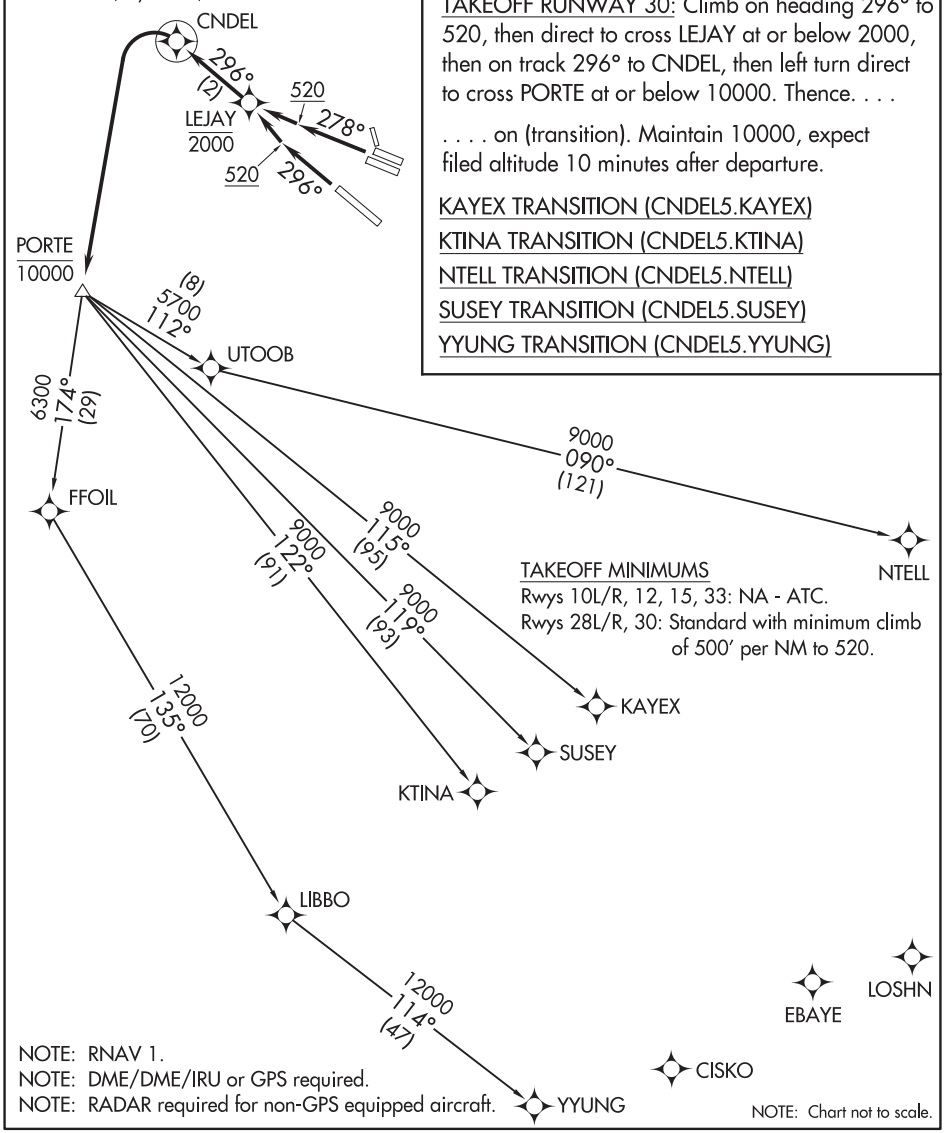
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 28L, 28R: Climb on heading 278° to 520, then direct to cross LEJAY at or below 2000, then on track 296° to CNDEL, then left turn direct to cross PORTE at or below 10000. Thence. . . .

TAKEOFF RUNWAY 30: Climb on heading 296° to 520, then direct to cross LEJAY at or below 2000, then on track 296° to CNDEL, then left turn direct to cross PORTE at or below 10000. Thence. . . .

. . . . on (transition). Maintain 10000, expect filed altitude 10 minutes after departure.

KAYEX TRANSITION (CNDEL5.KAYEX)
KTINA TRANSITION (CNDEL5.KTINA)
NTELL TRANSITION (CNDEL5.NTELL)
SUSEY TRANSITION (CNDEL5.SUSEY)
YYUNG TRANSITION (CNDEL5.YYUNG)



TAKEOFF MINIMUMS
Rwys 10L/R, 12, 15, 33: NA - ATC.
Rwys 28L/R, 30: Standard with minimum climb of 500′ per NM to 520.

NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required for non-GPS equipped aircraft.

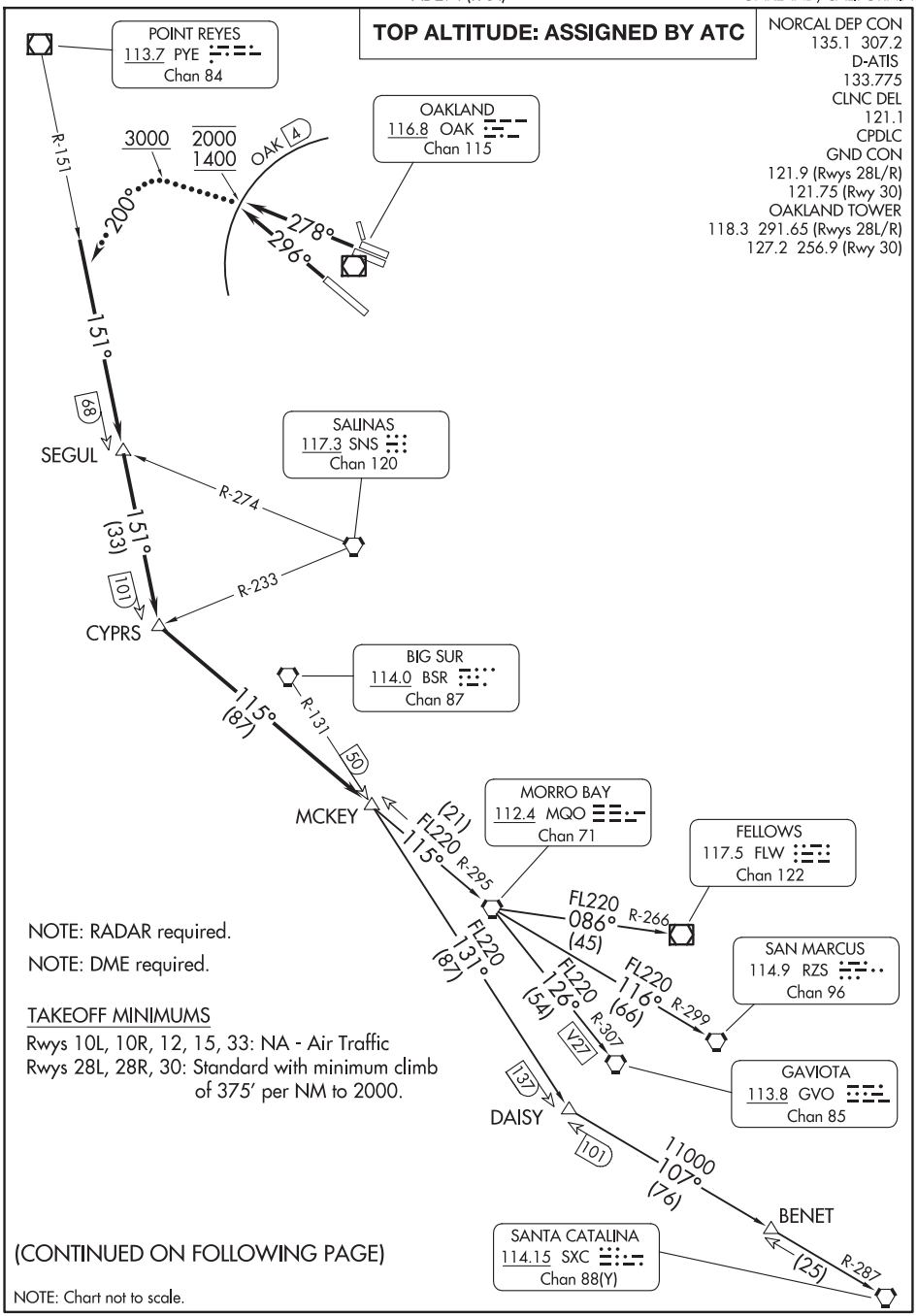
NOTE: Chart not to scale.

(COAST9.MCKEY) 25163

COAST NINE DEPARTURE

AL-294 (FAA)

OAKLAND INTL (OAK)
OAKLAND, CALIFORNIA



(CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SW-2, 07 AUG 2025 to 02 OCT 2025

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 28L/R: Climb heading 278° for RADAR vectors to PYE R-151, cross 4 DME northwest of OAK VOR/DME at or above 1400 and at or below 2000. Thence . . . .

TAKEOFF RUNWAY 30: Climb heading 296° for RADAR vectors to PYE R-151, cross 4 DME northwest of OAK VOR/DME at or above 1400 and at or below 2000. Thence . . . .

. . . . intercept and proceed on the PYE R-151 to SEGUL INT, then on PYE R-151 to CYPRS INT, then on MQO R-295 to MCKEY INT, then on assigned (transition). Maintain FL220. Expect clearance to filed altitude ten minutes after departure.

LOST COMMUNICATIONS: After reaching 3000, turn left heading 200° to intercept and proceed on PYE R-151, then resume own navigation.

FELLOWS TRANSITION (COAST9.FLW): From over MCKEY INT on MQO R-295 to MQO VORTAC, then on MQO R-086 and FLW R-266 to FLW VOR/DME.

GAVIOTA TRANSITION (COAST9.GVO): From over MCKEY INT on MQO R-295 to MQO VORTAC, then on MQO R-126 and GVO R-307 to GVO VORTAC.

SAN MARCUS TRANSITION (COAST9.RZS): From over MCKEY INT on MQO R-295 to MQO VORTAC, then on MQO R-116 and RZS R-299 to RZS VORTAC.

SANTA CATALINA TRANSITION (COAST9.SXC): From over MCKEY INT on BSR R-131 to DAISY INT, then on SXC R-287 to SXC VORTAC.

SW-2, 07 AUG 2025 to 02 OCT 2025

(HUSSH2.HUSSH) 25163

HUSSH TWO DEPARTURE (RNAV)

AL-294 (FAA)

OAKLAND INTL (OAK)
OAKLAND, CALIFORNIA

SW-2, 07 AUG 2025 to 02 OCT 2025

HUSSH TWO DEPARTURE (RNAV)
(HUSSH2.HUSSH) 25JUN15
OAKLAND, CALIFORNIA
OAKLAND INTL (OAK)

SW-2, 07 AUG 2025 to 02 OCT 2025

D-ATIS 133.775
CLNC DEL
121.1
CPDLC
GND CON
121.9 (Rwys 10L/R, 28L/28R, 15/33)
121.75 (Rwy 12/30)
OAKLAND TOWER
118.3 291.65 (Rwys 10L/R, 28L/28R, 15/33)
127.2 256.9 (Rwy 12/30)
NORCAL DEP CON
135.1 307.2

TOP ALTITUDE: ASSIGNED BY ATC

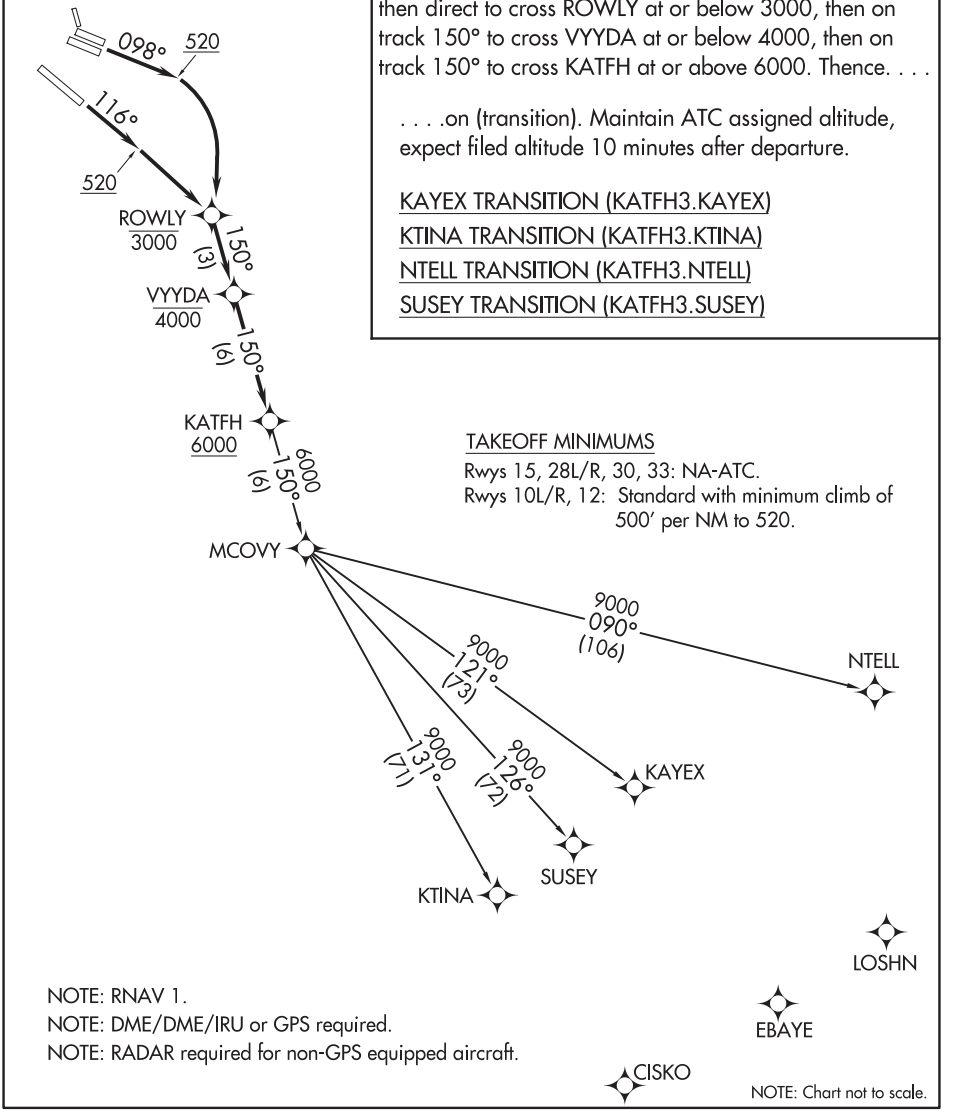
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 10L, 10R: Climb on heading 098° to 520, then right turn direct to cross ROWLY at or below 3000, then on track 150° to cross VYYDA at or below 4000, then on track 150° to cross KATFH at or above 6000. Thence. . . .

TAKEOFF RUNWAY 12: Climb on heading 116° to 520, then direct to cross ROWLY at or below 3000, then on track 150° to cross VYYDA at or below 4000, then on track 150° to cross KATFH at or above 6000. Thence. . . .

. . . .on (transition). Maintain ATC assigned altitude, expect filed altitude 10 minutes after departure.

KAYEX TRANSITION (KATFH3.KAYEX)
KTINA TRANSITION (KATFH3.KTINA)
NTELL TRANSITION (KATFH3.NTELL)
SUSEY TRANSITION (KATFH3.SUSEY)



TAKEOFF MINIMUMS
Rwys 15, 28L/R, 30, 33: NA-ATC.
Rwys 10L/R, 12: Standard with minimum climb of 500' per NM to 520.

NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required for non-GPS equipped aircraft.

NOTE: Chart not to scale.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

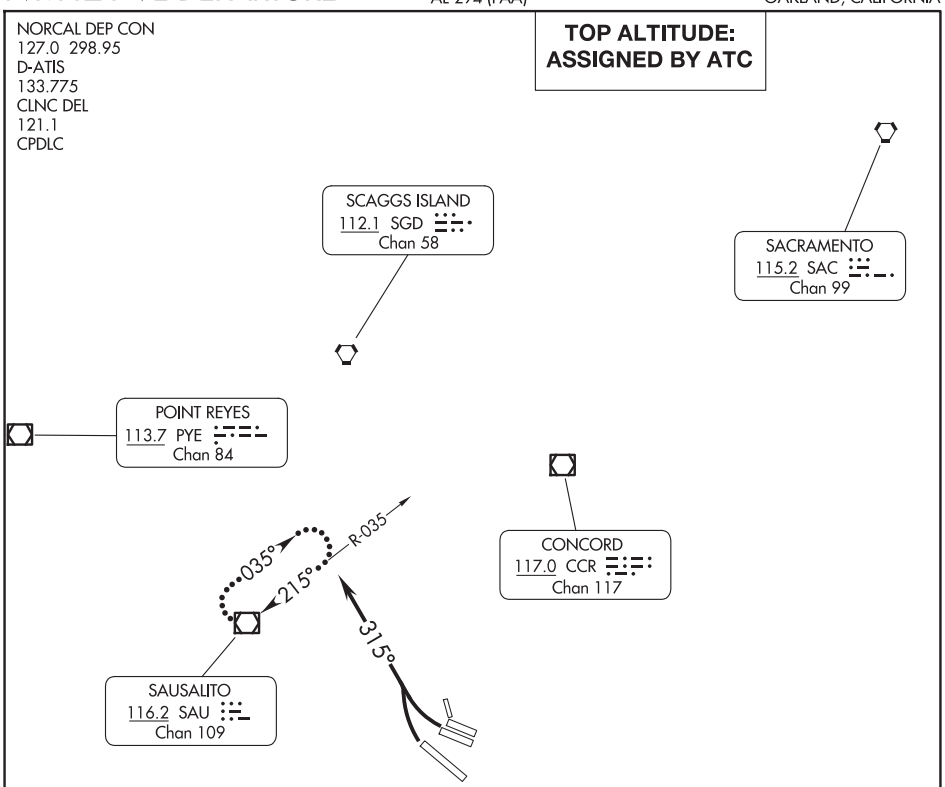
(NIMI5.OAK) 25163

NIMITZ FIVE DEPARTURE

AL-294 (FAA)

OAKLAND INTL (OAK)
OAKLAND, CALIFORNIA

SW-2, 07 AUG 2025 to 02 OCT 2025



NOTE: RADAR required.

TAKEOFF MINIMUMS

Rwys 10L, 10R, 12, 15, 33: NA-Air Traffic.

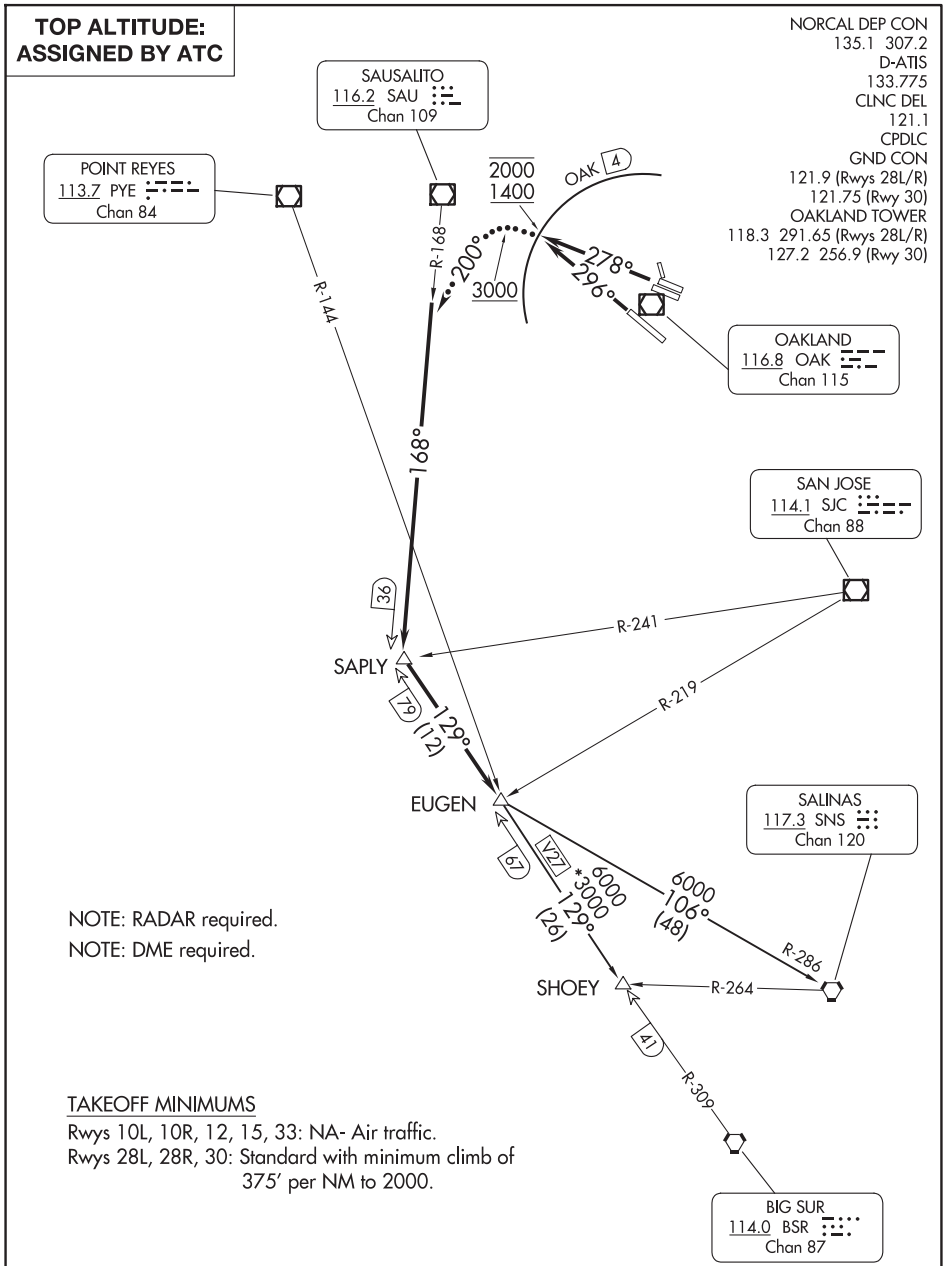
Rwys 28L, 28R, 30: Standard with minimum climb of 375′ per NM to 2000.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 28L/R and 30: Climbing right turn heading 315° for RADAR vectors to assigned route/fix. Maintain ATC assigned altitude. Expect filed altitude ten minutes after departure.

LOST COMMUNICATIONS: If not in contact with departure control after reaching 4000, proceed direct to SAU VOR/DME and hold on SAU R-035. Climb in holding pattern to assigned altitude, then proceed to assigned fix/route.



(CONTINUED ON FOLLOWING PAGE)

SW-2, 07 AUG 2025 to 02 OCT 2025

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 28L/R: Climb heading 278° for RADAR vectors to SAU R-168, cross 4 DME northwest of OAK VOR/DME at or above 1400 and at or below 2000. Thence . . . .
TAKEOFF RUNWAY 30: Climb heading 296° for RADAR vectors to SAU R-168, cross 4 DME northwest of OAK VOR/DME at or above 1400 and at or below 2000. Thence . . . .

. . . . intercept and proceed on the SAU R-168 to SAPLY INT and on BSR R-309 to EUGEN INT, then via assigned (transition). Expect clearance to filed altitude ten minutes after departure.

LOST COMMUNICATIONS: After reaching 3000, turn left heading 200° to intercept and proceed via SAU R-168, then resume own navigation.

SALINAS TRANSITION (NUEVO8.SNS): From over EUGEN INT on SNS R-286 to SNS VORTAC.
SHOEY TRANSITION (NUEVO8.SHOEY): From over EUGEN INT on BSR R-309 to SHOEY INT.

SW-2, 07 AUG 2025 to 02 OCT 2025

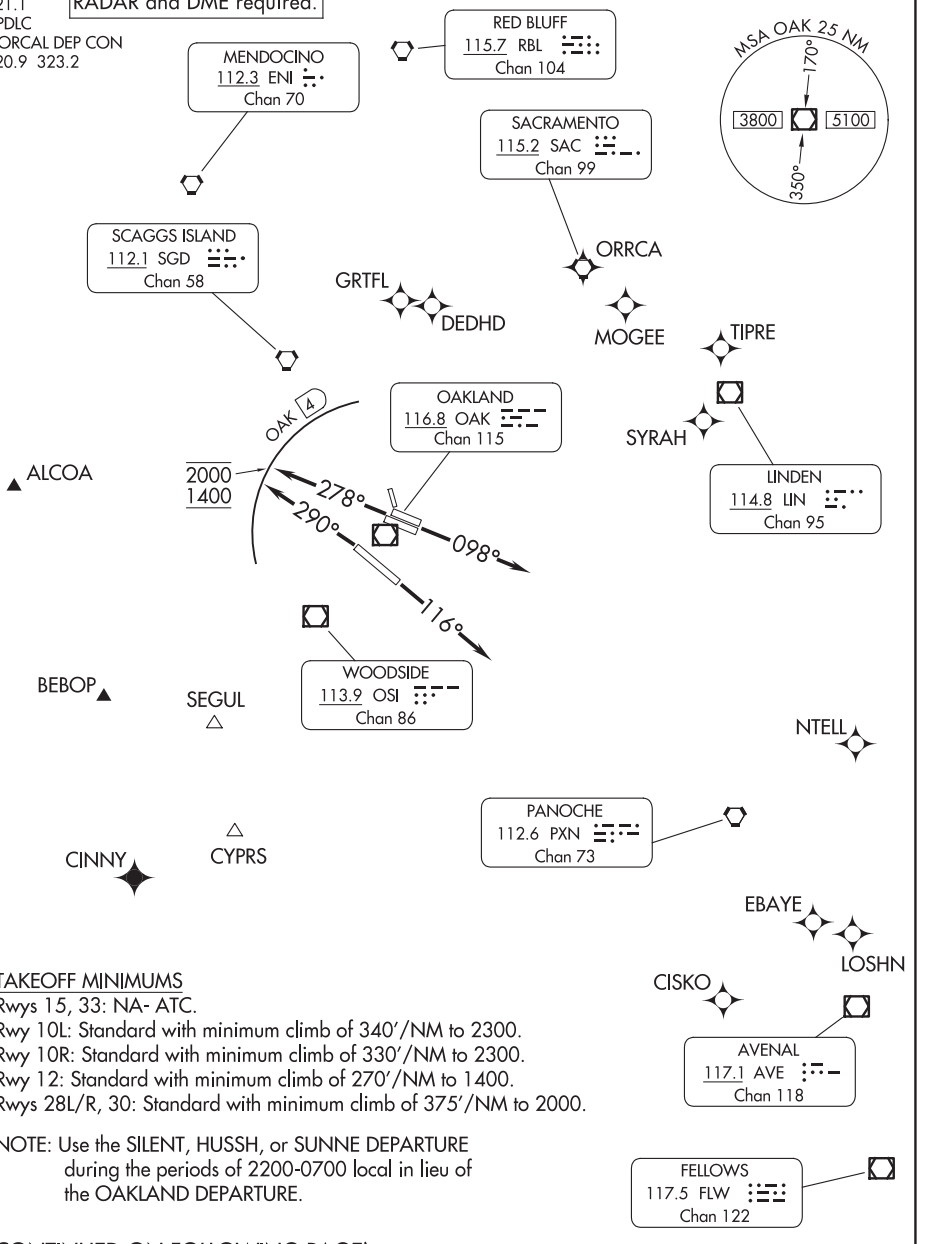
SW-2, 07 AUG 2025 to 02 OCT 2025

D-ATIS 133.775
CLNC DEL 121.1
CPDLC
NORCAL DEP CON 120.9 323.2

RNAV 1-GPS. From ALCOA, BEBOP, CINNY, CISKO, DEDHD, EBAYE, GRTFL, LOSHN, MOGEE, NTELL, ORRCA, SYRAH, or TIPRE.

RADAR and DME required.

TOP ALTITUDE: ASSIGNED BY ATC



TAKEOFF MINIMUMS
Rwys 15, 33: NA- ATC.
Rwy 10L: Standard with minimum climb of 340'/NM to 2300.
Rwy 10R: Standard with minimum climb of 330'/NM to 2300.
Rwy 12: Standard with minimum climb of 270'/NM to 1400.
Rwys 28L/R, 30: Standard with minimum climb of 375'/NM to 2000.

NOTE: Use the SILENT, HUSSH, or SUNNE DEPARTURE during the periods of 2200-0700 local in lieu of the OAKLAND DEPARTURE.

(CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 10L/R: Climb on heading 098° for RADAR vectors to assigned route/fix, thence. . . .
TAKEOFF RUNWAY 12: Climb on heading 116° for RADAR vectors to assigned route/fix, thence. . . .
TAKEOFF RUNWAYS 28L/R: Climb on heading 278° for RADAR vectors to assigned route/fix. Cross 4 DME northwest of OAK VOR/DME at or above 1400 and at or below 2000, thence. . . .
TAKEOFF RUNWAY 30: Climb on heading 290° for RADAR vectors to assigned route/fix. Cross 4 DME northwest of OAK VOR/DME at or above 1400 and at or below 2000, thence. . . .

. . . .maintain ATC assigned altitude. Expect filed altitude ten minutes after departure.

LOST COMMUNICATIONS: If not in contact with departure control after reaching 5000', continue climb to assigned altitude and proceed direct to assigned route/fix.

SW-2, 07 AUG 2025 to 02 OCT 2025

NORCAL DEP CON
135.1 307.2
D-ATIS
133.775
CLNC DEL
121.1
CPDLC
TOP ALTITUDE:
ASSIGNED BY ATC
TAKEOFF MINIMUMS
Rwys 15, 33: NA- ATC.
Rwys 10L/R,12, 30: Standard.
Rwys 28L/R: Standard with minimum climb of 375' per NM to 2000.
OAKLAND
116.8 OAK
Chan 115
WOODSIDE
113.9 OSI
Chan 86
OAK 4
278°
296°
270°
2000
1400
N
ALCOA
ALLBE
BEBOP
BAART
CINNY
FFOIL
ALANN
NTELL
KAYEX
SUSEY
KTINA
LIBBO
DEPARTURE ROUTE DESCRIPTION
TAKEOFF RUNWAYS 10L/R, 12: Climbing right turn heading 270° for RADAR vectors to assigned route/fix, thence. . . .
TAKEOFF RUNWAYS 28L/R: Climb on heading 278° for RADAR vectors to assigned route/fix. Cross 4 DME northwest of OAK VOR/DME at or above 1400 and at or below 2000, thence. . . .
TAKEOFF RUNWAY 30: Climb on heading 296° for RADAR vectors to assigned route/fix. Cross 4 DME northwest of OAK VOR/DME at or above 1400 and at or below 2000, thence. . . .
. . . .maintain ATC assigned altitude. Expect filed altitude ten minutes after departure.
NOTE: RADAR required.
NOTE: Chart not to scale.

(SALAD5.SALAD) 25163

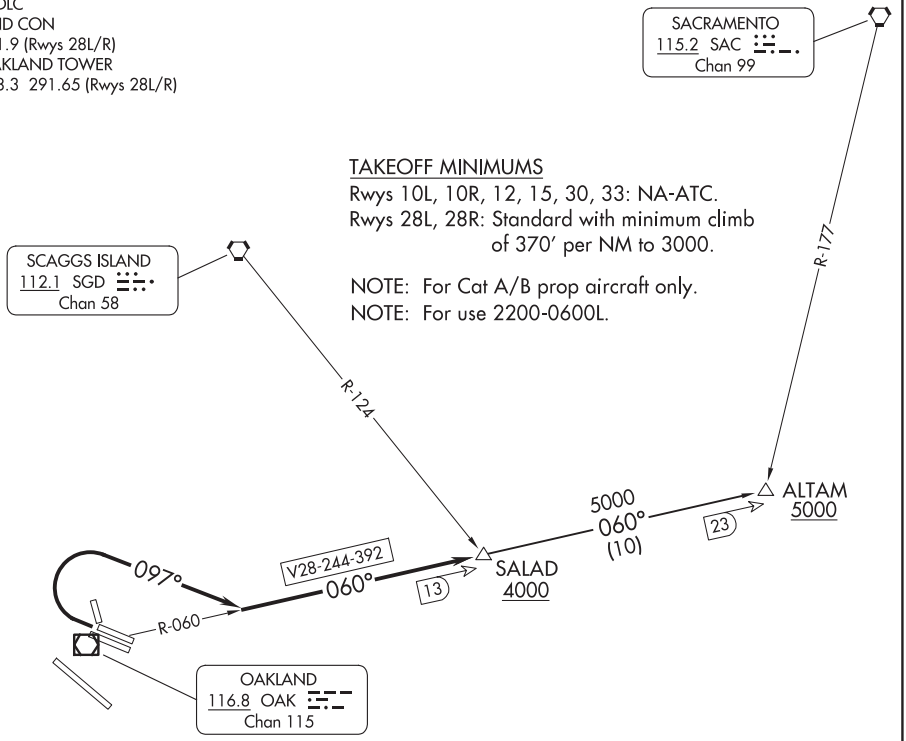
SALAD FIVE DEPARTURE

AL-294 (FAA)

OAKLAND INTL (OAK)
OAKLAND, CALIFORNIA

NORCAL DEP CON
120.9 323.2
D-ATIS
133.775
CLNC DEL
121.1
CPDLC
GND CON
121.9 (Rwys 28L/R)
OAKLAND TOWER
118.3 291.65 (Rwys 28L/R)

TOP ALTITUDE: ASSIGNED BY ATC



NOTE: Chart not to scale.

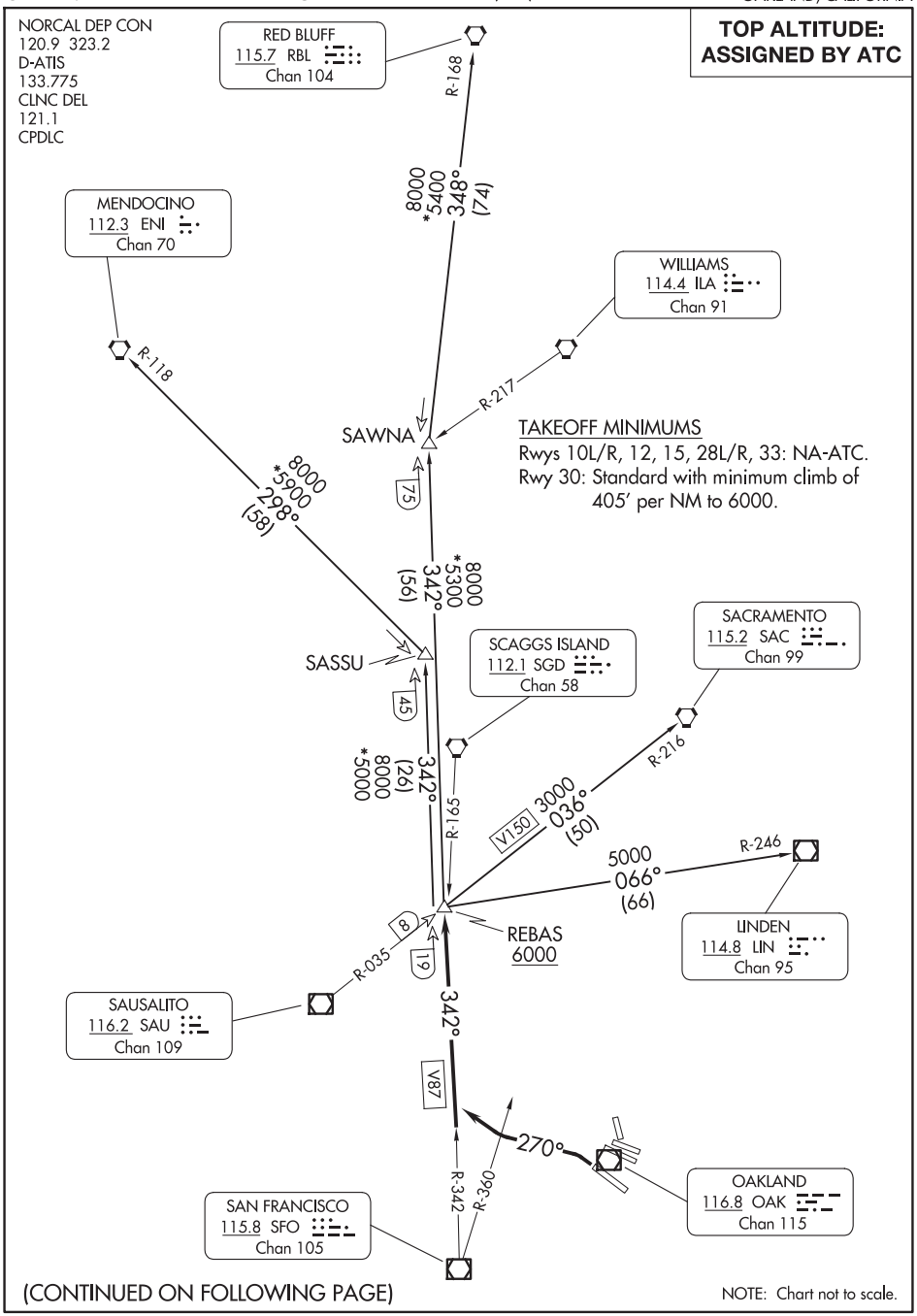
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 28 L/R: Climbing right turn heading 097° to intercept OAK VOR/DME R-060 to cross SALAD/OAK 13 DME at or above 4000, thence . . . .

. . . . on ALTAM transition. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

ALTAM TRANSITION (SALAD5.ALTAM): From over SALAD on OAK R-060 to ALTAM.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025



(CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

SW-2, 07 AUG 2025 to 02 OCT 2025

(SLNT3.REBAS) 25163

SILENT THREE DEPARTURE

AL-294 (FAA)

OAKLAND INTL (OAK)
OAKLAND, CALIFORNIA

SW-2, 07 AUG 2025 to 02 OCT 2025

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 30: Climbing left turn on heading 270° to V87 (commence right turn at SFO R-360) to REBAS INT/SFO 19 DME. Cross REBAS INT at or above 6000. Thence . . . .

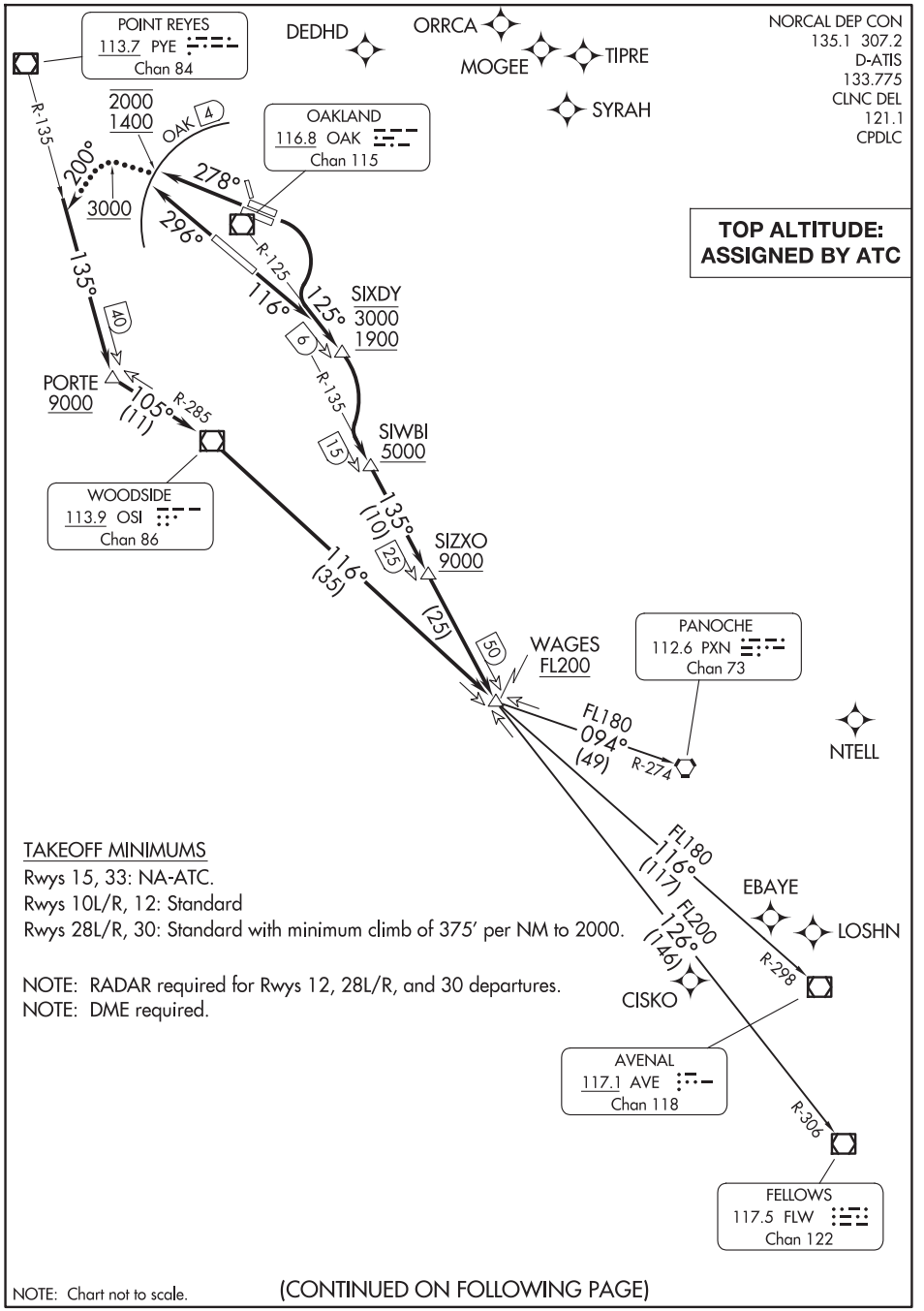
. . . . (transition). Expect filed altitude 10 minutes after departure.

LINDEN TRANSITION (SLNT3.LIN): From over REBAS INT on LIN R-246 to LIN VOR/DME.

MENDOCINO TRANSITION (SLNT3.ENI): From over REBAS INT on SFO R-342 to SASSU INT, then on ENI R-118 to ENI VORTAC.

RED BLUFF TRANSITION (SLNT3.RBL): From over REBAS INT on SFO R-342 to SAWNA INT, then on RBL R-168 to RBL VORTAC.

SACRAMENTO TRANSITION (SLNT3.SAC): From over REBAS INT on SAC R-216 to SAC VORTAC.



TAKEOFF MINIMUMS

Rwys 15, 33: NA-ATC.

Rwys 10L/R, 12: Standard

Rwys 28L/R, 30: Standard with minimum climb of 375′ per NM to 2000.

NOTE: RADAR required for Rwys 12, 28L/R, and 30 departures.

NOTE: DME required.

NOTE: Chart not to scale.

(CONTINUED ON FOLLOWING PAGE)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 10L/R: Climbing right turn to intercept OAK R-125, to cross SIXDY/OAK VOR/DME 6 DME at or above 1900 and at or below 3000, then climbing right turn to intercept and proceed on the OAK R-135 to cross SIWBI/OAK 15 DME at or above 5000 and to cross SIZXO/OAK 25 DME at or above 9000 and to cross WAGES INT/OAK 50 DME at or above FL200, thence. . . .
TAKEOFF RUNWAY 12: Climb on heading 116° for vectors to assigned route/fix, thence. . . .
TAKEOFF RUNWAYS 28L/R: Climb on heading 278° for vectors to PYE R-135 to cross 4 DME northwest of OAK VOR/DME at or above 1400 and at or below 2000. Intercept and proceed on the PYE R-135 to cross PORTE INT/PYE 40 DME at or above 9000, then on OSI R-285 to OSI VOR/DME, then on OSI R-116 to cross WAGES INT/OSI 35 DME at or above FL200, thence. . . .
TAKEOFF RUNWAY 30: Climb on heading 296° for vectors to assigned route/fix. Cross 4 DME northwest of OAK VOR/DME at or above 1400 and at or below 2000, thence. . . .

. . . .on (transition) or (assigned route) maintain ATC assigned altitude.
Expect filed altitude 10 minutes after departure.

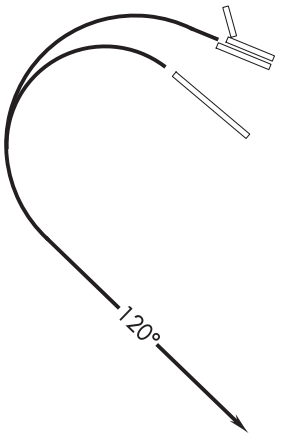
LOST COMMUNICATIONS
TAKEOFF RUNWAYS 28L/R and 30: After reaching 3000, turn left heading 200°, intercept and proceed via the PYE R-135. Resume your own navigation.

AVENAL TRANSITION (SKYL1.AVE): From over WAGES INT on OSI R-116 and AVE R-298 to AVE VOR/DME.
FELLOWS TRANSITION (SKYL1.FLW): From over WAGES INT on FLW R-306 to FLW VOR/DME.
PANOCHE TRANSITON (SKYL1.PXN): From over WAGES INT on PXN R-274 to PXN VORTAC.

SW-2, 07 AUG 2025 to 02 OCT 2025

NORCAL DEP CON
135.1 307.2
D-ATIS
133.775
CLNC DEL
121.1
CPDLC

TOP ALTITUDE: 5000



SW-2, 07 AUG 2025 to 02 OCT 2025

TAKEOFF MINIMUMS
Rwys 10L/R, 12, 15, 33: NA-Air Traffic.
Rwys 28L/R, 30: Standard.

SUNNE △

NOTE: RADAR required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 28L/R, 30: Climbing left turn on heading 120° for vectors to SUNNE. Maintain 5000. Expect higher altitude five minutes after departure.

APP CRS	Rwy Ldg	N/A
280°	TDZE	N/A
	Apt Elev	218

RNAV (GPS)-A

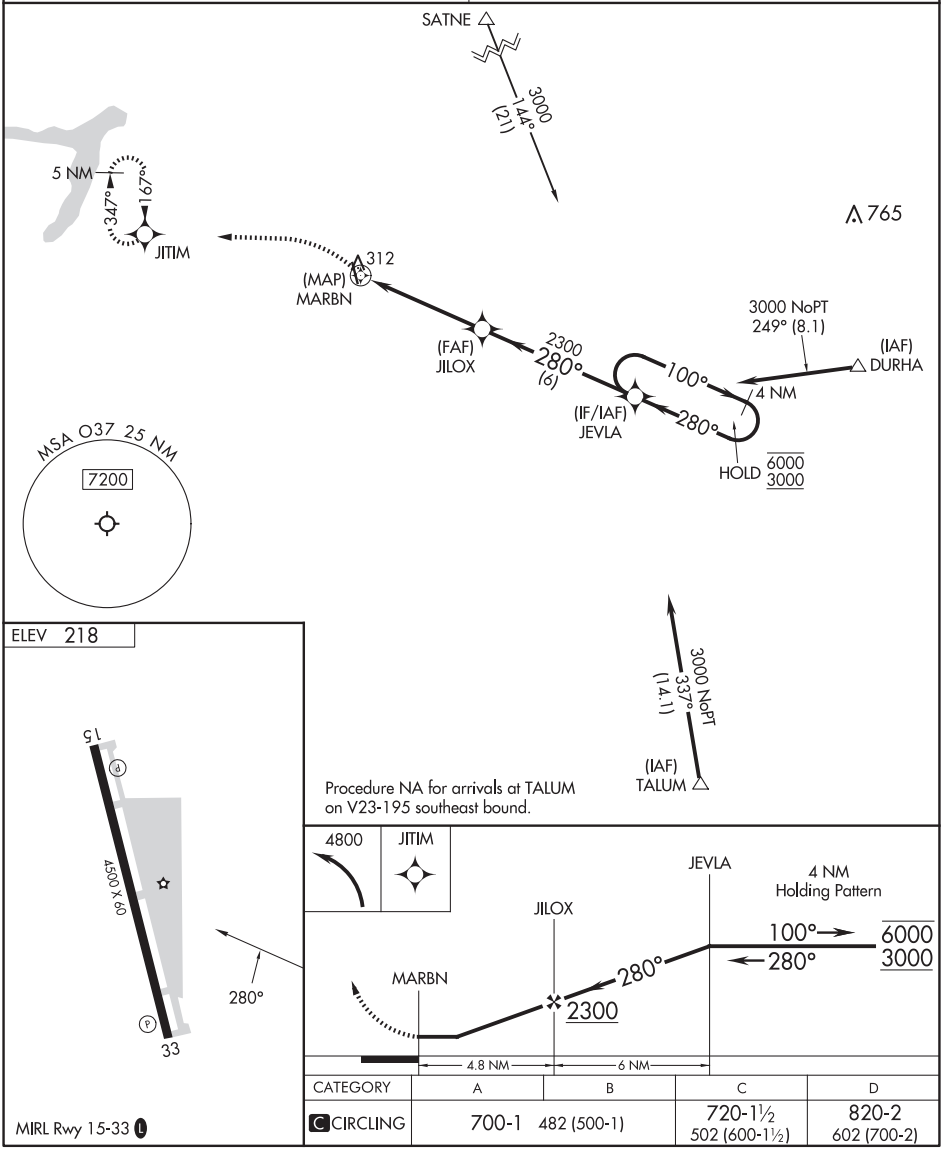
HAIGH FLD (O37)

RNP APCH.

T A NA Use Chico altimeter setting; when not received, use Redding altimeter setting and increase all MDA 120 feet. Increase visibility Cat C and D ¼ SM.

MISSED APPROACH: Climbing left turn to 4800 direct JITIM and hold, continue climb-in-hold to 4800.

OAKLAND CENTER	UNICOM
132.2 350.3	122.7 (CTAF) L



CATEGORY	A	B	C	D
C CIRCLING	700-1	482 (500-1)	720-1½ 502 (600-1½)	820-2 602 (700-2)

MIRL Rwy 15-33 L

39°43′N-122°09′W

SW-2, 07 AUG 2025 to 02 OCT 2025

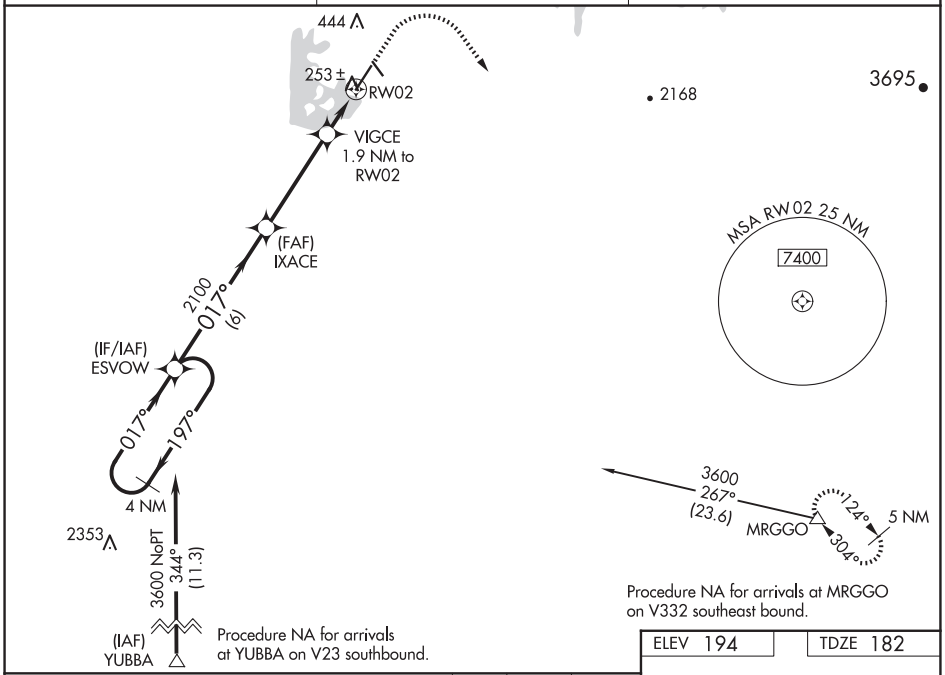
WAAS	APP CRS	Rwy Ldg	6020
CH 49026	017°	TDZE	182
W02A		Apt Elev	194

RNAV (GPS) RWY 2
OROVILLE MUNI (OVE)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -2°C (29°F) or above 54°C (130°F). Circling NA northeast of Rwy 13-31. DME/DME RNP-0.3 NA.

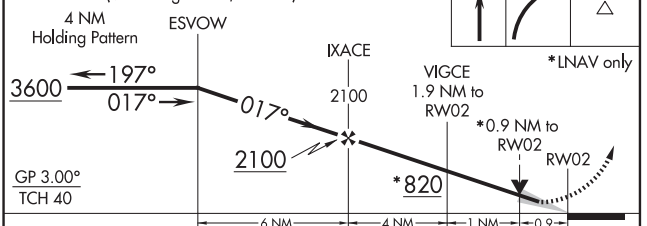
MISSED APPROACH: Climb to 650 then climbing right turn to 6000 direct MRGGO and hold, continue climb-in-hold to 6000.

ASOS	NORCAL APP CON	UNICOM
121.425	125.4 259.1	122.8 (CTAF) L



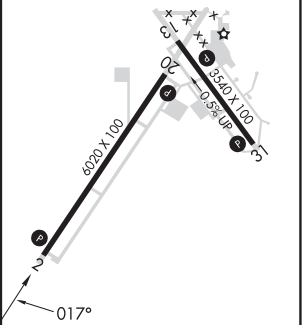
VGSI and RNAV glidepath angles not coincident (VGSI Angle 3.00/TCH 44).

650	6000	MRGGO
↑	↗	△



CATEGORY	A	B	C	D
LPV DA	432-⅞ 250 (300-⅞)			
LNAV/VNAV DA	432-⅞ 250 (300-⅞)			
LNAV MDA	520-1 338 (400-1)			
C CIRCLING	580-1 386 (400-1)	660-1 466 (500-1)	660-1½ 466 (500-1½)	780-2 586 (600-2)

ELEV 194	TDZE 182



REIL Rwys 2 and 20 L
HIRL Rwys 2-20 and 13-31 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

VOR/DME MYV 110.8 Chan 45	APP CRS 338°	Rwy Ldg N/A TDZE N/A Apt Elev 194

VOR-A

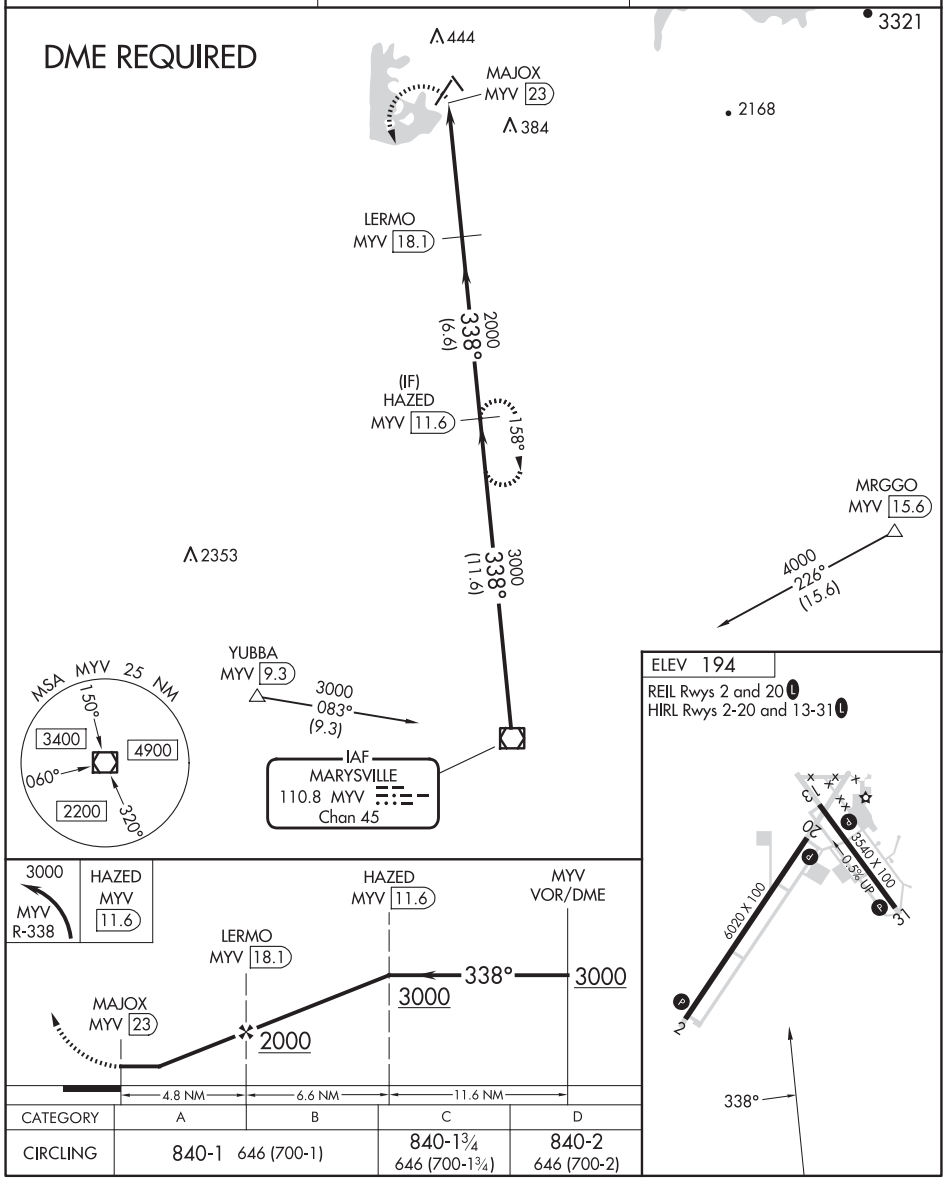
OROVILLE MUNI (OVE)

Circling NA northeast of Rwy 13-31. DME required.

MISSED APPROACH: Climbing left turn to 3000 on MYV VOR/DME R-338 to HAZED/MYV 11.6 DME and hold.

ASOS 121.425	NORCAL APP CON 125.4 259.1	UNICOM 122.8 (CTAF) L

DME REQUIRED



CATEGORY	A	B	C	D
CIRCLING	840-1 646 (700-1)		840-1¾ 646 (700-1¾)	840-2 646 (700-2)

SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS	Rwy Idg	2441
322°	TDZE	7
	Apt Elev	7

RNAV (GPS) RWY 31

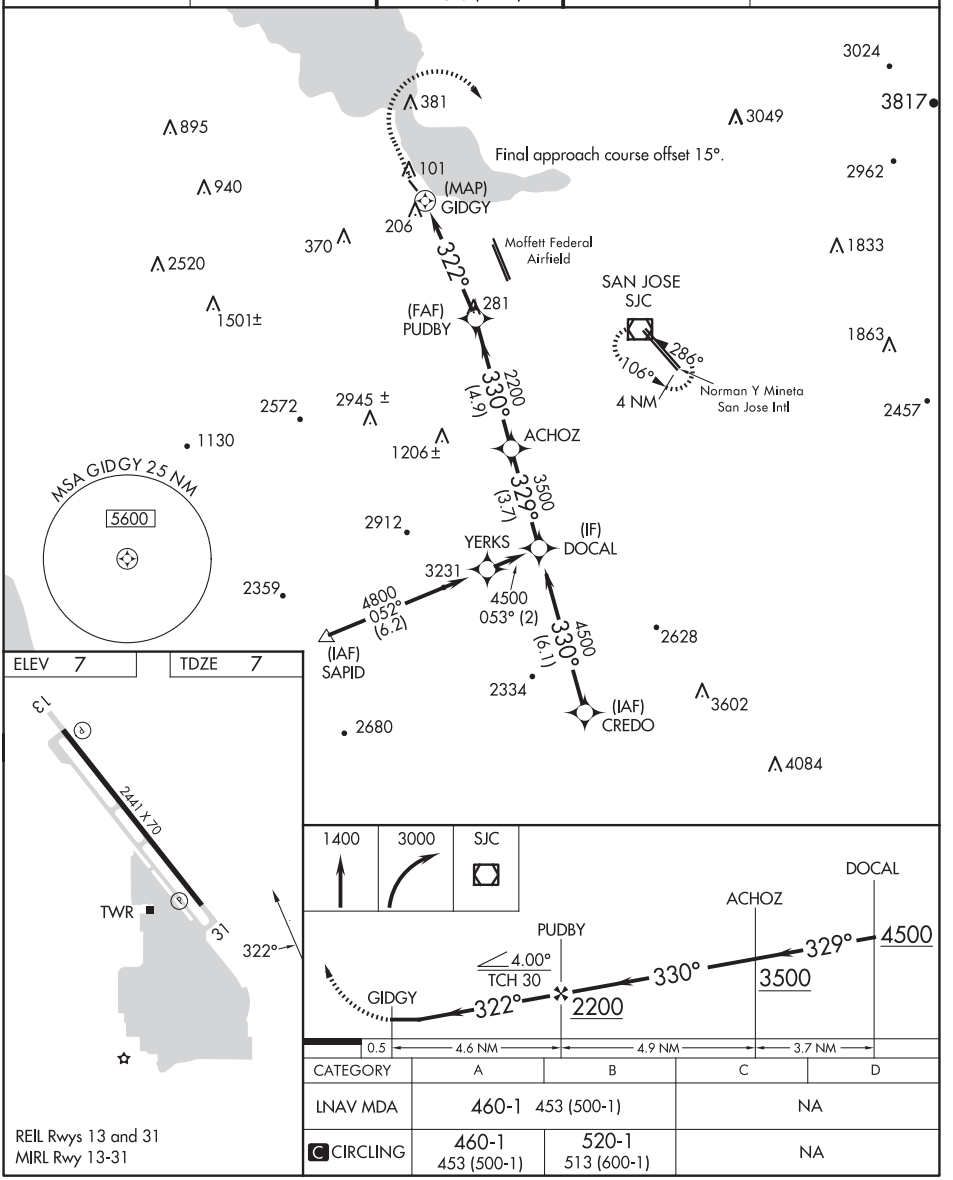
PALO ALTO (PAO)

RNP APCH.

Circling NA southwest of Rwy 13-31. Rwy 31 helicopter visibility reduction below 1 SM NA. Procedure NA at night. When control tower closed, use Norman Y Mineta San Jose Intl altimeter setting and increase all MDAs 40 feet.

MISSED APPROACH: Climb to 1400 then climbing right turn to 3000 direct SJC VOR/DME and hold.

ATIS	NORCAL APP CON	PALO ALTO TOWER★	GND CON	UNICOM
135.275	121.3 270.35	118.6 (CTAF)	125.0	122.95



CATEGORY	A	B	C	D
LNAV MDA	460-1 453 (500-1)		NA	
C CIRCLING	460-1 453 (500-1)	520-1 513 (600-1)	NA	

REIL Rwys 13 and 31
MIRL Rwy 13-31

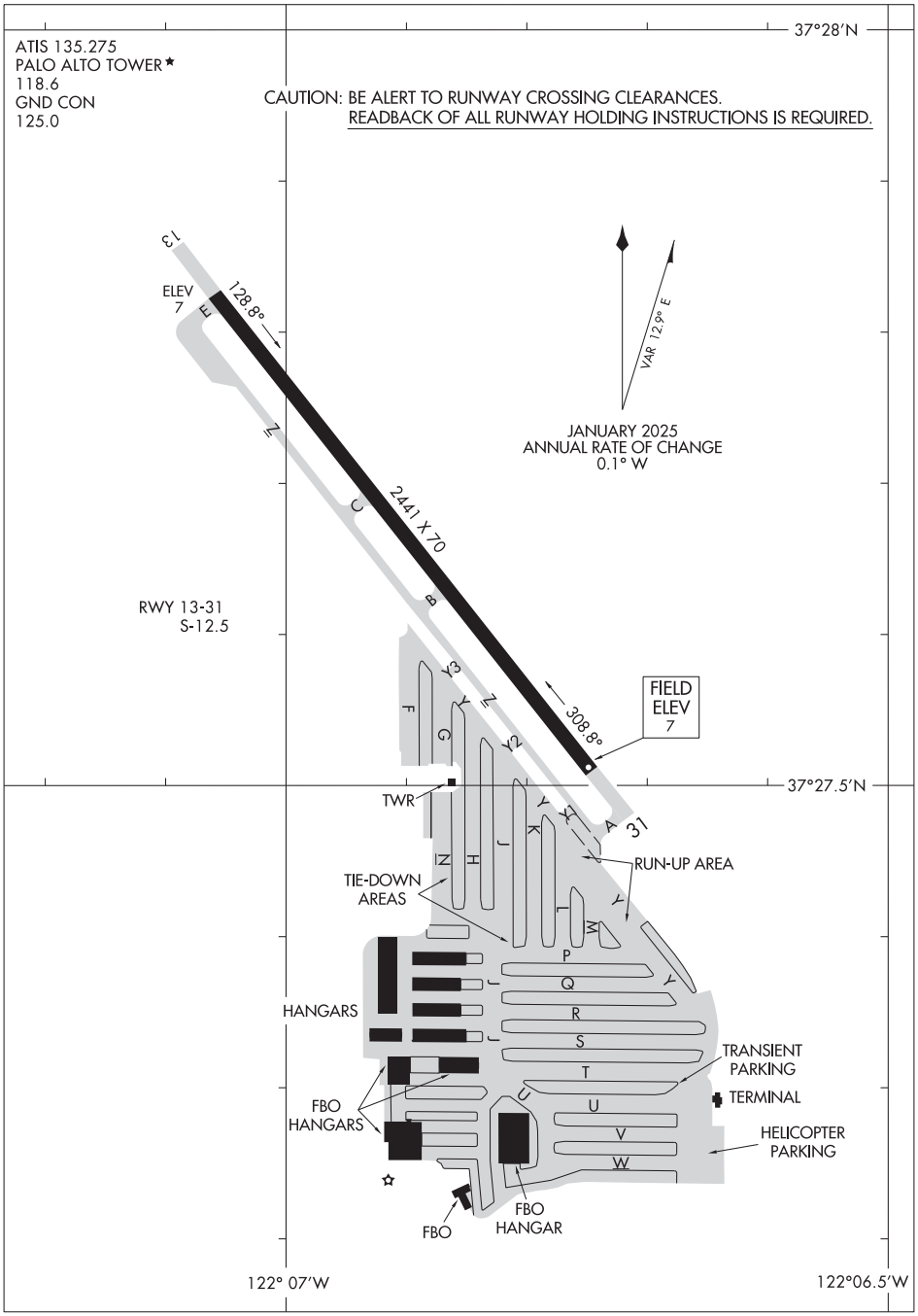
SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

25107

AIRPORT DIAGRAM

AL-9216 (FAA)

PALO ALTO (PAO)
PALO ALTO, CALIFORNIA



SW-2, 07 AUG 2025 to 02 OCT 2025

AIRPORT DIAGRAM
25107

PALO ALTO, CALIFORNIA
PALO ALTO (PAO)

RNAV (GPS) RWY 29

PETALUMA MUNI (O69)

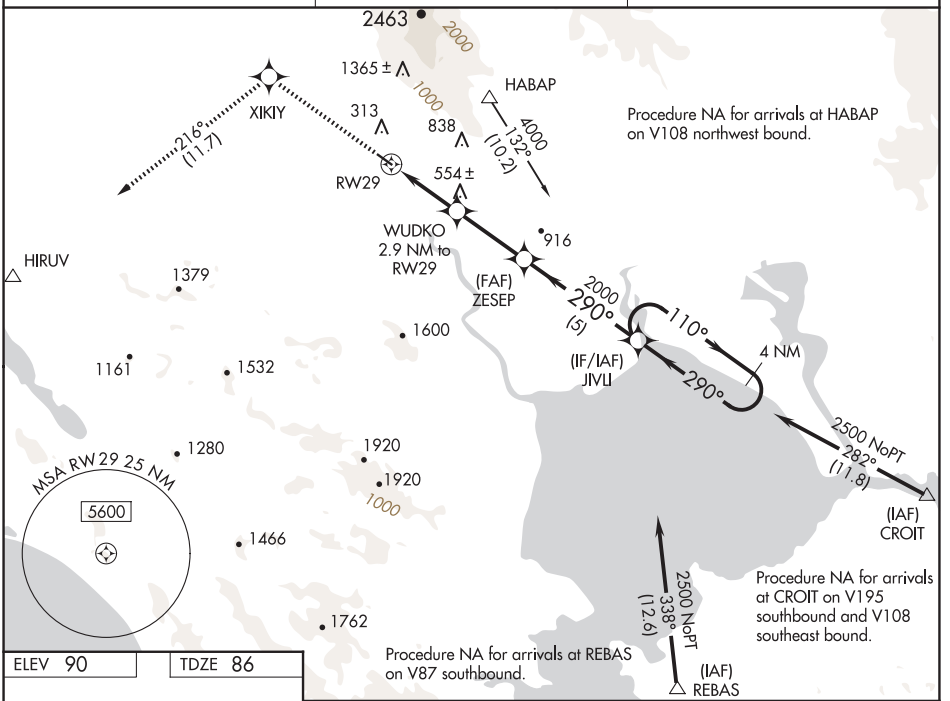
WAAS	APP CRS	Rwy Idg	3600
CH 49124	290°	TDZE	86
W29A		Apt Elev	90

RNP APCH-GPS.

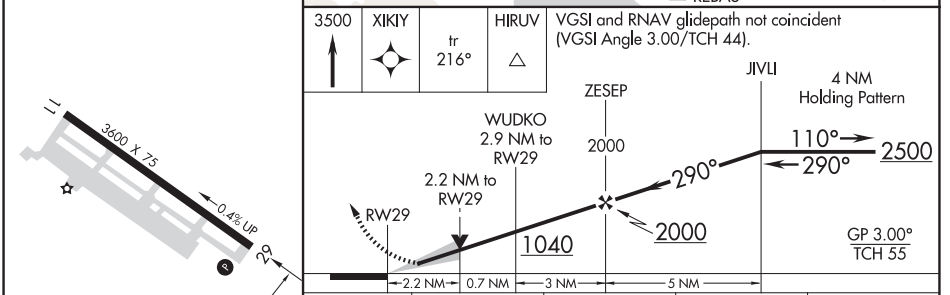
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Circling Rwy 11 NA at night.

MISSED APPROACH: Climb to 3500 direct XIKIY and on track 216° to HIRUV.

AWOS-3P	OAKLAND CENTER	UNICOM
132.325	127.8 353.5	122.7 (CTAF) L



ELEV 90 TDZE 86



CATEGORY	A	B	C	D
LPV DA	356-⅞	270 (300-⅞)	NA	
LNAV/VNAV DA	707-2½	621 (700-2½)	NA	
LNAV MDA	820-1	734 (800-1)	NA	
CIRCLING	820-1 730 (800-1)	940-1¼ 850 (900-1¼)	NA	

REIL Rwy 29 L
MIRL Rwy 11-29 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

PETALUMA, CALIFORNIA | AL-6838 (FAA) | 25107

VOR RWY 29

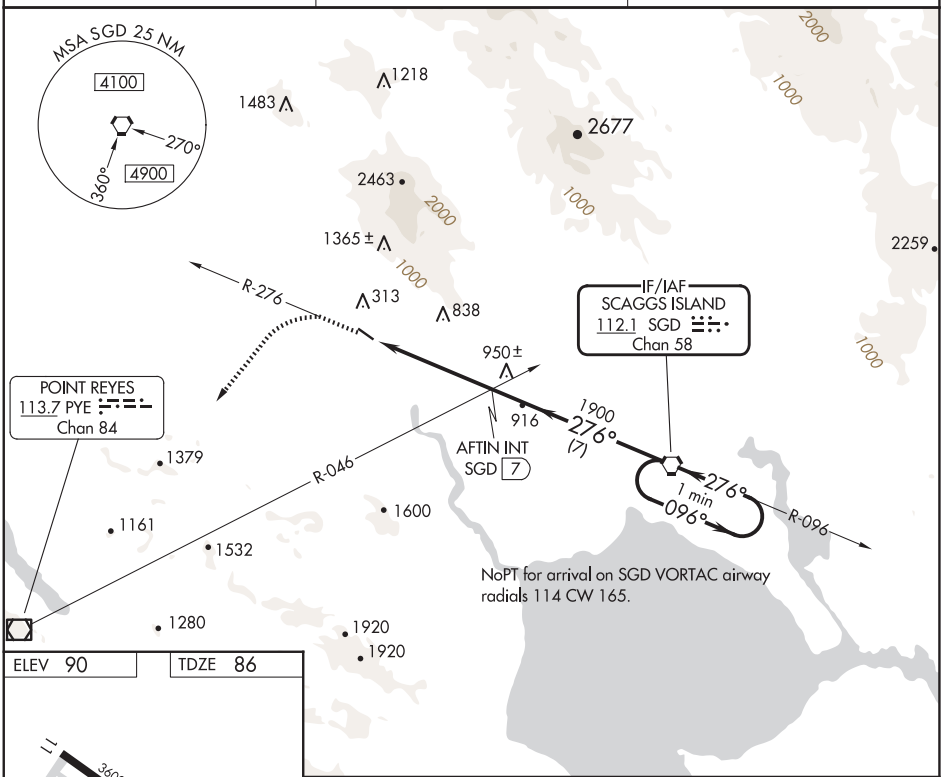
PETALUMA MUNI (O69)

VORTAC SGD	APP CRS	Rwy Idg	3600
112.1	276°	TDZE	86
Chan 58		Apt Elev	90

NA — Circling Rwy 11 NA at night.

MISSED APPROACH: Climb to 2000 via SGD R-276 then climbing left turn to 3500 direct PYE VOR/DME.

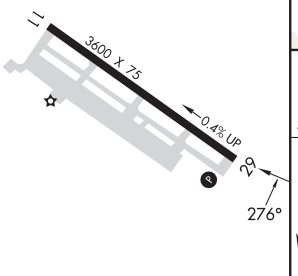
AWOS-3P	OAKLAND CENTER	UNICOM
132.325	127.8 353.5	122.7 (CTAF)



SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

ELEV 90	TDZE 86



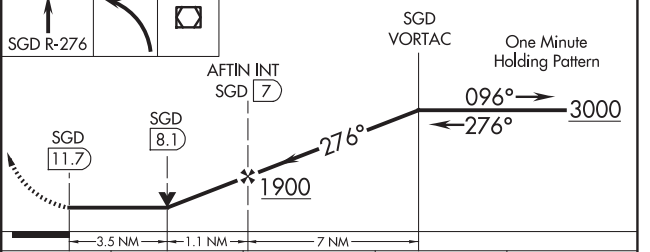
REIL Rwy 29 L
MIRL Rwy 11-29 L

FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

2000	3500	PYE
SGD R-276		

DME unusable from SGD VORTAC 11.1 DME to MAP.



CATEGORY	A	B	C	D
S-29	1260-1¼ 1174 (1200-1¼)	1260-1½ 1174 (1200-1½)	NA	
CIRCLING	1260-1⅛ 1170 (1200-1⅛)	1260-1½ 1170 (1200-1½)	NA	

PETALUMA, CALIFORNIA
Orig-E 05OCT23

38°15′N-122°36′W

WAAS	APP CRS	Rwy Idg	3914
CH 78324	049°	TDZE	2586
W05A		Apt Elev	2586

RNAV (GPS) RWY 5

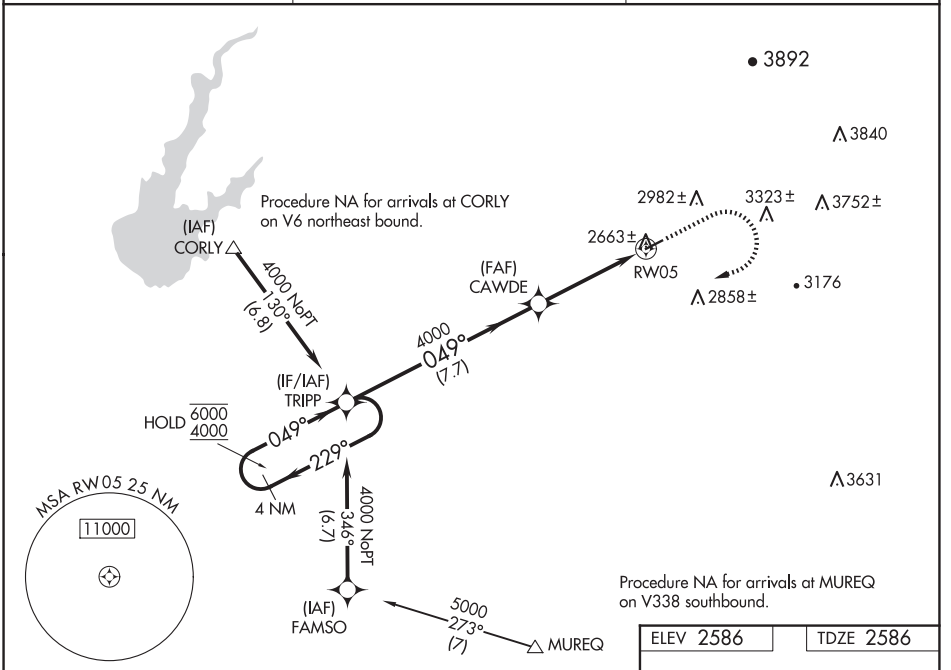
PLACERVILLE (PVF)

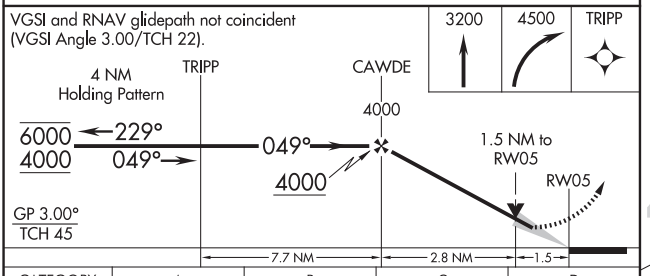
RNP APCH - GPS.

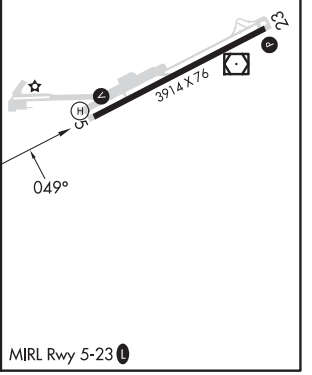
Circling NA northwest of Rwy 5-23. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C.

MISSED APPROACH: Climb to 3200 then climbing right turn to 4500 direct TRIPP and hold.

AWOS-3	NORCAL APP CON	UNICOM
128.125	127.4 317.5	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	2966-1 380 (400-1)		NA	
LNAV/VNAV DA	2970-1⅛ 384 (400-1⅛)		NA	
LNAV MDA	3080-1 494 (500-1)		NA	
CIRCLING	3180-1 594 (600-1)	3440-1¼ 854 (900-1¼)	NA	

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

PORTERVILLE, CALIFORNIA AL-569 (FAA) 25051

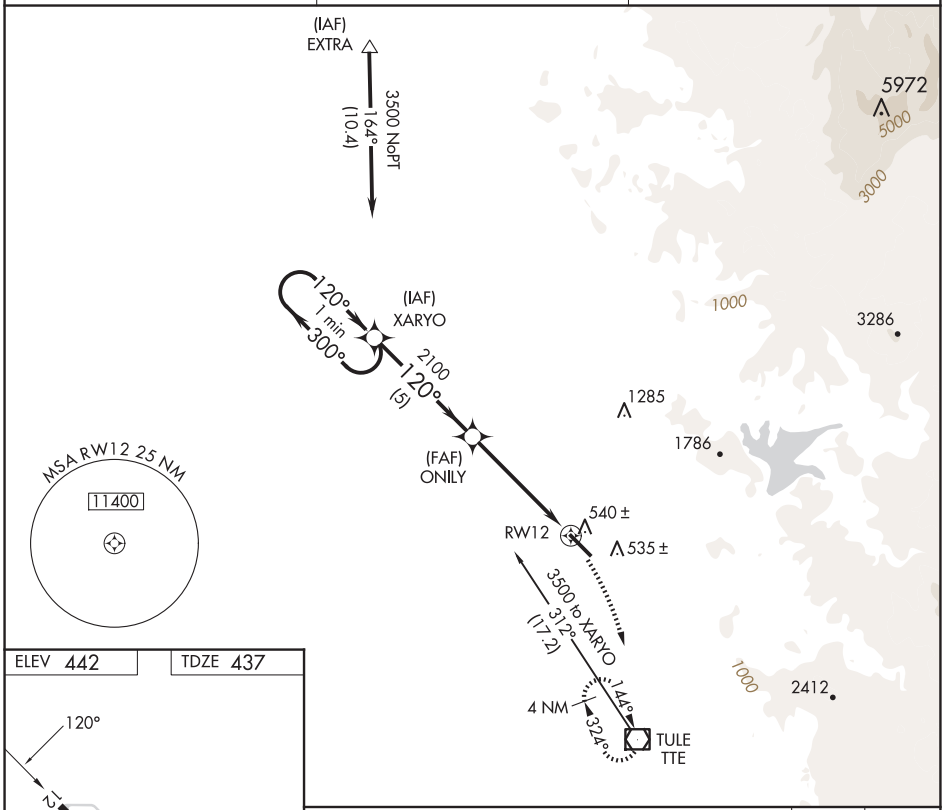
APP CRS	Rwy Idg	5960
120°	TDZE	437
	Apt Elev	442

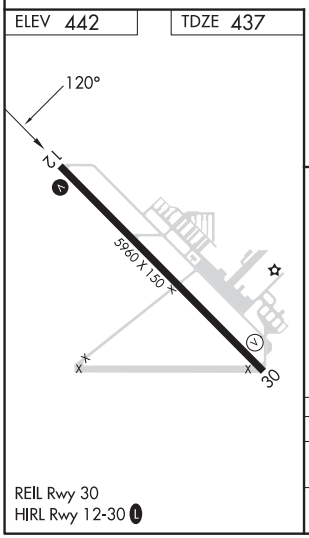
GPS RWY 12
PORTERVILLE MUNI (PTV)

T
NA

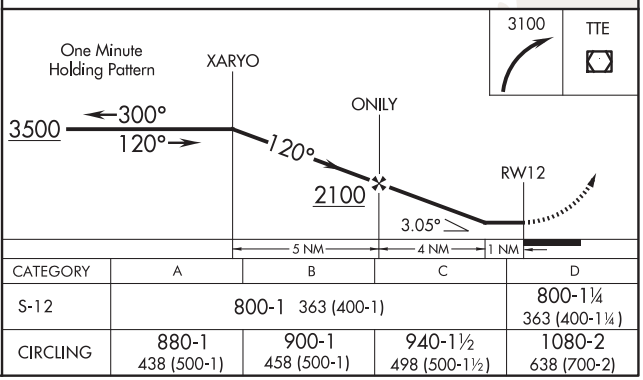
MISSED APPROACH: Climbing right turn to 3100 direct TTE VOR/DME and hold.

AWOS-3PT	BAKERSFIELD APP CON ★	UNICOM
134.625	119.075	122.8 (CTAF) L





REIL Rwy 30
HIRL Rwy 12-30 L



CATEGORY	A	B	C	D
S-12	800-1 363 (400-1)			800-1¼ 363 (400-1¼)
CIRCLING	880-1 438 (500-1)	900-1 458 (500-1)	940-1½ 498 (500-1½)	1080-2 638 (700-2)

PORTERVILLE, CALIFORNIA
Orig-A 30DEC21

36°02'N-119°04'W

PORTERVILLE MUNI (PTV)
GPS RWY 12

SW-2, 07 AUG 2025 to 02 OCT 2025

GPS RWY 30

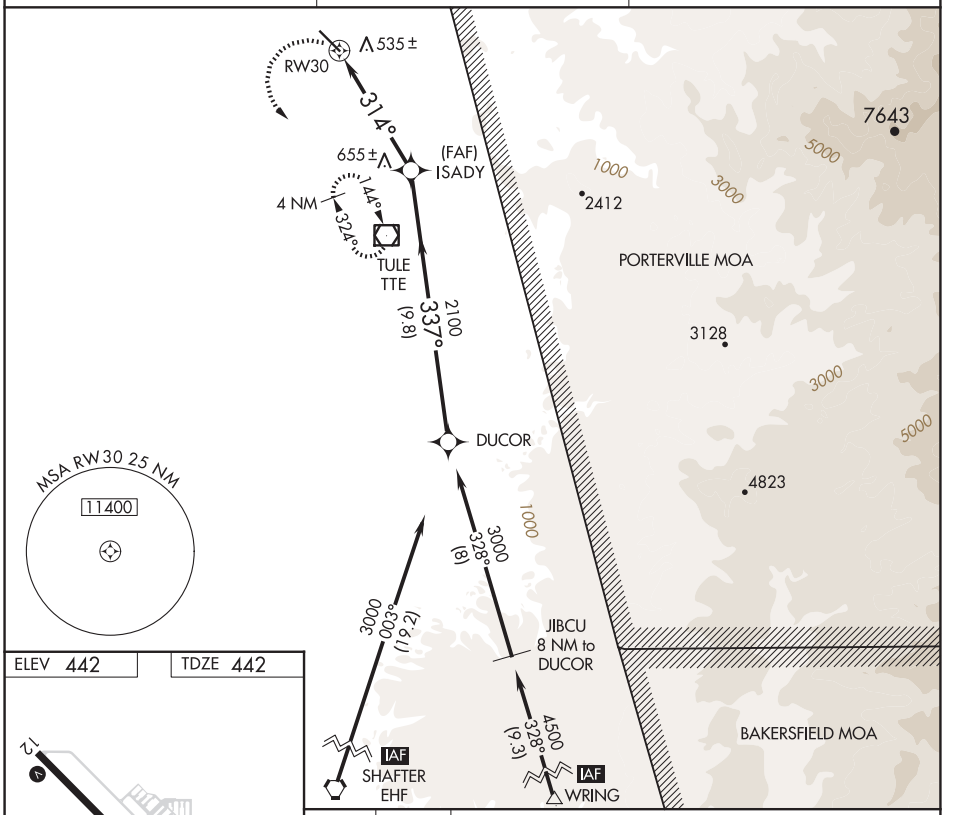
PORTERVILLE MUNI (PTV)

APP CRS	Rwy Idg	5960
314°	TDZE	442
	Apt Elev	442

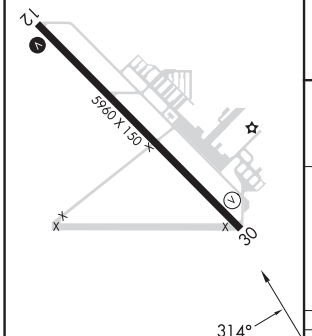
IAF ARM APPROACH MODE PRIOR TO IAF.
NA Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climbing left turn to 3100 direct TTE VOR/DME and hold.

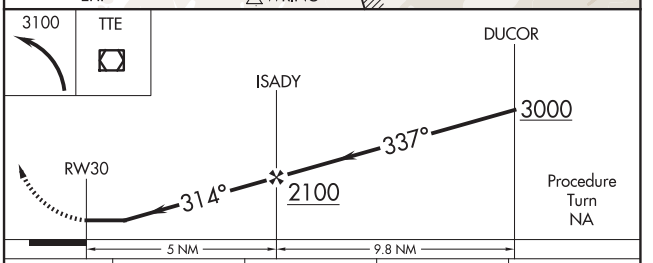
AWOS-3PT	BAKERFIELD APP CON★	UNICOM
134.625	119.075	122.8 (CTAF) L



ELEV 442 TDZE 442



REIL Rwy 30
HIRL Rwy 12-30 L



CATEGORY	A	B	C	D
S-30	900-1 458 (500-1)		900-1¼ 458 (500-1¼)	900-1½ 458 (500-1½)
CIRCLING	900-1 458 (500-1)		940-1½ 498 (500-1½)	1080-2 638 (700-2)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

PORTERVILLE, CALIFORNIA AL-569 (FAA) 25051

VOR/DME TTE	APP CRS	Rwy Idg	N/A
116.25	327°	TDZE	N/A
Chan 109(Y)		Apt Elev	443

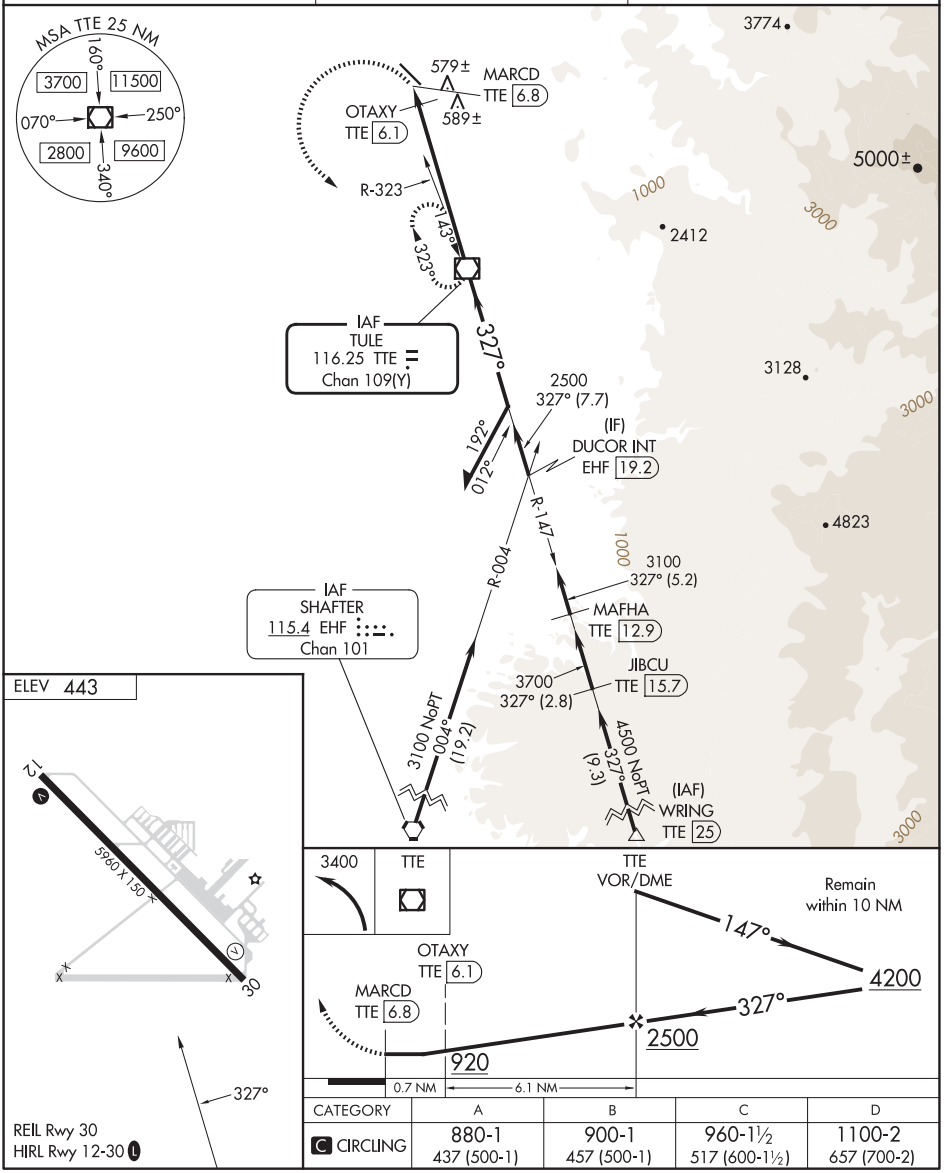
VOR-A

PORTERVILLE MUNI (PTV)

DME required.

MISSED APPROACH: Climbing left turn to 3400 direct TTE VOR/DME and hold.

AWOS-3PT	BAKERFIELD APP CON★	UNICOM
134.625	119.075	122.8 (CTAF) L



CATEGORY	A	B	C	D
C CIRCLING	880-1 437 (500-1)	900-1 457 (500-1)	960-1½ 517 (600-1½)	1100-2 657 (700-2)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS CH 73008 W15A	APP CRS 151°	Rwy Idg 5431 TDZE 352 Apt Elev 352

RNAV (GPS) RWY 15

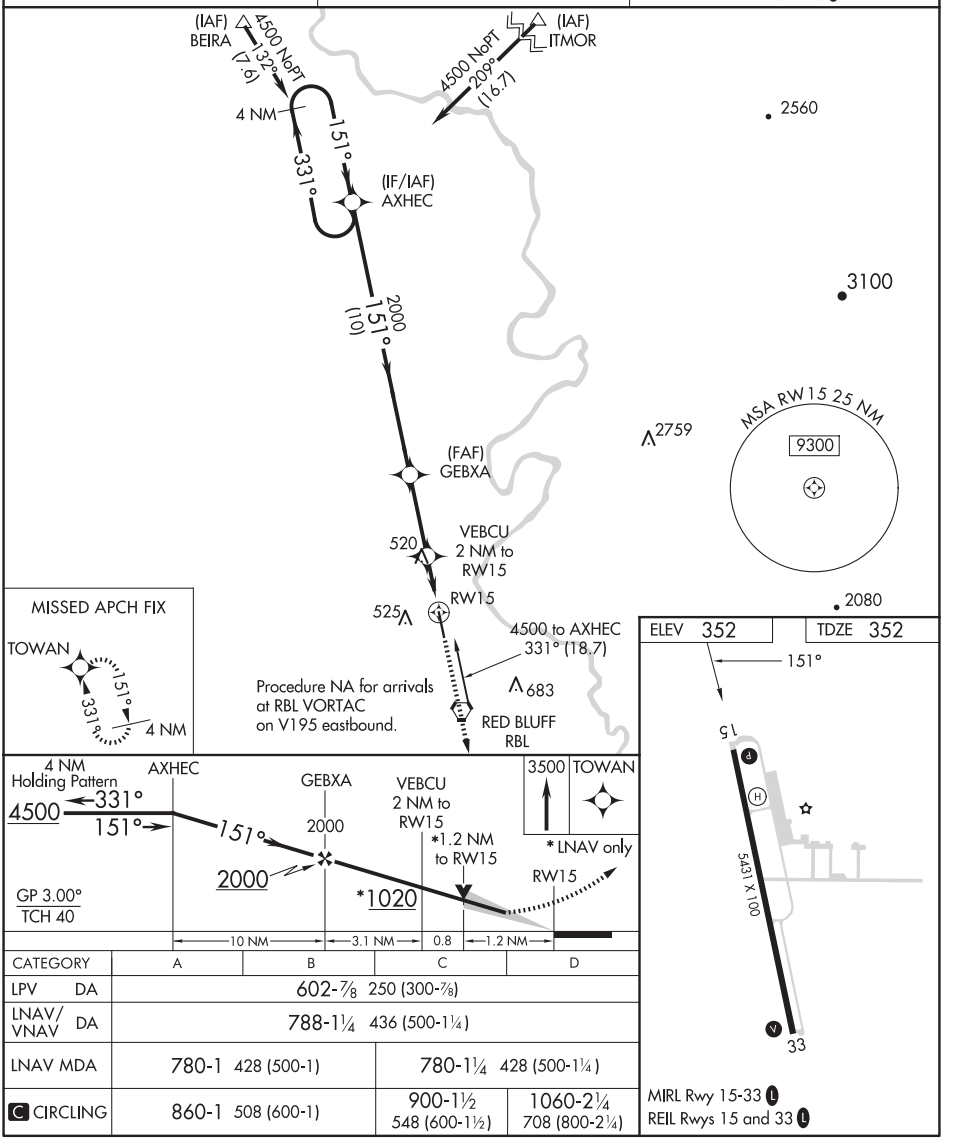
RED BLUFF MUNI (RBL)

RNP APCH.

Circling to Rwy 33 NA at night. Baro-VNAV and VDP NA when using Redding altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -2°C or above 54°C. When local altimeter setting not received; use Redding altimeter setting and increase LPV DA to 674 feet and increase LNAV/VNAV DA to 860 feet and increase visibility all Cats ⅛ SM; increase all MDAs 80 feet and LNAV visibility Cats C/D ⅛ SM and Circling visibility Cats C/D ¼ SM.

MISSED APPROACH: Climb to 3500 direct TOWAN and hold.

ASOS	OAKLAND CENTER	UNICOM
120.775	132.2 350.3	123.0 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	602-⅞ 250 (300-⅞)			
LNAV/VNAV DA	788-1¼ 436 (500-1¼)			
LNAV MDA	780-1 428 (500-1)		780-1¼ 428 (500-1¼)	
C CIRCLING	860-1 508 (600-1)		900-1½ 548 (600-1½)	1060-2¼ 708 (800-2¼)

MIRL Rwy 15-33 L
REIL Rwys 15 and 33 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 33

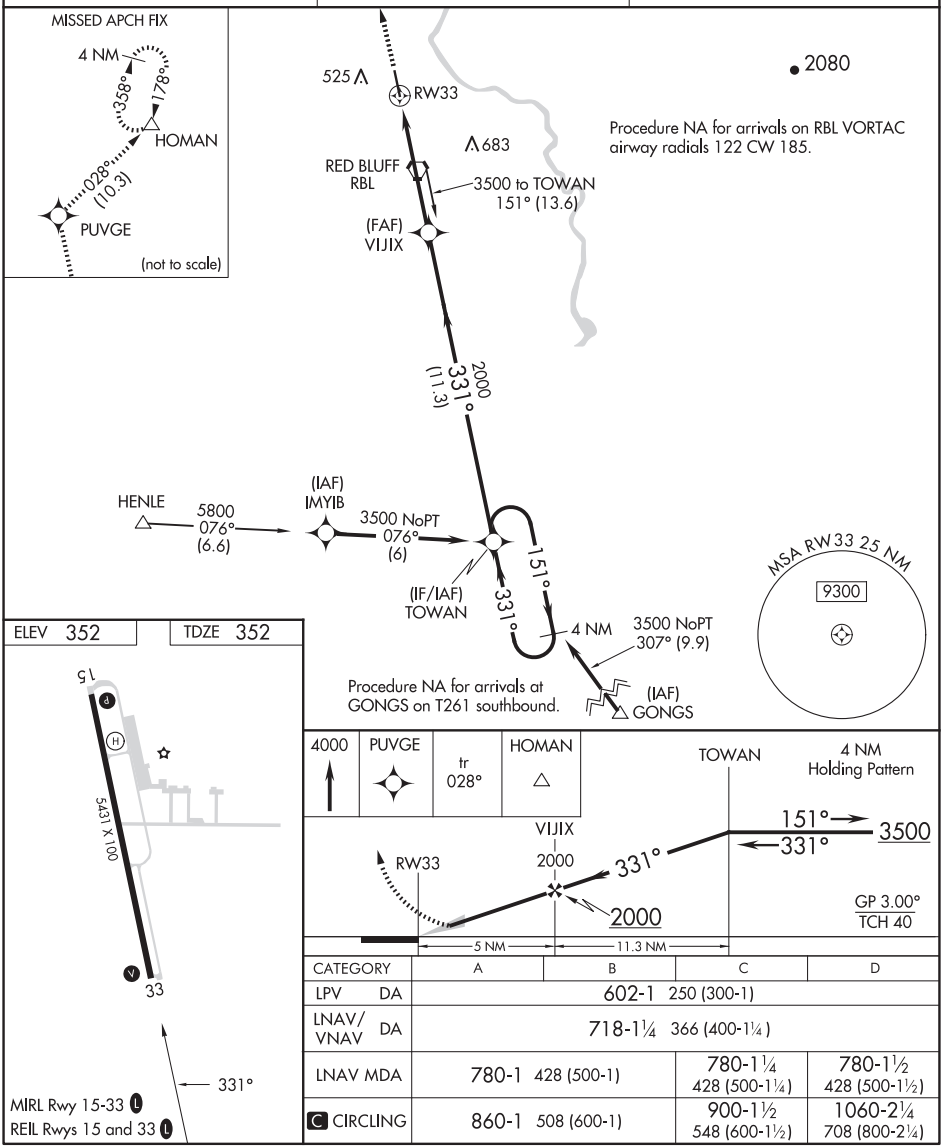
RED BLUFF MUNI (RBL)

WAAS CH 42609 W33A	APP CRS 331°	Rwy Idg 5431 TDZE 352 Apt Elev 352

Baro-VNAV NA when using Redding altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Redding altimeter setting and increase all DA/MDA 80 feet and increase LPV all Cats visibility ¼ SM, LNAV/VNAV all Cats visibility ¼ SM, LNAV Cat C visibility ¼ SM and Circling Cats C and D visibility ¼ SM.

MISSED APPROACH: Climb to 4000 direct PUVGE and track 028° to HOMAN and hold.

ASOS	OAKLAND CENTER	UNICOM
120.775	132.2 350.3	123.0 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	602-1 250 (300-1)			
LNAV/VNAV DA	718-1¼ 366 (400-1¼)			
LNAV MDA	780-1 428 (500-1)		780-1¼ 428 (500-1¼)	780-1½ 428 (500-1½)
C CIRCLING	860-1 508 (600-1)		900-1½ 548 (600-1½)	1060-2¼ 708 (800-2¼)

SW-2, 07 AUG 2025 to 02 OCT 2025

VORTAC RBL	APP CRS	Rwy Idg 5431
115.7	149°	TDZE 352
Chan 104		Apt Elev 352

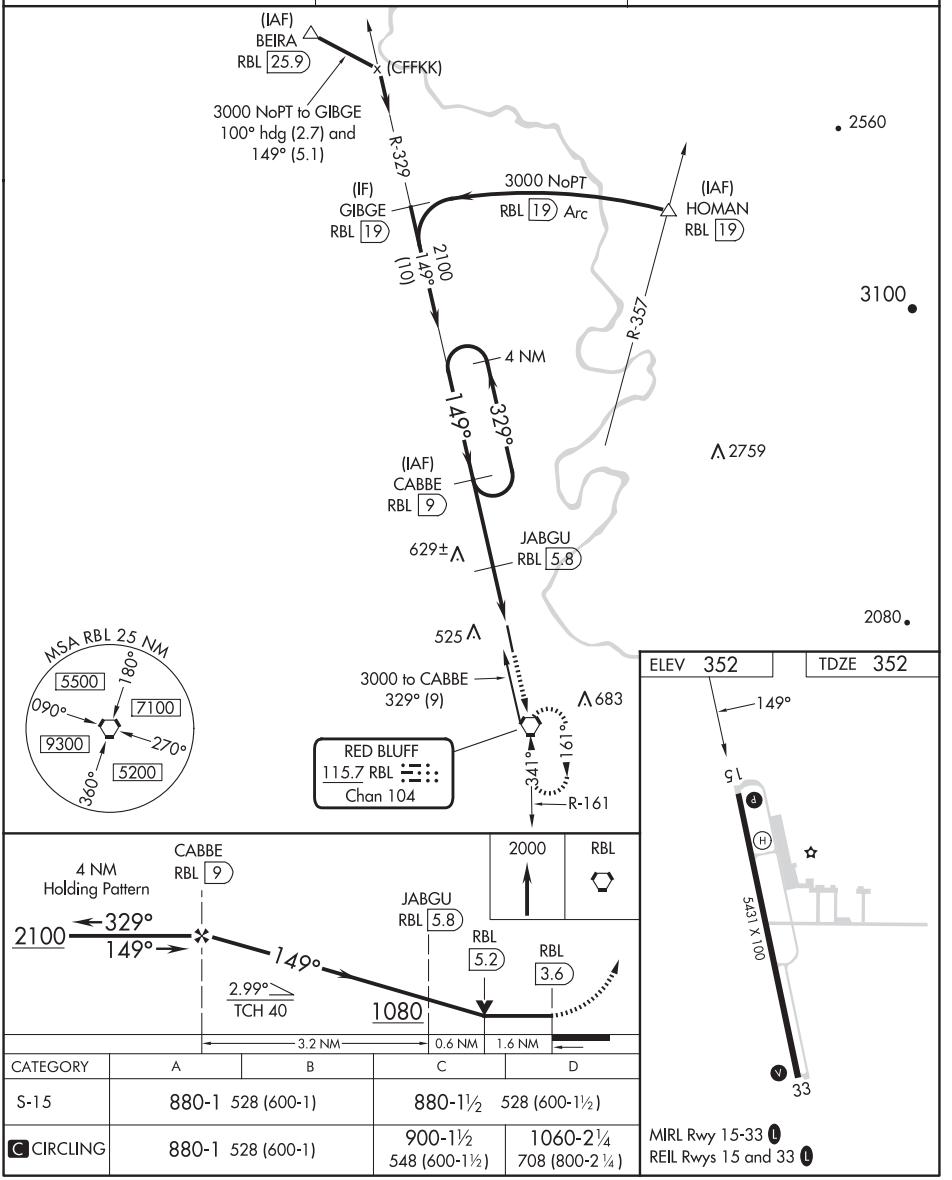
VOR/DME RWY 15

RED BLUFF MUNI (RBL)

When local altimeter setting not received, use Redding altimeter setting and increase all MDAs and all Cat C/D visibility ¼ SM. VDP NA with Redding altimeter setting.

MISSED APPROACH: Climb to 2000 direct RBL VORTAC and hold.

ASOS	OAKLAND CENTER	UNICOM
120.775	132.2 350.3	123.0 (CTAF) L



CATEGORY	A	B	C	D
S-15	880-1 528 (600-1)		880-1½ 528 (600-1½)	
C CIRCLING	880-1 528 (600-1)		900-1½ 548 (600-1½)	1060-2¼ 708 (800-2¼)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RED BLUFF, CALIFORNIA | AL-344 (FAA) | 24193

VORTAC RBL	APP CRS	Rwy Idg	5431
115.7	328°	TDZE	352
Chan 104		Apt Elev	352

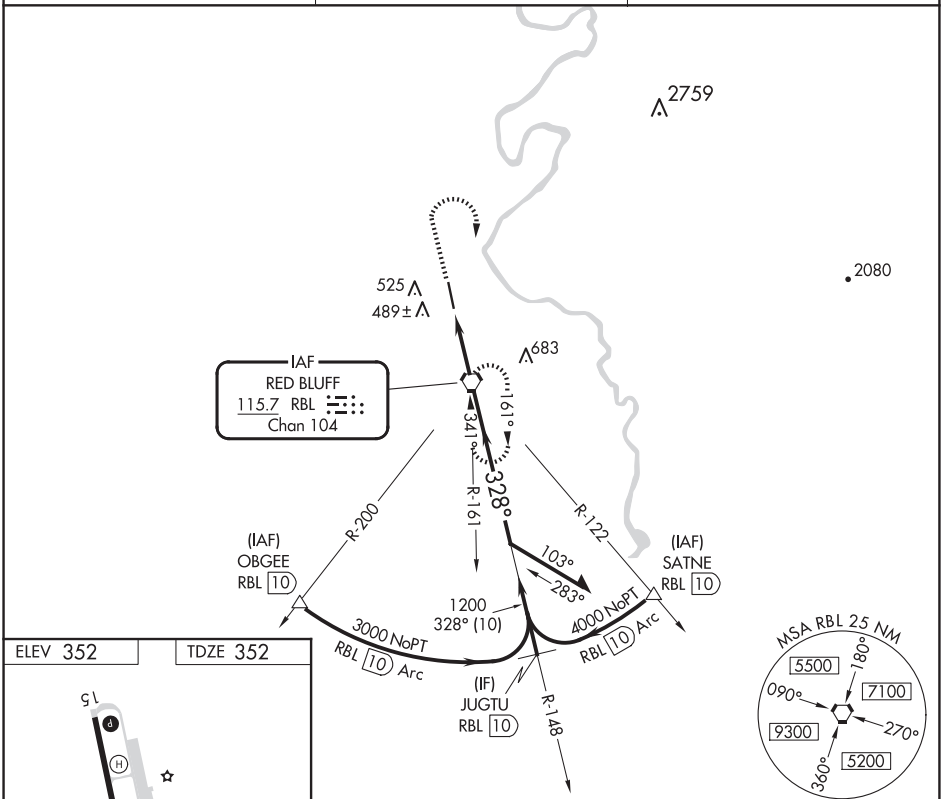
VOR RWY 33

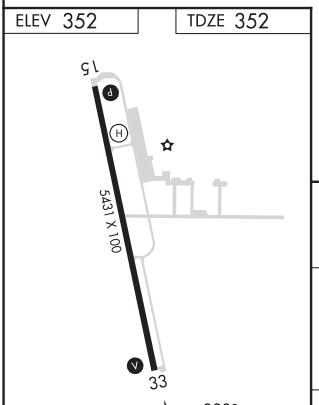
RED BLUFF MUNI (RBL)

When local altimeter setting not received, use Redding altimeter setting and increase all MDAs 80 feet and all Cat C/D visibilities ¼ SM.

MISSED APPROACH: Climb to 1500, then climbing right turn to 2000 direct RBL VORTAC and hold.

ASOS	OAKLAND CENTER	UNICOM
120.775	132.2 350.3	123.0 (CTAF) L

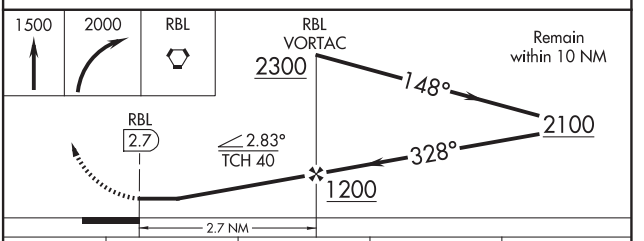




MIRL Rwy 15-33 L
REIL Rwys 15 and 33 L

FAF to MAP 2.7 NM

Knots	60	90	120	150	180
Min:Sec	2:42	1:48	1:21	1:05	0:54



CATEGORY	A	B	C	D
S-33	740-1 388 (400-1)			740-1¼ 388 (400-1¼)
C CIRCLING	880-1 528 (600-1)		900-1½ 548 (600-1½)	1060-2¼ 708 (800-2¼)

RED BLUFF, CALIFORNIA
Amdt 8B 23APR20

40°09′N-122°15′W

RED BLUFF MUNI (RBL)
VOR RWY 33

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS	Rwy Idg	N/A
166°	TDZE	N/A
	Apt Elev	723

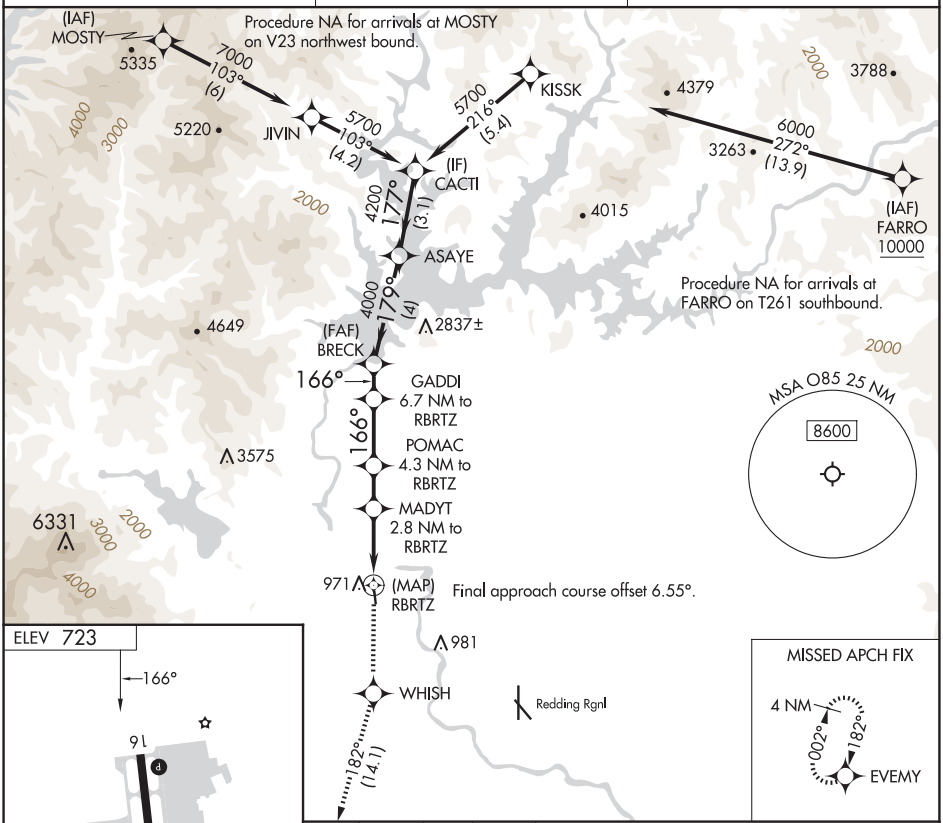
RNAV (GPS)-A
BENTON FLD (O85)

RNP APCH - GPS.

T NA Procedure NA at night. Rwy 16, 34 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Redding Rgnl altimeter setting and increase all MDAs 60 feet.

MISSED APPROACH: Climb to 4000 direct WHISH and on track 182° to EVEMY and hold.

AWOS-2	OAKLAND CENTER	UNICOM
118.675	132.2 350.3	122.8 (CTAF) L



CATEGORY	A	B	C	D
C CIRCLING	1340-1 617 (700-1)	1600-1¼ 877 (900-1¼)	NA	

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

REDDING, CALIFORNIA AL-10033 (FAA) 25107

APP CRS	Rwy Idg	N/A
340°	TDZE	N/A
	Apt Elev	723

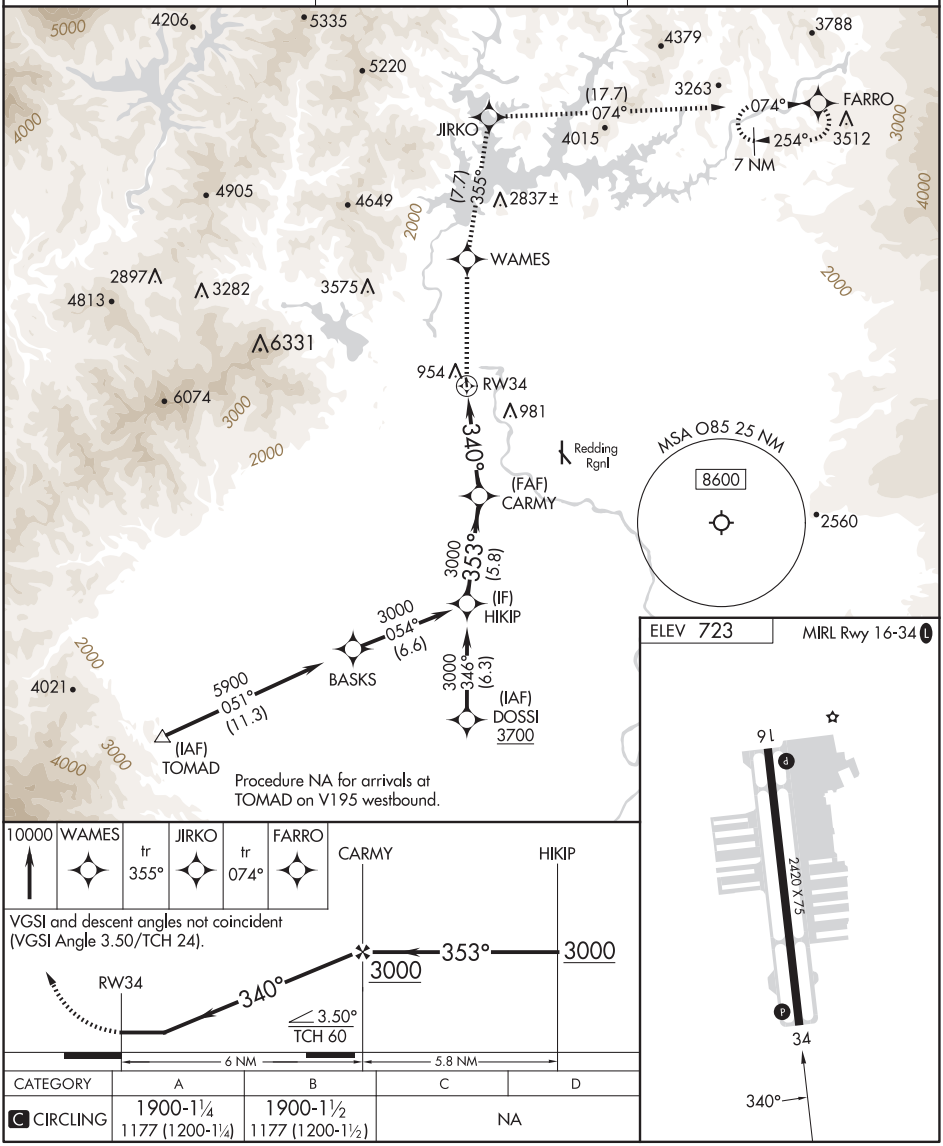
RNAV (GPS)-B
BENTON FLD (O85)

RNP APCH - GPS.

T NA Procedure NA at night. Rwy 16, 34 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Redding Rgnl altimeter setting and increase all MDAs 60 feet.

MISSED APPROACH: Climb to 10000 direct WAMES and on track 355° to JIRKO and on track 074° to FARRO and hold, continue climb-in-hold to 10000.

AWOS-2	OAKLAND CENTER	UNICOM
118.675	132.2 350.3	122.8 (CTAF) L



CATEGORY	A	B	C	D
C CIRCLING	1900-1¼ 1177 (1200-1¼)	1900-1½ 1177 (1200-1½)	NA	

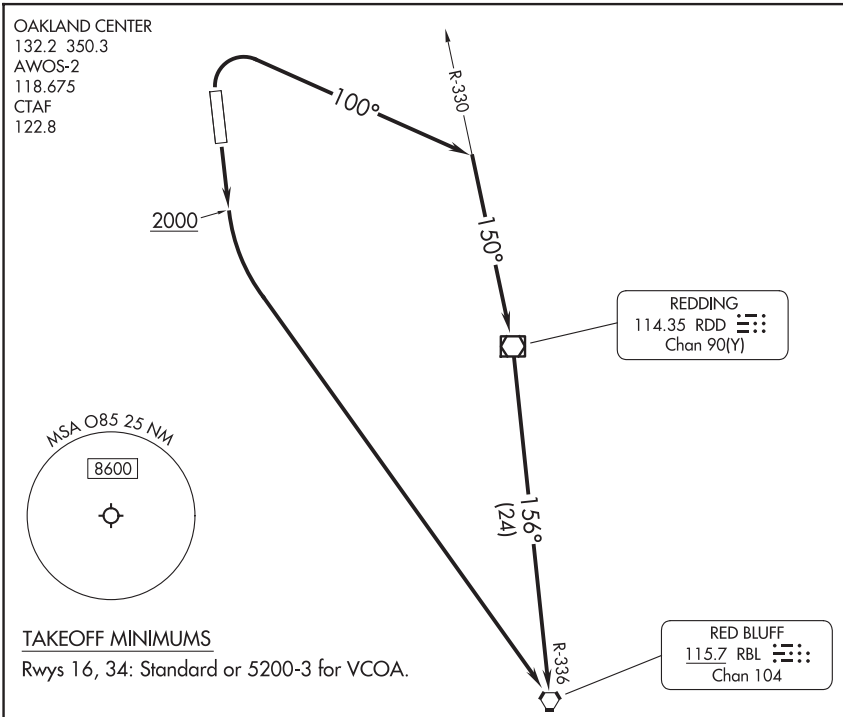
SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

REDDING, CALIFORNIA
Orig 05OCT23

40°34'N-122°24'W

BENTON FLD (O85)
RNAV (GPS)-B



TAKEOFF MINIMUMS

Rwys 16, 34: Standard or 5200-3 for VCOA.

TAKEOFF OBSTACLE NOTES

Rwy 16: Trees beginning 75′ from DER, 319′ left of centerline, up to 30′ AGL/732′ MSL.
Vehicle on road 273′ from DER, 537′ right of centerline, 730′ MSL.
Tree 771′ from DER, 613′ right of centerline, 747′ MSL.
Tree 1105′ from DER, 324′ right of centerline, 755′ MSL.
Trees beginning 1207′ from DER, 162′ right of centerline, up to 51′ AGL/762′ MSL.
Rwy 34: Building 2′ from DER, 455′ left of centerline, 724′ MSL.
Pole, sign beginning 63′ from DER, 179′ right of centerline, up to 749′ MSL.
Navaid, trees, pole beginning 84′ from DER, 260′ left of centerline, up to 748′ MSL.
Trees, fence, poles beginning 116′ from DER, 182′ right of centerline, up to 46′ AGL/765′ MSL.
Trees, pole beginning 373′ from DER, 224′ left of centerline, up to 57′ AGL/753′ MSL.
Trees beginning 623′ from DER, 440′ right of centerline, up to 775′ MSL.
Pole, trees beginning 750′ from DER, 19′ left of centerline, up to 754′ MSL.
Trees beginning 1766′ from DER, 870′ left of centerline, up to 779′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb to 2000, then climbing left turn direct RBL VORTAC.
TAKEOFF RUNWAY 34: Climbing right turn on heading 100° to intercept RDD VOR/DME R-330 to RDD VOR/DME, then on RDD VOR/DME R-156 to intercept RBL VORTAC R-336 to RBL VORTAC.

VCOA ALL RUNWAYS: Obtain ATC approval for VCOA when requesting IFP clearance. Climb in visual conditions to cross Benton Fld airport at or above 5800 before proceeding on course.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

ILS or LOC RWY 34

REDDING RGNL (RDD)

LOC/DME I-RDD	APP CRS	Rwy Ldg 6997
108.7	346°	TDZE 499
Chan 24		Apt Elev 505

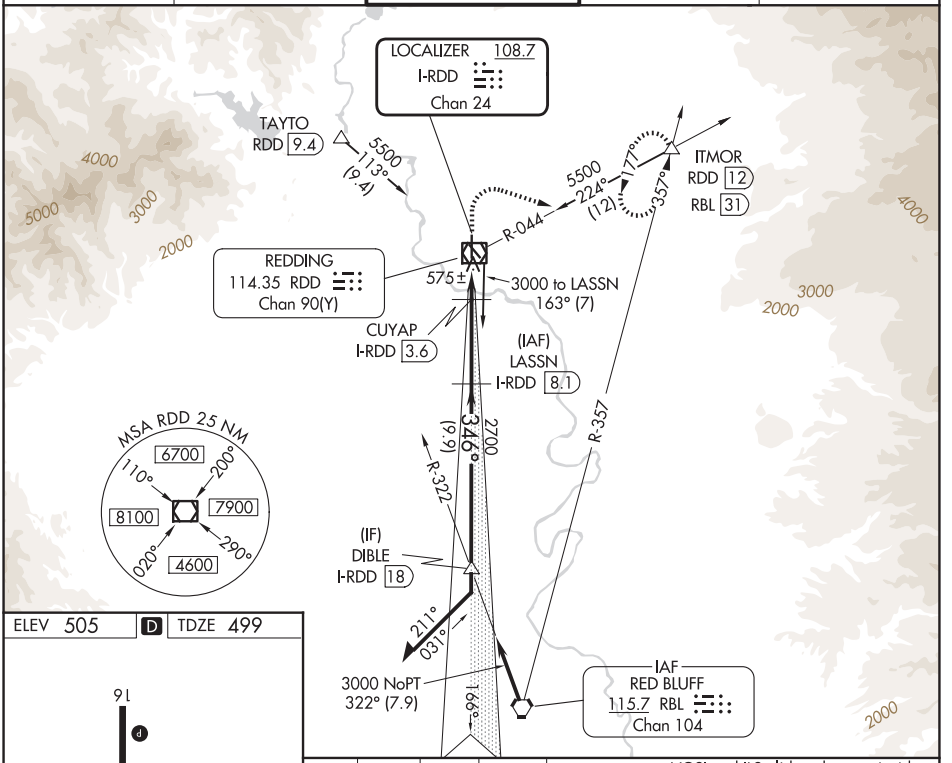
DME required for LOC only.

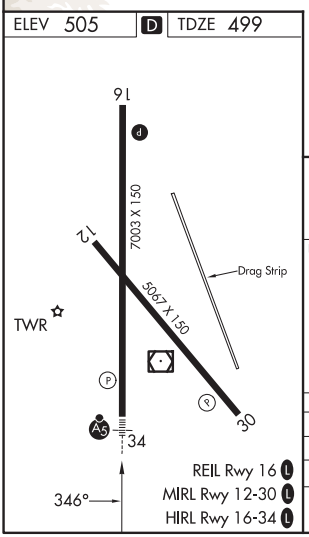
For inop ALS, increase S-ILS 34 Cat E visibility to ¾ SM and S-LOC 34 Cat C/D/E visibility to 1 SM.

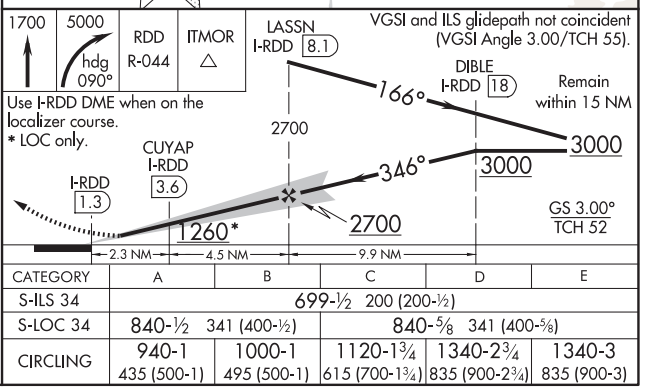
MALSR

MISSED APPROACH: Climb to 1700 then climbing right turn to 5000 on heading 090° and RDD R-044 to ITMOR INT/RDD 12 DME and hold, continue climb-in-hold to 5000.

ATIS	OAKLAND CENTER	REDDING TOWER ★	GND CON	UNICOM
124.1	132.2 350.3	119.8 (CTAF) L 269.25	121.7	122.95







CATEGORY	A	B	C	D	E
S-ILS 34	699-½ 200 (200-½)				
S-LOC 34	840-½ 341 (400-½)		840-⅝ 341 (400-⅝)		
CIRCLING	940-1 435 (500-1)	1000-1 495 (500-1)	1120-1¾ 615 (700-1¾)	1340-2¾ 835 (900-2¾)	1340-3 835 (900-3)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS	APP CRS	Rwy Ldg	7003
CH 86443	166°	TDZE	505
W16A		Apt Elev	505

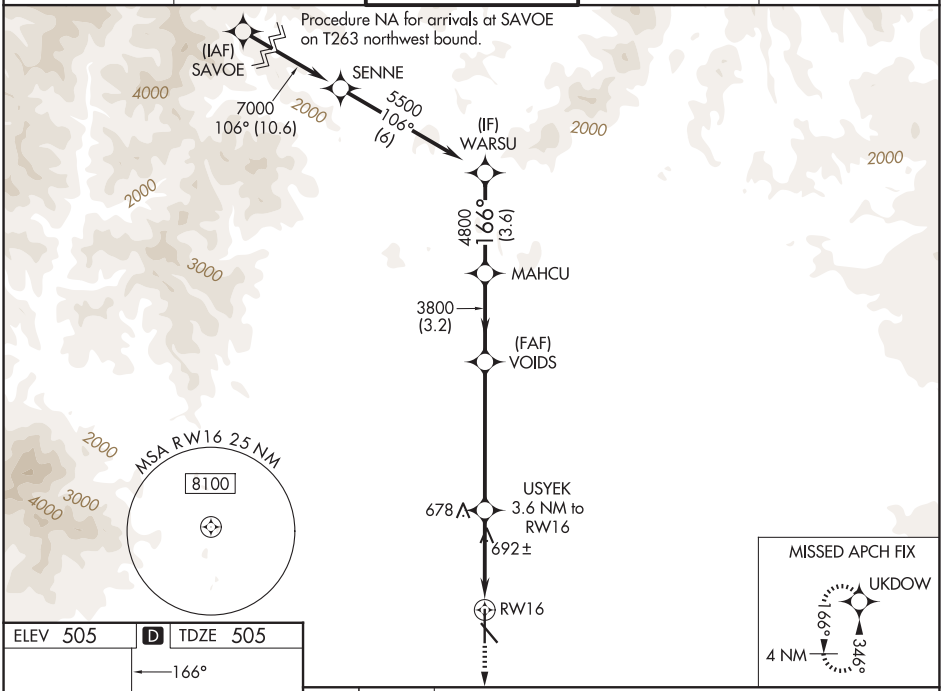
RNAV (GPS) RWY 16
REDDING RGNL (RDD)

RNP APCH.

Rwy 16 helicopter visibility reduction below ¾ SM NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -4°C or above 53°C.

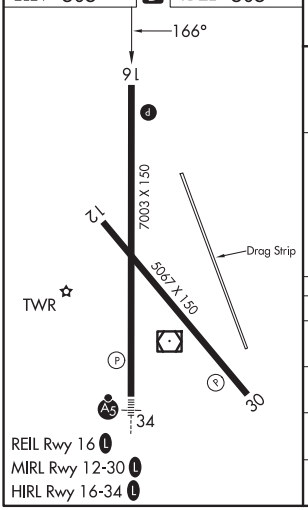
MISSED APPROACH: Climb to 3000 direct UKDOW and hold.

ATIS	OAKLAND CENTER	REDDING TOWER *	GND CON	UNICOM
124.1	132.2 350.3	119.8 (CTAF) L 269.25	121.7	122.95



MISSED APCH FIX

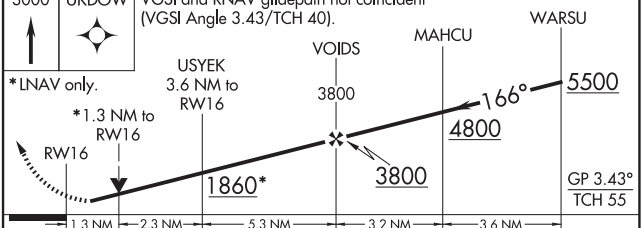
ELEV 505 D TDZE 505



3000 UKDOW

VGSI and RNAV glidepath not coincident (VGSI Angle 3.43/TCH 40).

*LNAV only.



CATEGORY	A	B	C	D
LPV DA	755-¾ 250 (300-¾)		775-⅞ 270 (300-⅞)	
LNAV/VNAV DA	892-1⅛ 387 (400-1⅛)			
LNAV MDA	960-1 455 (500-1)		960-1⅜ 455 (500-1⅜)	
CIRCLING	960-1 455 (500-1)	1000-1 495 (500-1)	1120-1¾ 615 (700-1¾)	1340-2¾ 835 (900-2¾)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS CH 56402 W34A	APP CRS 346°	Rwy Ldg 6997 TDZE 499 Apt Elev 505

RNAV (GPS) RWY 34

REDDING RGNL (RDD)

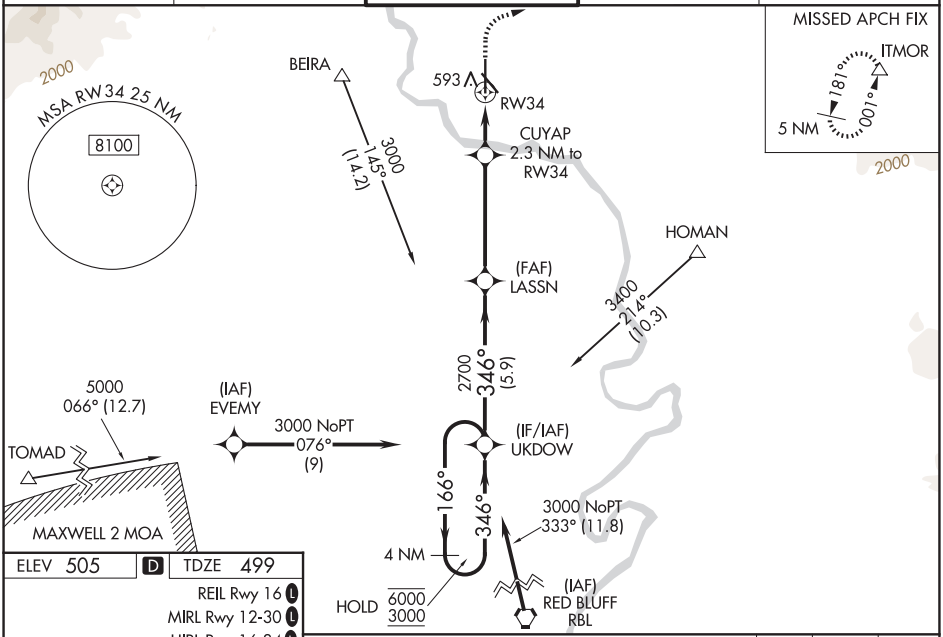
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -4°C or above 54°C. For inop ALS, increase LNAV/VNAV all Cats visibility to ¾ SM and LNAV Cat C, D visibility to 1 SM.

MALSR

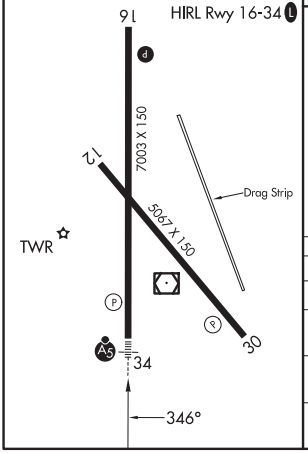
MISSED APPROACH: Climb to 1700 then climbing right turn to 5000 direct ITMOR, continue climb-in-hold to 5000.

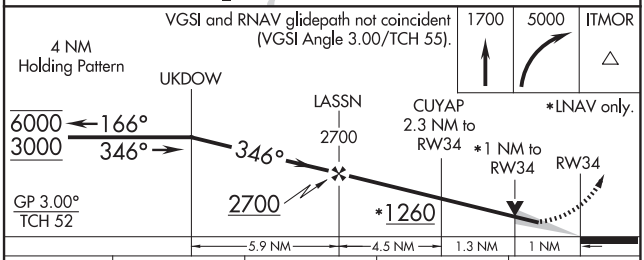
ATIS	OAKLAND CENTER	REDDING TOWER ★	GND CON	UNICOM
124.1	132.2 350.3	119.8 (CTAF) L 269.25	121.7	122.95



ELEV 505 D TDZE 499

REIL Rwy 16 L
MIRL Rwy 12-30 L
HIRL Rwy 16-34 L





CATEGORY	A	B	C	D
LPV DA	699-½ 200 (200-½)			
LNAV/VNAV DA	754-½ 255 (300-½)			
LNAV MDA	860-½ 361 (400-½)		860-⅝ 361 (400-⅝)	
CIRCLING	940-1 435 (500-1)	1000-1 495 (500-1)	1120-1¾ 615 (700-1¾)	1340-2¾ 835 (900-2¾)

40°31′N-122°18′W

SW-2, 07 AUG 2025 to 02 OCT 2025

LOC BC RWY 16

REDDING RGNL (RDD)

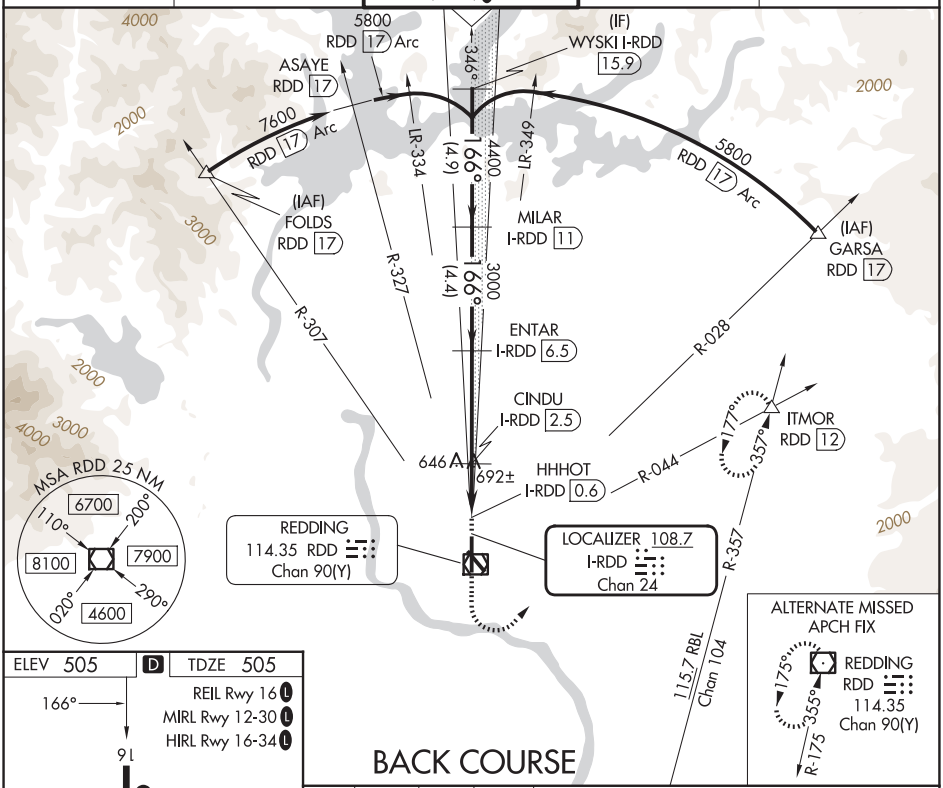
LOC/DME I-RDD	APP CRS	Rwy Ldg 7003
108.7	166°	TDZE 505
Chan 24		Apt Elev 505

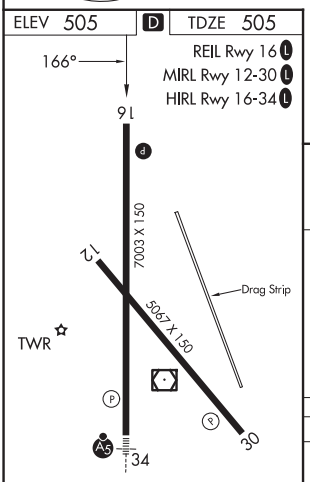
DME required.

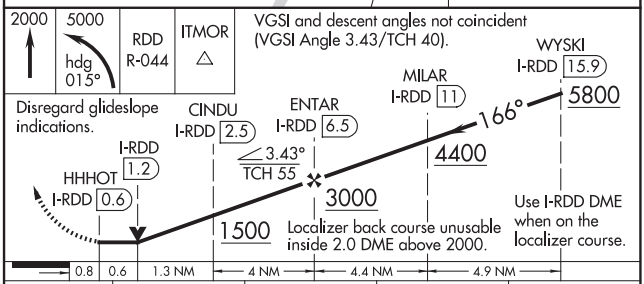
Rwy 16 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 2000 then climbing left turn to 5000 on heading 015° and RDD VOR/DME R-044 to ITMOR INT/RDD 12 DME and hold, continue climb-in-hold to 5000.

ATIS	OAKLAND CENTER	REDDING TOWER ★	GND CON	UNICOM
124.1	132.2 350.3	119.8 (CTAF) L 269.25	121.7	122.95







CATEGORY	A	B	C	D
S-16	960-1 455 (500-1)		960-1⅜ 455 (500-1⅜)	
CIRCLING	960-1 455 (500-1)	1000-1 495 (500-1)	1120-1¾ 615 (700-1¾)	1340-2¾ 835 (900-2¾)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

VOR RWY 34

REDDING RGNL (RDD)

VOR/DME RDD	APP CRS	Rwy Ldg	6997
114.35	355°	TDZE	499
Chan 90(Y)		Apt Elev	505

Inop table does not apply to S-34 Cats C/D. MACHL fix minimums: for inop ALS, increase S-34 Cat C/D visibility to 1¾ SM.

MALSR

MISSED APPROACH: Climb to 2100 then climbing right turn to 5300 on heading 090° and on RDD VOR/DME R-044 to ITMOR INT and hold, continue climb-in-hold to 5300.

ATIS	OAKLAND CENTER	REDDING TOWER ★	GND CON	UNICOM
124.1	132.2 350.3	119.8 (CTAF) L 269.25	121.7	122.95

ALTERNATE MISSED APCH FIX

REDDING RDD 114.35 Chan 90(Y)

R-175 175° 355°

IAF REDDING 114.35 RDD Chan 90(Y)

ITMOR

177° 357° 3900 224° (12)

R-044

BEIRA 4000 076° (5.3)

MACHL RDD 3.8

355° 220° 040° R-175

R-357

115.7 RBL Chan 104

3100 336° (24.5)

MSA RDD 25 NM

6700 200° 110° 7900 8100 290° 020° 4600

RED BLUFF 115.7 RBL Chan 104

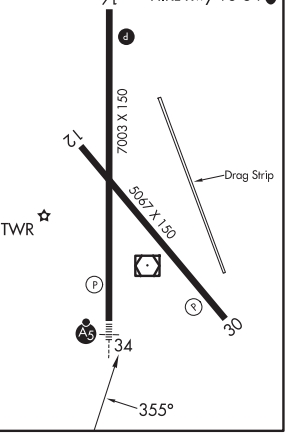
2000 3000

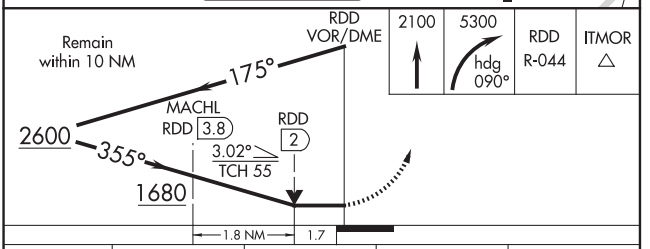
ELEV 505 D TDZE 499

REIL Rwy 16 L

MIRL Rwy 12-30 L

HIRL Rwy 16-34 L



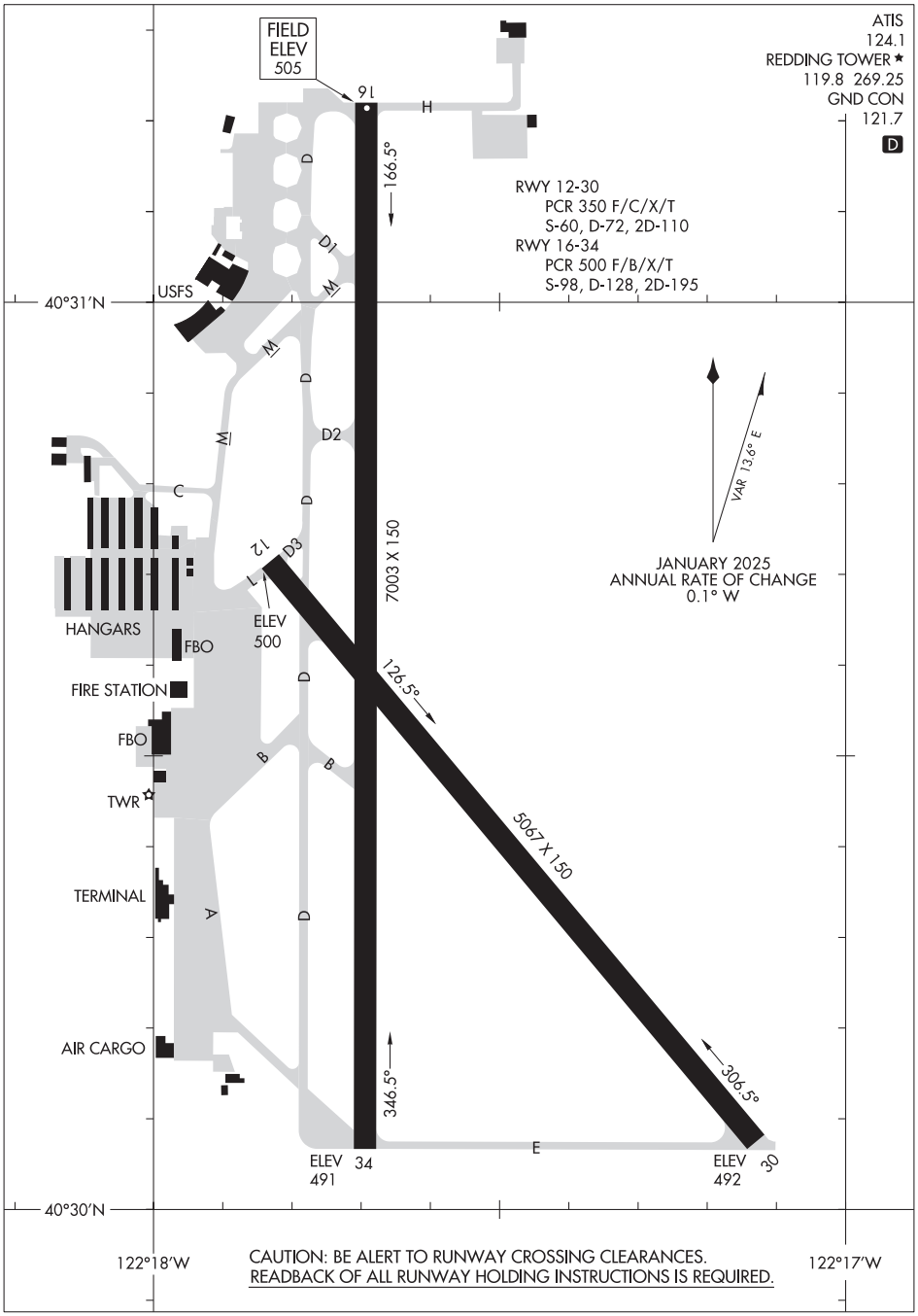


2100	5300	RDD	ITMOR
↑	hdg 090°	R-044	△

CATEGORY	A	B	C	D
S-34	1680-¾ 1181 (1200-¾)	1680-1 1181 (1200-1)	1680-3	1181 (1200-3)
CIRCLING	1680-1¼ 1175 (1200-1¼)	1680-1½ 1175 (1200-1½)	1680-3	1175 (1200-3)
MACHL FIX MINIMUMS				
S-34	1100-½ 601 (600-½)		1100-1⅜ 601 (600-1⅜)	
CIRCLING	1100-1 595 (600-1)		1120-1¾ 615 (700-1¾)	1340-2¾ 835 (900-2¾)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

AL-688 (FAA)



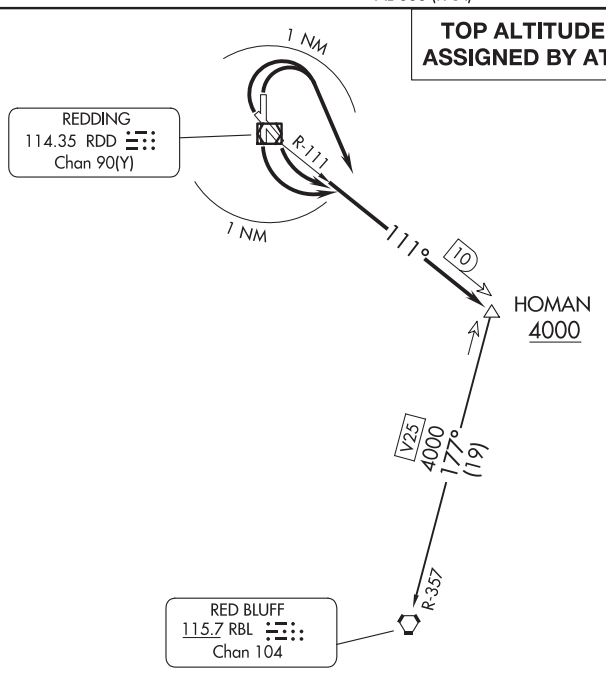
SW-2, 07 AUG 2025 to 02 OCT 2025

(HOMAN3.HOMAN) 23334

HOMAN THREE DEPARTURE

AL-688 (FAA)

REDDING RGNL (RDD)
REDDING, CALIFORNIA



TAKEOFF MINIMUMS:
Rwys 12, 16, 30, 34: Standard with minimum climb of 400′ per NM to 4000.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 12, 16: Climbing left turn within 1 NM, thence. . . .
TAKEOFF RUNWAYS 30, 34: Climbing right turn within 1 NM, thence. . . .

. . . .Intercept the RDD R-111, to HOMAN INT/RDD 10 DME, cross HOMAN INT/RDD 10 DME at or above 4000′; then on (transition) or (assigned route). Expect filed altitude 10 minutes after departure.

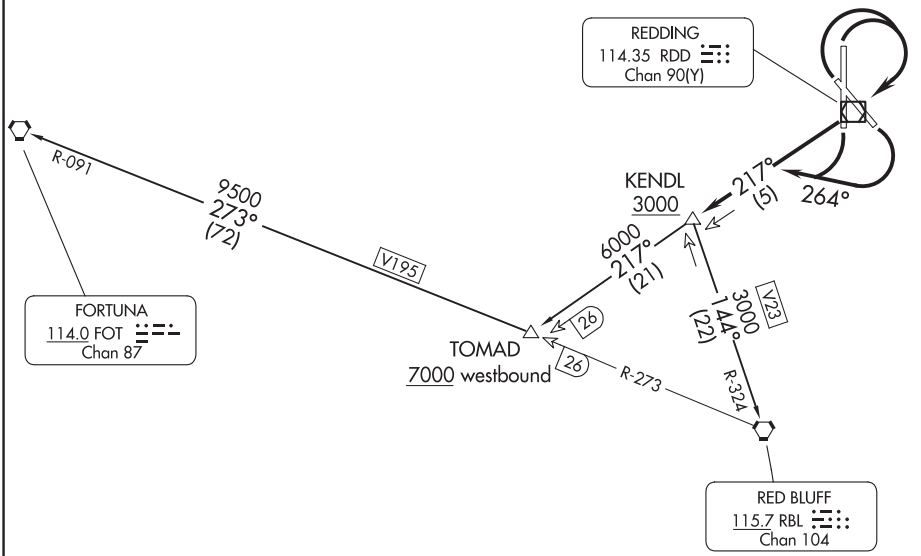
RED BLUFF TRANSITION (HOMAN3.RBL): From over HOMAN INT/RDD 10 DME on RBL R-357 to RBL VORTAC.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

KENDL FOUR DEPARTURE

OAKLAND CENTER
132.2 350.3
ATIS
124.1
REDDING TOWER★
119.8 269.25

TOP ALTITUDE: ASSIGNED BY ATC



TAKEOFF MINIMUMS
Rwys 12: Standard with minimum climb of 410′ per NM to 3000.
Rwy 16: Standard with minimum climb of 495′ per NM to 3000.
Rwy 30: Standard with minimum climb of 440′ per NM to 3000.
Rwy 34: Standard with minimum climb of 410′ per NM to 3000.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 12 and 16: Climbing right turn heading 264° to intercept RDD VOR/DME R-217 to KENDL, cross KENDL at or above 3000, thence . . .
TAKEOFF RUNWAYS 30 and 34: Climbing right turn direct RDD VOR/DME then on RDD VOR/DME R-217 to KENDL, cross KENDL at or above 3000, thence . . .

. . . . via (transition) or (assigned route) maintain ATC assigned altitude.

FORTUNA TRANSITION (KENDL4.FOT): From over KENDL on RDD R-217 to TOMAD, thence on RBL R-273 and FOT R-091 to FOT VORTAC.
RED BLUFF TRANSITION (KENDL4.RBL): From over KENDL on RBL R-324 to RBL VORTAC.
TOMAD TRANSITION (KENDL4.TOMAD): From over KENDL on RDD R-217 to TOMAD.

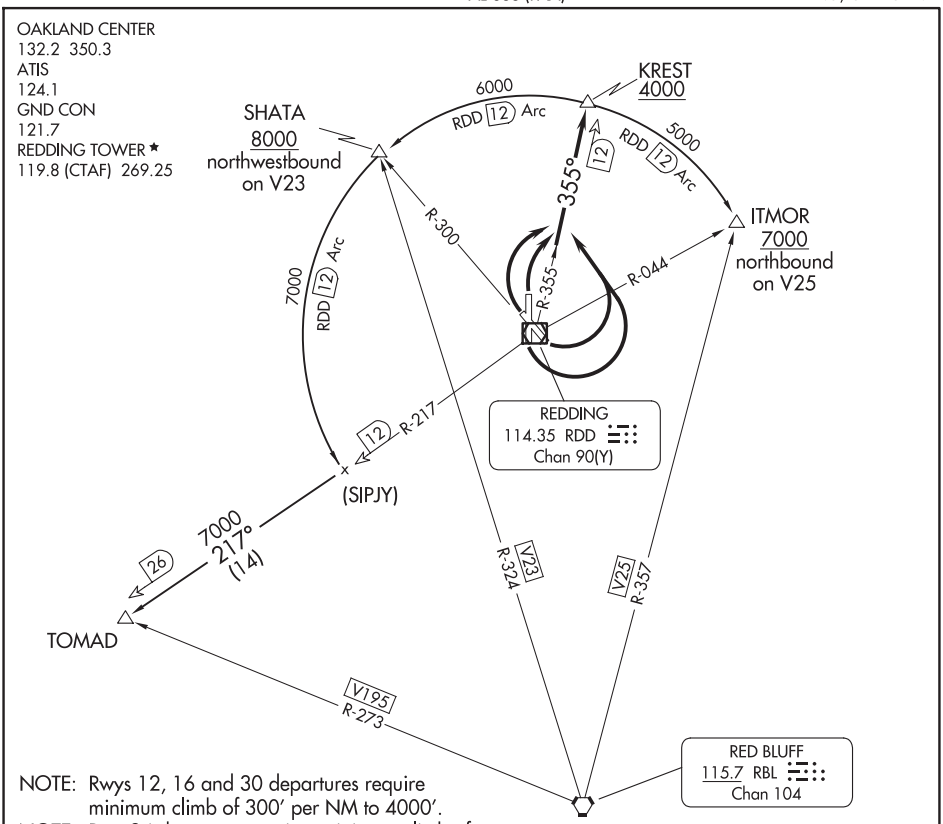
SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(KREST3.KREST) 23334

KREST THREE DEPARTURE

AL-688 (FAA)

REDDING RGNL (RDD)
REDDING, CALIFORNIA



NOTE: Rwys 12, 16 and 30 departures require minimum climb of 300′ per NM to 4000′.
NOTE: Rwy 34 departure requires minimum climb of 320′ per NM to 4000′.
NOTE: DME required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 12 and 16: Turn left immediately after departure to intercept and proceed on the RDD R-355 to KREST DME Fix. Cross KREST DME Fix at or above 4000, thence on (transition) or (assigned route).
TAKEOFF RUNWAYS 30 and 34: Turn right immediately after departure to intercept and proceed on RDD R-355 to KREST DME Fix. Cross KREST DME Fix at or above 4000, thence on (transition) or (assigned route).

ITMOR TRANSITION (KREST3.ITMOR): From over KREST DME Fix on RDD 12 DME Arc clockwise to ITMOR INT.
SHATA TRANSITION (KREST3.SHATA): From over KREST DME Fix on RDD 12 DME Arc counterclockwise to SHATA INT.
TOMAD TRANSITION (KREST3.TOMAD): From over KREST DME Fix on RDD 12 DME Arc counterclockwise to RDD R-217, thence on RDD R-217 to TOMAD INT.

SW-2, 07 AUG 2025 to 02 OCT 2025

SHASTA FOUR DEPARTURE

AL-688 (FAA)

OAKLAND CENTER
132.2 350.3
ATIS
124.1
GND CON
121.7
REDDING TOWER★
119.8 (CTAF) 269.25

TOP ALTITUDE: ASSIGNED BY ATC

KLAMATH FALLS
115.9 LMT
Chan 106

FORT JONES
116.25 FJS
Chan 109(Y)

REDDING
114.35 RDD
Chan 90(Y)

RED BLUFF
115.7 RBL
Chan 104

MUSTANG
117.9 FMG
Chan 126

WILLIAMS
114.4 ILA
Chan 91

346°
306°
126°
166°
161°
341°
R-161

TAKEOFF MINIMUMS

Rwy 12: Standard with a minimum climb of 375′ per NM to 13900.
Rwy 16: Standard with a minimum climb of 370′ per NM to 13900.
Rwy 30: Standard with a minimum climb of 460′ per NM to 8400.
Rwy 34: Standard with a minimum climb of 452′ per NM to 8200.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 12: Climb heading 126° (or ATC assigned 344° CW 234°), thence . . . .
TAKEOFF RUNWAY 16: Climb heading 166° (or ATC assigned 354° CW 234°), thence . . . .
TAKEOFF RUNWAY 30: Climb heading 306° (or ATC assigned 134° CW 004°), thence . . . .
TAKEOFF RUNWAY 34: Climb heading 346° (or ATC assigned 174° CW 004°), thence . . . .

. . . . expect vectors to join assigned route. Maintain ATC assigned altitude; expect filed altitude/flight level ten minutes after departing.

LOST COMMUNICATIONS: If no contact with Oakland Center after reaching 4000 proceed to RBL VORTAC and hold.

NOTE: RADAR required.

NOTE: Chart not to scale.

SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 16

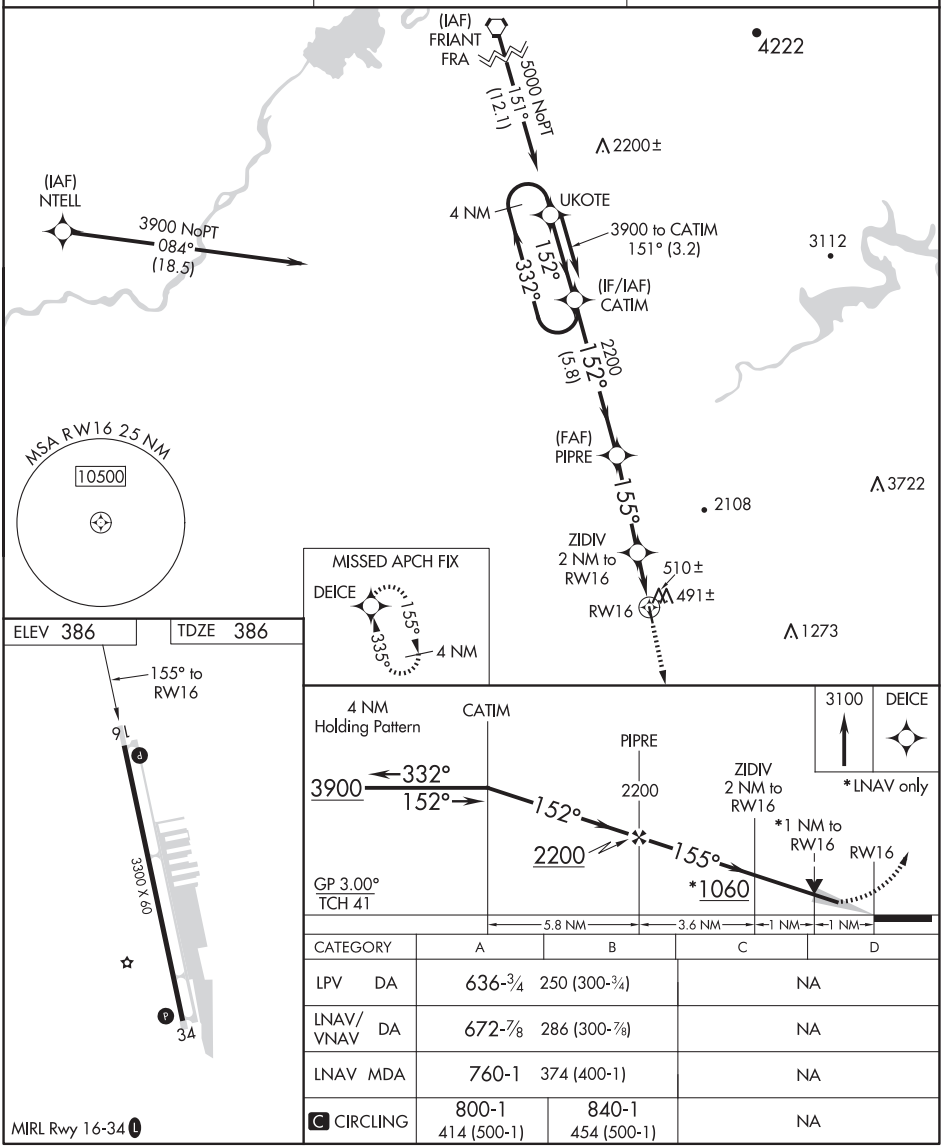
REEDLEY MUNI (O32)

WAAS	APP CRS	Rwy Idg	3300
CH 77841	155°	TDZE	386
W16A		Apt Elev	386

T NA — For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). Circling NA east of Rwy 16-34. Baro-VNAV and VDP NA when using Fresno Yosemite Intl altimeter setting. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Fresno Yosemite Intl altimeter setting: increase all DAs 41 feet and all visibilities ⅛ SM; increase all MDAs 60 feet.

MISSED APPROACH: Climb to 3100 direct DEICE and hold, continue climb-in-hold to 3100.

AWOS-3PT	FRESNO APP CON	UNICOM
120.175	132.35 323.25	122.7 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	636-¾	250 (300-¾)		NA
LNAV/VNAV DA	672-⅞	286 (300-⅞)		NA
LNAV MDA	760-1	374 (400-1)		NA
C CIRCLING	800-1 414 (500-1)	840-1 454 (500-1)		NA

MIRL Rwy 16-34 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS	APP CRS	Rwy Idg	3300
CH **99641**	**335°**	TDZE	**386**
W34A		Apt Elev	**386**

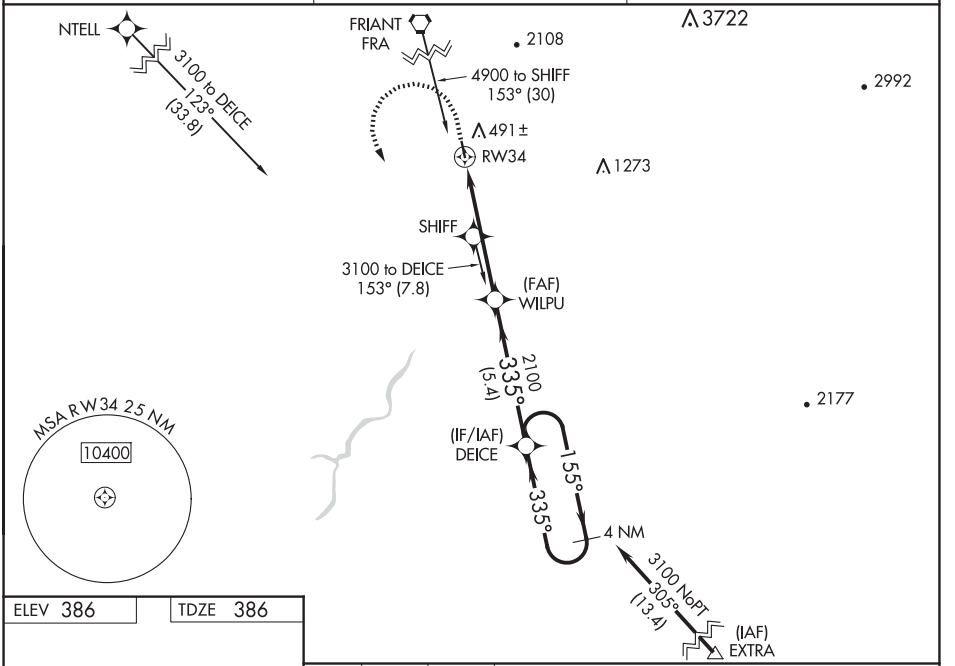
RNAV (GPS) RWY 34

REEDLEY MUNI (O32)

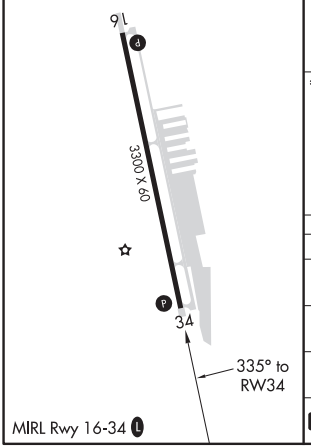
T NA — For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). Circling NA east of Rwy 16-34. Baro-VNAV and VDP NA when using Fresno Yosemite Intl altimeter setting. Rwy 34 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Fresno Yosemite Intl altimeter setting: increase all DAs 41 feet and all visibilities ⅛ SM; increase all MDAs 60 feet.

MISSED APPROACH: Climb to 860 then climbing left turn to 3100 direct DEICE and hold, continue climb-in-hold to 3100.

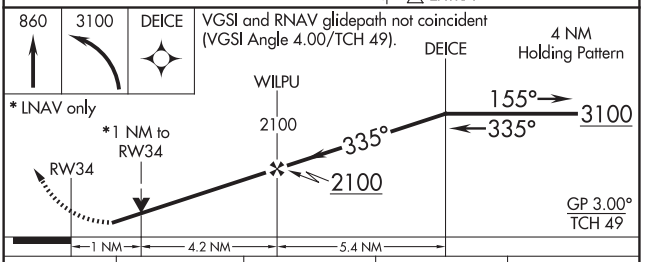
AWOS-3PT	FRESNO APP CON	UNICOM
120.175	**132.35 323.25**	**122.7** (CTAF) L



ELEV 386	TDZE 386



MIRL Rwy 16-34 L



CATEGORY	A	B	C	D
LPV DA	636-¾	250 (300-¾)	NA	
LNAV/VNAV DA	740-1	354 (400-1)	NA	
LNAV MDA	860-1	474 (500-1)	NA	
C CIRCLING	860-1	474 (500-1)	NA	

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RIO VISTA, CALIFORNIA | AL-5597 (FAA) | 22139

RNAV (GPS) RWY 25

RIO VISTA MUNI (O88)

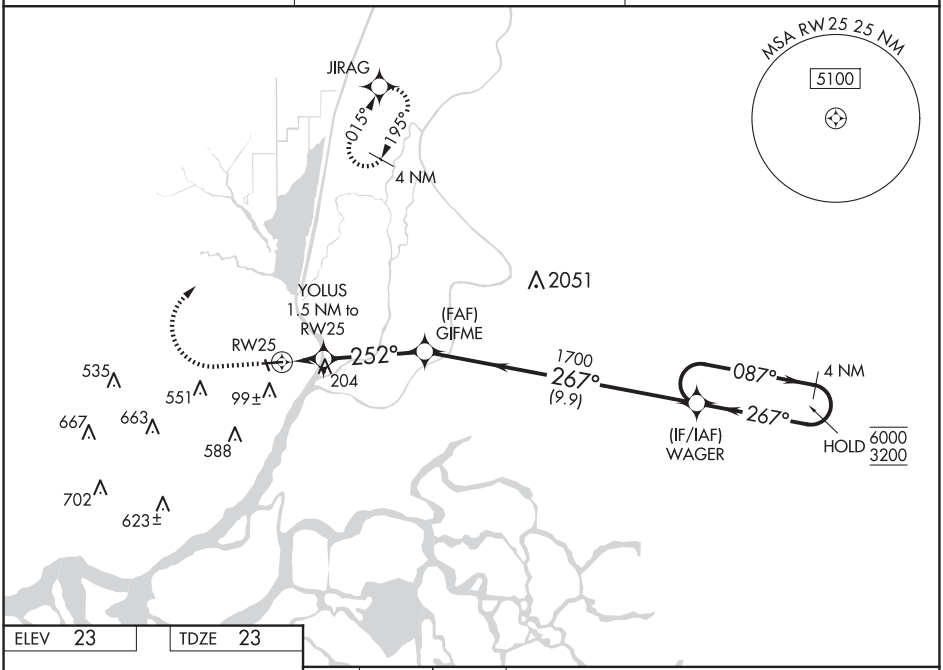
WAAS	APP CRS	Rwy Idg	4199
CH 82325	252°	TDZE	23
W25A		Apt Elev	23

RNP APCH - GPS.

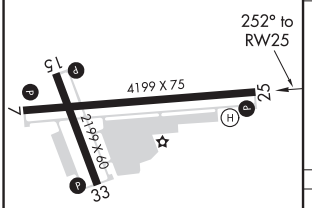
T A NA — Circling Rwy 33 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

MISSED APPROACH: Climb to 500 then climbing right turn to 3100 direct JIRAG and hold, continue climb-in-hold to 3100.

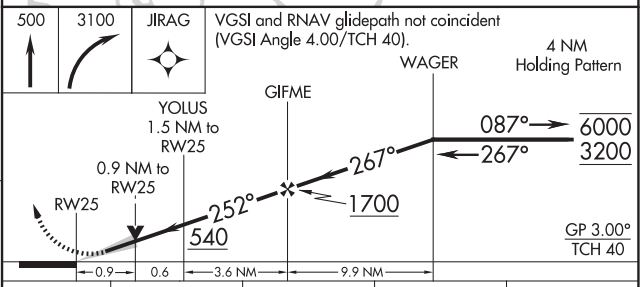
AWOS-AV	TRAVIS APP CON	UNICOM
127.075	119.9 257.9	122.725 (CTAF) L



ELEV 23 | TDZE 23



REIL Rwy 7, 15, 25 and 33 L
MIRL Rwys 7-25 and 15-33 L



CATEGORY	A	B	C	D
LPV DA	223-¾ 200 (200-¾)			NA
LNAV/VNAV DA	353-1 330 (400-1)			NA
LNAV MDA	460-1 437 (500-1)		460-1¼ 437 (500-1¼)	NA
C CIRCLING	460-1 437 (500-1)	600-1 577 (600-1)	940-2¾ 917 (1000-2¾)	NA

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SW-2, 07 AUG 2025 to 02 OCT 2025

LOC I-MCC	APP CRS	Rwy Idg	10599
109.7	163°	TDZE	77
		Apt Elev	77

ILS or LOC RWY 16

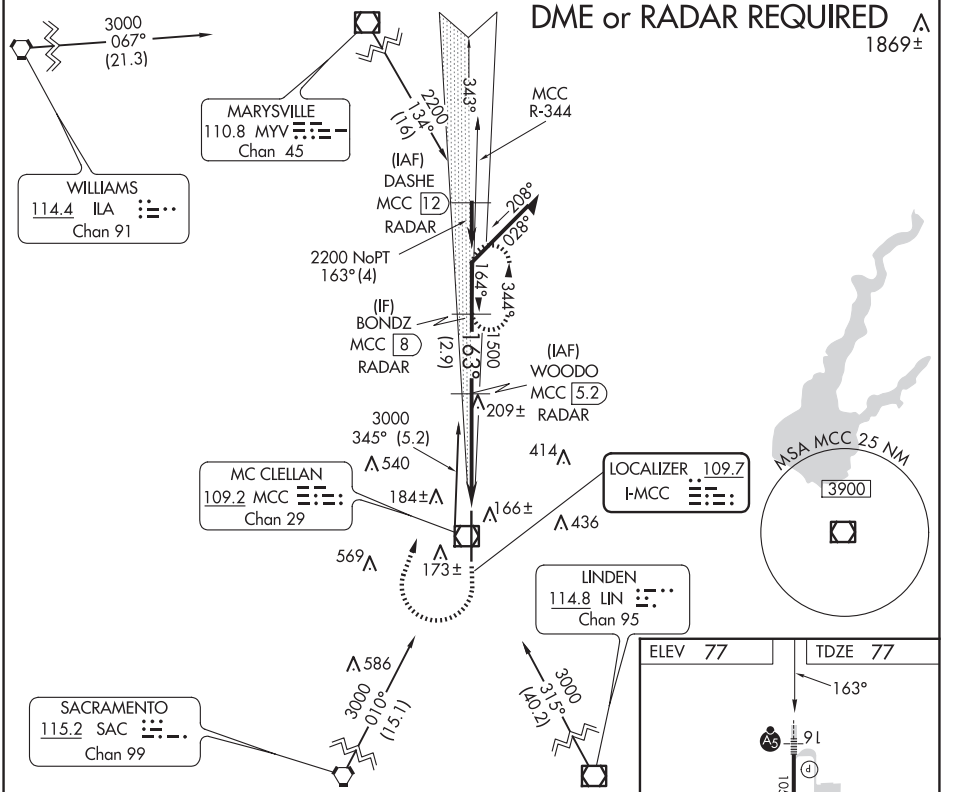
MC CLELLAN AIRFIELD (MCC)

NA DME from MCC VOR/DME. If local altimeter setting is not received, use Sacramento Intl altimeter setting and increase all DH/MDAs 40 feet.

MALSR

MISSED APPROACH: Climb to 1200 then climbing right turn to 2200 via MCC VOR/DME R-344 to BONDZ/MCC 8 DME/RADAR and hold.

AWOS-3	NORCAL APP CON	CLNC DEL	UNICOM
125.975	127.4 317.5	119.825	122.975 (CTAF) L



CATEGORY	A	B	C	D
S-ILS 16	277-½ 200 (200-½)			
S-LOC 16	460-½ 383 (400-½)			460-¾ 383 (400-¾)
CIRCLING	NA			

FAF to MAP 4.3 NM

Knots	60	90	120	150	180
Min:Sec	4:18	2:52	2:09	1:43	1:26

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

VOR/DME RWY 34

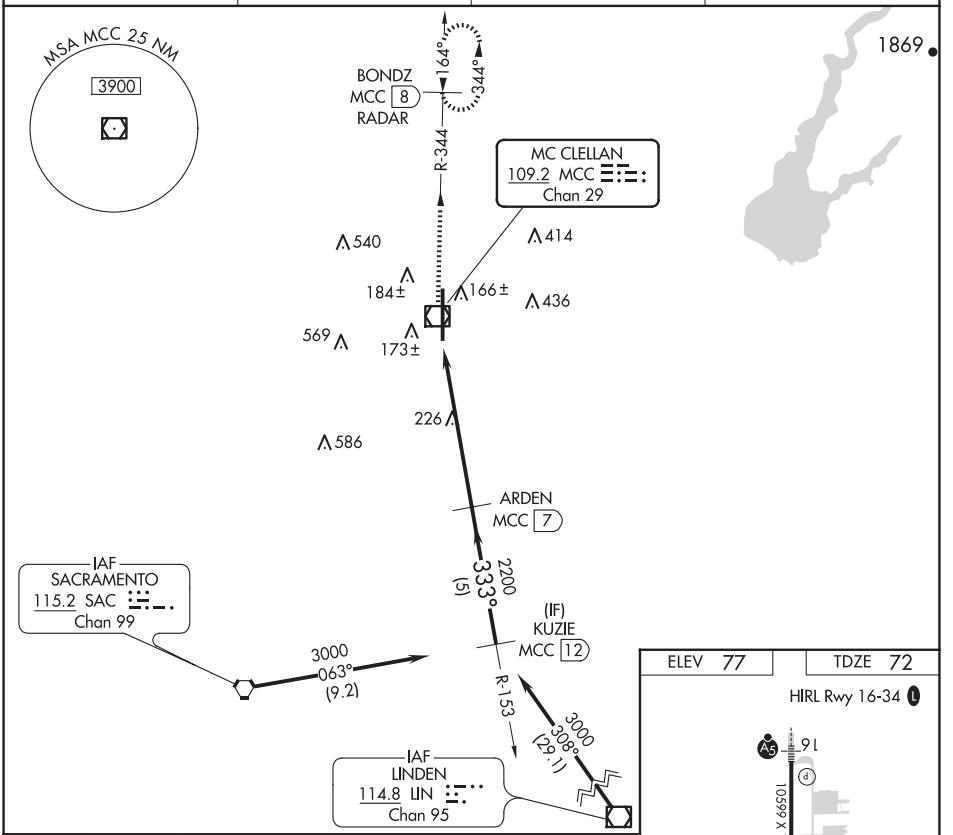
MC CLELLAN AIRFIELD (MCC)

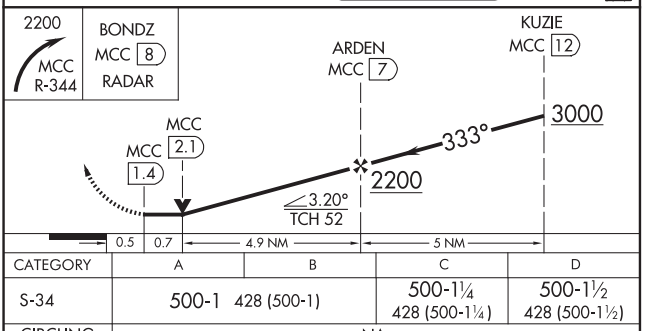
VOR/DME MCC	APP CRS	Rwy Idg 10599
109.2	333°	TDZE 72
Chan 29		Apt Elev 77

NA VDP NA when using Sacramento Intl altimeter setting. When local altimeter setting not received, use Sacramento Intl altimeter setting and increase all MDAs 40 feet.

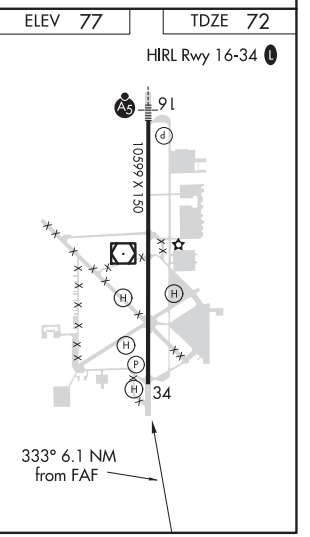
MISSED APPROACH: Climbing right turn to 2200 via MCC R-344 to BONDZ/MCC 8 DME/RADAR and hold.

AWOS-3	NORCAL APP CON	CLNC DEL	UNICOM
125.975	127.4 317.5	119.825	122.975 (CTAF) L





CATEGORY	A	B	C	D
S-34	500-1 428 (500-1)		500-1¼ 428 (500-1¼)	500-1½ 428 (500-1½)
CIRCLING	NA			

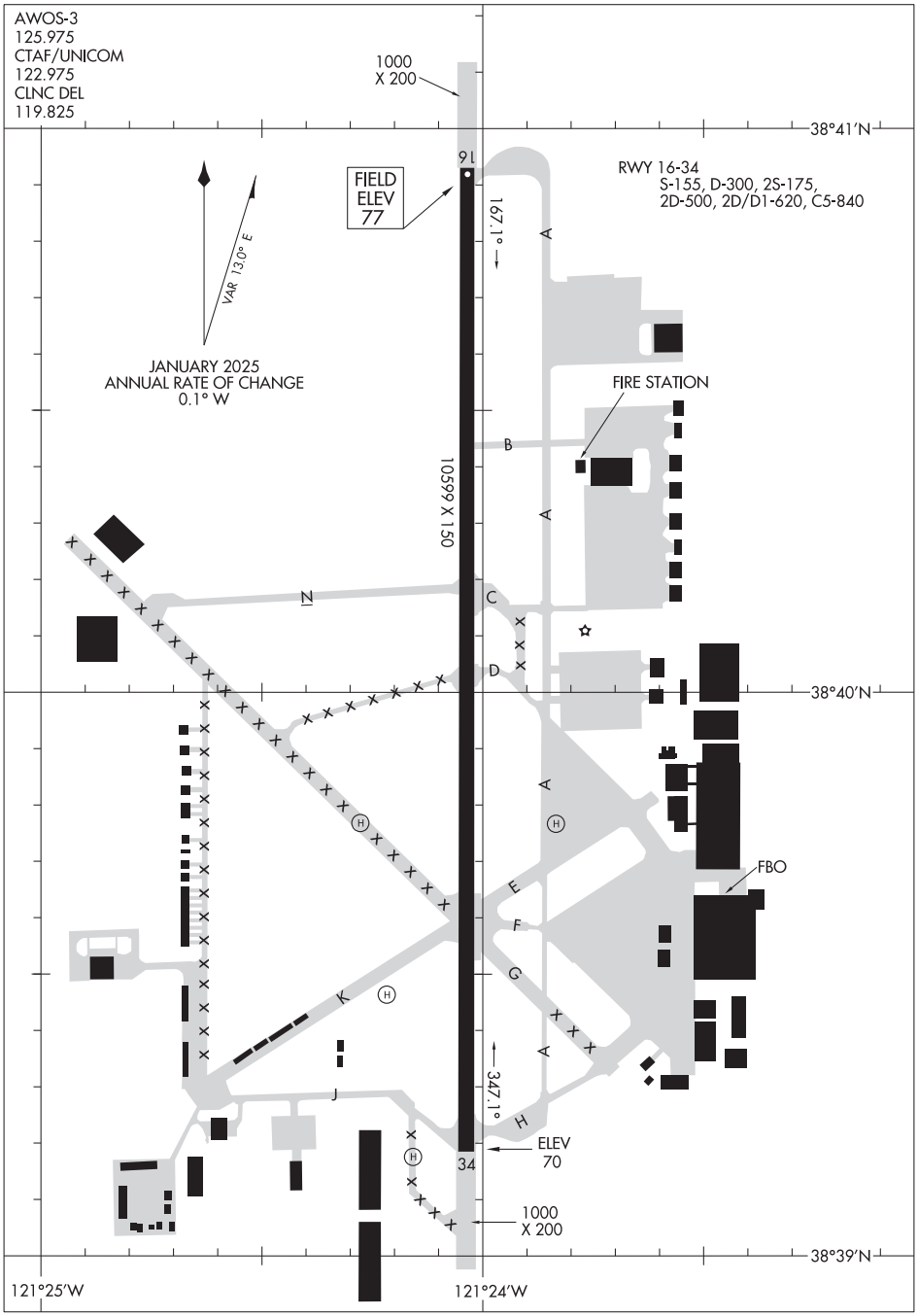


SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

AIRPORT DIAGRAM

MC CLELLAN AIRFIELD (MCC)

SACRAMENTO, CALIFORNIA



SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

AIRPORT DIAGRAM
25107
SACRAMENTO, CALIFORNIA
MC CLELLAN AIRFIELD (MCC)

LOC I-SAC	APP CRS	Rwy Ldg	5503
110.3	019°	TDZE	21
		Apt Elev	24

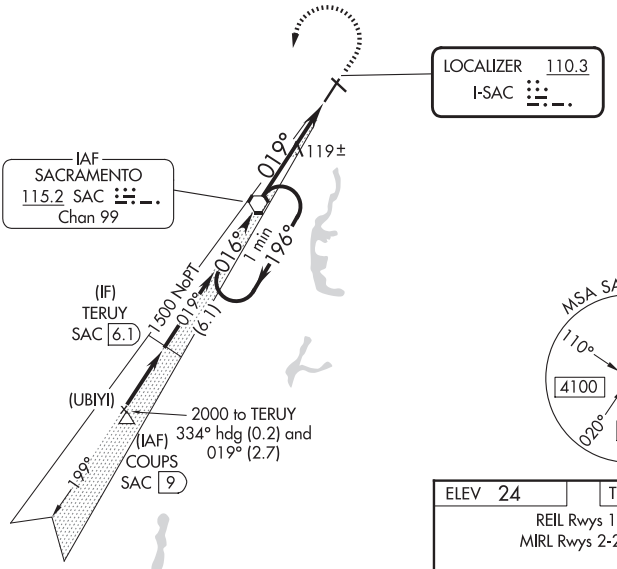
ILS or LOC RWY 2
SACRAMENTO EXEC (SAC)

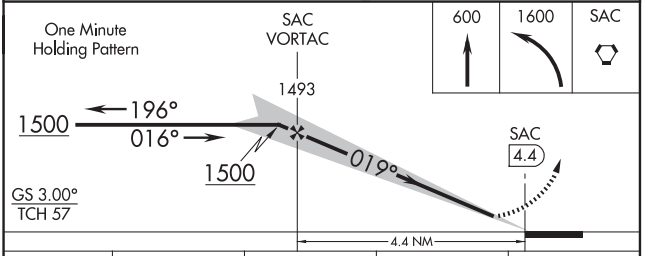
When local altimeter setting not received, use Sacramento Intl altimeter setting and increase DA to 322 feet, increase all MDAs 40 feet and Circling Cat D visibility ¼ SM. Autopilot coupled approach NA below 335 feet. For inop MALSR, increase S-ILS 2 all Cats visibility to ⅞ SM and S-LOC 2 Cat C/D visibility to 1 SM. For inop MALSR when using Sacramento Intl altimeter setting, increase S-ILS 2 all Cats visibility to ⅞ SM.

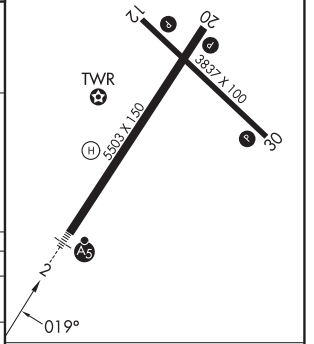
MALSR

MISSED APPROACH: Climb to 600 then climbing left turn to 1600 direct SAC VORTAC and hold.

ATIS	NORCAL APP CON	EXEC TOWER★	GND CON	UNICOM
118.075	125.25 257.9	119.5 (CTAF) L 278.8	125.0	122.95







CATEGORY	A	B	C	D
S-ILS 2	294-½ 273 (300-½)			
S-LOC 2	380-½ 359 (400-½)		380-⅝ 359 (400-⅝)	
CIRCLING	500-1 476 (500-1)	520-1 496 (500-1)	560-1½ 536 (600-1½)	800-2½ 776 (800-2½)

FAF to MAP 4.4 NM

Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS	APP CRS	Rwy Ldg	5503
CH 62810	019°	TDZE	21
W02A		Apt Elev	24

RNAV (GPS) RWY 2
SACRAMENTO EXEC (SAC)

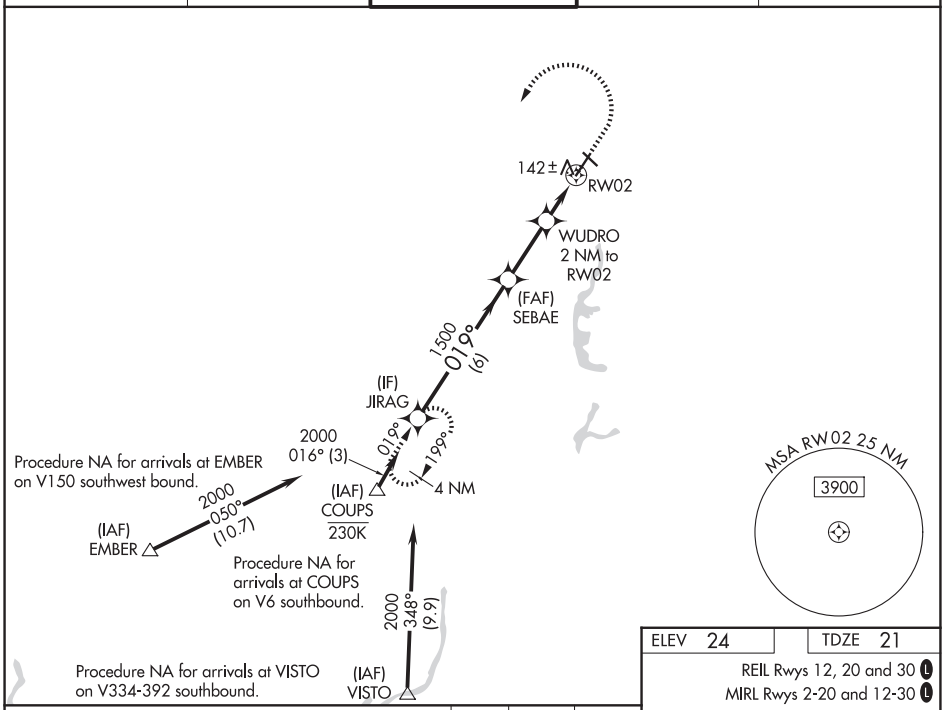
RNP APCH-GPS.

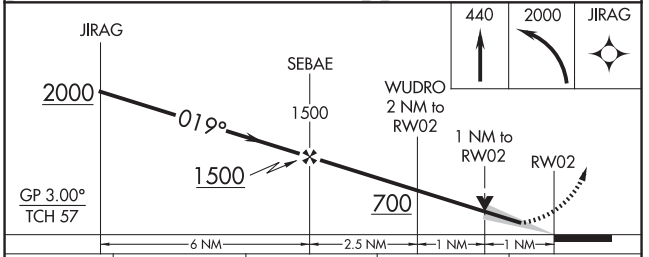
T A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1°C or above 54°C. For inop ALS, increase LNAV/VNAV all Cats visibility to ⅞ SM, increase LNAV all Cats visibility to 1 SM.

MALSR A5

MISSED APPROACH: Climb to 440 then climbing left turn to 2000 direct JIRAG and hold.

ATIS	NORCAL APP CON	EXEC TOWER ★	GND CON	UNICOM
118.075	125.25 257.9	119.5 (CTAF) L 278.8	125.0	122.95



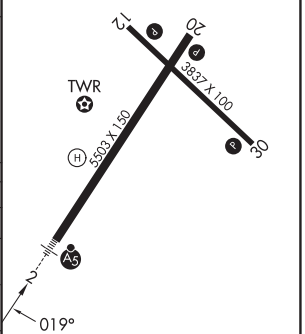


CATEGORY	A	B	C	D
LPV DA	221-½ 200 (200-½)			
LNAV/VNAV DA	304-½ 283 (300-½)			
LNAV MDA	400-½ 379 (400-½)		400-⅝ 379 (400-⅝)	
CIRCLING	500-1 476 (500-1)	520-1 496 (500-1)	560-1½ 536 (600-1½)	800-2½ 776 (800-2½)

ELEV 24 TDZE 21

REIL Rwys 12, 20 and 30 L

MIRL Rwys 2-20 and 12-30 L



SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

VORTAC SAC	APP CRS	Rwy Ldg	5503
115.2	016°	TDZE	21
Chan 99		Apt Elev	24

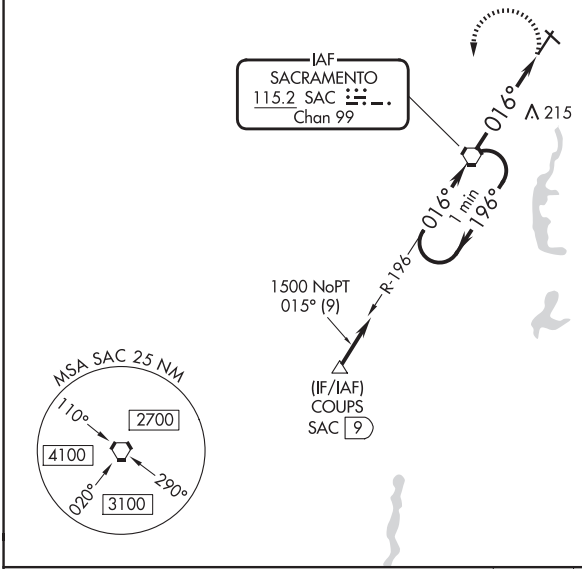
VOR RWY 2
SACRAMENTO EXEC (SAC)

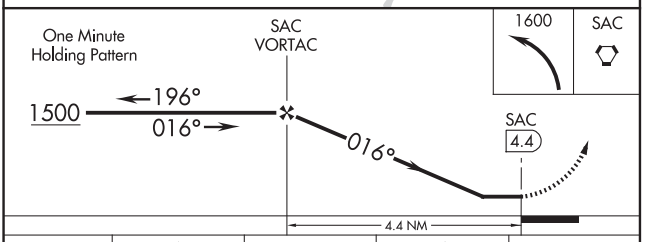
When local altimeter setting not received, use Sacramento Intl altimeter setting and increase all MDAs 40 feet and Circling Cat D visibility ¼ SM.

MALSR

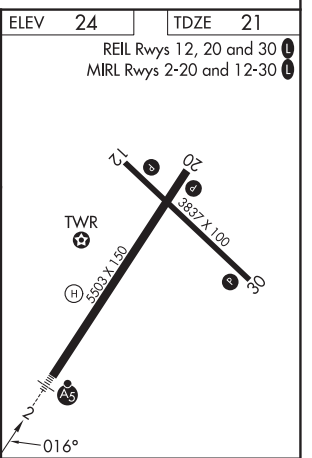
MISSED APPROACH: Climbing left turn to 1600 direct SAC VORTAC and hold.

ATIS	NORCAL APP CON	EXEC TOWER ★	GND CON	UNICOM
118.075	125.25 257.9	119.5 (CTAF) L 278.8	125.0	122.95



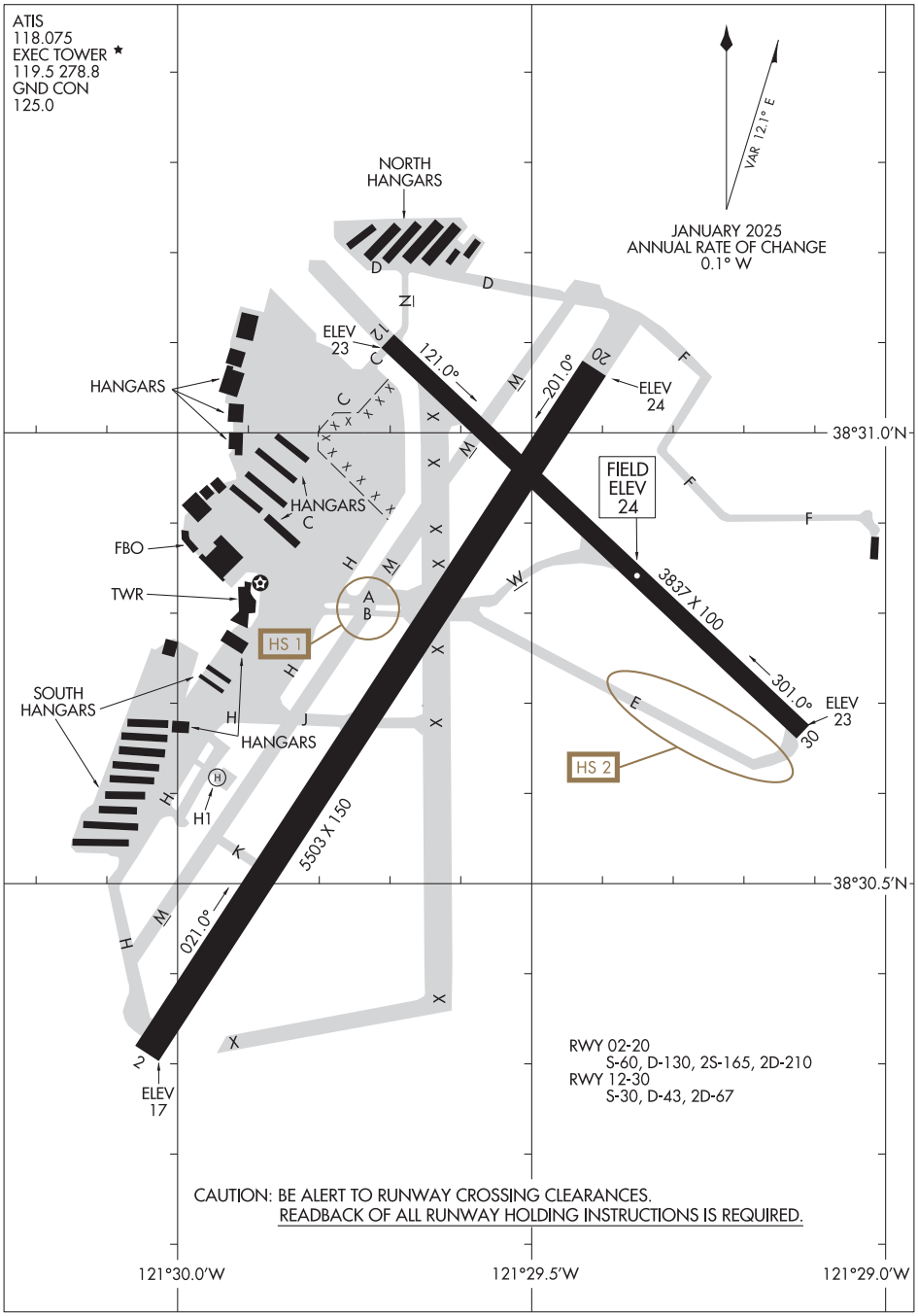


CATEGORY	A	B	C	D
S-2	520-½	499 (500-½)	520-1	499 (500-1)
CIRCLING	520-1	496 (500-1)	560-1½ 536 (600-1½)	800-2½ 776 (800-2½)



FAF to MAP 4.4 NM					
Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025



SW-2, 07 AUG 2025 to 02 OCT 2025

SACRAMENTO, CALIFORNIA | AL-5490 (FAA) | 25163

ILS or LOC RWY 17L

SACRAMENTO INTL (SMF)

LOC/DME I-MDK	APP CRS	Rwy Ldg	8605
111.75	168°	TDZE	27
Chan 54 (Y)		Apt Elev	27

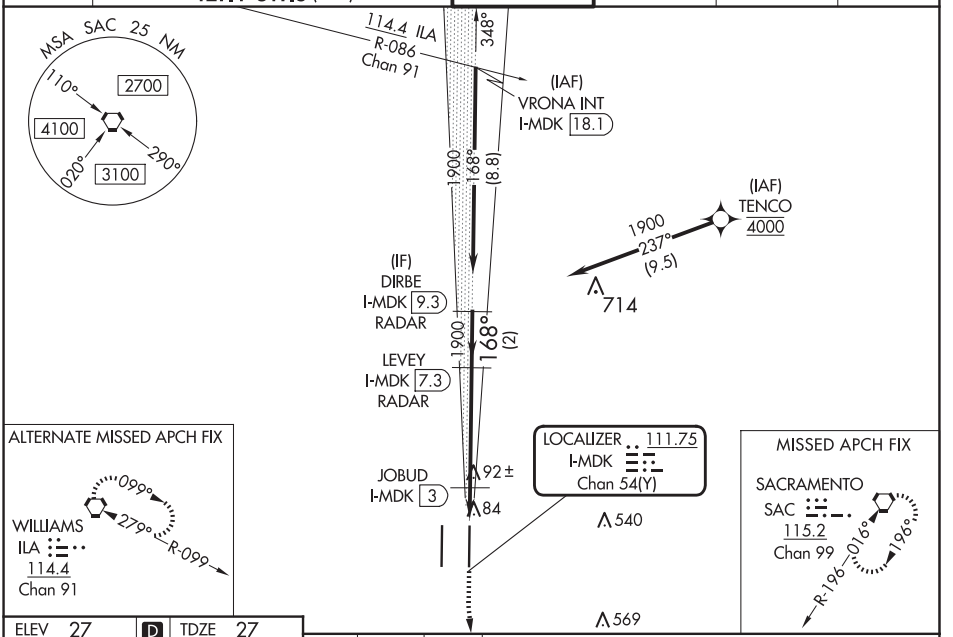
Aircraft not GPS equipped - RADAR required for procedure entry. DME or RADAR required. RNP APCH-GPS. From TENCO.

T A Simultaneous approach authorized. Circling NA west of Rwy 17L-35R. For inop ALS, increase S-LOC 17L Cat C/D visibility to 1⅜ SM and JOBUD fix minimums S-LOC 17L Cat C/D visibility to RVR 4500.

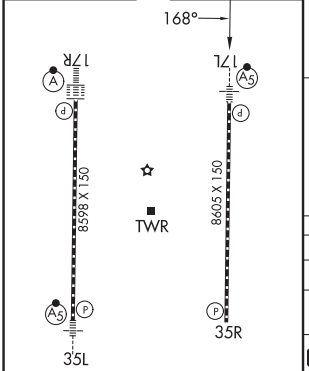
MALSR

MISSED APPROACH: Climb to 500 then climbing left turn to 3000 direct SAC VORTAC and hold.

D-ATIS	NORCAL APP CON	CAPITOL TOWER	GND CON	CLNC DEL	CPDLC
126.75	125.4 259.1 (W-NE) 125.25 257.9 (SW) 127.4 317.5 (E-SE)	125.7 256.7	121.7 256.7	121.1 256.7	



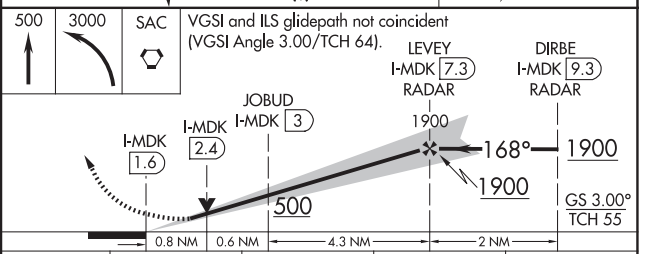
ELEV 27 | D | TDZE 27



TDZ/CL Rwys 17L and 17R
HIRL Rwys 17R-35L and 17L-35R

FAF to MAP 5.7 NM

Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54



CATEGORY	A	B	C	D
S-ILS 17L	227/18 200 (200-½)			
S-LOC 17L	500/24 473 (500-½)		500/50 473 (500-1)	
C CIRCLING	500-1 473 (500-1)		500-1½ 473 (500-1½)	840-2¾ 813 (900-2¾)
JOBUD FIX MINIMUMS (DME REQUIRED)				
S-LOC 17L	340/24 313 (400-½)			
C CIRCLING	400-1 373 (400-1)	480-1 453 (500-1)	480-1½ 453 (500-1½)	840-2¾ 813 (900-2¾)

SACRAMENTO, CALIFORNIA
Amdt 4D 23FEB23

38°42'N-121°35'W

SACRAMENTO INTL (SMF)

ILS or LOC RWY 17L

SW-2, 07 AUG 2025 to 02 OCT 2025

LOC/DME I-SMF	APP CRS	Rwy Ldg 8598
111.1	168°	TDZE 25
Chan 48		Apt Elev 27

ILS or LOC RWY 17R

SACRAMENTO INTL (SMF)

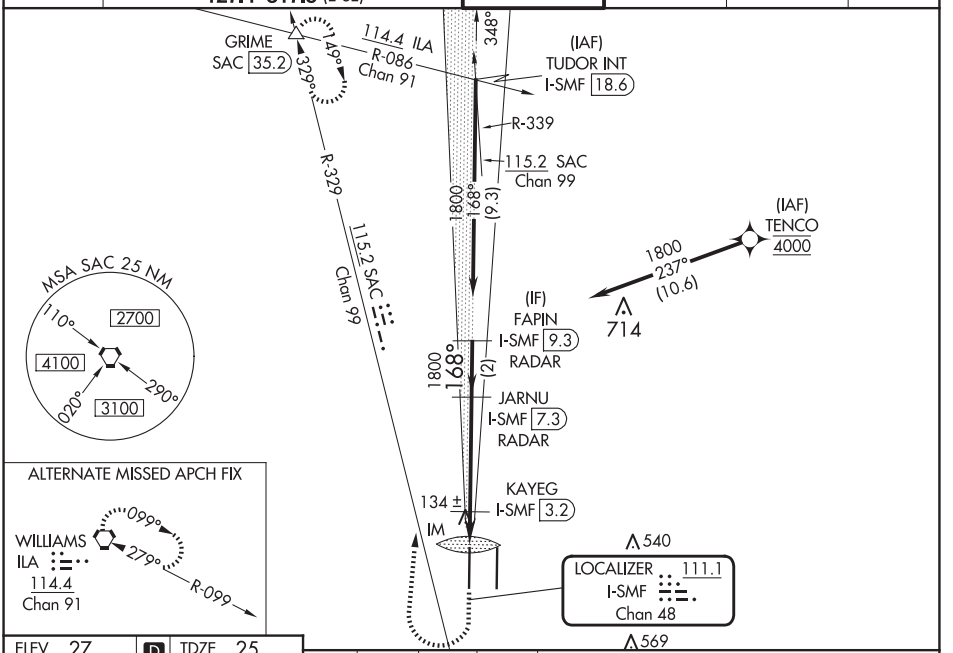
Aircraft not GPS equipped - RADAR required for procedure entry. DME or RADAR required. RNP APCH-GPS. From TENCO.

Simultaneous approach authorized. Circling NA east of Rwy 17R-35L.

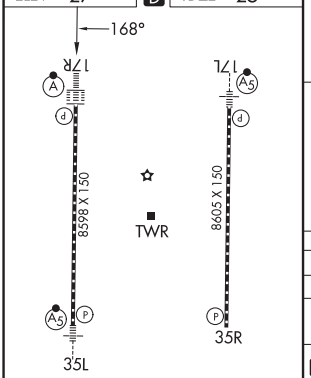
ALSF-2

MISSED APPROACH: Climb to 500 then climbing right turn to 2000 on heading 350° and SAC VORTAC R-329 to GRIME INT/SAC 35.2 DME and hold.

D-ATIS	NORCAL APP CON	CAPITOL TOWER	GND CON	CLNC DEL	CPDLC
126.75	125.4 259.1 (W-NE) 125.25 257.9 (SW) 127.4 317.5 (E-SE)	125.7 256.7	121.7 256.7	121.1 256.7	



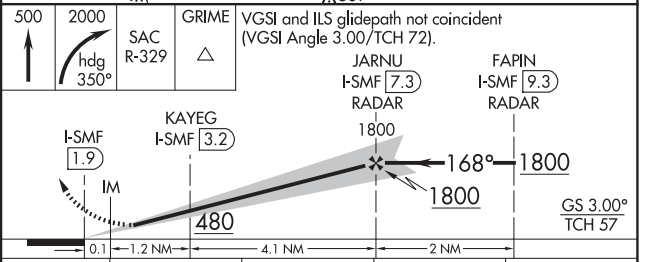
ELEV 27	D	TDZE 25



TDZ/CL Rwys 17L and 17R
HIRL Rwys 17R-35L and 17L-35R

FAF to MAP 5.4 NM

Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48



CATEGORY	A	B	C	D
S-ILS 17R	225/18		200 (200-½)	
S-LOC 17R	480/24 455 (500-½)		480/45 455 (500-⅞)	
C CIRCLING	480-1 453 (500-1)		480-1½ 453 (500-1½)	580-2 553 (600-2)
KAYEG FIX MINIMUMS (DME REQUIRED)				
S-LOC 17R	400/24 375 (400-½)		400/35 375 (400-⅝)	
C CIRCLING	440-1 413 (500-1)	480-1 453 (500-1)	480-1½ 453 (500-1½)	580-2 553 (600-2)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

LOC/DME I-HUX	APP CRS	Rwy Ldg	8598
111.1	348°	TDZE	24
Chan 48		Apt Elev	27

ILS or LOC RWY 35L

SACRAMENTO INTL (SMF)

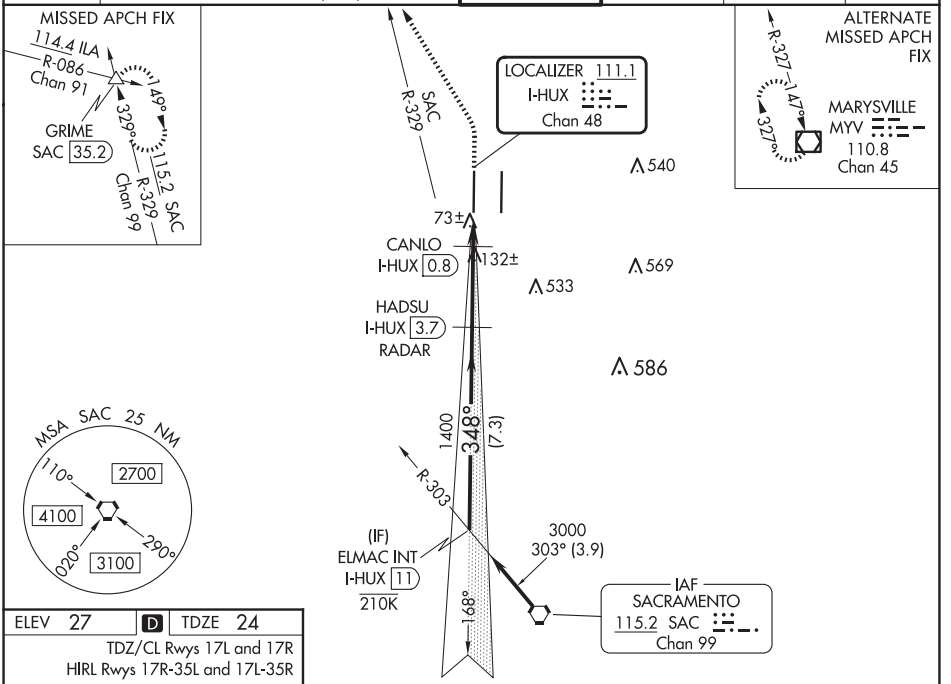
DME required.

T Circling NA east of Rwy 17R-35L. Autopilot coupled approach NA below 312 MSL. For inop ALS, increase S-LOC 35L Cats C/D visibility to RVR 4500.
*RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 500 then climbing left turn to 2000 on heading 320° and SAC VORTAC R-329 to GRIME INT/SAC 35.2 DME and hold.

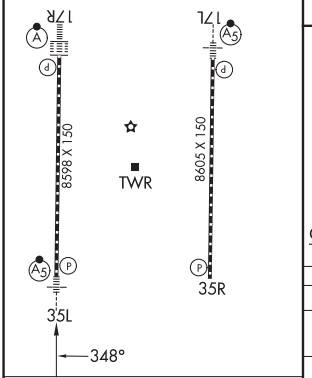
D-ATIS	NORCAL APP CON	CAPITOL TOWER	GND CON	CLNC DEL	CPDLC
126.75	125.4 259.1 (W-NE) 125.25 257.9 (SW) 127.4 317.5 (E-SE)	125.7 256.7	121.7 256.7	121.1 256.7	



Procedure NA for arrivals on SAC VORTAC airway radials 257 CW 329.

ELEV 27	D	TDZE 24

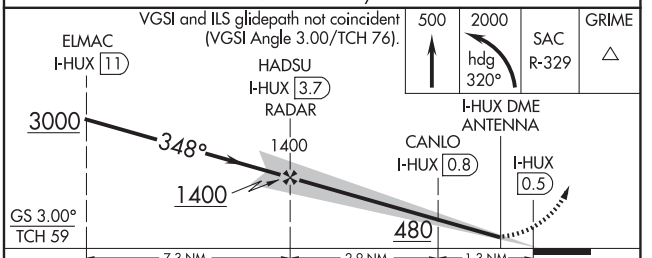
TDZ/CL Rwys 17L and 17R
HIRL Rwys 17R-35L and 17L-35R



FAF to MAP 4.1 NM

Knots	60	90	120	150	180
Min:Sec	4:06	2:44	2:03	1:38	1:22

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 76).



CATEGORY	A	B	C	D
S-ILS 35L*	224/24 200 (200-½)			
S-LOC 35L	340/24 316 (400-½)			
C CIRCLING	440-1 413 (500-1)	480-1 453 (500-1)	480-1½ 453 (500-1½)	580-2 553 (600-2)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

LOC/DME I-SMF	APP CRS	Rwy Ldg 8598
111.1	168°	TDZE 25
Chan 48		Apt Elev 27

ILS RWY 17R (SA CAT I)

SACRAMENTO INTL (SMF)

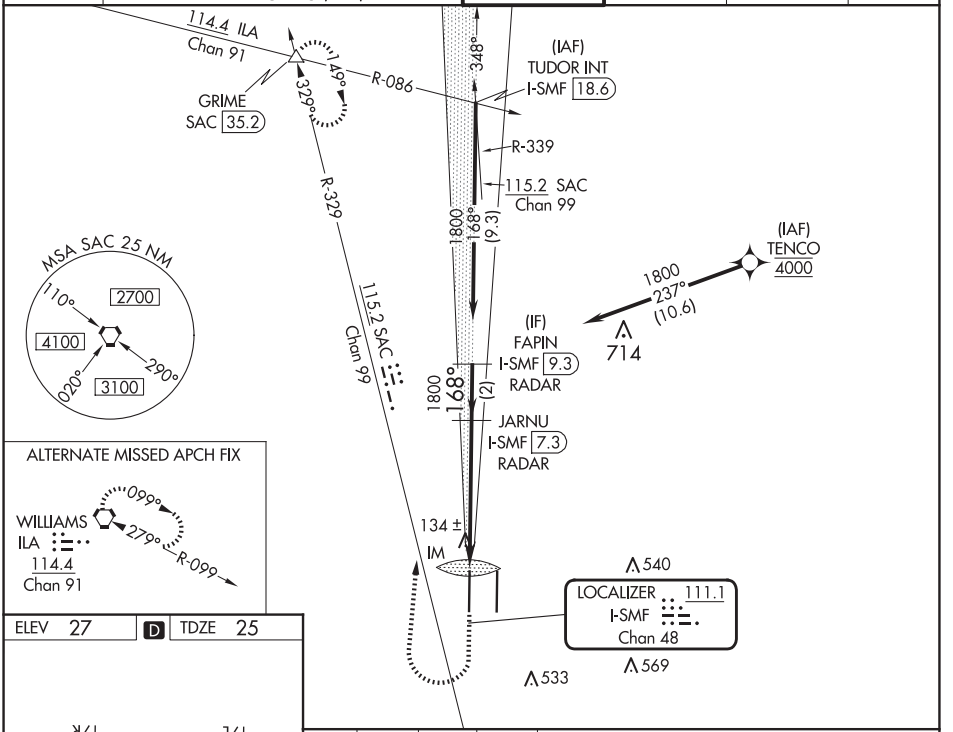
Aircraft not GPS equipped - RADAR required for procedure entry. DME or RADAR required. RNP APCH-GPS. From TENCO.

Simultaneous approach authorized. Requires specific OPSPEC, MSPEC, or LOA approval.

ALSF-2

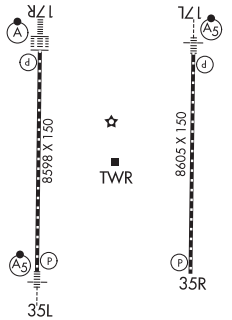
MISSED APPROACH: Climb to 500 then climbing right turn to 2000 on heading 350° and SAC VORTAC R-329 to GRIME INT/SAC 35.2 DME and hold.

D-ATIS	NORCAL APP CON	CAPITOL TOWER	GND CON	CLNC DEL	CPDLC
126.75	125.4 259.1 (W-NE) 125.25 257.9 (SW) 127.4 317.5 (E-SE)	125.7 256.7	121.7 256.7	121.1 256.7	



ALTERNATE MISSED APCH FIX

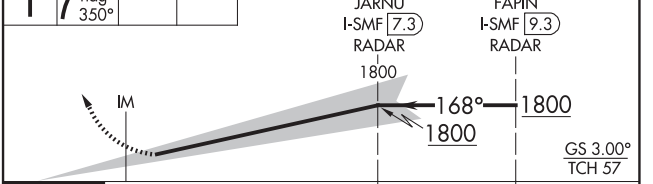
ELEV 27 | D | TDZE 25



TDZ/CL Rwys 17L and 17R
HIRL Rwys 17R-35L and 17L-35R

500	2000 hdg 350°	SAC R-329	GRIME

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 72).



CATEGORY	A	B	C	D
S-ILS 17R	RA 154/14 150 DA 175			

SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-2, 07 AUG 2025 to 02 OCT 2025

LOC/DME I-SMF	APP CRS	Rwy Ldg 8598
111.1	168°	TDZE 25
Chan 48		Apt Elev 27

ILS RWY 17R (CAT II & III)

SACRAMENTO INTL (SMF)

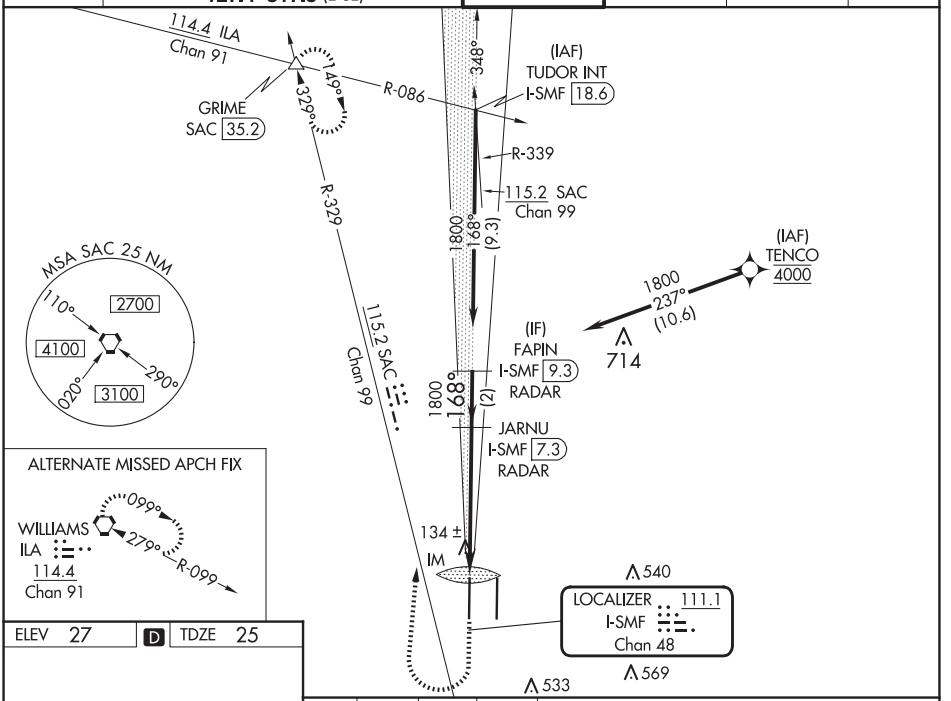
Aircraft not GPS equipped - RADAR required for procedure entry. DME or RADAR required. RNP APCH-GPS. From TENCO.

Simultaneous approach authorized.

ALSF-2

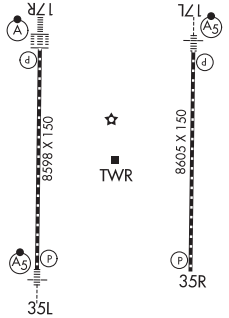
MISSED APPROACH: Climb to 500 then climbing right turn to 2000 on heading 350° and SAC VORTAC R-329 to GRIME INT/SAC 35.2 DME and hold.

D-ATIS	NORCAL APP CON	CAPITOL TOWER	GND CON	CLNC DEL	CPDLC
126.75	125.4 259.1 (W-NE) 125.25 257.9 (SW) 127.4 317.5 (E-SE)	125.7 256.7	121.7 256.7	121.1 256.7	

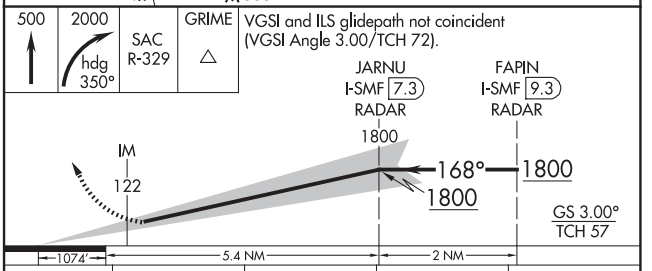


ALTERNATE MISSED APCH FIX

ELEV 27 D TDZE 25



TDZ/CL Rwys 17L and 17R
HIRL Rwys 17R-35L and 17L-35R



CATEGORY	A	B	C	D
S-ILS 17R	CAT II RA 103/12 100 DA 125			
S-ILS 17R	CAT III RVR 06			

CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-2, 07 AUG 2025 to 02 OCT 2025

ILS RWY 17L (SA CAT II)

SACRAMENTO INTL (SMF)

LOC/DME I-MDK	APP CRS	Rwy Ldg	8605
111.75	168°	TDZE	27
Chan 54 (Y)		Apt Elev	27

Aircraft not GPS equipped - RADAR required for procedure entry. DME or RADAR required. RNP APCH-GPS. From TENCO.

Simultaneous approach authorized. Requires specific OPSPEC, MSPEC or LOA approval.

MALSR

MISSED APPROACH: Climb to 500 then climbing left turn to 3000 direct SAC VORTAC and hold.

D-ATIS	NORCAL APP CON	CAPITOL TOWER	GND CON	CLNC DEL	CPDLC
126.75	125.4 259.1 (W-NE) 125.25 257.9 (SW) 127.4 317.5 (E-SE)	125.7 256.7	121.7 256.7	121.1 256.7	

MSA SAC 25 NM
110° 2700
4100
020° 3100
290°

114.4 ILA Chan 91 R-086

348°

(IAF) VRONA INT I-MDK 18.1

1900 168° (8.8)

(IAF) TENCO 4000

1900 237° (9.5)

714

(IF) DIRBE I-MDK 9.3 RADAR

1900 168° (2)

LEVEY I-MDK 7.3 RADAR

LOCALIZER 111.75 I-MDK Chan 54(Y)

92±

84

540

569

533

ALTERNATE MISSED APCH FIX

099° 279° R-099

WILLIAMS ILA 114.4 Chan 91

MISSED APCH FIX

SACRAMENTO SAC 115.2 Chan 99

016° 196° R-196

ELEV 27 D TDZ 27

17R 17L

8598 X 150 8605 X 150

TWR

35L 35R

TDZ/CL Rwys 17L and 17R
HIRL Rwys 17R-35L and 17L-35R

500 3000 SAC

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 64).

LEVEY I-MDK 7.3 RADAR

DIRBE I-MDK 9.3 RADAR

1900 168° 1900 1900

GS 3.00° TCH 55

1059' 5.7 NM 2 NM

CATEGORY	A	B	C	D
S-ILS 17L	RA 108/12 100 DA 127			

SA CATEGORY II ILS-SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (RNP) Z RWY 17L

SACRAMENTO INTL (SMF)

APP CRS	Rwy Ldg	8605
168°	TDZE	27
	Apt Elev	27

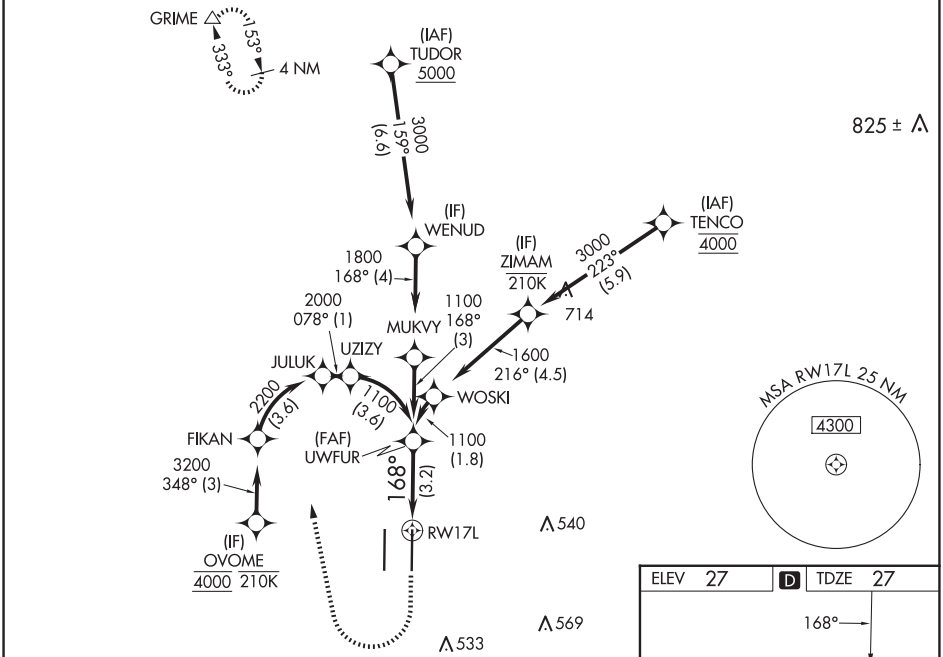
RNP AR APCH-GPS.

For uncompensated Baro-VNAV systems, procedure NA below -2°C or above 54°C. For inop ALS, increase RNP 0.12 all Cats visibility to RVR 4000; increase RNP 0.30 all Cats visibility to RVR 4500.

MALSR

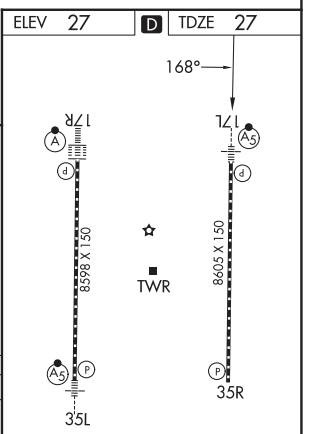
MISSED APPROACH: Climb to 500 then right turn to 3000 direct GRIME and hold.
*Missed approach requires minimum climb of 290 feet per NM to 3000.
#Missed approach requires minimum climb of 300 feet per NM to 3000.

D-ATIS	NORCAL APP CON	CAPITOL TOWER	GND CON	CLNC DEL	CPDLC
126.75	125.4 259.1 (W-NE) 125.25 257.9 (SW) 127.4 317.5 (E-SE)	125.7 256.7	121.7 256.7	121.1 256.7	

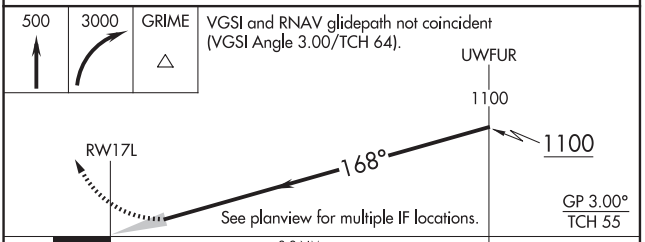


SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025



TDZ/CL Rwys 17L and 17R
HIRL Rwys 17R-35L and 17L-35R



CATEGORY	A	B	C	D
RNP 0.12 DA#	277/24 250 (300-½)			
RNP 0.30 DA*	339/24 312 (400-½)			

AUTHORIZATION REQUIRED

APP CRS	Rwy Ldg	8598
168°	TDZE	25
	Apt Elev	27

RNAV (RNP) Z RWY 17R

SACRAMENTO INTL (SMF)

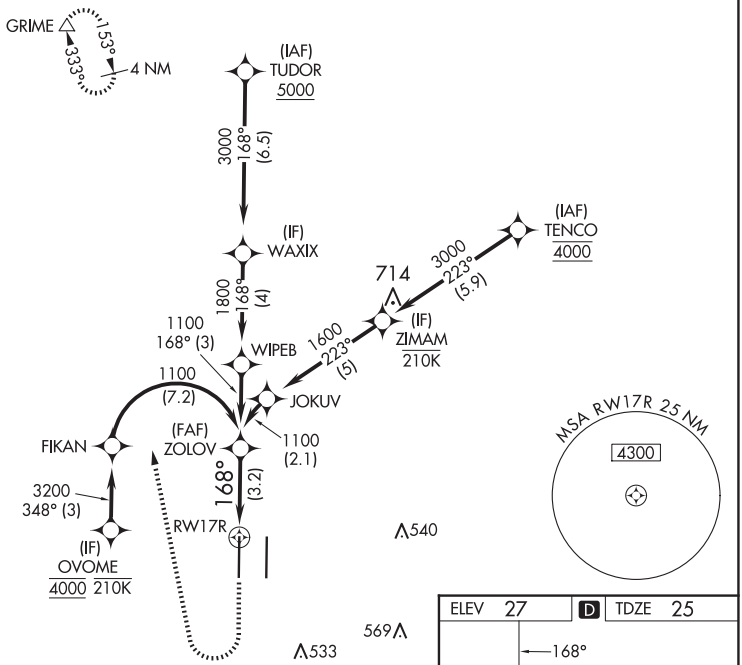
RNP AR APCH-GPS.

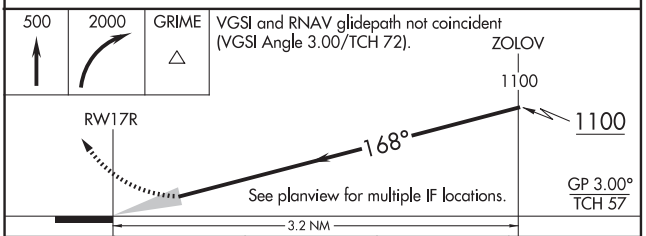
For uncompensated Baro-VNAV systems, procedure NA below -2°C or above 54°C. For inop ALS, increase RNP 0.10 all Cats visibility to RVR 4000; increase RNP 0.18 all Cats visibility to RVR 4500 and RNP 0.30 all Cats visibility to RVR 5500.

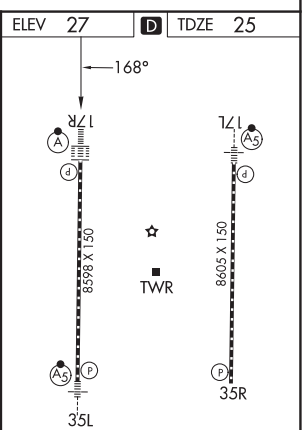
ALSF-2

MISSED APPROACH: Climb to 500 then climbing right turn to 2000 direct GRIME and hold.

D-ATIS	NORCAL APP CON	CAPITOL TOWER	GND CON	CLNC DEL	CPDLC
126.75	125.4 259.1 (W-NE) 125.25 257.9 (SW) 127.4 317.5 (E-SE)	125.7 256.7	121.7 256.7	121.1 256.7	







CATEGORY	A	B	C	D
RNP 0.10 DA	275/24 250 (300-½)			
RNP 0.18 DA	326/24 301 (300-½)			
RNP 0.30 DA	385/30 360 (400-⅝)			

AUTHORIZATION REQUIRED

TDZ/CL Rwys 17L and 17R
HIRL Rwys 17R-35L and 17L-35R

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

SACRAMENTO, CALIFORNIA | AL-5490 (FAA) | 25163

APP CRS	Rwy Ldg	8598
348°	TDZE	24
	Apt Elev	27

RNAV (RNP) Z RWY 35L

SACRAMENTO INTL (SMF)

RNP AR APCH-GPS.

T For uncompensated Baro-VNAV systems, procedure NA below -2°C or above 54°C. For inop ALS, increase RNP 0.12 all Cats visibility to RVR 4500; increase RNP 0.30 all Cats visibility to RVR 5500.

MALSR

MISSED APPROACH: Climb to 2000 on track 348° to JARNU and track 321° to GRIME and hold.

D-ATIS	NORCAL APP CON	CAPITOL TOWER	GND CON	CLNC DEL	CPDLC
126.75	125.4 259.1 (W-NE) 125.25 257.9 (SW) 127.4 317.5 (E-SE)	125.7 256.7	121.7 256.7	121.1 256.7	

MISSED APCH FIX

GRIME 153° 333° 4 NM

(IAF) PIECH 4000

4000 173° (33.8)

321° (14.4)

JARNU

348° (6.8)

714 ∧

(IF) BANZA 4000 210K

3200 168° (3)

RW35L

348° (3.2)

∧540

∧569

∧533

ZITUL

(FAF) WOMAV

1100 (6.9)

1100 348° (8.2)

(IF) ELMAC 3000 210K

MSA RW35L 25 NM 4300

(IAF) ISYOH 6000

3000 026° (9.9)

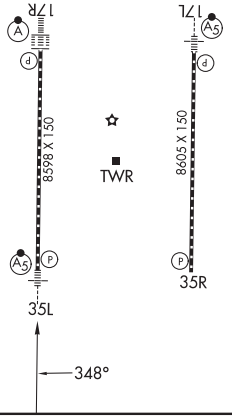
3000 299° (24.9)

(IAF) MYNRR 9000

ELEV 27 | D | TDZE 24

TDZ/CL Rwys 17L and 17R

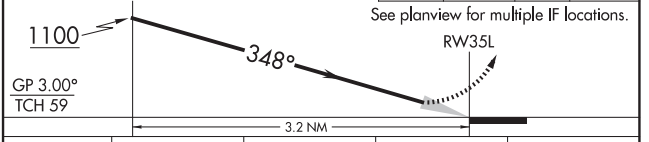
HIRL Rwys 17R-35L and 17L-35R



VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 76).

2000 tr 348° | JARNU | tr 321° | GRIME

See planview for multiple IF locations.



CATEGORY	A	B	C	D
RNP 0.12 DA		318/24	294 (300-½)	
RNP 0.30 DA		382/30	358 (400-⅝)	

AUTHORIZATION REQUIRED

SACRAMENTO, CALIFORNIA

Amdt 2 24MAR22

38°42'N-121°35'W

SACRAMENTO INTL (SMF)

RNAV (RNP) Z RWY 35L

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (RNP) Z RWY 35R

SACRAMENTO INTL (SMF)

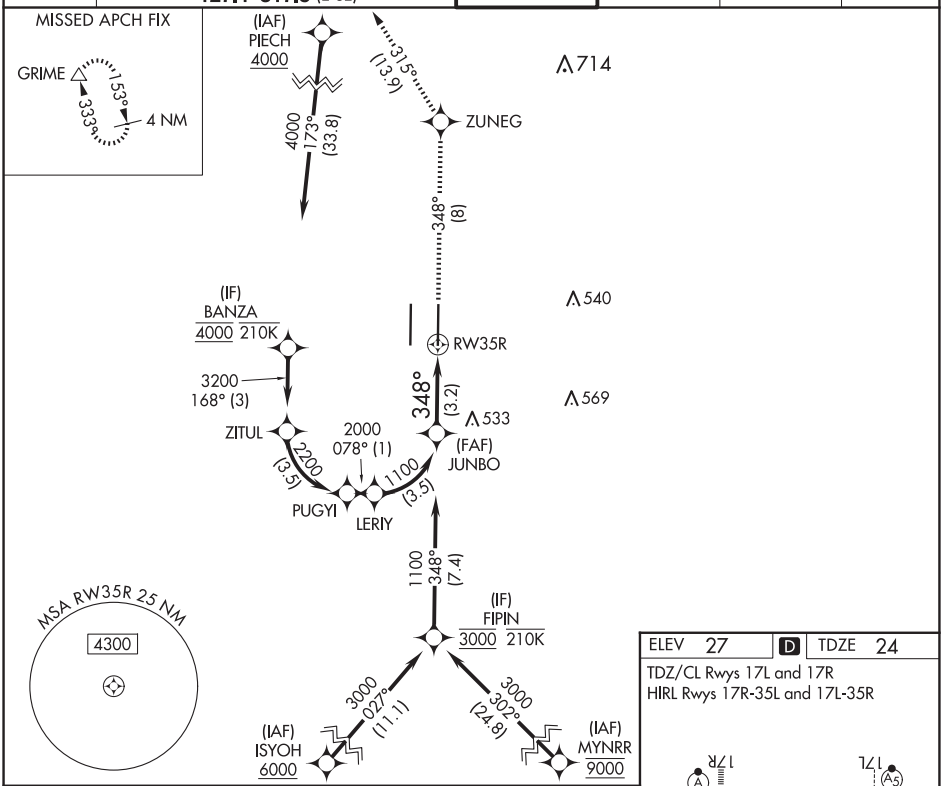
APP CRS	Rwy Ldg	8605
348°	TDZE	24
	Apt Elev	27

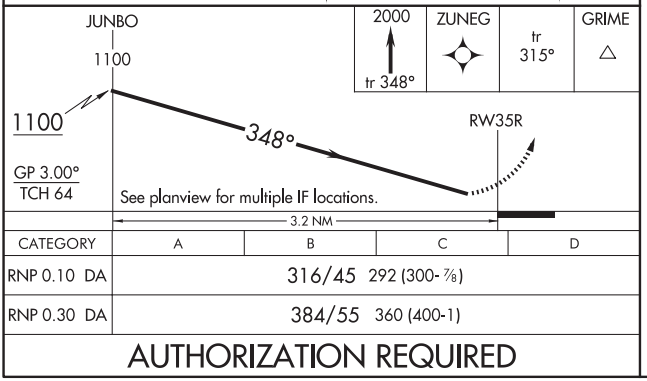
RNP AR APCH-GPS.

For uncompensated Baro-VNAV systems, procedure NA below -2°C or above 54°C.

MISSED APPROACH: Climb to 2000 on track 348° to ZUNEG and on track 315° to GRIME and hold.

D-ATIS	NORCAL APP CON	CAPITOL TOWER	GND CON	CLNC DEL	CPDLC
126.75	125.4 259.1 (W-NE) 125.25 257.9 (SW) 127.4 317.5 (E-SE)	125.7 256.7	121.7 256.7	121.1 256.7	





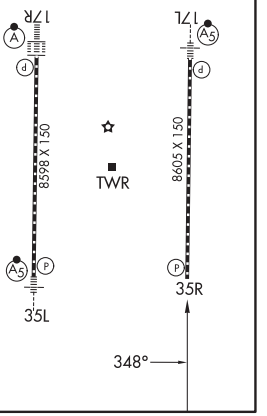
CATEGORY	A	B	C	D
RNP 0.10 DA	316/45 292 (300-⅞)			
RNP 0.30 DA	384/55 360 (400-1)			

AUTHORIZATION REQUIRED

ELEV 27 D TDZE 24

TDZ/CL Rwys 17L and 17R

HIRL Rwys 17R-35L and 17L-35R



SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) Y RWY 17L

SACRAMENTO INTL (SMF)

WAAS CH 78327 W17B	APP CRS 168°	Rwy Ldg 8605	TDZE 27	Apt Elev 27

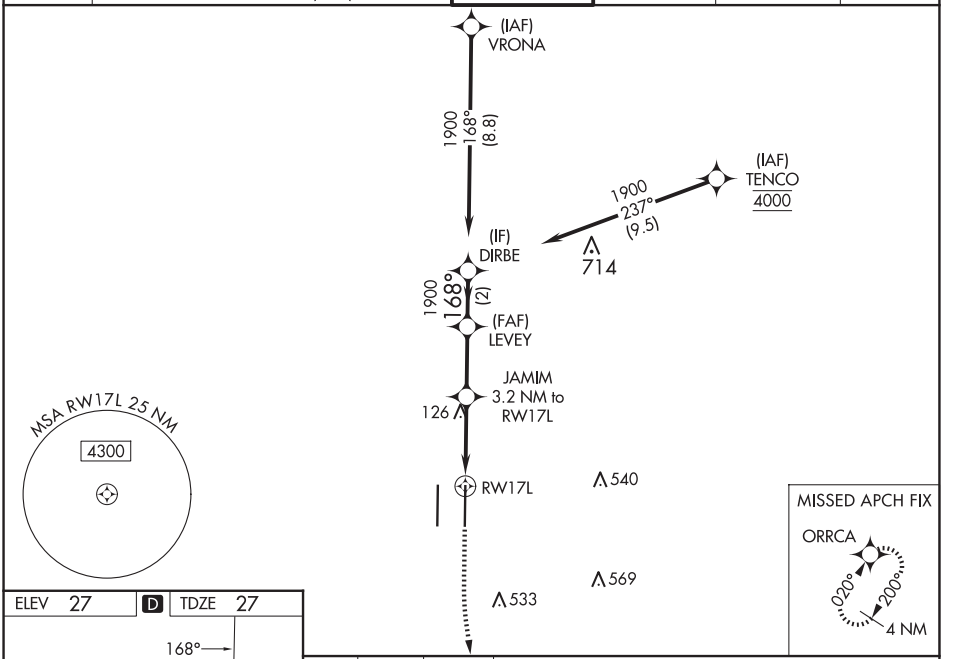
RNP APCH - GPS.

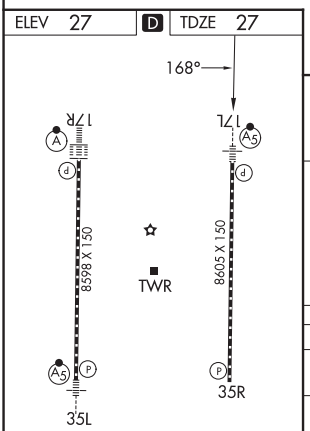
Circling NA west of Rwy 17L-35R. Simultaneous approach authorized. LNAV procedure NA during simultaneous operations. Use of FD or AP required during simultaneous operations. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -4°C or above 54°C. For inop ALS, increase LNAV/VNAV all Cats visibility to RVR 4000 and LNAV C/D visibility to RVR 5500.

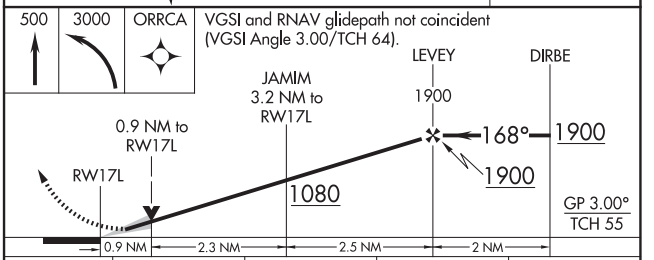
MALSR

MISSED APPROACH: Climb to 500 then climbing left turn to 3000 direct ORRCA and hold.

D-ATIS	NORCAL APP CON	CAPITOL TOWER	GND CON	CLNC DEL	CPDLC
126.75	125.4 259.1 (W-NE) 125.25 257.9 (SW) 127.4 317.5 (E-SE)	125.7 256.7	121.7 256.7	121.1 256.7	







CATEGORY	A	B	C	D
LPV DA	227/18 200 (200-½)			
LNAV/VNAV DA	277/24 250 (300-½)			
LNAV MDA	380/24 353 (400-½)		380/30 353 (400-⅝)	
C CIRCLING	400-1 373 (400-1)	480-1 453 (500-1)	480-1½ 453 (500-1½)	840-2¾ 813 (900-2¾)

TDZ/CL Rwys 17L and 17R
HIRL Rwys 17R-35L and 17L-35R

SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) Y RWY 17R

SACRAMENTO INTL (SMF)

WAAS	APP CRS	Rwy Ldg	8598
CH 65728	168°	TDZE	25
W17A		Apt Elev	27

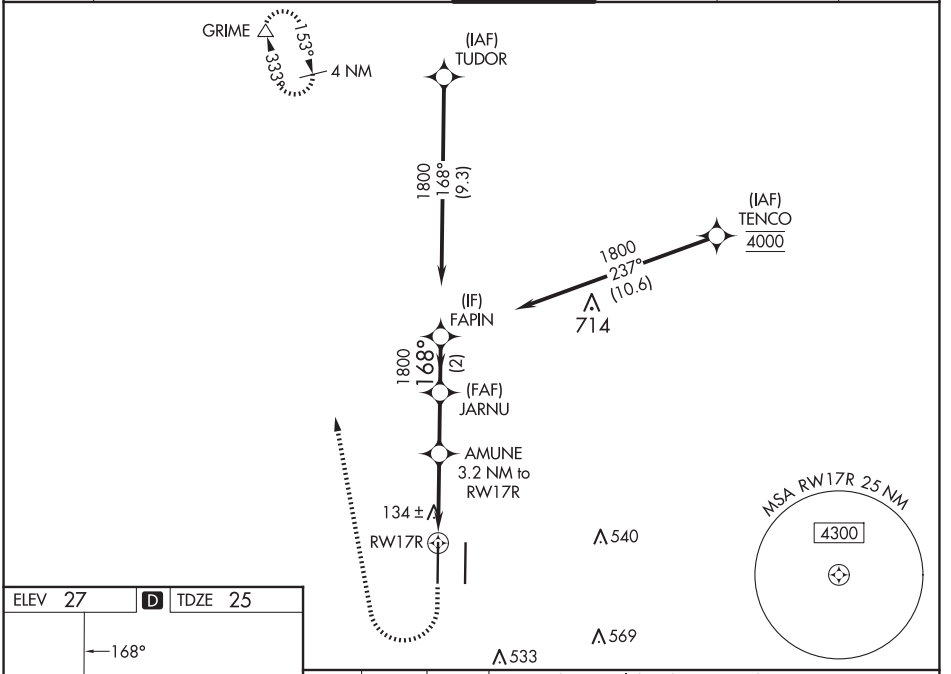
RNP APCH - GPS.

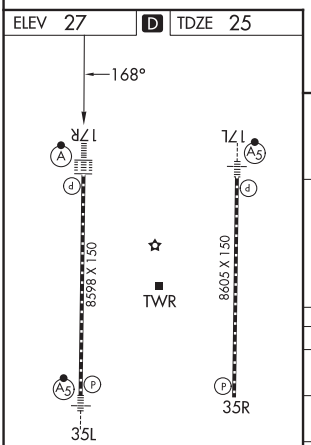
Circling NA east of Rwy 17R-35L. Simultaneous approach authorized. Use of FD or AP required during simultaneous operations. LNAV procedure NA during simultaneous operations. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -4°C or above 54°C. For inop ALS, increase LNAV/VNAV all Cats visibility to RVR 4500 and LNAV all Cats visibility to RVR 5500.

ALSF-2

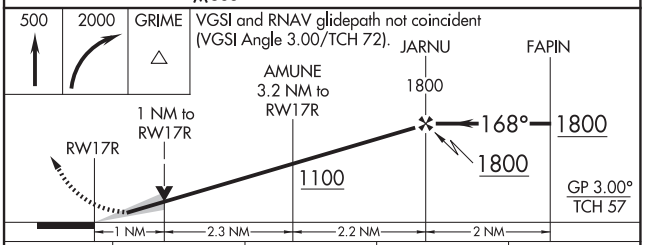
MISSED APPROACH: Climb to 500 then climbing right turn to 2000 direct GRIME and hold.

D-ATIS	NORCAL APP CON	CAPITOL TOWER	GND CON	CLNC DEL	CPDLC
126.75	125.4 259.1 (W-NE) 125.25 257.9 (SW) 127.4 317.5 (E-SE)	125.7 256.7	121.7 256.7	121.1 256.7	





TDZ/CL Rwys 17L and 17R
HIRL Rwys 17R-35L and 17L-35R



CATEGORY	A	B	C	D
LPV DA	225/18 200 (200-½)			
LNAV/VNAV DA	323/24 298 (300-½)			
LNAV MDA	400/24 375 (400-½)		400/35 375 (400-⅝)	
C CIRCLING	440-1 413 (500-1)	480-1 453 (500-1)	480-1½ 453 (500-1½)	580-2 553 (600-2)

SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) Y RWY 35L

SACRAMENTO INTL (SMF)

WAAS CH 86602 W35A	APP CRS 348°	Rwy Ldg 8598	TDZE 24	Apt Elev 27

RNP APCH-GPS.

T Circling NA east of Rwy 17R-35L. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -2°C or above 54°C. For inop ALS, increase LNAV/VNAV all Cats visibility to RVR 4500 and increase LNAV Cat C/D visibility to RVR 5500.
*RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 800 then climbing left turn to 2000 direct GRIME and hold.

D-ATIS	NORCAL APP CON	CAPITOL TOWER	GND CON	CLNC DEL	CPDLC
126.75	125.4 259.1 (W-NE) 125.25 257.9 (SW) 127.4 317.5 (E-SE)	125.7 256.7	121.7 256.7	121.1 256.7	

MISSED APCH FIX

GRIME 153° 333° 4 NM

RW35L 130

CANLO 1.3 NM to RW35L

(FAF) HADSU

1400 348° (7.3)

(IF) ELMAC 210K

3000 026° (9.8) (IAF) ISYOH

3000 299° (24.9) (IAF) MYNRR 9000

540 569 533 586

MSA RW35L 25 NM 4300

ELEV 27 D TDZE 24

TDZ/CL Rwys 17L and 17R
HIRL Rwys 17R-35L and 17L-35R

17R 8598 X 150 TWR 17L 8605 X 150 35L 35R 348°

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 76).

800 2000 GRIME

ELMAC 3000 348° HADSU 1400 CANLO 1.3 NM to RW35L RW35L

GP 3.00° TCH 59 1400 480

7.3 NM 2.9 NM 1.3 NM

CATEGORY	A	B	C	D
LPV DA*	224/24 200 (200-½)			
LNAV/VNAV DA	311/24 287 (300-½)			
LNAV MDA	380/24 356 (400-½)		380/30 356 (400-⅝)	
C CIRCLING	440-1 413 (500-1)	480-1 453 (500-1)	480-1½ 453 (500-1½)	580-2 553 (600-2)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS	Rwy Ldg	8605
348°	TDZE	24
	Apt Elev	27

RNAV (GPS) Y RWY 35R

SACRAMENTO INTL (SMF)

RNP APCH-GPS.

Circling NA west of Rwy 17L-35R. Rwy 35R helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -2°C or above 54°C.

MISSED APPROACH: Climb to 800 then climbing left turn to 2000 direct GRIME and hold.

D-ATIS	NORCAL APP CON	CAPITOL TOWER	GND CON	CLNC DEL	CPDLC
126.75	125.4 259.1 (W-NE) 125.25 257.9 (SW) 127.4 317.5 (E-SE)	125.7 256.7	121.7 256.7	121.1 256.7	

MISSED APCH FIX

GRIME 153° 333° 4 NM

708

540

130 RW35R

153± 569

AMNIC 2.2 NM to RW35R 533

(FAF) CEDRA

1400 348° (6.4)

(IF) FIPIN 210K

MSA RW35R 25 NM 4300

3000 302° (24.8)

3000 027° (11.1)

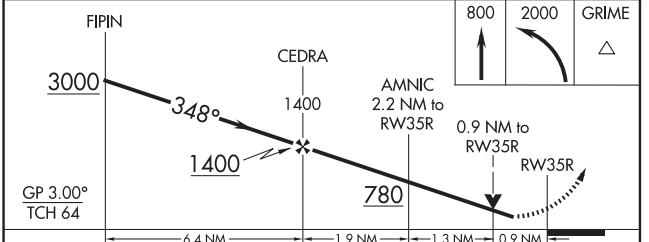
(IAF) ISYOH

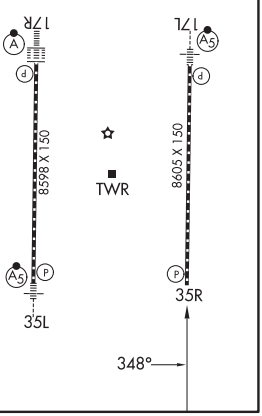
(IAF) MYNRR 9000

ELEV 27 D TDZE 24

TDZ/CL Rwys 17L and 17R

HIRL Rwys 17R-35L and 17L-35R





CATEGORY	A	B	C	D
LNAV/VNAV DA	311/45 287 (300-⅞)			
LNAV MDA	380/55 356 (400-1)			
C CIRCLING	400-1 373 (400-1)	480-1 453 (500-1)	480-1½ 453 (500-1½)	840-2¾ 813 (900-2¾)

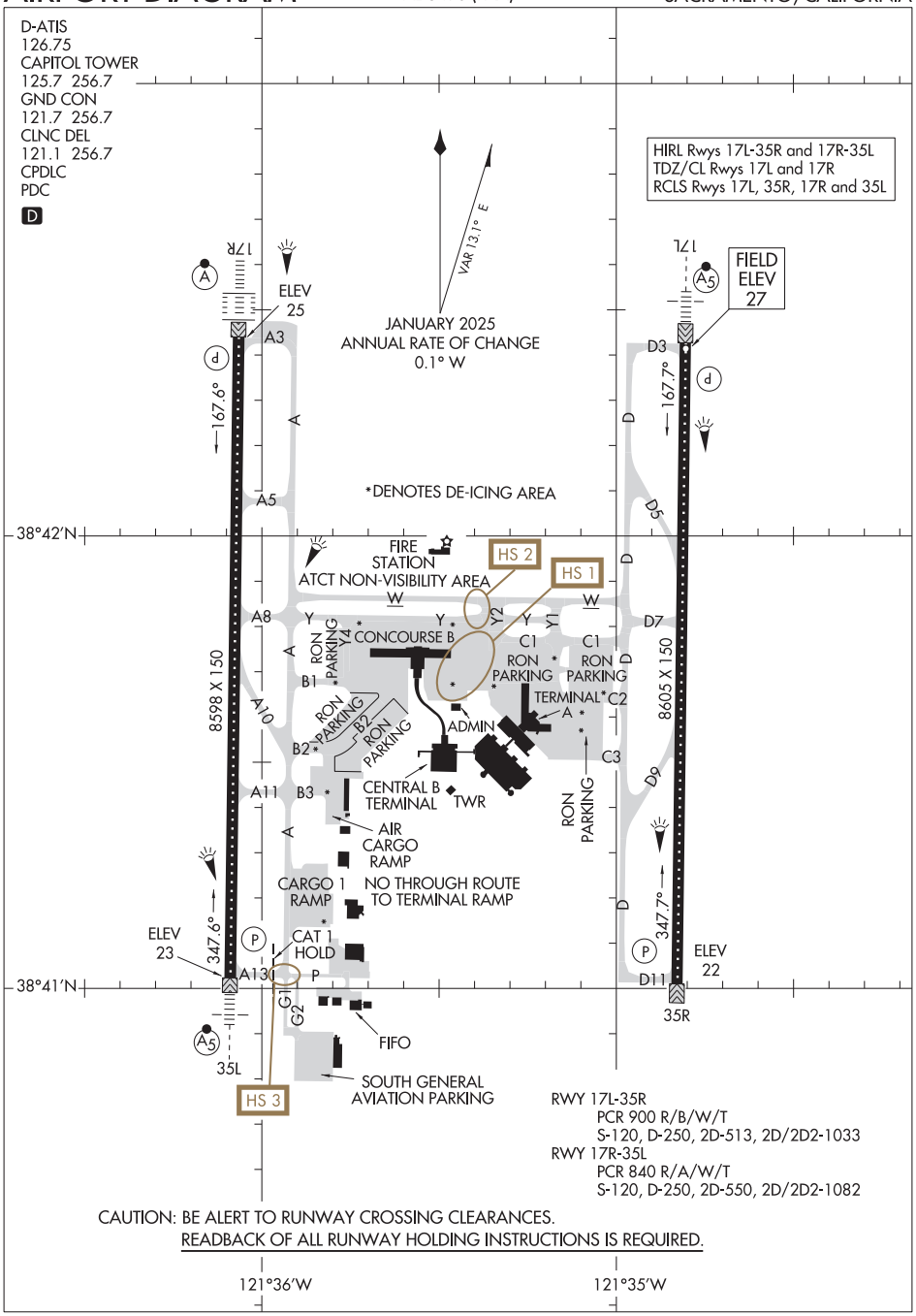
SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

25163

AIRPORT DIAGRAM

AL-5490 (FAA)

SACRAMENTO INTL (SMF)
SACRAMENTO, CALIFORNIA



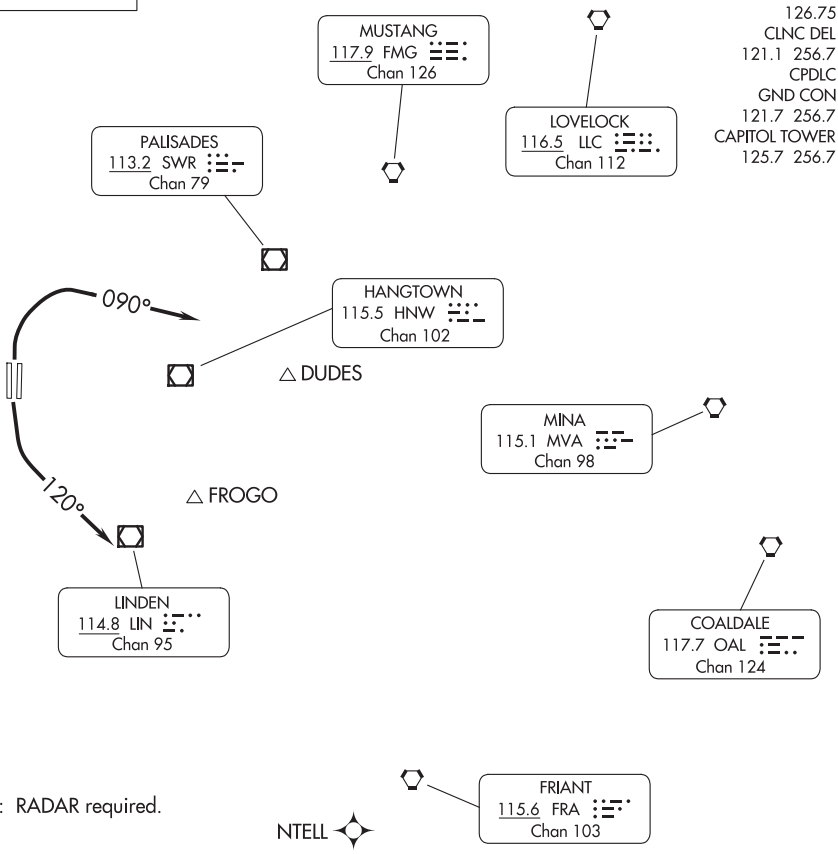
SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

AIRPORT DIAGRAM
25163
SACRAMENTO, CALIFORNIA
SACRAMENTO INTL (SMF)

TOP ALTITUDE: ASSIGNED BY ATC

NORCAL DEP CON
127.4 317.5
D-ATIS
126.75
CLNC DEL
121.1 256.7
CPDLC
GND CON
121.7 256.7
CAPITOL TOWER
125.7 256.7



NOTE: RADAR required.

TAKEOFF MINIMUMS

Rwys 17R, 35L/R: Standard.
Rwy 17L: Standard with minimum climb of 220′ per NM to 700.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 17L/R: Climbing left turn heading 120°, or as assigned by ATC, for RADAR vectors to assigned route/fix, thence. . . .
TAKEOFF RUNWAYS 35L/R: Climbing right turn heading 090°, or as assigned by ATC, for RADAR vectors to assigned route/fix, thence. . . .

. . . .maintain ATC assigned altitude. Expect filed altitude ten minutes after departure.

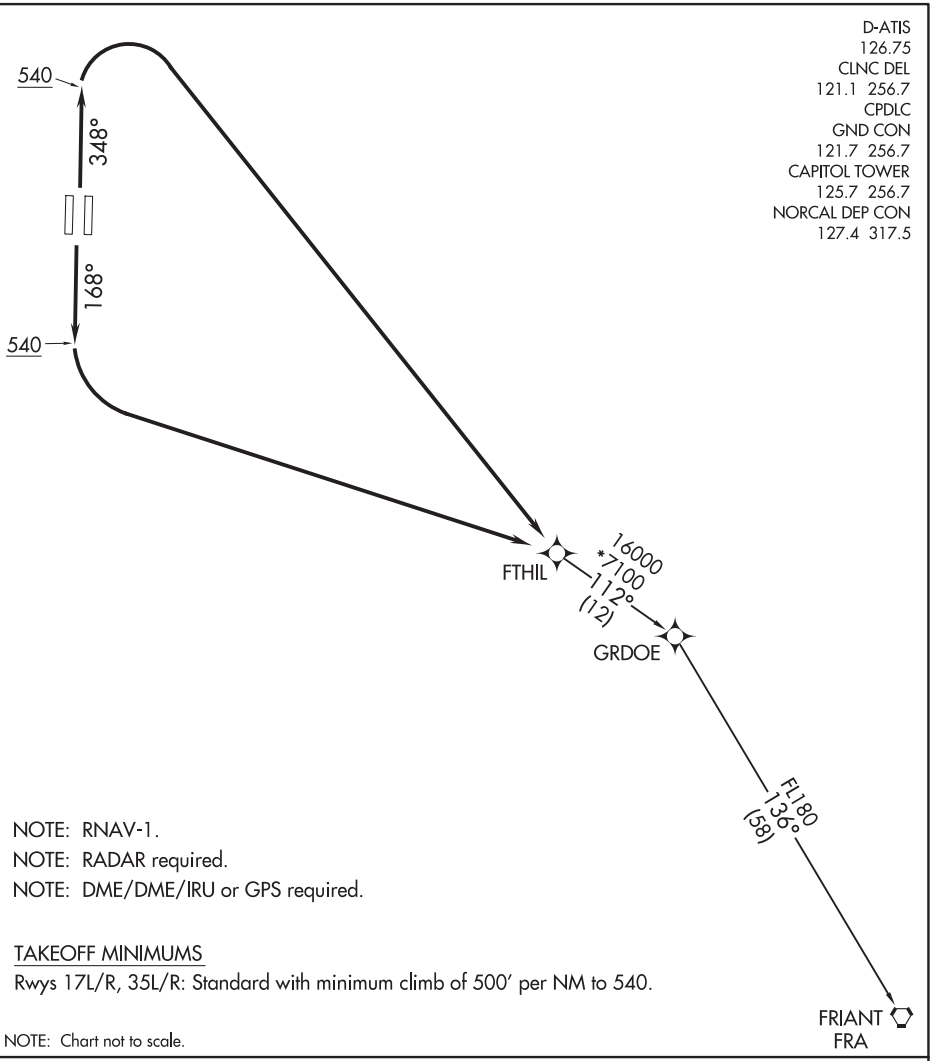
SW-2, 07 AUG 2025 to 02 OCT 2025

(FTHIL3.FTHIL) 20142

FTHIL THREE DEPARTURE (RNAV)

AL-5490 (FAA)

SACRAMENTO INTL (SMF)
SACRAMENTO, CALIFORNIA



NOTE: RNAV-1.

NOTE: RADAR required.

NOTE: DME/DME/IRU or GPS required.

TAKEOFF MINIMUMS

Rwys 17L/R, 35L/R: Standard with minimum climb of 500′ per NM to 540.

NOTE: Chart not to scale.

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 17L/R: Climb on heading 168° to 540, then left turn direct FTHIL. Thence. . . .

TAKEOFF RUNWAYS 35L/R: Climb on heading 348° to 540, then right turn direct FTHIL. Thence. . . .

. . . . on transition. Maintain FL190. Expect filed altitude 10 minutes after departure.

FRIANT TRANSITION (FTHIL3.FRA)

RVRCT FOUR DEPARTURE (RNAV)

(RVRCT4.RVRCT) 19MAY22

SACRAMENTO, CALIFORNIA

SACRAMENTO INTL (SMF)

TOP ALTITUDE: ASSIGNED BY ATC

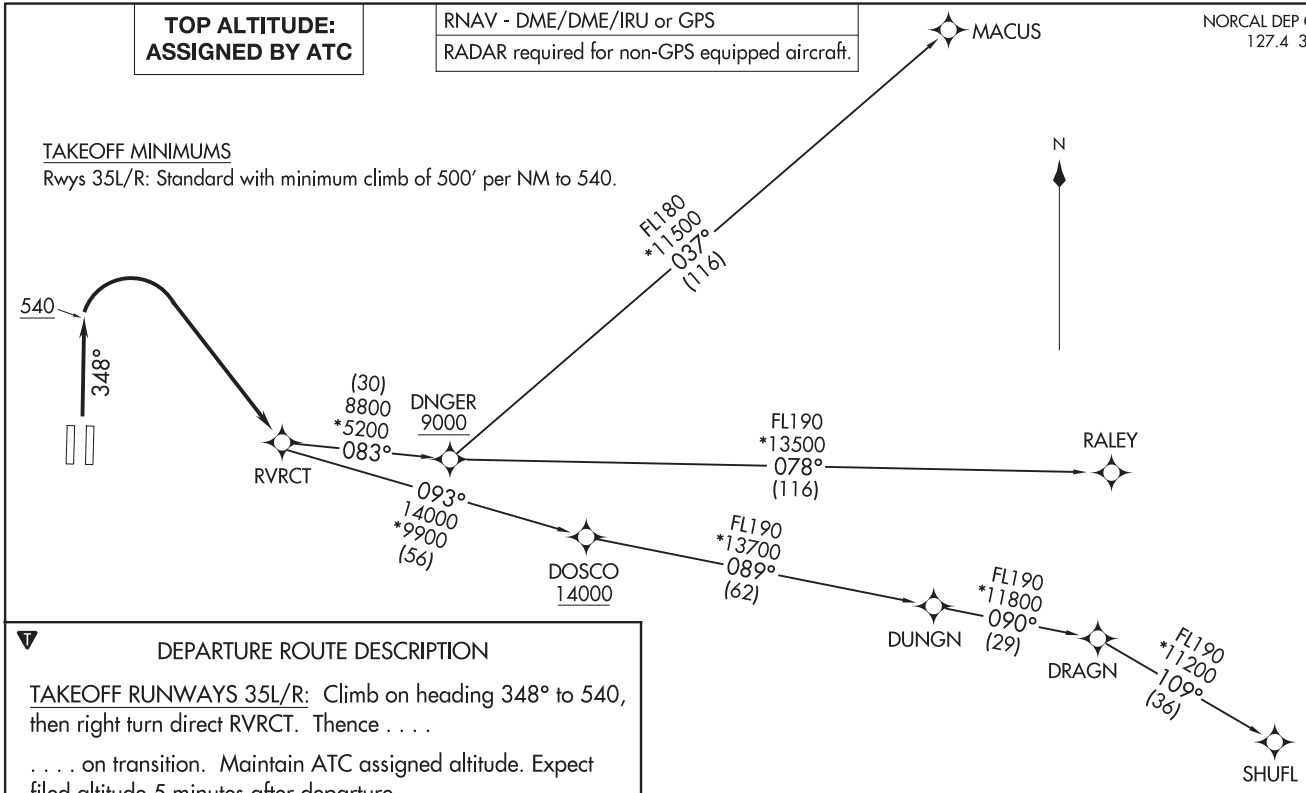
RNAV - DME/DME/IRU or GPS

RADAR required for non-GPS equipped aircraft.

NORCAL DEP CON
127.4 317.5

TAKEOFF MINIMUMS

Rwys 35L/R: Standard with minimum climb of 500′ per NM to 540.



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 35L/R: Climb on heading 348° to 540, then right turn direct RVRCT. Thence . . . .

. . . . on transition. Maintain ATC assigned altitude. Expect filed altitude 5 minutes after departure.

MACUS TRANSITION (RVRCT4.MACUS)

RALEY TRANSITION (RVRCT4.RALEY)

SHUFL TRANSITION (RVRCT4.SHUFL)

NOTE: Chart not to scale.

RVRCT FOUR DEPARTURE (RNAV)

(RVRCT4.RVRCT) 22139

AL-5490 (FAA)

SACRAMENTO INTL (SMF)

SACRAMENTO, CALIFORNIA

SCTWN FOUR DEPARTURE (RNAV)

(SCTWN4.SCTWN) 19MAY22

SACRAMENTO, CALIFORNIA

SACRAMENTO INTL (SMF)

TOP ALTITUDE: ASSIGNED BY ATC

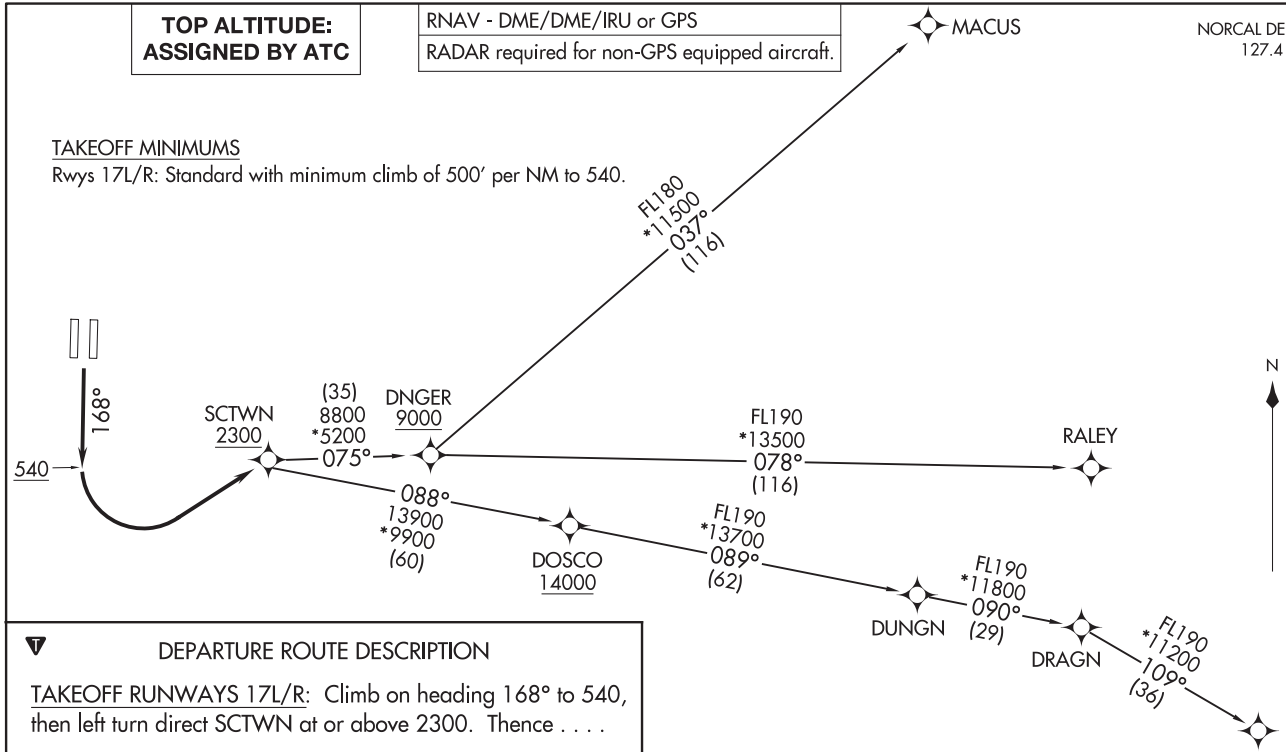
RNAV - DME/DME/IRU or GPS

RADAR required for non-GPS equipped aircraft.

NORCAL DEP CON
127.4 317.5

TAKEOFF MINIMUMS

Rwys 17L/R: Standard with minimum climb of 500′ per NM to 540.



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 17L/R: Climb on heading 168° to 540, then left turn direct SCTWN at or above 2300. Thence . . . .

. . . . on transition. Maintain ATC assigned altitude. Expect filed altitude 5 minutes after departure.

MACUS TRANSITION (SCTWN4.MACUS)

RALEY TRANSITION (SCTWN4.RALEY)

SHUFL TRANSITION (SCTWN4.SHUFL)

NOTE: Chart not to scale.

(SCTWN4.SCTWN) 22139

SCTWN FOUR DEPARTURE (RNAV)

AL-5490 (FAA)

SACRAMENTO INTL (SMF)

SACRAMENTO, CALIFORNIA

LOC/DME I-MHR	APP CRS	Rwy Ldg 11301
111.35	221°	TDZE 98
Chan 50 (Y)		Apt Elev 98

ILS Y or LOC Y RWY 22L

SACRAMENTO MATHER (MHR)

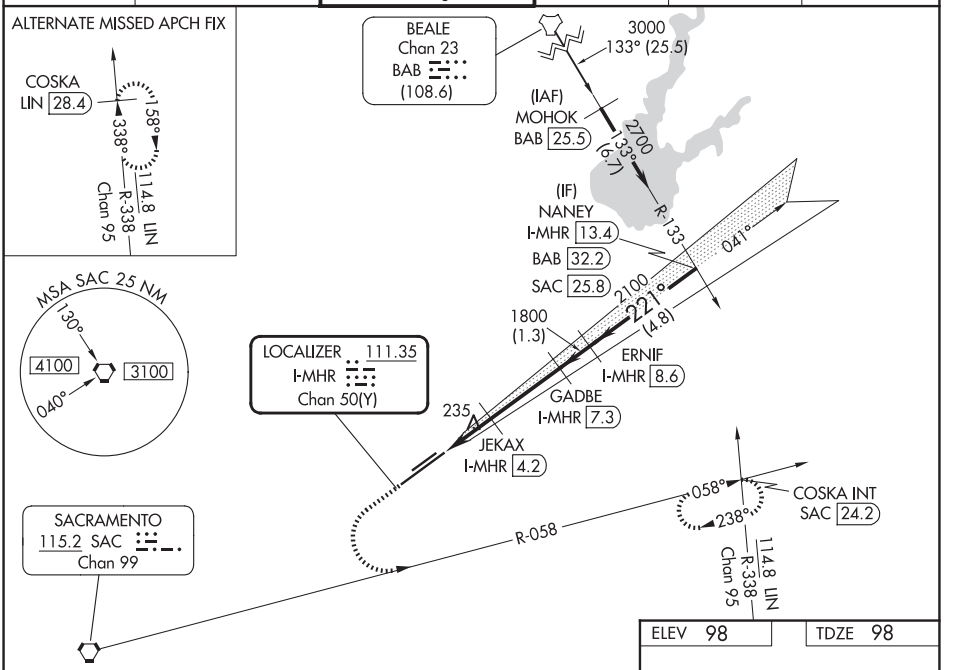
TACAN required for procedure entry at BAB TACAN. For non-TACAN equipped aircraft, DME required.

T A Circling NA northwest of Rwy 4R-22L. For inop ALS, increase S-ILS Cat E visibility to RVR 4000 and S-LOC Cat C/D/E visibility to RVR 6000. *RVR 1800 authorized with use of FD or AP or HUD to DA. (NA when using Sacramento Exec altimeter setting).

MALSR

MISSED APPROACH: Climb to 1000, then climbing left turn to 3500 on heading 090° and SAC VORTAC R-058 to COSKA INT/ SAC 24.2 DME and hold, continue climb-in-hold to 3500.

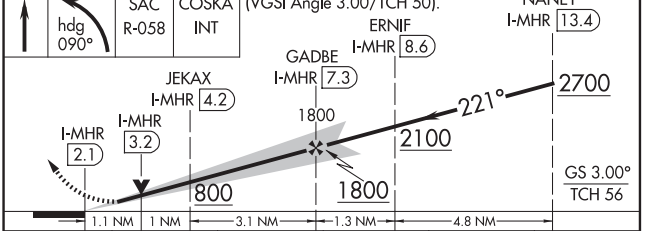
ATIS	NORCAL APP CON	MATHER TOWER ★	GND CON	CLNC DEL	UNICOM
118.325	127.4 317.5	120.65 (CTAF) L 282.25	121.85 307.9	121.85 307.9	122.95

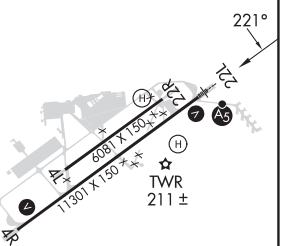


ELEV 98	TDZE 98

1000	3500 hdg 090°	SAC R-058	COSKA INT

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 50).





CATEGORY	A	B	C	D	E
S-ILS 22L	298/24 200 (200-½)				
S-LOC 22L	500/24 402 (500-½)		500/40 402 (500-¾)		
CIRCLING	560-1 462 (500-1)		600-1½ 502 (600-1½)	800-2¼ 702 (800-2¼)	800-2½ 702 (800-2½)

HIRL Rwy 4R-22L L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

SACRAMENTO, CALIFORNIA | AL-356 (FAA) | 25191

ILS Z or LOC Z RWY 22L

SACRAMENTO MATHER (MHR)

LOC/DME I-MHR	APP CRS	Rwy Ldg	11301
111.35	221°	TDZE	98
Chan 50 (Y)		Apt Elev	98

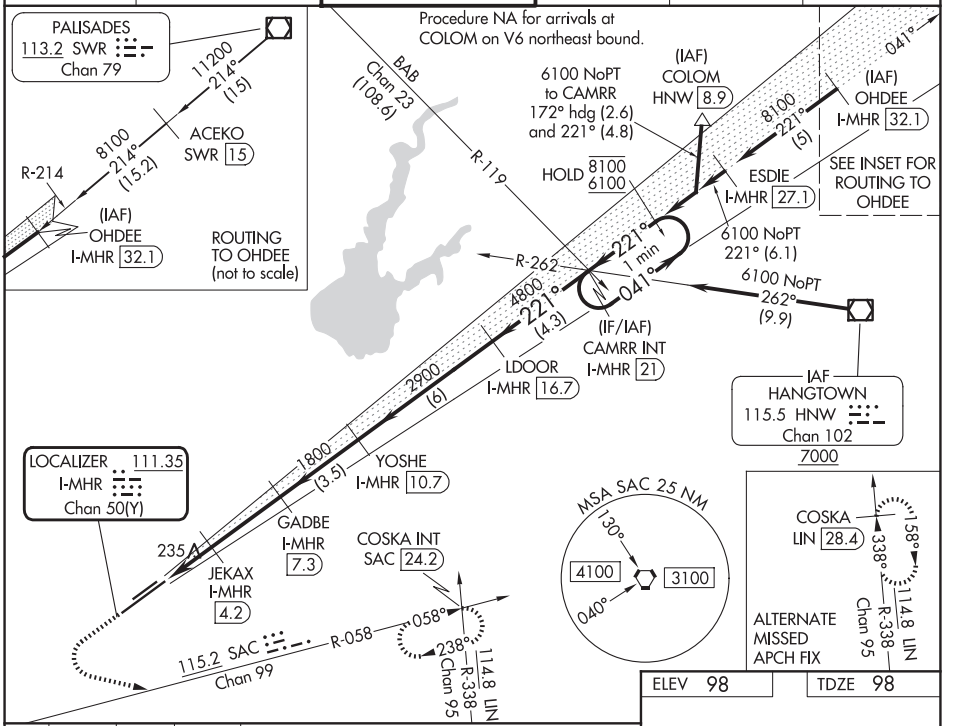
DME required for LOC only.

For inop ALS, increase S-ILS Cat E visibility to RVR 4000 and S-LOC Cat C/D/E visibility to RVR 6000. Circling NA northwest of Rwy 4R-22L.
*RVR 1800 authorized with use of FD or AP or HUD to DA (NA when using Sacramento Exec altimeter setting).

MALSR

MISSED APPROACH: Climb to 1000, then climbing left turn to 3500 on heading 090° and SAC VORTAC R-058 to COSKA INT/ SAC 24.2 DME and hold, continue climb-in-hold to 3500.

ATIS	NORCAL APP CON	MATHER TOWER ★	GND CON	CLNC DEL	UNICOM
118.325	127.4 317.5	120.65 (CTAF) L 282.25	121.85 307.9	121.85 307.9	122.95



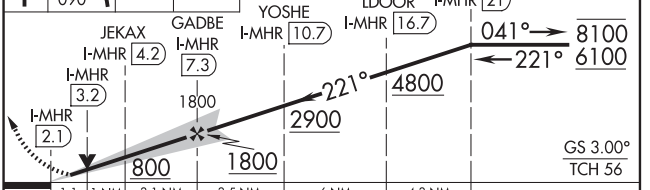
SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

1000	3500 hdg 090°	SAC R-058	COSKA INT

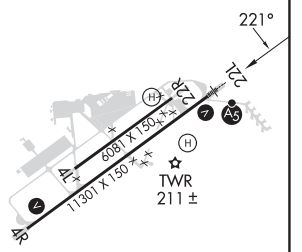
VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 50).

One Minute Holding Pattern



CATEGORY	A	B	C	D	E
S-ILS 22L*	298/24 200 (200-½)				
S-LOC 22L	500/24 402 (500-½)		500/40 402 (500-¾)		
CIRCLING	560-1 462 (500-1)		600-1½ 502 (600-1½)	800-2¼ 702 (800-2¼)	800-2½ 702 (800-2½)

ELEV 98 | TDZE 98



HIRL Rwy 4R-22L L

SACRAMENTO, CALIFORNIA
Amdt 8 15JUN23

38°33'N-121°18'W

SACRAMENTO MATHER (MHR)

ILS Z or LOC Z RWY 22L

ILS Z RWY 22L (SA CAT I & II)

SACRAMENTO MATHER (MHR)

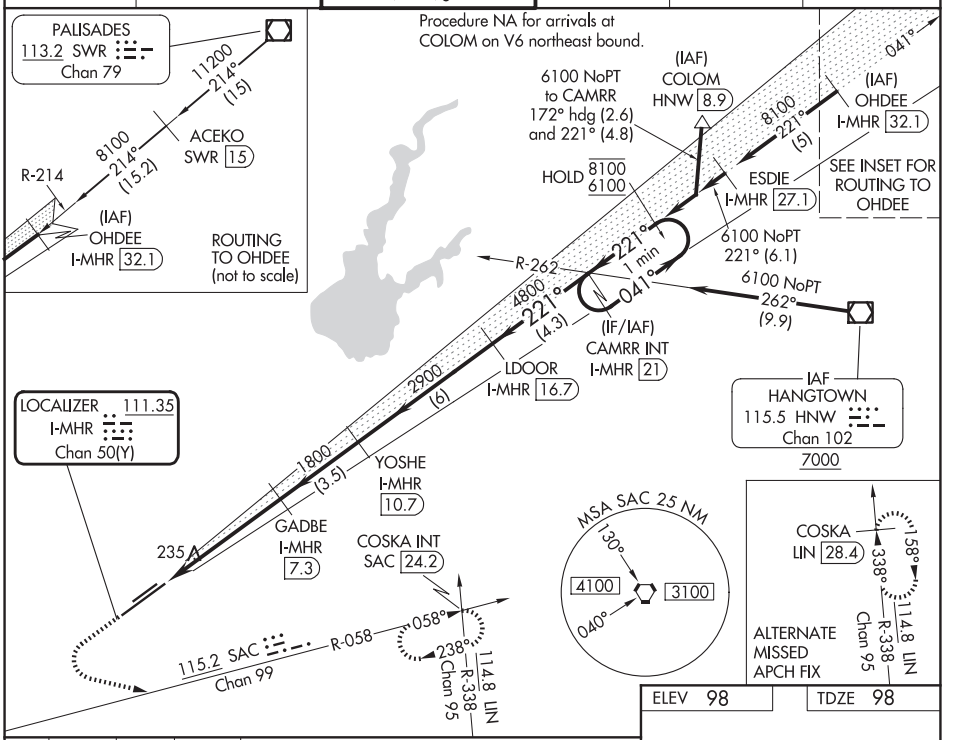
LOC/DME I-MHR	APP CRS	Rwy Ldg	11301
111.35	221°	TDZE	98
Chan 50 (Y)		Apt Elev	98

T A Requires specific OPSPEC, MSPEC, or LOA approval. Procedure NA when tower closed.

MALSR

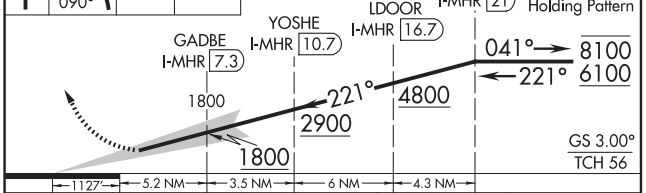
MISSED APPROACH: Climb to 1000, then climbing left turn to 3500 on heading 090° and SAC VORTAC R-058 to COSKA INT/SAC 24.2 DME and hold, continue climb-in-hold to 3500.

ATIS	NORCAL APP CON	MATHER TOWER ★	GND CON	CLNC DEL	UNICOM
118.325	127.4 317.5	120.65 (CTAF) L 282.25	121.85 307.9	121.85 307.9	122.95



1000	3500 hdg 090°	SAC R-058	COSKA INT

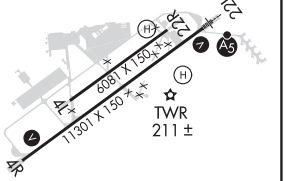
VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 50).



CATEGORY	A	B	C	D
S-ILS 22L	SA CAT I	RA 136/14 150	DA 248	
S-ILS 22L	SA CAT II	RA 95/12 100	DA 198	

SA CATEGORY I & II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

ELEV 98	TDZE 98



HIRL Rwy 4R-22L L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 4R

SACRAMENTO MATHER (MHR)

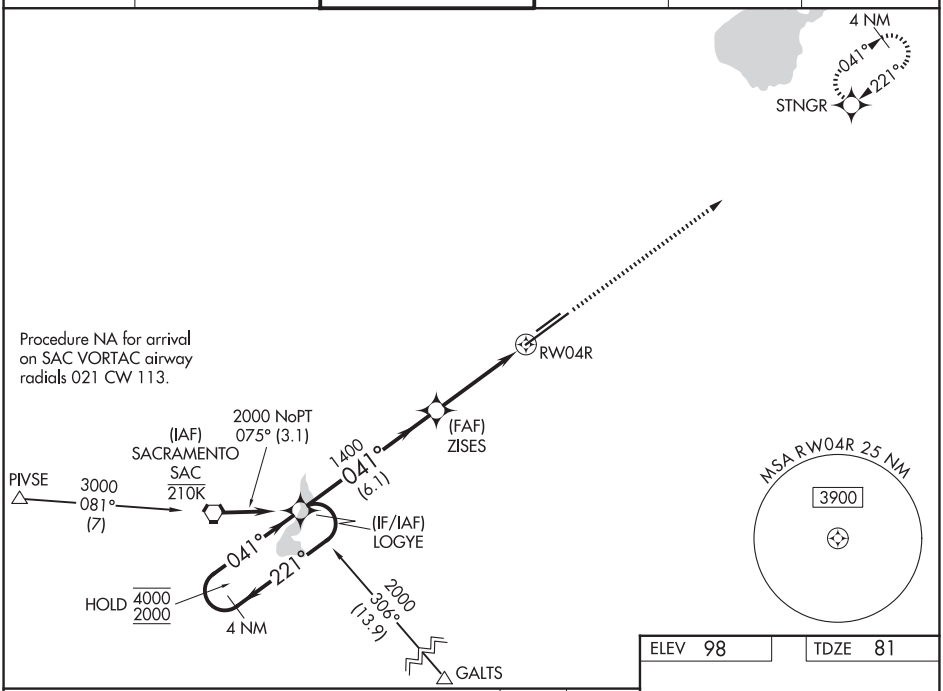
WAAS CH 45601 W04A	APP CRS 041°	Rwy Ldg 11301 TDZE 81 Apt Elev 98

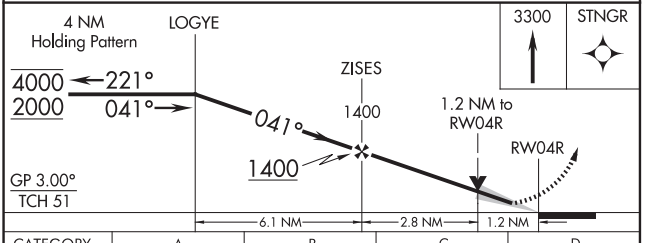
RNP APCH - GPS.

Circling NA northwest of Rwy 4R-22L. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

MISSED APPROACH: Climb to 3300 direct STNGR and hold.
*Missed approach requires minimum climb of 210 feet per NM to 2500.

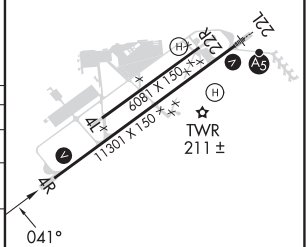
ATIS	NORCAL APP CON	MATHER TOWER ★	GND CON	CLNC DEL	UNICOM
118.325	127.4 317.5	120.65 (CTAF) L 282.25	121.85 307.9	121.85 307.9	122.95





CATEGORY	A	B	C	D
LPV DA*	331/40 250 (300-¾)			
LNAV/VNAV DA*	365/45 284 (300-⅞)			
LNAV MDA*	520/55 439 (500-1)		520-1¼ 439 (500-1¼)	
LNAV MDA	540/55 459 (500-1)	560/55 479 (500-1)	580-1⅜ 499 (500-1⅜)	
CIRCLING	560-1 462 (500-1)	580-1 482 (500-1)	600-1½ 502 (600-1½)	740-2 642 (700-2)

ELEV 98 TDZE 81



HIRL Rwy 4R-22L L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 22L

SACRAMENTO MATHER (MHR)

WAAS CH 40225 W22A	APP CRS 221°	Rwy Ldg 11301 TDZE 98 Apt Elev 98

RNP APCH.

T A Circling NA northwest of Rwy 4R-22L. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. For inop ALS, increase LNAV/VNAV all Cats visibility to 1⅛ SM and LNAV Cat C/D visibility to 1⅜ SM.

MALSR (A5)

MISSED APPROACH: Climb to 3000 direct XAKBE and on track 233° to SAC VORTAC and hold.

ATIS	NORCAL APP CON	MATHER TOWER ★	GND CON	CLNC DEL	UNICOM
118.325	127.4 317.5	120.65 (CTAF) L 282.25	121.85 307.9	121.85 307.9	122.95

MISSED APCH FIX

SACRAMENTO SAC

049° 229° 4 NM

Procedure NA for arrivals at HAGAN on V392-494 northbound.

HAGAN (12.2) 158° 4300

Procedure NA for arrivals on HNW VOR/DME airway radials 180 CW 303.

4 NM HOLD 041° 221° 6000 3500

HANGTOWN HNW

5200 249° (15)

2600 221° (3.4) (IF/IAF) STNGR

JASOD

1800 221° (4.1)

(FAF) GADBE

JEKAX 2.1 NM to RW22L

295± RW22L

XAKBE

233° (8.2)

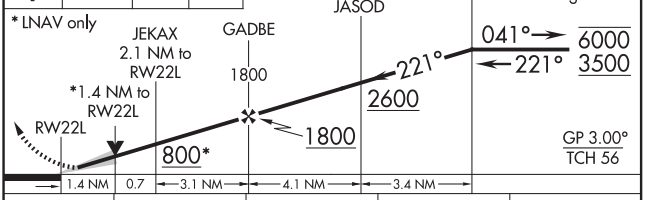
MSA RW22L 25 NM

4200

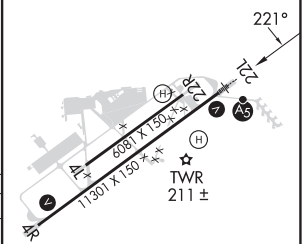
ELEV 98 TDZE 98

3000 XAKBE tr 233° SAC

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 50).



CATEGORY	A	B	C	D
LPV DA	298-½ 200 (200-½)			
LNAV/VNAV DA	517-¾ 419 (500-¾)			
LNAV MDA	580-½ 482 (500-½)		580-1 482 (500-1)	
CIRCLING	580-1 482 (500-1)		600-1½ 502 (600-1½)	800-2¼ 702 (800-2¼)



HIRL Rwy 4R-22L L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 22R

SACRAMENTO MATHER (MHR)

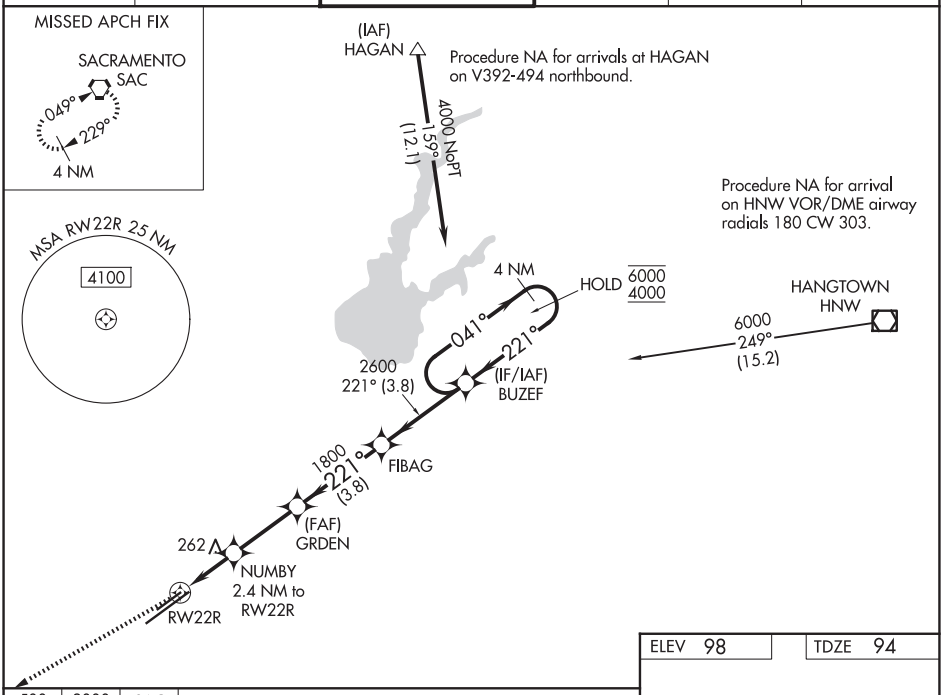
WAAS	APP CRS	Rwy Ldg	6081
CH 42943	221°	TDZE	94
W22B		Apt Elev	98

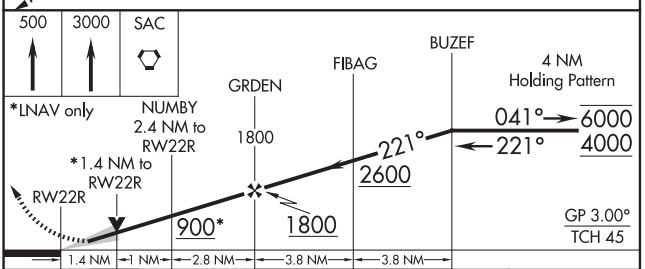
RNP APCH.

Circling NA northwest of Rwy 4L-22R. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Procedure NA at night.

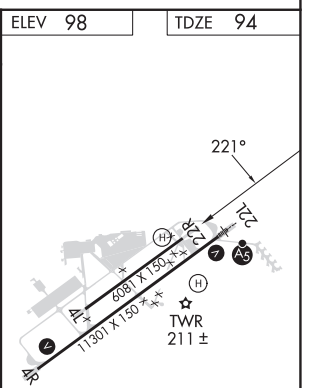
MISSED APPROACH: Climb to 500 then climb to 3000 direct SAC VORTAC and hold.

ATIS	NORCAL APP CON	MATHER TOWER ★	GND CON	CLNC DEL	UNICOM
118.325	127.4 317.5	120.65 (CTAF) L 282.25	121.85 307.9	121.85 307.9	122.95





CATEGORY	A	B	C	D
LPV DA	294-¾ 200 (200-¾)			
LNAV/VNAV DA	369-⅞ 275 (300-⅞)			
LNAV MDA	580-1 486 (500-1)		580-1⅜ 486 (500-1⅜)	
CIRCLING	580-1 482 (500-1)		600-1½ 502 (600-1½)	800-2¼ 702 (800-2¼)



SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

38°34'N
38°33'N
121°17'W
121°18'W
121°19'W
1000 X 300
1000 X 150
FIELD ELEV 98
22L
22R
4R
4L
ELEV 94
ELEV 83
ELEV 77
220.7°
040.7°
1301 X 150
6081 X 150
800 X 150
VAR 13.0° E
JANUARY 2025
ANNUAL RATE OF CHANGE
0.1° W
TWR
211±
#1
#2
FBO
FBO
FBO
NORTH APRON
AIR CARGO APRON
FUEL FARM
FIRE STATION
RWY 04L-22R
S-90, D-105, 2S-133, 2D-190
RWY 04R-22L
S-160, D-280, 2S-175, 2D-500
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
ATIS
118.325
MATHER TOWER ★
120.65 282.25
GND CON
121.85 307.9
CLNC DEL
121.85 307.9

SALINAS, CALIFORNIA | AL-363 (FAA) | 25107

LOC I-SNS	APP CRS	Rwy Idg	4825
108.5	315°	TDZE	82
		Apt Elev	84

ILS RWY 31
SALINAS MUNI (SNS)

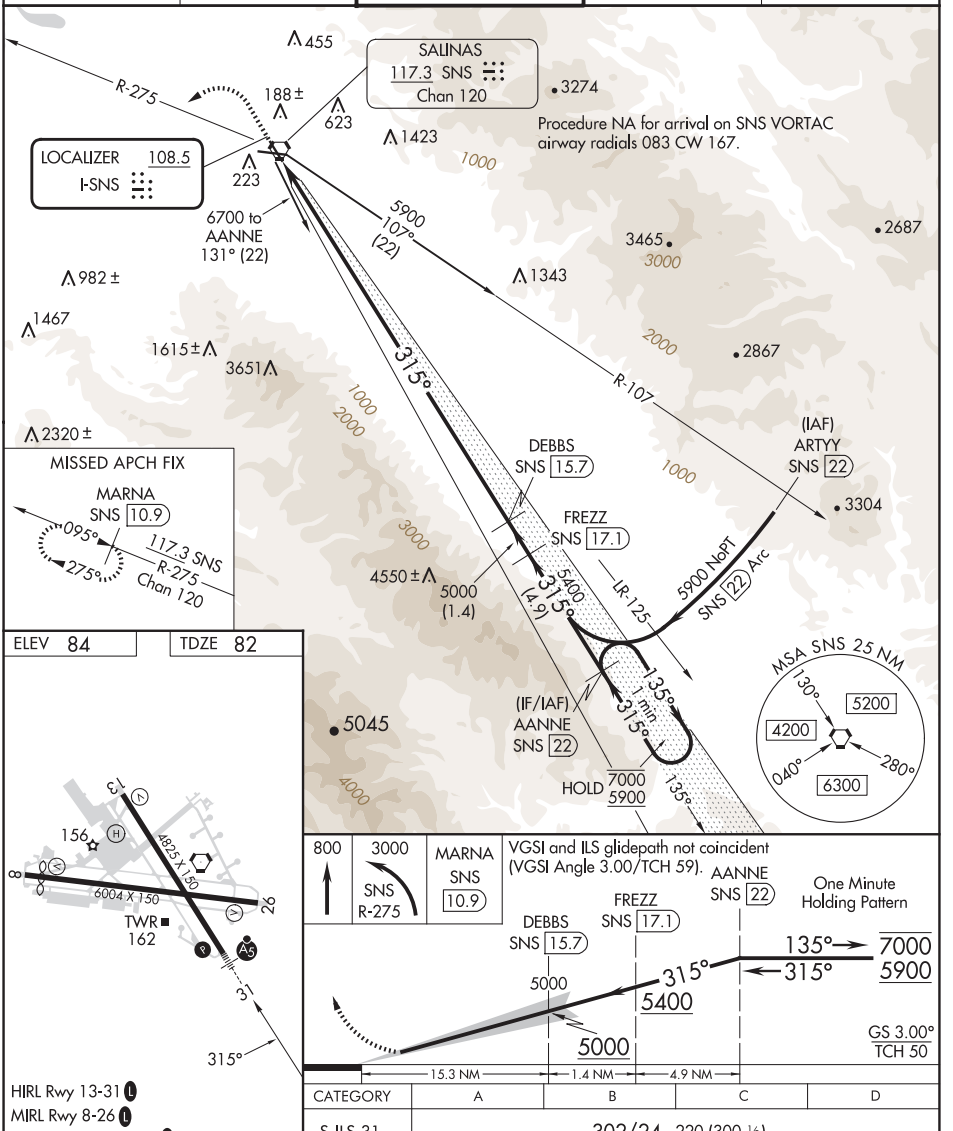
DME required.

DME from SNS VORTAC. DME use requires simultaneous reception of I-SNS and SNS DME.

MALSR

MISSED APPROACH: Climb to 800, then climbing left turn to 3000 on SNS VORTAC R-275 to MARNA/SNS 10.9 DME and hold, continue climb-in-hold to 3000.

ATIS	NORCAL APP CON	SALINAS TOWER ★	GND CON	UNICOM
124.85	133.0 251.15	119.525 (CTAF) L 239.3	121.7	123.0



ELEV 84	TDZ 82

HIRL Rwy 13-31 L
MIRL Rwy 8-26 L
REIL Rwys 13 and 26 L

CATEGORY	A	B	C	D
S-ILS 31	302/24 220 (300-½)			

SALINAS, CALIFORNIA
Amdt 7 16MAY24

36°40'N-121°36'W

SALINAS MUNI (SNS)
ILS RWY 31

SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS	Rwy Idg	5608
084°	TDZE	76
	Apt Elev	84

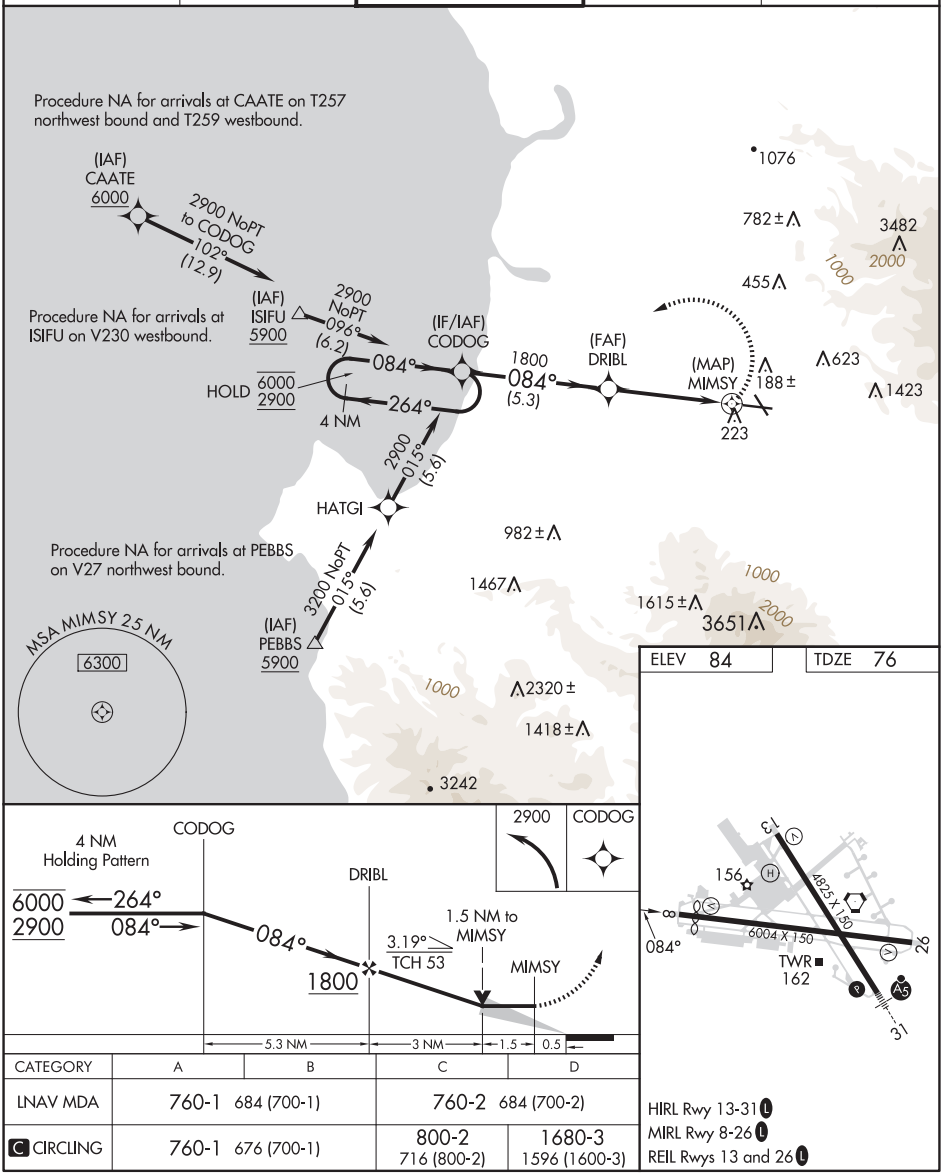
RNAV (GPS) RWY 8
SALINAS MUNI (SNS)

RNP APCH-GPS.

Circling Cat C/D NA northeast of Rwy 13 and north of Rwy 26.

MISSED APPROACH: (Do not exceed 185K until CODOG) Climbing left turn to 2900 direct CODOG and hold, continue climb-in-hold to 2900.

ATIS	NORCAL APP CON	SALINAS TOWER ★	GND CON	UNICOM
124.85	133.0 251.15	119.525 (CTAF) L 239.3	121.7	123.0



CATEGORY	A	B	C	D
LNAV MDA	760-1 684 (700-1)		760-2 684 (700-2)	
C CIRCLING	760-1 676 (700-1)		800-2 716 (800-2)	1680-3 1596 (1600-3)

HIRL Rwy 13-31 L
MIRL Rwy 8-26 L
REIL Rwys 13 and 26 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 13

SALINAS MUNI (SNS)

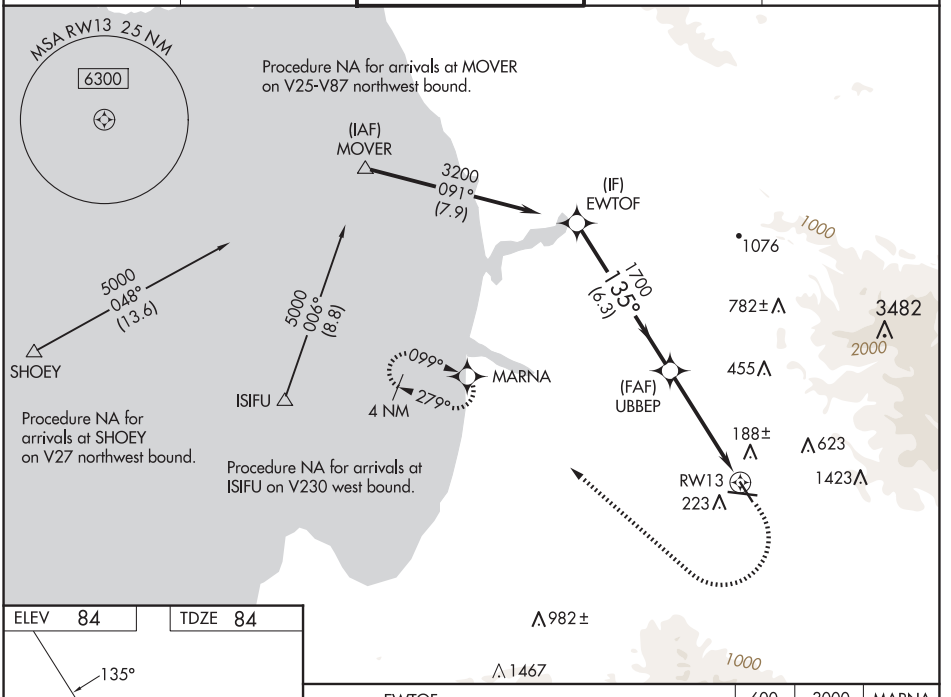
WAAS CH 57944 W13A	APP CRS 135°	Rwy Idg 4825 TDZE 84 Apt Elev 84

RNP APCH - GPS.

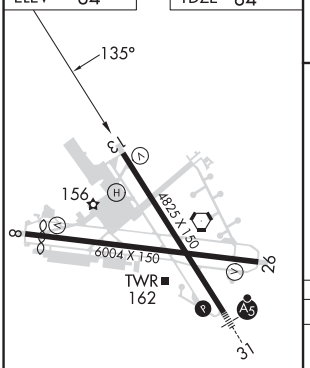
T A Rwy 13 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 1°C or above 54°C. Circling NA for Cat C northeast of Rwy 13 and north of Rwy 26. Circling NA for Cat D northeast of Rwy 13-31.

MISSED APPROACH: (Do not exceed 185K until MARNA). Climb to 600, then climbing right turn to 3000 direct MARNA and hold, continue climb-in-hold to 3000.

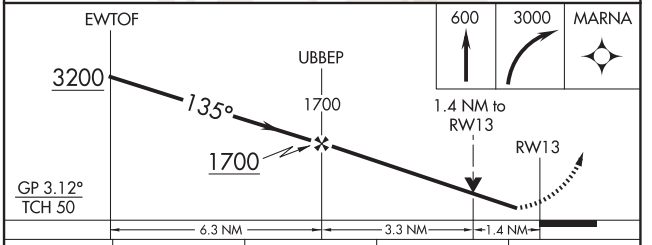
ATIS	NORCAL APP CON	SALINAS TOWER ★	GND CON	UNICOM
124.85	133.0 251.15	119.525 (CTAF) L 239.3	121.7	123.0



ELEV 84 TDZE 84



HIRL Rwy 13-31 L
MIRL Rwy 8-26 L
REIL Rwys 13 and 26 L



CATEGORY	A	B	C	D
LPV DA	334-¾ 250 (300-¾)			
LNAV/VNAV DA	447-1 363 (400-1)		463-1 379 (400-1)	488-1⅛ 404 (500-1⅛)
LNAV MDA	580-1 496 (500-1)		580-1⅜ 496 (500-1⅜)	
C CIRCLING	580-1 496 (500-1)		800-2 716 (800-2)	1620-3 1536 (1600-3)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) Y RWY 31

SALINAS MUNI (SNS)

APP CRS	Rwy Idg	4825
315°	TDZE	82
	Apt Elev	84

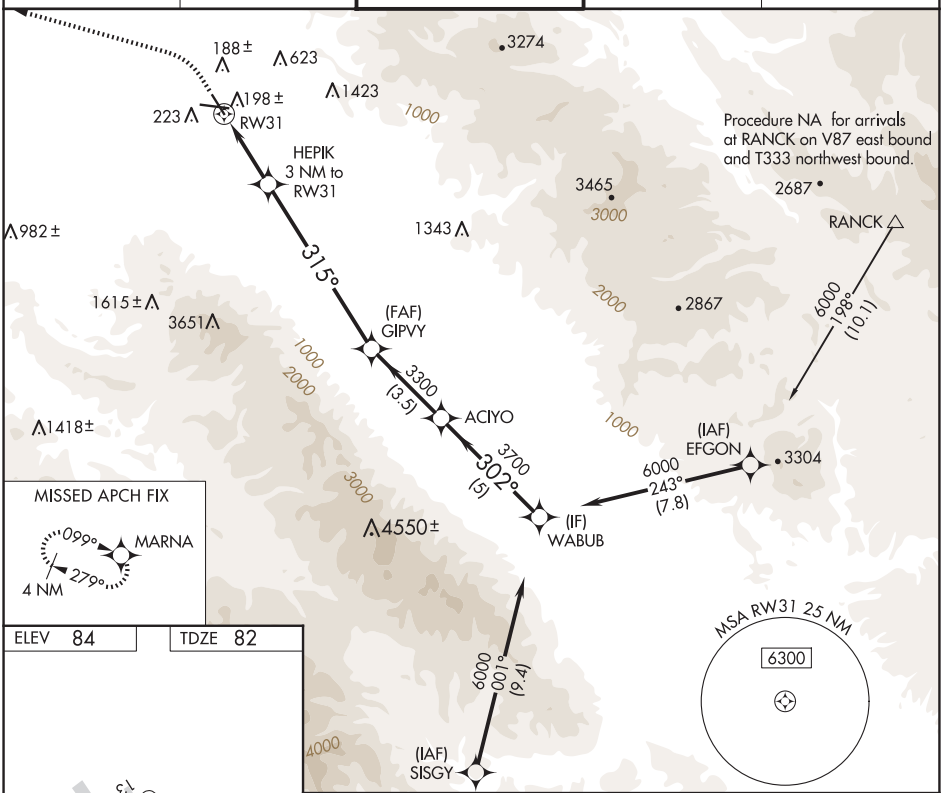
RNP APCH - GPS.

Circling NA for Cat C northeast of Rwy 13 and north of Rwy 26. Circling NA for Cat D northeast of Rwy 13-31.

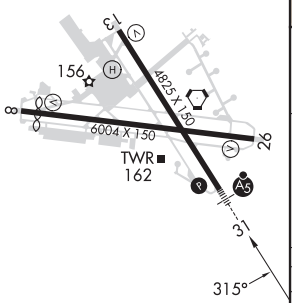
MALSR

MISSED APPROACH: Climb to 600, then climbing left turn to 3000 direct MARNA and hold, continue climb-in-hold to 3000.

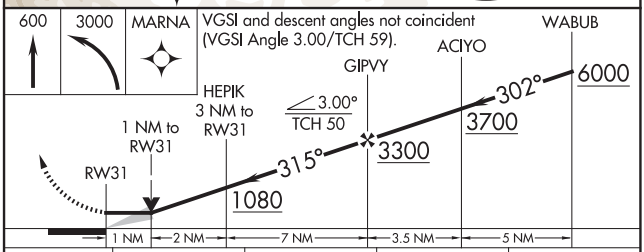
ATIS	NORCAL APP CON	SALINAS TOWER ★	GND CON	UNICOM
124.85	133.0 251.15	119.525 (CTAF) L 239.3	121.7	123.0



ELEV 84 | TDZE 82



HIRL Rwy 13-31 L
MIRL Rwy 8-26 L
REIL Rwys 13 and 26 L



CATEGORY	A	B	C	D
LNAV MDA	460/24 378 (400-½)		460/35 378 (400-⅝)	
C CIRCLING	540-1 456 (500-1)		800-2 716 (800-2)	1620-3 1536 (1600-3)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

SALINAS, CALIFORNIA

AL-363 (FAA)

25107

RNAV (GPS) Z RWY 31

SALINAS MUNI (SNS)

WAAS	APP CRS	Rwy Idg	4825
CH 69513	315°	TDZE	82
W31A		Apt Elev	84

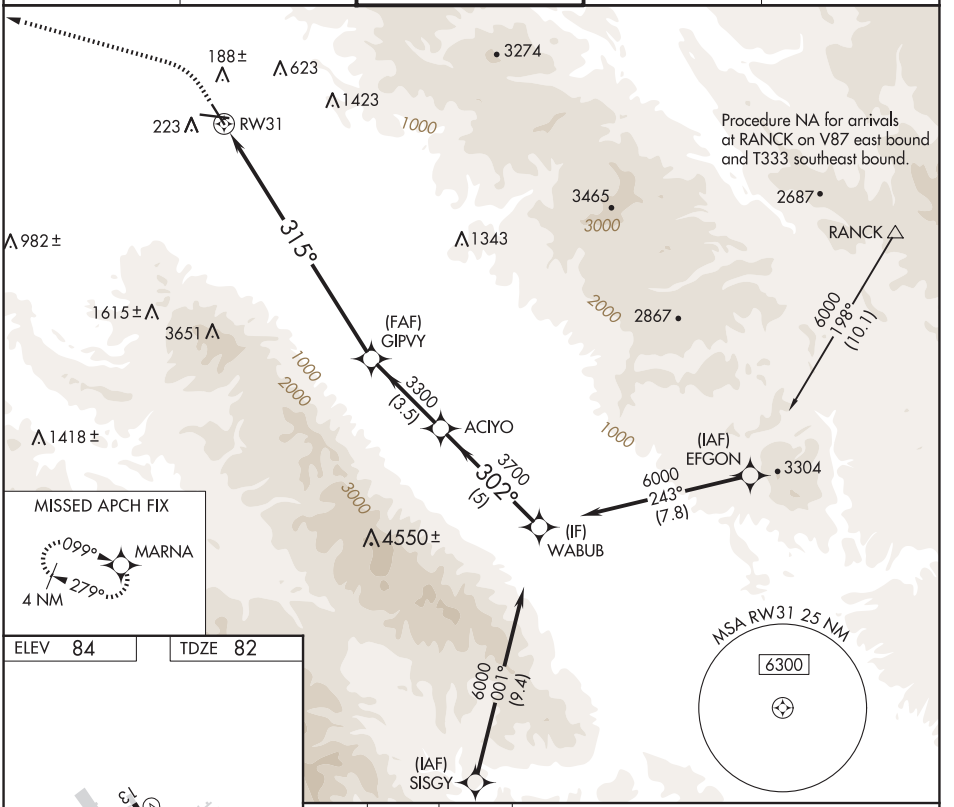
RNP APCH - GPS.

Baro-VNAV NA.

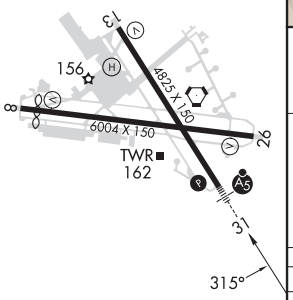
MALSR

MISSED APPROACH: Climb to 600, then climbing left turn to 3000 direct MARNA and hold, continue climb-in-hold to 3000.

ATIS	NORCAL APP CON	SALINAS TOWER ★	GND CON	UNICOM
124.85	133.0 251.15	119.525 (CTAF) L 239.3	121.7	123.0



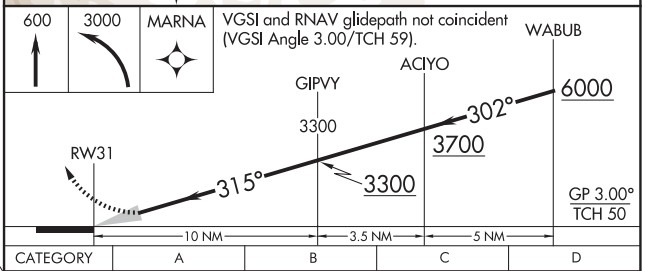
ELEV 84	TDZE 82



HIRL Rwy 13-31 L

MIRL Rwy 8-26 L

REIL Rwys 13 and 26 L



CATEGORY		A	B	C	D
LPV	DA	302/24	220 (300-½)		
LNAV/VNAV	DA	465/35	383 (400-⅝)		

SALINAS, CALIFORNIA

Amdt 2 16MAY24

36°40'N-121°36'W

SALINAS MUNI (SNS)

RNAV (GPS) Z RWY 31

SW-2, 07 AUG 2025 to 02 OCT 2025

LOC RWY 31
SALINAS MUNI (SNS)

LOC I-SNS	APP CRS	Rwy Idg	4825
108.5	315°	TDZE	82
		Apt Elev	84

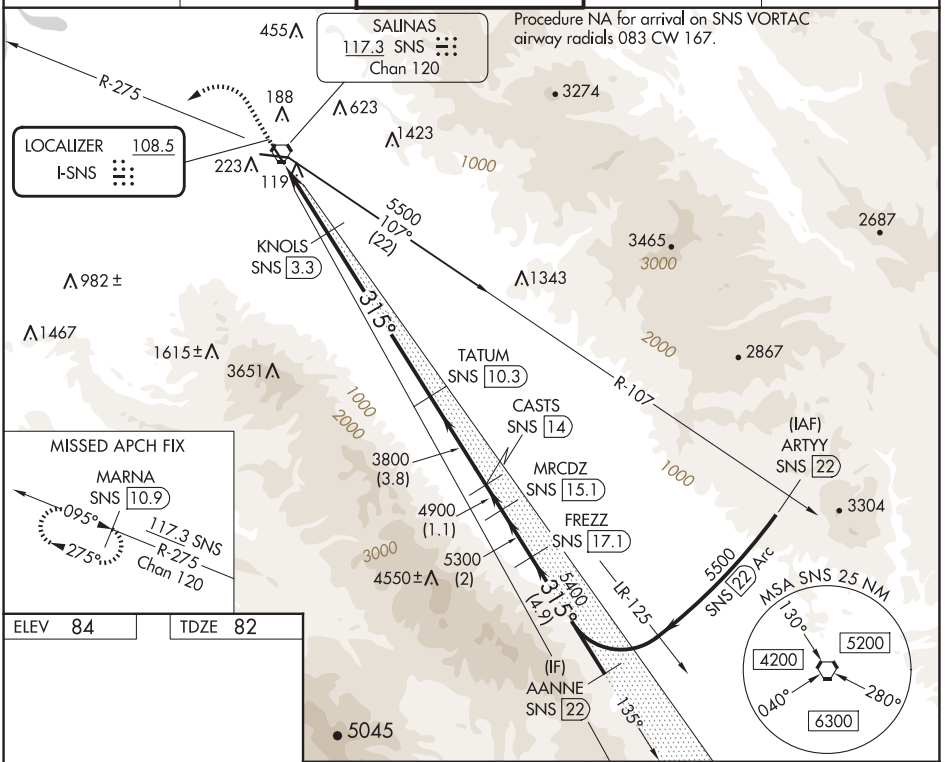
DME required.

DME from SNS VORTAC. DME use requires simultaneous reception of I-SNS and SNS DME. Circling NA for Cats C and D northeast of Rwy 13 and north of Rwy 26. For inop ALS, increase S-LOC-31 visibility Cats C and D to RVR 5000.

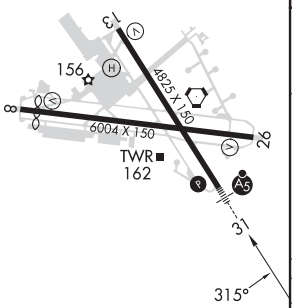
MALSR

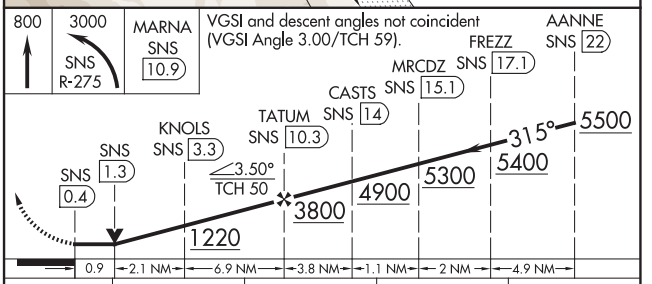
MISSED APPROACH: Climb to 800 then climbing left turn to 3000 on SNS VORTAC R-275 to MARNA/SNS 10.9 DME and hold, continue climb-in-hold to 3000.

ATIS	NORCAL APP CON	SALINAS TOWER ★	GND CON	UNICOM
124.85	133.0 251.15	119.525 (CTAF) L 239.3	121.7	123.0



ELEV 84	TDZE 82





CATEGORY	A	B	C	D
S-LOC 31	420/24 338 (400-½)		420/40	338 (400-¾)
CIRCLING	540-1 456 (500-1)		800-2 716 (800-2)	1740-3 1656 (1700-3)

HIRL Rwy 13-31 L
MIRL Rwy 8-26 L
REIL Rwys 13 and 26 L

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SW-2, 07 AUG 2025 to 02 OCT 2025

SALINAS, CALIFORNIA | AL-363 (FAA) | 25107

VORTAC SNS	APP CRS	Rwy Idg	4825
117.3	122°	TDZE	84
Chan 120		Apt Elev	84

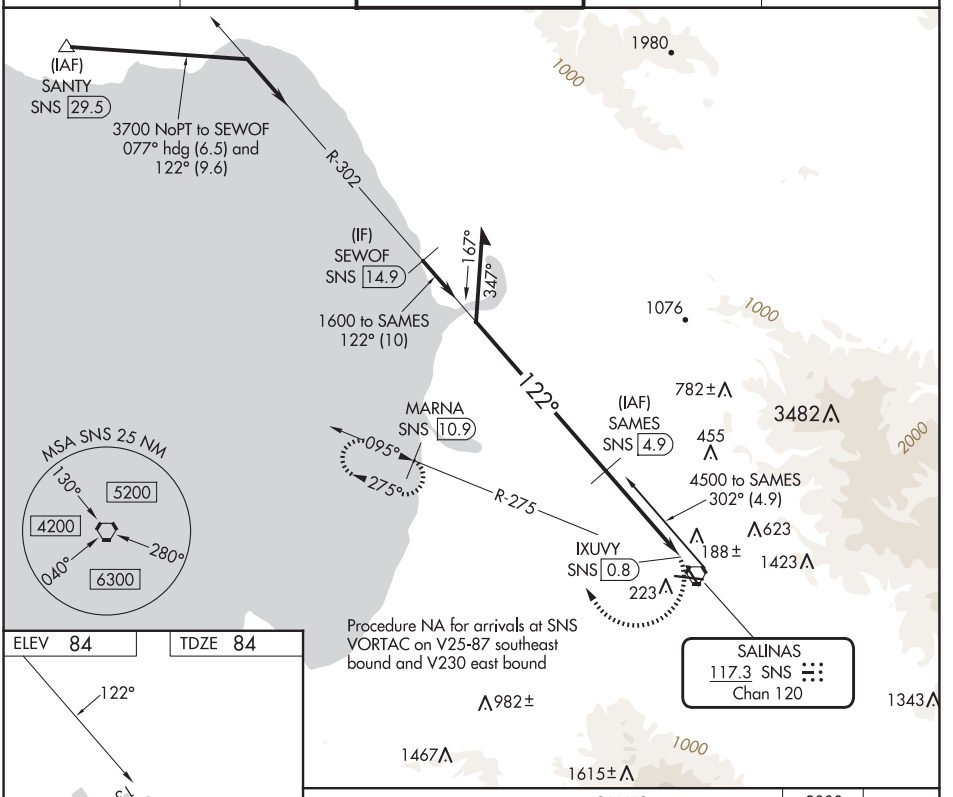
VOR RWY 13
SALINAS MUNI (SNS)

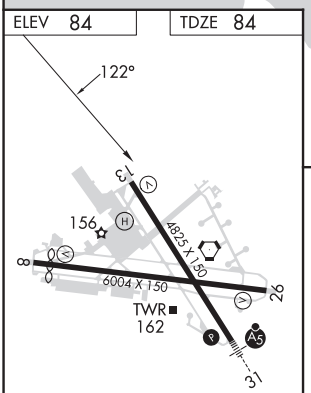
DME required.

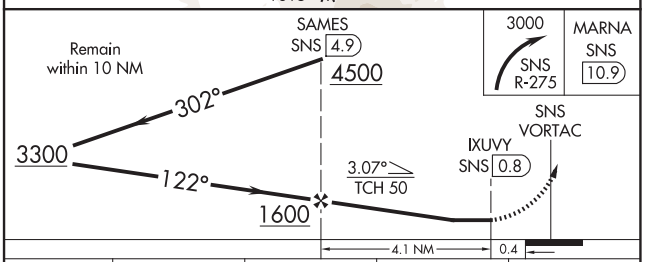
Rwy 13 helicopter visibility reduction below 1 SM NA. Circling NA for Cat C northeast of Rwy 13 and north of Rwy 26 and NA for Cat D northeast of Rwy 13-31.

MISSED APPROACH: Climbing right turn to 3000 on SNS VORTAC R-275 to MARNA/SNS 10.9 DME and hold, continue climb-in-hold to 3000.

ATIS	NORCAL APP CON	SALINAS TOWER★	GND CON	UNICOM
124.85	133.0 251.15	119.525 (CTAF) L 239.3	121.7	123.0







CATEGORY	A	B	C	D
S-13	600-1	516 (600-1)	600-1⅜ 516 (600-1⅜)	760-1⅞ 676 (700-1⅞)
CIRCLING	600-1	516 (600-1)	800-2 716 (800-2)	960-2¾ 876 (900-2¾)

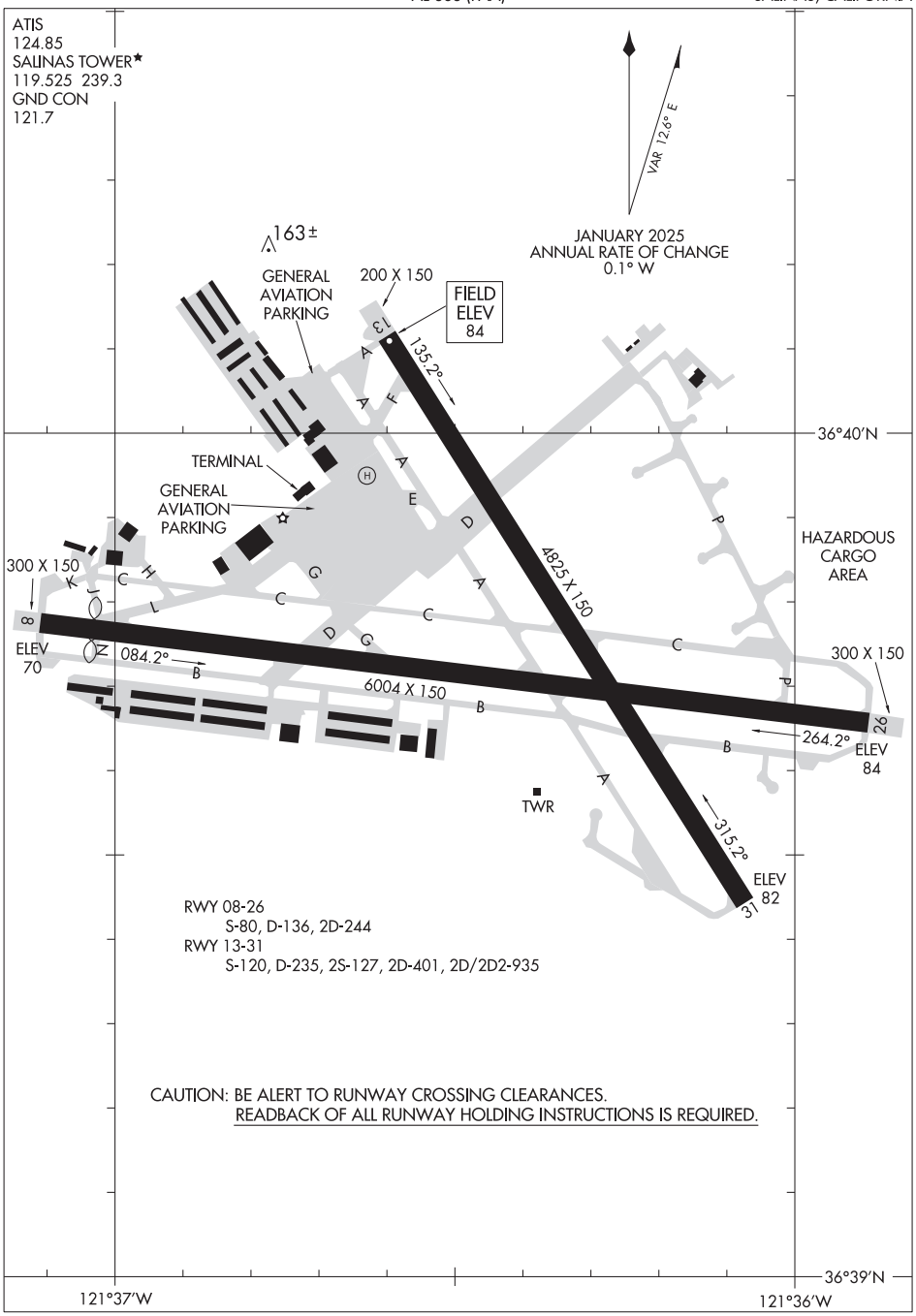
HIRL Rwy 13-31 L
MIRL Rwy 8-26 L
REIL Rwys 13 and 26 L

SALINAS, CALIFORNIA
Amdt 13 16MAY24

36°40′N-121°36′W

SALINAS MUNI (SNS)
VOR RWY 13

SW-2, 07 AUG 2025 to 02 OCT 2025



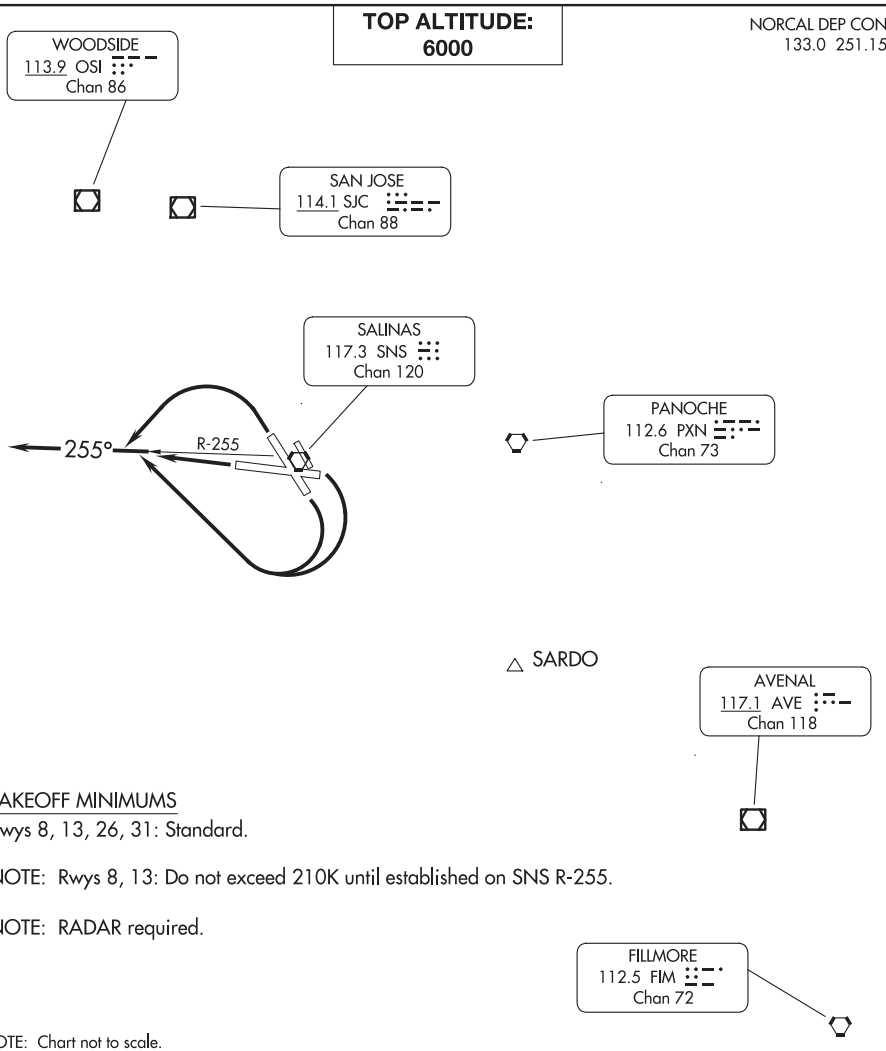
SW-2, 07 AUG 2025 to 02 OCT 2025

(SNS3.SNS) 23334

SALINAS THREE DEPARTURE

AL-363 (FAA)

SALINAS MUNI (SNS)
SALINAS, CALIFORNIA



TAKEOFF MINIMUMS

Rwys 8, 13, 26, 31: Standard.

NOTE: Rwys 8, 13: Do not exceed 210K until established on SNS R-255.

NOTE: RADAR required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8, 13: Climbing right turn to 6000 to intercept SNS R-255 thence . . . .

TAKEOFF RUNWAY 26: Climb to 6000 to intercept SNS R-255 thence . . . .

TAKEOFF RUNWAY 31: Climbing left turn to 6000 to intercept SNS R-255 thence . . . .

. . . . Expect RADAR vectors to assigned route. Expect clearance to filed altitude/flight level within five (5) minutes after departure.

SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 31

CALAVERAS COUNTY/MAURY RASMUSSEN FLD (CPU)

WAAS	APP CRS	Rwy Idg	3602
CH 81842	311°	TDZE	1328
W31A		Apt Elev	1328

RNP APCH.

Circling NA southwest of Rwy 31-13.

MISSED APPROACH: Climb to 4400 direct ZEGEX and hold, continue climb-in-hold to 4400.

AWOS-3P	NORCAL APP CON	UNICOM
118.525	125.1 363.2	123.0 (CTAF)

MISSED APCH FIX

5 NM 145° 325° ZEGEX

KATSO 1791± 5200 144° (23.5)

1341 2812 RW31 1535± 3154

ZESUM 3 NM to RW31 1414±

311° (FAF) KACBY 3107 2603 3478 2595± 3897

3700 291° (5.5)

111° 291° 5 NM (IF/IAF) WUBEB

LINDEN LIN 5200 087° (26.2)

MSA RW31 25 NM 8800

5200 NoPT 342° (12.6) (IAF) HOFED

ELEV 1328 TDZE 1328

3° 0.6°/UP 3602 X 60 311°

MIRL Rwy 13-31 (L)

4400 ZEGEX

VGSI and descent angle not coincident (VGSI Angle 3.00/TCH 26).

WUBEB 5 NM Holding Pattern

ZESUM 3 NM to RW31 KACBY

0.8 NM to RW31 3.00° TCH 31 RW31 311° 3700 2320 291° 111° 291° 5200

0.8 NM 2.2 NM 4.3 NM 5.5 NM

CATEGORY	A	B	C	D
LP MDA	1600-1 272 (300-1)			NA
LNAV MDA	1860-1 532 (600-1)		1860-1½ 532 (600-1½)	NA
C CIRCLING	1860-1 532 (600-1)	2040-1 712 (800-1)	2360-3 1032 (1100-3)	NA

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SAN CARLOS, CALIFORNIA | AL-9219 (FAA) | 25107

RNAV (GPS) Y RWY 30

SAN CARLOS (SQL)

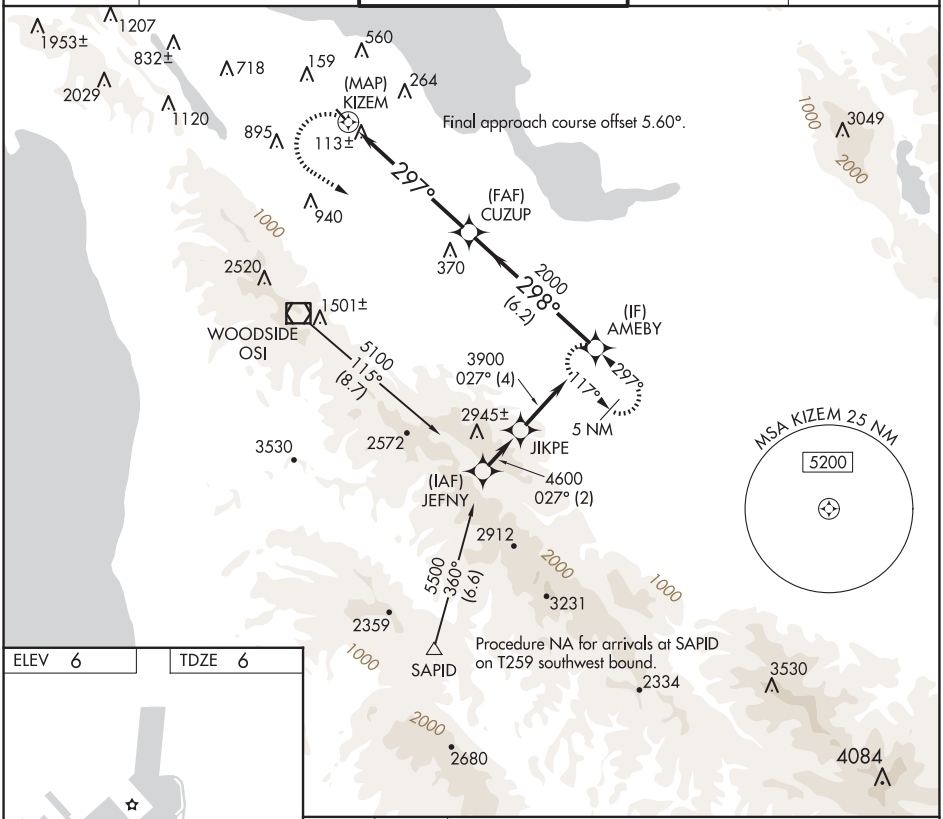
APP CRS	Rwy Idg	2621
297°	TDZE	6
	Apt Elev	6

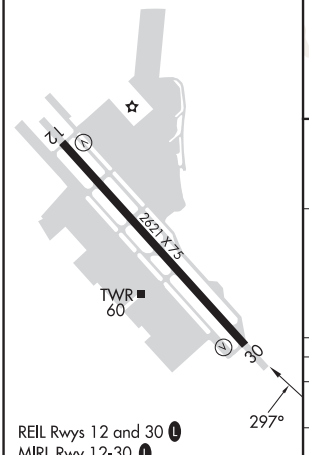
RNP APCH - GPS.

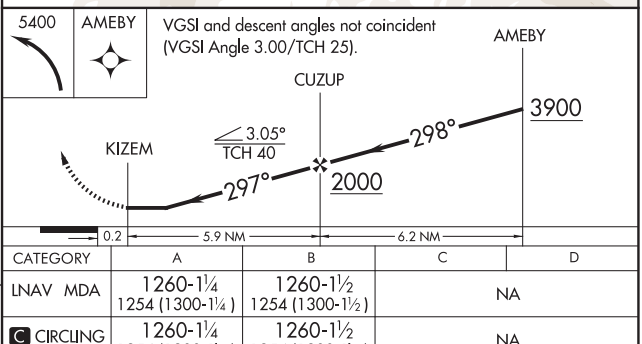
When Circling to Rwy 12 at night, operational VGSI required, remain on or above VGSI glidepath until threshold. Rwy 30 helicopter visibility reduction below 1 SM NA. Circling NA west of Rwy 12-30.

MISSED APPROACH: Climbing left turn to 5400 direct AMEBY and hold, continue climb-in-hold to 5400.

ATIS	NORCAL APP CON	SAN CARLOS TOWER ★	GND CON	UNICOM
125.9	133.95 317.6	119.0 (CTAF) L 326.2	121.6	122.95







CATEGORY	A	B	C	D
LNAV MDA	1260-1¼ 1254 (1300-1¼)	1260-1½ 1254 (1300-1½)	NA	
C CIRCLING	1260-1¼ 1254 (1300-1¼)	1260-1½ 1254 (1300-1½)	NA	

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SW-2, 07 AUG 2025 to 02 OCT 2025

SAN CARLOS, CALIFORNIA | 37°31'N-122°15'W | SAN CARLOS (SQL)

Orig-C 11JUL24

RNAV (GPS) Y RWY 30

APP CRS	Rwy Idg	2621
297°	TDZE	6
	Apt Elev	6

RNAV (GPS) Z RWY 30

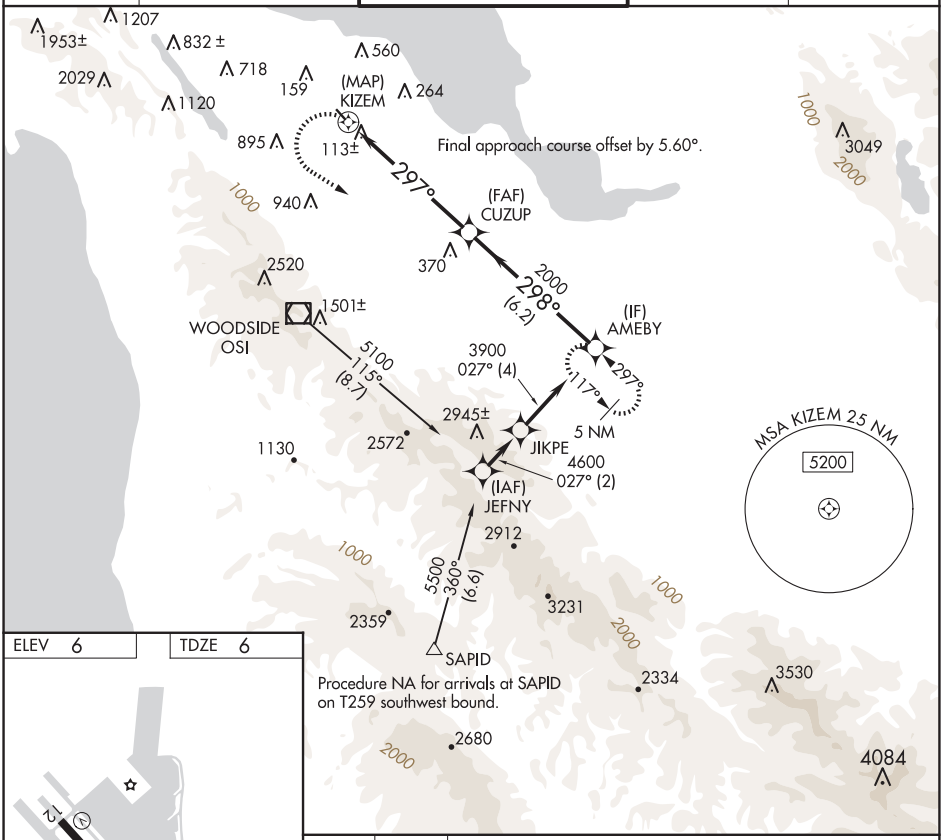
SAN CARLOS (SQL)

RNP APCH - GPS.

Rwy 30 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climbing left turn to 5400 direct AMEBY and hold, continue climb-in-hold to 5400. Missed approach requires minimum climb of 340 feet per NM to 1300; if unable to meet climb gradient, see RNAV (GPS) Y RWY 30.

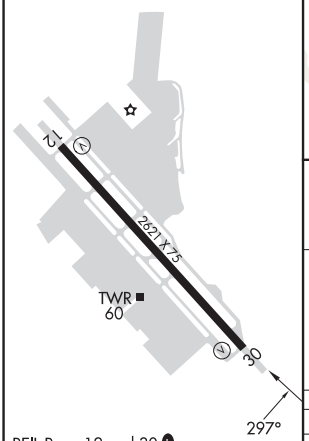
ATIS	NORCAL APP CON	SAN CARLOS TOWER ★	GND CON	UNICOM
125.9	133.95 317.6	119.0 (CTAF) L 326.2	121.6	122.95



SW-2, 07 AUG 2025 to 02 OCT 2025

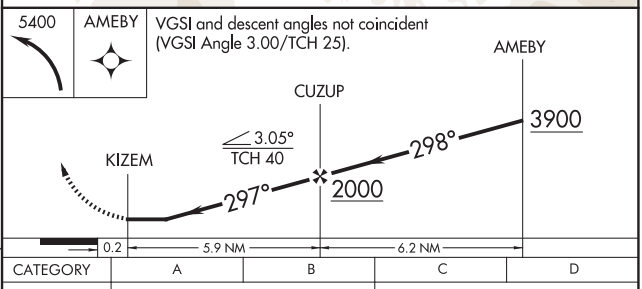
SW-2, 07 AUG 2025 to 02 OCT 2025

ELEV 6	TDZE 6



REIL Rwys 12 and 30 L

MIRL Rwy 12-30 L



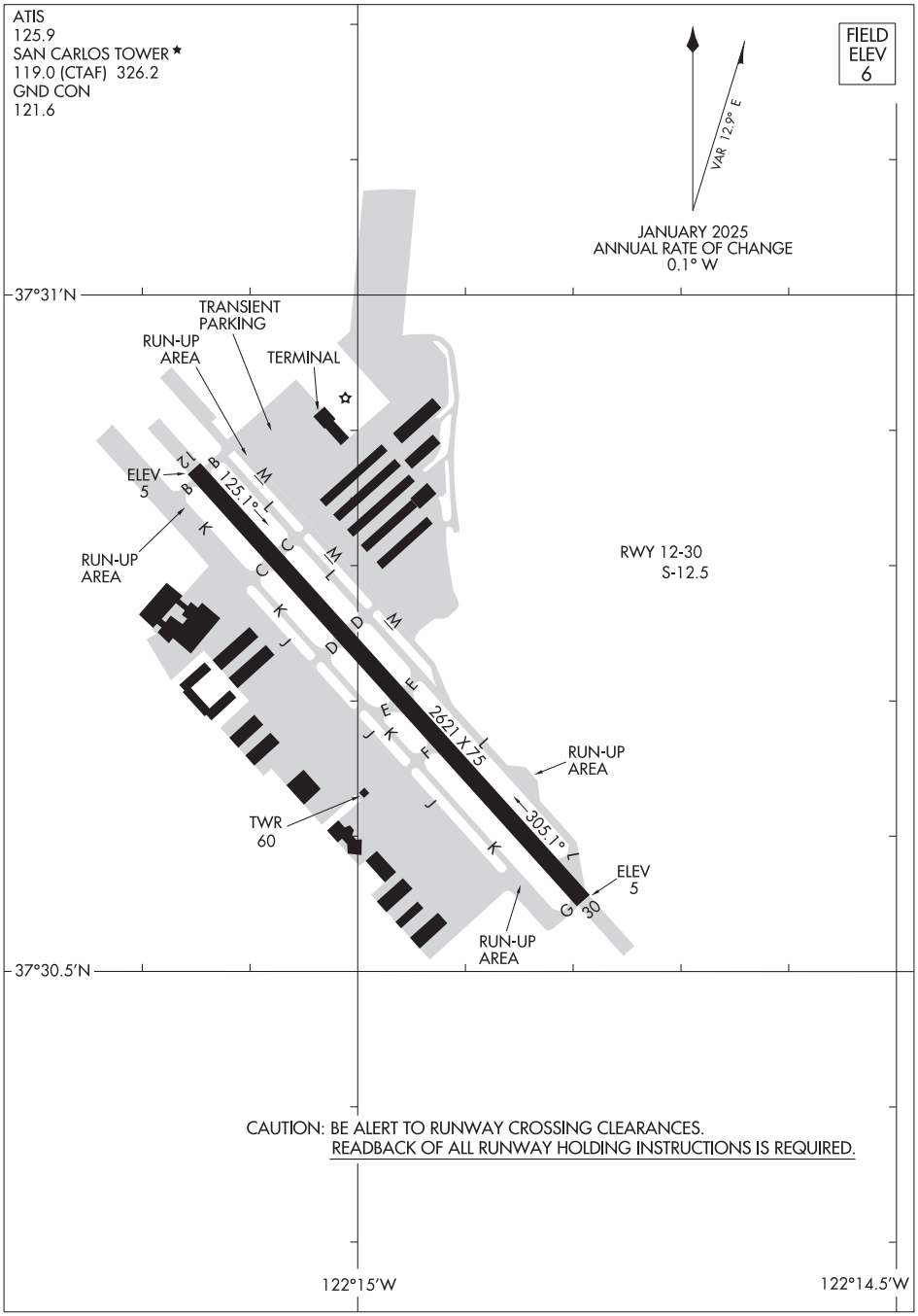
CATEGORY	A	B	C	D
LNAV MDA	900-1¼ 894 (900-1¼)		NA	

25107

AIRPORT DIAGRAM

SAN CARLOS (SQL)
SAN CARLOS, CALIFORNIA

AL-9219 (FAA)



AIRPORT DIAGRAM

SAN CARLOS, CALIFORNIA
SAN CARLOS (SQL)

25107

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

ILS or LOC RWY 19L

SAN FRANCISCO INTL (SFO)

LOC/DME I-SIA	APP CRS		19L	19R
108.9	194°	Rwy Ldg	8650	7650
Chan 26		TDZE	11	11
		Apt Elev	13	13

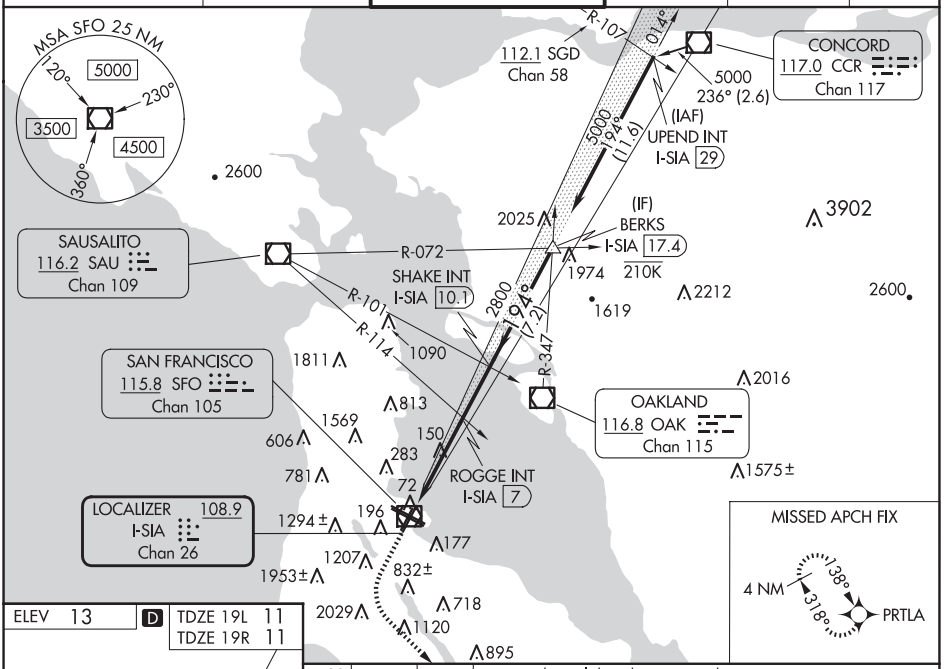
RNP APCH - GPS.

Inop table does not apply to S-LOC Rwy 19L or Sidestep Rwy 19R. Simultaneous approach authorized. Simultaneous operations require use of vertical guidance; maintain last assigned altitude until established on the glideslope. For inop ALS, increase S-ILS Rwy 19L* all Cats visibility to RVR 4500, S-ILS Rwy 19L all Cats visibility to 2½ SM. Sidestep NA until passing ROGGE INT.

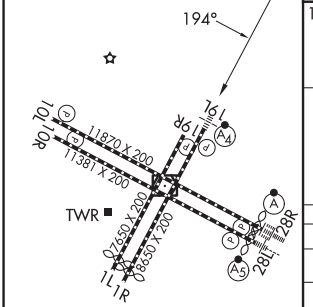
MALSF Rwy 19L

MISSED APPROACH: Climb to 1100 then climbing left turn to 4000 direct to PRTLA and hold.
*Missed approach requires minimum climb of 357 feet per NM to 2000.

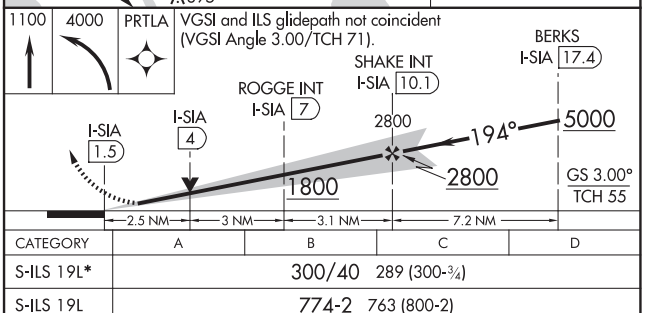
D-ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL	CPDLC
113.7 115.8 118.85	134.5 338.2	120.5 269.1	121.8	118.2	



ELEV 13 D TDZE 19L 11 TDZE 19R 11



HIRL all Rwys
TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L



CATEGORY	A	B	C	D
S-ILS 19L*	300/40 289 (300-¾)			
S-ILS 19L	774-2 763 (800-2)			
S-LOC 19L	1800-1¼ 1789 (1800-1¼)	1800-1½ 1789 (1800-1½)	1800-3 1789 (1800-3)	
ROGGE FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)				
S-LOC 19L	880/40 869 (900-¾)	880/55 869 (900-1)	880-2½ 869 (900-2½)	
SIDESTEP 19R	880-2 869 (900-2)		880-3 869 (900-3)	

FAF to MAP 8.6 NM					
Knots	60	90	120	150	180
Min:Sec	8:36	5:44	4:18	3:26	2:52

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ILS or LOC RWY 28L

SAN FRANCISCO INTL (SFO)

LOC/DME I-SFO	APP CRS	Rwy Ldg	10275
109.55	284°	TDZE	13
Chan 32(Y)		Apt Elev	13

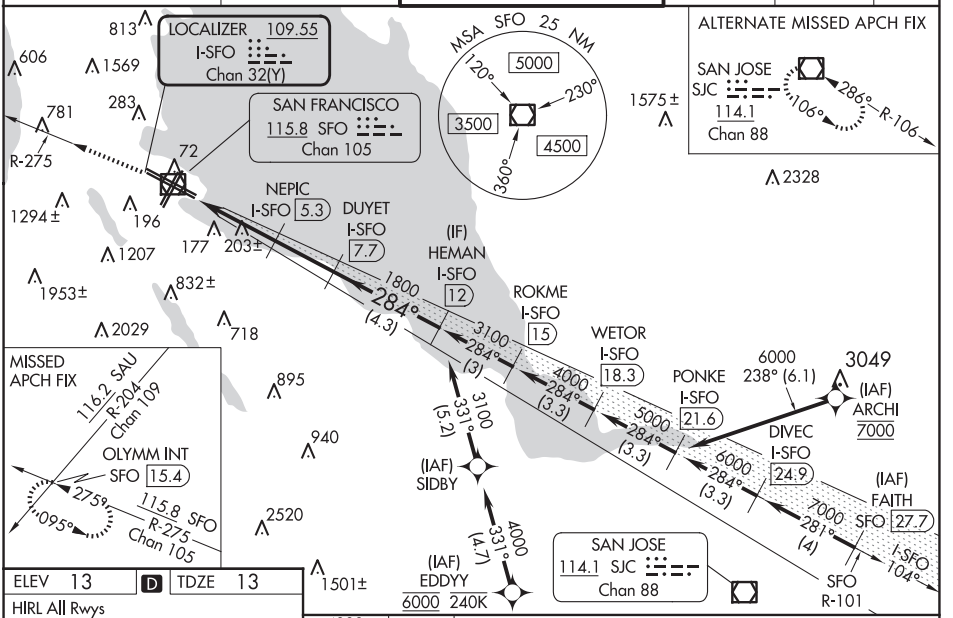
DME required. RNP APCH-GPS or RADAR required for procedure entry.

T A Circling NA to Rwys 10L, 10R, 19L, and 19R. Circling to Rwy 1L and 1R NA at night. Simultaneous approach authorized. Simultaneous operations require use of vertical guidance; maintain last assigned altitude until established on glideslope. LOC procedure NA during simultaneous operations.
*RVR 1800 authorized with use of FD or AP or HUD to DA.
†For inop ALS, increase S-ILS 28L all Cats visibility to 2½ SM.
**For inop ALS increase S-LOC 28L Cat C/D visibility to 2½ SM.

MALSR

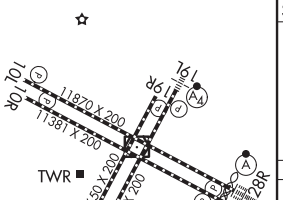
MISSED APPROACH: Climb to 4000 on SFO VOR/DME R-275 to OLYMM INT/SFO 15.4 DME and hold, continue climb-in-hold to 4000.
#Missed approach requires minimum climb of 330 feet per NM to 1600.

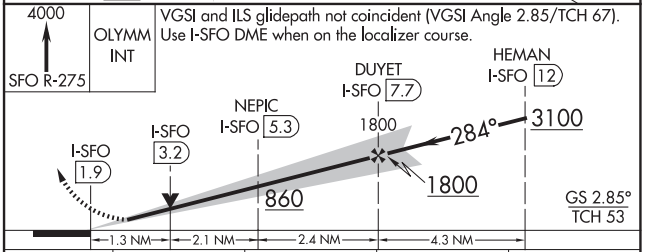
D-ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL	CPDLC
113.7 115.8 118.85	134.5 338.2	120.5 269.1	121.8	118.2	



ELEV 13	D	TDZE 13

HIRL All Rwys
TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L





CATEGORY	A	B	C	D
S-ILS 28L*#	213/24 200 (200-½)			
S-ILS 28L†	789-1¾ 776 (800-1¾)			
S-LOC 28L#	460/24 447 (500-½)		460/45 447 (500-⅞)	
S-LOC 28L**	860/24 847 (900-½)	860/40 847 (900-¾)	860-1⅞ 847 (900-1⅞)	
C CIRCLING	860-1¼ 847 (900-1¼)	960-1¼ 947 (1000-1¼)	1560-3 1547 (1600-3)	NA

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

LOC/DME I-GWQ	APP CRS		28R	28L
111.7	284°	Rwy Ldg	11236	10275
Chan 54		TDZE	13	13
		Apt Elev	13	13

ILS or LOC RWY 28R

SAN FRANCISCO INTL (SFO)

RNAV 1-GPS or RADAR required for procedure entry.

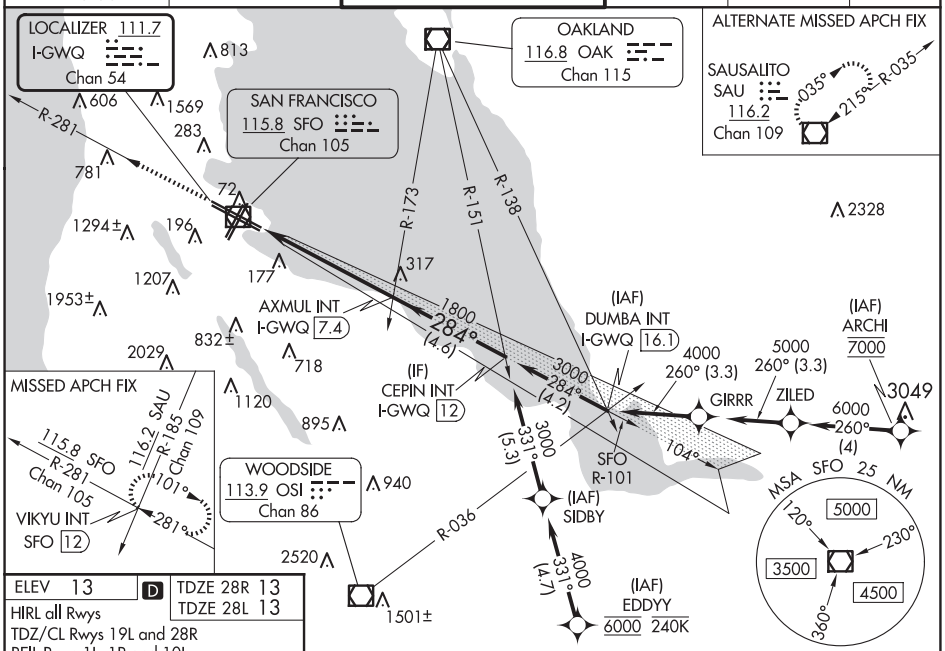
T A Circling NA to Rwys 10L, 10R, 19L, and 19R. Circling Rwy 1L, 1R NA at night. LOC procedure NA during simultaneous operations. For inop ALS increase S-LOC 28R* Cat C/D visibility to 1⅜ SM. Simultaneous approach authorized. Simultaneous operations require use of vertical guidance; maintain last assigned altitude until established on glideslope.

ALSF-2 Rwy 28R (A)

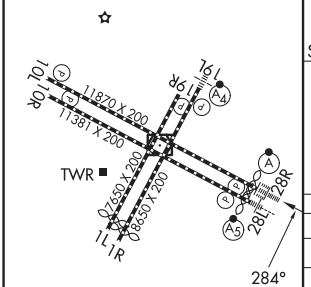
MALSR Rwy 28L (A5)

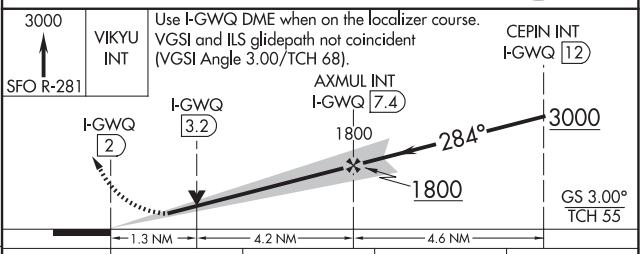
MISSED APPROACH: Climb to 3000 on SFO VOR/DME R-281 to VIKYU INT/SFO 12 DME and hold.
*Missed approach requires minimum climb of 350 feet per NM to 1900; if unable to meet climb gradient, see ILS or LOC RWY 28L.

D-ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL	CPDLC
113.7 115.8 118.85	134.5 338.2	120.5 269.1	121.8	118.2	



ELEV 13 D	TDZE 28R 13
HIRL all Rwys	TDZE 28L 13
TDZ/CL Rwys 19L and 28R	
REIL Rwys 1L, 1R and 10L	





CATEGORY	A	B	C	D
S-ILS 28R*	213/18 200 (200-½)			
S-LOC 28R*	480/24 467 (500-½)		480/50 467 (500-1)	
SIDESTEP* 28L	480/55 467 (500-1)			480-1½ 467 (500-1½)
C CIRCLING	740-1 727 (800-1)	960-1¼ 947 (1000-1¼)	1560-3 1547 (1600-3)	NA

FAF to MAP 5.4 NM

Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

SAN FRANCISCO, CALIFORNIA | AL-375 (FAA) | 25163

LOC/DME I-GWQ	APP CRS	Rwy Ldg	11236
111.7	284°	TDZE	13
Chan 54		Apt Elev	13

ILS RWY 28R (SA CAT I)

SAN FRANCISCO INTL (SFO)

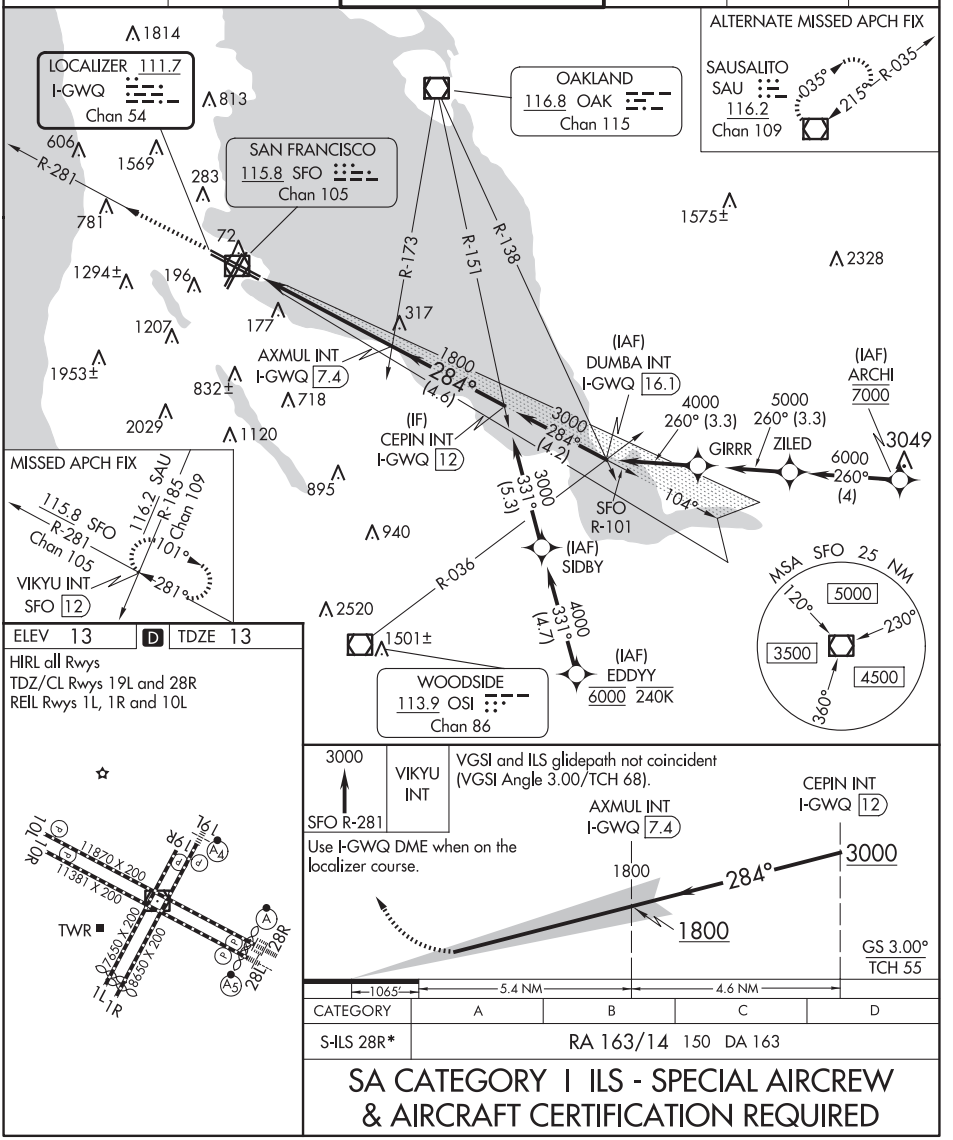
RNAV 1-GPS or RADAR required for procedure entry.

Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH.

ALSF-2

MISSED APPROACH: Climb to 3000 on SFO VOR/DME R-281 to VIKYU INT/SFO 12 DME and hold.
*Missed approach requires minimum climb of 350 feet per NM to 1900; if unable to meet climb gradient, see ILS or LOC RWY 28L.

D-ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL	CPDLC
113.7 115.8 118.85	134.5 338.2	120.5 269.1	121.8	118.2	



ELEV 13 | D | TDZE 13

HIRL all Rwys
TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L

3000 SFO R-281 | VIKYU INT

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 68).

Use I-GWQ DME when on the localizer course.

CATEGORY	A	B	C	D
S-ILS 28R*	RA 163/14 150 DA 163			

SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SAN FRANCISCO, CALIFORNIA
Amdt 15B 19MAY22

37°37'N-122°23'W

SAN FRANCISCO INTL (SFO)
ILS RWY 28R (SA CAT I)

SW-2, 07 AUG 2025 to 02 OCT 2025

LOC/DME I-GWQ	APP CRS	Rwy Ldg	11236
111.7	284°	TDZE	13
Chan 54		Apt Elev	13

ILS RWY 28R (CAT II & III)

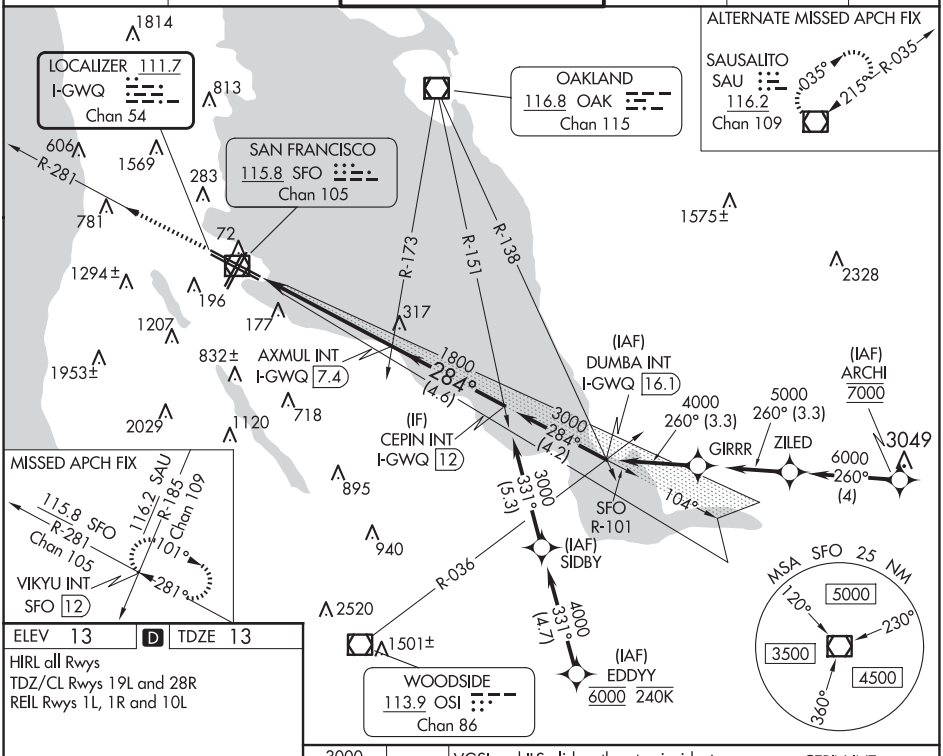
SAN FRANCISCO INTL (SFO)

RNAV 1-GPS or RADAR required for procedure entry.

ALSF-2

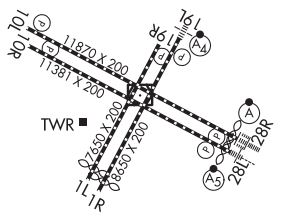
MISSED APPROACH: Climb to 3000 on SFO VOR/DME R-281 to VIKYU INT/SFO 12 DME and hold.
*Missed approach requires minimum climb of 350 feet per NM to 1900; if unable to meet climb gradient, see ILS or LOC RWY 28L.

D-ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL	CPDLC
113.7 115.8 118.85	134.5 338.2	120.5 269.1	121.8	118.2	



ELEV 13	D	TDZE 13

HIRL all Rwys
TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L

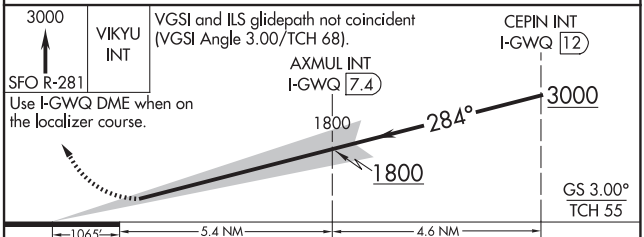


3000 SFO R-281

VIKYU INT

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 68).

Use I-GWQ DME when on the localizer course.



CATEGORY	A	B	C	D
S-ILS 28R*	CAT II RA 113/12 100 DA 113			
S-ILS 28R*	CAT III RVR 06			

CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

SAN FRANCISCO, CALIFORNIA | AL-375 (FAA) | 25163

LOC/DME I-SFO	APP CRS	Rwy Ldg	10275
109.55	284°	TDZE	13
Chan 32(Y)		Apt Elev	13

ILS RWY 28L (SA CAT II)

SAN FRANCISCO INTL (SFO)

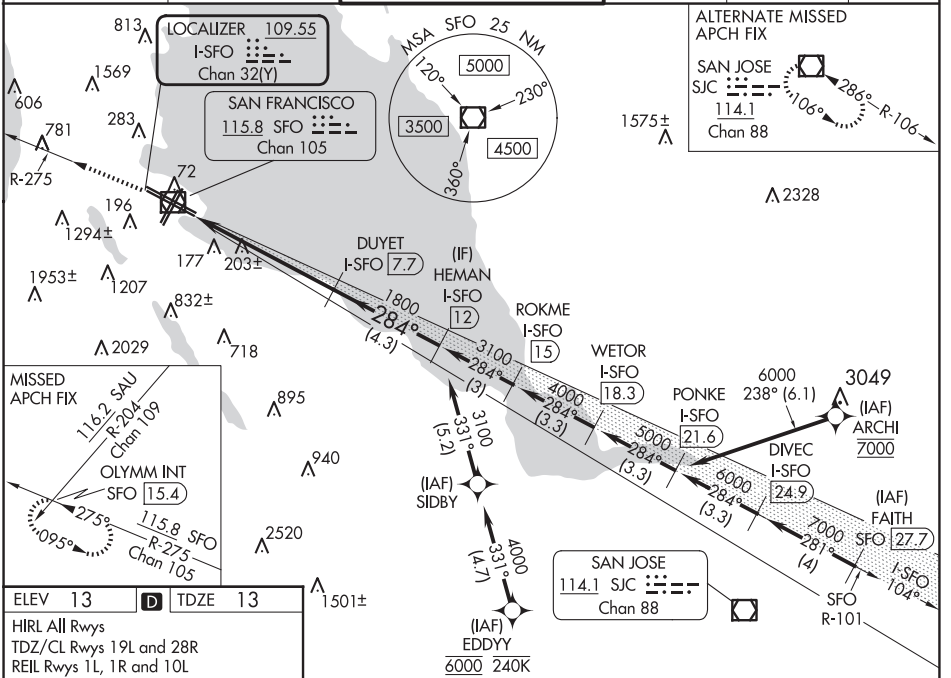
DME required. RNP APCH-GPS or RADAR required for procedure entry.

T
A Requires specific OPSPEC, MSPEC, or LOA approval.

MALSR

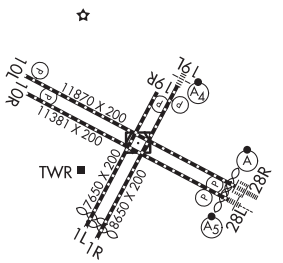
MISSED APPROACH: Climb to 4000 on SFO VOR/DME R-275 to OLYMM INT/SFO 15.4 DME and hold, continue climb-in-hold to 4000.
*Missed approach requires minimum climb of 330 feet per NM to 1600.

D-ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL	CPDLC
113.7 115.8 118.85	134.5 338.2	120.5 269.1	121.8	118.2	



ELEV 13	D	TDZE 13

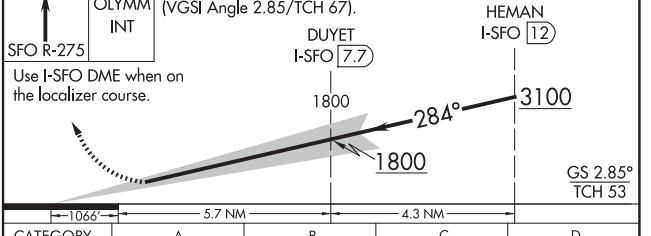
HIRL All Rwys
TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L



4000
SFO R-275
OLYMM INT

VGSI and ILS glidepath not coincident (VGSI Angle 2.85/TCH 67).

Use I-SFO DME when on the localizer course.



CATEGORY	A	B	C	D
S-ILS 28L*	RA 113/12 100 DA 113			

SA CAT II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SAN FRANCISCO, CALIFORNIA
Amdt 27C 11AUG22

37°37'N-122°23'W

SAN FRANCISCO INTL (SFO)
ILS RWY 28L (SA CAT II)

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

GBAS	APP CRS	Rwy Ldg	8650
CH 21448	194°	TDZE	11
G19A		Apt Elev	13

GLS RWY 19L

SAN FRANCISCO INTL (SFO)

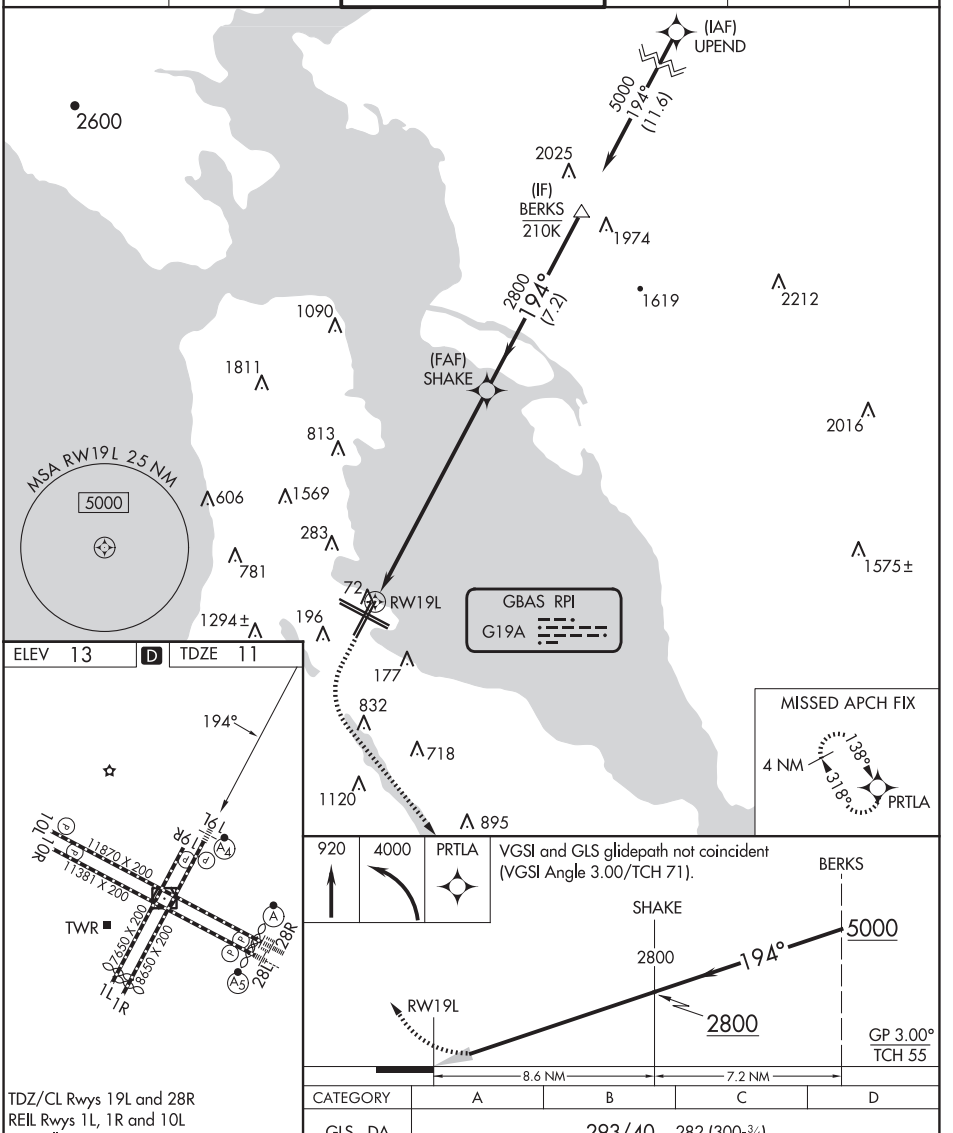
RNP APCH-GPS.

T NA Autopilot coupled approach NA below 293 feet. For inop ALS, increase GLS visibility to RVR 4500.

MALSF (A4)

MISSED APPROACH: Climb to 920 then climbing left turn to 4000 direct PRTLA and hold. Missed approach requires minimum climb of 357 feet per NM to 2000.

D-ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL	CPDLC
113.7 115.8 118.85	134.5 338.2	120.5 269.1	121.8	118.2	



CATEGORY	A	B	C	D
GLS DA	293/40	282 (300-¾)		

TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L
HIRL all Rwys

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

SAN FRANCISCO, CALIFORNIA AL-375 (FAA) 25163

GBAS	APP CRS	Rwy Ldg	7650
CH 21859	194°	TDZE	11
G19B		Apt Elev	13

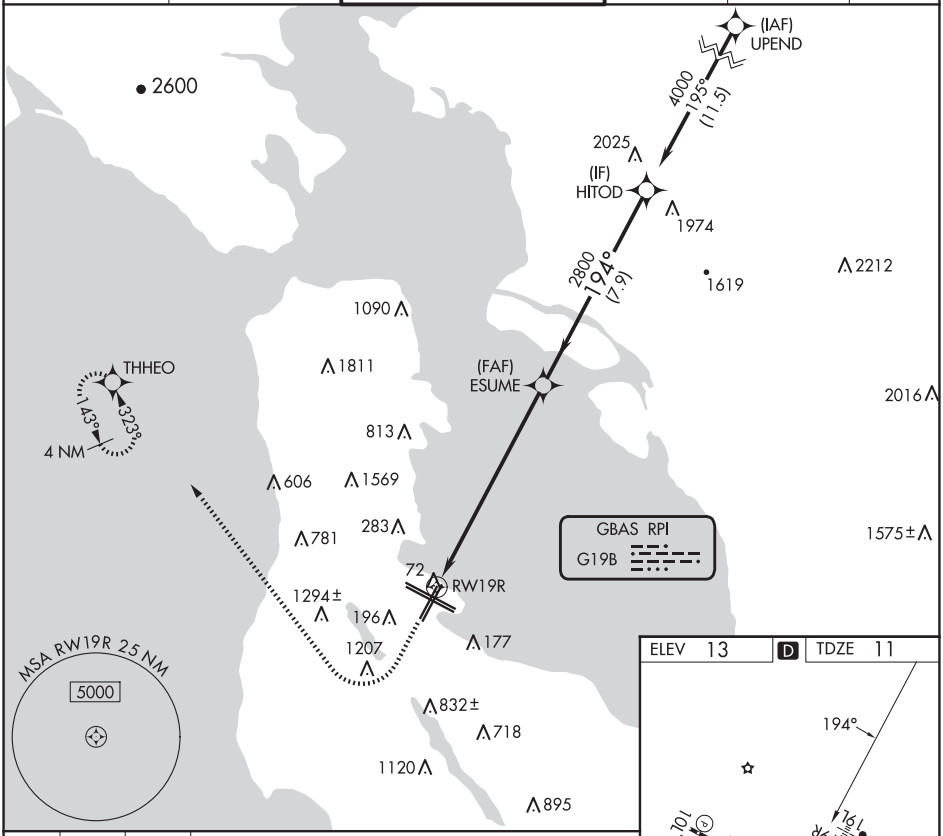
GLS RWY 19R
SAN FRANCISCO INTL (SFO)

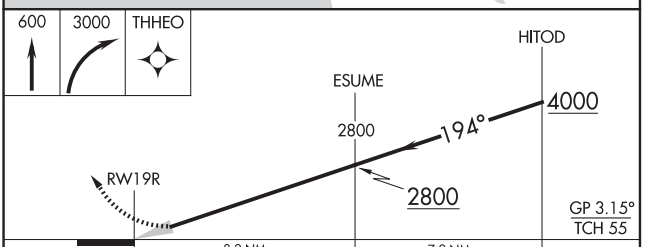
RNP APCH-GPS.

NA Autopilot coupled approach NA below 321 feet.

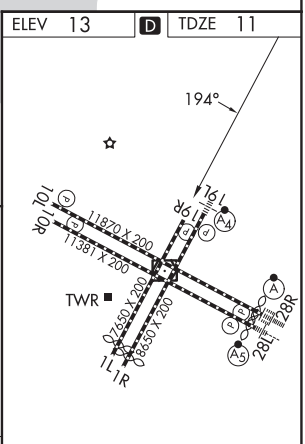
MISSED APPROACH: Climb to 600 then climbing right turn to 3000 direct THHEO and hold. Missed approach requires minimum climb of 395 feet per NM to 2100.

D-ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL	CPDLC
113.7 115.8 118.85	134.5 338.2	120.5 269.1	121.8	118.2	





CATEGORY	A	B	C	D
GLS DA	321/45	310 (400-⅞)		



TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L
HIRL all Rwys

SAN FRANCISCO, CALIFORNIA
Amdt 1 30NOV23

37°37'N-122°23'W

SAN FRANCISCO INTL (SFO)
GLS RWY 19R

SW-2, 07 AUG 2025 to 02 OCT 2025

GLS RWY 28L

SAN FRANCISCO INTL (SFO)

GBAS CH 21037 G28B	APP CRS 284°	Rwy Ldg 10275 TDZE 13 Apt Elev 13

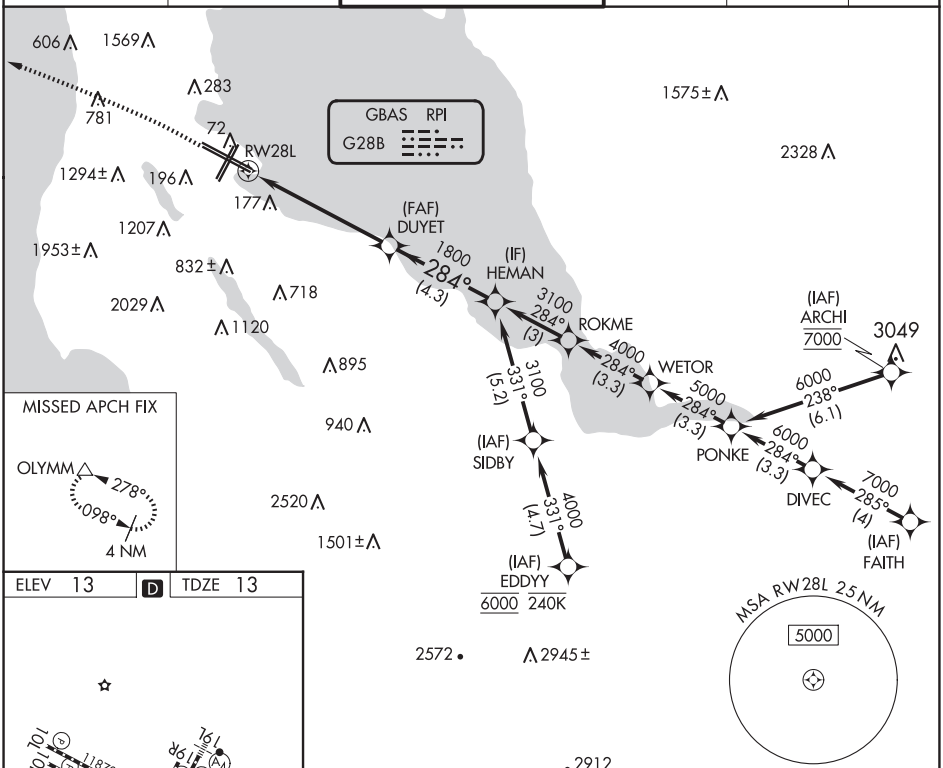
RNP APCH-GPS.

T A NA Simultaneous approach authorized. Simultaneous operations require use of vertical guidance; maintain last assigned altitude until established on glidepath. Use of FD or AP required during simultaneous operations. Autopilot coupled approach NA below 213.
*RVR 1800 authorized with use of FD or AP or HUD to DA.

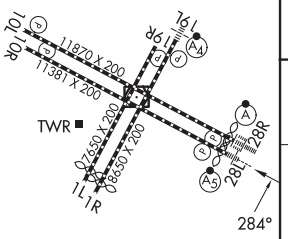
MALSR

MISSED APPROACH: Climb to 1020 then climbing left turn to 4000 direct OLYMM and hold.
*Missed approach requires minimum climb of 330 feet per NM to 1600; if unable to meet climb gradient, see RNAV (GPS) Rwy 28L.

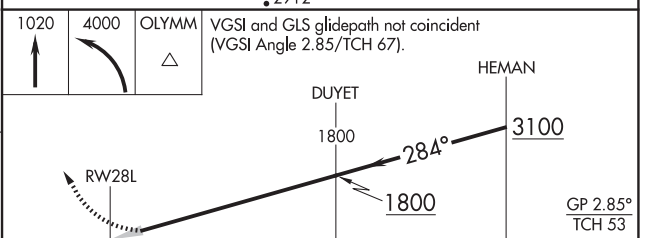
D-ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL	CPDLC
113.7 115.8 118.85	134.5 338.2	120.5 269.1	121.8	118.2	



ELEV 13 D TDZE 13



HIRL all Rwys
TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L



CATEGORY	A	B	C	D
GLS DA*	213/24	200 (200-½)		

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

SAN FRANCISCO, CALIFORNIA AL-375 (FAA) 25163

GBAS	APP CRS	Rwy Ldg 11236
CH 20626	284°	TDZE 13
G28A		Apt Elev 13

GLS RWY 28R

SAN FRANCISCO INTL (SFO)

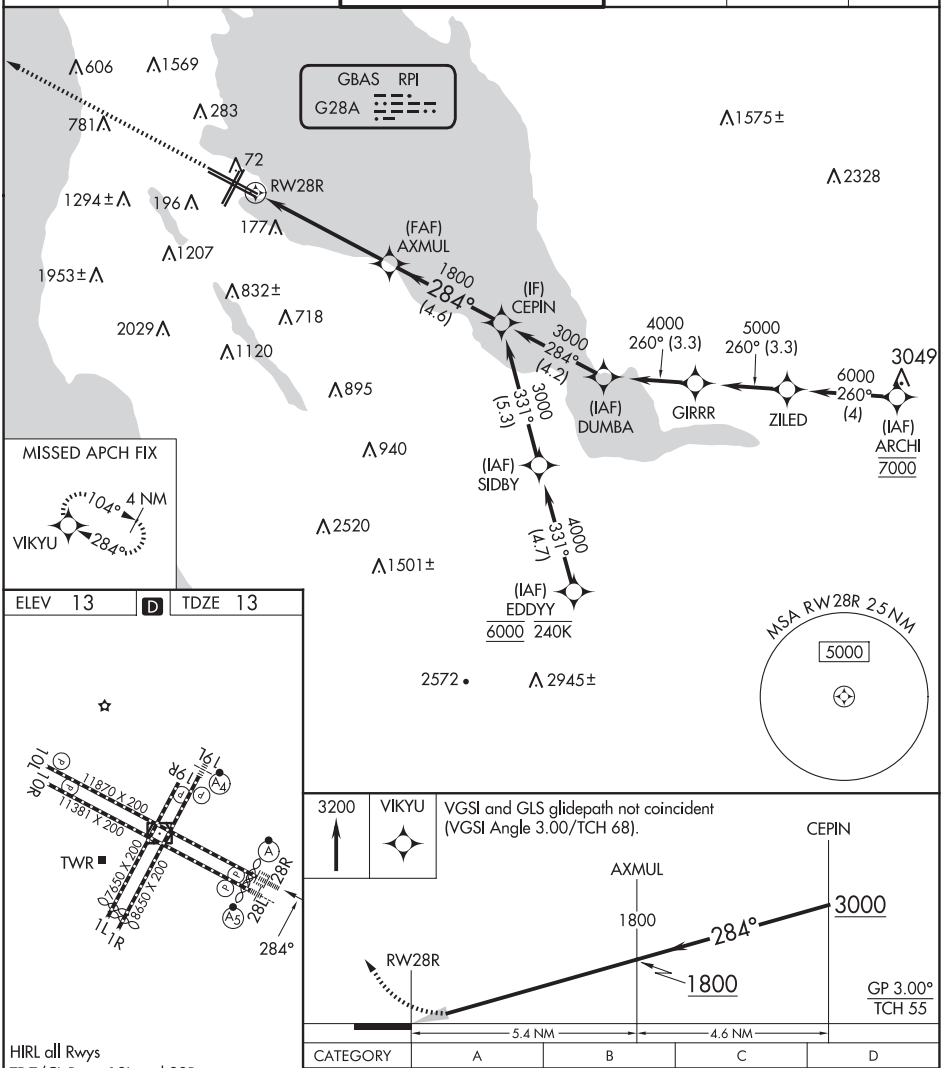
RNP APCH-GPS.

T A NA Simultaneous approach authorized. Simultaneous operations require use of vertical guidance; maintain last assigned altitude until established on glidepath. Use of FD or AP required during simultaneous operations. Autopilot coupled approach NA below 213 feet.

ALSF-2

MISSED APPROACH: Climb to 3200 direct VIKYU and hold.
*Missed approach requires minimum climb of 350 feet per NM to 1900; if unable to meet climb gradient, see RNAV (GPS) Z RWY 28R.

D-ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL	CPDLC
113.7 115.8 118.85	134.5 338.2	120.5 269.1	121.8	118.2	



ELEV 13 D TDZE 13

HIRL all Rwys
TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L

3200 VIKYU

VGSI and GLS glidepath not coincident (VGSI Angle 3.00/TCH 68).

CATEGORY	A	B	C	D
GLS DA*	213/18 200 (200-½)			

SAN FRANCISCO, CALIFORNIA
Orig 02DEC21

37°37'N-122°23'W

SAN FRANCISCO INTL (SFO)
GLS RWY 28R

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS	Rwy Ldg	11236
284°	TDZE	13
	Apt Elev	13

RNAV (RNP) Y RWY 28R

SAN FRANCISCO INTL (SFO)

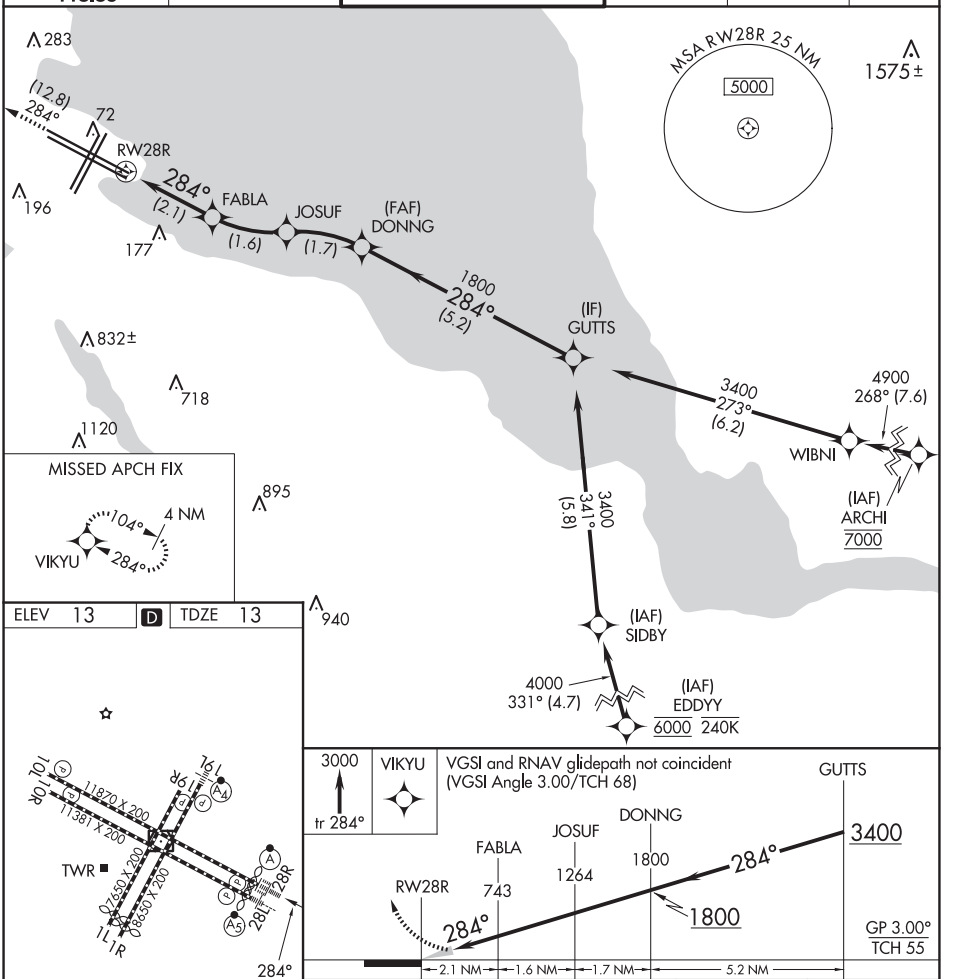
RNP AR APCH, RF required.

T For uncompensated Baro-VNAV systems, procedure NA below 3°C or above 54°C. For inop ALS, increase RNP 0.11 all Cats visibility to RVR 4000 and RNP 0.30 all Cats visibility to RVR 4500.

ALSF-2

MISSED APPROACH: Climb to 3000 on track 284° to VIKYU and hold.
*Missed approach requires minimum climb of 250 feet per NM to 1600.
#Missed approach requires minimum climb of 350 feet per NM to 2100.

D-ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL	CPDLC
113.7 115.8 118.85	134.5 338.2	120.5 269.1	121.8	118.2	



ELEV 13 D TDZE 13

TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L
HIRL all Rwys

3000
tr 284°
VIKYU

VGSI and RNAV glidepath not coincident
(VGSI Angle 3.00/TCH 68)

CATEGORY	A	B	C	D
RNP 0.11 DA*	263/24 250 (300-½)			
RNP 0.30 DA#	326/24 313 (400-½)			

AUTHORIZATION REQUIRED

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

SAN FRANCISCO, CALIFORNIA AL-375 (FAA) 25163

APP CRS	Rwy Ldg	10704
104°	TDZE	10
	Apt Elev	13

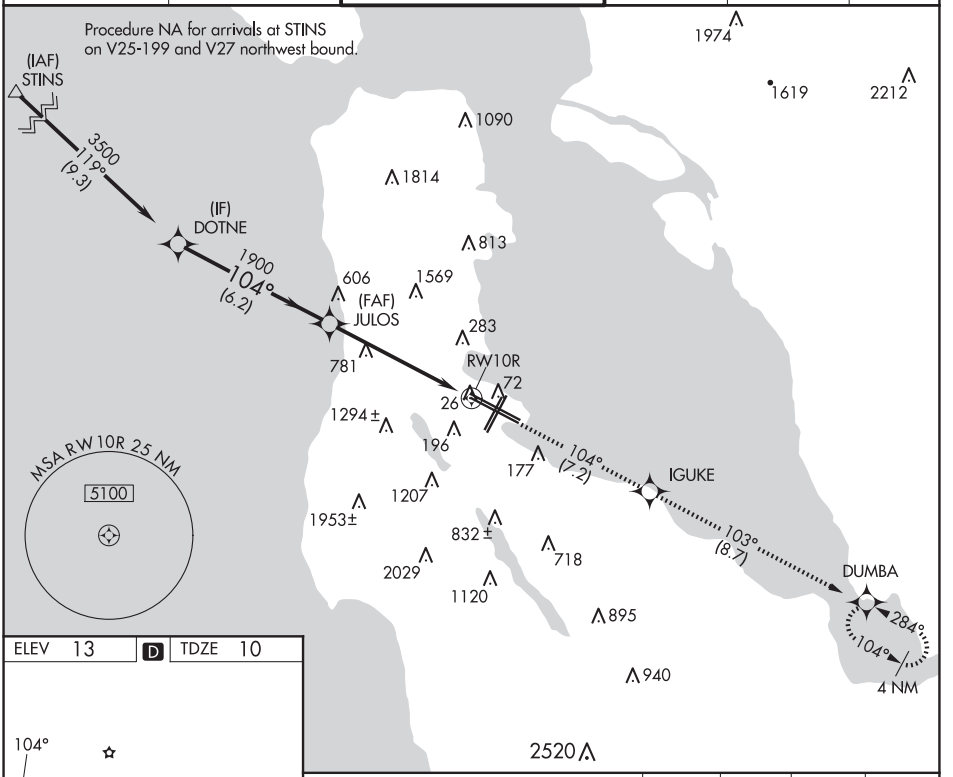
RNAV (RNP) Z RWY 10R

SAN FRANCISCO INTL (SFO)

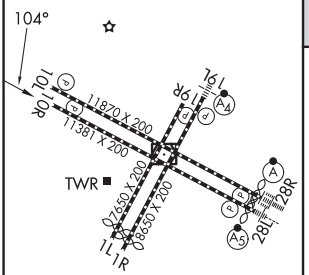
For uncompensated Baro-VNAV systems, procedure NA below 2°C (36°F) or above 54°C (130°F). GPS required. When VGSI inop, procedure NA at night.

MISSED APPROACH: Climb to 3600 on track 104° to IGUKE and on track 103° to DUMBA and hold.

D-ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL	CPDLC
113.7 115.8 118.85	134.5 338.2	120.5 269.1	121.8	118.2	

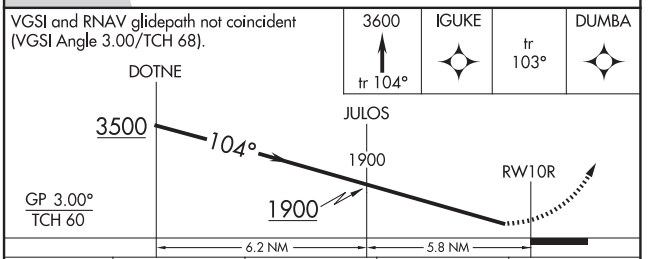


ELEV 13	D	TDZE 10



TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L
HIRL all Rwys

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 68).



CATEGORY	A	B	C	D
RNP 0.20 DA	396-1¼ 386 (400-1¼)			
RNP 0.30 DA	1108-4 1098 (1100-4)			

AUTHORIZATION REQUIRED

SAN FRANCISCO, CALIFORNIA
Amdt 2A 26JUN14

37°37'N-122°23'W

SAN FRANCISCO INTL (SFO)

RNAV (RNP) Z RWY 10R

SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS	APP CRS	Rwy Ldg 11193
CH 93946	107°	TDZE 7
W10A		Apt Elev 13

RNAV (GPS) RWY 10L

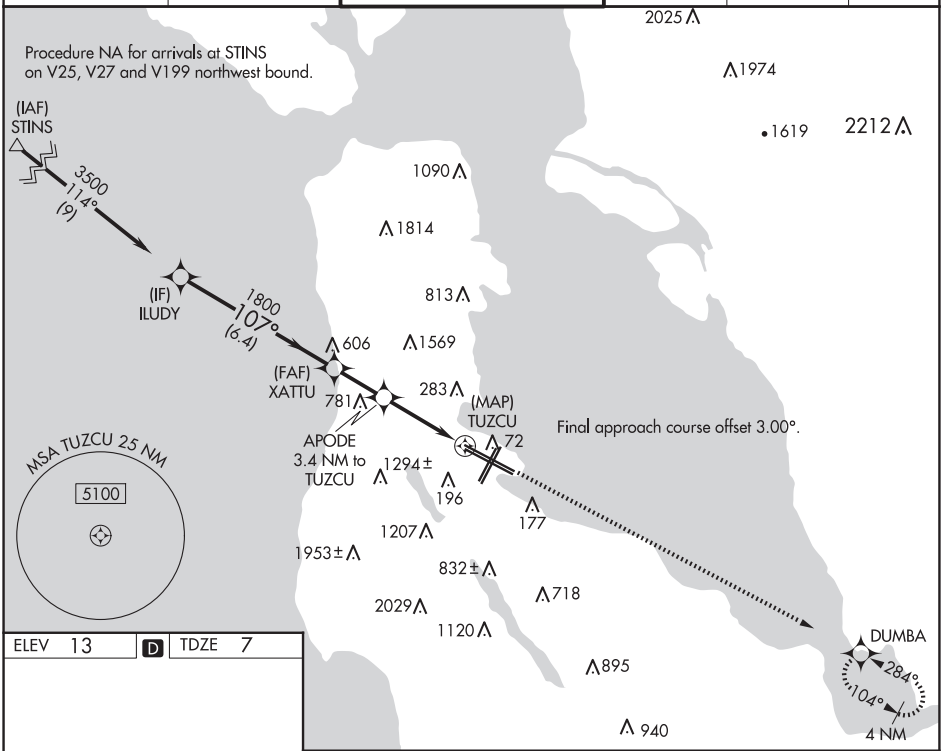
SAN FRANCISCO INTL (SFO)

RNP APCH - GPS.

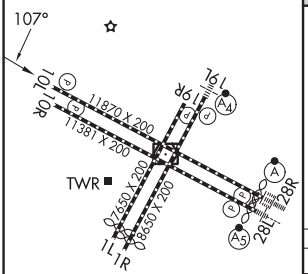
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 4°C or above 54°C. Rwy 10L helicopter visibility reduction below RVR 4000 NA.

MISSED APPROACH: Climb to 500, then climb to 3000 direct DUMBA and hold.

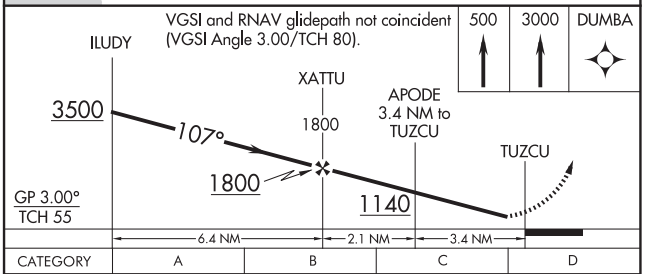
D-ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL	CPDLC
113.7 115.8 118.85	134.5 338.2	120.5 269.1	121.8	118.2	



ELEV 13 D TDZE 7



TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R, and 10L
HIRL all Rwys



CATEGORY	A	B	C	D
LPV DA	257/40 250 (300-¾)			
LNAV/VNAV DA	494-1⅜ 487 (500-1⅜)			
LNAV MDA	1080-1¼ 1073 (1100-1¼)	1080-1½ 1073 (1100-1½)	1080-3 1073 (1100-3)	

SW-2, 07 AUG 2025 to 02 OCT 2025

SAN FRANCISCO, CALIFORNIA | AL-375 (FAA) | 25163

WAAS CH 58015 W19A	APP CRS 194°	Rwy Ldg 8650 TDZE 11 Apt Elev 13

RNAV (GPS) RWY 19L

SAN FRANCISCO INTL (SFO)

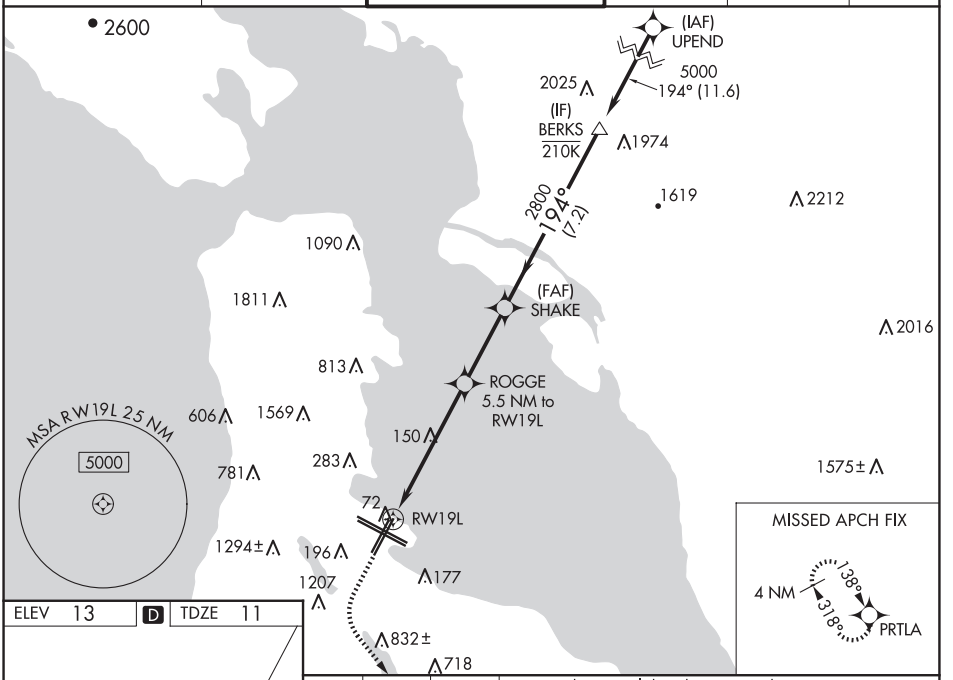
RNP APCH - GPS.

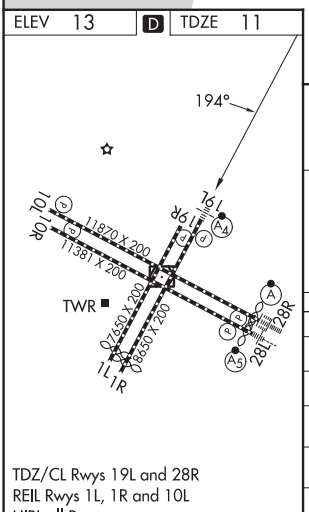
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 4°C or above 54°C. For inop ALS, increase LPV DA* (CG 357) all Cats visibility to RVR 4500. For inop ALS, increase LNAV/VNAV all Cats visibility to 2½ SM and LNAV Cats C and D visibility to 3 SM.

MALSF

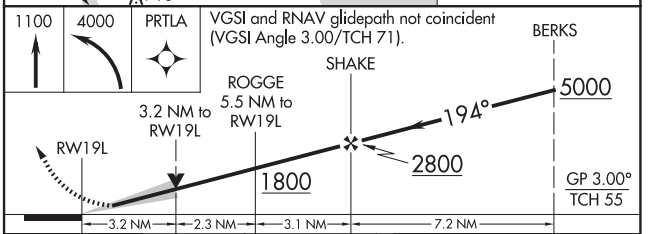
MISSED APPROACH: Climb to 1100 then climbing left turn to 4000 direct PRTLA and hold.
*Missed approach requires minimum climb of 357 feet per NM to 2000.

D-ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL	CPDLC
113.7 115.8 118.85	134.5 338.2	120.5 269.1	121.8	118.2	





TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L
HIRL all Rwys



CATEGORY	A	B	C	D
LPV DA*	293/40 282 (300-¾)			
LPV DA	656-1⅝ 645 (700-1⅝)			
LNAV/VNAV DA*	350/40 339 (400-¾)			
LNAV/VNAV DA	794-2 783 (800-2)			
LNAV MDA	1100/55 1089 (1100-1)	1100-1¼ 1089 (1100-1¼)	1100-2½ 1089 (1100-2½)	

SAN FRANCISCO, CALIFORNIA
Amdt 4 30NOV23

37°37'N-122°23'W

SAN FRANCISCO INTL (SFO)

RNAV (GPS) RWY 19L

SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS CH 53415 W28B	APP CRS 284°	Rwy Ldg 10275 TDZE 13 Apt Elev 13

RNAV (GPS) RWY 28L

SAN FRANCISCO INTL (SFO)

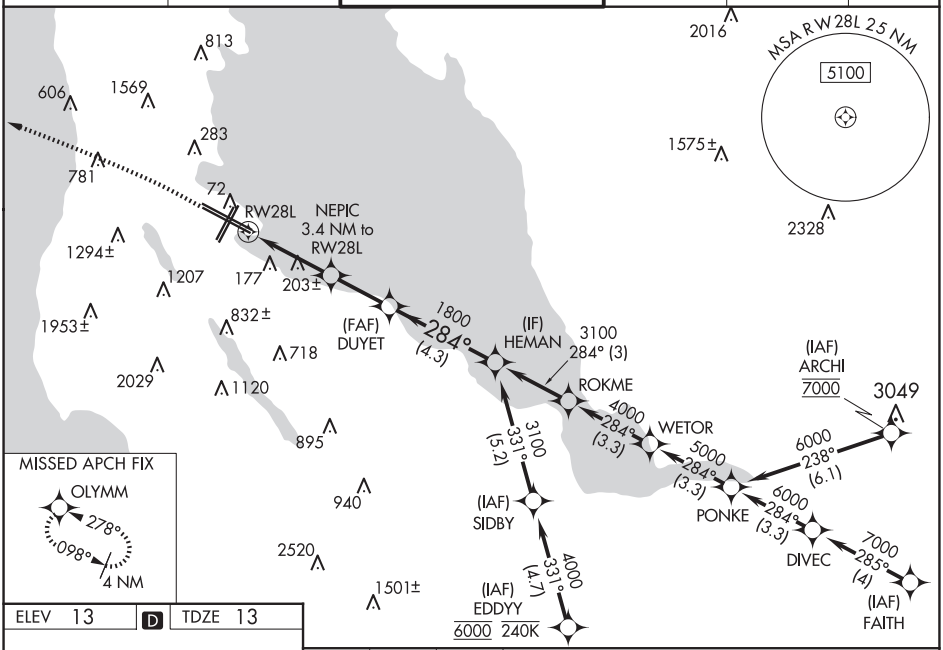
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 3°C or above 54°C. For inop ALS, increase LPV † all Cats visibility to 2½ SM, increase LNAV/VNAV all Cats visibility to 2 SM. Circling NA to Rwys 10L, 10R, 19L, and 19R. Circling Rwy 1L, 1R NA at night.
#RVR 1800 authorized with use of FD or AP or HUD to DA.

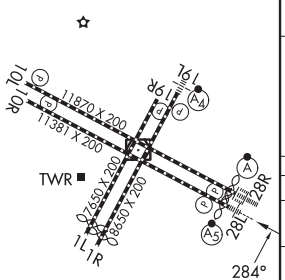
MALSR

MISSED APPROACH: Climb to 1020 then climbing left turn to 4000 direct OLYMM and hold, continue climb-in-hold to 4000.
#Missed approach requires minimum climb of 330 feet per NM to 1600.

D-ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL	CPDLC
113.7 115.8 118.85	134.5 338.2	120.5 269.1	121.8	118.2	



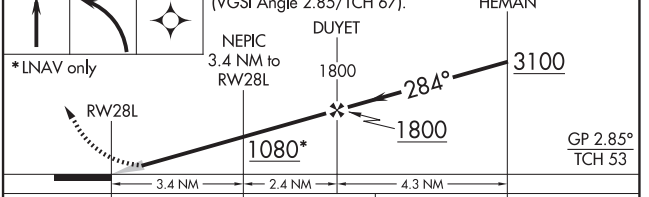
ELEV 13	D	TDZE 13



HIRL all Rwys
TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L

1020	4000	OLYMM

VGSI and RNAV glidepath not coincident (VGSI Angle 2.85/TCH 67).



CATEGORY	A	B	C	D
LPV DA#	213/24 200 (200-½)			
LPV DA†	798-1¾ 785 (800-1¾)			
LNAV/VNAV DA	770-1¾ 757 (800-1¾)			
LNAV MDA	1020/40 1007 (1100-¾)	1020/55 1007 (1100-1)	1020-2½ 1007 (1100-2½)	
C CIRCLING	1020-1¼ 1007 (1100-1¼)	1020-1½ 1007 (1100-1½)	1560-3 1547 (1600-3)	NA

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

SAN FRANCISCO, CALIFORNIA AL-375 (FAA) 25163

RNAV (GPS) Y RWY 10R

SAN FRANCISCO INTL (SFO)

APP CRS	Rwy Ldg	10704
104°	TDZE	10
	Apt Elev	13

DME/DME RNP-0.3 NA. When VGSI inop, procedure NA at night. Helicopter visibility reduction below RVR 5000 NA.

MISSED APPROACH: Climb to 4000 direct DUMBA and hold.

D-ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL	CPDLC
113.7 115.8 118.85	134.5 338.2	120.5 269.1	121.8	118.2	

Procedure NA for arrivals at STINS on V25-199 and V27 northwest bound.

(IAF) STINS

3500 119° (9.3)

(IF) DOTNE

1900 104° (6.2)

(FAF) JULOS

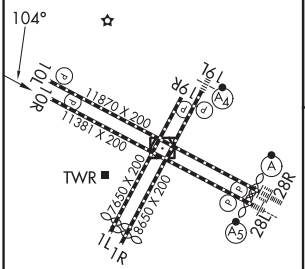
RW10R

MSA RW10R 25 NM 5100

1974 2212 1619 1090 1814 813 606 1569 283 781 72 1294± 196 177 1207 1953± 832± 2029 718 1120 895 940 2520 1501±

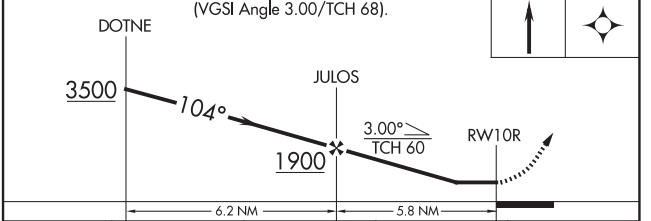
DUMBA 284° 104° 4 NM

ELEV 13 D TDZE 10



TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L
HIRL all Rwys

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 68).



CATEGORY	A	B	C	D
LNAV MDA	1200/60 1190 (1200-1¼)	1200-1½ 1190 (1200-1½)	1200-3	1190 (1200-3)

SAN FRANCISCO, CALIFORNIA
Amdt 2A 26JUN14

37°37′N-122°23′W

SAN FRANCISCO INTL (SFO)

RNAV (GPS) Y RWY 10R

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS CH 53533 W19B	APP CRS 194°	Rwy Ldg 7650 TDZE 11 Apt Elev 13

RNAV (GPS) Y RWY 19R

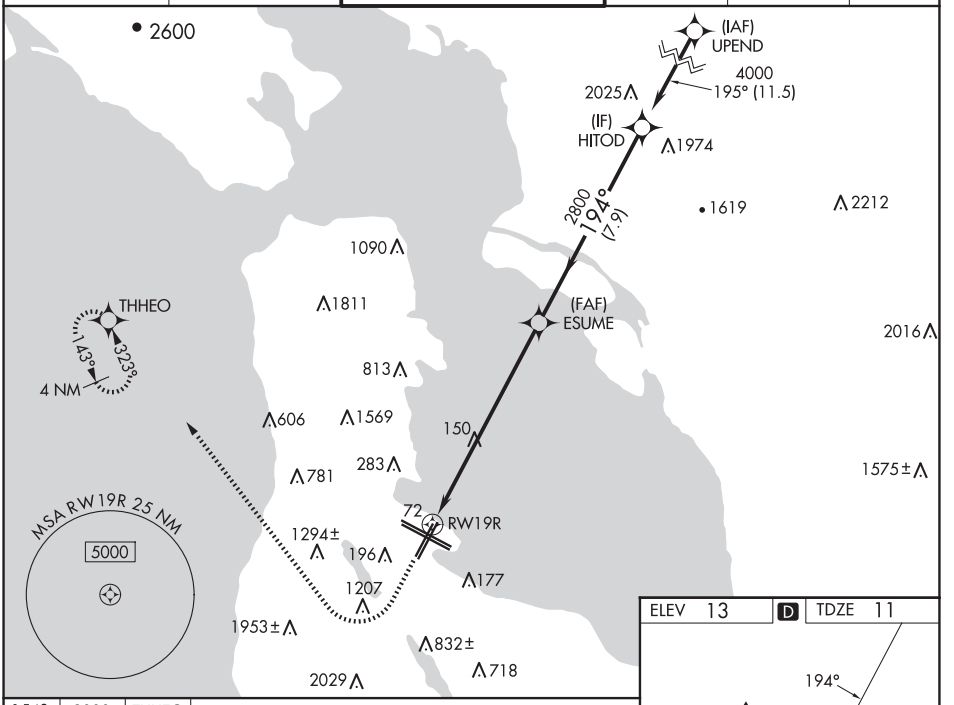
SAN FRANCISCO INTL (SFO)

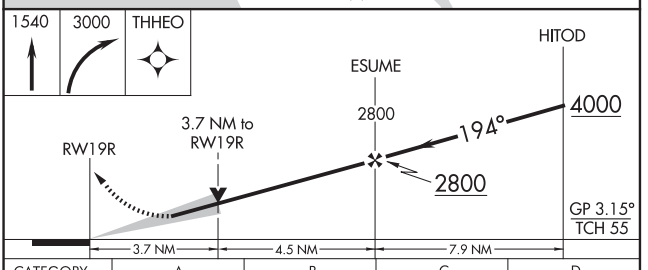
RNP APCH-GPS.

LNAV procedure NA during simultaneous operations. Use of FD or AP required during simultaneous operations. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 4°C or above 54°C. Simultaneous approach authorized. Simultaneous operations require use of vertical guidance; maintain last assigned altitude until established on glidepath. Simultaneous approach NA below 12°C (52°F).

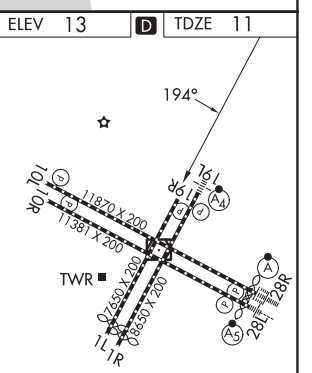
MISSED APPROACH: Climb to 1540 then climbing right turn to 3000 direct THHEO and hold.

D-ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL	CPDLC
113.7 115.8 118.85	134.5 338.2	120.5 269.1	121.8	118.2	





CATEGORY	A	B	C	D
LPV DA	1005-4 994 (1000-4)			
LNAV/VNAV DA	878-2½ 867 (900-2½)			
LNAV MDA	1320-1¼ 1309 (1400-1¼)	1320-1½ 1309 (1400-1½)	1320-3 1309 (1400-3)	



TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L
HIRL all Rwys

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

SAN FRANCISCO, CALIFORNIA AL-375 (FAA) 25163

WAAS	APP CRS	Rwy Ldg	7650
CH 57945	194°	TDZE	11
W19D		Apt Elev	13

RNAV (GPS) Z RWY 19R

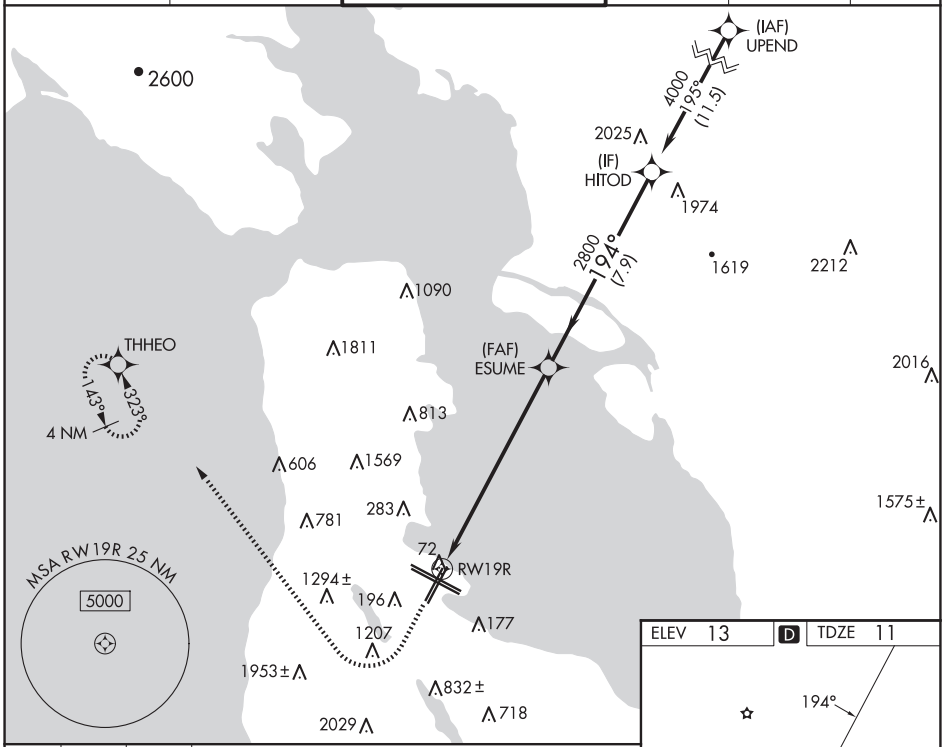
SAN FRANCISCO INTL (SFO)

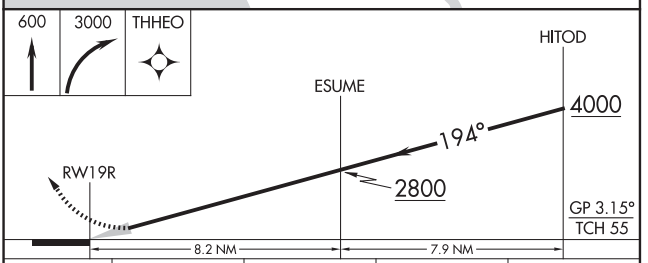
RNP APCH - GPS.

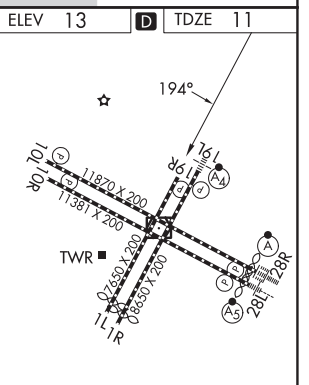
Simultaneous approach authorized. Simultaneous operations require use of vertical guidance; maintain last assigned altitude until established on glidepath. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 4°C or above 54°C. Simultaneous approach NA below 12°C (52°F). Use of FD or AP required during simultaneous operations.

MISSED APPROACH: Climb to 600 then climbing right turn to 3000 direct THHEO and hold.
*Missed approach requires minimum climb of 395 feet per NM to 2100; if unable to meet climb gradient, see RNAV (GPS) Y RWY 19R.

D-ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL	CPDLC
113.7 115.8 118.85	134.5 338.2	120.5 269.1	121.8	118.2	







CATEGORY	A	B	C	D
LPV DA*	317/45 306 (400-⅞)			
LNAV/VNAV DA*	328/45 317 (400-⅞)			

TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L
HIRL all Rwys

SAN FRANCISCO, CALIFORNIA
Orig-A 17APR25

37°37'N-122°23'W

SAN FRANCISCO INTL (SFO)

RNAV (GPS) Z RWY 19R

SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) Z RWY 28R

SAN FRANCISCO INTL (SFO)

WAAS CH 48803 W28A	APP CRS 284°	Rwy Ldg 11236 TDZE 13 Apt Elev 13

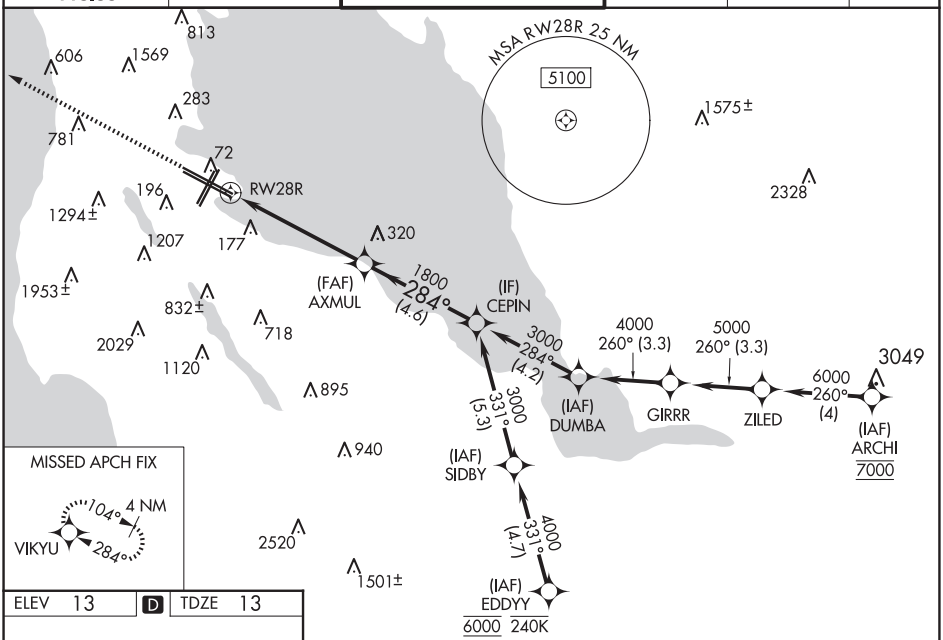
RNP APCH - GPS.

Circling NA to Rwys 10L, 10R, 19L, and 19R. Circling Rwy 1L, 1R NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 4°C or above 54°C. For inop ALS, increase LNAV/VNAV all Cats visibility to 1¾ SM, increase LNAV Cat C/D visibility to 2 SM.

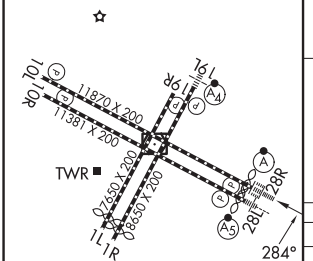
ALSF-2

MISSED APPROACH: Climb to 3000 direct VIKYU and hold.
*Missed approach requires minimum climb of 350 feet per NM to 1900; if unable to meet climb gradient, see RNAV (GPS) RWY 28L.

D-ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL	CPDLC
113.7 115.8 118.85	134.5 338.2	120.5 269.1	121.8	118.2	

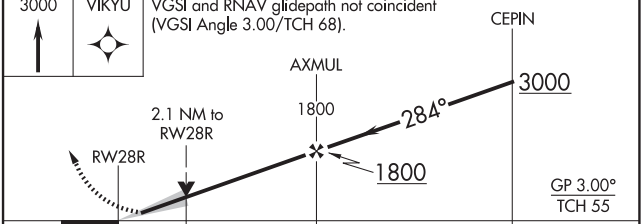


ELEV 13 D TDZ 13



TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L
HIRL all Rwys

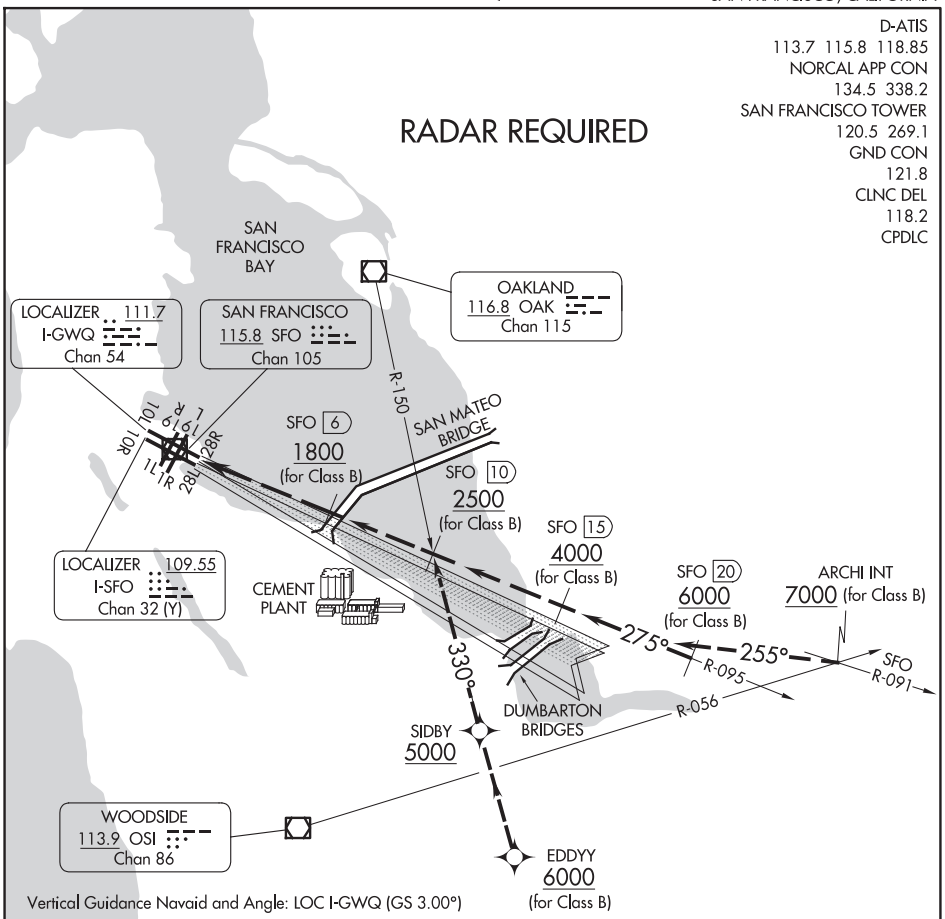
3000 VIKYU VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 68).



CATEGORY	A	B	C	D
LPV DA*	213/18 200 (200-½)			
LNAV/VNAV DA	642-1⅜ 629 (700-1⅜)			
LNAV MDA	760/24 747 (800-½)	760/40 747 (800-¾)	760-1¾ 747 (800-1¾)	
C CIRCLING	760-1 747 (800-1)	1020-1½ 1007 (1100-1½)	1640-3 1627 (1700-3)	NA

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

QUIET BRIDGE VISUAL RWY 28L/R



QUIET BRIDGE VISUAL APPROACH RUNWAY 28L/R

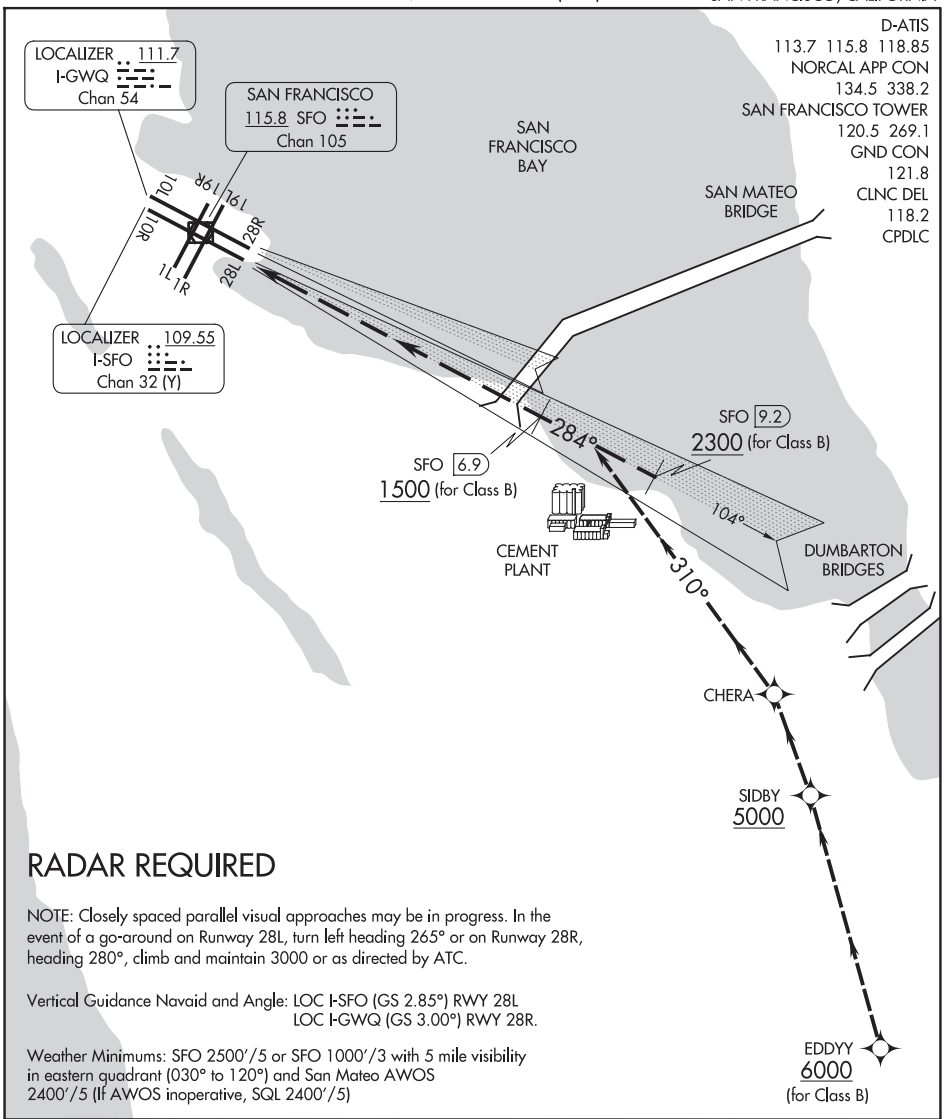
NOTE: Closely spaced parallel visual approaches may be in progress to Runway 28L utilizing I-SFO. In the event of a go-around on Runway 28L, turn left heading 265° or on Runway 28R, heading 280°, climb and maintain 3000 or as directed by ATC.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

TIPP TOE VISUAL RWY 28L/R

AL-375 (FAA)

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA



RADAR REQUIRED

NOTE: Closely spaced parallel visual approaches may be in progress. In the event of a go-around on Runway 28L, turn left heading 265° or on Runway 28R, heading 280°, climb and maintain 3000 or as directed by ATC.

Vertical Guidance Navaid and Angle: LOC I-SFO (GS 2.85°) RWY 28L
LOC I-GWQ (GS 3.00°) RWY 28R.

Weather Minimums: SFO 2500′/5 or SFO 1000′/3 with 5 mile visibility in eastern quadrant (030° to 120°) and San Mateo AWOS 2400′/5 (If AWOS inoperative, SQL 2400′/5)

	1 NM	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

TIPP TOE VISUAL APPROACH RUNWAY 28L/R

At/above 6000 at EDDYY, proceed to SIDBY at/above 5000, north turn at SIDBY to CHERA.
Runway 28L, from CHERA 310° heading to intercept the I-SFO localizer.
Runway 28R, from CHERA 310° heading to intercept the I-GWQ localizer.
In the event of a go-around on Runway 28L, turn left on heading 265°. For a go-around on Runway 28R, heading 280°, climb and maintain 3000 or as directed by ATC.

TIPP TOE VISUAL RWY 28L/R

Amdt 3 24MAR22

37°37′N-122°23′W

SAN FRANCISCO, CALIFORNIA
SAN FRANCISCO INTL (SFO)

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

25219

AIRPORT DIAGRAM

AL-375 (FAA)

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA

AIRPORT DIAGRAM
25219
SAN FRANCISCO, CALIFORNIA
SAN FRANCISCO INTL (SFO)

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

▼ DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 10L: Climb heading 104° to 520, then direct ORYAN, then on track 102° to SAHEY, then on track 101° to cross CIITY at or above 5000. Thence. . . .

TAKEOFF RUNWAY 10R: Climb heading 104° to 520, then direct URRSA, then on track 101° to SAHEY, then on track 101° to cross CIITY at or above 5000. Thence. . . .

TAKEOFF RUNWAYS 19L/19R: Climb heading 194° to 520, then left turn direct to cross CIITY at or above 5000. Thence. . . .

. . . on (transition). Maintain FL190. Expect filed altitude 10 minutes after departure.

DEDHD TRANSITION (CIITY3.DEDHD)

GRTFL TRANSITION (CIITY3.GRTFL)

MOGEE TRANSITION (CIITY3. MOGEE)

ORRCA TRANSITION (CIITY3.ORRCA)

SYRAH TRANSITION (CIITY3.SYRAH)

TIPRE TRANSITION (CIITY3.TIPRE)

TAKEOFF MINIMUMS

Rwys 10L/R: Standard with minimum climb of 500' per NM to 520.

Rwys 19L/R: Standard with minimum climb of 575' per NM to 2000.

TOP ALTITUDE: FL190

D-ATIS 113.7
SAN FRANCISCO TOWER 120.5
NORCAL DEP CON 120.9
CLNC DEL 115.8
GND CON 269.1
CPDLC 323.2
118.85
118.2
121.8

(GAPP7.GAP) 23334

GAP SEVEN DEPARTURE

AL-375 (FAA)

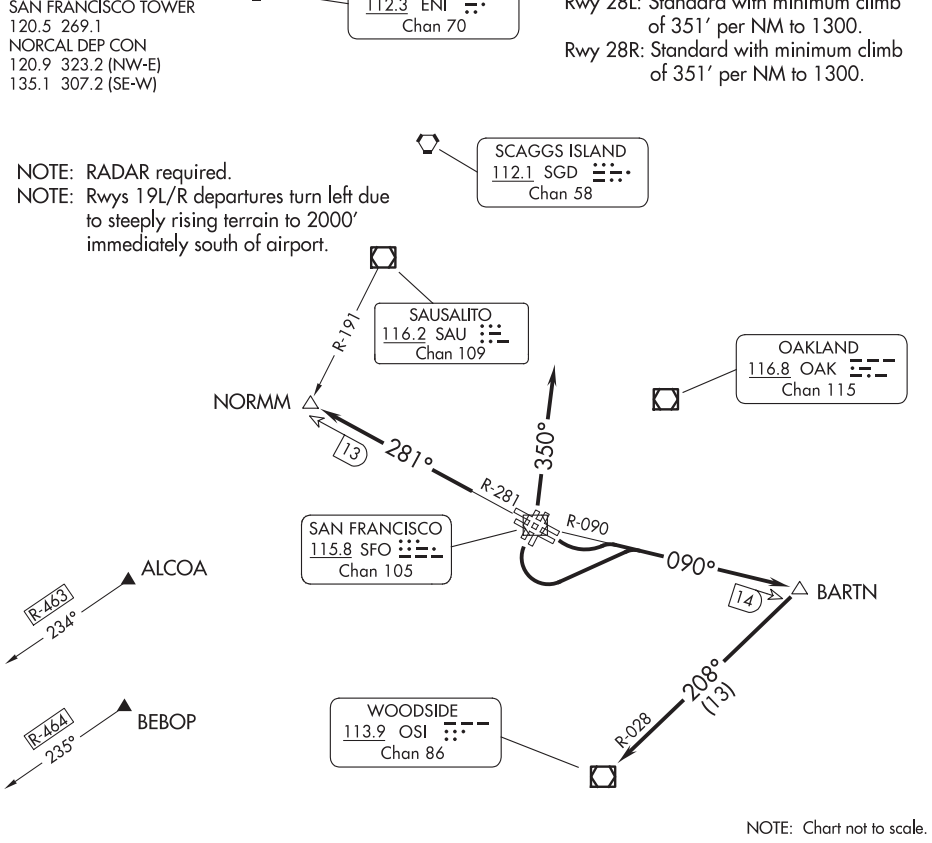
SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA

D-ATIS
113.7 115.8 118.85
CPDLC
GND CON
121.8
SAN FRANCISCO TOWER
120.5 269.1
NORCAL DEP CON
120.9 323.2 (NW-E)
135.1 307.2 (SE-W)

TAKEOFF MINIMUMS

Rwy 19L/R: Standard with minimum climb of 575′ per NM to 2000.
Rwy 28L: Standard with minimum climb of 351′ per NM to 1300.
Rwy 28R: Standard with minimum climb of 351′ per NM to 1300.

NOTE: RADAR required.
NOTE: Rwys 19L/R departures turn left due to steeply rising terrain to 2000′ immediately south of airport.



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 1L/R: Climb on SFO R-350 (or as assigned) for vectors to assigned route/fix. Thence . . . .

TAKEOFF RUNWAYS 10L/R and 19L/R: Turn left and climb on the SFO R-090 and OSI R-028 to OSI VOR/DME; expect vector to assigned route/fix after OSI VOR/DME. Thence . . . .

TAKEOFF RUNWAYS 28L/R: Climb on the SFO VOR/DME R-281 to NORMM INT/ SFO VOR/DME 13 DME; expect vector to assigned route/fix after NORMM INT. Thence . . . .

. . . .expect further clearance to filed altitude 10 minutes after departure.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

GNNRR THREE DEPARTURE (RNAV)

(GNNRR3.GNNRR) 29DEC22

SAN FRANCISCO, CALIFORNIA

SAN FRANCISCO INTL (SFO)

RNAV 1 - GPS.

GPS required.

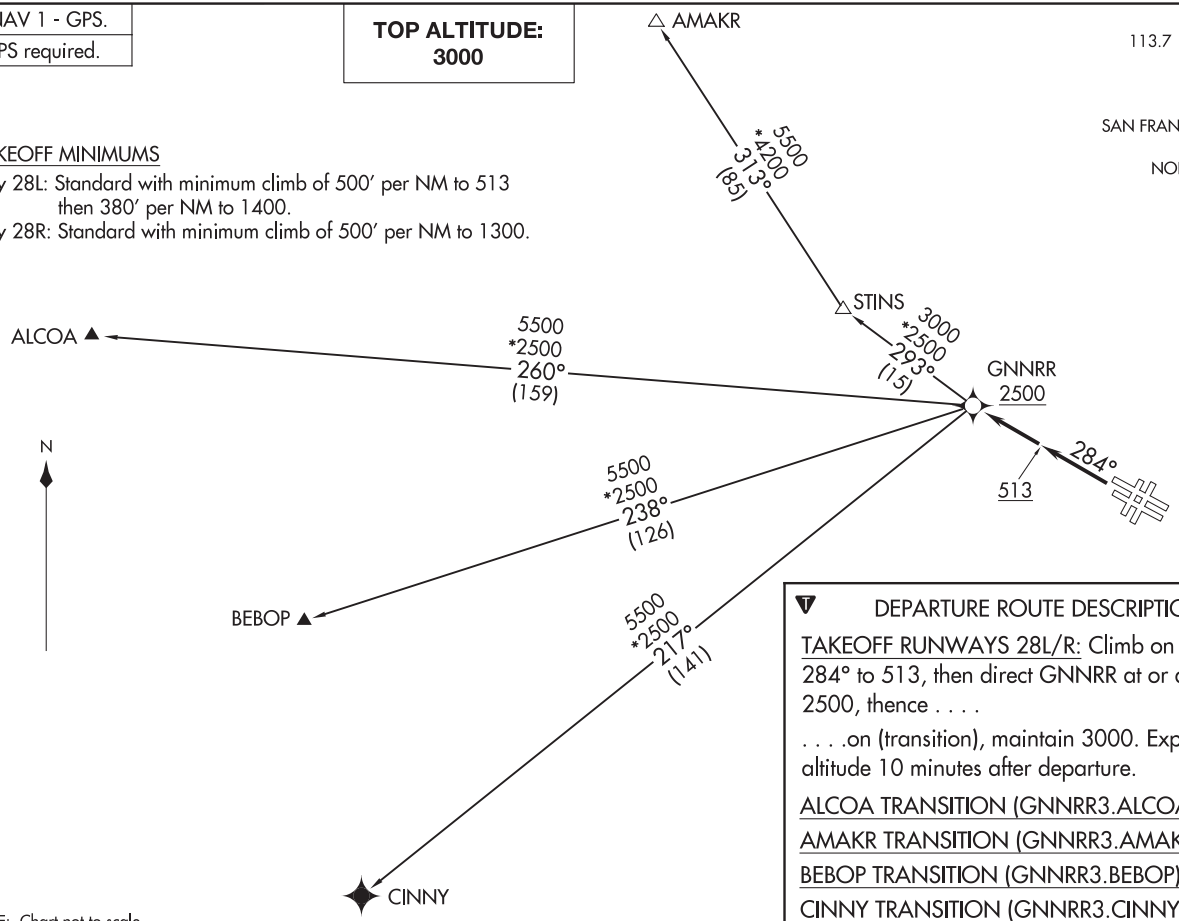
TOP ALTITUDE: 3000

D-ATIS
113.7 115.8 118.85
CLNC DEL
118.2
CPDLC
SAN FRANCISCO TOWER
120.5 269.1
NORCAL DEP CON
135.1 307.2

TAKEOFF MINIMUMS

Rwy 28L: Standard with minimum climb of 500′ per NM to 513 then 380′ per NM to 1400.

Rwy 28R: Standard with minimum climb of 500′ per NM to 1300.



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 28L/R: Climb on heading 284° to 513, then direct GNNRR at or above 2500, thence . . . .

. . . .on (transition), maintain 3000. Expect filed altitude 10 minutes after departure.

ALCOA TRANSITION (GNNRR3.ALCOA)

AMAKR TRANSITION (GNNRR3.AMAKR)

BEBOP TRANSITION (GNNRR3.BEBOP)

CINNY TRANSITION (GNNRR3.CINNY)

(GNNRR3.GNNRR) 22363

GNNRR THREE DEPARTURE (RNAV)

SAN FRANCISCO INTL (SFO)

SAN FRANCISCO, CALIFORNIA

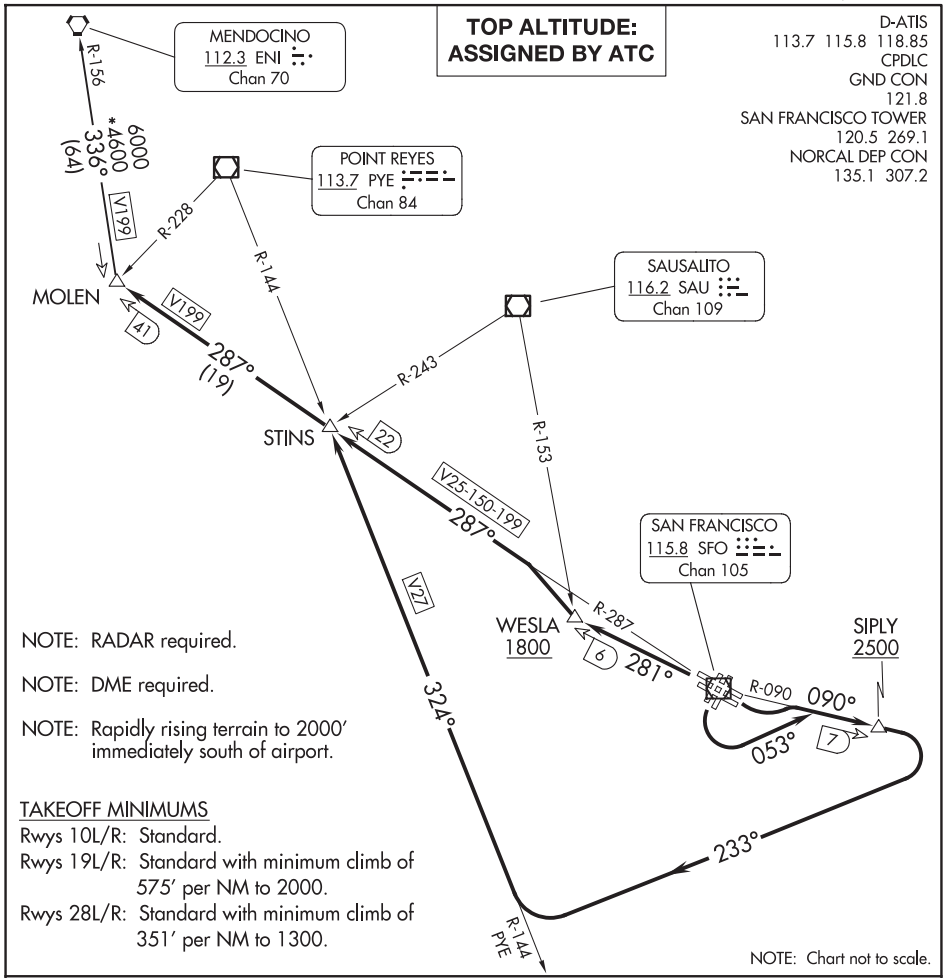
AL-375 (FAA)

(MOLEN9.MOLEN) 23334

MOLEN NINE DEPARTURE

AL-375 (FAA)

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 10L/R: Climbing left turn to intercept SFO R-090 to cross SIPLY 7 DME FIX at or above 2500, then climbing right turn heading 233° to intercept and proceed on PYE R-144 to STINS INT/SFO 22 DME, then on SFO VOR/DME R-287 to MOLEN INT/SFO 41 DME. Thence . . . .

TAKEOFF RUNWAYS 19L/R: Climbing left turn to heading 053° to intercept SFO R-090 to cross SIPLY 7 DME FIX at or above 2500, then climbing right turn heading 233° to intercept and proceed on PYE R-144 to STINS INT/SFO VOR/DME 22 DME, then on SFO VOR/DME R-287 to MOLEN INT/SFO 41 DME. Thence . . . .

TAKEOFF RUNWAYS 28 L/R: Climb on SFO VOR/DME R-281 to cross WESLA INT/SFO VOR/DME 6 DME at or above 1800 then climbing right turn to intercept SFO R-287 to MOLEN INT/SFO 41 DME. Thence . . . .

. . . . (transition). Expect clearance to filed altitude 10 minutes after departure.

MENDOCINO TRANSITION (MOLEN9.ENI): From over MOLEN INT on ENI R-156 to ENI VORTAC.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

NIITE FOUR DEPARTURE (RNAV)

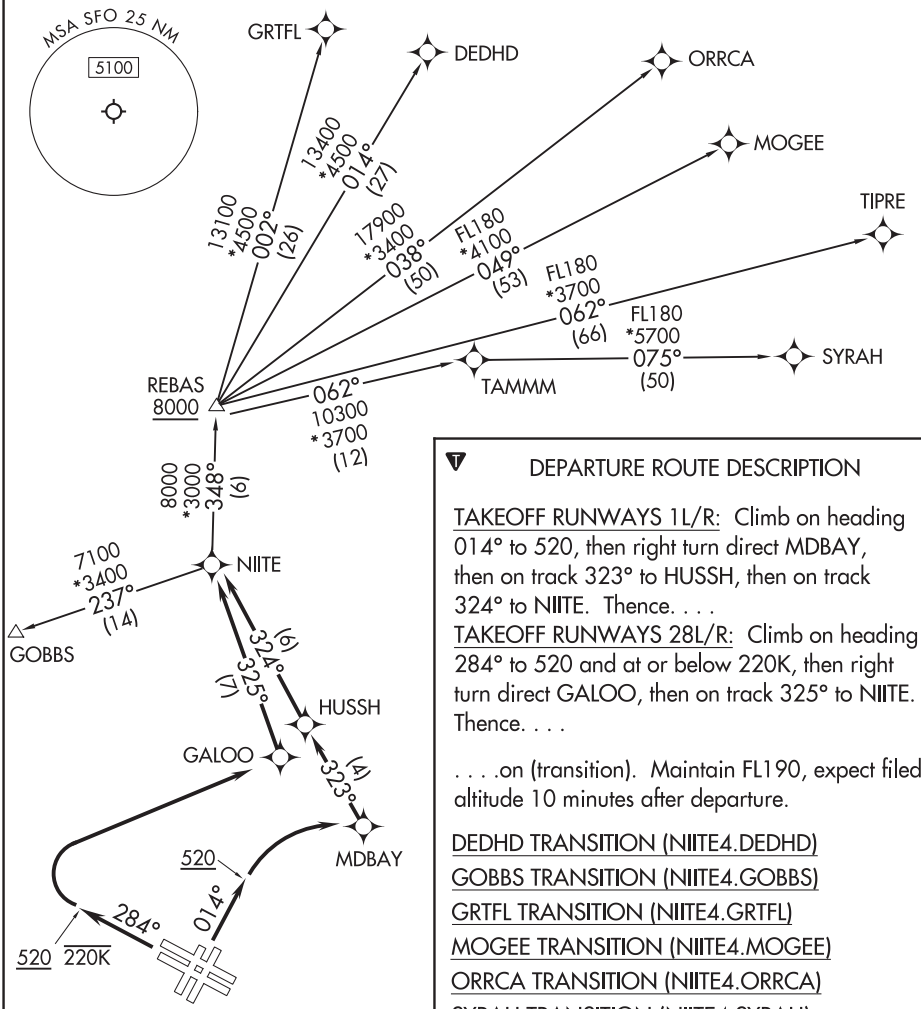
AL-375 (FAA)

NORCAL DEP CON
120.9 323.2
D-ATIS
113.7 115.8 118.85
CLNC DEL
118.2
CPDLC
GND CON
121.8
SAN FRANCISCO TOWER
120.5 269.1

RNAV 1 - DME/DME/IRU or GPS.
RADAR required.

TOP ALTITUDE: FL190

TAKEOFF MINIMUMS
Rwys 1L/R: Standard with minimum climb of 500'/NM to 520.
Rwys 10L/R, 19L/R: NA-ATC.
Rwy 28L: Standard with minimum climb of 535'/NM to 2100.
Rwy 28R: Standard with minimum climb of 560'/NM to 2100.



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 1L/R: Climb on heading 014° to 520, then right turn direct MDBAY, then on track 323° to HUSSH, then on track 324° to NIITE. Thence. . . .
TAKEOFF RUNWAYS 28L/R: Climb on heading 284° to 520 and at or below 220K, then right turn direct GALOO, then on track 325° to NIITE. Thence. . . .

. . . .on (transition). Maintain FL190, expect filed altitude 10 minutes after departure.

DEDHD TRANSITION (NIITE4.DEDHD)
GOBBS TRANSITION (NIITE4.GOBBS)
GRTFL TRANSITION (NIITE4.GRTFL)
MOGEE TRANSITION (NIITE4.MOGEE)
ORRCA TRANSITION (NIITE4.ORRCA)
SYRAH TRANSITION (NIITE4.SYRAH)
TIPRE TRANSITION (NIITE4.TIPRE)

SW-2, 07 AUG 2025 to 02 OCT 2025

(SAHEY4.SAHEY) 21224

SAHEY FOUR DEPARTURE (RNAV)

AL-375 (FAA)

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA

SW-2, 07 AUG 2025 to 02 OCT 2025

SAHEY FOUR DEPARTURE (RNAV)
(SAHEY4.SAHEY) 12AUG21
SAN FRANCISCO, CALIFORNIA
SAN FRANCISCO INTL (SFO)

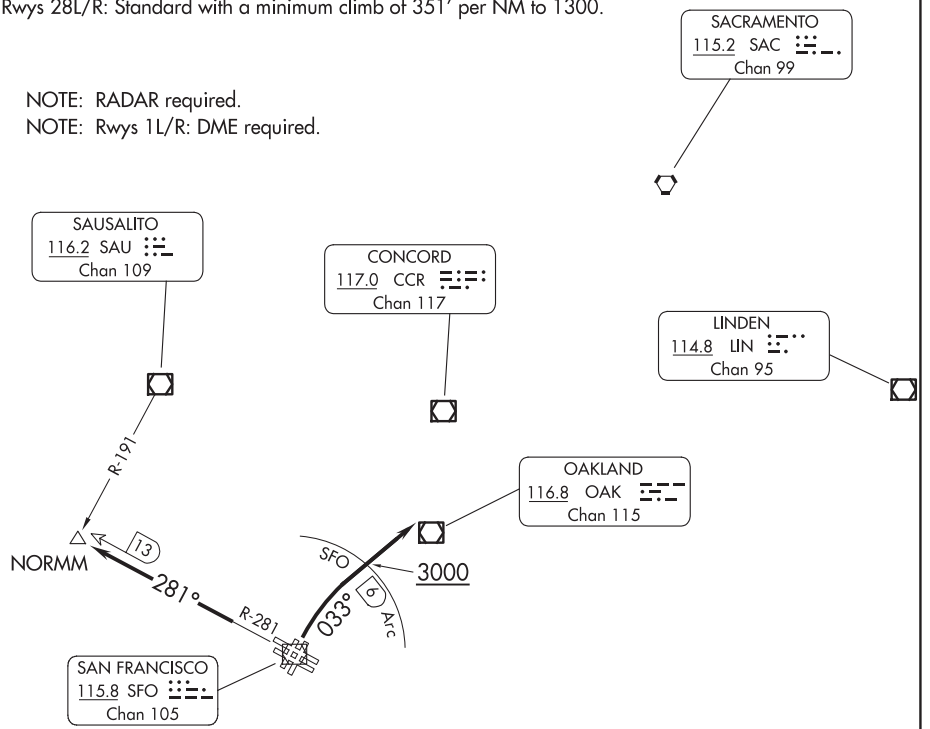
SW-2, 07 AUG 2025 to 02 OCT 2025

TOP ALTITUDE: ASSIGNED BY ATC

D-ATIS 113.7 115.8 118.85
CPDLC
GND CON 121.8
SAN FRANCISCO TOWER 120.5 269.1
NORCAL DEP CON 120.9 323.2

TAKEOFF MINIMUMS
Rwys 1L/R: Standard.
Rwys 28L/R: Standard with a minimum climb of 351′ per NM to 1300.

NOTE: RADAR required.
NOTE: Rwys 1L/R: DME required.



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 1L/R: Climbing right turn heading 033° or ATC assigned heading to cross SFO 6 DME at or above 3000 for RADAR vectors to assigned route/fix. Expect further clearance to filed altitude 10 minutes after departure.

TAKEOFF RUNWAYS 28L/R: Climb on SFO VOR/DME R-281 to NORMM INT/SFO 13 DME; then expect RADAR vectors to assigned route/fix. Expect further clearance to filed altitude 10 minutes after departure.

LOST COMMUNICATIONS:
If not in contact with departure control after reaching 3000, continue climb to filed altitude and proceed direct to assigned route/fix.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(SEGUL1.SEGUL) 24193

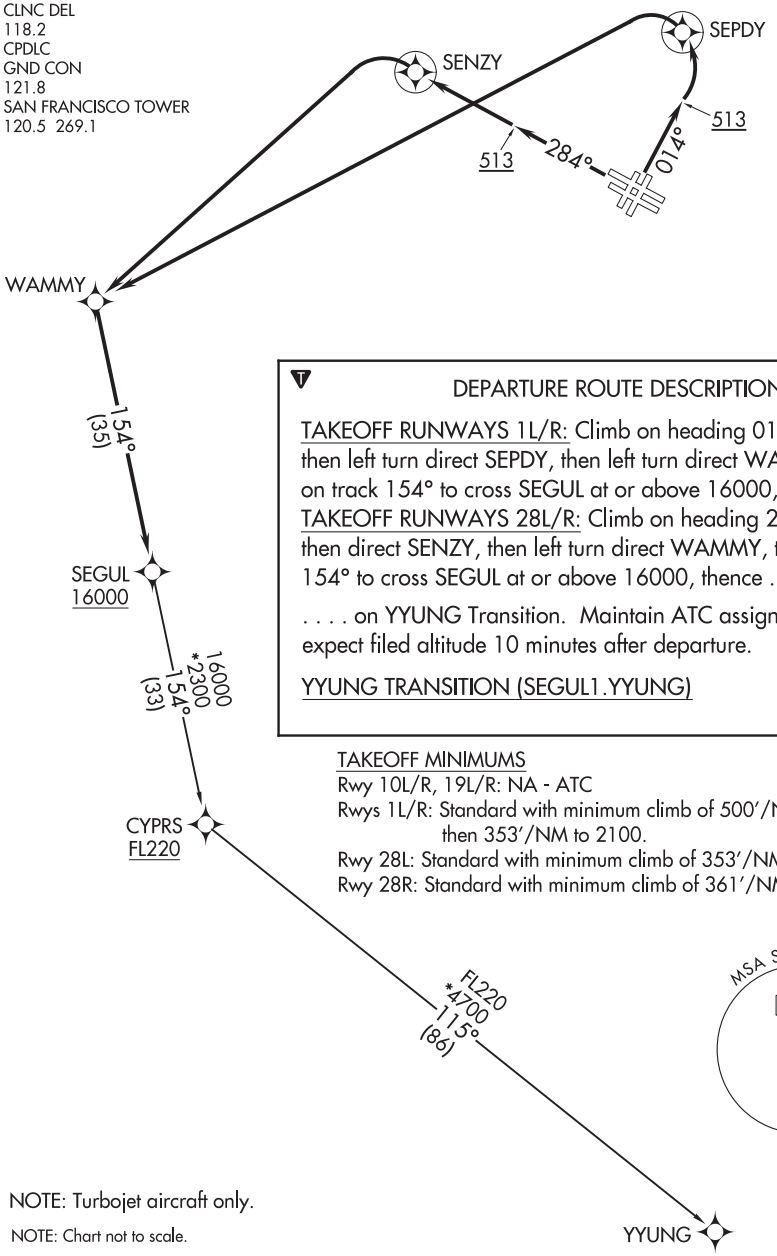
SEGUL ONE DEPARTURE (RNAV)

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA
AL-375 (FAA)

NORCAL DEP CON
135.1 307.2
D-ATIS
113.7 115.8 118.85
CLNC DEL
118.2
CPDLC
GND CON
121.8
SAN FRANCISCO TOWER
120.5 269.1

TOP ALTITUDE: ASSIGNED BY ATC

RNAV 1 - DME/DME/IRU or GPS.
RADAR required for non-GPS equipped aircraft.



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 1L/R: Climb on heading 014° to 513, then left turn direct SEPDY, then left turn direct WAMMY, then on track 154° to cross SEGUL at or above 16000, thence . . . .
TAKEOFF RUNWAYS 28L/R: Climb on heading 284° to 513, then direct SENZY, then left turn direct WAMMY, then on track 154° to cross SEGUL at or above 16000, thence . . . .

. . . . on YYUNG Transition. Maintain ATC assigned altitude, expect filed altitude 10 minutes after departure.

YYUNG TRANSITION (SEGUL1.YYUNG)

TAKEOFF MINIMUMS
Rwy 10L/R, 19L/R: NA - ATC
Rwys 1L/R: Standard with minimum climb of 500'/NM to 513 then 353'/NM to 2100.
Rwy 28L: Standard with minimum climb of 353'/NM to 1200.
Rwy 28R: Standard with minimum climb of 361'/NM to 1100.

NOTE: Turbojet aircraft only.
NOTE: Chart not to scale.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

TOP ALTITUDE: 3000
N
KYNNG
KRLOS
SNTNA
GRTFL
DEDHD
ORRCA
MOGEE
TIPRE
SYRAH
520
284°
344°
(7)
052°
(5)
10700
003°
(32)
10900
013°
(33)
15300
035°
(55)
15800
045°
(58)
FL180
057°
(70)
17000
067°
(64)
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: Chart not to scale.
TAKEOFF MINIMUMS
Rwys 28L/R: Standard with a minimum climb of 500' per NM to 1300.
DEPARTURE ROUTE DESCRIPTION
TAKEOFF RUNWAYS 28L/R: Climb heading 284° to 520, then direct KYNNG, then on depicted route to SNTNA. Thence . . . .
. . . .on (transition). Maintain 3000. Expect filed altitude 10 minutes after departure.
DEDHD TRANSITION (SNTNA2.DEDHD)
GRTFL TRANSITION (SNTNA2.GRTFL)
MOGEE TRANSITION (SNTNA2.MOGEE)
ORRCA TRANSITION (SNTNA2.ORRCA)
SYRAH TRANSITION (SNTNA2.SYRAH)
TIPRE TRANSITION (SNTNA2.TIPRE)
SW-2, 07 AUG 2025 to 02 OCT 2025
D-ATIS 113.7 115.8 118.85
CLNC DEL 118.2
CPDLC
GND CON 121.8
SAN FRANCISCO TOWER 120.5 269.1
NORCAL DEP CON 120.9 323.2

(SSTIK5.SSTIK) 21224

SSTIK FIVE DEPARTURE (RNAV)

AL-375 (FAA)

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA

D-ATIS
113.7 115.8 118.85
CLNC DEL
118.2
CPDLC
GND CON
121.8
SAN FRANCISCO TOWER
120.5 269.1
NORCAL DEP CON
135.1 307.2

TOP ALTITUDE: FL190

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 1L/R: Climb on heading 014° to 520 and at or below 210K, then climbing left turn direct SSTIK, then climbing left turn direct to cross PORTE at or below 10000. Thence. . . .

. . . . on (transition). Maintain FL190, expect filed altitude 10 minutes after departure.

KAYEX TRANSITION (SSTIK5.KAYEX)
KTINA TRANSITION (SSTIK5.KTINA)
NTELL TRANSITION (SSTIK5.NTELL)
SUSEY TRANSITION (SSTIK5.SUSEY)
YYUNG TRANSITION (SSTIK5.YYUNG)

SSTIK
520 210K
014°
PORTE
10000
(8)
5700
112°
UTOOB
6300
174°
(29)
FFOIL
9000
090°
(121)
NTELL
9000
115°
(95)
9000
122°
(91)
9000
119°
(93)
KAYEX
SUSEY
KTINA
12000
135°
(70)
LIBBO
12000
114°
(47)
YYUNG
EBAYE
LOSHN
CISKO

TAKEOFF MINIMUMS
Rwys 10L/R, 19L/R, 28L/R: NA-ATC.
Rwys 1L/R: Standard with minimum climb of 500' per NM to 1600.

NOTE: GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Do not exceed 210K until leaving 520 feet.

NOTE: Chart not to scale.

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

SSTIK FIVE DEPARTURE (RNAV)
SAN FRANCISCO, CALIFORNIA
SAN FRANCISCO INTL (SFO)

(SSTIK5.SSTIK) 12AUG21

TRUKN TWO DEPARTURE (RNAV)

(TRUKN2.TRUKN) 25JUN15

(TRUKN2.TRUKN) 17341

TRUKN TWO DEPARTURE (RNAV)

AL-375 (FAA)

SAN FRANCISCO, CALIFORNIA

SAN FRANCISCO INTL (SFO)

SAN FRANCISCO INTL (SFO)

SAN FRANCISCO, CALIFORNIA

D-ATIS
113.7 115.8 118.85
CLNC DEL
118.2
CPDLC
GND CON
121.8
SAN FRANCISCO TOWER
120.5 269.1
NORCAL DEP CON
120.9 323.2

TOP ALTITUDE: FL190

N

GRTFL

DEDHD

ORRCA

MOGEE

TIPRE

SYRAH

HYPEE

COSMC

TRUKN

TYDYE
3000

11100
*4500
345°
(38)

11100
*4500
353°
(37)

14400
*6000
022°
(42)

13500
*6000
035°
(42)

15300
*6000
049°
(51)

13900
*6000
063°
(44)

6100
*4300
022°
(12)

5100
*4300
043°
(12)

043°
(3)

520

284°

014°

520 210K

TAKEOFF MINIMUMS

Rwys 1L/R: Standard with a minimum climb of 500′ per NM to 520.

Rwy 28L: Standard with minimum climb of 535′ per NM to 2100.

Rwy 28R: Standard with minimum climb of 560′ per NM to 2100.

NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: Rwys 28L/R do not exceed 210K until leaving 520′.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 1L, 1R: Climb heading 014° to 520, then right turn direct TYDYE, cross TYDYE at or above 3000, then on track 043° to TRUKN. Thence. . . .

TAKEOFF RUNWAYS 28L, 28R: Climb heading 284° to 520 and at or below 210K, then right turn direct TRUKN. Thence. . . .

. . . .on (transition). Maintain FL190. Expect filed altitude 10 minutes after departure.

DEDHD TRANSITION (TRUKN2.DEDHD)
GRTFL TRANSITION (TRUKN2.GRTFL)
MOGEE TRANSITION (TRUKN2.MOGEE)
ORRCA TRANSITION (TRUKN2.ORRCA)
SYRAH TRANSITION (TRUKN2.SYRAH)
TIPRE TRANSITION (TRUKN2.TIPRE)

(WESLA5.WESLA) 21224

WESLA FIVE DEPARTURE (RNAV)

AL-375 (FAA)

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA

D-ATIS
113.7 115.8 118.85
CLNC DEL
118.2
CPDLC
GND CON
121.8
SAN FRANCISCO TOWER
120.5 269.1
NORCAL DEP CON
135.1 307.2

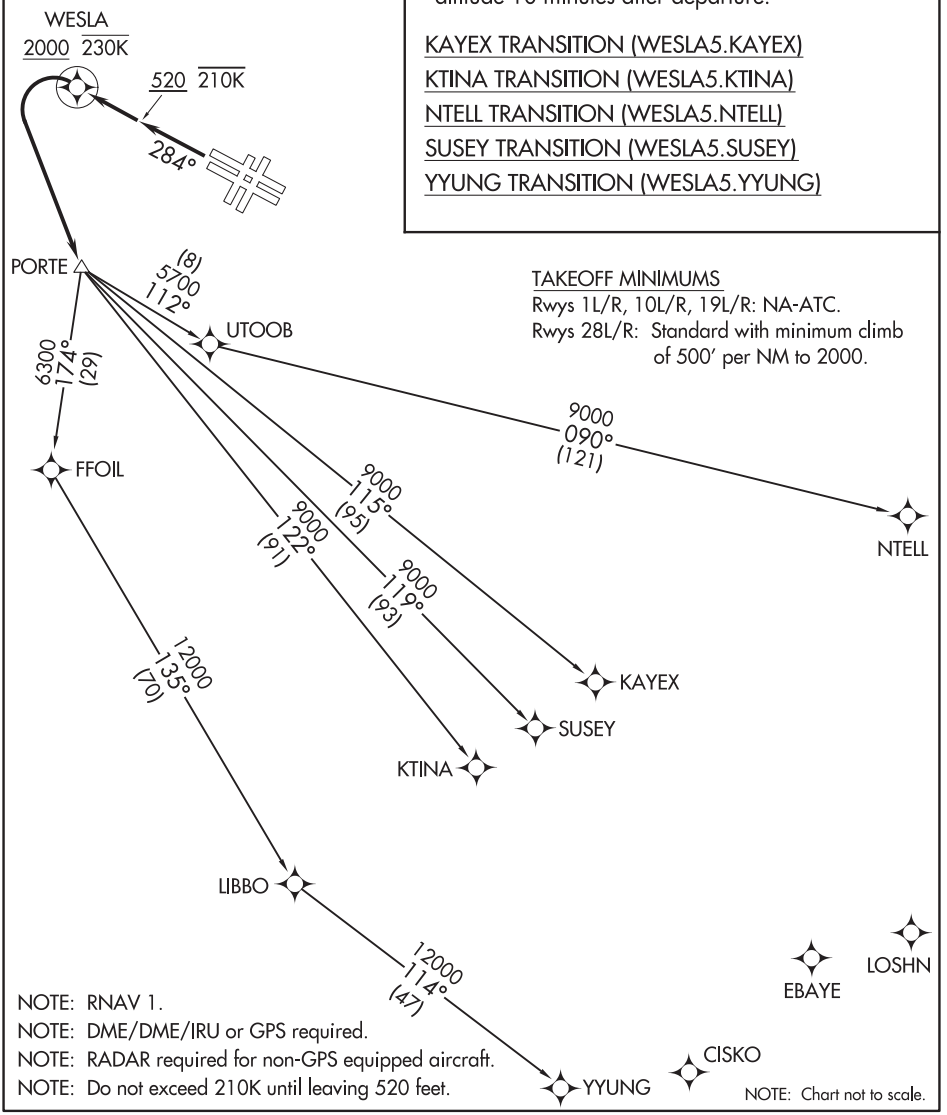
TOP ALTITUDE: AS ASSIGNED BY ATC

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 28L/R: Climb on heading 284° to 520, then climb direct to cross WESLA at or above 2000 at or below 230K, then climbing left turn direct PORTE, thence . . . .

. . . . on (transition). Maintain 3000, expect filed altitude 10 minutes after departure.

KAYEX TRANSITION (WESLA5.KAYEX)
KTINA TRANSITION (WESLA5.KTINA)
NTELL TRANSITION (WESLA5.NTELL)
SUSEY TRANSITION (WESLA5.SUSEY)
YYUNG TRANSITION (WESLA5.YYUNG)



TAKEOFF MINIMUMS
Rwys 1L/R, 10L/R, 19L/R: NA-ATC.
Rwys 28L/R: Standard with minimum climb of 500′ per NM to 2000.

NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required for non-GPS equipped aircraft.
NOTE: Do not exceed 210K until leaving 520 feet.

NOTE: Chart not to scale.

WESLA FIVE DEPARTURE (RNAV)
SAN FRANCISCO, CALIFORNIA
SAN FRANCISCO INTL (SFO)

(WESLA5.WESLA) 12AUG21

SW-2, 07 AUG 2025 to 02 OCT 2025

LOC/DME I-SLV	APP CRS		12R	12L
110.9	126°	Rwy Idg	8587	8831
Chan 46		TDZE	46	44
		Apt Elev	62	62

ILS or LOC RWY 12R

NORMAN Y MINETA SAN JOSE INTL (SJC)

T
A
DME required.
For inoperative MALSR, increase S-LOC 12R Cat C/D visibility to 1 mile.

MALSR Rwy 12R

MISSED APPROACH: Climb to 500 then climb to 4000 on SJC VOR/DME R-121 to GILRO/SJC 26.7 DME and hold.

D-ATIS	NORCAL APP CON	SAN JOSE TOWER ★	GND CON	CLNC DEL	CPDLC	UNICOM
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0		122.95

RADAR REQUIRED

MSA SJC 25 NM 5600

WOODSIDE 113.9 OSI Chan 86

(IF) ARTAQ INT I-SLV 9

306°

1800

126° (2)

R-053

R-061

SUNNE INT I-SLV 7

JUJGE I-SLV 3

SAN JOSE 114.1 SJC Chan 88

126°

223

251

164

183

LOCALIZER 110.9 I-SLV Chan 46

R-121

542

426

MISSED APCH FIX GILRO SJC 26.7

114.1 SJC Chan 88

R-347

121°

301°

R-121

117.3 SNS Chan 120

2328 2986 3675 3024 3817 3841 3049 2962 3951 1833 2520 1501± 1863 2945± 2572 1206± 265± 396 713± 857± 2912 2359 3231 1365

3000 2000 1000

ELEV 62 D TDZE 12R 46 TDZE 12L 44

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 75).

ARTAQ INT I-SLV 9

SUNNE INT I-SLV 7

JUJGE I-SLV 3

I-SLV 1.6

1800 126° 1800 1800

GS 3.00° TCH 58

*520

2 NM 4 NM 1.4 NM

500 4000 SJC R-121 GILRO

*LOC only

126°

12L 12R 30L 30R

129

TWR

11000 X 150 11000 X 150

0.3% DOWN 0.3% DOWN

REIL Rwy 12L

HIRL Rwys 12L-30R and 12R-30L L

CATEGORY	A	B	C	D
S-ILS 12R	251-½ 205 (200-½)			
S-LOC 12R	420-½ 374 (400-½)		420-⅝ 374 (400-⅝)	
SIDESTEP RWY 12L	600-1 556 (600-1)		600-1½ 556 (600-1½)	600-2 556 (600-2)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

SAN JOSE, CALIFORNIA AL-693 (FAA) 25107

ILS or LOC RWY 30L

NORMAN Y MINETA SAN JOSE INTL (SJC)

LOC/DME I-SJC	APP CRS		30L	30R
110.9	306°	Rwy Idg	7614	7597
Chan 46		TDZE	57	55
		Apt Elev	62	62

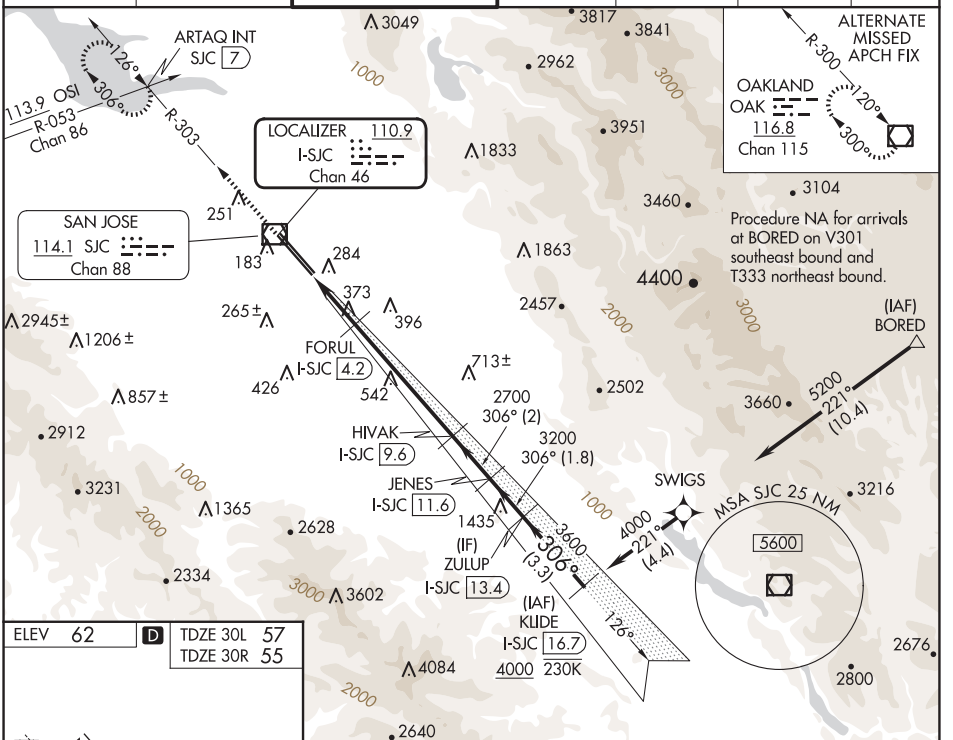
RNAV 1-GPS or RADAR required for procedure entry. DME required. From BORED: RNAV 1-GPS required.

T A # RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR Rwy 30L

MISSED APPROACH: Climb to 1900 on SJC VOR/DME R-303 to ARTAQ INT/SJC 7 DME and hold.

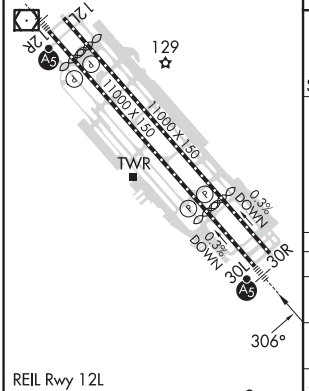
D-ATIS	NORCAL APP CON	SAN JOSE TOWER ★	GND CON	CLNC DEL	CPDLC	UNICOM
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0		122.95



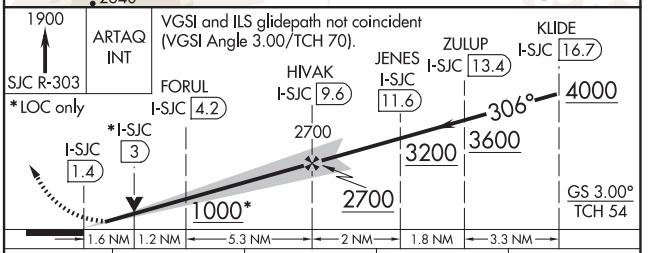
SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

ELEV 62 D TDZE 30L 57 TDZE 30R 55



REIL Rwy 12L
HIRL Rwys 12L-30R and 12R-30L L



CATEGORY	A	B	C	D
S-ILS 30L #	257/24 200 (200-½)			
S-LOC 30L	640/24 583 (600-½)		640-1¼ 583 (600-1¼)	
SIDESTEP 30R	640-1 585 (600-1)		640-1¾ 585 (600-1¾)	640-2 585 (600-2)

SAN JOSE, CALIFORNIA
Amdt 26 10SEP20

37°22'N-121°56'W

NORMAN Y MINETA SAN JOSE INTL (SJC)
ILS or LOC RWY 30L

ILS RWY 30L (SA CAT I & II)

NORMAN Y MINETA SAN JOSE INTL (SJC)

LOC/DME I-SJC	APP CRS	Rwy Idg 7614
110.9	306°	TDZE 57
Chan 46		Apt Elev 62

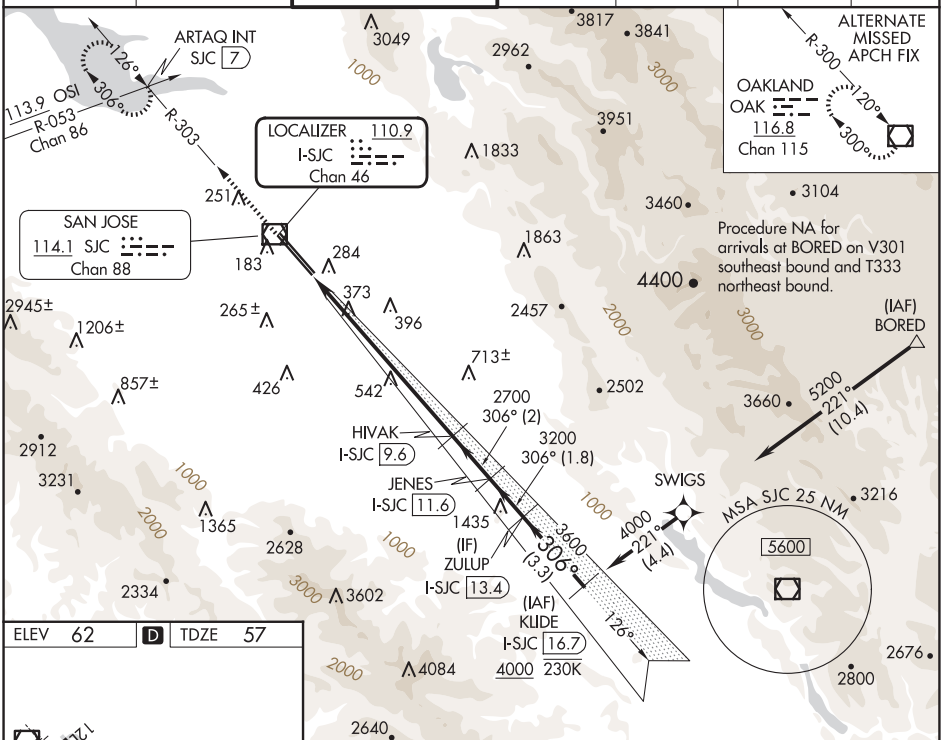
RNAV 1-GPS or RADAR required for procedure entry. DME required.
From BORED: RNAV 1-GPS required.

SA CAT I: Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH.
SA CAT II: Reduced lighting: requires specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown. SA CAT I /II: Procedure NA when tower closed.

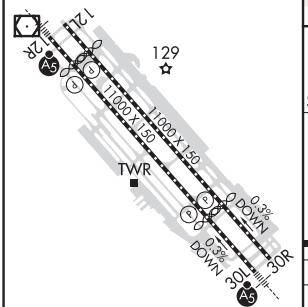
MALSR

MISSED APPROACH: Climb to 1900 on SJC VOR/DME R-303 to ARTAQ INT/SJC 7 DME and hold.

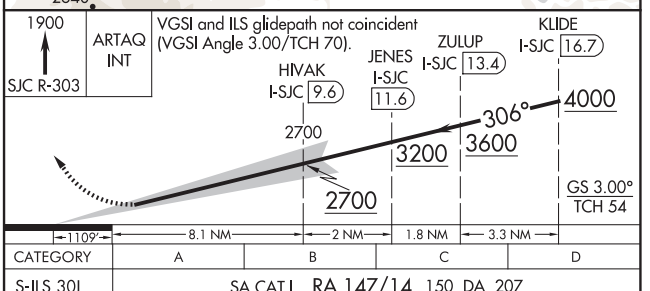
D-ATIS	NORCAL APP CON	SAN JOSE TOWER ★	GND CON	CLNC DEL	CPDLC	UNICOM
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0		122.95



ELEV 62	D	TDZE 57



REIL Rwy 12L
HIRL Rwys 12L-30R and 12R-30L L



CATEGORY	A	B	C	D
S-ILS 30L	SA CAT I RA 147/14 150 DA 207			
S-ILS 30L	SA CAT II RA 97/12 100 DA 157			

SA CATEGORY I & II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

SAN JOSE, CALIFORNIA | AL-693 (FAA) | 25107

APP CRS	Rwy Idg	8831
126°	TDZE	44
	Apt Elev	62

RNAV (RNP) Z RWY 12L

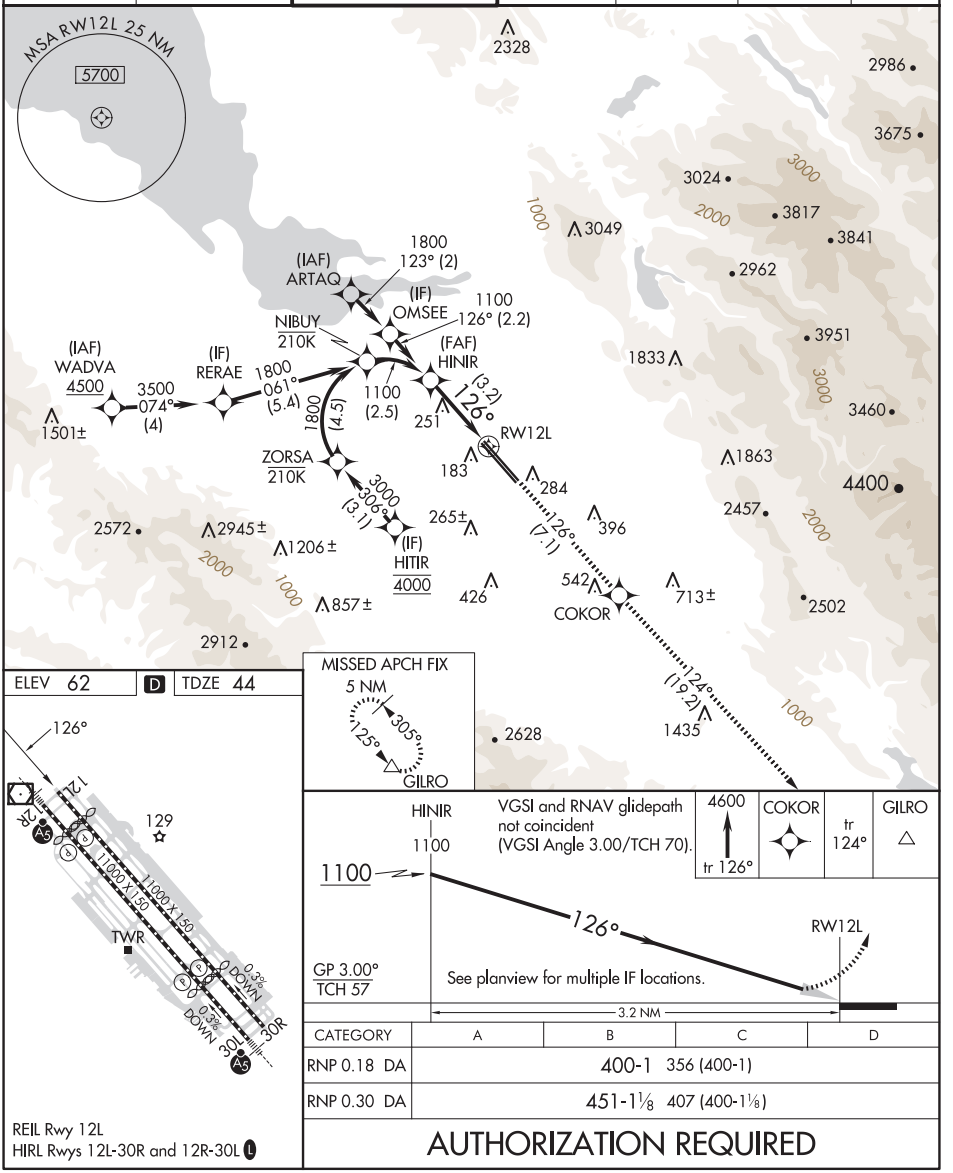
NORMAN Y MINETA SAN JOSE INTL (SJC)

RNP AR APCH-GPS.

For uncompensated Baro-VNAV systems, procedure NA below 0°C or above 54°C.

MISSED APPROACH: Climb to 4600 on track 126° to COKOR and track 124° to GILRO and hold.

D-ATIS	NORCAL APP CON	SAN JOSE TOWER ★	GND CON	CLNC DEL	CPDLC	UNICOM
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0		122.95



ELEV 62 | D | TDZE 44

REIL Rwy 12L
HIRL Rwys 12L-30R and 12R-30L L

CATEGORY	A	B	C	D
RNP 0.18 DA	400-1 356 (400-1)			
RNP 0.30 DA	451-1⅛ 407 (400-1⅛)			

AUTHORIZATION REQUIRED

SAN JOSE, CALIFORNIA
Amdt 2B 24MAR22

37°22'N-121°56'W

NORMAN Y MINETA SAN JOSE INTL (SJC)
RNAV (RNP) Z RWY 12L

SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS	Rwy ldg	8587
126°	TDZE	46
	Apt Elev	62

RNAV (RNP) Z RWY 12R

NORMAN Y MINETA SAN JOSE INTL (SJC)

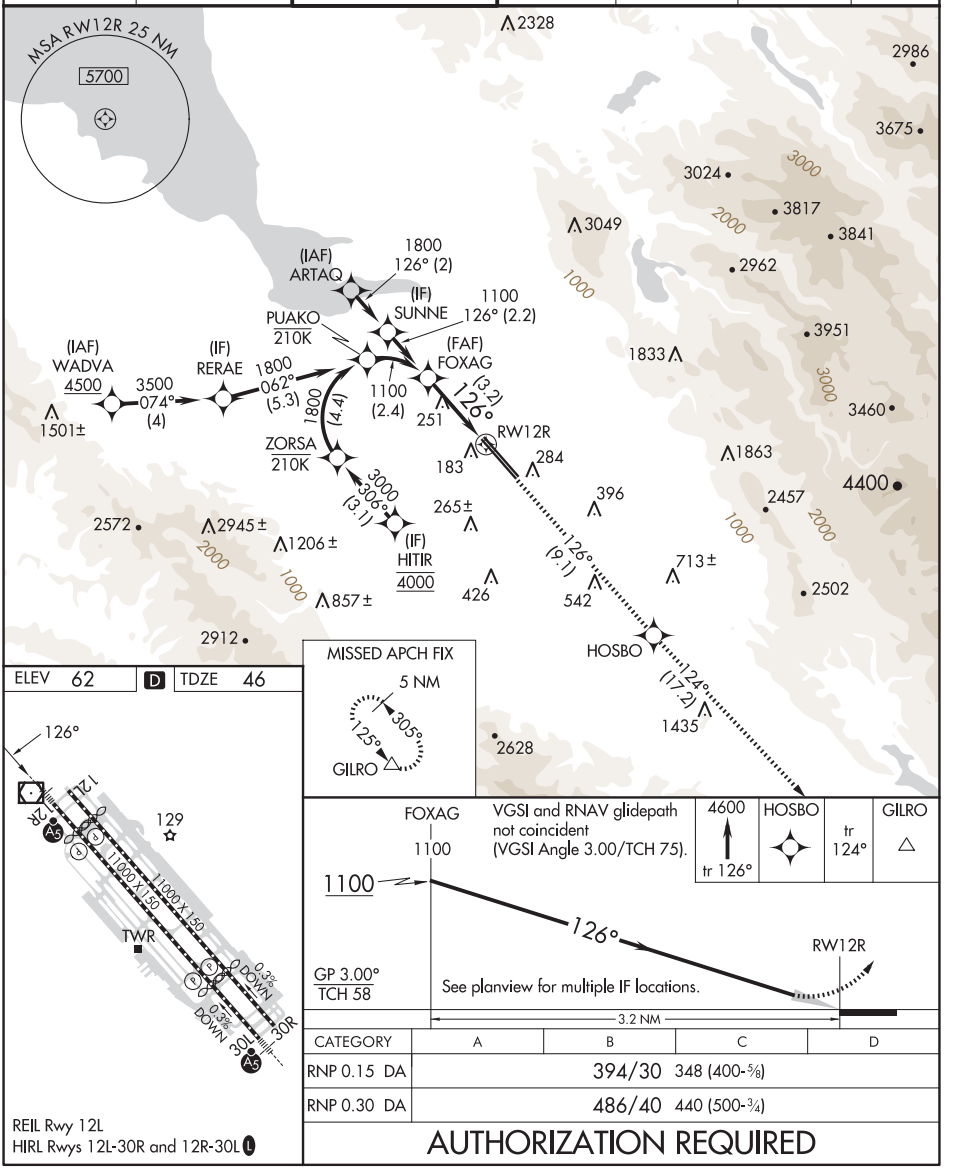
RNP AR APCH-GPS.

T For uncompensated Baro-VNAV systems, procedure NA below 0°C or above 54°C. For inop ALS, increase RNP 0.15 all Cats visibility to RVR 5500.

MALSR

MISSED APPROACH: Climb to 4600 on track 126° to HOSBO and track 124° to GILRO and hold.

D-ATIS	NORCAL APP CON	SAN JOSE TOWER ★	GND CON	CLNC DEL	CPDLC	UNICOM
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0		122.95



MISSED APCH FIX

5 NM

305°

125°

GILRO

ELEV 62 D TDZ 46

REIL Rwy 12L

HIRL Rwys 12L-30R and 12R-30L L

CATEGORY	A	B	C	D
RNP 0.15 DA	394/30 348 (400-⅝)			
RNP 0.30 DA	486/40 440 (500-¾)			

AUTHORIZATION REQUIRED

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

SAN JOSE, CALIFORNIA | AL-693 (FAA) | 25107

APP CRS		
306°	Rwy Idg	7614
	TDZE	57
	Apt Elev	62

RNAV (RNP) Z RWY 30L

NORMAN Y MINETA SAN JOSE INTL (SJC)

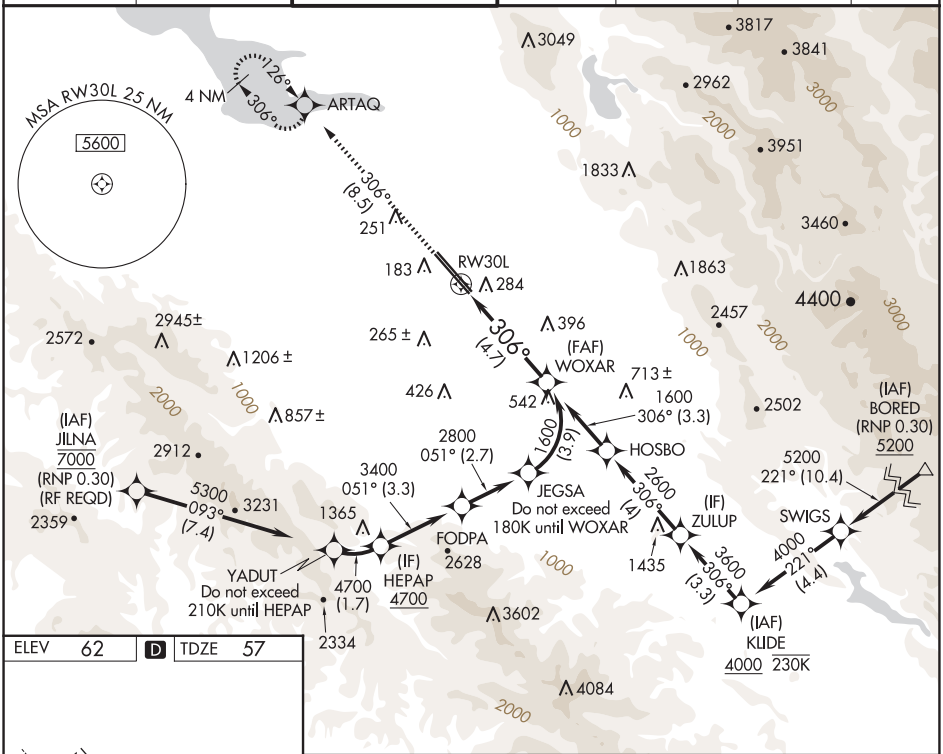
RNP AR APCH.

T For uncompensated Baro-VNAV systems, procedure NA below 1°C or above 54°C . For inop ALS, increase RNP 0.10 all Cats visibility to RVR 5500 and increase RNP 0.30 all Cats visibility to 1⅜ SM.

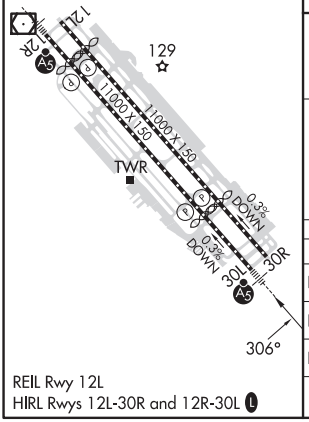
MALSR

MISSED APPROACH: Climb to 2000 on track 306° to ARTAQ and hold.

D-ATIS	NORCAL APP CON	SAN JOSE TOWER ★	GND CON	CLNC DEL	CPDLC	UNICOM
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0		122.95



ELEV	62	D	TDZE	57



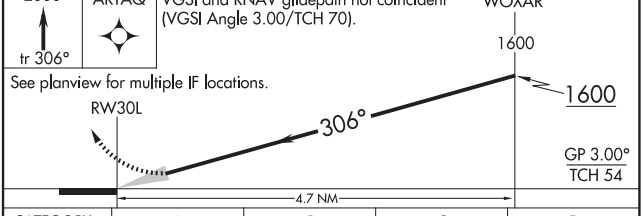
REIL Rwy 12L
HIRL Rwys 12L-30R and 12R-30L L

2000 tr 306°

ARTAQ

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 70).

See planview for multiple IF locations.



CATEGORY	A	B	C	D
RNP 0.10 DA		430/35	373 (400-⅝)	
RNP 0.20 DA		464/40	407 (500-¾)	
RNP 0.30 DA		541/50	484 (500-1)	

AUTHORIZATION REQUIRED

SAN JOSE, CALIFORNIA
Amdt 4 02DEC21

37°22'N-121°56'W

NORMAN Y MINETA SAN JOSE INTL (SJC)

RNAV (RNP) Z RWY 30L

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS	Rwy Idg	7597
306°	TDZE	55
	Apt Elev	62

RNAV (RNP) Z RWY 30R

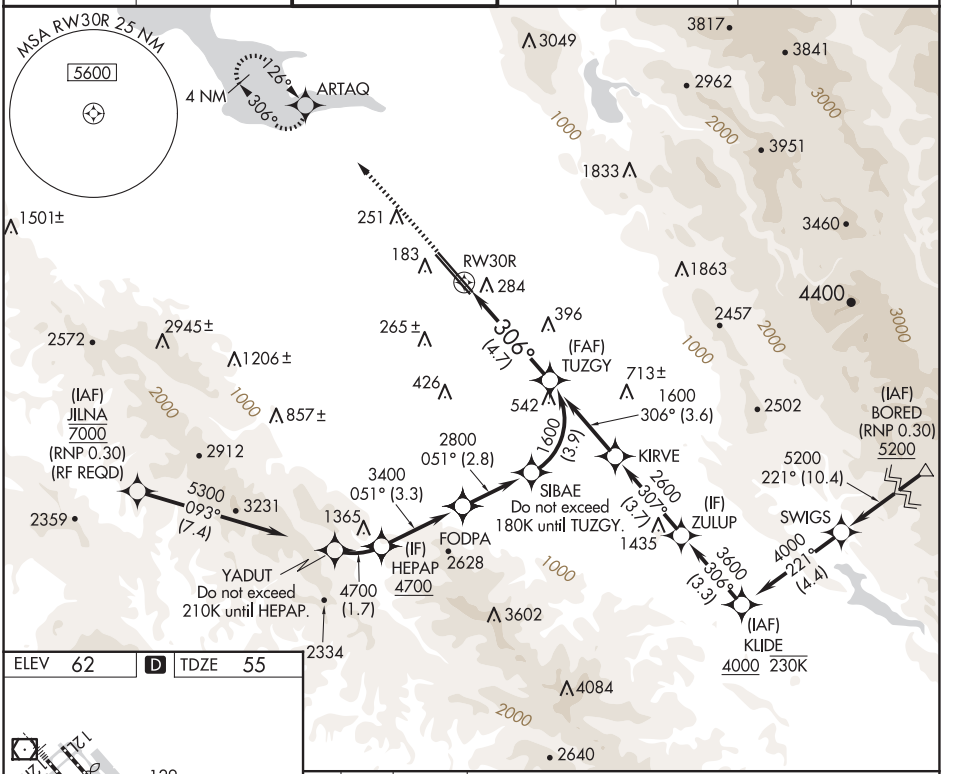
NORMAN Y MINETA SAN JOSE INTL (SJC)

RNP AR APCH.

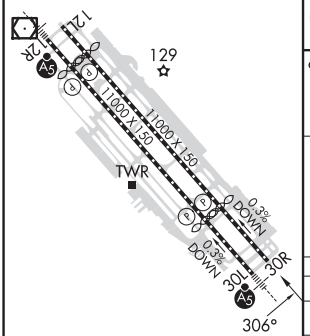
For uncompensated Baro-VNAV systems, procedure NA below 1°C or above 54°C.

MISSED APPROACH: Climb to 600 then climb to 2000 direct ARTAQ and hold.

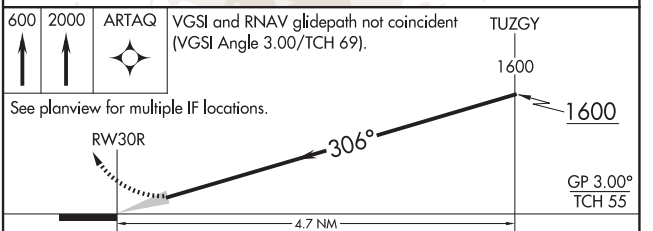
D-ATIS	NORCAL APP CON	SAN JOSE TOWER ★	GND CON	CLNC DEL	CPDLC	UNICOM
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0		122.95



ELEV 62	D	TDZE 55



REIL Rwy 12L
HIRL Rwys 12L-30R and 12R-30L L



CATEGORY	A	B	C	D
RNP 0.11 DA	377-1 322 (400-1)			
RNP 0.20 DA	472-1⅛ 417 (500-1⅛)			
RNP 0.30 DA	538-1⅜ 483 (500-1⅜)			

AUTHORIZATION REQUIRED

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

SAN JOSE, CALIFORNIA | AL-693 (FAA) | 25107

RNAV (GPS) Y RWY 12L

NORMAN Y MINETA SAN JOSE INTL (SJC)

WAAS	APP CRS		
CH 69501	126°	Rwy Idg	8831
W12B		TDZE	44
		Apt Elev	62

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1°C (31°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 4600 direct COKOR and on track 124° to GILRO and hold.

D-ATIS	NORCAL APP CON	SAN JOSE TOWER ★	GND CON	CLNC DEL	CPDLC	UNICOM
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0		122.95

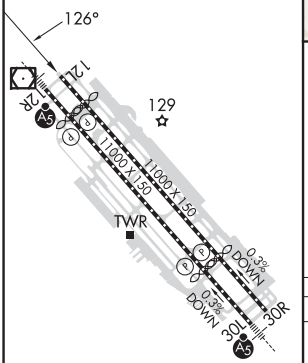
RADAR REQUIRED

MSA RW12L 25 NM
5700

(IF) ROSTE
1800
126°
(3.2)
(FAF) OMSEE
252
RW12L
183
284
396
265±
426
542
COKOR
713±
124°
(19.2)
1435
1365
2628
1206±
857±
2945±
2912
2572
1833
1863
2457
2502
4400
3660
3104
3460
3951
3049
3024
3817
3841
4089
3675
2962
1000
2000
3000

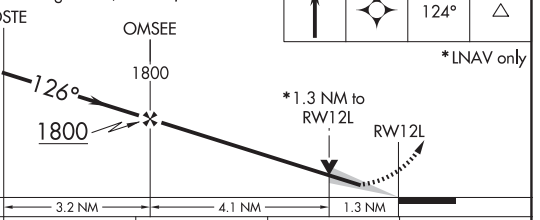
MISSED APCH FIX
GILRO
304°
124°
4 NM

ELEV 62 | D | TDZE 44



REIL Rwy 12L
HIRL Rwys 12L-30R and 12R-30L L

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 70).



*LNAV only

CATEGORY	A	B	C	D
LPV DA	294-¾ 250 (300-¾)			
LNAV/VNAV DA	341-1 297 (300-1)			
LNAV MDA	520-1 476 (500-1)		520-1⅜ 476 (500-1⅜)	

SAN JOSE, CALIFORNIA
Amdt 3A 21JUL16

NORMAN Y MINETA SAN JOSE INTL (SJC)
37°22'N-121°56'W
RNAV (GPS) Y RWY 12L

SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) Y RWY 12R

NORMAN Y MINETA SAN JOSE INTL (SJC)

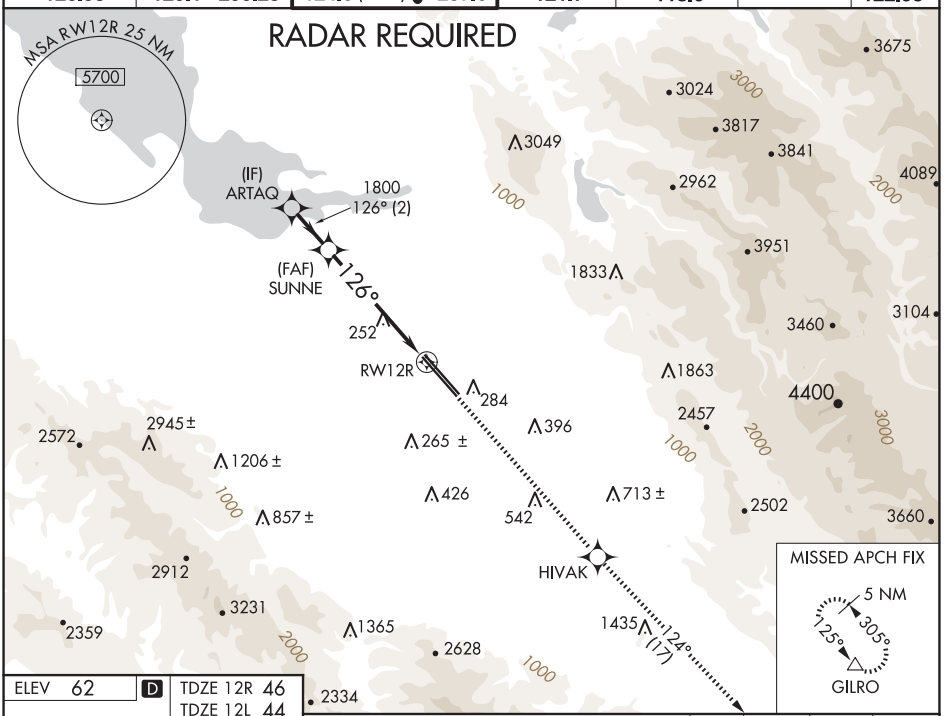
WAAS CH 90106 W12A	APP CRS 126°	Rwy Idg	12R 8587	12L 8831
		TDZE	46	44
		Apt Elev	62	62

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1°C (31°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. For inoperative MALSR, increase LNAV/VNAV all Cats visibility to 1 mile and LNAV Cats C/D visibility to 1⅜ mile.

MALSR Rwy 12R

MISSED APPROACH: Climb to 4600 direct HIVAK and on track 124° to GILRO and hold.

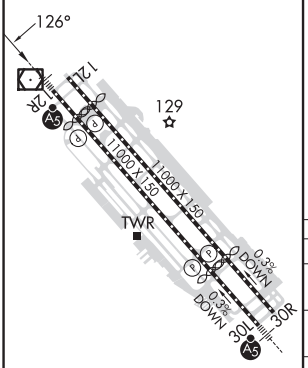
D-ATIS	NORCAL APP CON	SAN JOSE TOWER ★	GND CON	CLNC DEL	CPDLC	UNICOM
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0		122.95



SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

ELEV 62 D TDZE 12R 46 TDZE 12L 44

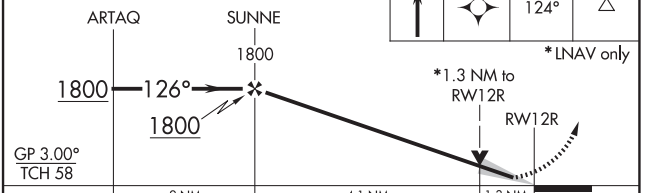


REIL Rwy 12L
HIRL Rwys 12L-30R and 12R-30L L

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 75).

4600 | HIVAK | tr 124° | GILRO

*LNAV only



CATEGORY	A	B	C	D
LPV DA	246-½ 200 (200-½)			
LNAV/VNAV DA	371-⅝ 325 (400-⅝)	371-1 325 (400-1)		
LNAV MDA	520-½ 474 (500-½)		520-1 474 (500-1)	
SIDESTEP 12L	520-1 476 (500-1)		520-1½ 476 (500-1½)	520-2 476 (500-2)

SAN JOSE, CALIFORNIA

AL-693 (FAA)

25107

RNAV (GPS) Y RWY 30L

NORMAN Y MINETA SAN JOSE INTL (SJC)

WAAS	APP CRS		30L	30R
CH 97306	306°	Rwy Idg	7614	7597
W30A		TDZE	57	55
		Apt Elev	62	62

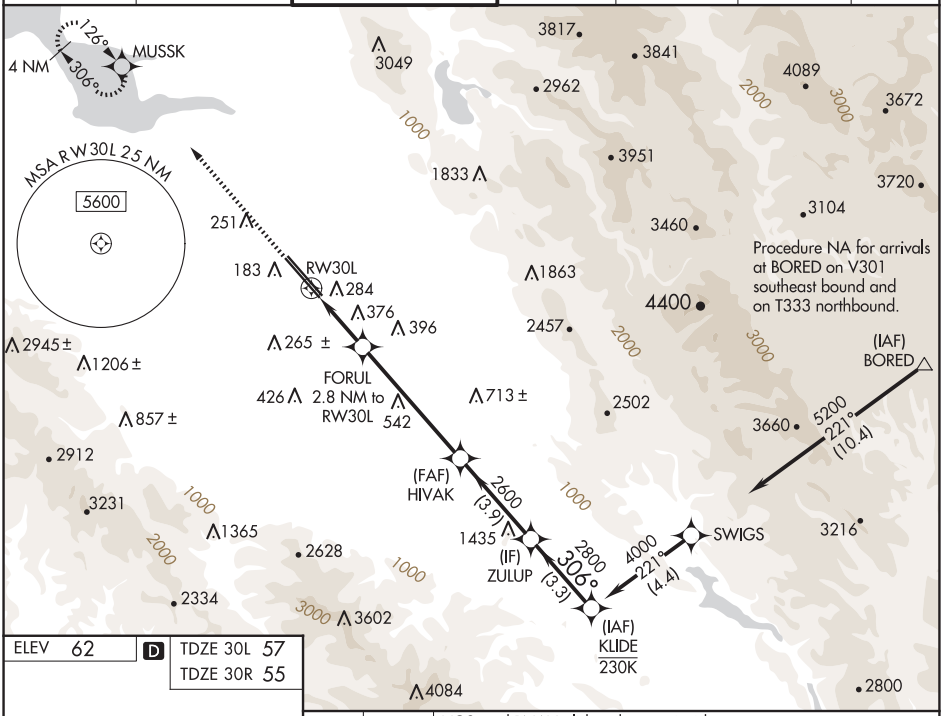
RNP APCH-GPS.

T For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 1°C or above 54°C. For inop ALS, increase LNAV/VNAV all Cats visibility to 1⅜ SM.
* RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR Rwy 30L

MISSED APPROACH: Climb to 2300 direct MUSSK and hold.

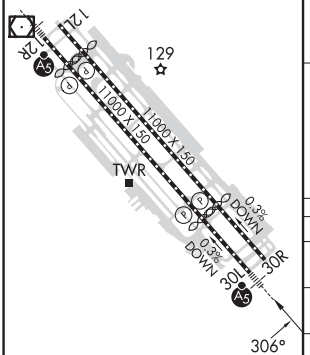
D-ATIS	NORCAL APP CON	SAN JOSE TOWER *	GND CON	CLNC DEL	CPDLC	UNICOM
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0		122.95



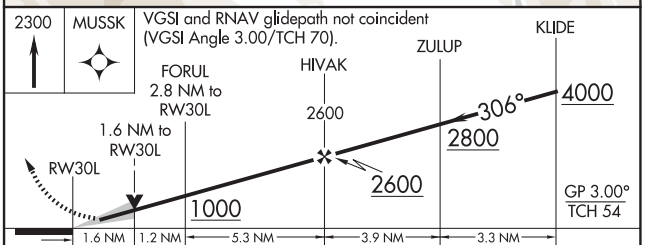
SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

ELEV 62 D TDZE 30L 57 TDZE 30R 55



REIL Rwy 12L
HIRL Rwys 12L-30R and 12R-30L L



CATEGORY	A	B	C	D
LPV DA*	257/24 200 (200-½)			
LNAV/VNAV DA	540/50 483 (500-1)			
LNAV MDA	640/24 583 (600-½)		640-1¼ 583 (600-1¼)	
SIDESTEP 30R	640-1 585 (600-1)			

SAN JOSE, CALIFORNIA
Amdt 4A 23FEB23

37°22'N-121°56'W

NORMAN Y MINETA SAN JOSE INTL (SJC)
RNAV (GPS) Y RWY 30L

WAAS CH 72901 W30B	APP CRS 306°	Rwy Idg 7597 TDZE 55 Apt Elev 62

RNAV (GPS) Y RWY 30R

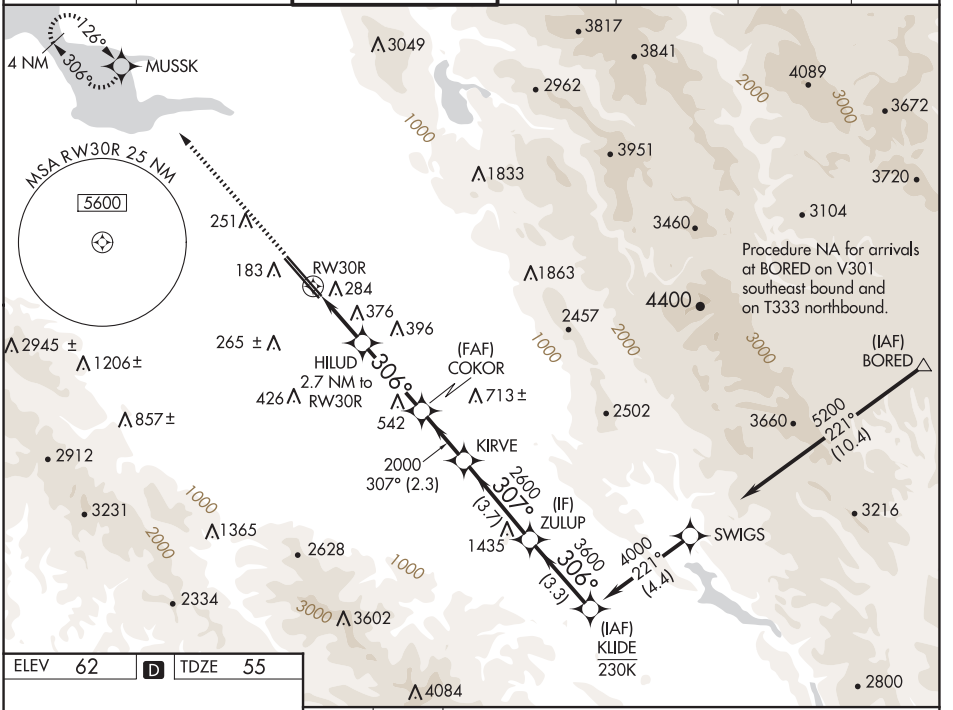
NORMAN Y MINETA SAN JOSE INTL (SJC)

RNP APCH-GPS.

T For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1°C or above 54°C.

MISSED APPROACH: Climb to 2300 direct MUSSK and hold.

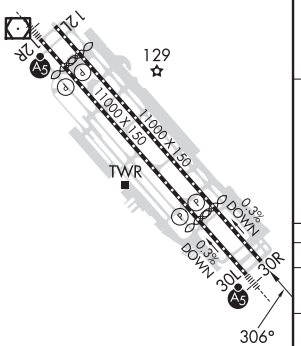
D-ATIS	NORCAL APP CON	SAN JOSE TOWER ★	GND CON	CLNC DEL	CPDLC	UNICOM
126.95	120.1 290.25	124.0 (CTAF) L 257.6	121.7	118.0		122.95



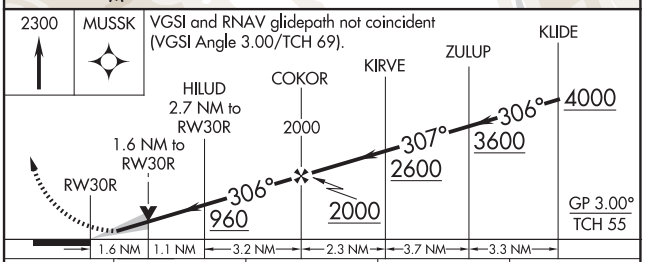
SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

ELEV 62 D TDZE 55

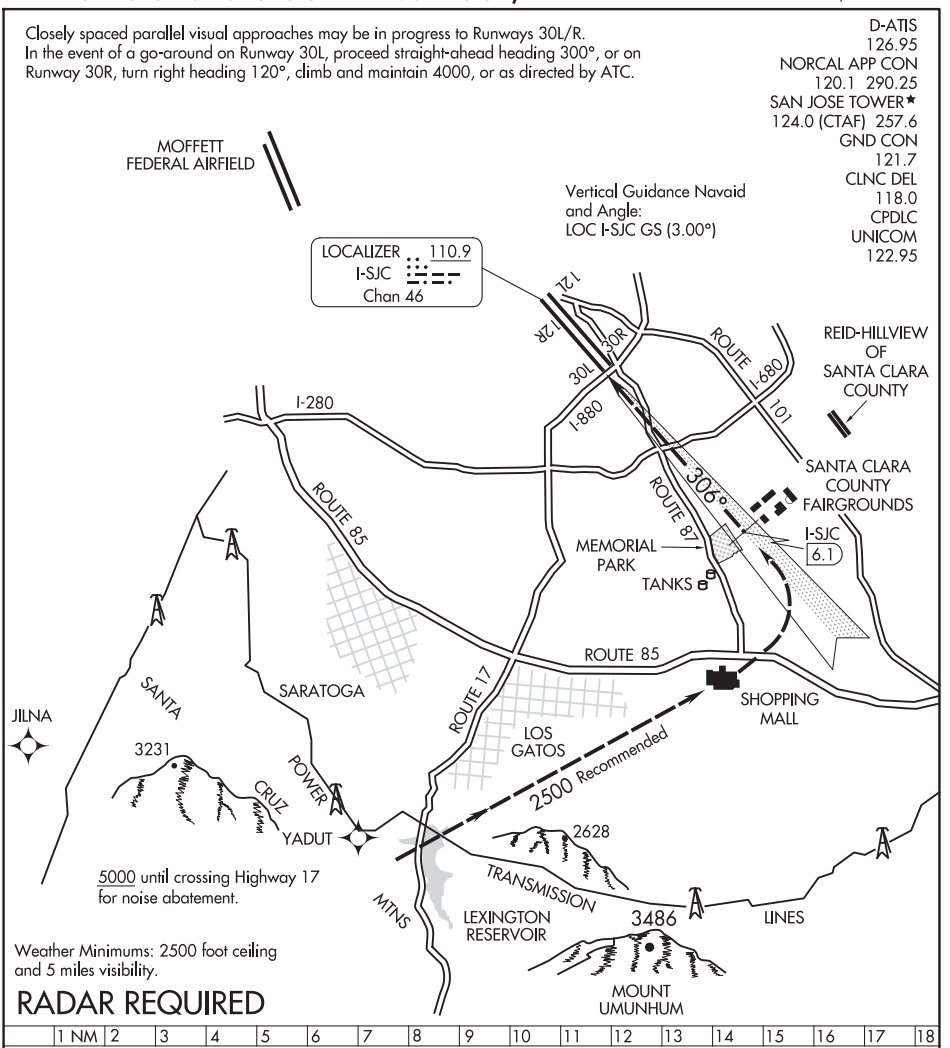


REIL Rwy 12L
HIRL Rwys 12L-30R and 12R-30L L



CATEGORY	A	B	C	D
LPV DA	255-¾ 200 (200-¾)			
LNAV/VNAV DA	541-1⅜ 486 (500-1⅜)			
LNAV MDA	640-1 585 (600-1)		640-1¾ 585 (600-1¾)	
C CIRCLING	640-1 578 (600-1)	700-1 638 (700-1)	700-1¾ 638 (700-1¾)	700-2 638 (700-2)

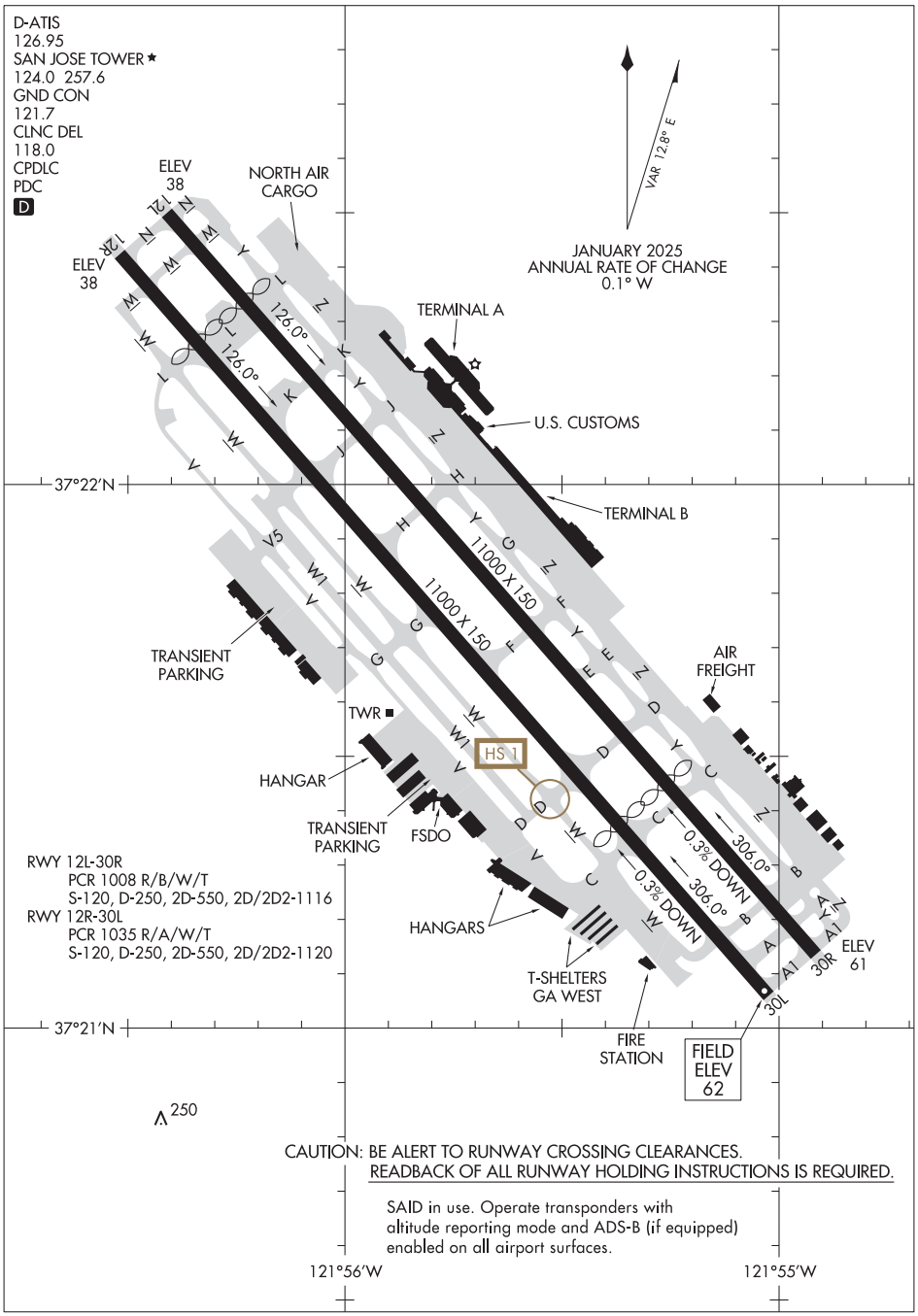
FAIRGROUNDS VISUAL RWY 30L/R



FAIRGROUNDS VISUAL APPROACH RUNWAY 30L/R

FROM WEST-NORTHWEST: From over Lexington Reservoir northeast to shopping mall at Hi-ways 85/87 then to a turn onto final southeast fairgrounds and adjoining memorial park.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025



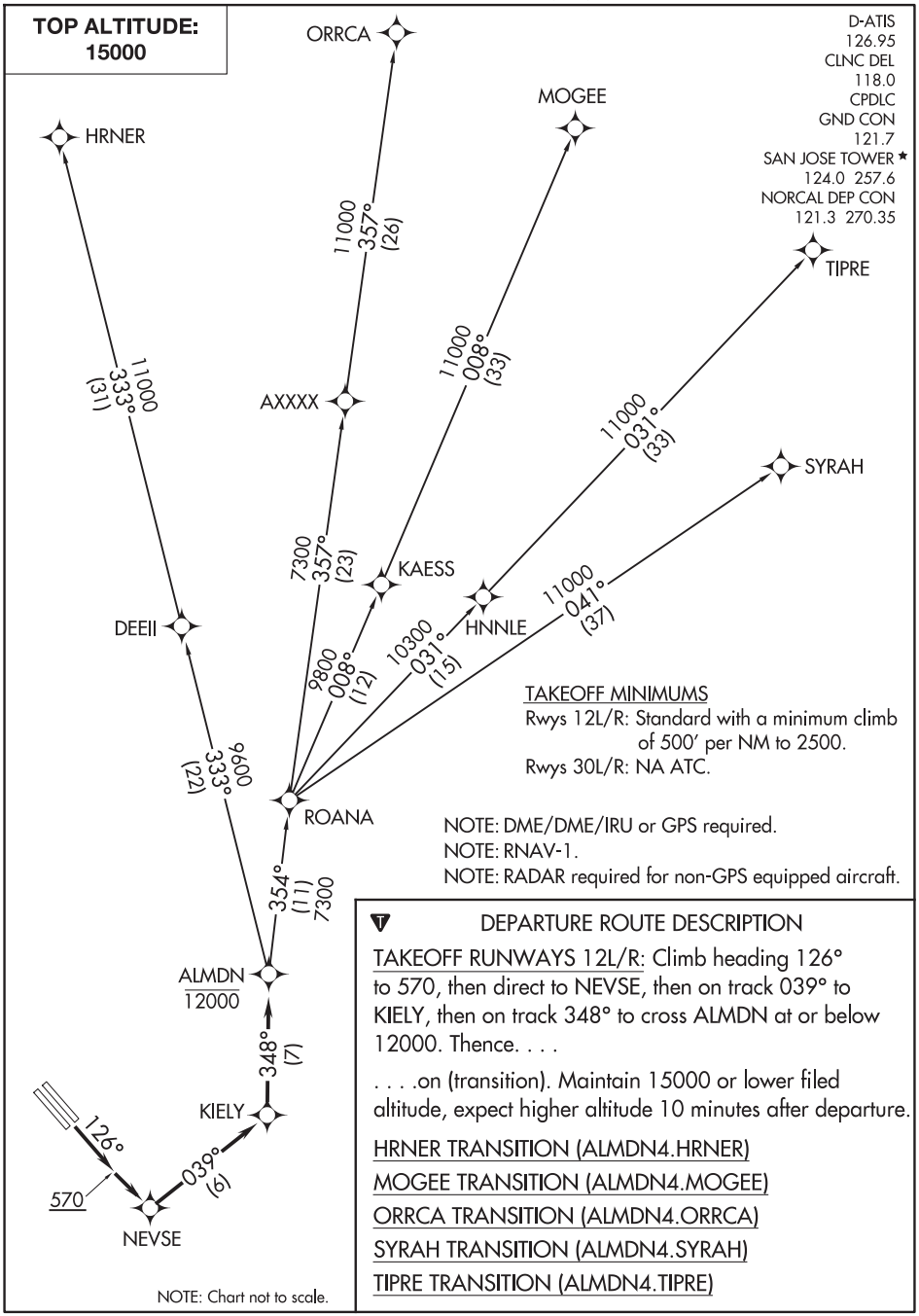
AIRPORT DIAGRAM
25107
NORMAN Y MINETA SAN JOSE INTL (SJC)
SAN JOSE, CALIFORNIA

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(ALMDN4.ALMDN) 18032

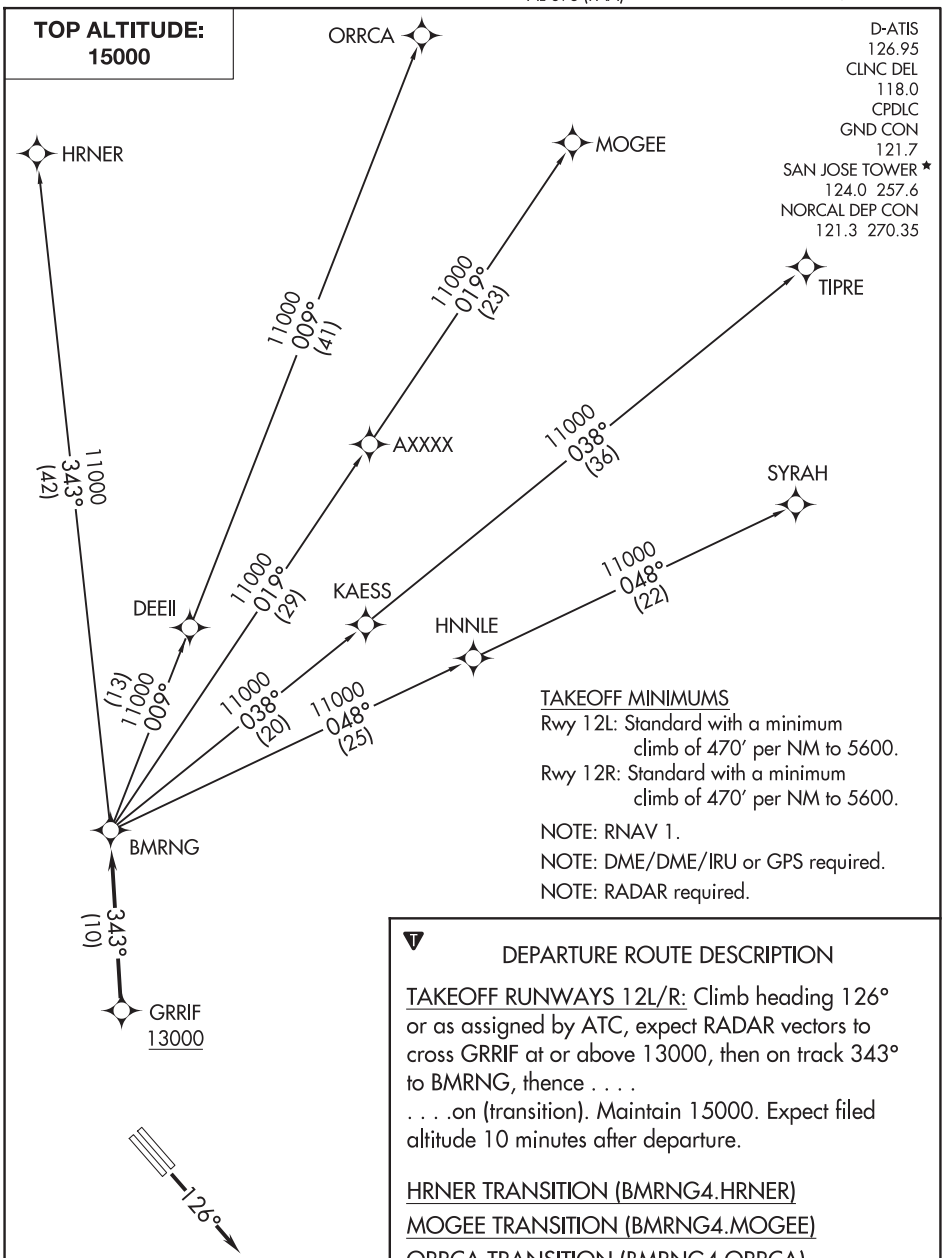
ALMDN FOUR DEPARTURE (RNAV)

NORMAN Y MINETA SAN JOSE INTL (SJC)
AL-693 (FAA)
SAN JOSE, CALIFORNIA



SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025



TAKEOFF MINIMUMS

Rwy 12L: Standard with a minimum climb of 470′ per NM to 5600.

Rwy 12R: Standard with a minimum climb of 470′ per NM to 5600.

NOTE: RNAV 1.

NOTE: DME/DME/IRU or GPS required.

NOTE: RADAR required.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 12L/R: Climb heading 126° or as assigned by ATC, expect RADAR vectors to cross GRRIF at or above 13000, then on track 343° to BMRNG, thence . . . .

. . . .on (transition). Maintain 15000. Expect filed altitude 10 minutes after departure.

HRNER TRANSITION (BMRNG4.HRNER)

MOGEE TRANSITION (BMRNG4.MOGEE)

ORRCA TRANSITION (BMRNG4.ORRCA)

SYRAH TRANSITION (BMRNG4.SYRAH)

TIPRE TRANSITION (BMRNG4.TIPRE)

NOTE: Chart not to scale.

(LOUPE1.BMRNG) 24137

LOUPE ONE DEPARTURE (RNAV)

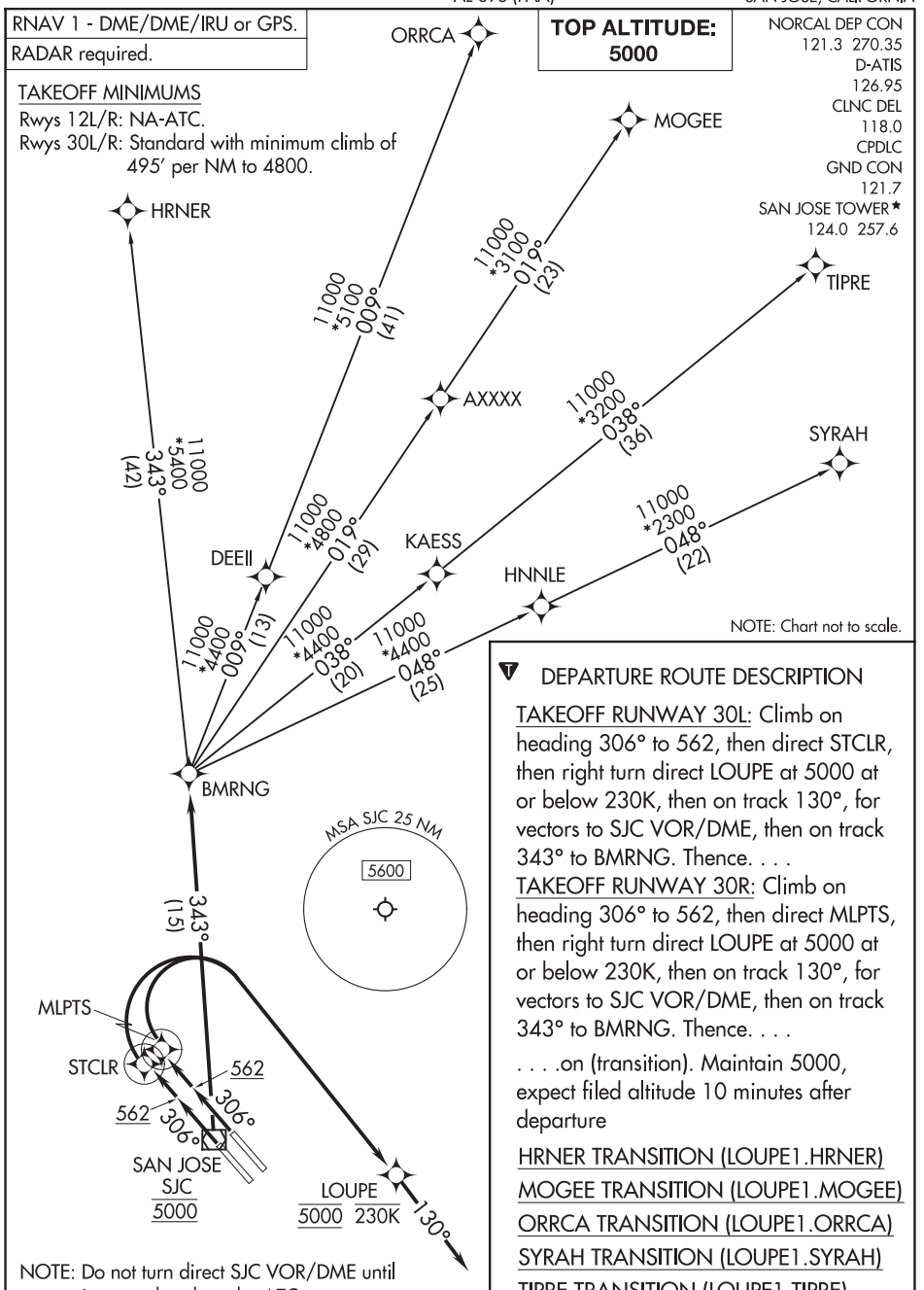
NORMAN Y MINETA SAN JOSE INTL (SJC)
AL-693 (FAA) SAN JOSE, CALIFORNIA

RNAV 1 - DME/DME/IRU or GPS.
RADAR required.

TOP ALTITUDE: 5000

NORCAL DEP CON
121.3 270.35
D-ATIS
126.95
CLNC DEL
118.0
CPDLC
GND CON
121.7
SAN JOSE TOWER★
124.0 257.6

TAKEOFF MINIMUMS
Rwys 12L/R: NA-ATC.
Rwys 30L/R: Standard with minimum climb of 495′ per NM to 4800.



NOTE: Do not turn direct SJC VOR/DME until instructed to do so by ATC.

DEPARTURE ROUTE DESCRIPTION

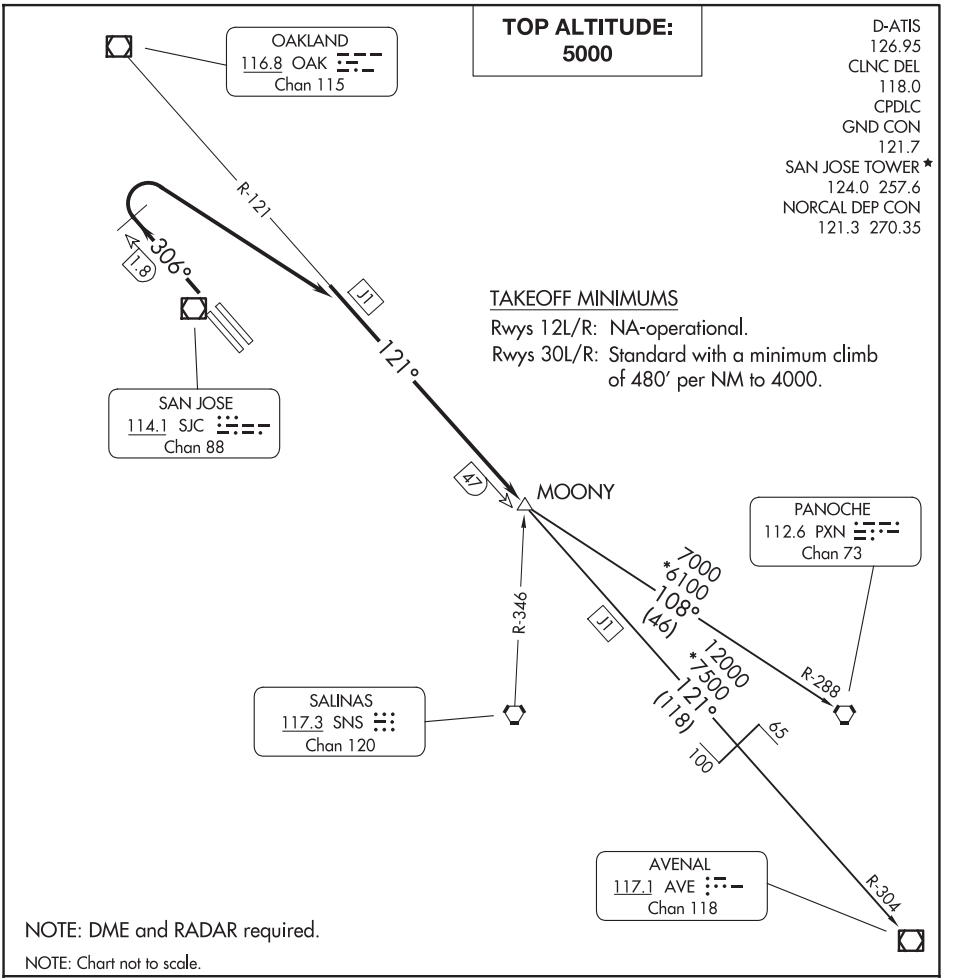
TAKEOFF RUNWAY 30L: Climb on heading 306° to 562, then direct STCLR, then right turn direct LOUPE at 5000 at or below 230K, then on track 130°, for vectors to SJC VOR/DME, then on track 343° to BMRNG. Thence. . . .

TAKEOFF RUNWAY 30R: Climb on heading 306° to 562, then direct MLPTS, then right turn direct LOUPE at 5000 at or below 230K, then on track 130°, for vectors to SJC VOR/DME, then on track 343° to BMRNG. Thence. . . .

. . . .on (transition). Maintain 5000, expect filed altitude 10 minutes after departure

HRNER TRANSITION (LOUPE1.HRNER)
MOGEE TRANSITION (LOUPE1.MOGEE)
ORRCA TRANSITION (LOUPE1.ORRCA)
SYRAH TRANSITION (LOUPE1.SYRAH)
TIPRE TRANSITION (LOUPE1.TIPRE)

SW-2, 07 AUG 2025 to 02 OCT 2025



SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 30L/R: Climb heading 306° to SJC 1.8 DME NW of SJC VOR/DME, then turn right to intercept and proceed on OAK R-121 to MOONY INT, thence. . . .

. . . .on (transition) or (assigned route). Maintain 5000, expect clearance to filed altitude ten minutes after departure.

AVENAL TRANSITION (SJC3.AVE): From over MOONY INT on OAK R-121 and AVE R-304 to AVE VOR/DME.

PANOCHE TRANSITION (SJC3.PXN): From over MOONY INT on PXN R-288 to PXN VORTAC.

(SPTNS1.TECKY) 22027

SPTNS ONE DEPARTURE (RNAV)

NORMAN Y MINETA SAN JOSE INTL (SJC)

AL-693 (FAA)

SAN JOSE, CALIFORNIA

NOTE: RNAV 1

NOTE: RADAR required for non-GPS equipped aircraft.

NOTE: DME/DME/IRU or GPS required.

TAKEOFF MINIMUMS

Rwys 30L/R: Standard with minimum climb of 500′ per NM to 570 then minimum climb of 344′ per NM to 4000.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 30L: Climb on heading 306° to 570, then direct to cross STCLR at or above 900 at or below 230K, then right turn direct to cross SPTNS at 5000, then on track 125° to cross TECKY at or above 13000, thence. . . .

TAKEOFF RUNWAY 30R: Climb on heading 306° to 570, then direct to cross MLPTS at or above 900 at or below 230K, then right turn direct to cross SPTNS at 5000, then on track 125° to cross TECKY at or above 13000, thence. . . .

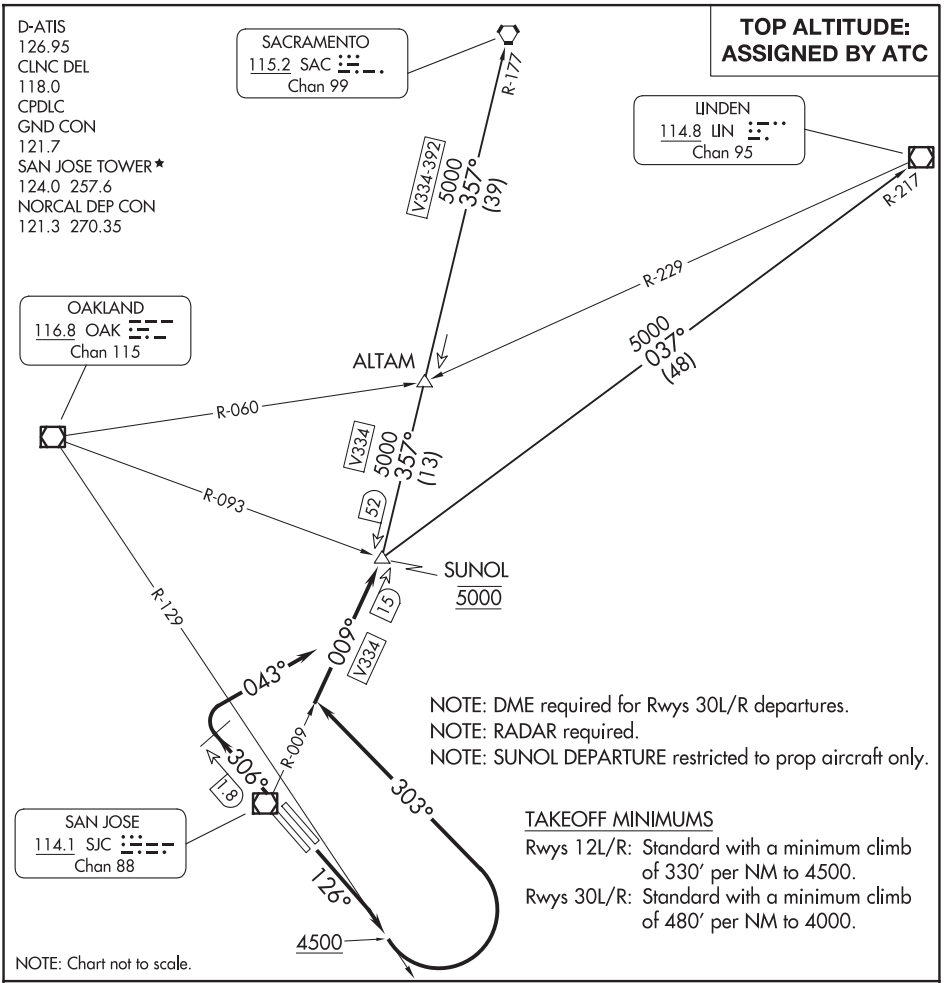
. . . .on (transition), maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

JFREE TRANSITION (SPTNS1.JFREE)

VLREE TRANSITION (SPTNS1.VLREE)

NOTE: Chart not to scale.

SW-2, 07 AUG 2025 to 02 OCT 2025



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 12L/R: Climb heading 126° to intercept and proceed on OAK R-129 to 4500, then turn left heading 303° for RADAR vectors to intercept and proceed on SJC R-009 to cross SUNOL at 5000, thence . . . .

TAKEOFF RUNWAYS 30L/R: Climb heading 306° at SJC 1.8 DME northwest of SJC VOR/DME, turn right heading 043° to intercept and proceed on SJC R-009 to cross SUNOL at 5000, thence . . . .

. . . . then on (transition) or (assigned route). Maintain ATC assigned altitude.

LINDEN TRANSITION (SUNOL1.LIN): From over SUNOL on LIN R-217 to LIN VOR/DME.

SACRAMENTO TRANSITION (SUNOL1.SAC): From over SUNOL on SAC R-177 to SAC VORTAC.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

TECKY FOUR DEPARTURE (RNAV)

(TECKY4.TECKY) 27JAN22

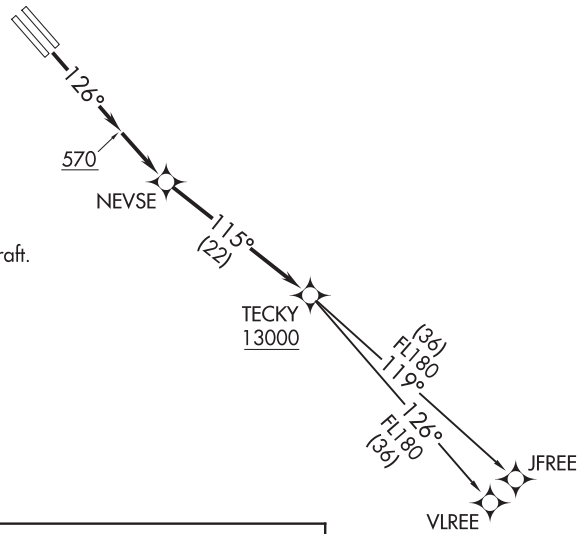
SAN JOSE, CALIFORNIA
NORMAN Y MINETA SAN JOSE INTL (SJC)

D-ATIS
126.95
CLNC DEL
118.0
CPDLC
GND CON
121.7
SAN JOSE TOWER ★
124.0 257.6
NORCAL DEP CON
121.3 270.35

NOTE: RNAV 1
NOTE: RADAR required for non-GPS equipped aircraft.
NOTE: DME/DME/IRU or GPS required.

TAKEOFF MINIMUMS
Rwys 12L/R: Standard with minimum climb of 500' per NM to 570.

TOP ALTITUDE: FL190



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 12L, 12R: Climb on heading 126° to 570, then direct NEVSE, then on track 115° to cross TECKY at or above 13000, thence. . . .

. . . .on (transition). Maintain FL190. Expect filed altitude 10 minutes after departure.

JFREE TRANSITION (TECKY4.JFREE)
VLREE TRANSITION (TECKY4.VLREE)

NOTE: Chart not to scale.

(TECKY4.TECKY) 22027

TECKY FOUR DEPARTURE (RNAV)

AL-693 (FAA)

NORMAN Y MINETA SAN JOSE INTL (SJC)
SAN JOSE, CALIFORNIA

WAAS CH 82216 W13A	APP CRS 127°	Rwy Idg 2601 TDZE 135 Apt Elev 135

RNAV (GPS) RWY 13L

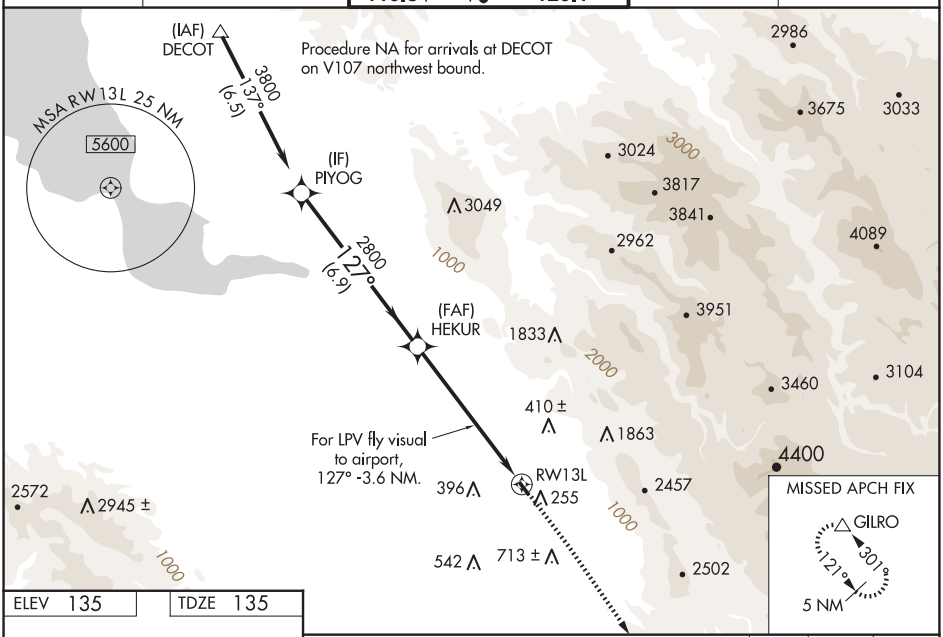
REID-HILLVIEW OF SANTA CLARA COUNTY (RHV)

RNP APCH.

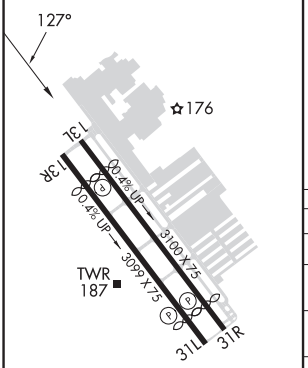
T NA Circling Rwy 31L NA at night. Rwy 13L helicopter visibility reduction below ¾ SM NA. VDP NA with Norman Y Mineta San Jose Intl altimeter setting. When control tower closed, use Norman Y Mineta San Jose Intl altimeter setting and increase all DAs 25 feet and all MDAs 40 feet; increase LPV# visibility to 1⅜ SM. Circling east of Rwy 13L-31R NA at night.

MISSED APPROACH: Climb to 1900 then climbing right turn to 5000 direct GILRO and hold.
#Missed approach requires minimum climb of 300 feet per NM to 2800.

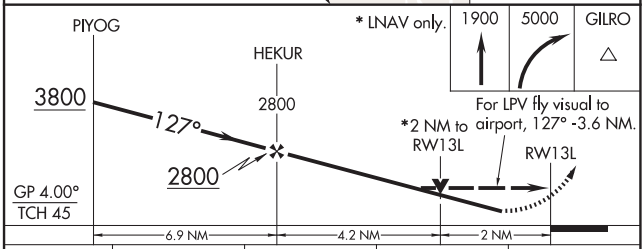
ATIS	NORCAL APP CON	REID-HILLVIEW TOWER ★ (Rwy 13L-31R) (Rwy 13R-31L)	GND CON	UNICOM
125.2	120.1 290.25	119.8 (CTAF) L 126.1	121.65	122.95



ELEV 135 TDZ 135



MIRL Rwy 13L-31R L
REIL Rwys 13L and 31R L



CATEGORY	A	B	C	D
LPV DA#	562-1¼ 427 (500-1¼)		NA	
LPV DA	1708-3 1573 (1600-3)		NA	
LNAV MDA#	1040-1¼ 905 (1000-1¼)		NA	
LNAV MDA	1600-1¼ 1465 (1500-1¼)	1600-1½ 1465 (1500-1½)	NA	
C CIRCLING	1600-1¼ 1465 (1500-1¼)	1600-1½ 1465 (1500-1½)	NA	

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

SAN JOSE, CALIFORNIA AL-5591 (FAA) 24305

APP CRS	Rwy Idg	2690
312°	TDZE	133
	Apt Elev	135

RNAV (GPS) Y RWY 31R

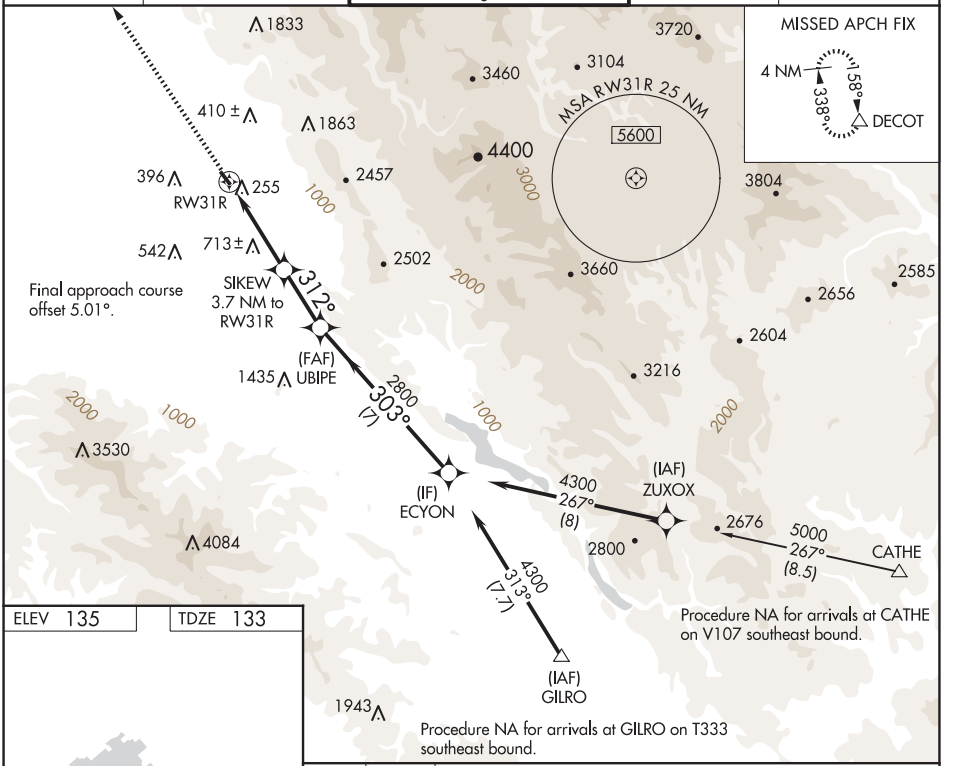
REID-HILLVIEW OF SANTA CLARA COUNTY (RHV)

RNP APCH.

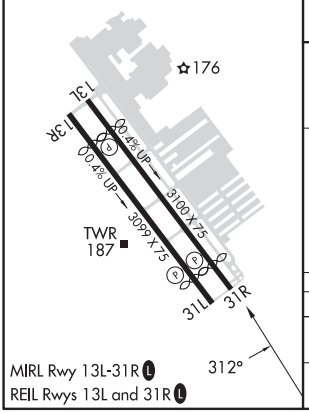
T NA Circling Rwy 31L NA at night. Rwy 31R helicopter visibility reduction below ¾ SM NA. VDP NA when using Norman Y Mineta San Jose Intl altimeter setting. Circling east of Rwy 13L-31R NA at night. When control tower closed, use Norman Y Mineta San Jose Intl altimeter setting and increase all MDAs 40 feet.

MISSED APPROACH: Climb to 4000 direct DECOT and hold.

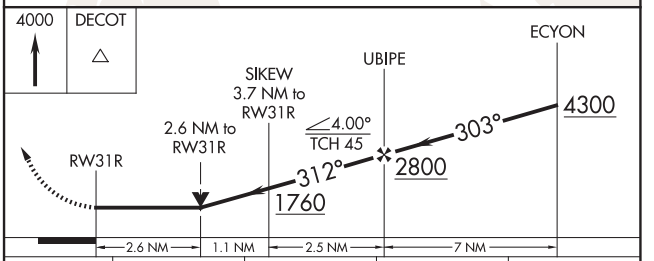
ATIS	NORCAL APP CON	REID-HILLVIEW TOWER ★ (Rwy 13L-31R) (Rwy 13R-31L)	GND CON	UNICOM
125.2	120.1 290.25	119.8 (CTAF) L 126.1	121.65	122.95



ELEV 135 TDZ 133



MIRL Rwy 13L-31R L
REIL Rwys 13L and 31R L



CATEGORY	A	B	C	D
LNAV MDA	1300-1¼ 1167 (1200-1¼)	1300-1½ 1167 (1200-1½)	NA	
C CIRCLING	1300-1¼ 1165 (1200-1¼)	1300-1½ 1165 (1200-1½)	NA	

SAN JOSE, CALIFORNIA
Amdt 1 10SEP20

REID-HILLVIEW OF SANTA CLARA COUNTY (RHV)
37°20'N-121°49'W
RNAV (GPS) Y RWY 31R

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS	APP CRS	Rwy Idg	2690
CH 58316	307°	TDZE	133
W31A		Apt Elev	135

RNAV (GPS) Z RWY 31R

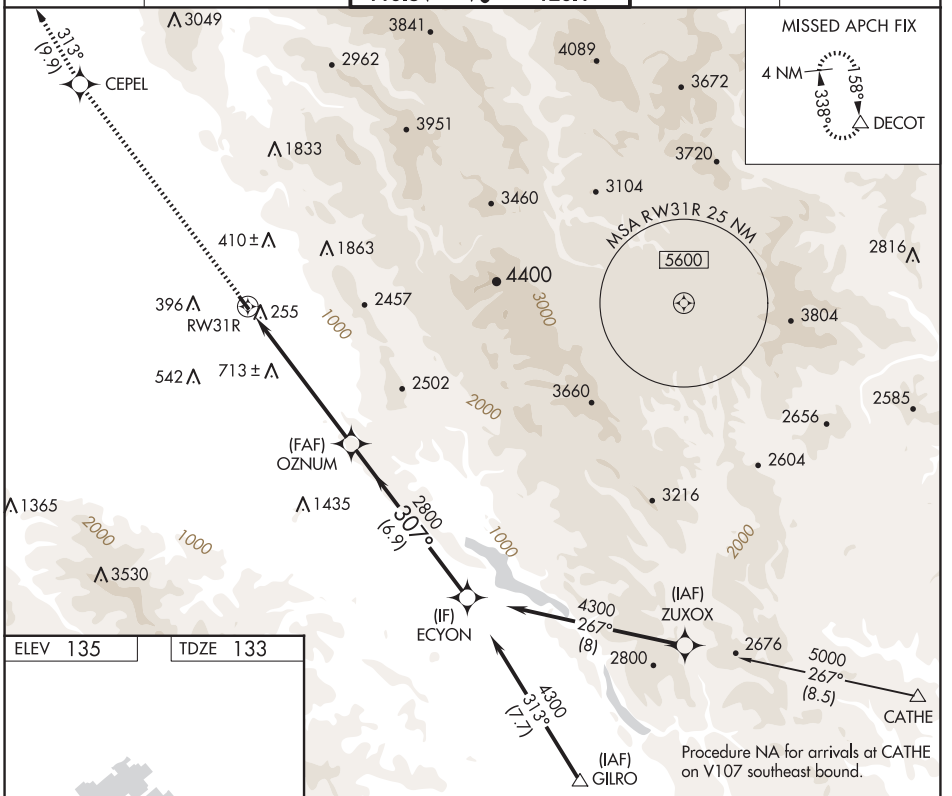
REID-HILLVIEW OF SANTA CLARA COUNTY (RHV)

RNP APCH.

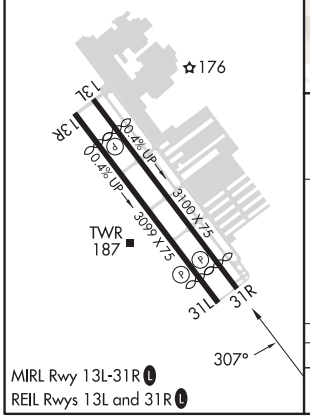
When control tower closed, use Norman Y Mineta San Jose Intl altimeter setting and increase DA to 558 feet and visibility to 1¼ SM. Rwy 31R helicopter visibility reduction below ¾ SM NA.

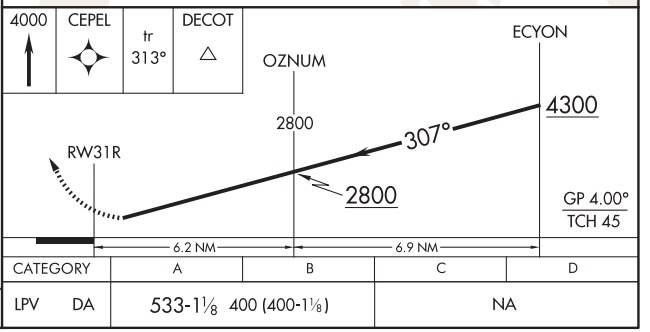
MISSED APPROACH: Climb to 4000 direct CEPEL and on track 313° to DECOT and hold.

ATIS	NORCAL APP CON	REID-HILLVIEW TOWER ★ (Rwy 13L-31R) (Rwy 13R-31L)	GND CON	UNICOM
125.2	120.1 290.25	119.8 (CTAF) L 126.1	121.65	122.95



ELEV 135 TDZ 133





CATEGORY	A	B	C	D
LPV DA	533-1⅛ 400 (400-1⅛)		NA	

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

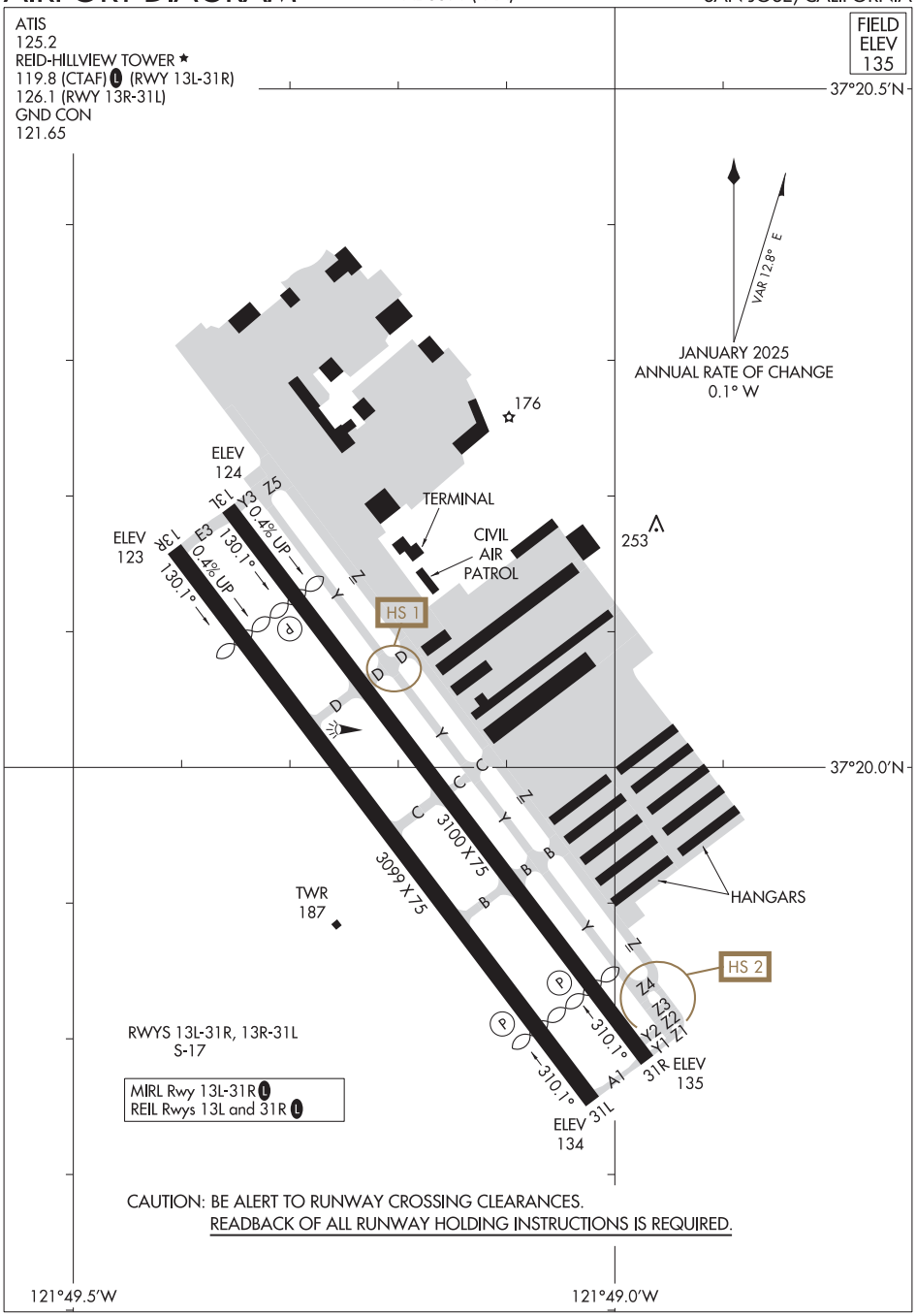
25107

AIRPORT DIAGRAM

REID-HILLVIEW OF SANTA CLARA COUNTY (RHV)

AL-5591 (FAA)

SAN JOSE, CALIFORNIA



AIRPORT DIAGRAM

SAN JOSE, CALIFORNIA

REID-HILLVIEW OF SANTA CLARA COUNTY (RHV)

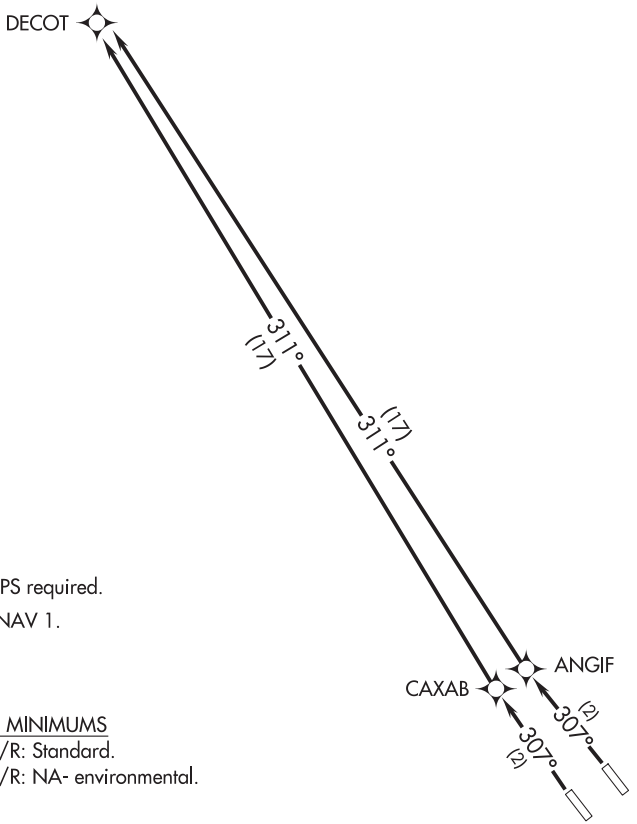
25107

SW-2, 07 AUG 2025 to 02 OCT 2025

DECOT ONE DEPARTURE (OBSTACLE) (RNAV) AL-5591 (FAA)

SW-2, 07 AUG 2025 to 02 OCT 2025

NORCAL DEP CON
121.3 270.35



NOTE: GPS required.

NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwys 31L/R: Standard.
Rwys 13L/R: NA- environmental.

TAKEOFF OBSTACLE NOTES
Rwys 31L/R: Trees 1070′ from DER, 500′ right and left of centerline, 173′ and 169′ MSL.
Rwy 31R: Light 125′ from DER, 370′ right of centerline, 159′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 31L: Climb to 4000 via 307° course to CAXAB WP and 311° track to DECOT WP. Then via assigned route.

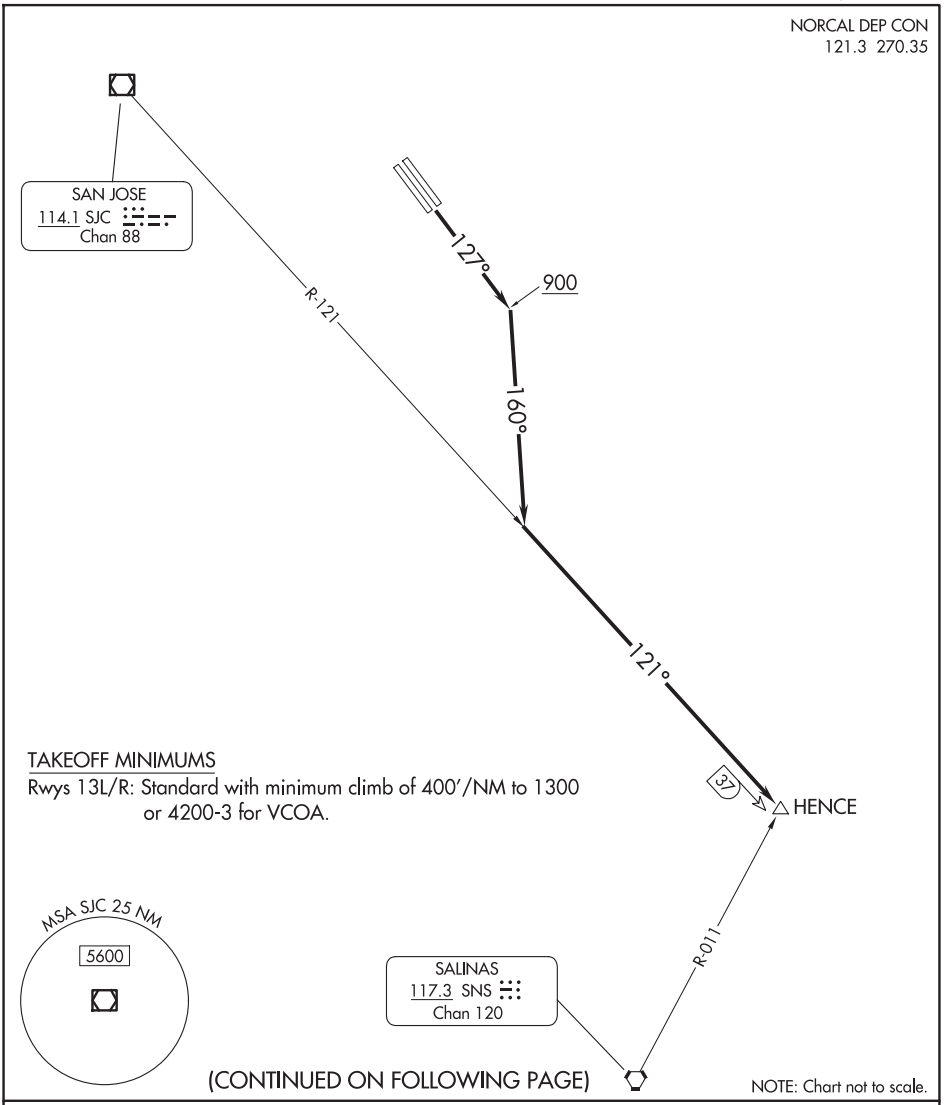
TAKEOFF RUNWAY 31R: Climb to 4000 via 307° course to ANGIF WP and 311° track to DECOT WP. Then via assigned route.

TAKEOFF RUNWAYS 13L/13R: NA.

(HENCE1.HENCE) 24249

HENCE ONE DEPARTURE (OBSTACLE)

REID-HILLVIEW OF SANTA CLARA COUNTY (RHV)
AL-5591 (FAA)
SAN JOSE, CALIFORNIA



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 13L/R: Climb on heading 127° to 900, then climbing right turn to heading 160° to intercept SJC VOR/DME R-121 to HENCE.

VCOA RUNWAYS 13L/R: Obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Reid-Hillview of Santa Clara County Airport at or above 4200 before proceeding on course.

SW-2, 07 AUG 2025 to 02 OCT 2025

TAKEOFF OBSTACLE NOTES

Rwy 13L: Pole, vehicles on road beginning 91′ from DER, 30′ left of centerline, up to 39′ AGL/174′ MSL.
Fence 145′ from DER, 292′ right of centerline, 4′AGL/140′ MSL.
Pole, fence beginning 162′ from DER, 100′ right of centerline, up to 10′ AGL/147′ MSL.
Vehicles on road beginning 176′ from DER, 5′ right of centerline, up to 151′ MSL.
Pole 253′ from DER, 297′ left of centerline, 39′ AGL/175′ MSL.
Vehicle on road 253′ from DER, 333′ right of centerine, 15′ AGL/155′ MSL.
Pole 383′ from DER, 22′ right of centerline, 21′ AGL/156′ MSL.
Pole 617′ from DER, 438′ right of centerline, 20′ AGL/158′ MSL.
Trees, transmission line, pole, building beginning 652′ from DER, 238′ left of centerline, up to 241′ MSL.
Tree 659′ from DER, 147′ right of centerline, 166′ MSL.
Tree 709′ from DER, 269′ right of centerline, 168′ MSL.
Trees, electrical system beginning 859′ from DER, 460′ right of centerline, up to 183′ MSL.
Tree, electrical system beginning 1151′ from DER, 107′ right of centerline, up to 193′ MSL.
Building 1364′ from DER, 421′ right of centreline, 198′ MSL.
Tree, building beginning 1420′ from DER, 375′ right of centerline, up to 217′ MSL.
Trees, poles beginning 2204′ from DER, 40′ right of centerline, up to 246′ MSL.
Transmission line, tree beginning 2467′ from DER, 512′ left of centerline, up to 104′ AGL/244′ MSL.
Transmission lines beginning 3217′ from DER, 783′ left of centerline, up to 112′ AGL/255′ MSL.
Transmission line 4802′ from DER, 1350′ left of centerline, 110′ AGL/266′ MSL.

Rwy 13R: Fence 146′ from DER, 8′ left of centerline, 4′ AGL/140′ MSL.
Pole, fence beginning 163′ from DER, 7′ left of centerline, up to 10′ AGL/147′ MSL.
Vehicles on road beginning 177′ from DER, 15′ left of centerline, up to 151′ MSL.
Electrical system, vehicle on road beginning 185′ from DER, 33′ right of centerline, up to 34′ AGL/168′ MSL.
Vehicle on road 232′ from DER, 330′ left of centerline, 15′ AGL/155′ MSL.
Tree, vehicle on road beginning 255′ from DER, 315′ right of centerline, up to 175′ MSL.
Pole 384′ from DER, 277′ left of centerline, 21′ AGL/156′ MSL.
Tree, pole beginning 545′ from DER, 138′ right of centerline, up to 185′ MSL.
Tree 660′ from DER, 152′ left of centerline, 166′ MSL.
Tree 700′ from DER, 425′ right of centerline, 200′ MSL.
Trees, electrical systems, buildings beginning 701′ from DER, 75′ right of centerline, up to 229′ MSL.
Tree 709′ from DER, 30′ left of centerline 168′ MSL.
Tree 1152′ from DER, 192′ left of centerline, 193′ MSL.
Tree 1380′ from DER, 852′ left of centerline, 214′ MSL.
Tree, building beginning 1642′ from DER, 538′ left of centerline, up to 225′ MSL.
Tree 2134′ from DER, 807′ left of centerline, 240′ MSL.
Trees, transmission line beginning 2205′ from DER, 96′ left of centerline, up to 246′ MSL.
Trees, poles beginning 2436′ from DER, 349′ right of centerline, up to 233′ MSL.
Transmission lines beginning 3218′ from DER, 1082′ left of centerline, up to 112′ AGL/255′ MSL.
Transmission line 4803′ from DER, 1649′ left of centerline, 110′ AGL/266′ MSL.
Tower 2.2 NM from DER, 3840′ right of centerline, 104′ AGL/526′ MSL.

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SAN MARTIN, CALIFORNIA | AL-9260 (FAA) | 25107

RNAV (GPS) RWY 32

SAN MARTIN (E16)

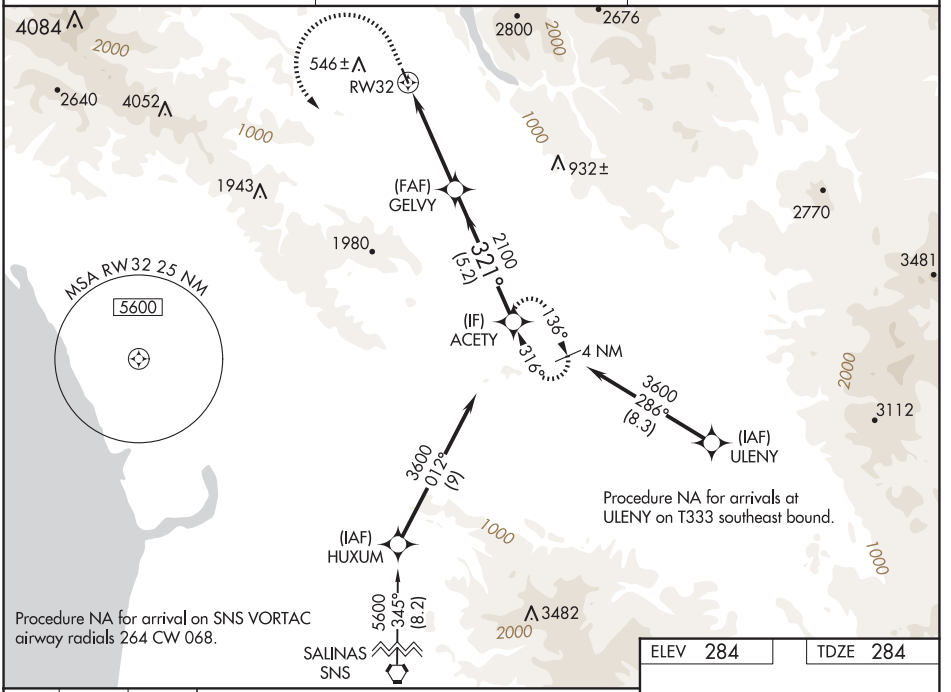
WAAS	APP CRS	Rwy Idg	3095
CH 56444	321°	TDZE	284
W32A		Apt Elev	284

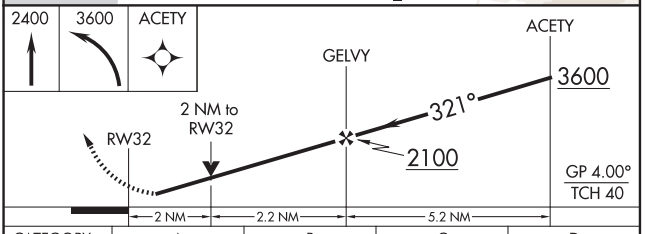
RNP APCH - GPS.

Circling NA southwest of Rwy 14-32. Rwy 32 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 2400 then climbing left turn to 3600 direct ACETY and hold.
*Missed approach requires minimum climb of 260 feet per NM to 2400.

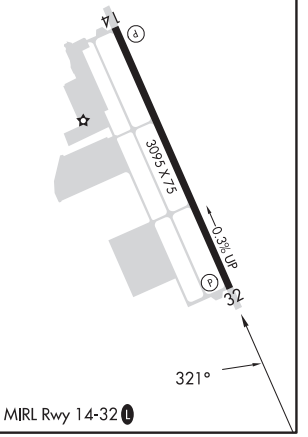
AWOS-3P	NORCAL APP CON	UNICOM
118.35	124.525 348.675	122.7 (CTAF) L





CATEGORY	A	B	C	D
LPV DA*	600-⅞ 316 (400-⅞)		NA	
LPV DA	954-1⅞ 670 (700-1⅞)		NA	
LNAV MDA*	1060-1 776 (800-1)	1060-1¼ 776 (800-1¼)	NA	
LNAV MDA	1320-1¼ 1036 (1100-1¼)	1320-1½ 1036 (1100-1½)	NA	
C CIRCLING	1320-1¼ 1036 (1100-1¼)	1320-1½ 1036 (1100-1½)	NA	

ELEV 284 | TDZE 284



SAN MARTIN, CALIFORNIA
Amdt 2A 08SEP22

37°05'N-121°36'W

SAN MARTIN (E16)
RNAV (GPS) RWY 32

SW-2, 07 AUG 2025 to 02 OCT 2025

LOC I-STS	APP CRS	Rwy Idg	6000
109.3	321°	TDZE	122
		Apt Elev	129

ILS or LOC RWY 32

CHARLES M SCHULZ/SONOMA COUNTY (STS)

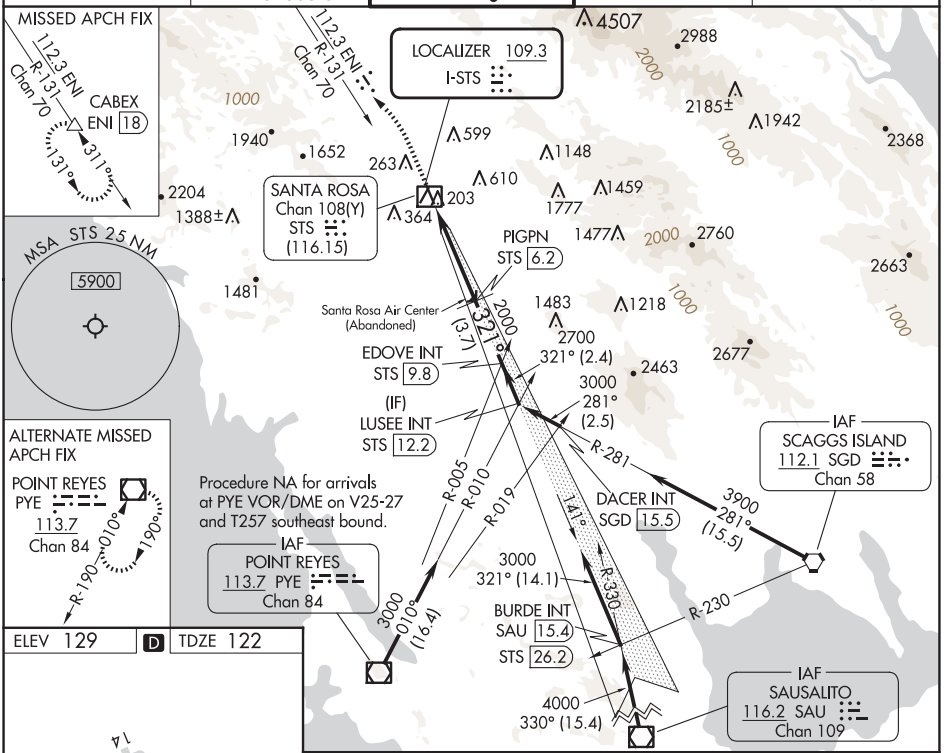
DME required.

Autopilot coupled approach NA below 1286. DME from STS DME. DME use requires simultaneous reception of I-STS and STS DME. For inop ALS increase S-ILS 32 visibility all Cats to RVR 4500, S-LOC 32 Cats A/B to RVR 5500.

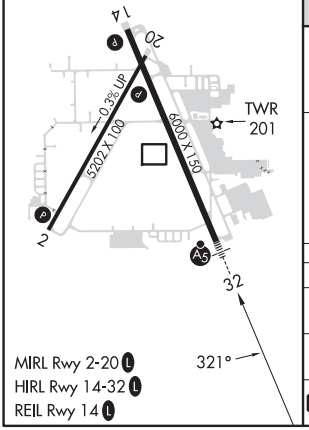
MALSR

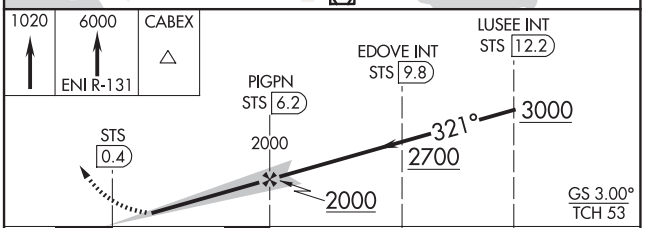
MISSED APPROACH: Climb to 1020 then climb to 6000 on ENI VORTAC R-131 to CABEX/ENI VORTAC 18 DME and hold, continue climb-in-hold to 6000.

ATIS	OAKLAND CENTER	SANTA ROSA TOWER★	GND CON	UNICOM
120.55	127.8 353.5	118.5 (CTAF) L 363.0	121.9	122.95



ELEV 129	D	TDZE 122





CATEGORY	A	B	C	D
S-ILS 32	377/24 255 (300-½)			
S-LOC 32	580/24 458 (500-½)		580/45 458 (500-⅞)	
C CIRCLING	600-1 471 (500-1)	680-1 551 (600-1)	1080-3 951 (1000-3)	1420-3 1291 (1300-3)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

SANTA ROSA, CALIFORNIA | AL-696 (FAA) | 24305

RNAV (GPS) RWY 2

CHARLES M SCHULZ/SONOMA COUNTY (STS)

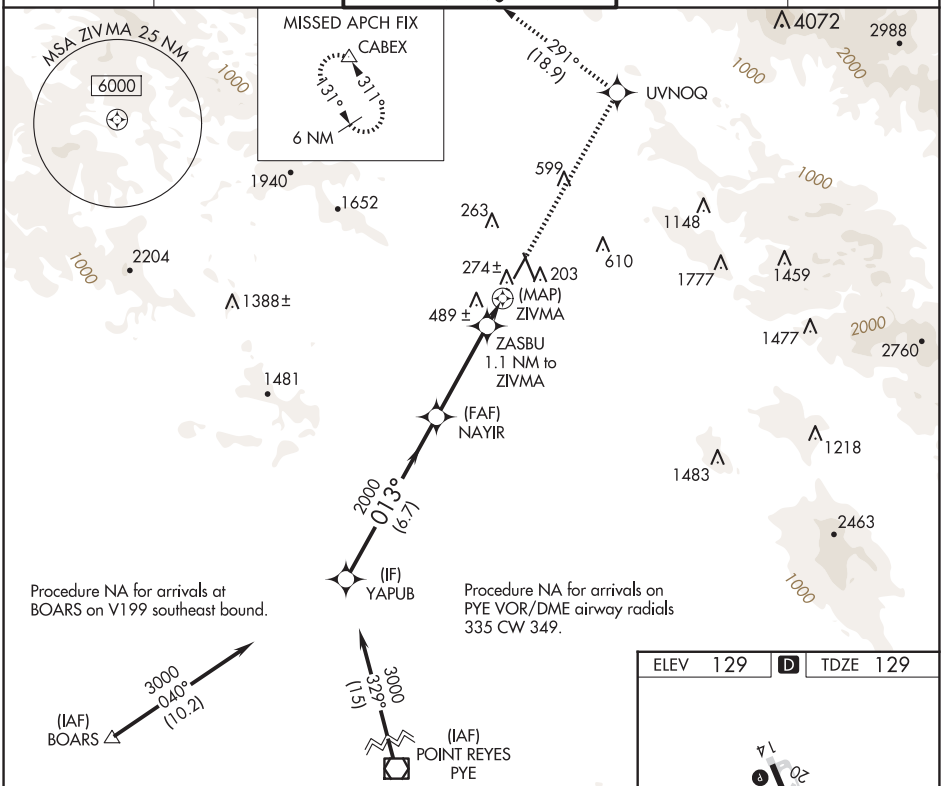
WAAS	APP CRS	Rwy Idg	4802
CH 69230	013°	TDZE	129
W02A		Apt Elev	129

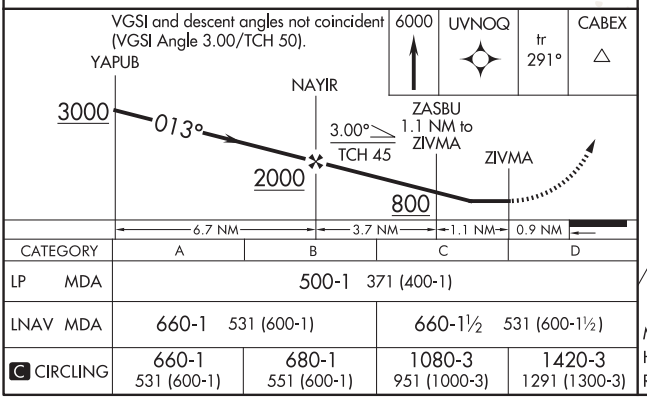
RNP APCH.

Rwy 2 helicopter visibility reduction below ¾ SM NA.

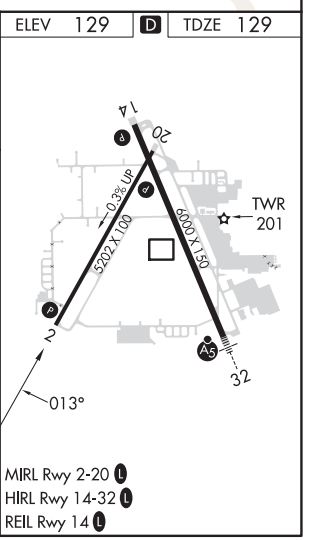
MISSED APPROACH: Climb to 6000 direct UVNOQ and on track 291° to CABEX and hold, continue climb-in-hold to 6000.

ATIS	OAKLAND CENTER	SANTA ROSA TOWER ★	GND CON	UNICOM
120.55	127.8 353.5	118.5 (CTAF) L 363.0	121.9	122.95





CATEGORY	A	B	C	D
LP MDA	500-1 371 (400-1)			
LNAV MDA	660-1 531 (600-1)		660-1½ 531 (600-1½)	
C CIRCLING	660-1 531 (600-1)	680-1 551 (600-1)	1080-3 951 (1000-3)	1420-3 1291 (1300-3)



MIRL Rwy 2-20 L
HIRL Rwy 14-32 L
REIL Rwy 14 L

SANTA ROSA, CALIFORNIA
Orig-E 28MAR19

CHARLES M SCHULZ/SONOMA COUNTY (STS)
38°31′N-122°49′W
RNAV (GPS) RWY 2

SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS		
126°	Rwy Idg	5880
	TDZE	122
	Apt Elev	129

RNAV (GPS) RWY 14

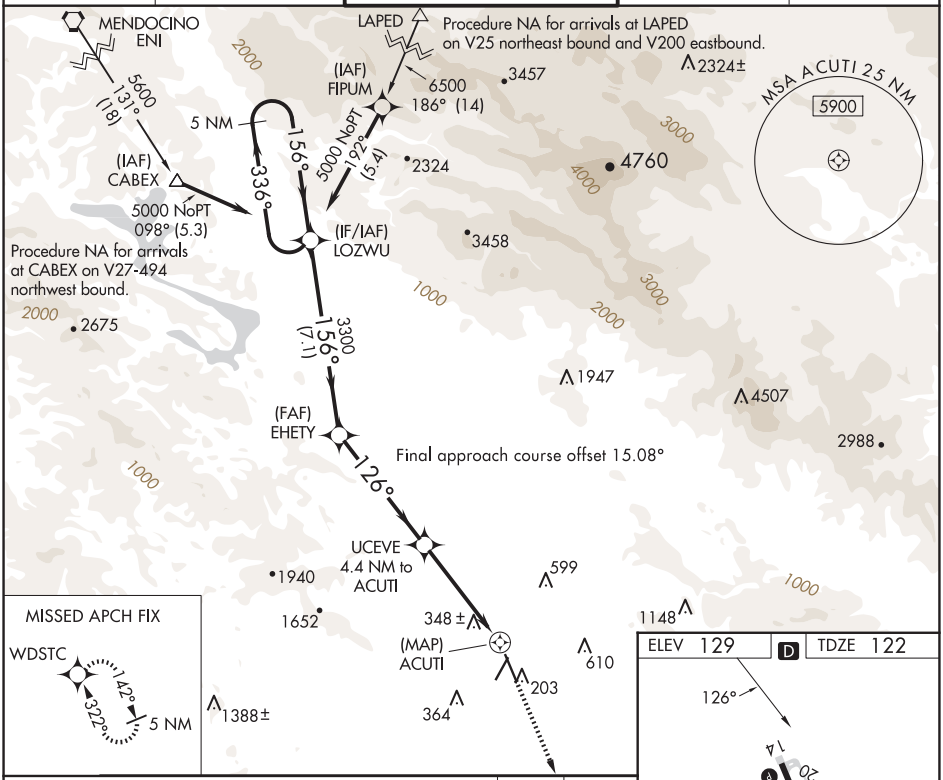
CHARLES M SCHULZ/SONOMA COUNTY (STS)

RNP APCH.

Rwy 14 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 5000 direct WDSTC and hold, continue climb-in-hold to 5000.

ATIS	OAKLAND CENTER	SANTA ROSA TOWER★	GND CON	UNICOM
120.55	127.8 353.5	118.5 (CTAF) L 363.0	121.9	122.95



CATEGORY	A	B	C	D
LNAV MDA	600-1 478 (500-1)		600-1⅜ 478 (500-1⅜)	
C CIRCLING	600-1 471 (500-1)	680-1 551 (600-1)	1080-3 951 (1000-3)	1420-3 1291 (1300-3)

MIRL Rwy 2-20 L
HIRL Rwy 14-32 L
REIL Rwy 14 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

SANTA ROSA, CALIFORNIA | AL-696 (FAA) | 24305

RNAV (GPS) RWY 32

CHARLES M SCHULZ/SONOMA COUNTY (STS)

WAAS CH 72611 W32A	APP CRS 321°	Rwy Idg 6000 / TDZE 122 / Apt Elev 129

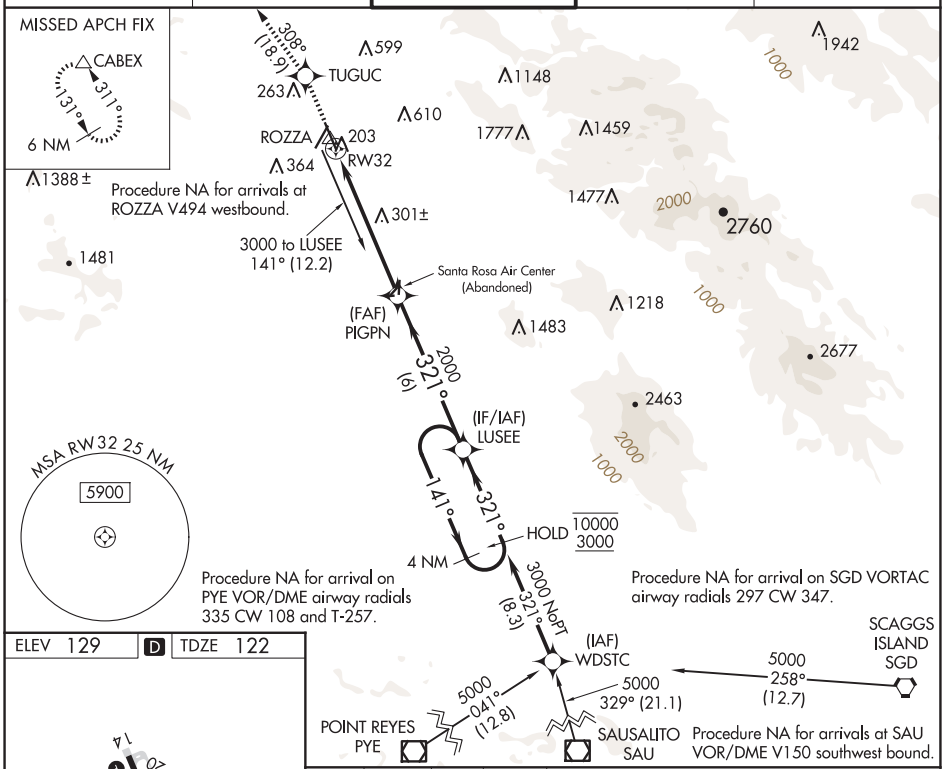
RNP APCH-GPS.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -4°C or above 54°C.
#RVR 1800 authorized with use of FD or AP or HUD to DA.

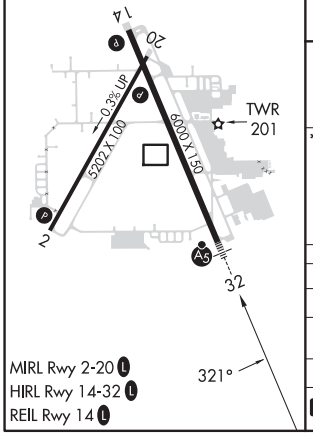
MALSR

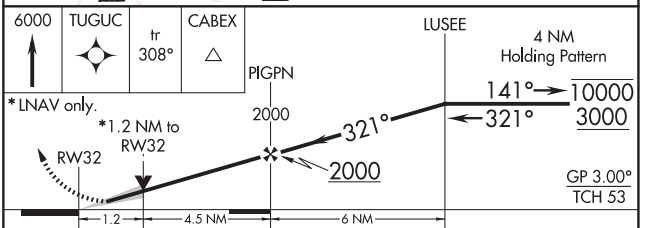
MISSED APPROACH: Climb to 6000 direct TUGUC and on track 308° to CABEX and hold, continue climb-in-hold to 6000.

ATIS	OAKLAND CENTER	SANTA ROSA TOWER*	GND CON	UNICOM
120.55	127.8 353.5	118.5 (CTAF) L 363.0	121.9	122.95



ELEV 129 | D | TDZE 122



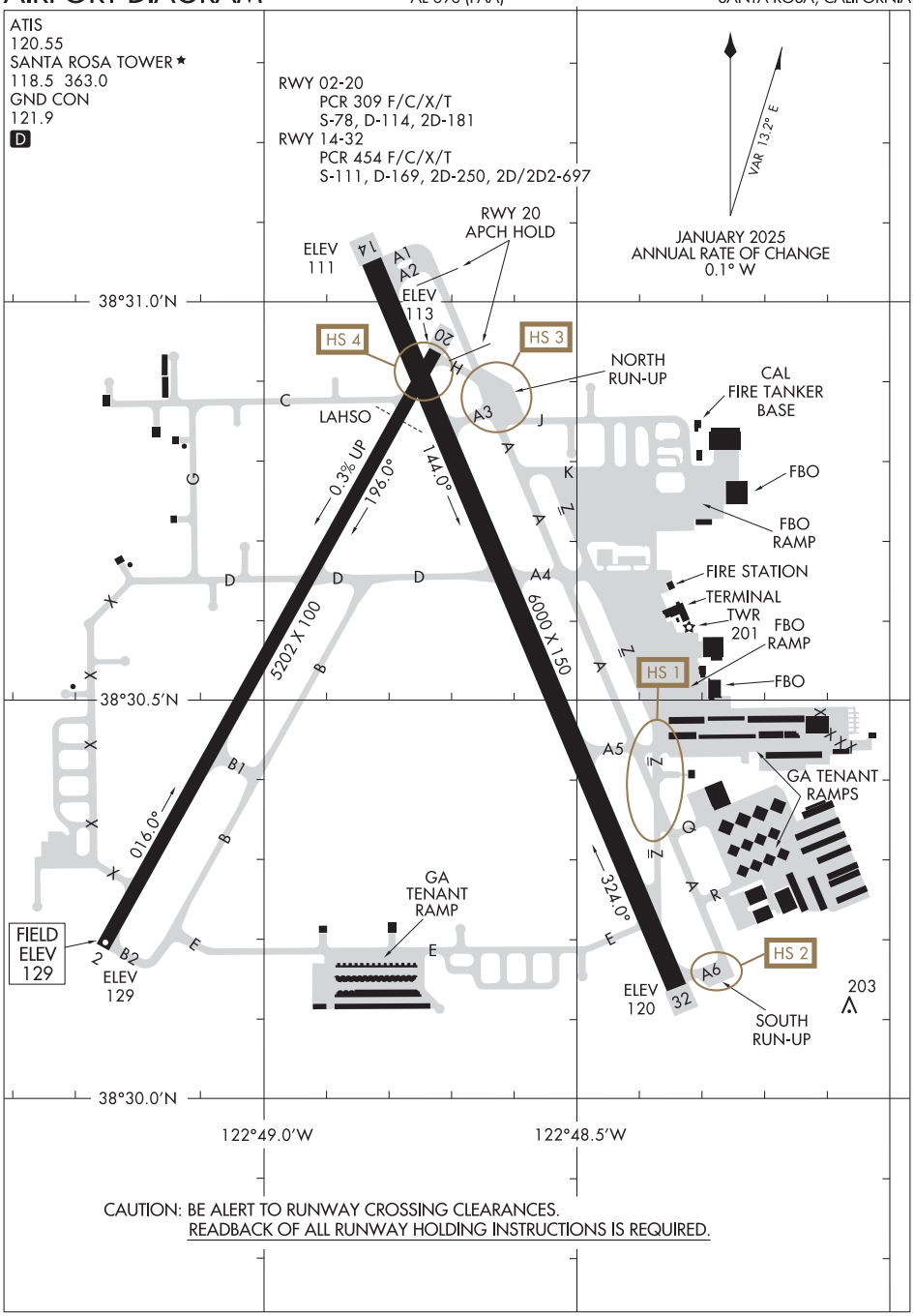


CATEGORY	A	B	C	D
LPV DA#	322/24 200 (200-½)			
LNAV/VNAV DA	570/50 448 (500-1)			
LNAV MDA	560/24 438 (500-½)		560/40 438 (500-¾)	
C CIRCLING	600-1 471 (500-1)	680-1 551 (600-1)	1080-3 951 (1000-3)	1420-3 1291 (1300-3)

SANTA ROSA, CALIFORNIA
Amdt 1F 12AUG21

CHARLES M SCHULZ/SONOMA COUNTY (STS)
38°31′N-122°49′W
RNAV (GPS) RWY 32

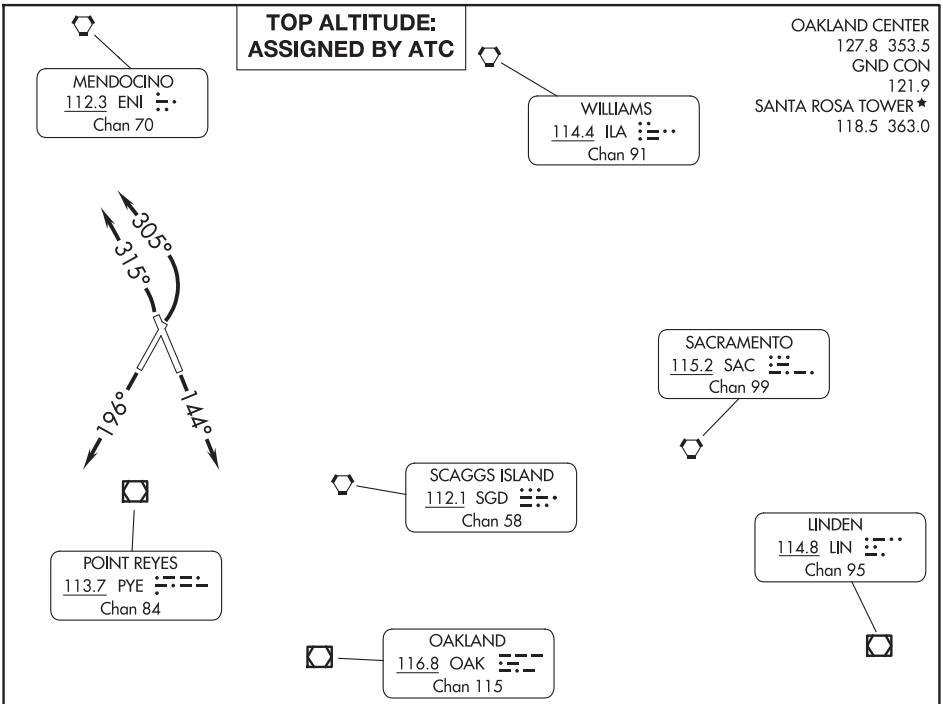
SW-2, 07 AUG 2025 to 02 OCT 2025


ATIS
120.55
SANTA ROSA TOWER ★
118.5 363.0
GND CON
121.9
D
RWY 02-20
PCR 309 F/C/X/T
S-78, D-114, 2D-181
RWY 14-32
PCR 454 F/C/X/T
S-111, D-169, 2D-250, 2D/2D2-697
VAR 13.2° E
JANUARY 2025
ANNUAL RATE OF CHANGE
0.1° W
RWY 20
APCH HOLD
ELEV
111
ELEV
113
38°31.0′N
HS 4
HS 3
NORTH
RUN-UP
CAL
FIRE TANKER
BASE
LAHSO
0.3% UP
196.0°
144.0°
FBO
FBO
RAMP
FIRE STATION
TERMINAL
TWR
201
FBO
RAMP
FBO
5202 X 100
6000 X 150
HS 1
38°30.5′N
GA TENANT
RAMPS
016.0°
324.0°
GA
TENANT
RAMP
FIELD
ELEV
129
ELEV
129
ELEV
120
HS 2
SOUTH
RUN-UP
203
38°30.0′N
122°49.0′W
122°48.5′W
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

(CHRLY8.ROZZA) 24305

CHARLIE EIGHT DEPARTURE

CHARLES M SCHULZ/SONOMA COUNTY (STS)
AL-696 (FAA)
SANTA ROSA, CALIFORNIA



NOTE: RADAR required.

TAKEOFF MINIMUMS

Rwy 2: Standard with minimum climb of 300' per NM to 2100.
Rwy 14: Standard with minimum climb of 285' per NM to 2500.
Rwy 20: Standard with minimum climb of 265' per NM to 2200.
Rwy 32: Standard with minimum climb of 375' per NM to 2200.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 2: Climbing left turn on heading 305° (or as assigned between 200° CW to 305° from departure end of runway), thence . . . .

TAKEOFF RUNWAY 14: Climb on heading 144° (or as assigned between 110° CW to 315° from departure end of runway), thence . . . .

TAKEOFF RUNWAY 20: Climb on heading 196° (or as assigned between 100° CW to 250° from departure end of runway), thence . . . .

TAKEOFF RUNWAY 32: Climbing left turn on heading 315° (or as assigned between 145° CW to 315° from departure end of runway), thence . . . .

. . . . expect RADAR vectors to join assigned route. Maintain ATC assigned altitude; expect filed altitude/flight level ten minutes after departure.

LOST COMMUNICATIONS: If not in contact with Oakland Center after reaching 4000, proceed direct to the PYE VOR/DME. Thence via assigned route.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

TAKEOFF MINIMUMS
Rwy 2: NA - ATC.
Rwy 14: Standard with minimum climb of 300′ per NM to 6100.
Rwy 20: Standard with minimum climb of 500′ per NM to 629′ then minimum climb of 280′ per NM to 6100.
Rwy 32: Standard with minimum climb of 360′ per NM to 5200.
RNAV 1 - GPS. GPS required.
TOP ALTITUDE: FL230
OAKLAND CENTER 127.8 353.5
RED BLUFF RBL
ENRQZ 15000
POZEY
BAHNZ 15000
MUSTANG FMG
RALEY
DUNGN
DRAGN
SHUFL
CHRRO
MADBM 5500
HHEER 5900
ZZITO 2000 230K
KUIPR 3100 230K
ITIZZ 3500 230K
OUTAA
629
NSA STS 25 NM
5900
NOTE: Do not exceed 230K until passing ITIZZ.
NOTE: Do not exceed 230K until passing KUIPR.
NOTE: Do not exceed 230K until passing ZZITO.
NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION
TAKEOFF RUNWAY 14: Climb direct to cross ITIZZ at or above 3500 and at or below 230K then on depicted route, thence. . . .
TAKEOFF RUNWAY 20: Climb on heading 193° to 629, then left turn direct to cross KUIPR at or above 3100 and at or below 230K, then on depicted route, thence. . . .
TAKEOFF RUNWAY 32: Climb direct to cross ZZITO at or above 2000 and at or below 230K, then on depicted route, thence. . . .
. . . .on assigned transition, maintain ATC assigned altitude, expect filed altitude 10 minutes after departure.
BAHNZ TRANSITION (CHRRO1.BAHNZ)
MUSTANG TRANSITION (CHRRO1.FMG)
RALEY TRANSITION (CHRRO1.RALEY)
RED BLUFF TRANSITION (CHRRO1.RBL)
SHUFL TRANSITION (CHRRO1.SHUFL)
N

(MMORK1.MMORK) 24305 AL-696 (FAA)

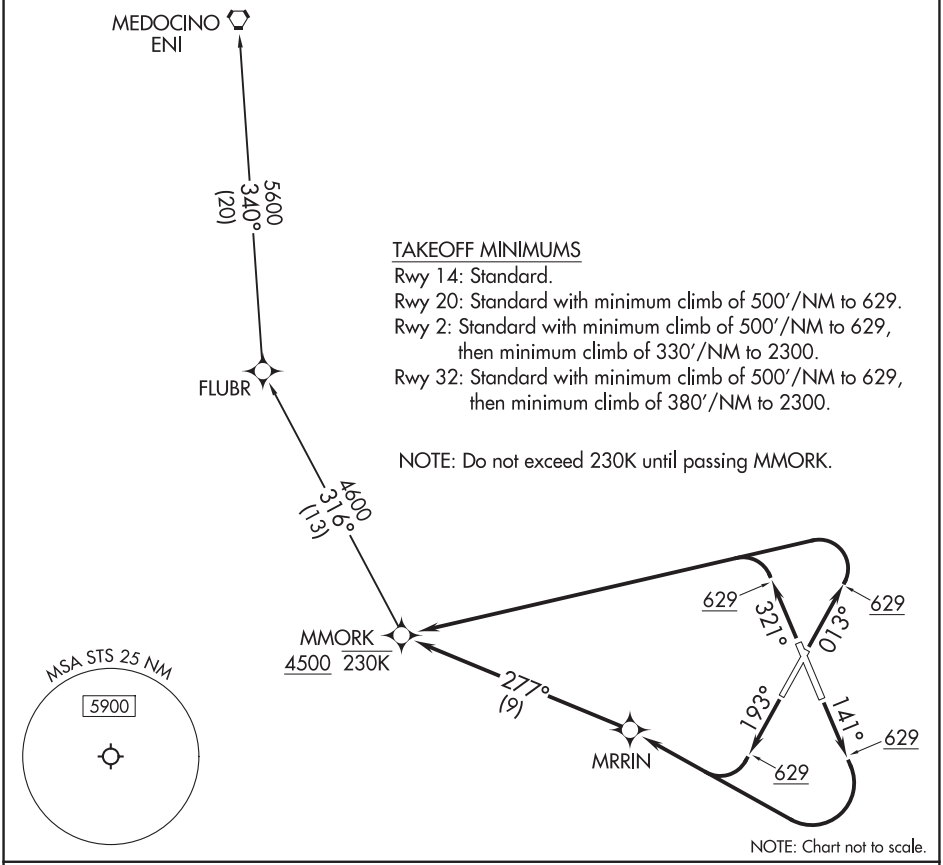
MMORK ONE DEPARTURE (RNAV)

CHARLES M SCHULZ/SONOMA COUNTY (STS)
SANTA ROSA, CALIFORNIA

TOP ALTITUDE: ASSIGNED BY ATC

RNAV 1 - DME/DME/IRU or GPS.
RADAR required for non-GPS equipped aircraft.

OAKLAND CENTER
127.8 353.5



TAKEOFF MINIMUMS
Rwy 14: Standard.
Rwy 20: Standard with minimum climb of 500'/NM to 629.
Rwy 2: Standard with minimum climb of 500'/NM to 629, then minimum climb of 330'/NM to 2300.
Rwy 32: Standard with minimum climb of 500'/NM to 629, then minimum climb of 380'/NM to 2300.

NOTE: Do not exceed 230K until passing MMORK.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 2: Climb on heading 013° to 629, then left turn direct to cross MMORK at or above 4500 and at or below 230K, thence . . . .

TAKEOFF RUNWAY 14: Climb on heading 141° to 629, then right turn direct MRRIN, then on depicted route, thence . . . .

TAKEOFF RUNWAY 20: Climb on heading 193° to 629, then right turn direct MRRIN, then on depicted route, thence . . . .

TAKEOFF RUNWAY 32: Climb on heading 321° to 629, then left turn direct to cross MMORK at or above 4500 and at or below 230K, thence . . . .

. . . . on assigned transition, maintain ATC assigned altitude, expect filed altitude 10 minutes after departure.

MENDOCINO TRANSITION (MMORK1.ENI)

SW-2, 07 AUG 2025 to 02 OCT 2025

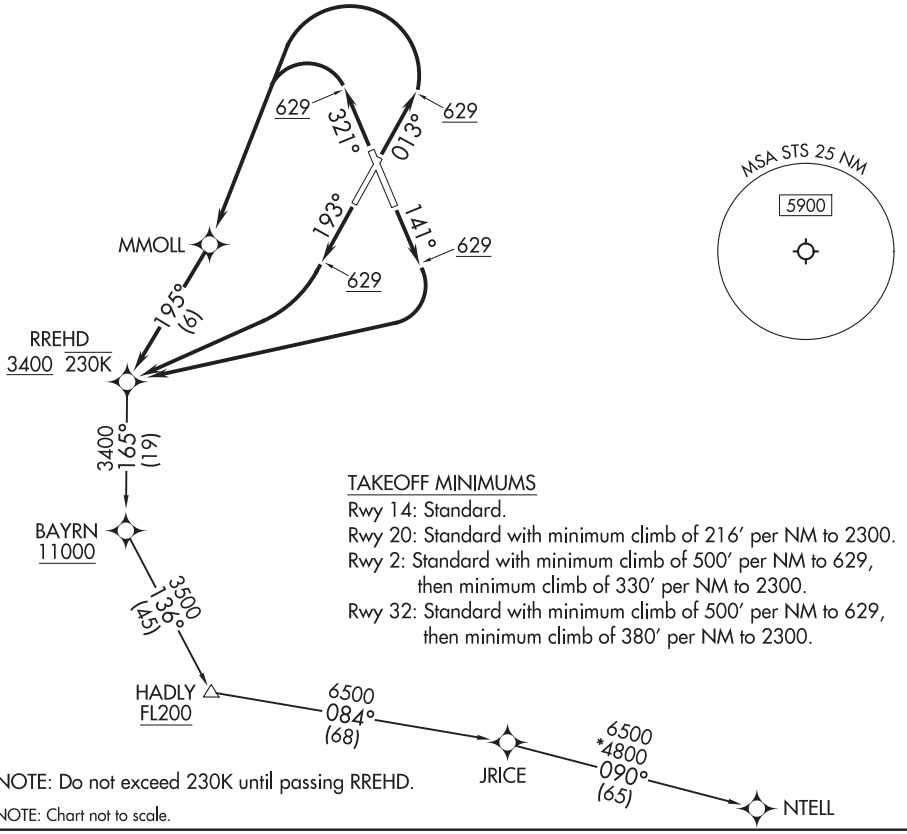
RREHD ONE DEPARTURE (RNAV)

AL-696 (FAA)

TOP ALTITUDE: FL230

RNAV 1 - DME/DME/IRU or GPS.
RADAR required for non-GPS equipped aircraft.

OAKLAND CENTER
127.8 353.5



TAKEOFF MINIMUMS
Rwy 14: Standard.
Rwy 20: Standard with minimum climb of 216′ per NM to 2300.
Rwy 2: Standard with minimum climb of 500′ per NM to 629, then minimum climb of 330′ per NM to 2300.
Rwy 32: Standard with minimum climb of 500′ per NM to 629, then minimum climb of 380′ per NM to 2300.

NOTE: Do not exceed 230K until passing RREHD.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 2: Climb on heading 013° to 629, then left turn direct MMOLL, then on depicted route, thence . . . .

TAKEOFF RUNWAY 14: Climb on heading 141° to 629, then right turn direct to cross RREHD at or above 3400 and at or below 230K, thence . . . .

TAKEOFF RUNWAY 20: Climb on heading 193° to 629, then right turn direct to cross RREHD at or above 3400 and at or below 230K, thence . . . .

TAKEOFF RUNWAY 32: Climb on heading 321° to 629, then left turn direct MMOLL, then on depicted route, thence . . . .

. . . .on assigned transition, maintain ATC assigned altitude, expect filed altitude 10 minutes after departure.

HADLY TRANSITION (RREHD1.HADLY)

NTELL TRANSITION (RREHD1.NTELL)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

SOUTH LAKE TAHOE, CALIFORNIA | AL-5416 (FAA) | 25163

RNAV (GPS) RWY 18

LAKE TAHOE (TVL)

WAAS	APP CRS	Rwy Ldg	7017
CH 57943	172°	TDZE	6259
W18A		Apt Elev	6268

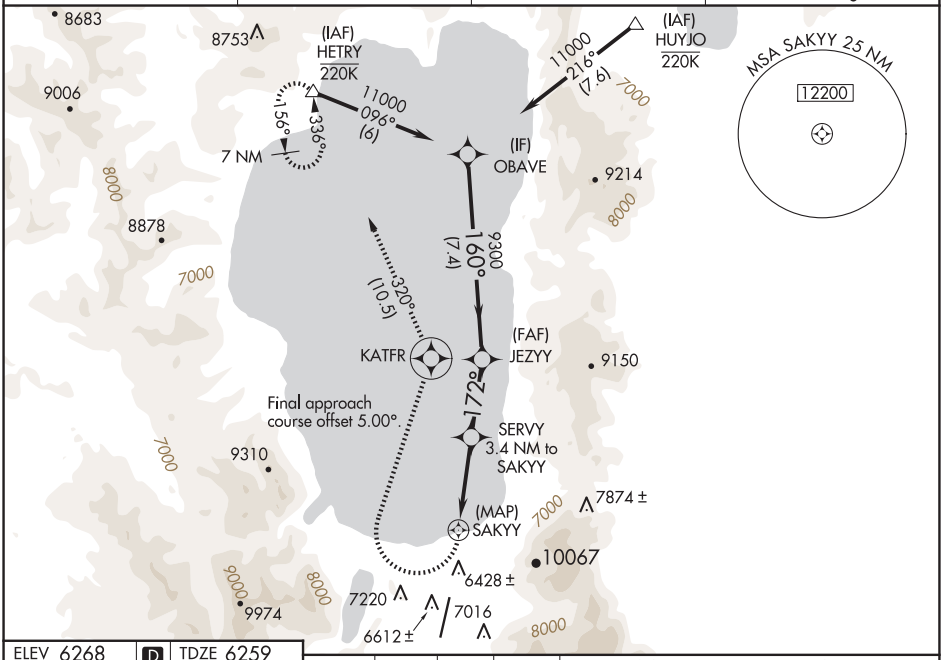
RNP APCH.

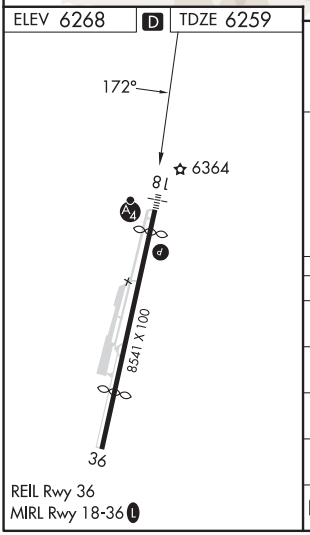
Circling NA at night. Rwy 18 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, procedure NA. Circling NA east of Rwy 18-36.

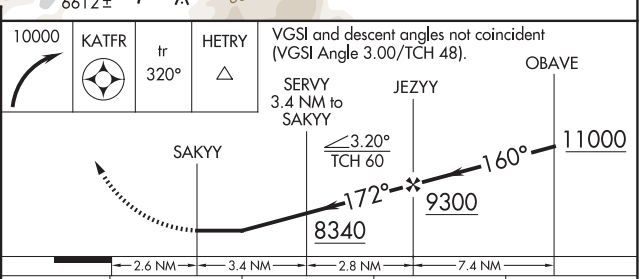
MALSF

MISSED APPROACH: (Do not exceed 185K until KATFR). Climbing right turn to 10000 direct KATFR then on track 320° to HETRY and hold, continue climb-in-hold to 12000. * Missed approach requires minimum climb of 425 feet per NM to 10000.

ASOS	OAKLAND CENTER	CLNC DEL	CTAF
124.725	127.95 316.1	134.3	122.85 L







CATEGORY	A	B	C	D
LP MDA*	6680-3 421 (500-3)			
LP MDA	7120-3 861 (900-3)		7140-3 881 (900-3)	7320-3 1061 (1100-3)
LNAV MDA*	6980-3 721 (800-3)			7560-3 1301 (1300-3)
LNAV MDA	7280-3 1021 (1100-3)	7620-3 1361 (1400-3)	8160-3 1901 (1900-3)	NA
C CIRCLING	7420-3 1152 (1200-3)	7680-3 1412 (1500-3)	8160-3 1892 (1900-3)	NA

SOUTH LAKE TAHOE, CALIFORNIA
Amdt 1 15AUG19

38°54'N-120°00'W

LAKE TAHOE (TVL)

RNAV (GPS) RWY 18

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

LDA RWY 18

LAKE TAHOE (TVL)

LOC/DME I-TVL	APP CRS	Rwy Ldg	7017
108.9	171°	TDZE	6259
Chan 26		Apt Elev	6268

DME required.

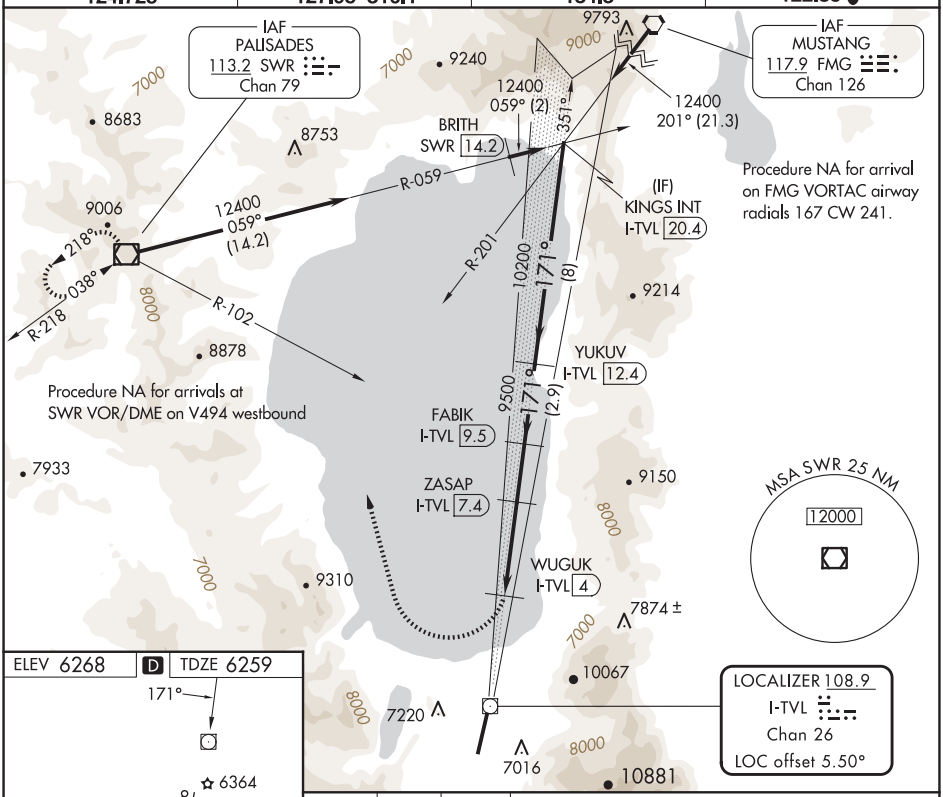
T
NA
-12°C

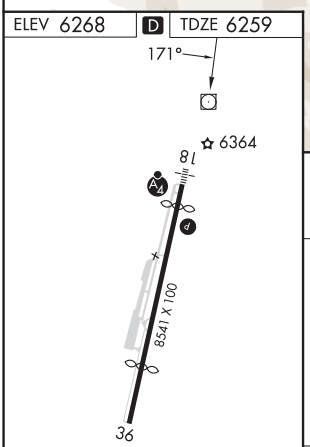
Rwy 18 helicopter visibility reduction below ¾ SM NA.
When local altimeter setting not received, procedure NA.

MALSF

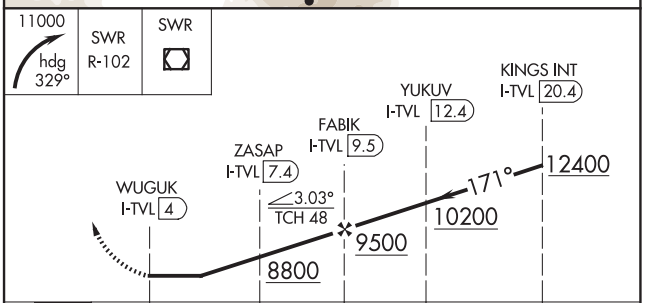
MISSED APPROACH: Climbing right turn to 11000 on heading 329° and SWR VOR/DME R-102 to SWR VOR/DME and hold.

ASOS	OAKLAND CENTER	CLNC DEL	CTAF
124.725	127.95 316.1	134.3	122.85 L





REIL Rwy 36
MIRL Rwy 18-36 L



CATEGORY	A	B	C	D
S-18	7160-5	901 (900-5)		8520-5 2261 (2300-5)

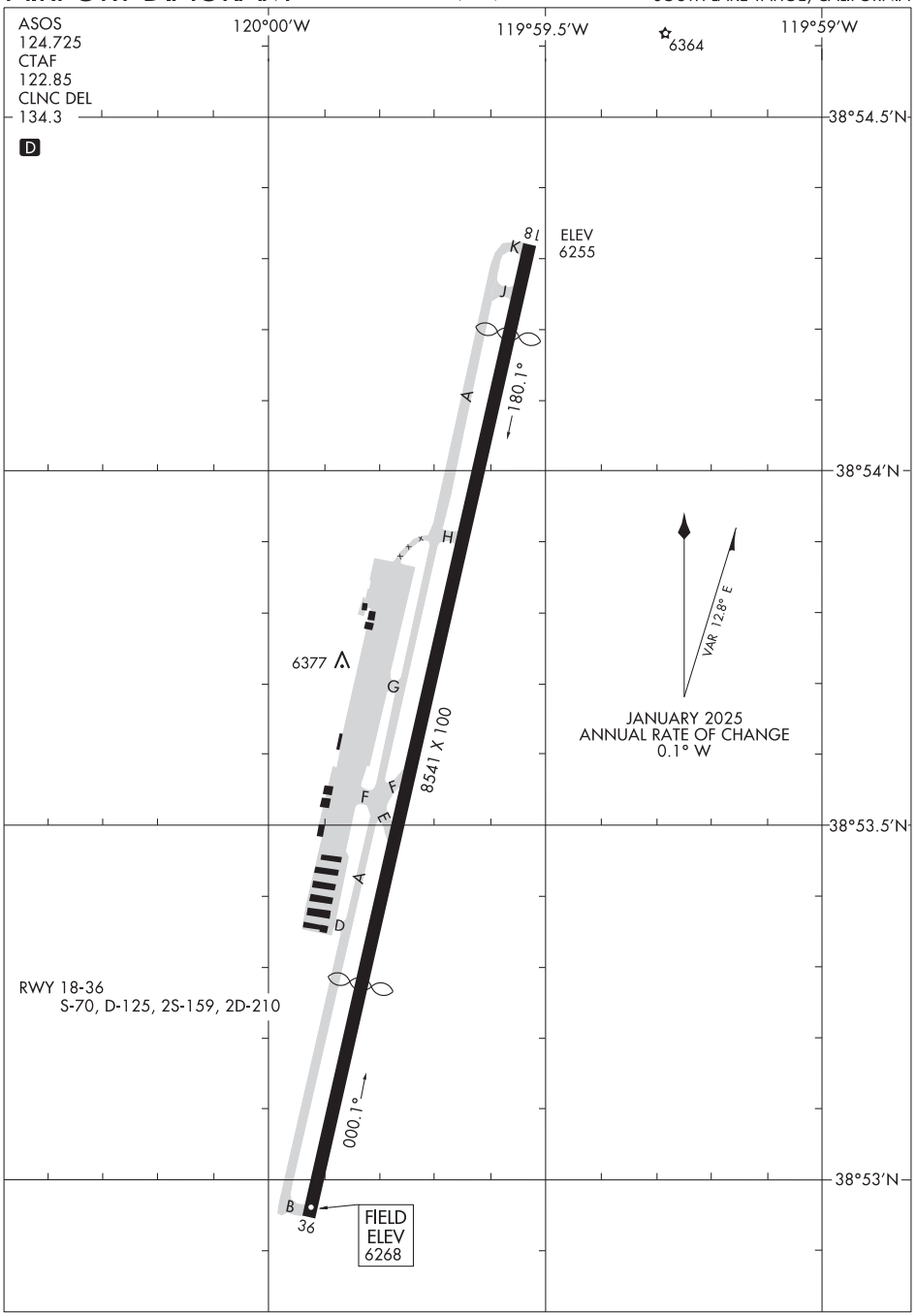
SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

25107

AIRPORT DIAGRAM

AL-5416 (FAA)

LAKE TAHOE (TVL)
SOUTH LAKE TAHOE, CALIFORNIA

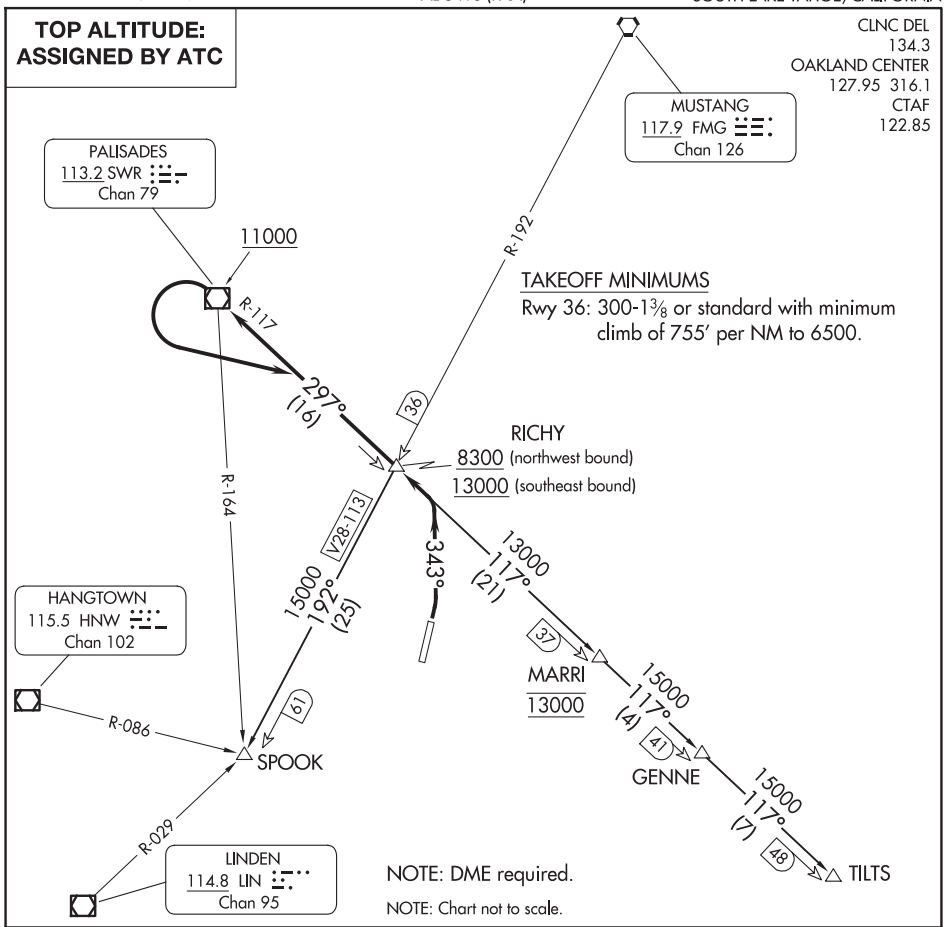


SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

AIRPORT DIAGRAM
25107

SOUTH LAKE TAHOE, CALIFORNIA
LAKE TAHOE (TVL)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 36: Climbing left turn on heading 343° to intercept the SWR VOR/DME R-117 northwest bound. Cross RICHY/SWR 16 DME at or above 8300, cross SWR at or above 11000. Thence. . . .

. . . .on assigned route (Aircraft cleared on a transition turn left to intercept the SWR R-117 southeast bound to cross RICHY at or above 13000). Maintain ATC assigned altitude.

GENNE TRANSITION (RICHY7.GENNE): From over RICHY INT on SWR R-117 to GENNE.

MARRI TRANSITION (RICHY7.MARRI): From over RICHY INT on SWR R-117 to MARRI.

SPOOK TRANSITION (RICHY7.SPOOK): From over RICHY INT on FMG R-192 to SPOOK INT.

TILTS TRANSITION (RICHY7.TILTS): From over RICHY INT on SWR R-117 to TILTS.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

STOCKTON, CALIFORNIA | AL-407 (FAA) | 24361

ILS or LOC RWY 29R

STOCKTON METRO (SCK)

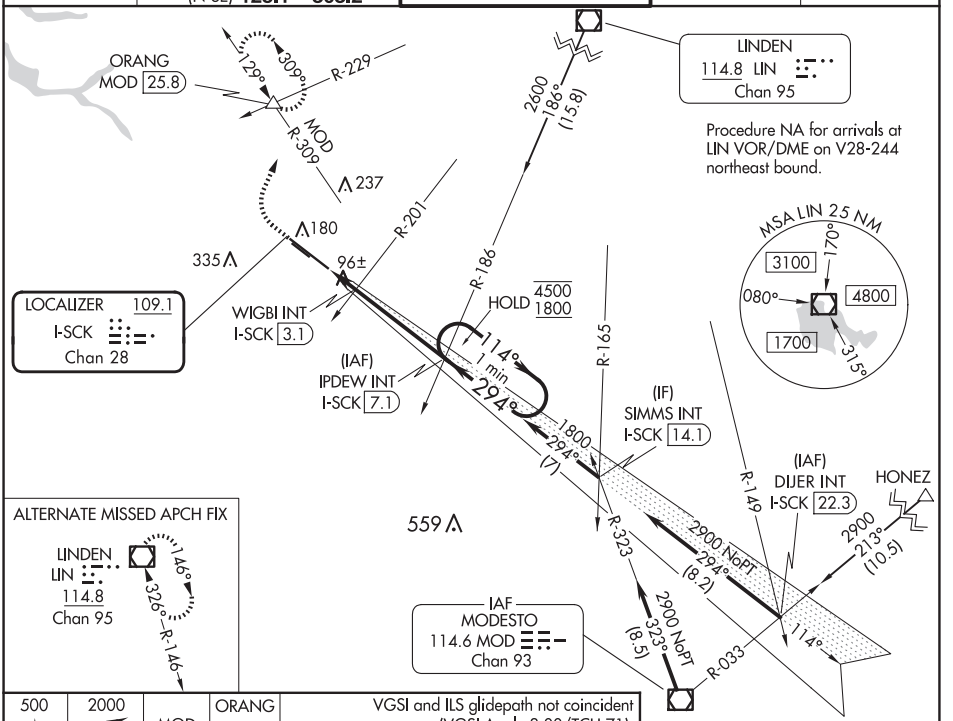
LOC/DME I-SCK	APP CRS	Rwy Idg	8650
109.1	294°	TDZE	32
Chan 28		Apt Elev	33

T For inop ALS, increase S-LOC 29R Cat C/D visibility to 1⅜ SM.
A # RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR

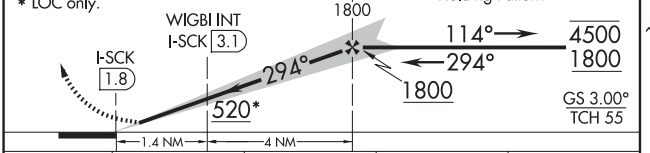
MISSED APPROACH: Climb to 500 then climbing right turn to 2000 on heading 010° and MOD VOR/DME R-309 to ORANG INT/MOD 25.8 DME and hold.

ATIS	NORCAL APP CON	STOCKTON TOWER ★	GND CON	UNICOM
118.25	(SE-NW) 123.85 278.3 (N-SE) 125.1 363.2	120.3 (CTAF) L 239.0	121.9	122.95

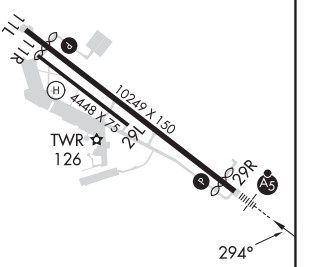


500	2000	MOD	ORANG
↑	hdg 010°	R-309	△

* LOC only.



ELEV 33 | D | TDZE 32



HIRL Rwy 11L-29R L

CATEGORY	A	B	C	D
S-ILS 29R #	232/24 200 (200-½)			
S-LOC 29R	520/24 488 (500-½)		520/50 488 (500-1)	
C CIRCLING	520-1 487 (500-1)	540-1 507 (600-1)	640-1¾ 607 (700-1¾)	640-2 607 (700-2)
WIGBI FIX MINIMUMS (DUAL VOR RECEIVERS or DME REQUIRED)				
S-LOC 29R	360/24 328 (400-½)		360/26 328 (400-½)	
C CIRCLING	500-1 467 (500-1)	540-1 507 (600-1)	640-1¾ 607 (700-1¾)	640-2 607 (700-2)

FAF to MAP 5.4 NM

Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

STOCKTON, CALIFORNIA
Amdt 22A 05DEC19

37°54'N-121°14'W

STOCKTON METRO (SCK)

ILS or LOC RWY 29R

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

ILS RWY 29R (SA CAT II)

STOCKTON METRO (SCK)

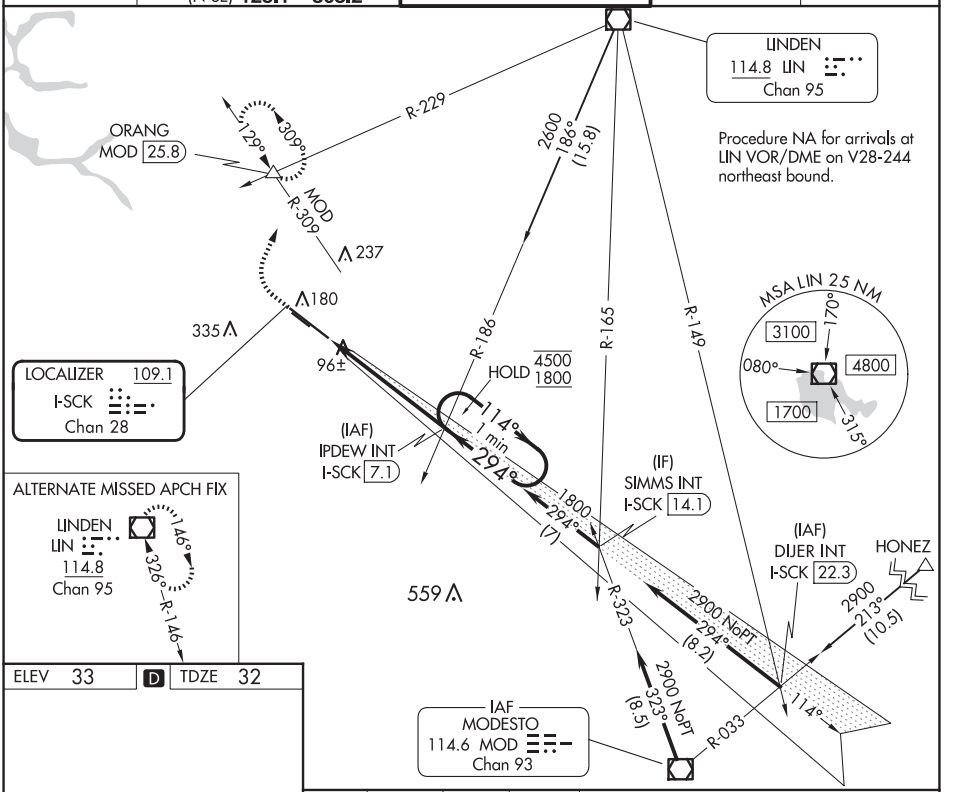
LOC/DME I-SCK	APP CRS	Rwy Idg	8650
109.1	294°	TDZE	32
Chan 28		Apt Elev	33

T A Reduced lighting: requires specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown. Procedure NA when tower closed.

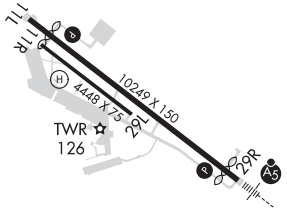
MALSR (A5)

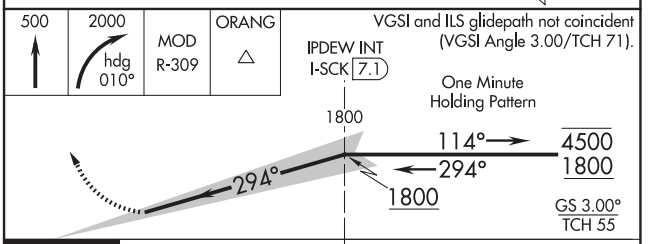
MISSED APPROACH: Climb to 500 then climbing right turn to 2000 on heading 010° and MOD VOR/DME R-309 to ORANG INT/MOD 25.8 DME and hold.

ATIS	NORCAL APP CON	STOCKTON TOWER ★	GND CON	UNICOM
118.25	(SE-NW) 123.85 278.3 (N-SE) 125.1 363.2	120.3 (CTAF) L 239.0	121.9	122.95



ELEV 33 D TDZE 32





CATEGORY	A	B	C	D
S-ILS 29R	RA 105/12 100 DA 132			

SA CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

HIRL Rwy 11L-29R L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

STOCKTON, CALIFORNIA AL-407 (FAA) 24361

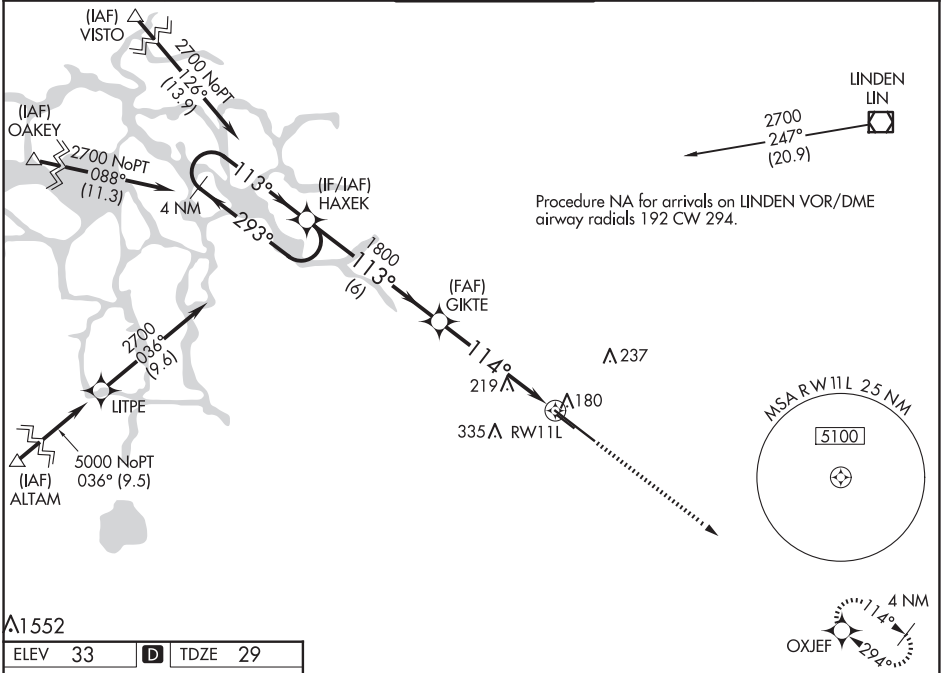
RNAV (GPS) RWY 11L
STOCKTON METRO (SCK)

WAAS	APP CRS	Rwy Idg	8650
CH 72910	114°	TDZE	29
W11A		Apt Elev	33

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -4°C (25°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.

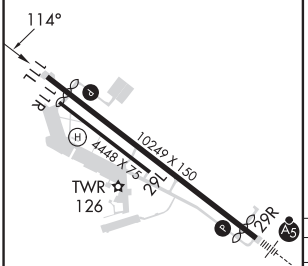
MISSED APPROACH: Climb to 2000 direct OXJEF and hold.

ATIS	NORCAL APP CON	STOCKTON TOWER★	GND CON	UNICOM
118.25	(SE-NW) 123.85 278.3 (N-SE) 125.1 363.2	120.3 (CTAF) L 239.0	121.9	122.95

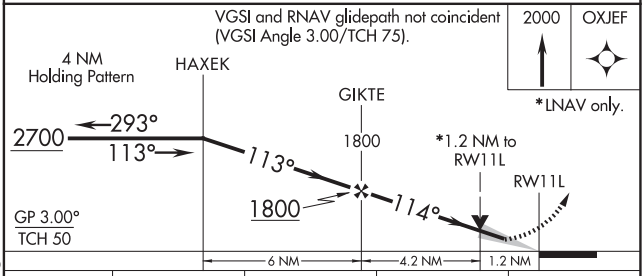


1552

ELEV 33 D TDZE 29



HIRL Rwy 11L-29R L



CATEGORY	A	B	C	D
LPV DA	229-¾ 200 (200-¾)			
LNAV/VNAV DA	471-1½ 442 (500-1½)			
LNAV MDA	480-1 451 (500-1)		480-1⅜ 451 (500-1⅜)	
C CIRCLING	500-1 467 (500-1)	540-1 507 (600-1)	640-1¾ 607 (700-1¾)	640-2 607 (700-2)

STOCKTON, CALIFORNIA
Amdt 1A 01FEB18

37°54'N-121°14'W

STOCKTON METRO (SCK)
RNAV (GPS) RWY 11L

SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS	APP CRS	Rwy Idg	8650
CH 87010	294°	TDZE	32
W29A		Apt Elev	33

RNAV (GPS) RWY 29R

STOCKTON METRO (SCK)

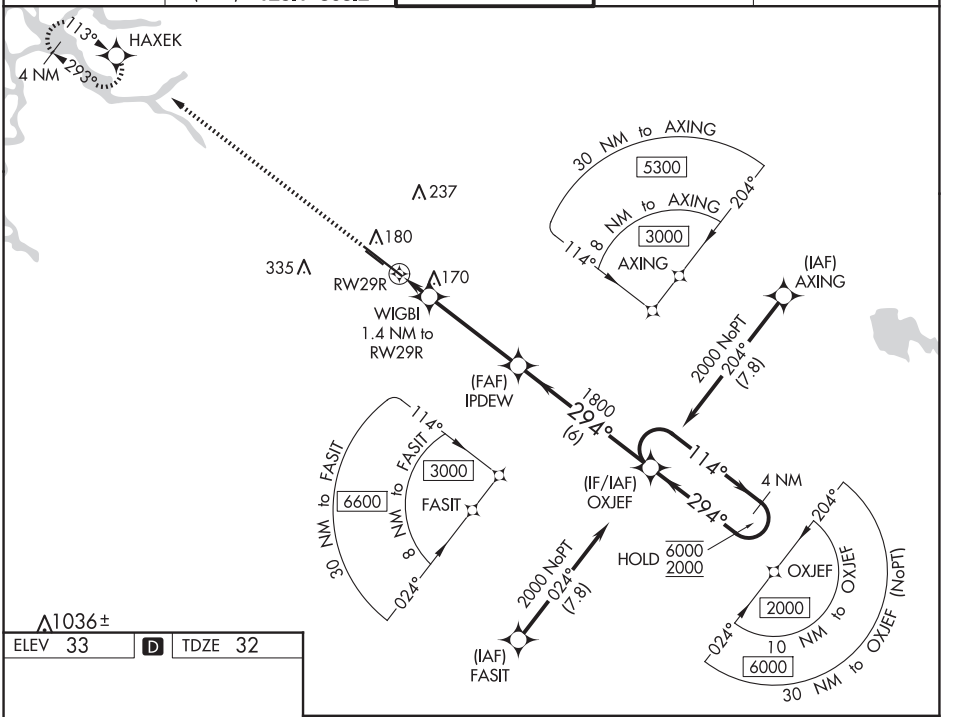
RNP APCH.

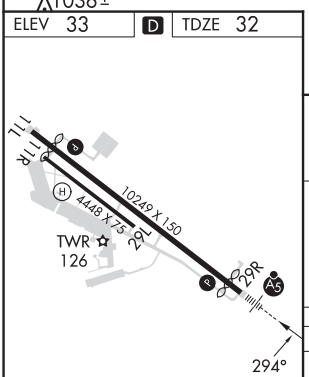
T For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -3°C or above 54°C. For inop ALS, increase LNAV/VNAV visibility all Cats to RVR 4500.
#RVR 1800 authorized with use of FD or AP or HUD to DA.

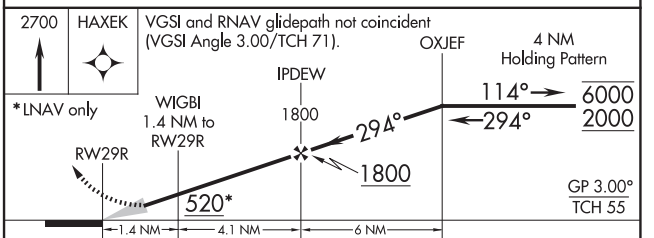
MALSR (A5)

MISSED APPROACH: Climb to 2700 direct HAXEK and hold.

ATIS	NORCAL APP CON	STOCKTON TOWER★	GND CON	UNICOM
118.25	(SE-NW) 123.85 278.3 (N-SE) 125.1 363.2	120.3 (CTAF) L 239.0	121.9	122.95







CATEGORY	A	B	C	D
LPV DA#	232/24 200 (200-½)			
LNAV/VNAV DA	320/24 288 (300-½)			
LNAV MDA	420/24 388 (400-½)		420/35 388 (400-⅝)	
C CIRCLING	500-1 467 (500-1)	540-1 507 (600-1)	640-1¾ 607 (700-1¾)	640-2 607 (700-2)

HIRL Rwy 11L-29R L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

25107

AIRPORT DIAGRAM

AL-407 (FAA)

STOCKTON METRO (SCK)

STOCKTON, CALIFORNIA

AIRPORT DIAGRAM

25107

STOCKTON, CALIFORNIA

STOCKTON METRO (SCK)

SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS		
297°	Rwy Ldg	4051
	TDZE	4146
	Apt Elev	4149

RNAV (GPS) RWY 29

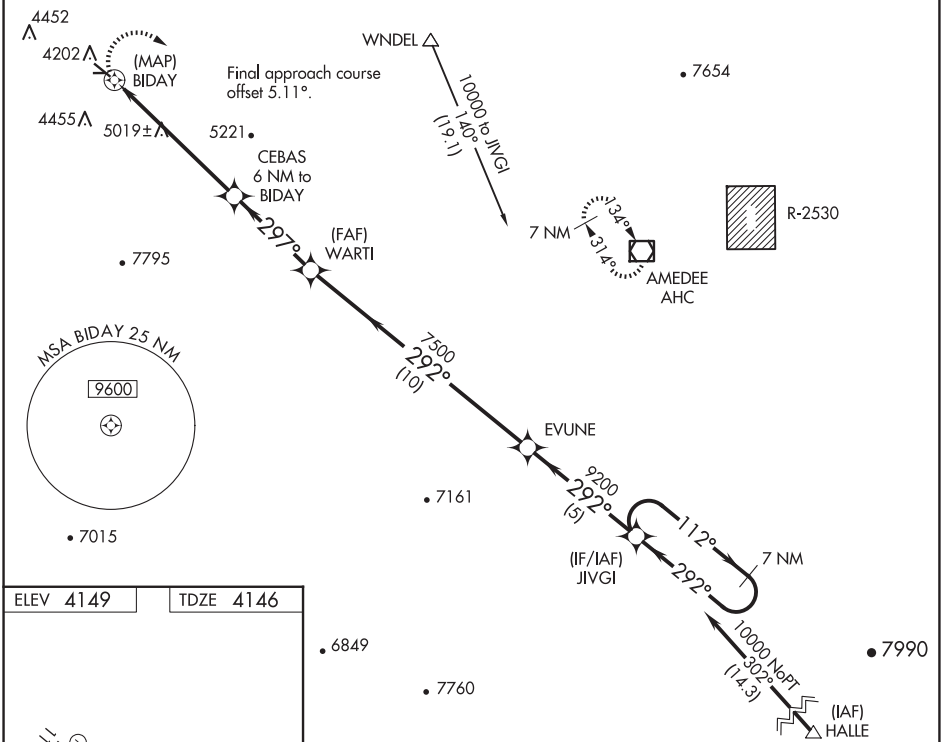
SUSANVILLE MUNI (SVE)

T A -15°C

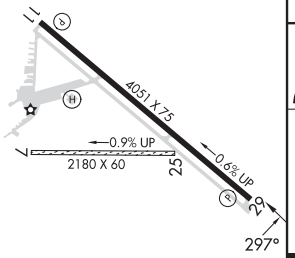
DME/DME RNP- 0.3 NA. When local altimeter setting not received, use Reno/Stead altimeter setting and increase all MDA 720 feet. Circling to Rwy 7/25 NA. Rwy 29 helicopter visibility reduction below ¾ SM NA. Circling NA for Cat D southwest of Rwy 11-29.

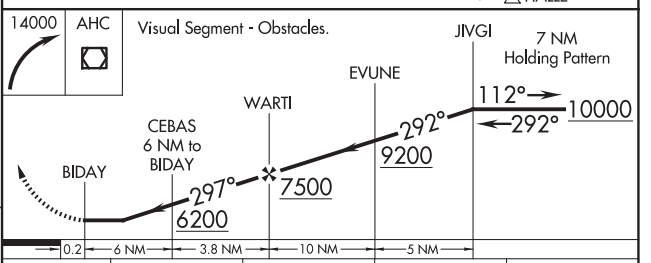
MISSED APPROACH: Climbing right turn to 14000 direct AHC VOR/DME and hold, continue climb-in-hold to 14000.

AWOS-3	OAKLAND CENTER	UNICOM
133.8	128.8 285.5	122.8 (CTAF) L



ELEV 4149 TDZE 4146





CATEGORY	A	B	C	D
LNAV MDA	5760-1¼ 1614 (1700-1¼)	5760-1½ 1614 (1700-1½)	5760-3	1614 (1700-3)
CIRCLING	5760-1¼ 1611 (1700-1¼)	5760-1½ 1611 (1700-1½)	5780-3 1631 (1700-3)	6060-3 1911 (2000-3)

MIRL Rwy 11-29 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

SUSANVILLE, CALIFORNIA | AL-9479 (FAA) | 25163

APP CRS	Rwy Ldg	N/A
142°	TDZE	N/A
	Apt Elev	4149

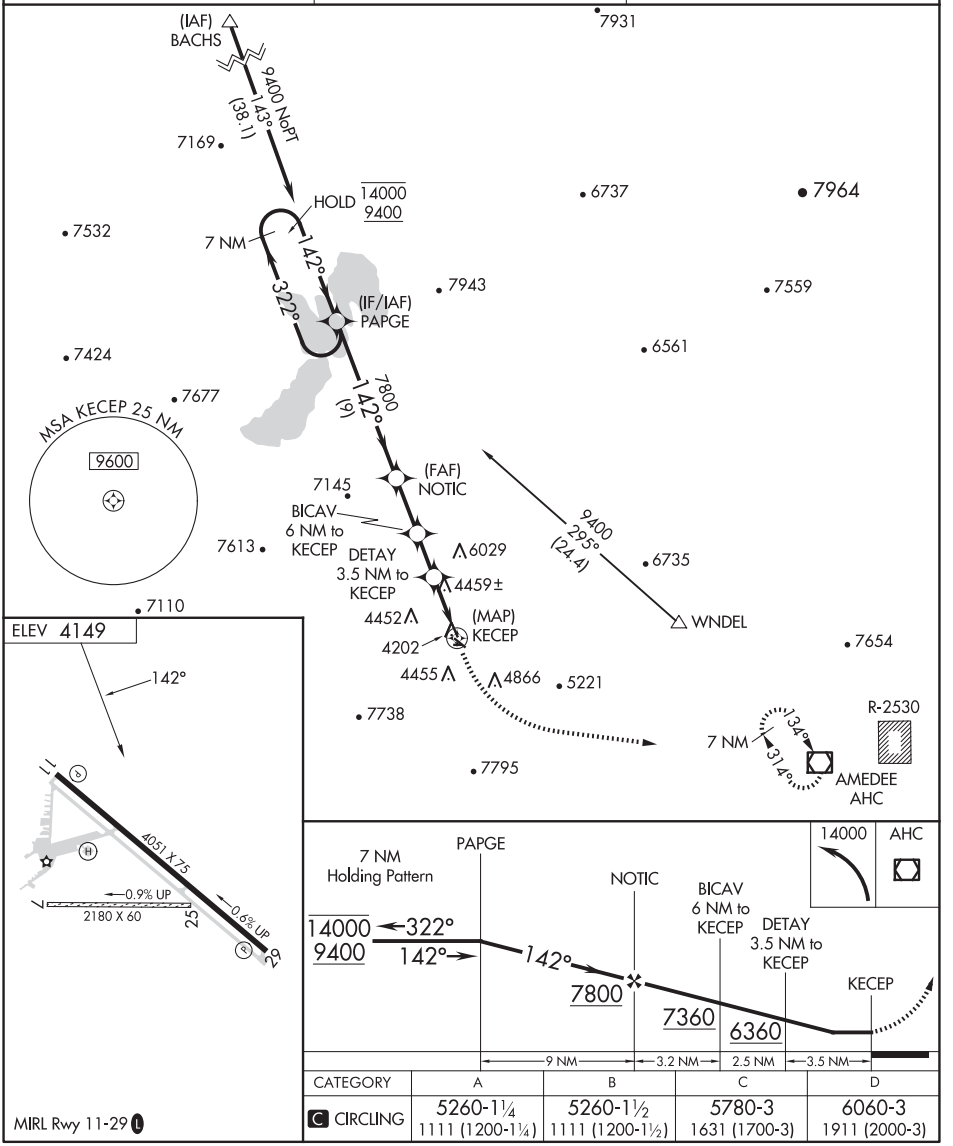
RNAV (GPS)-A
SUSANVILLE MUNI (SVE)

RNP APCH.

Circling NA for Cat D southwest of Rwy 11-29.
NA When local altimeter setting not received, procedure NA.
-15°C Circling NA to Rwy 7/25.

MISSED APPROACH: Climbing left turn to 14000 direct AHC VOR/DME and hold, continue climb-in-hold to 14000.

AWOS-3	OAKLAND CENTER	UNICOM
133.8	128.8 285.5	122.8 (CTAF) L



CATEGORY	A	B	C	D
C CIRCLING	5260-1¼ 1111 (1200-1¼)	5260-1½ 1111 (1200-1½)	5780-3 1631 (1700-3)	6060-3 1911 (2000-3)

MIRL Rwy 11-29 L

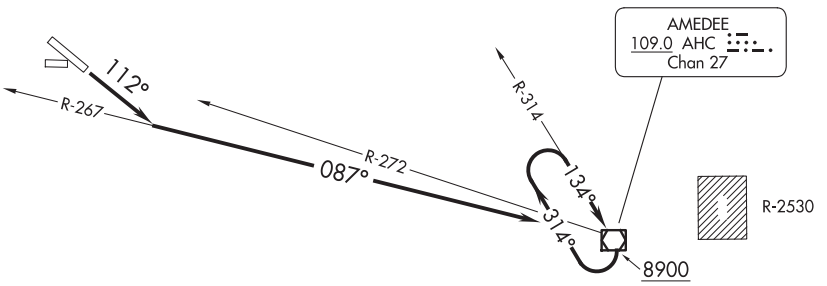
SUSANVILLE, CALIFORNIA
Amdt 2 19JUL18

40°23′N-120°34′W

SUSANVILLE MUNI (SVE)
RNAV (GPS)-A

SW-2, 07 AUG 2025 to 02 OCT 2025

OAKLAND CENTER
128.8 285.5
CTAF
122.8



TAKEOFF MINIMUMS

Rwys 7, 25, 29: NA- obstacles.

Rwy 11: Standard with minimum climb of 410′ per NM to 6000 or 1900-2½ for climb in visual conditions.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 11: Climb via 112° heading and AHC R-267 to AHC VOR/DME, Thence. . . .
Or climb in visual conditions to cross Susanville Muni Airport eastbound at or above 6000, then via AHC R-272 to AHC VOR/DME, Thence. . . .

. . . .cross AHC VOR/DME at or above 8900′. Climb in AHC holding pattern to depart AHC VOR/DME at or above 14000 before proceeding on course.

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

TRACY, CALIFORNIA | AL-5815 (FAA) | 19339

WAAS	APP CRS	Rwy Idg	4001
CH 49200	116°	TDZE	193
W12A		Apt Elev	193

RNAV (GPS) RWY 12

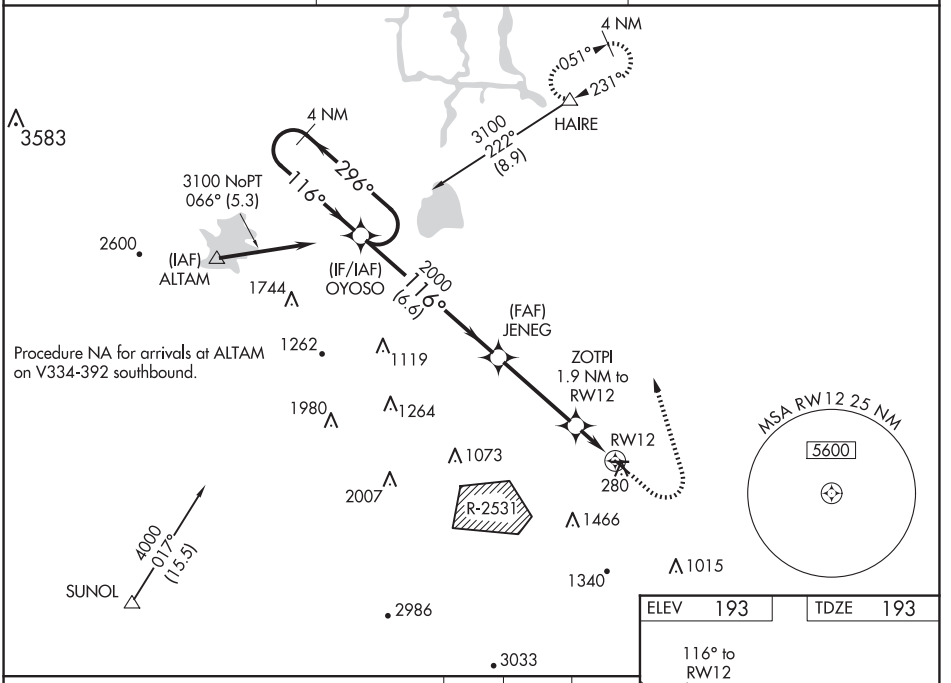
TRACY MUNI (TCY)

RNP APCH

T For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Circling NA southwest of Rwy 12-30. Baro-VNAV and VDP NA when using Stockton altimeter setting. Circling Rwy 30 NA at night. Rwy 12 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Stockton altimeter setting: increase all DAs to 507 feet; increase all MDAs 60 feet and visibilities LNAV Cat C ⅛ SM.

MISSED APPROACH: Climb to 700 then climbing left turn to 3200 direct HAIRE and hold.

AWOS-3	NORCAL APP CON	UNICOM
118.375	123.85 278.3	123.075 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	443-⅞	250 (300-⅞)		NA
LNAV/VNAV DA	447-⅞	254 (300-⅞)		NA
LNAV MDA	520-1	327 (400-1)		NA
C CIRCLING	580-1 387 (400-1)	660-1 467 (500-1)	660-1½ 467 (500-1½)	NA

MIRL Rwys 8-26 and 12-30 L
REIL Rwys 8, 12, 26 and 30 L

SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS	APP CRS	Rwy Idg	3438
CH 49040	255°	TDZE	186
W26A		Apt Elev	193

RNAV (GPS) RWY 26

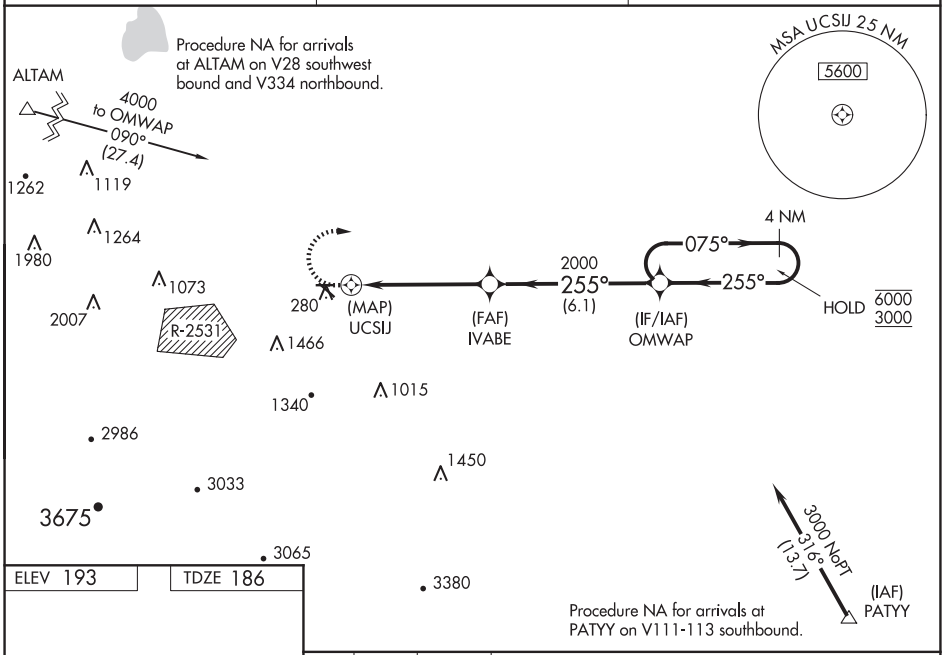
TRACY MUNI (TCY)

RNP APCH.

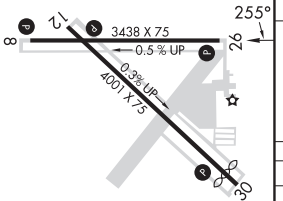
T Baro-VNAV NA when using Stockton altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Circling NA southwest of Rwy 12-30. Circling Rwy 30 NA at night. Rwy 26 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Stockton altimeter setting: increase LPV DA to 496 feet, increase LNAV/VNAV DA to 553 feet; increase all MDAs 60 feet and visibility LNAV Cat C ⅛ SM.

MISSED APPROACH: (Do not exceed 210K until OMWAP) Climb to 640 then climbing right turn to 3000 direct OMWAP and hold.

AWOS-3	NORCAL APP CON	UNICOM
118.375	123.85 278.3	123.075 (CTAF) L



ELEV 193 TDZE 186

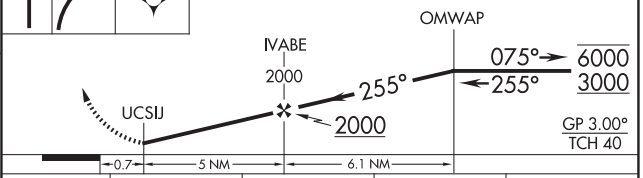


MIRL Rwys 8-26 and 12-30 L
REIL Rwys 8, 12, 26 and 30 L

640	3000	OMWAP

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 21).

4 NM Holding Pattern



CATEGORY	A	B	C	D
LPV DA	436-⅞ 250 (300-⅞)			NA
LNAV/VNAV DA	493-1⅛ 307 (300-1⅛)			NA
LNAV MDA	540-1 354 (400-1)			NA
C CIRCLING	580-1 387 (400-1)	660-1 467 (500-1)	660-1½ 467 (500-1½)	NA

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

TRACY, CALIFORNIA | AL-5815 (FAA) | 23110

WAAS	APP CRS	Rwy Idg	3740
CH 69201	297°	TDZE	193
W30A		Apt Elev	193

RNAV (GPS) RWY 30

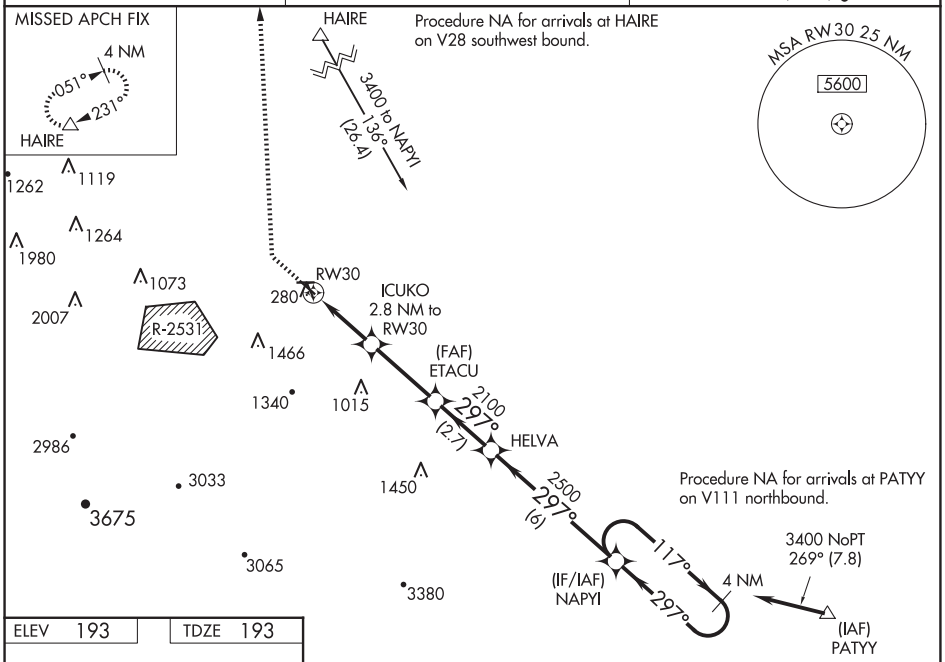
TRACY MUNI (TCY)

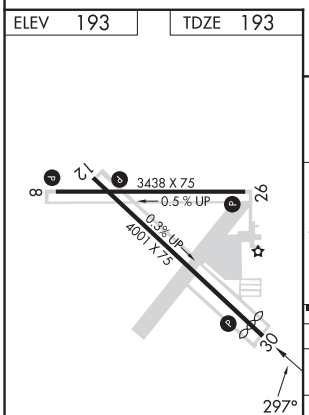
RNP APCH

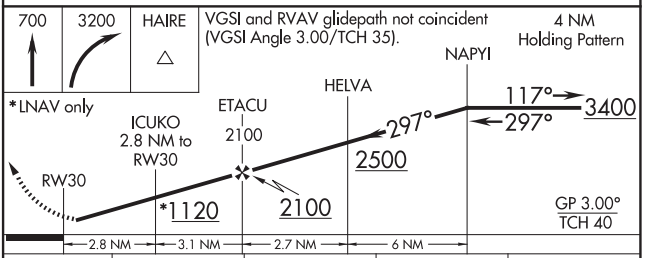
Baro-VNAV NA when using Stockton altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Circling NA southwest of Rwy 12-30. Straight-In Rwy 30 NA at night, Circling Rwy 30 NA at night. Rwy 30 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Stockton altimeter setting; increase all DAs to 507 feet; increase all MDAs 60 feet and visibility LNAV Cat C 1⅛ SM.

MISSED APPROACH: Climb to 700 then climbing right turn to 3200 direct HAIRE and hold, continue climb-in-hold to 3200.

AWOS-3	NORCAL APP CON	UNICOM
118.375	123.85 278.3	123.075 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	447-1	254 (300-1)		NA
LNAV/VNAV DA	443-1	250 (300-1)		NA
LNAV MDA	540-1	347 (400-1)		NA
C CIRCLING	580-1 387 (400-1)	660-1 467 (500-1)	660-1½ 467 (500-1½)	NA

MIRL Rwys 8-26 and 12-30 L
REIL Rwys 8, 12, 26 and 30 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

VOR RWY 26

TRACY MUNI (TCY)

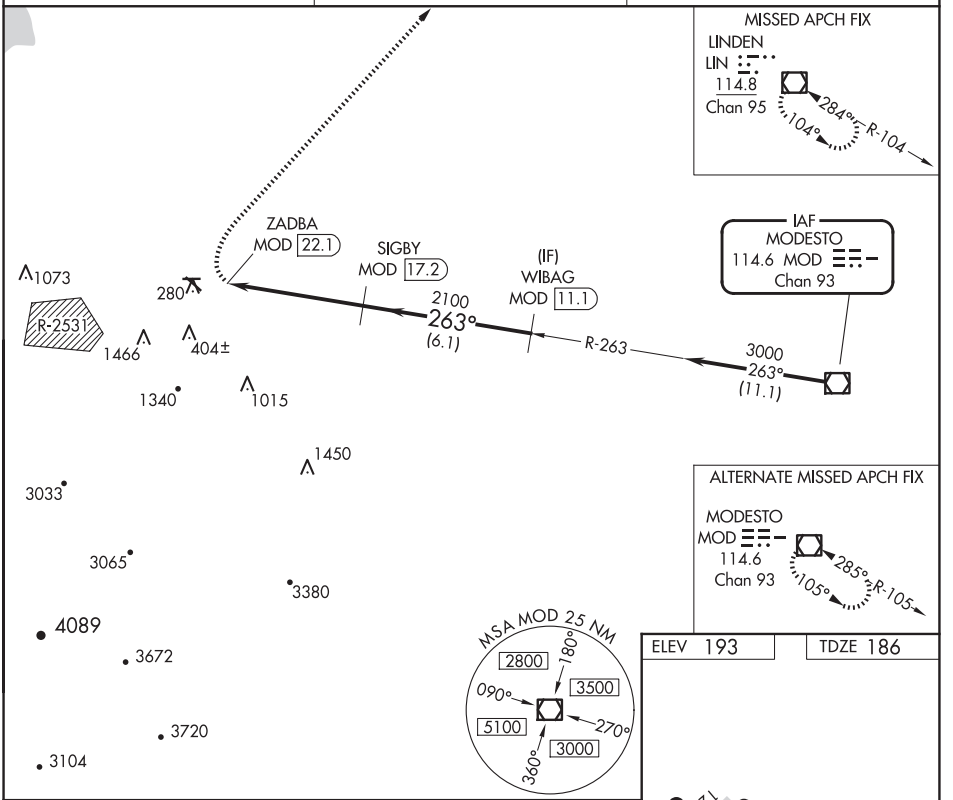
VOR/DME MOD	APP CRS	Rwy Idg	3438
114.6	263°	TDZE	186
Chan 93		Apt Elev	193

DME required.

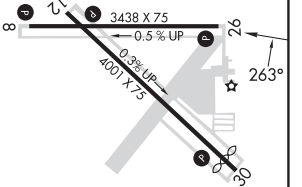
Circling NA southwest of Rwy 12-30. Circling Rwy 30 NA at night. Rwy 26 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Stockton altimeter setting: increase all MDAs 60 feet and visibility Cat C ⅛ SM.

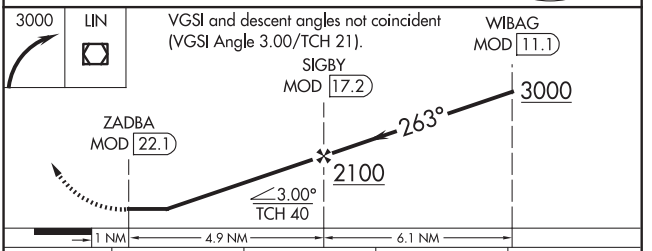
MISSED APPROACH: Climbing right turn to 3000 direct LIN VOR/DME and hold.

AWOS-3	NORCAL APP CON	UNICOM
118.375	123.85 278.3	123.075 (CTAF) L



ELEV 193 TDZE 186





CATEGORY	A	B	C	D
S-26	760-1¼ 574 (600-1¼)		760-1⅝ 574 (600-1⅝)	NA
C CIRCLING	760-1¼ 567 (600-1¼)		760-1⅝ 567 (600-1⅝)	NA

MIRL Rwys 8-26 and 12-30 L

REIL Rwys 8, 12, 26 and 30 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(TRACY1.TRACY) 22195

TRACY ONE DEPARTURE

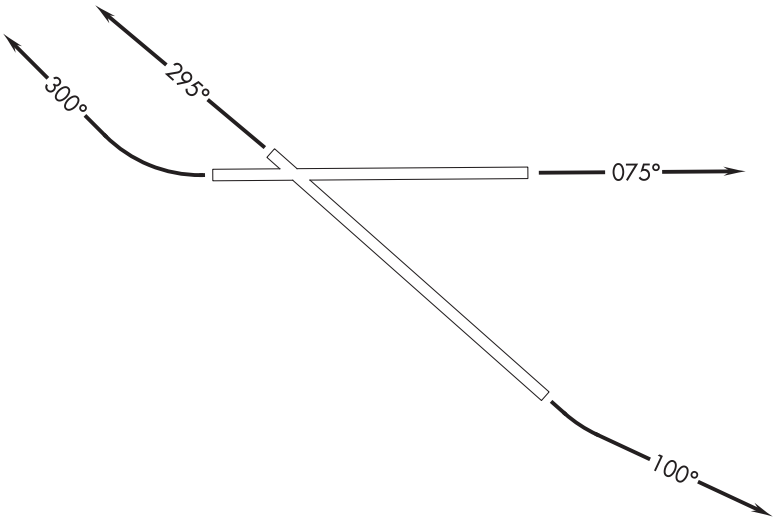
AL-5815 (FAA)

TRACY MUNI (TCY)
TRACY, CALIFORNIA

TOP ALTITUDE: ASSIGNED BY ATC

RADAR required.

NORCAL DEP CON
123.85 278.3



TAKEOFF MINIMUMS
Rwys 8, 12, 30: Standard.
Rwys 26: Standard with a minimum climb of 310' per NM to 1300.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climb on heading 075° , or as assigned by ATC between 275° CW 110°.

TAKEOFF RUNWAY 12: Climbing left turn on heading 100°, or as assigned by ATC between 297° CW 110°.

TAKEOFF RUNWAY 26: Climbing right turn on heading 300°, or as assigned by ATC between 300° CW 074°.

TAKEOFF RUNWAY 30: Climb on heading 295°, or as assigned by ATC between 290° CW 110°.

SW-2, 07 AUG 2025 to 02 OCT 2025

FAIRFIELD, CALIFORNIA

ILS or LOC or RNAV (GPS) RWY 21L

TRAVIS AFB (KSUU)

[USAF]

SBAS	APCH CRS	Rwy ldg	10,995
Chan 62106	215°	TDZE	58
W21A		Arpt Elev	63

RNP APCH. RNAV1-GPS or RADAR required for ILS, LOC.

RADAR required for CAT E aircraft for full procedure off of SEATO.

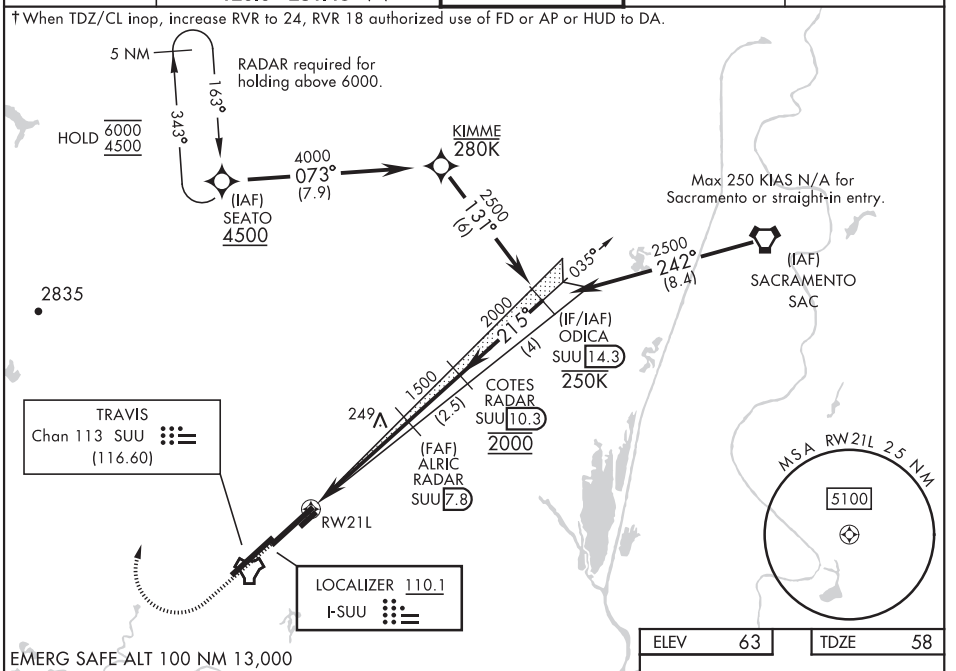
* When ALS inop, increase RVR to 40, vis to ¾ miles.
** When ALS inop, increase CAT AB RVR to 55, vis to 1 mile; CAT CDE vis to 1⅜ miles.
***Circling not authorized NW of Rwy 3L-21R.

ALSF-2

MISSED APPROACH: Climb to 2200 then climbing right turn to 4500 direct SEATO and hold, continue climb in hold to 4500.

ATIS	APP CON	TOWER	GND CON	CLNC DEL
135.55 292.125	119.9 322.325 (S) 126.6 281.45 (N)	120.75 254.4	121.8 289.4	127.55 335.8

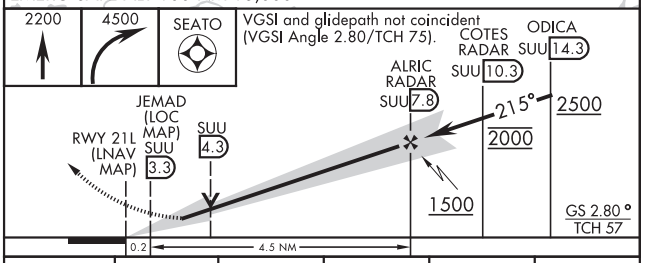
† When TDZ/CL inop, increase RVR to 24, RVR 18 authorized use of FD or AP or HUD to DA.

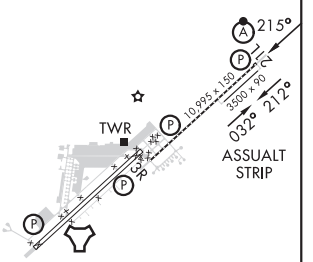


ELEV	63	TDZE	58

2200	4500	SEATO

VGSI and glidepath not coincident (VGSI Angle 2.80/TCH 75).





HIRL Rwy 3R-21L
MIRL Rwy 032°- 212°
TDZL/CL Rwy 3R, 21L

CATEGORY	A	B	C	D	E
S-ILS 21L*†	258/18		200	(200-½)	
LPV DA*†	258/18		200	(200-½)	
S-LOC 21L**	500/24 442 (500-½)		500/45 442 (500-⅞)		
LNAV MDA**	500/24 442 (500-½)		500/45 442 (500-⅞)		
C CIRCLING***	560-1 497 (500-1)	660-1 597 (600-1)	1100-3 1037(1100-3)	1200-3 1137 (1200-3)	

FAF to MAP 4.5 NM					
Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30

FAIRFIELD, CALIFORNIA
Orig 19MAY22

38°16'N-121°55'W

TRAVIS AFB (KSUU)

ILS or LOC or RNAV (GPS) RWY 21L

SW-2, 07 AUG 2025 to 02 OCT 2025

FAIRFIELD, CALIFORNIA

ILS RWY 21L (CAT II)

TRAVIS AFB (KSUU)

LOC I-SUU	APCH CRS	Rwy Idg 10,995
110.1	215°	TDZE 58
		Arpt Elev 63

[USAF]

RNAV1- GPS or RADAR required.

RADAR required for CAT E aircraft for full procedure off of SEATO.

ALSF-2

MISSED APPROACH: Climb to 2200 then climbing right turn to 4500 direct SEATO and hold, continue climb in hold to 4500.

ATIS	APP CON	TOWER	GND CON	CLNC DEL
135.55 292.125	119.9 322.325 (S) 126.6 281.45 (N)	120.75 254.4	121.8 289.4	127.55 335.8

CATEGORY II ILS SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

5 NM

RADAR required for holding above 6000.

HOLD 6000 4500

343°

163°

(IAF) SEATO 4500

4000

073° (7.9)

KIMME 280K

2500

131° (6)

Max 250 KIAS N/A for Sacramento or straight-in entry.

035°

2500

242° (8.4)

(IAF) SACRAMENTO SAC

2835

2000

215° (4)

(IF/IAF) ODICA SUU 14.3 250K

665

662

1500

(2.5)

COTES RADAR SUU 10.3 2000

249°

(FAF) ALRIC RADAR SUU 7.8

RW21L

TRAVIS Chan 113 SUU (116.60)

LOCALIZER 110.1 I-SUU

MSA RW21L 25 NM 5100

EMERG SAFE ALT 100 NM 13,000

2200 4500 SEATO

VGSI and glidepath not coincident (VGSI Angle 2.80/TCH 75).

ALRIC RADAR SUU 7.8

COTES RADAR SUU 10.3

ODICA SUU 14.3

215° 2500 2000

1500

GS 2.80° TCH 57

1218'

4.7 NM

CATEGORY	A	B	C	D	E
S-ILS 21L	RA 83/12	100	DA 158		

ELEV 63 TDZE 58

263°

TWR

10,995 x 150

3500 x 90

032° 212°

ASSUALT STRIP

HIRL Rwy 3R-21L
MIRL Rwy 032° - 212°
TDZL/CL Rwy 3R, 21L

FAIRFIELD, CALIFORNIA

38°16'N-121°55'W

TRAVIS AFB (KSUU)

Orig 19MAY22

ILS RWY 21L (CAT II)

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

FAIRFIELD, CALIFORNIA

RNAV (GPS) RWY 03R

WAAS	APCH CRS	Rwy ldg	10,995
CH **98057**	**035°**	TDZE	**59**
W03B		Arpt Elev	**63**

- (USAF)

TRAVIS AFB (KSUU)

RNP APCH

* Circling NA NW of RWY 3L-21R.

MISSED APPROACH: Climb to 4500 direct FOLNO, track 308° to SEATO and hold, continue climb-in-hold to 4500.

ATIS	APP CON	TOWER	GND CON	CLNC DEL
135.55 292.125	**119.9 322.325** (S) **126.6 281.45** (N)	**120.75 254.4**	**121.8 289.4**	**127.55 335.8**

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

5 NM 163° 343° SEATO

RADAR required when holding above 6000.

2783

FOLNO

199

RW03R

WUSMO

(FAF) LUDEC 035° 253 427

HEIDY 2500 1900 (3) 306

2500 036° (6.5) 1159

(IF/IAF) HABAL 3000

MSA RW03R 25 NM 5100

EMERG SAFE ALT 100 NM 12,600

4500 FOLNO tr 308° SEATO

HABAL 3000 036° HEIDY 2500 LUDEC 1900 035° WUSMO 900 1.3 NM to RW03R RW03R

GP 3.00° TCH 50

VGSI and RNAV glidepath not coincident (VGSI angle 2.50°/TCH 69)

3.1 NM 2.5 NM

ELEV 63 TDZE 59

TWR 209 10995 x 150 3500 x 60 212° 032° 21 3L 21R ASSAULT STRIP 035°

HIRL Rwys 3L-21R, 3R-21L
MIRL Rwy 032°-212°
TDZL/CL Rwys 3R, 21L

CATEGORY	A	B	C	D	E
LPV DA	259/40		200	(200-¾)	
LNAV/VNAV DA	340/45 281 (300-⅞)	351/45 292 (300-⅞)	359/45 300 (300-⅞)	370/45 311 (400-⅞)	
LNAV MDA	460/55 401 (400-1)		460/60	401 (400-1⅛)	
C CIRCLING*	560-1 497 (500-1)	660-1 597 (600-1)	1100-3 1037 (1100-3)	1200-3 1137 (1200-3)	

FAIRFIELD, CALIFORNIA

38°16'N - 121°55'W

TRAVIS AFB (KSUU)

Orig 27JAN22

RNAV (GPS) RWY 03R

SW-2, 07 AUG 2025 to 02 OCT 2025

25219

FAIRFIELD, CALIFORNIA

TACAN RWY 21L

TACAN	APCH CRS	Rwy Idg	TDZE	Arpt Elev
SUU Chan 113	213°	10,995	58	63

[USAF] TRAVIS AFB (KSUU)

*When ALS inop, increase CAT AB RVR to 55, vis to 1 mile, CAT CDE vis to 1⅜ miles.
** Circling not authorized NW of Rwy 3L-21R.

ALSF-2

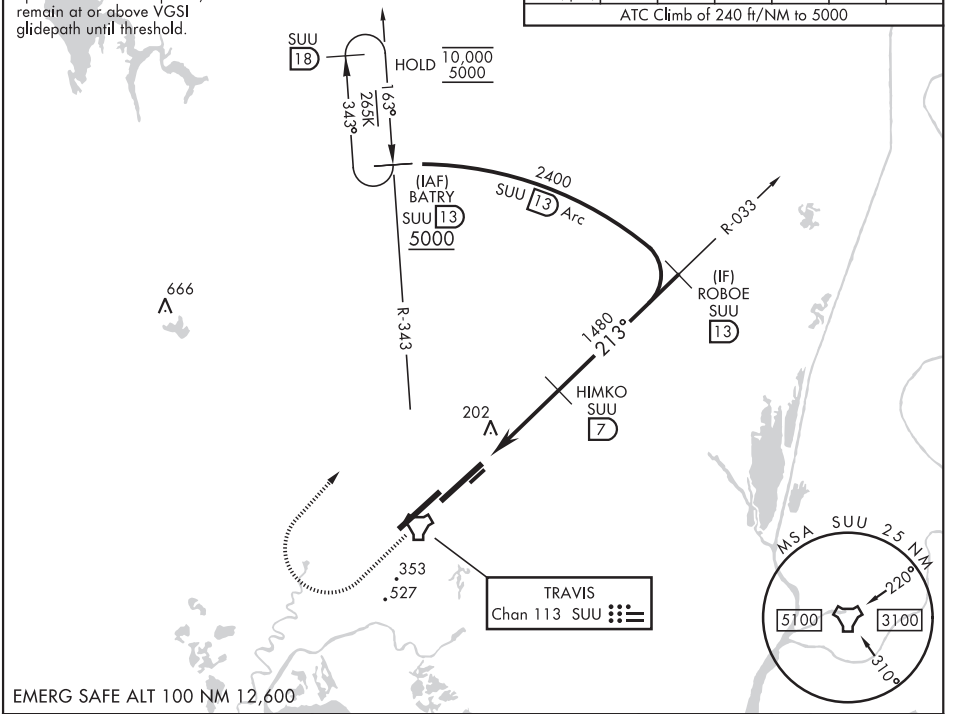
MISSED APPROACH: Climb to 2300 then climbing right turn to 5000 on heading 028° and SUU TACAN R-343 to BATRY/13 DME and hold.

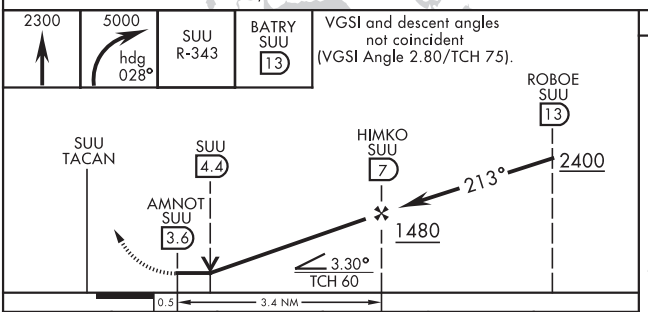
ATIS	APP CON	TOWER	GND CON	CLNC DEL
135.55 292.125	119.9 322.325 (S) 126.6 281.45 (N)	120.75 254.4	121.8 289.4	127.55 335.8

When circling to Rwy 3L at night, operational VGSI required, remain at or above VGSI glidepath until threshold.

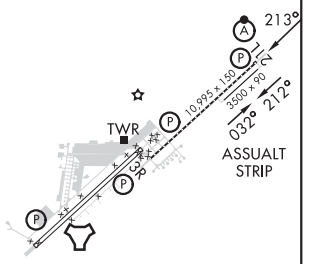
Knots	60	120	180	240	300	360
V/V(fpm)	240	480	720	960	1200	1440

ATC Climb of 240 ft/NM to 5000





ELEV 63 TDZE 58



CATEGORY	A	B	C	D	E
S-21L*	500/24 442 (500-½)		500/45 442 (500-⅞)		
CIRCLING**	560-1 497 (500-1)	660-1 597 (600-1)	840-2¼ 777 (800-2¼)	1200-3 1137 (1200-3)	

HIRL Rwy 3R-21L
MIRL Rwy 032° - 212°
TDZL/CL Rwy 3R, 21L

FAIRFIELD, CALIFORNIA 38°16'N-121°55'W TRAVIS AFB (KSUU)

Amdt 1 07AUG25

TACAN RWY 21L

SW-2, 07 AUG 2025 to 02 OCT 2025

AIRPORT DIAGRAM

[USAF]

TRAVIS AFB (KSUU)

FAIRFIELD, CALIFORNIA

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

AIRPORT DIAGRAM

FAIRFIELD, CALIFORNIA
TRAVIS AFB (KSUU)

24193

BESSA TWO DEPARTURE (RNAV) (BESSA2.BESSA)

TRAVIS AFB (KSUU)
FAIRFIELD, CALIFORNIA

[USAF]

Rwy	Knots	60	120	180	240	300	360
*3R ⓒ	V/V(fpm)	201	402	603	804	1005	1206
† 3R Ⓑ	V/V(fpm)	295	590	885	1180	1475	1770
† 3L Ⓑ	V/V(fpm)	299	598	897	1196	1495	1794
*21L/R ⓒ	V/V(fpm)	220	440	660	880	1100	1320
†21R Ⓑ	V/V(fpm)	277	554	831	1108	1385	1662
†21L Ⓑ	V/V(fpm)	280	560	840	1120	1400	1680

* Minimum † ATC Climb Rate

ⓒ to 500
Ⓑ to BESSA to 8000
ⓒ to 4000

▼ DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 3L/R: Climb on heading 035° to 1500, then left turn direct to cross BESSA at or above 8000. Thence...

TAKEOFF RWY 21L/R: Climb on heading 215° to 1500, then right turn direct to cross BESSA at or above 8000. Thence...

...via assigned transition. Maintain ATC assigned altitude.

HANAI TRANSITION (BESSA2.HANAI)

MENDOCINO TRANSITION (BESSA2.ENI)

WILLIAMS TRANSITION (BESSA2.ILA)

RNAV1- GPS

ATIS 135.55 292.125
CLINC DEL
127.55 335.8
GND CON
121.8 289.4
TRAVIS TOWER
120.75 254.4
TRAVIS DEP CON
126.6 306.9

WILLIAMS ILA

WILLIAMS TRNS 358° (29.5)

BESSA 8000

035° 1500

215° 1500

285° (22)

SIMGY 15,000

MENDOCINO TRNS 285° (37.8)

HANAI TRNS 216° (19)

MENDOCINO ENI

GABNN

194° (37.3)

PXTON FL180

210° (21.8)

HANAI

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

BESSA TWO DEPARTURE (RNAV) (BESSA2.BESSA)

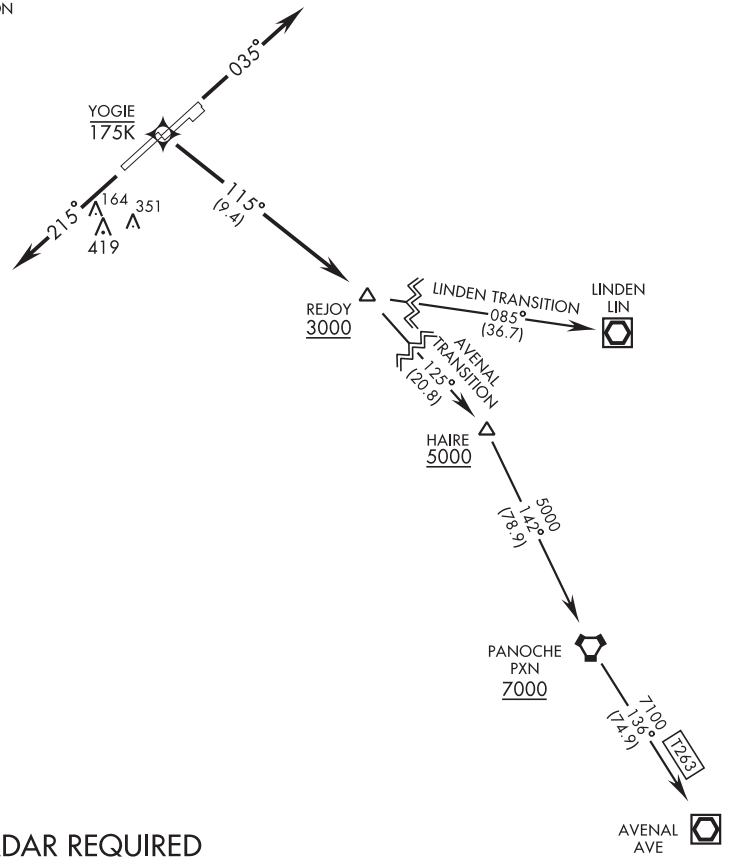
Orig 11JUL24

FAIRFIELD, CALIFORNIA
TRAVIS AFB (KSUU)

REJOY ONE DEPARTURE (RNAV) (REJOY1• REJOY)

ATIS 135.55 292.125
CLNC DEL
127.55 335.8
GND CON
121.8 289.4
TOWER
120.75 254.4
TRAVIS DEP CON
126.6 306.9

[USAF] AL-488 (CIV)



RNAV1 - GPS.

ATC RADAR REQUIRED

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 3 L/R: Climb on heading 035° to 2000, expect ATC RADAR vectors to YOGIE, then track 115° to cross REJOY at or above 3000. Thence...

TAKEOFF RWY 21L/R: Climb on heading 215° to 2000, expect ATC RADAR vectors to cross REJOY at or above 3000. Thence...

...via assigned transition. Maintain ATC assigned altitude. Expect further clearance to filed altitude within 10 minutes after departure.

AVENAL TRANSITION: (REJOY1•AVE)
LINDEN TRANSITION: (REJOY 1•LIN)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

TRUCKEE, CALIFORNIA | AL-6021 (FAA) | 25163

RNAV (GPS) RWY 11

TRUCKEE-TAHOE (TRK)

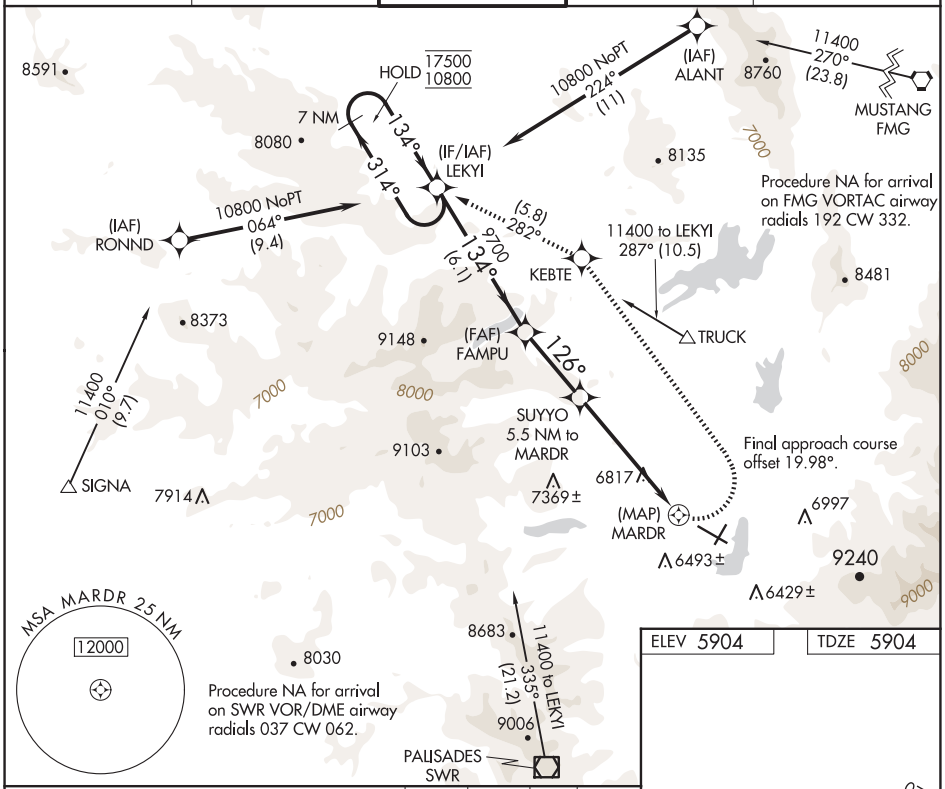
APP CRS	Rwy Ldg	7001
126°	TDZE	5904
	Apt Elev	5904

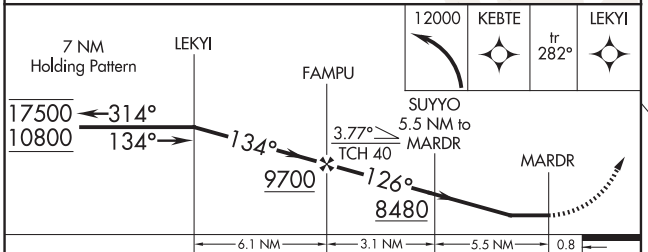
RNP APCH.

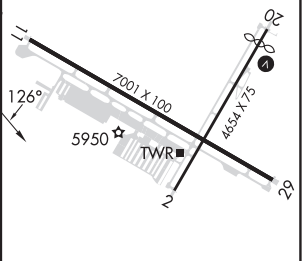
Circling NA for Cat C south of Rwy 29 and east of Rwy 2. Procedure NA at night. Rwy 11 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, procedure NA. -17°C

MISSED APPROACH: (Do not exceed 220K until KEBTE) Climbing left turn to 12000 direct KEBTE and track 282° to LEKYI and hold, continue climb-in-hold 12000.

D-ATIS	OAKLAND CENTER	TRUCKEE TOWER ★	GND CON	UNICOM
118.0	127.95 316.1	120.575 (CTAF) L	118.3	122.95







CATEGORY	A	B	C	D
LNAV MDA	7720-1¼ 1816 (1900-1¼)	7720-1½ 1816 (1900-1½)	7720-3 1816 (1900-3)	NA
C CIRCLING	7720-1¼ 1816 (1900-1¼)	7720-1½ 1816 (1900-1½)	7720-3 1816 (1900-3)	NA

REIL Rwy 11 L
MIRL Rwys 11-29 and 2-20 L

TRUCKEE, CALIFORNIA
Amdt 1 20JUN19

39°19'N-120°08'W

TRUCKEE-TAHOE (TRK)

RNAV (GPS) RWY 11

SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS CH 87135 W20A	APP CRS 182°	Rwy Ldg 4539 TDZE 5898 Apt Elev 5904

RNAV (GPS) RWY 20

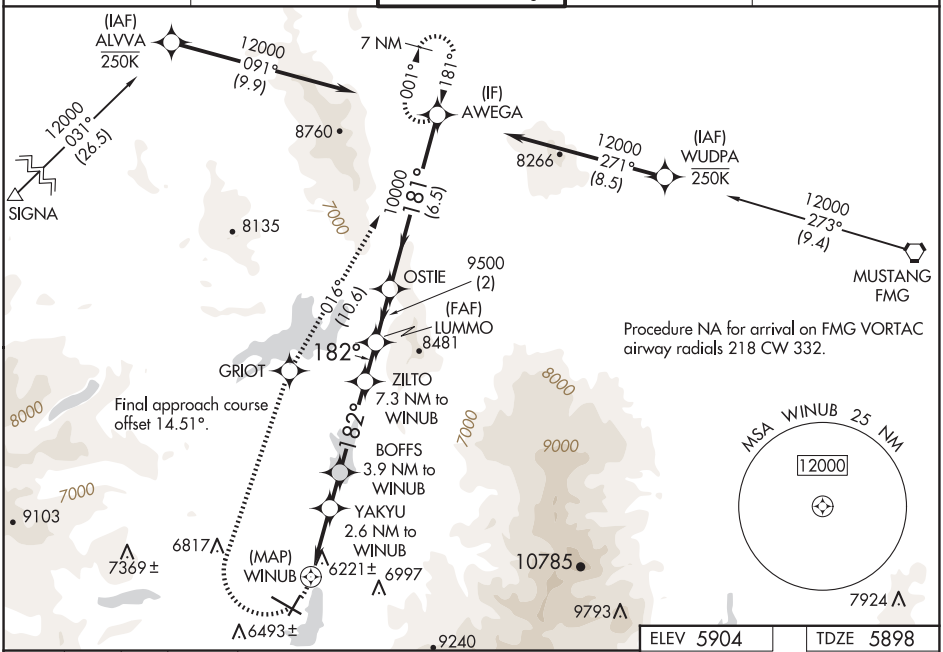
TRUCKEE-TAHOE (TRK)

RNP APCH.

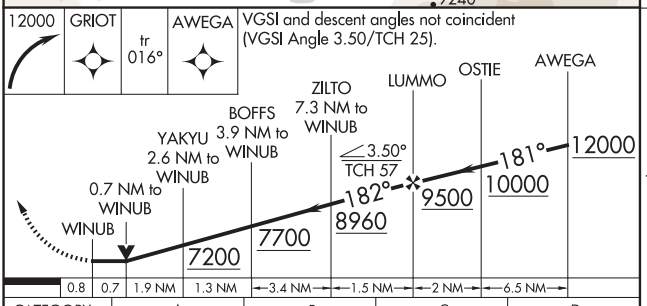
T A -17°C Circling to Rwy 2, 11, 29 NA at night. Circling NA for Cat C south of Rwy 29 and east of Rwy 2. Rwy 20 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, procedure NA.

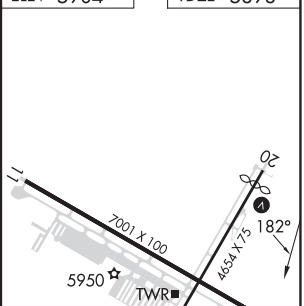
MISSED APPROACH: (Do not exceed 200K until GRIOT) Climbing right turn to 12000 direct GRIOT and on track 016° to AWEGA and hold, continue climb-in-hold to 12000.
*Missed approach requires minimum climb of 270 feet per NM to 7700.

D-ATIS	OAKLAND CENTER	TRUCKEE TOWER★	GND CON	UNICOM
118.0	127.95 316.1	120.575 (CTAF) L	118.3	122.95



ELEV 5904 TDZE 5898





CATEGORY	A	B	C	D
LP MDA*	6480-1 582 (600-1)		6480-1¾ 582 (600-1¾)	NA
LP MDA	6780-1¼ 882 (900-1¼)		6780-2½ 882 (900-2½)	NA
LNAV MDA	7120-1¼ 1222 (1300-1¼)	7120-1½ 1222 (1300-1½)	7120-3 1222 (1300-3)	NA
C CIRCLING	7120-1¼ 1216 (1300-1¼)	7220-1½ 1316 (1400-1½)	7700-3 1796 (1800-3)	NA

REIL Rwy 11 L
MIRL Rwys 11-29 and 2-20 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

TRUCKEE, CALIFORNIA | AL-6021 (FAA) | 25163

RNAV (GPS)-A

TRUCKEE-TAHOE (TRK)

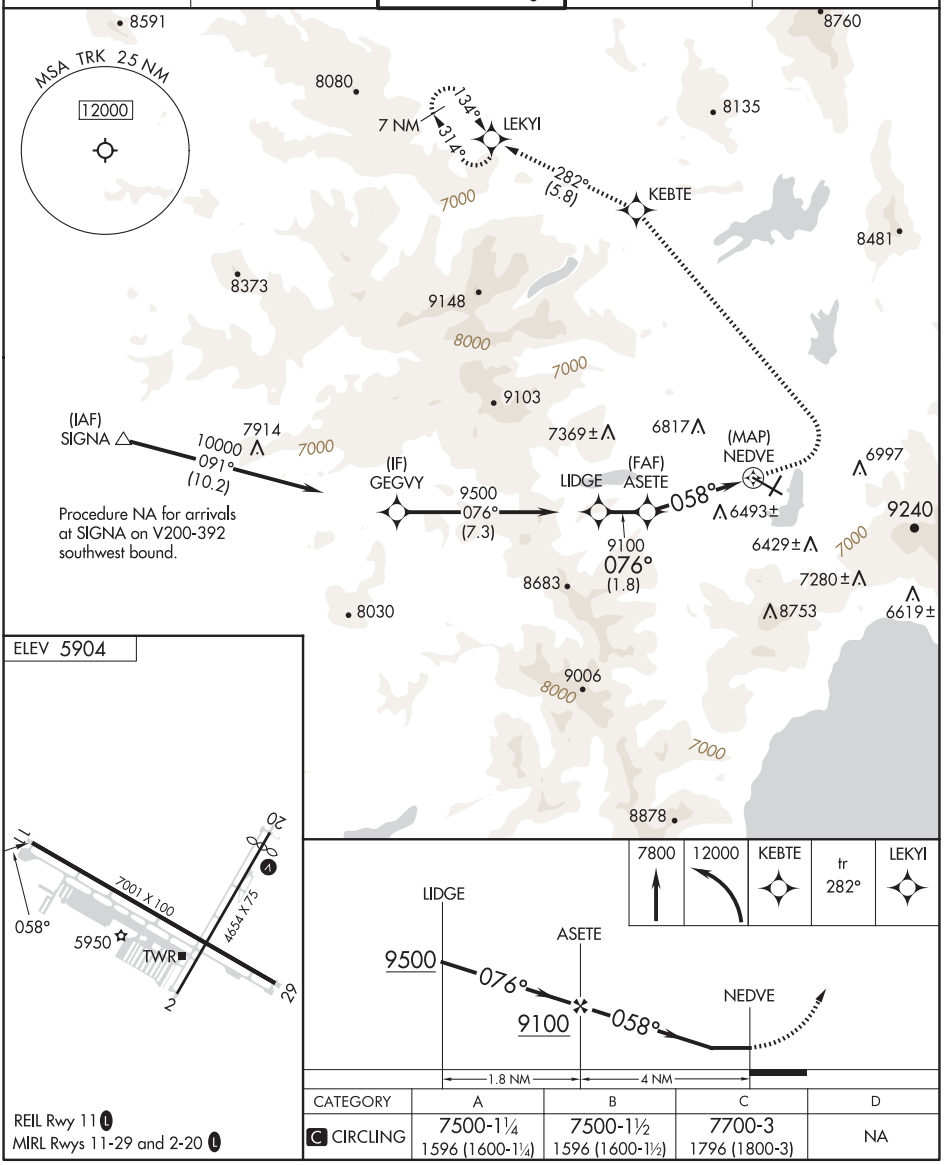
APP CRS	Rwy Ldg	N/A
058°	TDZE	N/A
	Apt Elev	5904

RNP APCH.

Circling NA for Cat C south of Rwy 29 and east of Rwy 2. Procedure NA at night. When local altimeter setting not received, procedure NA. -17°C

MISSED APPROACH: (Do not exceed 200K until KEBTE) Climb to 7800 then climbing left turn to 12000 direct KEBTE and track 282° to LEKYI and hold, continue climb-in-hold 12000.

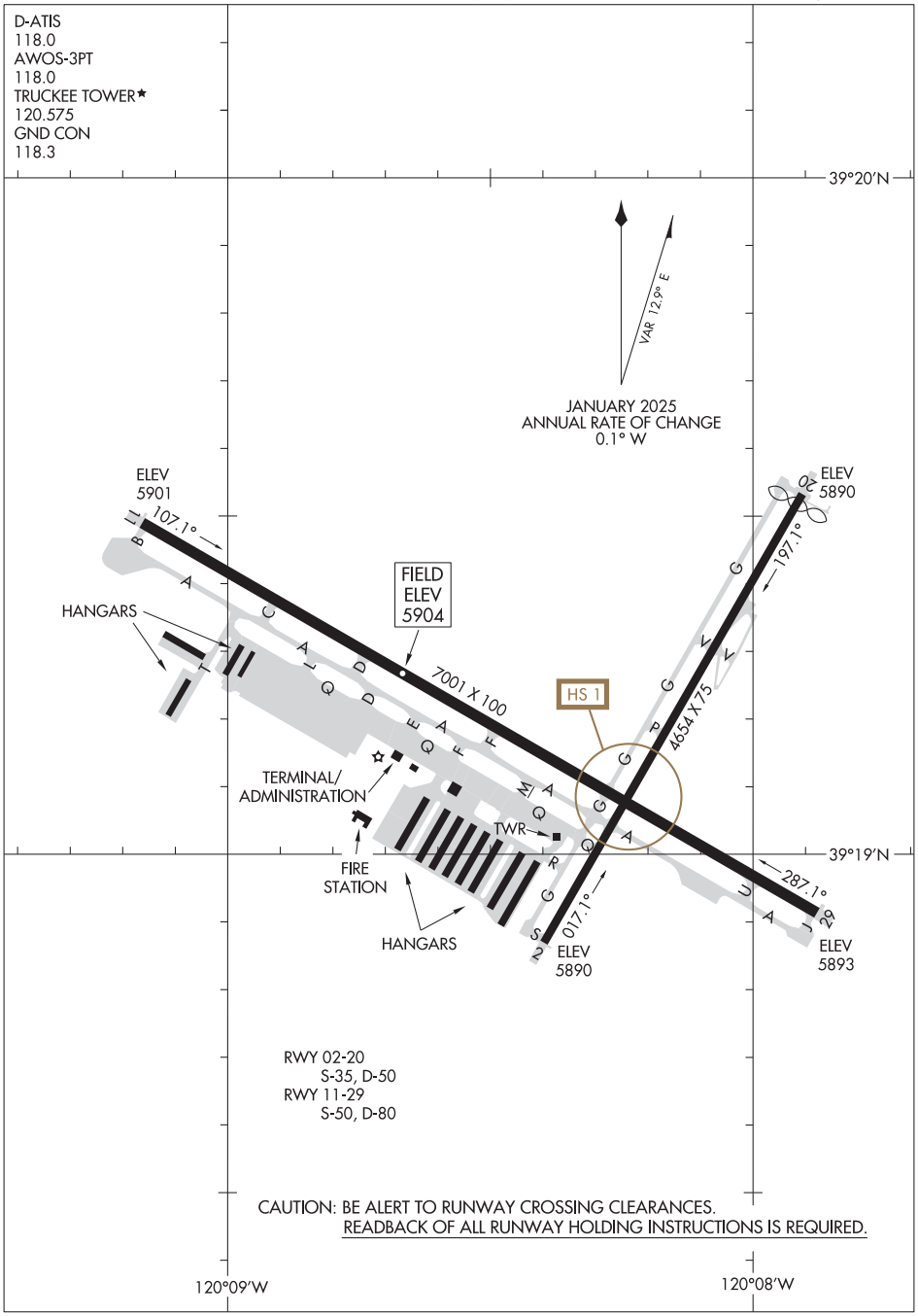
D-ATIS	OAKLAND CENTER	TRUCKEE TOWER ★	GND CON	UNICOM
118.0	127.95 316.1	120.575 (CTAF) L	118.3	122.95



CATEGORY	A	B	C	D
C CIRCLING	7500-1¼ 1596 (1600-1¼)	7500-1½ 1596 (1600-1½)	7700-3 1796 (1800-3)	NA

REIL Rwy 11 L
MIRL Rwys 11-29 and 2-20 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025



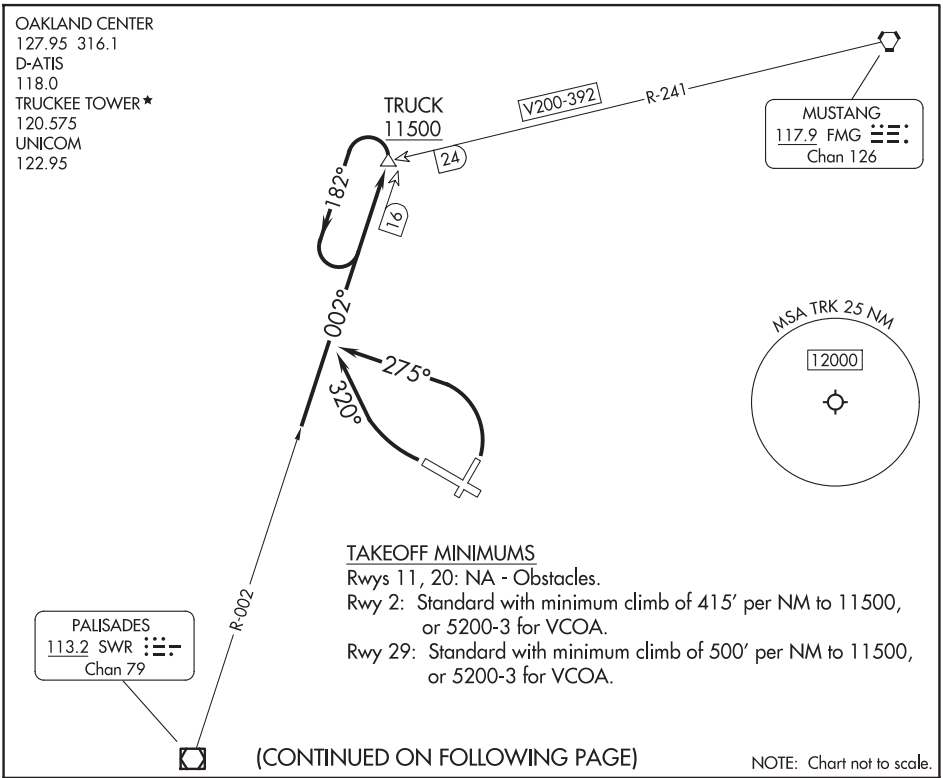
SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(TRUCK5.TRUCK) 24025

TRUCK FIVE DEPARTURE (OBSTACLE)

AL-6021 (FAA)

TRUCKEE-TAHOE (TRK)
TRUCKEE, CALIFORNIA



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 2: Climbing left turn to 11500 on heading 275° and SWR R-002 to TRUCK INT, thence. . . . , or for climb in visual conditions cross Truckee-Tahoe Airport heading 290° at or above 9100, then proceed on SWR R-002 to TRUCK INT. When executing VCOA, notify ATC prior to departure. Thence. . . .

TAKEOFF RUNWAY 29: Climbing right turn to 11500 on heading 320° and SWR VOR/DME R-002 to TRUCK INT, thence. . . . , or for climb in visual conditions cross Truckee-Tahoe Airport heading 290° at or above 9100, then proceed on SWR R-002 to TRUCK INT. When executing VCOA, notify ATC prior to departure. thence. . . .

. . . .continue climb in TRUCK INT holding pattern to cross TRUCK INT at or above 11500 before proceeding on course.

VCOA RUNWAYS 2, 29: Obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Truckee-Tahoe Airport heading 290° at or above 9100, then proceed on SWR VOR/DME R-002 to TRUCK INT, thence. . . .

. . . .continue climb in TRUCK INT holding pattern to cross TRUCK INT at or above 11500 before proceeding on course.

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

TAKEOFF OBSTACLE NOTES

Rwy 2: Trees, electrical system beginning 32′ from DER, 189′ left of centerline, up to 5934′ MSL. Trees beginning 448′ from DER, 431′ right of centerline, up to 5968′ MSL. Trees beginning 1 NM from DER, 1765′ right of centerline, up to 6078′ MSL. Tree 1 NM from DER, 1920′ right of centerline, 6125′ MSL. Trees beginning 1 NM from DER, 1540′ right of centerline, up to 6130′ MSL. Tree 1.1 NM from DER, 2002′ right of centerline, 6145′ MSL. Tree 1.1 NM from DER, 1766′ right of centerline, 6153′ MSL. Trees beginning 1.1 NM from DER, 1340′ right of centerline, up to 6154′ MSL. Trees beginning 1.1 NM from DER, 1302′ right of centerline, up to 6182′ MSL. Trees beginning 1.1 NM from DER, 1115′ right of centerline, up to 6242′ MSL. Trees beginning 1.1 NM from DER, 1067′ right of centerline, up to 6248′ MSL. Trees beginning 1.2 NM from DER, 1147′ right of centerline, up to 6253′ MSL. Trees beginning 1.2 NM from DER, 1351′ right of centerline, up to 6266′ MSL. Trees beginning 1.2 NM from DER, 929′ right of centerline, up to 6272′ MSL. Trees beginning 1.2 NM from DER, 818′ right of centerline, up to 6280′ MSL. Trees beginning 1.3 NM from DER, 1744′ right of centerline, up to 6281′ MSL. Trees beginning 1.3 NM from DER, 639′ right of centerline, up to 6288′ MSL. Trees beginning 1.3 NM from DER, 433′ right of centerline, up to 6305′ MSL. Trees, building beginning 1.4 NM from DER, 40′ right of centerline, up to 6315′ MSL. Tree 1.5 NM from DER, 7′ left of centerline, 6137′ MSL.

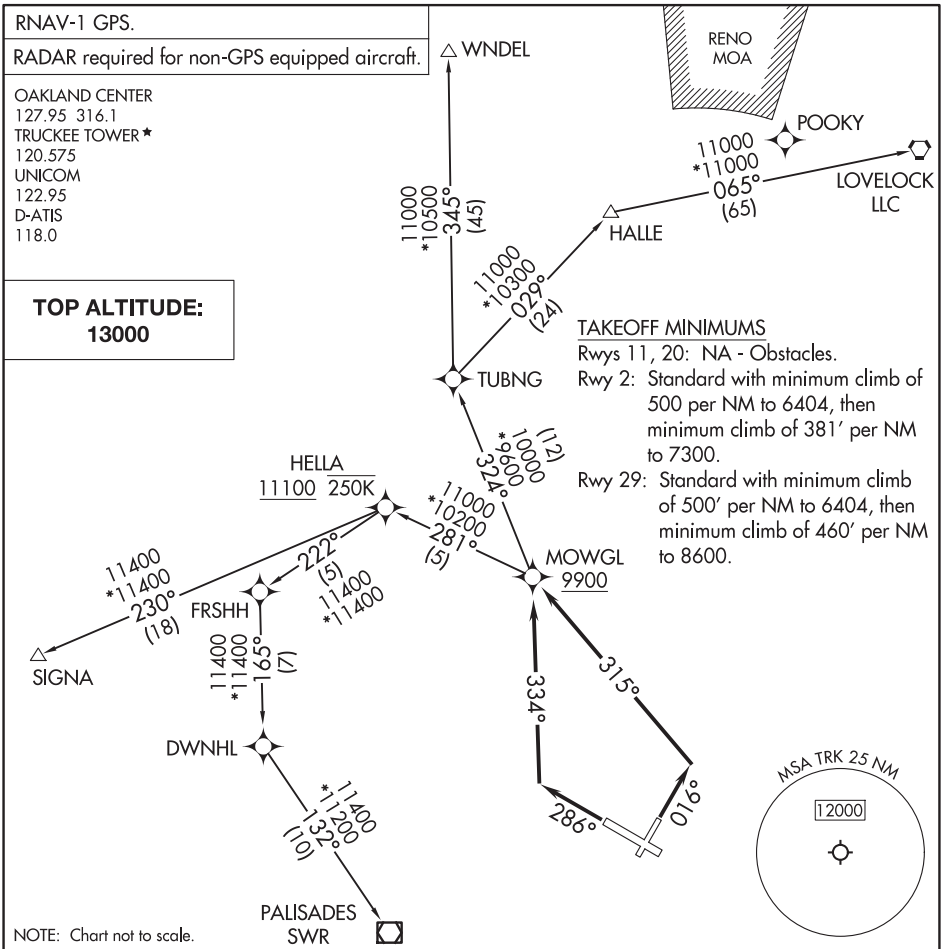
Rwy 29: Sign 23′ from DER, 157′ left of centerline, 3′ AGL/5902′ MSL. Trees beginning 73′ from DER, 400′ right of centerline, up to 5968′ MSL. Pole 144′ from DER, 217′ left of centerline, 6′ AGL/5905′ MSL. Trees beginning 206′ from DER, 55′ right of centerline, up to 5971′ MSL. Tree 213′ from DER, 546′ left of centerline, 5923′ MSL. Trees beginning 637′ from DER, 81′ left of centerline, up to 6005′ MSL. Tree 5956′ from DER, 542 right of centerline, 6058′ MSL. Trees beginning 1.6 NM from DER, 1356′ left of centerline, up to 6153′ MSL. Trees beginning 1.6 NM from DER, 1384′ left of centerline, up to 6197′ MSL. Tress, water tower beginning 1.6 NM from DER, 1738′ left of centerline, up to 6206′ MSL. Trees, pole beginning 1.6 NM from DER, 249′ left of centerline, up to 6268′ MSL. Tree 1.8 NM from DER, 3070′ right of centerline, 6192′ MSL. Tree 1.8 NM from DER, 2728′ right of centerline, 6197′ MSL. Tree 1.8 NM from DER, 1614′ right of centerline, 6204′ MSL. Trees beginning 1.8 NM from DER, 1108′ right of centerline, up to 6211′ MSL. Tree 1.8 NM from DER, 2581′ right of centerline, 6259′ MSL. Trees beginning 1.8 NM from DER, 2144′ right of centerline, up to 6265′ MSL. Trees beginning 1.9 NM from DER, 183′ right of centerline, up to 6266′ MSL. Tree 1.9 NM from DER, 3540′ right of centerline, 6308′ MSL. Tree 1.9 NM from DER, 3135′ right of centerline, 6351′ MSL. Trees beginning 1.9 NM from DER, 307′ right of centerline, up to 6379′ MSL. Tree 2 NM from DER, 3583′ right of centerline, 6391′ MSL. Trees beginning 2 NM from DER, 1301′ right of centerline, up to 6458′ MSL. Trees beginning 2 NM from DER, 535′ right of centerline, up to 6468′ MSL. Tree 2 NM from DER, 639′ left of centerline, 6270′ MSL. Tree 2.1 NM from DER, 2242′ left of centerline, 6315′ MSL. Trees beginning 2.1 NM from DER, 50′ left of centerline, up to 6332′ MSL. Tree 2.1 NM from DER, 2881′ right of centerline, 6502′ MSL. Trees beginning 2.1 NM from DER, 214′ right of centerline, up to 6505′ MSL. Tree 2.1 NM from DER, 2769′ left of centerline, 6439′ MSL. Trees beginning 2.1 NM from DER, 259′ left of centerline, up to 6440′ MSL. Tree 2.1 NM from DER, 3037′ right of centerline, 6547′ MSL. Trees beginning 2.1 NM from DER, 636′ right of centerline, up to 6573′ MSL. Trees beginning 2.2 NM from DER, 1171′ right of centerline, up to 6583′ MSL. Trees beginning 2.2 NM from DER, 733′ left of centerline, up to 6460′ MSL. Trees, building beginning 2.2 NM from DER, 20′ left of centerline, up to 6549′ MSL. Trees beginning 2.2 NM from DER, 525′ right of centerline, up to 6612′ MSL. Trees beginning 2.3 NM from DER, 1111′ right of centerline, up to 6657′ MSL. Tree beginning 2.3 NM from DER, 2179′ right of centerline, up to 6682′ MSL. Trees beginning 2.3 NM from DER, 412′ right of centerline, up to 6731′ MSL. Trees beginning 2.4 NM from DER, 371′ right of centerline, up to 6776′ MSL. Tower 2.5 NM from DER, 2714′ right of centerline, 93′ AGL/6817′ MSL. Antenna, trees beginning 2.5 NM from DER, 73′ right of centerline, up to 88′ AGL/6822′ MSL.

(MOWGL2.MOWGL) 23222

MOWGL TWO DEPARTURE (RNAV)

AL-6021 (FAA)

TRUCKEE-TAHOE (TRK)
TRUCKEE, CALIFORNIA



SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 2: Climb on heading 016° to intercept course 315° to cross MOWGL at or above 9900, thence. . . .

TAKEOFF RUNWAY 29: Climb on heading 286° to intercept course 334° to cross MOWGL at or above 9900, thence. . . .

. . . .(transition) maintain 13000 expect filed altitude 10 minutes after departure.

HALLE TRANSITION (MOWGL2.HALLE)

LOVELOCK TRANSITION (MOWGL2.LLC)

PALISADES TRANSITION (MOWGL2.SWR)

SIGNA TRANSITION (MOWGL2.SIGNA)

WNDEL TRANSITION (MOWGL2.WNDEL)

RNAV (GPS) RWY 13

MEFFORD FLD (TLR)

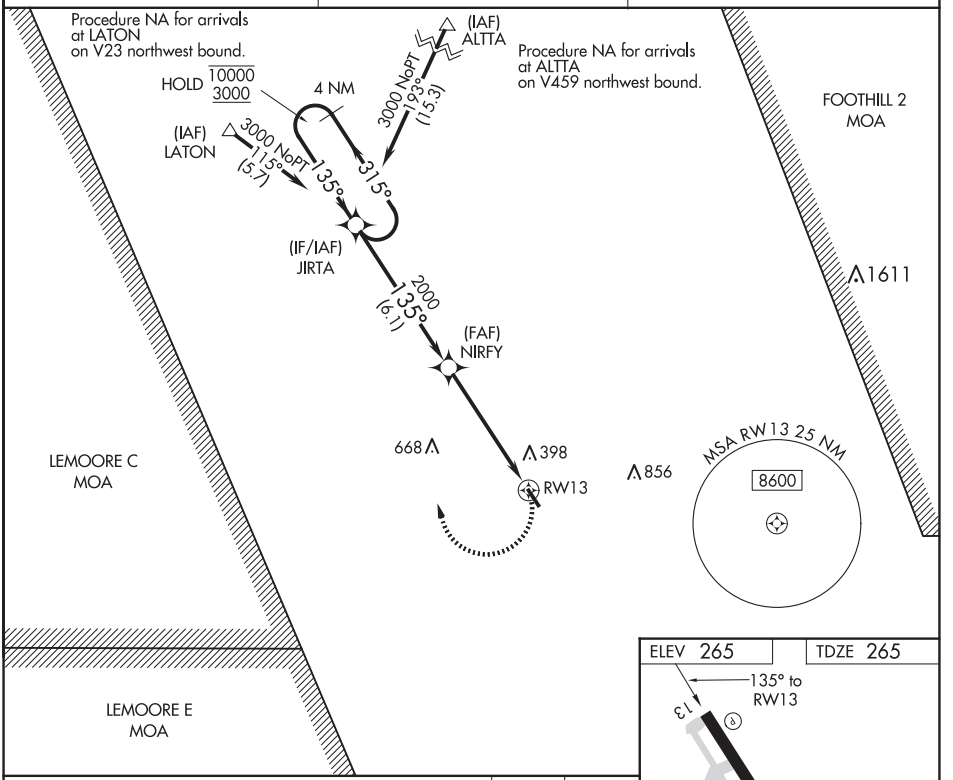
APP CRS	Rwy Idg	3901
135°	TDZE	265
	Apt Elev	265

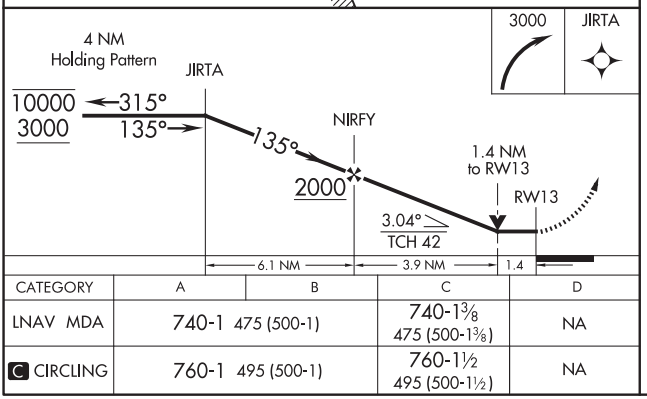
RNP APCH.

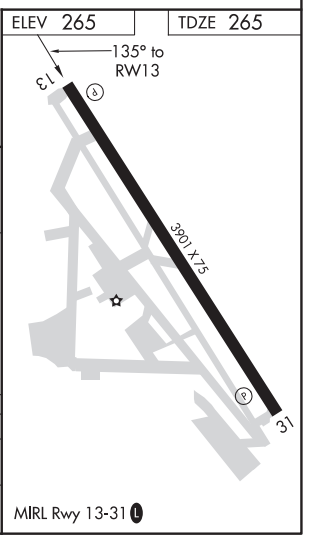
T ANA — Circling Rwy 31 NA at night. Rwy 13 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Visalia altimeter setting and increase all MDA 40 feet.

MISSED APPROACH: Climbing right turn to 3000 direct JIRTA and hold, Continue climb-in-hold to 3000.

AWOS-3PT	FRESNO APP CON	UNICOM
120.0	118.5 268.7	122.7 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	740-1 475 (500-1)		740-1⅜ 475 (500-1⅜)	NA
C CIRCLING	760-1 495 (500-1)		760-1½ 495 (500-1½)	NA

MIRL Rwy 13-31 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

TURLOCK, CALIFORNIA AL-9962 (FAA) 24361

RNAV (GPS)-A

TURLOCK MUNI (O15)

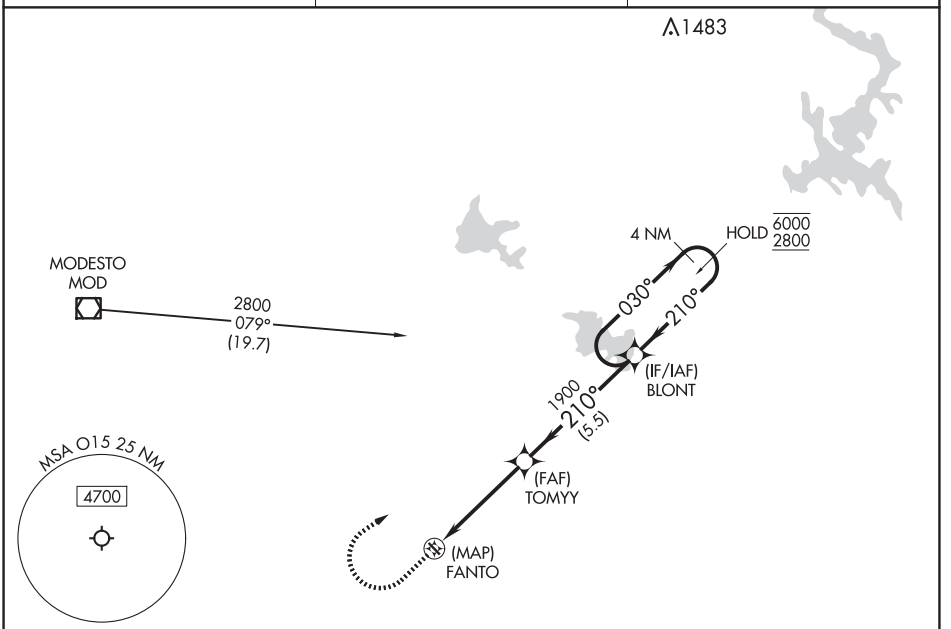
APP CRS	Rwy Idg	N/A
210°	TDZE	N/A
	Apt Elev	161

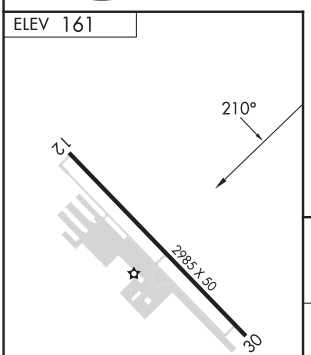
RNP APCH - GPS.

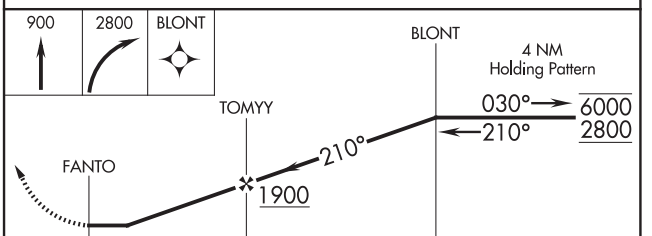
NA Procedure NA at night. Use MER altimeter setting; when not received, use MCE altimeter setting and increase all MDAs 20 feet.

MISSED APPROACH: Climb to 900 then climbing right turn to 2800 direct BLONT and hold.

MER AWOS-3	NORCAL APP CON	UNICOM
124.475	120.95 269.45	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	740-1 579 (600-1)	760-1 599 (600-1)	NA	

LIRL Rwy 12-30 L

TURLOCK, CALIFORNIA
Orig-A 26DEC24

37°29'N-120°42'W

TURLOCK MUNI (O15)

RNAV (GPS)-A

SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 15

UKIAH MUNI (UKI)

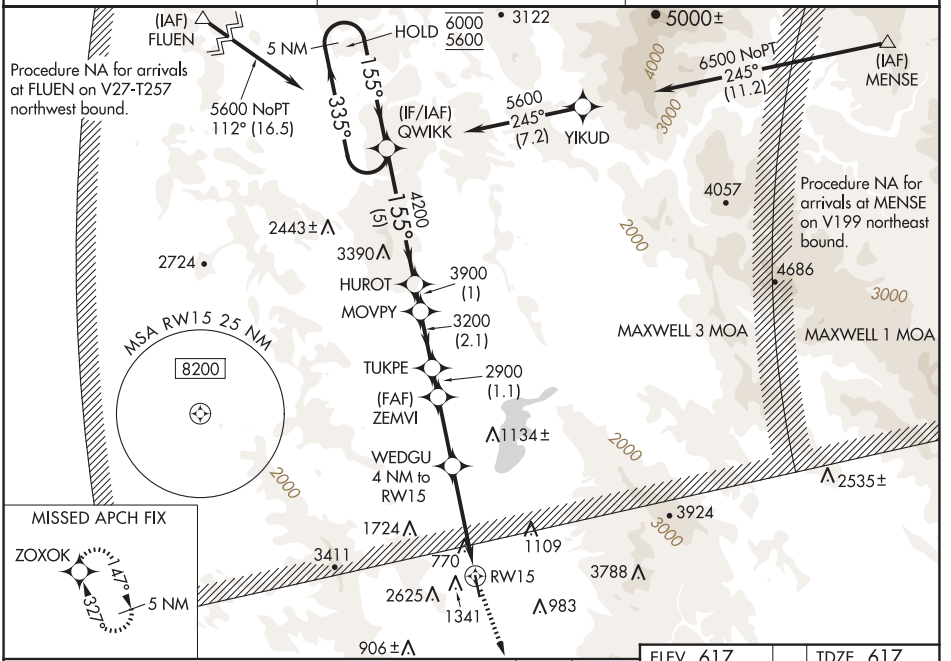
WAAS	APP CRS	Rwy Idg	4423
CH 93644	155°	TDZE	617
W15A		Apt Elev	617

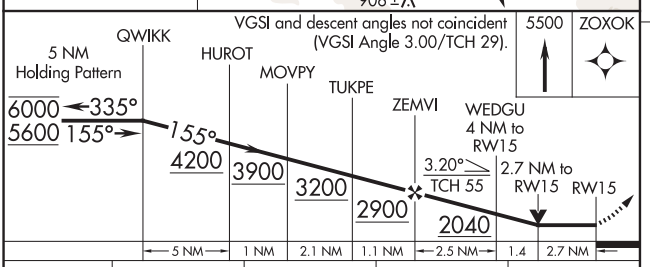
RNP APCH - GPS.

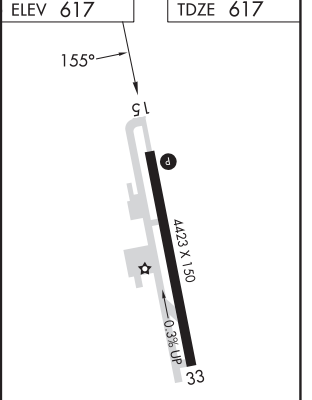
T A Circling NA southwest of Rwy 15-33. Circling Rwy 33 NA at night. Rwy 15 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 5500 direct ZOXOK and hold, continue climb-in-hold to 5500.
*Missed approach requires minimum climb of 350 feet per NM to 3300.

ASOS	OAKLAND CENTER	UNICOM
119.275	127.8 353.5	123.0 (CTAF) L







CATEGORY	A	B	C	D
LP MDA*	1500-1¼ 883 (900-1¼)	1540-1¼ 923 (1000-1¼)	1560-2½ 943 (1000-2½)	1580-3 963 (1000-3)
LP MDA	2120-1¼ 1503 (1600-1¼)	2120-1½ 1503 (1600-1½)	2120-3	1503 (1600-3)
LNAV MDA*	1960-1¼ 1343 (1400-1¼)	1960-1½ 1343 (1400-1½)	1960-3	1343 (1400-3)
LNAV MDA	2220-1¼ 1603 (1700-1¼)	2220-1½ 1603 (1700-1½)	2220-3	1603 (1700-3)
C CIRCLING	2220-1¼ 1603 (1700-1¼)	2220-1½ 1603 (1700-1½)	2220-3 1603 (1700-3)	2780-3 2163 (2200-3)

MIRL Rwy 15-33 L
REIL Rwys 15 and 33 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS)-B

UKIAH MUNI (UKI)

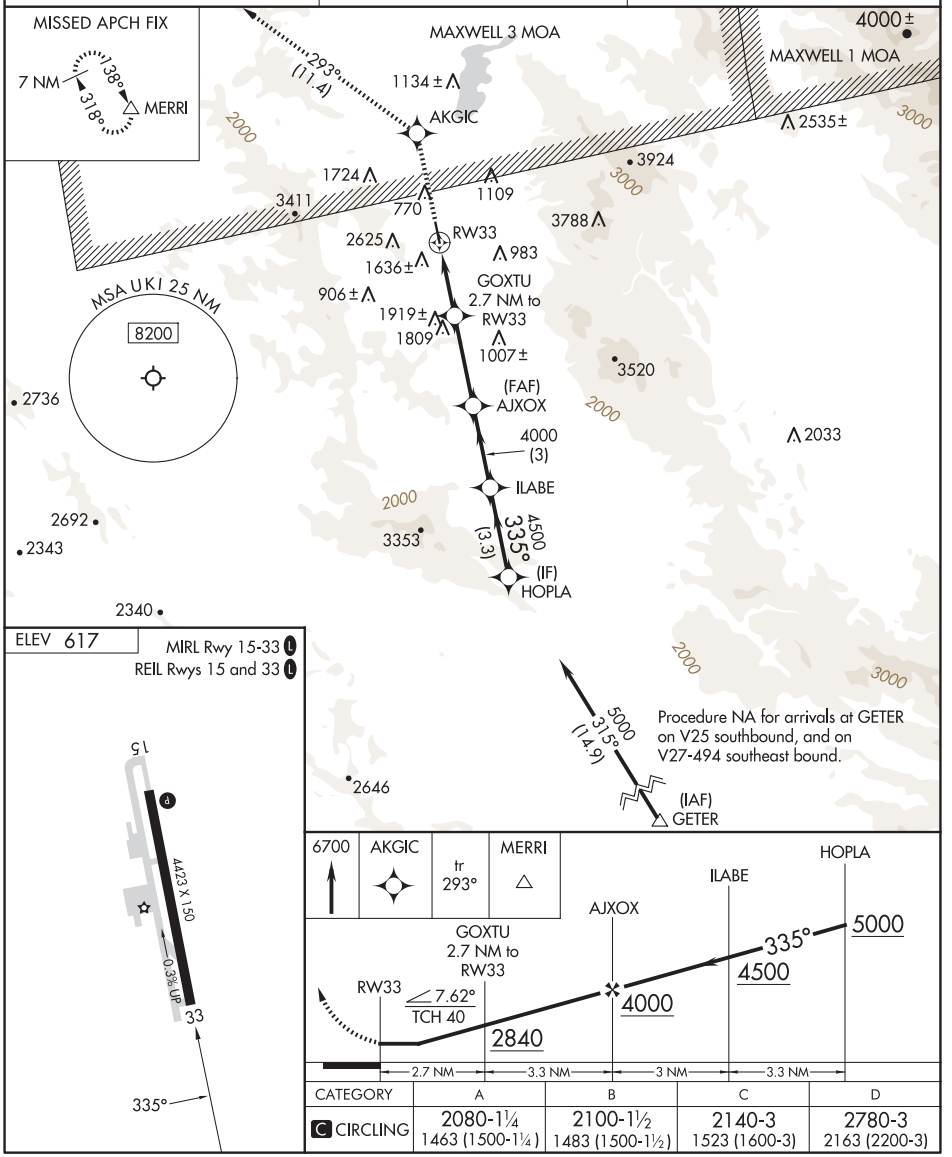
APP CRS	Rwy Idg	N/A
335°	TDZE	N/A
	Apt Elev	617

RNP APCH - GPS.

Circling NA southwest of Rwy 15-33. Circling Rwy 33 NA at night. Rwy 33 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 6700 direct AKGIC and on track 293° to MERRI and hold, continue climb-in-hold to 6700.

ASOS	OAKLAND CENTER	UNICOM
119.275	127.8 353.5	123.0 (CTAF) L



CATEGORY	A	B	C	D
C CIRCLING	2080-1¼ 1463 (1500-1¼)	2100-1½ 1483 (1500-1½)	2140-3 1523 (1600-3)	2780-3 2163 (2200-3)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

LOC/DME I-UKI	APP CRS	Rwy Idg	4423
109.1	155°	TDZE	617
Chan 28		Apt Elev	617

LOC RWY 15

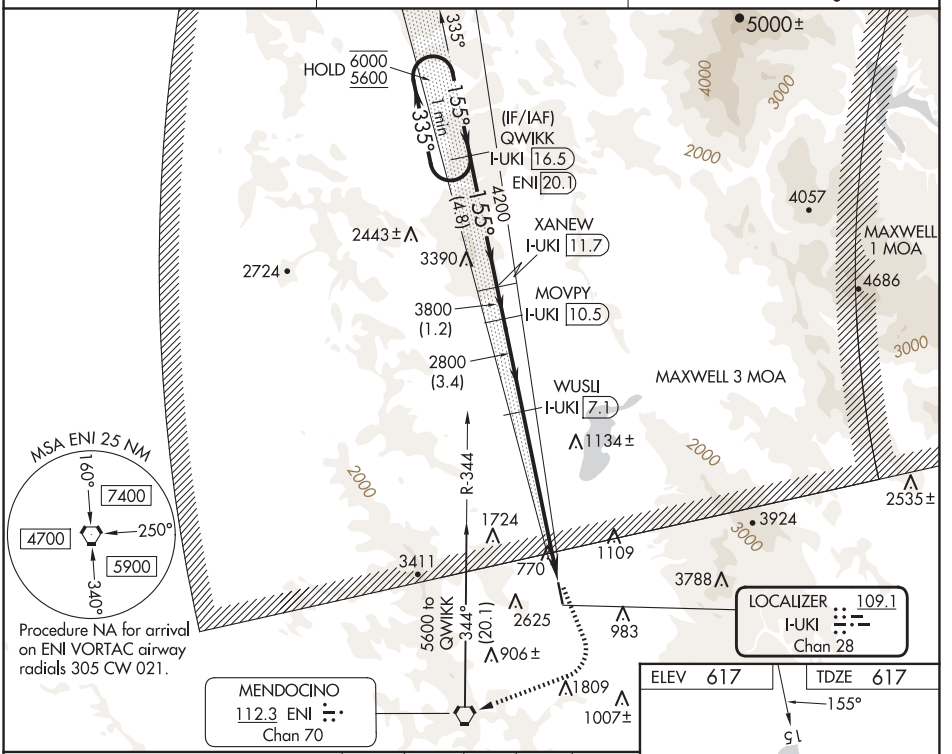
UKIAH MUNI (UKI)

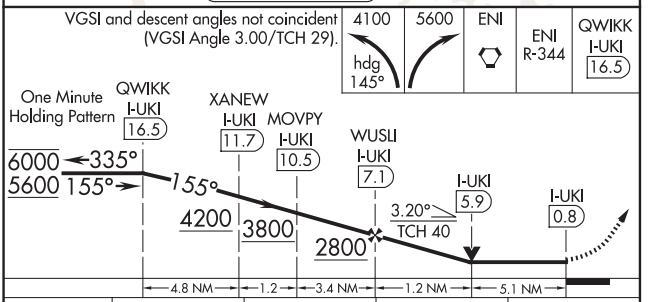
DME required.

T Circling NA southwest of Rwy 15-33. Circling Rwy 33 NA at night. Rwy 15 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climbing left turn to 4100 on heading 145° then climbing right turn to 5600 direct ENI VORTAC and on ENI VORTAC R-344 to QWIKK /I-UKI 16.5 DME and hold.

ASOS	OAKLAND CENTER	UNICOM
119.275	127.8 353.5	123.0 (CTAF) L





CATEGORY	A	B	C	D
S-LOC 15	2300-1¼ 1683 (1700-1¼)	2300-1½ 1683 (1700-1½)	2300-3 1683 (1700-3)	
C CIRCLING	2300-1¼ 1683 (1700-1¼)	2300-1½ 1683 (1700-1½)	2300-3 1683 (1700-3)	2780-3 2163 (2200-3)

MIRL Rwy 15-33 L
REIL Rwys 15 and 33 L

FAF to MAP 6.3 NM

Knots	60	90	120	150	180
Min:Sec	6:18	4:12	3:09	2:31	2:06

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

UKIAH, CALIFORNIA | AL-698 (FAA) | 25051

VORTAC ENI	APP CRS	Rwy Idg	N/A
112.3	022°	TDZE	N/A
Chan 70		Apt Elev	617

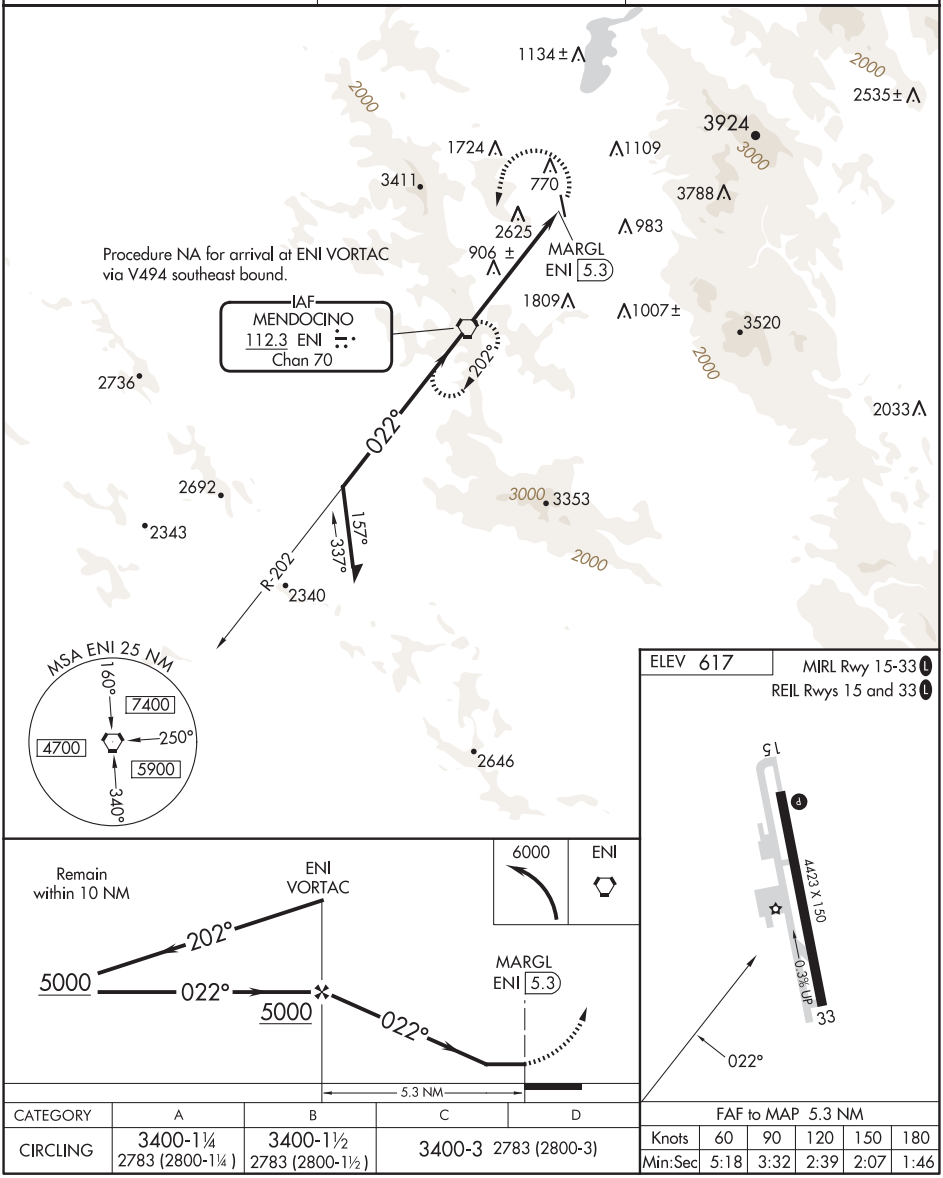
VOR-A

UKIAH MUNI (UKI)

Circling NA west of Rwy 15-33.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climbing left turn to 6000 direct ENI VORTAC and hold, continue climb-in-hold to 6000.

ASOS	OAKLAND CENTER	UNICOM
119.275	127.8 353.5	123.0 (CTAF)

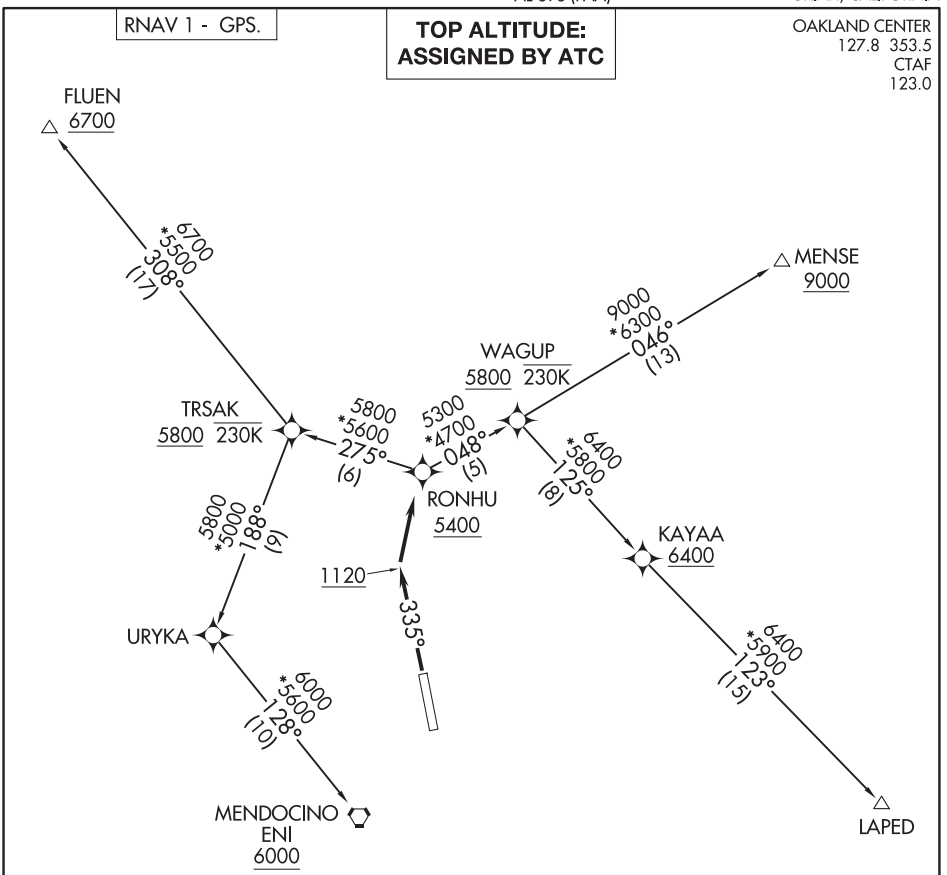


CATEGORY	A	B	C	D
CIRCLING	3400-1¼ 2783 (2800-1¼)	3400-1½ 2783 (2800-1½)	3400-3 2783 (2800-3)	

FAF to MAP 5.3 NM					
Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025



TAKEOFF MINIMUMS

Rwy 33: Standard with minimum climb of 297′ per NM to 4000.

NOTE: Do not exceed 230K until passing WAGUP.

NOTE: Do not exceed 230K until passing TRSAK.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 33: Climb on heading 335° to 1120, then direct RONHU at or above 5400, thence . . . .

. . . . on assigned transition, maintain ATC assigned altitude, expect filed altitude 10 minutes after departure.

FLUEN TRANSITION (RONHU2.FLUEN)

LAPED TRANSITION (RONHU2.LAPED)

MENDOCINO TRANSITION (RONHU2.ENI)

MENSE TRANSITION (RONHU2.MENSE)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(RYPAX2.RYPAX) 22307

RYPAX TWO DEPARTURE (RNAV)

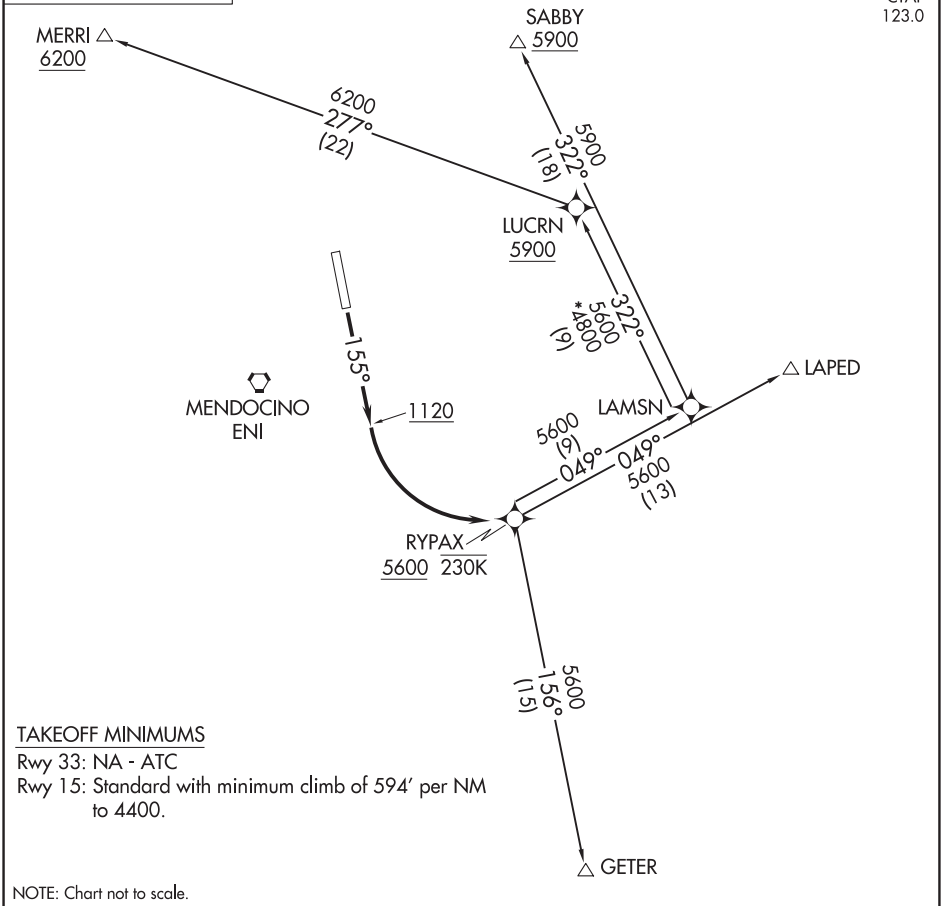
UKIAH MUNI (UKI)
UKIAH, CALIFORNIA

AL-698 (FAA)

RNAV 1 - GPS.

OAKLAND CENTER
127.8 353.5
CTAF
123.0

TOP ALTITUDE: ASSIGNED BY ATC



TAKEOFF MINIMUMS
Rwy 33: NA - ATC
Rwy 15: Standard with minimum climb of 594' per NM to 4400.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 15: Climb on heading 155° to 1120, then left turn direct RYPAX at or above 5600 at or below 230K, thence. . . .

. . . . on assigned transition, maintain ATC assigned altitude, expect filed altitude 10 minutes after departure.

GETER TRANSITION (RYPAX2.GETER)
LAPED TRANSITION (RYPAX2.LAPED)
MERRI TRANSITION (RYPAX2.MERRI)
SABBY TRANSITION (RYPAX2.SABBY)

SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS CH 53740 W20A	APP CRS 201°	Rwy Idg 4700 TDZE 117 Apt Elev 117

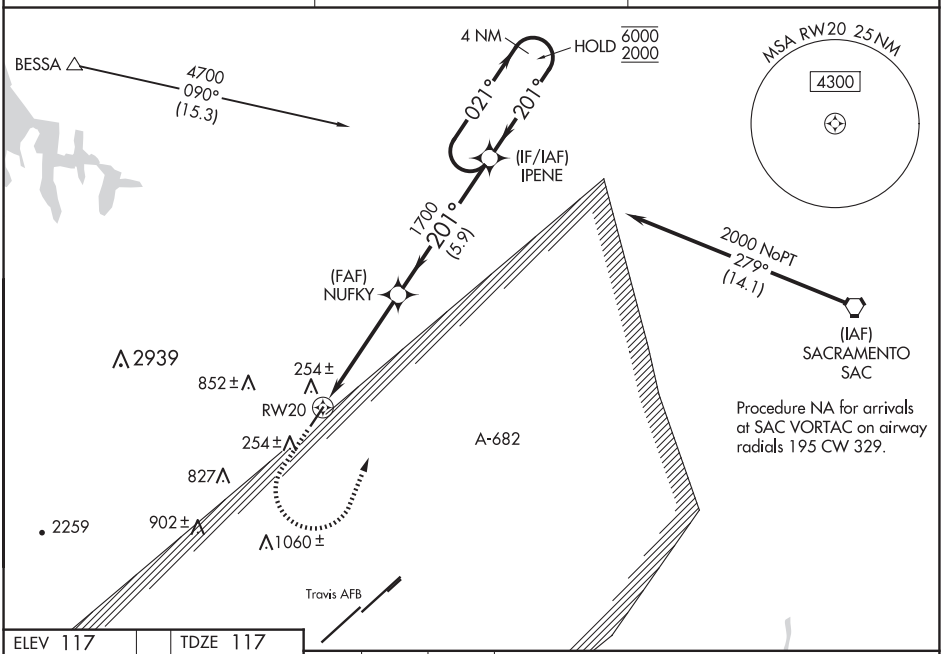
RNAV (GPS) RWY 20
NUT TREE (VCB)

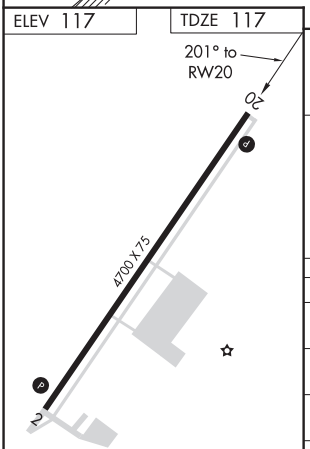
RNP APCH.

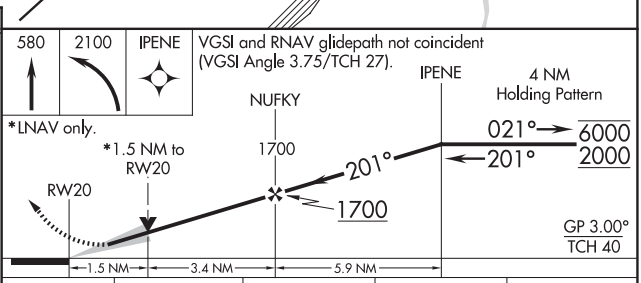
Circling NA west of Rwy 2-20. Circling Rwy 2 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -3°C or above 54°C.

MISSED APPROACH: (Do not exceed 220K until IPENE) Climb to 580 then climbing left turn to 2100 direct IPENE and hold.
Missed approach requires minimum climb of 229 feet per NM to 1300.

ASOS	TRAVIS APP CON	CTAF
134.75	128.4 281.45	122.85 L







CATEGORY	A	B	C	D
LPV DA#	367-¾ 250 (300-¾)			
LPV DA	384-⅞ 267 (300-⅞)			
LNAV/VNAV DA	614-1⅜ 497 (500-1⅜)			
LNAV MDA	720-1 603 (700-1)		720-1¾ 603 (700-1¾)	
C CIRCLING	720-1 603 (700-1)		960-2½ 843 (900-2½)	1480-3 1363 (1400-3)

MIRL Rwy 2-20 L
REIL Rwys 2 and 20 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

VACAVILLE, CALIFORNIA | AL-6094 (FAA) | 23334

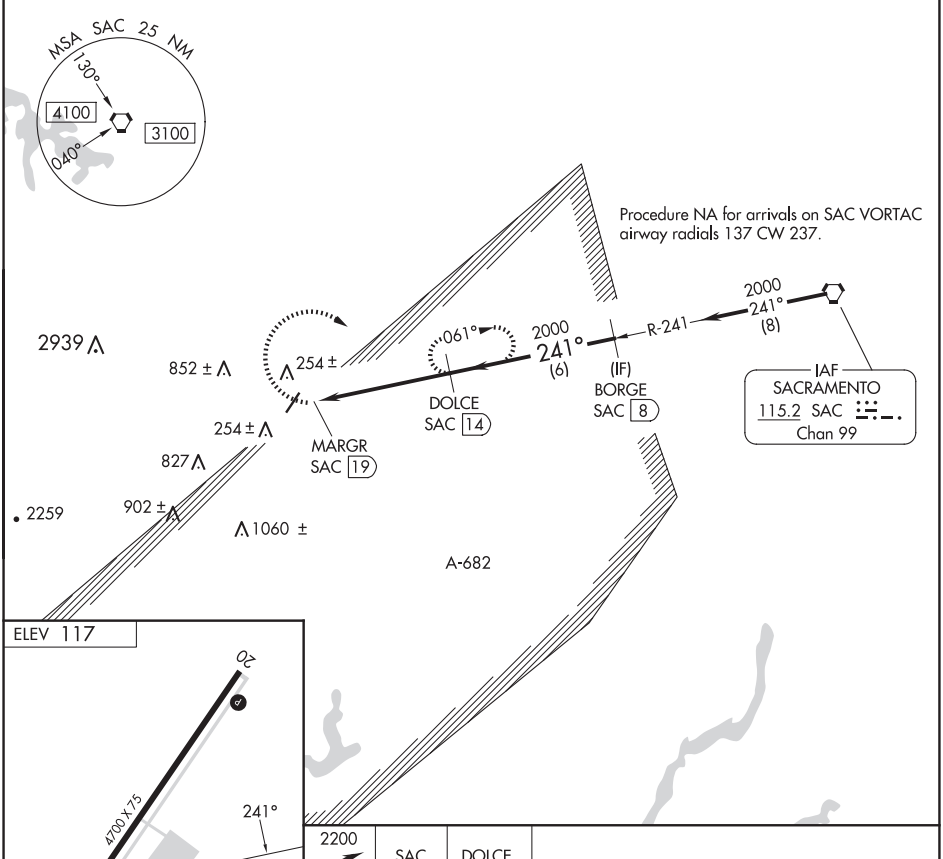
VORTAC SAC	APP CRS	Rwy Idg	N/A
115.2	241°	TDZE	N/A
Chan 99		Apt Elev	117

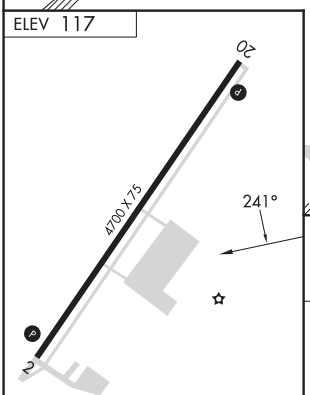
VOR-A
NUT TREE (VCB)

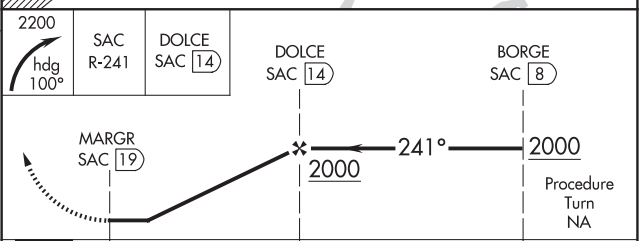
Rwy 2 helicopter visibility reduction below 1 SM NA.
DME required.
Circling Rwy 2 NA at night.
Circling NA west of Rwy 2-20.

MISSED APPROACH: Climbing right turn to 2200 on heading 100° and SAC R-241 to DOLCE/14 DME and hold.

ASOS	TRAVIS APP CON	CTAF
134.75	128.4 281.45	122.85 L







CATEGORY	A	B	C	D
C CIRCLING	920-1	803 (900-1)	960-2½	1360-3
			843 (900-2½)	1243 (1300-3)

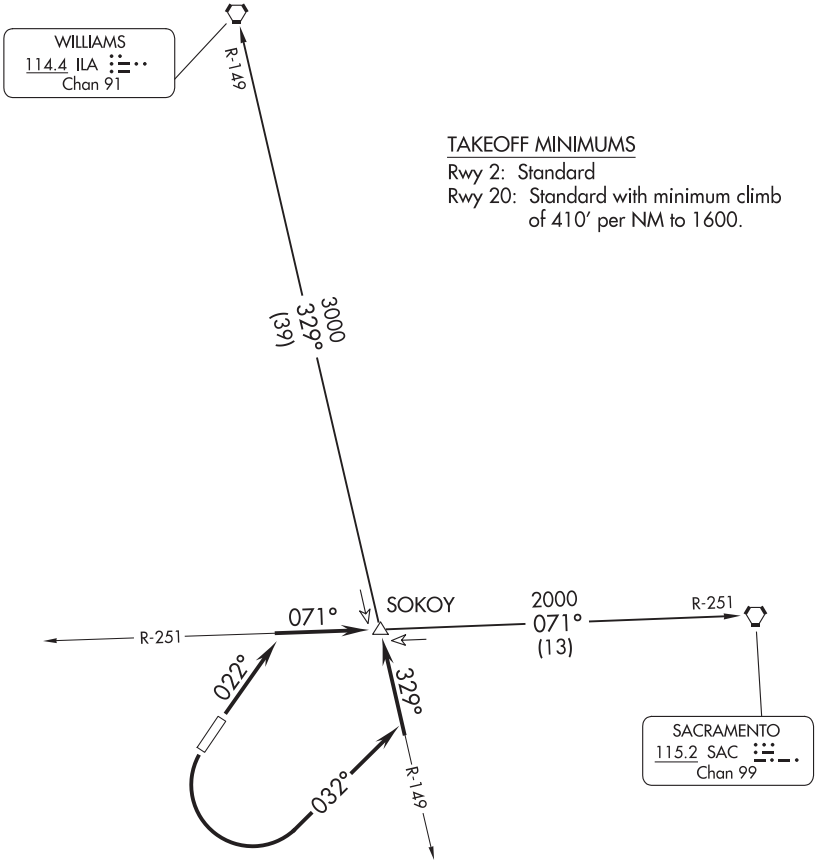
MIRL Rwy 2-20 L
REIL Rwys 2 and 20 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

TRAVIS DEP CON
128.4 281.45

TOP ALTITUDE: ASSIGNED BY ATC



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 2: Climb via heading 022°, intercept SAC R-251 to SOKOY/ SAC 13 DME.

TAKEOFF RUNWAY 20: Turn left heading 032°, intercept ILA R-149 to SOKOY/ ILA 39 DME.

SACRAMENTO TRANSITION (SOKOY3.SAC): From over SOKOY on SAC R-251 to SAC VORTAC.

WILLIAMS TRANSITION (SOKOY3.ILA): From over SOKOY on ILA R-149 to ILA VORTAC.

VISALIA, CALIFORNIA | AL-558 (FAA) | 22167

ILS or LOC RWY 30

VISALIA MUNI (VIS)

LOC/DME I-VIS	APP CRS	Rwy Idg	5635
108.5	301°	TDZE	295
Chan 22		Apt Elev	295

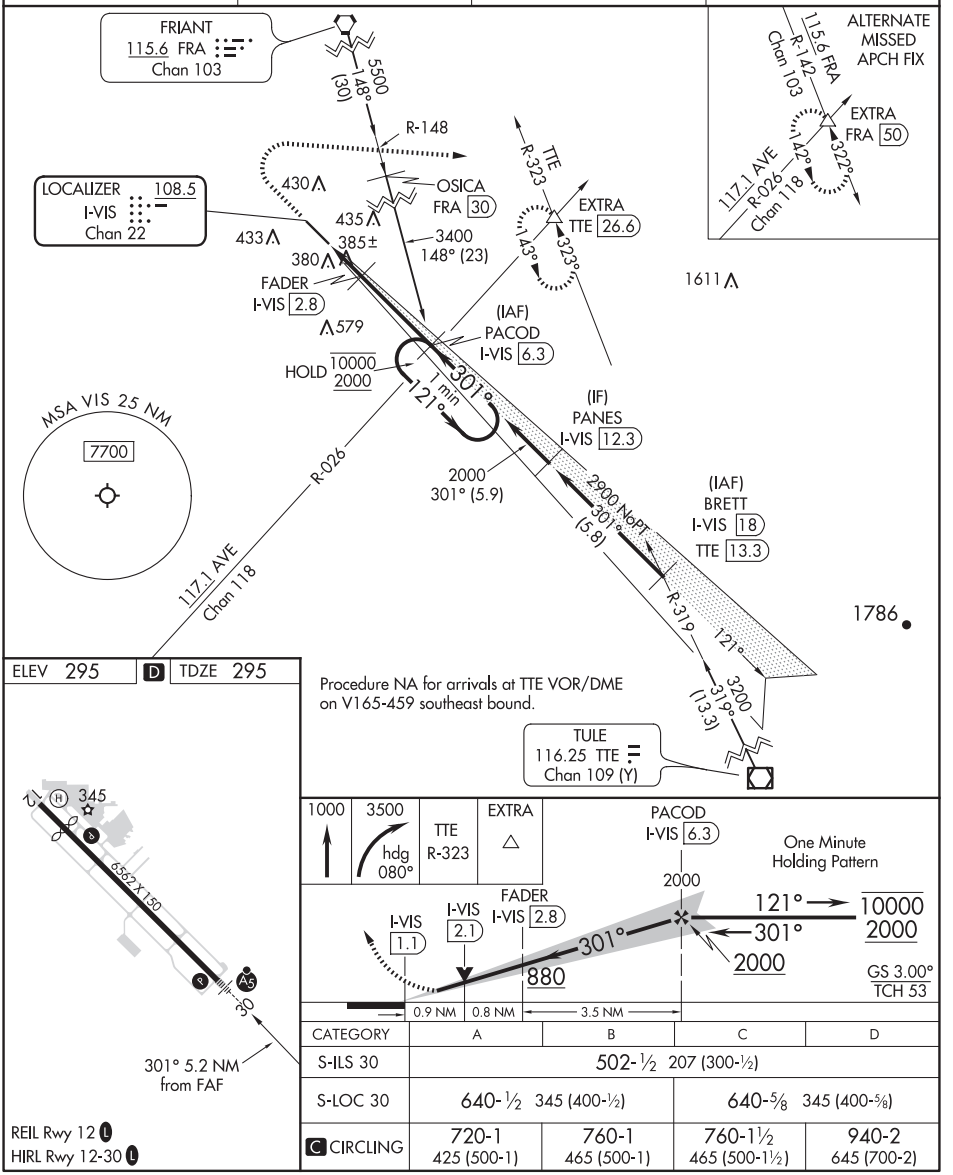
DME required.

NA For inop ALS, increase S-LOC 30 Cat C/D visibility to 1 SM.

MALSR

MISSED APPROACH: Climb to 1000 then climbing right turn to 3500 on heading 080° and on TTE VOR/DME R-323 to EXTRA INT/TTE 26.6 DME and hold, continue climb-in-hold to 3500.

AWOS-3PT	FRESNO APP CON	CLNC DEL	UNICOM
119.925	118.5	118.5	123.05 (CTAF) L



ELEV 295 | D | TDZE 295

Procedure NA for arrivals at TTE VOR/DME on V165-459 southeast bound.

CATEGORY	A	B	C	D
S-ILS 30	502-½ 207 (300-½)			
S-LOC 30	640-½ 345 (400-½)		640-⅝ 345 (400-⅝)	
C CIRCLING	720-1 425 (500-1)	760-1 465 (500-1)	760-1½ 465 (500-1½)	940-2 645 (700-2)

REIL Rwy 12 L
HIRL Rwy 12-30 L

VISALIA, CALIFORNIA
Amdt 9A 16JUN22

36°19'N-119°24'W

VISALIA MUNI (VIS)

ILS or LOC RWY 30

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS	APP CRS	Rwy Idg	5635
CH 82423	121°	TDZE	293
W12A		Apt Elev	295

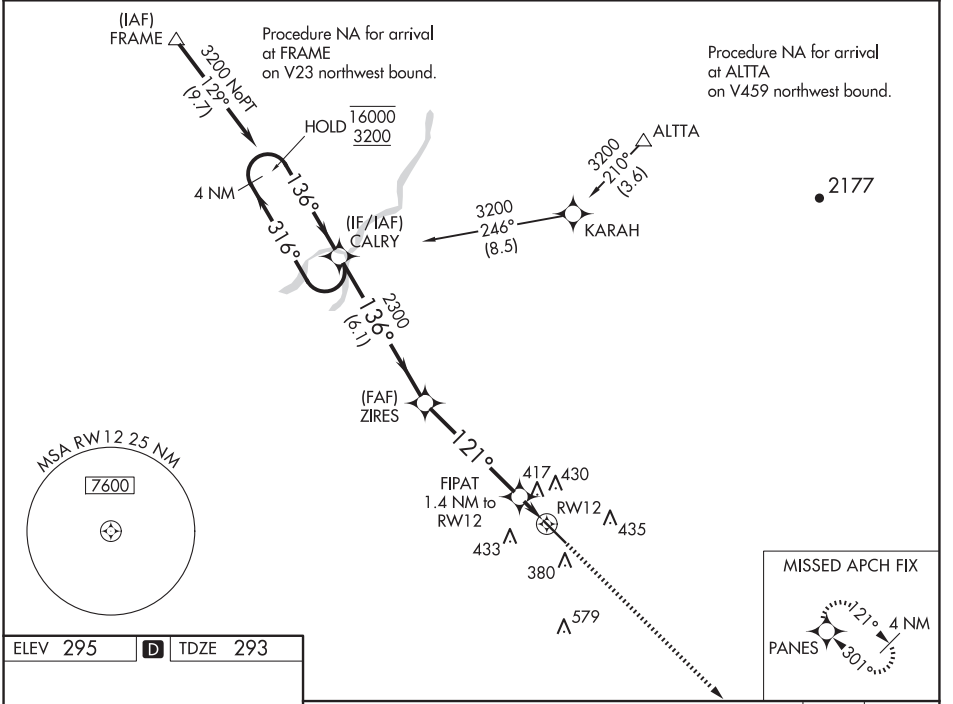
RNAV (GPS) RWY 12
VISALIA MUNI (VIS)

RNP APCH.

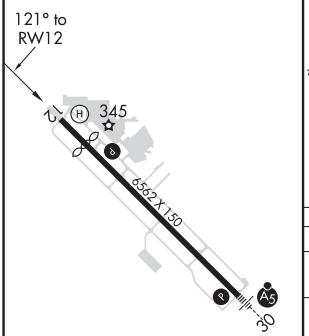
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

MISSED APPROACH: Climb to 2900 direct PANES and hold.

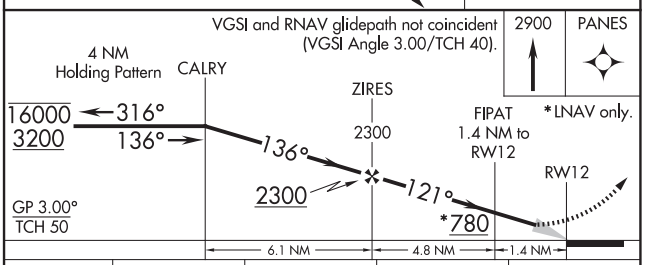
AWOS-3PT	FRESNO APP CON	CLNC DEL	UNICOM
119.925	118.5	118.5	123.05 (CTAF) L



ELEV 295 D TDZE 293



REIL Rwy 12 L
HIRL Rwy 12-30 L



CATEGORY	A	B	C	D
LPV DA	543-¾ 250 (300-¾)			
LNAV/VNAV DA	697-1⅛ 404 (500-1⅛)			
LNAV MDA	680-1 387 (400-1)		680-1⅛ 387 (400-1⅛)	
C CIRCLING	720-1 425 (500-1)	760-1 465 (500-1)	760-1½ 465 (500-1½)	940-2 645 (700-2)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

VISALIA, CALIFORNIA | AL-558 (FAA) | 19227

RNAV (GPS) RWY 30
VISALIA MUNI (VIS)

WAAS	APP CRS	Rwy Idg	5635
CH 77623	301°	TDZE	295
W30A		Apt Elev	295

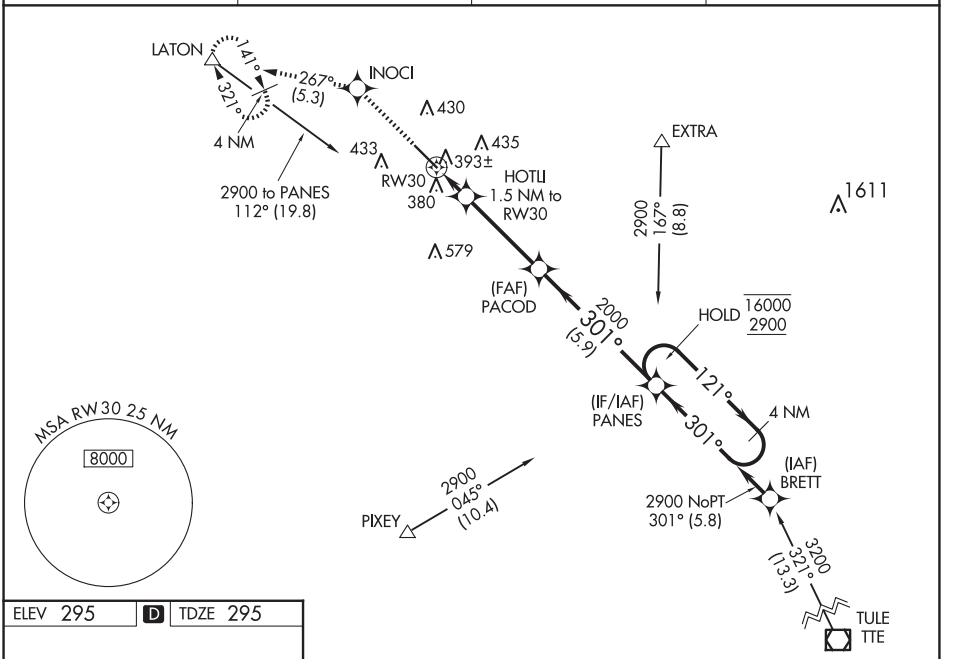
RNP APCH.

T A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. For inop ALS, increase LNAV/VNAV all Cats visibility to ¾ SM, LNAV Cats C/D to 1 SM.

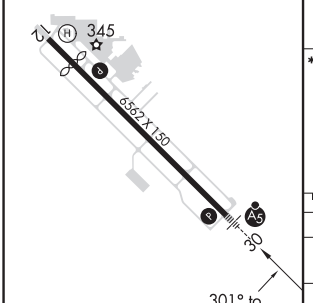
MALSR

MISSED APPROACH: Climb to 3000 direct INOCI and on track 267° to LATON and hold, continue climb-in-hold to 3000.

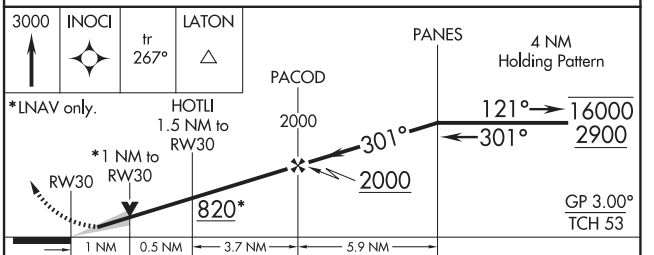
AWOS-3PT	FRESNO APP CON	CLNC DEL	UNICOM
119.925	118.5	118.5	123.05 (CTAF) L



ELEV 295 | D | TDZ 295



REIL Rwy 12 L
HIRL Rwy 12-30 L



CATEGORY	A	B	C	D
LPV DA	502-½ 207 (300-½)			
LNAV/VNAV DA	554-½ 259 (300-½)			
LNAV MDA	660-½ 365 (400-½)		660-⅝ 365 (400-⅝)	
C CIRCLING	720-1 425 (500-1)	760-1 465 (500-1)	760-1½ 465 (500-1½)	940-2 645 (700-2)

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

WAAS CH 50144 W02A	APP CRS 018°	Rwy Ldg 4502 TDZE 152 Apt Elev 163

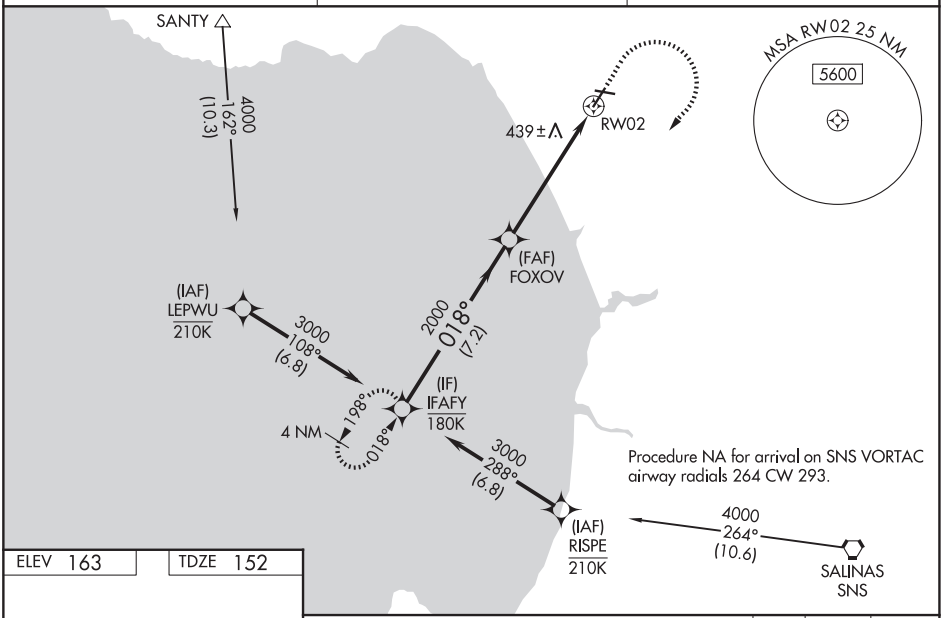
RNAV (GPS) RWY 2
WATSONVILLE MUNI (WVI)

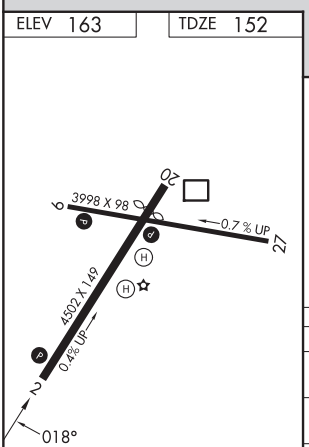
RNP APCH - GPS.

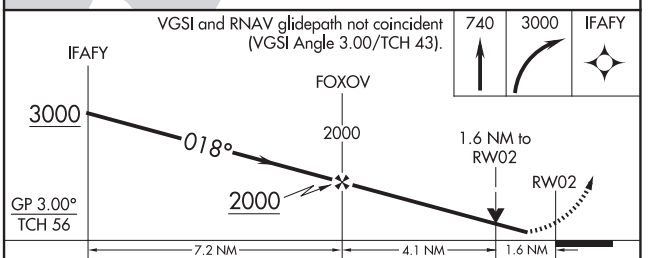
Rwy 2 helicopter visibility reduction below ¾ SM NA. Circling Rwy 9, 27 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 0°C or above 54°C. Circling NA west of Rwy 2-20. When local altimeter setting not received, use Monterey altimeter setting and increase LPV DA to 510 feet and all visibilities ⅛ SM. Increase LNAV/VNAV DA to 834 feet and all visibilities ¼ SM. Increase all MDAs 80 feet and LNAV visibility Cat C/D ⅛ SM, and Circling visibility Cat C ⅛ SM. Baro-VNAV and VDP NA when using Monterey altimeter setting.

MISSED APPROACH: (Do not exceed 200K until IFAFY) Climb to 740 then climbing right turn to 3000 direct IFAFY and hold, continue climb-in-hold to 3000.

ASOS	NORCAL APP CON	UNICOM
132.275	127.15 307.125	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	448-⅞ 296 (300-⅞)			
LNAV/VNAV DA	772-1¾ 620 (700-1¾)			
LNAV MDA	700-1 548 (600-1)		700-1⅝ 548 (600-1⅝)	
CIRCLING	700-1 537 (600-1)		700-1⅝ 537 (600-1⅝)	1160-3 997 (1000-3)

REIL Rwy 2 L
MIRL Rwy 2-20 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

WATSONVILLE, CALIFORNIA | AL-805 (FAA) | 25219

LOC RWY 2

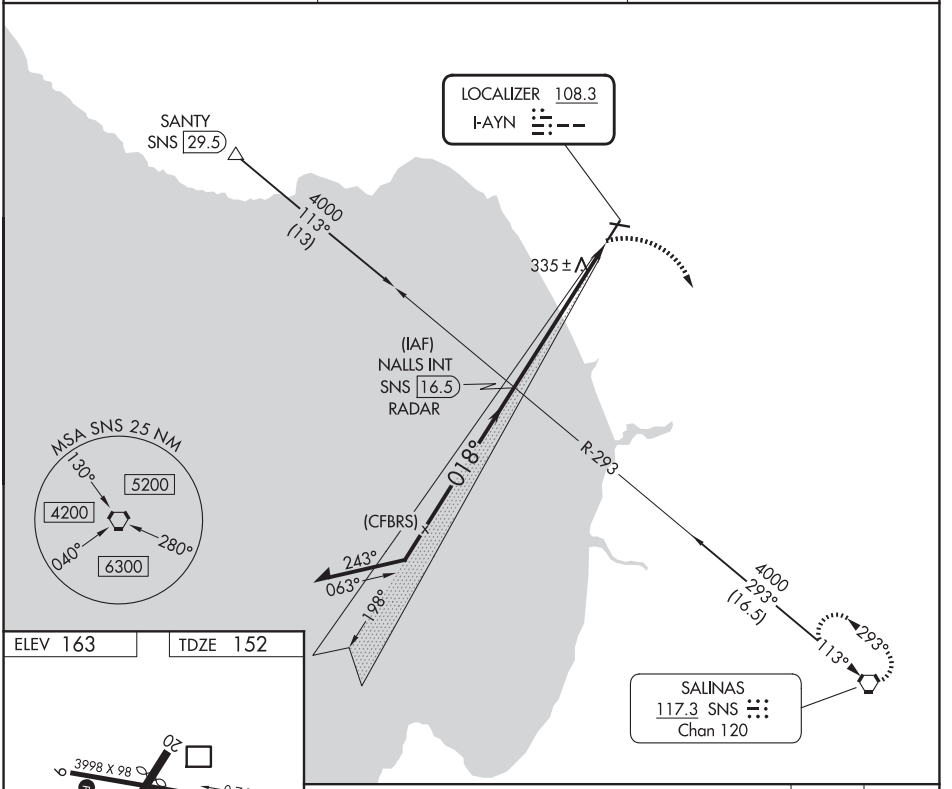
WATSONVILLE MUNI (WVI)

LOC I-AYN	APP CRS	Rwy Ldg	4502
108.3	018°	TDZE	152
		Apt Elev	163

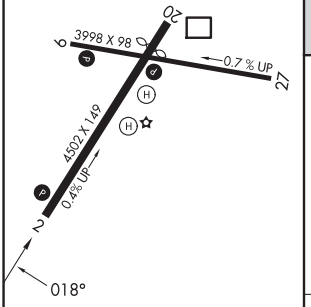
T NA — Rwy 2 helicopter visibility reduction below ¾ SM NA. Circling NA west of Rwy 2-20. Circling Rwy 9, 27 NA at night. When local altimeter setting not received, use Monterey altimeter setting and increase all MDAs 80 feet.

MISSED APPROACH: Climbing right turn to 5000 direct SNS VORTAC and hold, continue climb-in-hold to 5000.

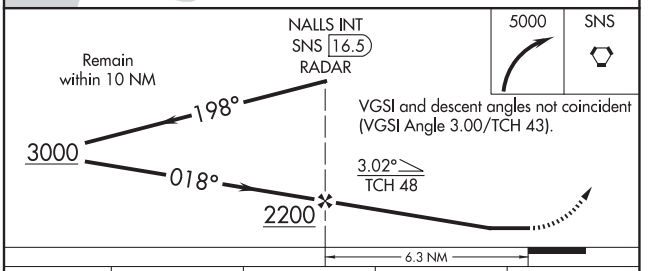
ASOS	NORCAL APP CON	UNICOM
132.275	127.15 307.125	122.8 (CTAF) L



ELEV 163 | TDZE 152



REIL Rwy 2 L
MIRL Rwy 2-20 L



FAF to MAP 6.3 NM					
Knots	60	90	120	150	180
Min:Sec	6:18	4:12	3:09	2:31	2:06

CATEGORY	A	B	C	D
S-2	1140-1¼ 988 (1000-1¼)	1140-1½ 988 (1000-1½)	1140-3 988 (1000-3)	
CIRCLING	1140-1¼ 977 (1000-1¼)	1140-1½ 977 (1000-1½)	1140-3 977 (1000-3)	1160-3 997 (1000-3)

SW-2, 07 AUG 2025 to 02 OCT 2025

VORTAC SNS	APP CRS	Rwy Ldg	N/A
117.3	314°	TDZE	N/A
Chan 120		Apt Elev	163

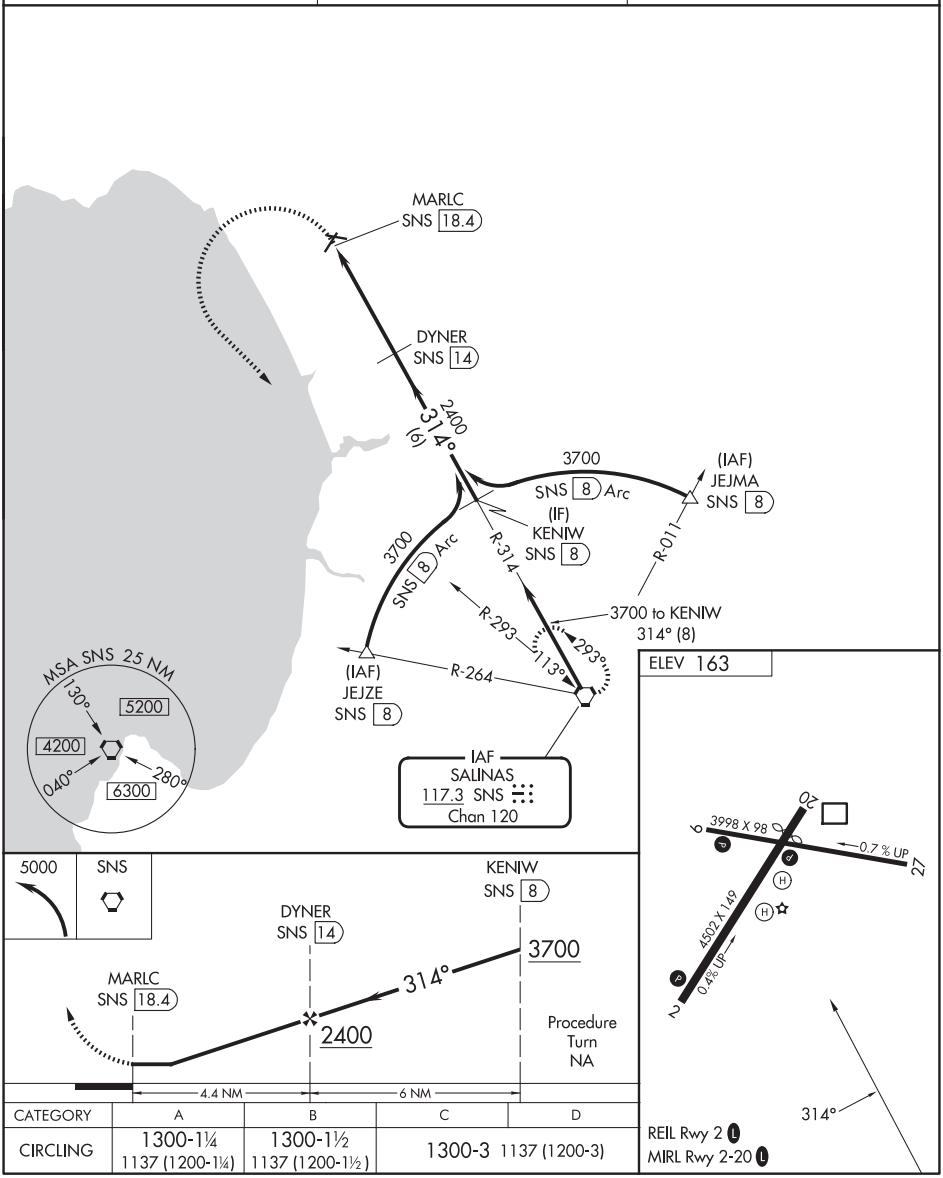
VOR-A

WATSONVILLE MUNI (WVI)

Circling NA west of Rwy 2-20. When local altimeter setting not received, use Monterey altimeter setting and increase all MDAs 80 feet. DME required. Circling Rwy 27 NA at night.

MISSED APPROACH: Climbing left turn to 5000 direct SNS VORTAC and hold, continue climb-in-hold to 5000.

ASOS	NORCAL APP CON	UNICOM
132.275	127.15 307.125	122.8 (CTAF) L



CATEGORY	A	B	C	D
CIRCLING	1300-1¼ 1137 (1200-1¼)	1300-1½ 1137 (1200-1½)	1300-3 1137 (1200-3)	

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

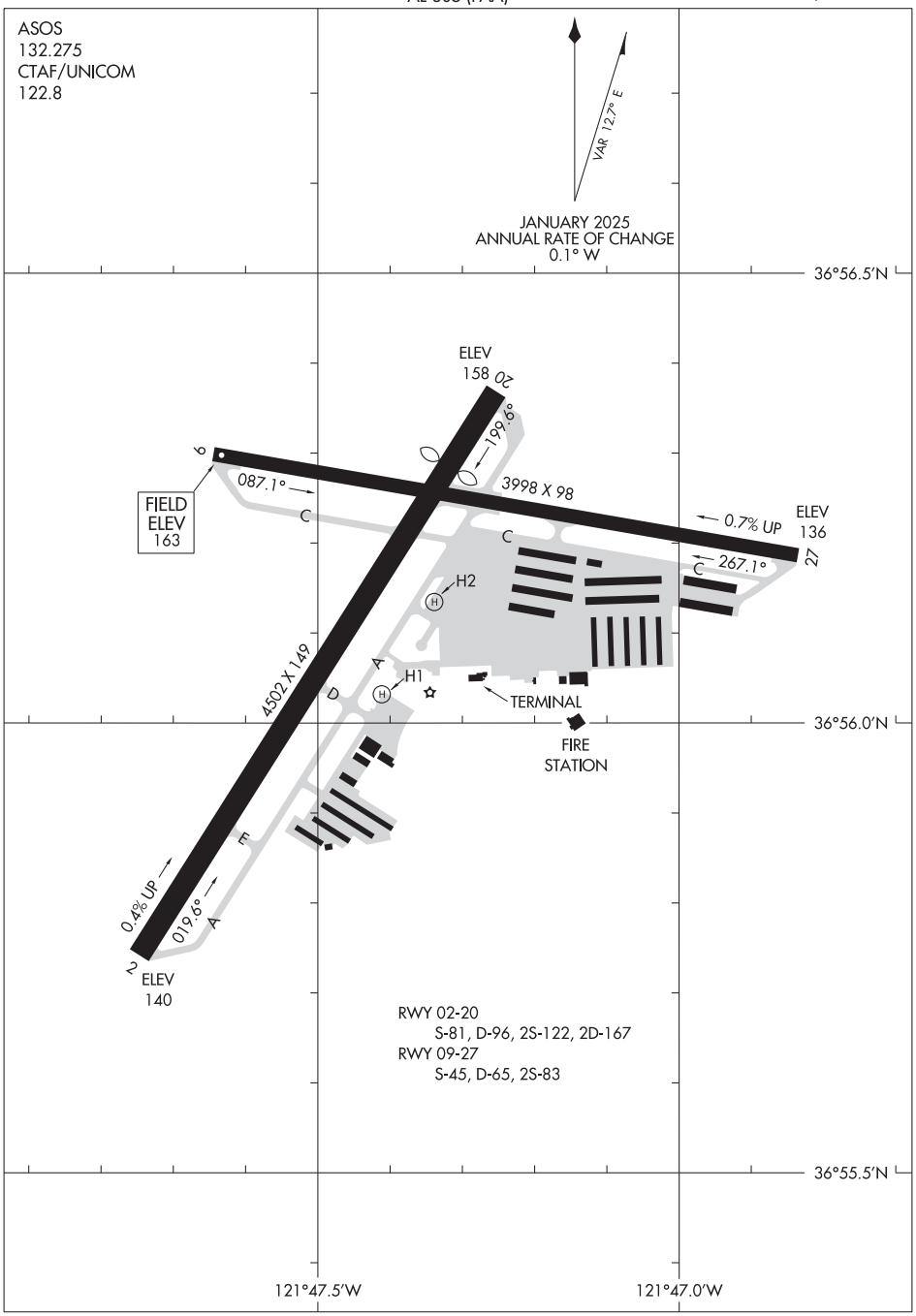
25219

AIRPORT DIAGRAM

WATSONVILLE MUNI (WVI)

WATSONVILLE, CALIFORNIA

AL-805 (FAA)



SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

AIRPORT DIAGRAM

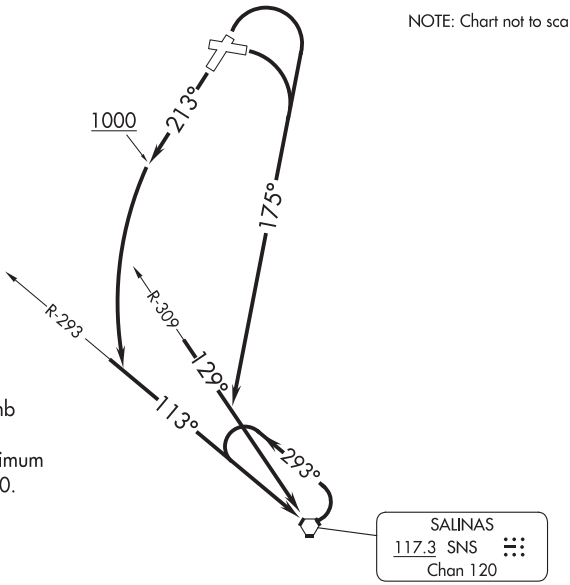
25219

WATSONVILLE, CALIFORNIA
WATSONVILLE MUNI (WVI)

WATSONVILLE FOUR DEPARTURE (OBSTACLE)

ASOS
132.275
NORCAL DEP CON
127.15 307.125
CTAF
122.8

NOTE: Chart not to scale.



TAKEOFF MINIMUMS

Rwy 27: NA - Airport Obstacles.
Rwy 20: Standard.
Rwy 2: Standard with minimum climb of 500′ per NM to 2600.
Rwy 9: 300-1 or standard with minimum climb of 270′ per NM to 400.

TAKEOFF OBSTACLE NOTES

Rwy 2: Lighting 8′ from DER, 84′ left of centerline, 1′ AGL/159′ MSL. Lighting 9′ from DER, 84′ right of centerline, 158′ MSL. Pole 14′ from DER, 349′ left of centerline, 205′ MSL. Pole, building, vehicles on road, tree and fence beginning 15′ from DER, 322′ left of centerline, up to 50′ AGL/213′ MSL. Trees beginning 278′ from DER, 414′ right of centerline, up to 188′ MSL. Pole, vehicles on road, stack, tree and building beginning 429′ from DER, 157′ left of centerline, up to 58′ AGL/220′ MSL. Pole, building and tree beginning 808′ from DER, 22′ right of centerline, up to 40′ AGL/198′ MSL. Tree and transmission line beginning 1021′ from DER, 137′ right of centerline, up to 222′ MSL. Pole 1174′ from DER, 328′ right of centerline, 57′ AGL/224′ MSL. Trees beginning 1275′ from DER, 298′ right of centerline, up to 242′ MSL. Tree 1345′ from DER, 320′ left of centerline, 236′ MSL. Tree 2249′ from DER, 371′ left of centerline, 264′ MSL.

Rwy 9: Tree and pole beginning 1′ from DER, 152′ left of centerline, up to 157′ MSL. Pole 65′ from DER, 301′ right of centerline, 31′ AGL/148′ MSL. Tree, fence, building, vehicles on road and pole beginning 74′ from DER, 251′ left of centerline, up to 160′ MSL. Pole, tree, building, tank and stack beginning 210′ from DER, 139′ left of centerline, up to 177′ MSL. Pole 231′ from DER, 250′ right of centerline, 32′ AGL/153′ MSL. Trees beginning 312′ from DER, 560′ right of centerline, up to 173′ MSL. Tower, pole and tree beginning 828′ from DER, 136′ left of centerline, up to 52′ AGL/181′ MSL. Trees beginning 915′ from DER, 146′ right of centerline, up to 197′ MSL. Tree 1815′ from DER, 365′ left of centerline, 215′ MSL. Tower 4697′ from DER, 1365′ right of centerline, 189′ AGL/292′ MSL.

Rwy 20: Tree 57′ from DER, 500′ left of centerline, 153′ MSL. Fence 57′ from DER, 268′ right of centerline, 7′ AGL/143′ MSL. Pole 95′ from DER, 467′ left of centerline, 175′ MSL. Pole, vehicles on road and tree beginning 96′ from DER, 377′ left of centerline, up to 50′ AGL/183′ MSL. Transmission line 848′ from DER, 505′ left of centerline, 44′ AGL/184′ MSL. Tree and transmission line beginning 919′ from DER, 520′ left of centerline, up to 190′ MSL. Tree 1153′ from DER, 286′ right of centerline, 169′ MSL. Tree 1207′ from DER, 615′ left of centerline, 197′ MSL. Tree, building and transmission line beginning 1267′ from DER, 318′ left of centerline, up to 203′ MSL. Tree 1336′ from DER, 7′ right of centerline, 177′ MSL. Tree 1337′ from DER, 46′ right of centerline, 192′ MSL. Tree 2201′ from DER, 776′ right of centerline, 240′ MSL.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 2 and 9: Climbing right turn on heading 175° to intercept SNS VORTAC R-309 to SNS VORTAC, thence . . . .
TAKEOFF RUNWAY 20: Climb heading 213° to 1000, then climbing left turn to intercept SNS VORTAC R-293 to SNS VORTAC, thence . . . .
. . . . continue climb in SNS holding pattern to cross SNS VORTAC at or above MEA/MCA for route of flight.

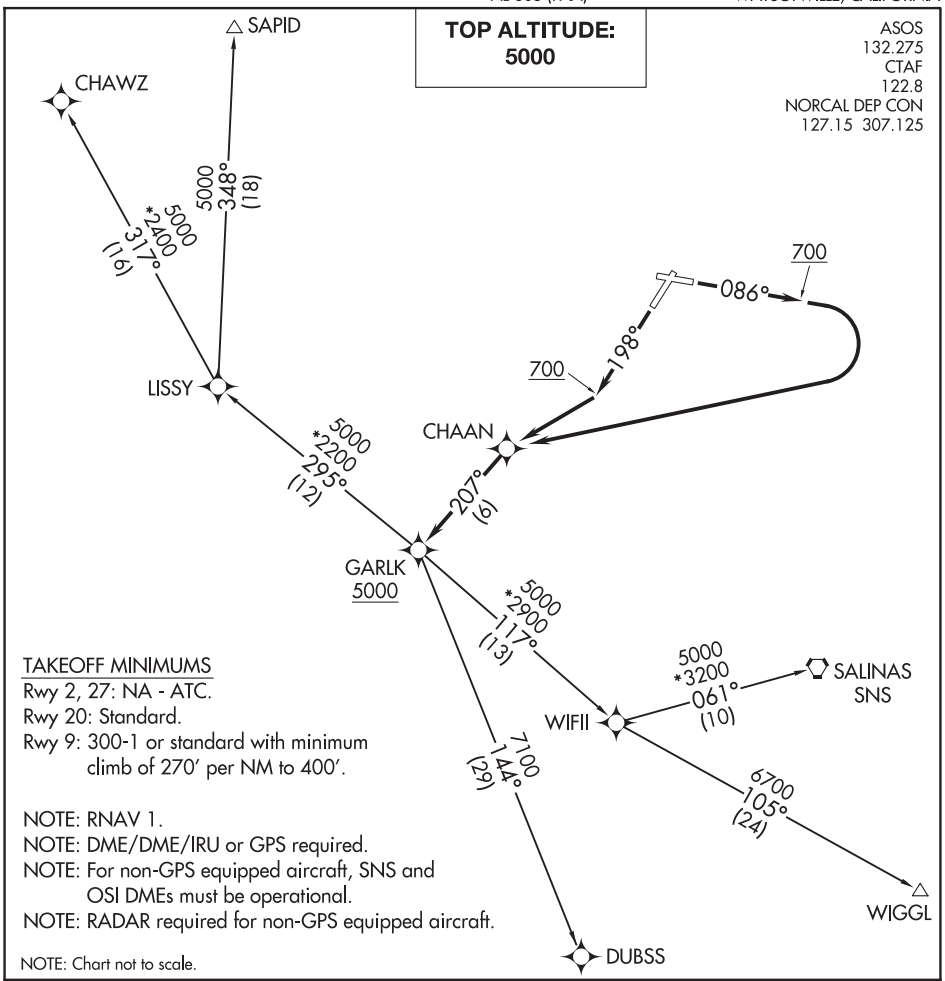
SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

(GARLK1.GARLK) 18256

GARLK ONE DEPARTURE (RNAV)

WATSONVILLE MUNI (WVI)
WATSONVILLE, CALIFORNIA

AL-805 (FAA)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb heading 086° to 700, then right turn direct CHAAN, thence. . . .

TAKEOFF RUNWAY 20: Climb heading 198° to 700, then direct CHAAN, thence. . . .

. . . . on track 207° to cross GARLK at or above 5000, then on (transition).

CHAWZ TRANSITION (GARLK1.CHAWZ)
DUBSS TRANSITION (GARLK1.DUBSS)
SALINAS TRANSITION (GARLK1.SNS)
SAPID TRANSITION (GARLK1.SAPID)
WIGGL TRANSITION (GARLK1.WIGGL)

SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS	Rwy Idg	5000
150°	TDZE	2934
	Apt Elev	2943

RNAV (GPS) RWY 14

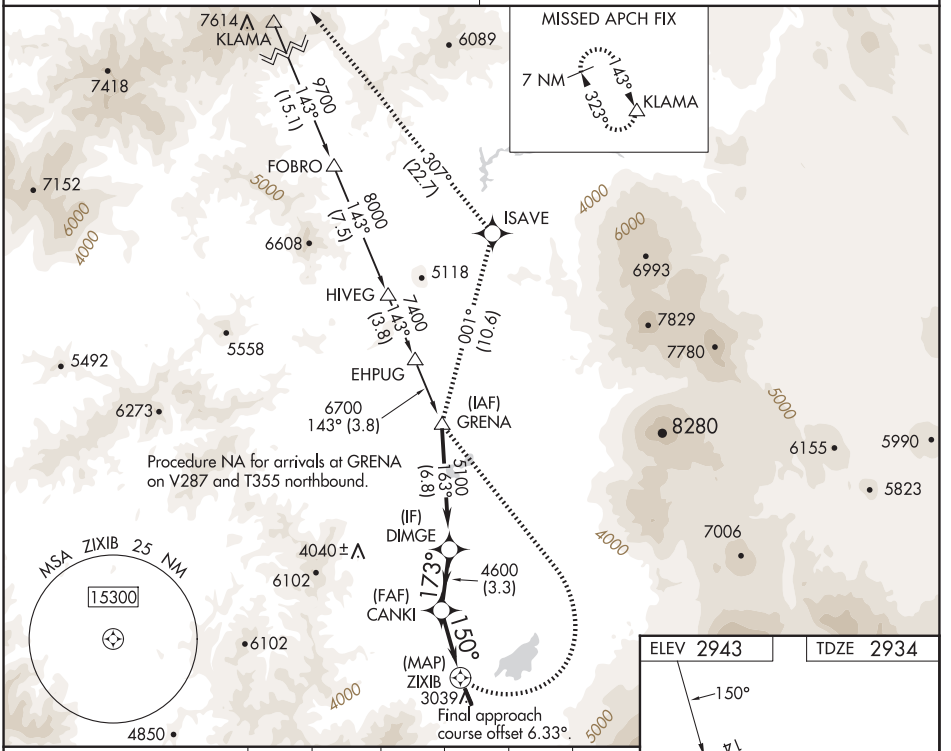
WEED (O46)

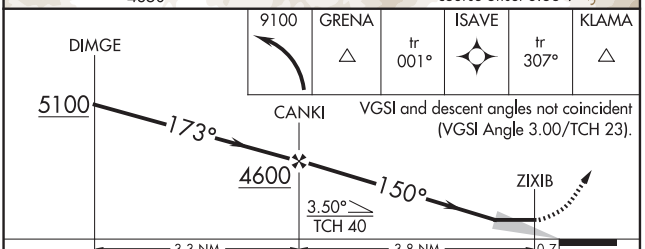
RNP APCH - GPS.

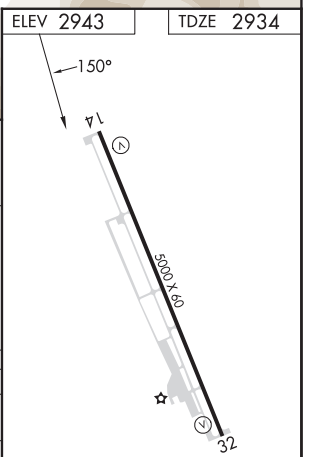
T A NA Circling NA southwest of Rwy 14-32. Use Montague altimeter setting.

MISSED APPROACH: (Do not exceed 185K until GRENA) Climbing left turn to 9100 direct GRENA then on track 001° to ISAVE then on track 307° to KLAMA and hold.
*Missed approach requires minimum climb of 325 feet per NM to 4000.

SEATTLE CENTER	UNICOM
124.85 306.3	122.7 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA*	3440-1 506 (500-1)		3580-1⅞ 646 (700-1⅞)	3700-2½ 766 (800-2½)
LNAV MDA	3440-1 506 (500-1)	3480-1 546 (600-1)	3780-2½ 846 (900-2½)	3820-2½ 886 (900-2½)
C CIRCLING	3680-1 737 (800-1)	3840-1¼ 897 (900-1¼)	4220-3 1277 (1300-3)	4440-3 1497 (1500-3)

MIRL Rwy 14-32 L

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

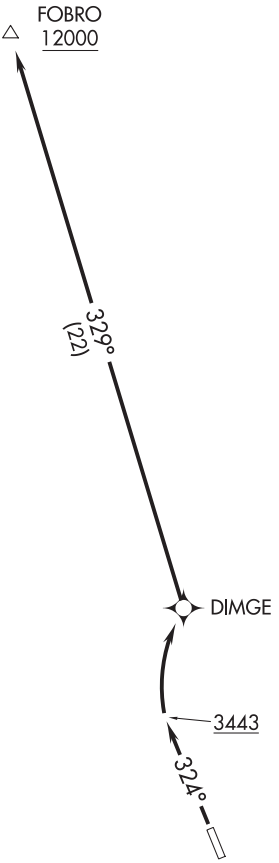
(FOBRO1.FOBRO) 17229

FOBRO ONE DEPARTURE (OBSTACLE) (RNAV)

AL-10021 (FAA)

WEED (O46)
WEED, CALIFORNIA

SEATTLE CENTER
124.85 306.3
UNICOM
122.7



NOTE: RNAV 1.
NOTE: GPS required.

TAKEOFF MINIMUMS
Rwy 14: NA-obstacles.
Rwy 32: Standard with minimum climb of 325′ per NM to 12000.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 32: Climb heading 324° to 3443, then right turn direct DIMGE, then on track 329° to cross FOBRO at or above 12000 or as assigned by ATC.

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

RNAV (GPS) RWY 16

ELLS FLD/WILLITS MUNI (O28)

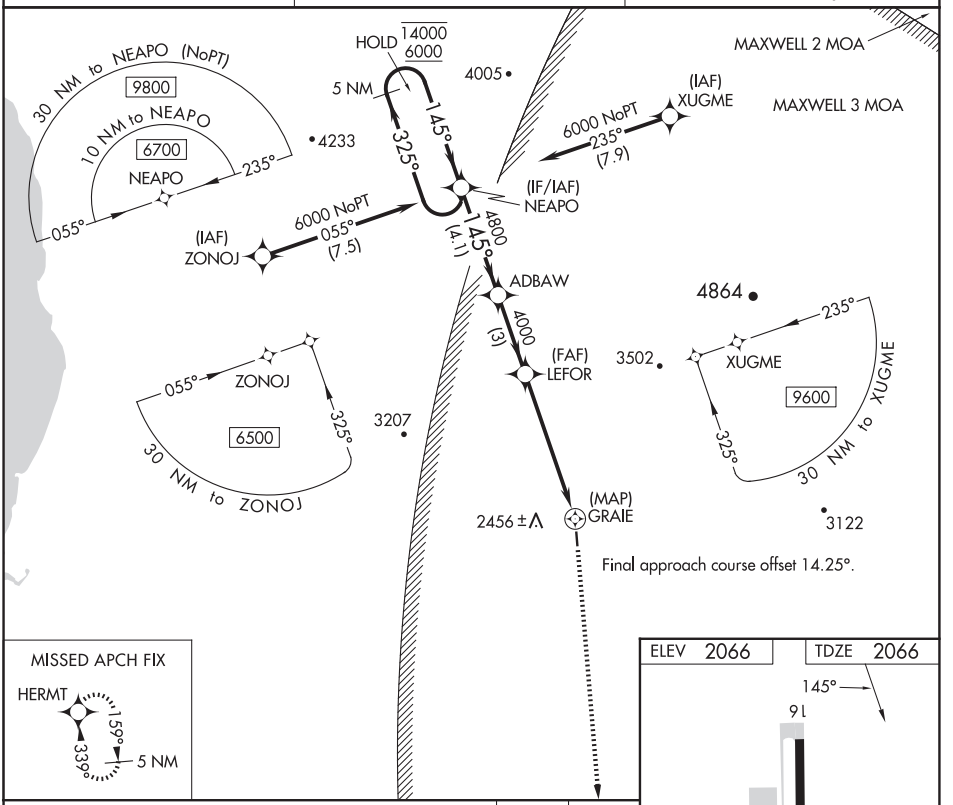
APP CRS		
145°	Rwy Idg	2705
	TDZE	2066
	Apt Elev	2066

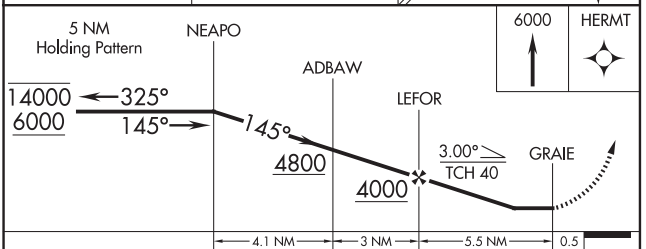
RNP APCH - GPS.

Procedure NA at night. Circling NA west of Rwy 16-34.
Use Ukiah altimeter setting; when not received, procedure NA.
Rwy 16 helicopter visibility reduction below 1 SM NA.

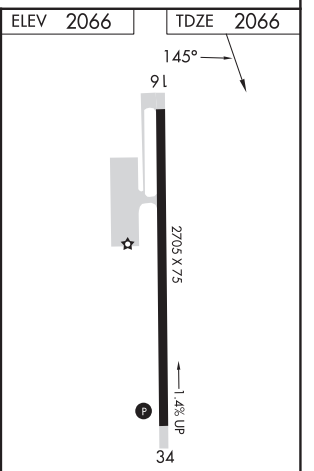
MISSED APPROACH: Climb to 6000 direct HERMT and hold.

UKI ASOS	OAKLAND CENTER	UNICOM
119.275	132.2 350.3	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	3620-1¼ 1554 (1600-1¼)	3620-1½ 1554 (1600-1½)	3620-3 1554 (1600-3)	NA
C CIRCLING	3620-1¼ 1554 (1600-1¼)	3620-1½ 1554 (1600-1½)	3620-3 1554 (1600-3)	NA



SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

WILLITS, CALIFORNIA | AL-9480 (FAA) | 21336

APP CRS		
339°	Rwy Idg	2705
	TDZE	2066
	Apt Elev	2066

RNAV (GPS) RWY 34

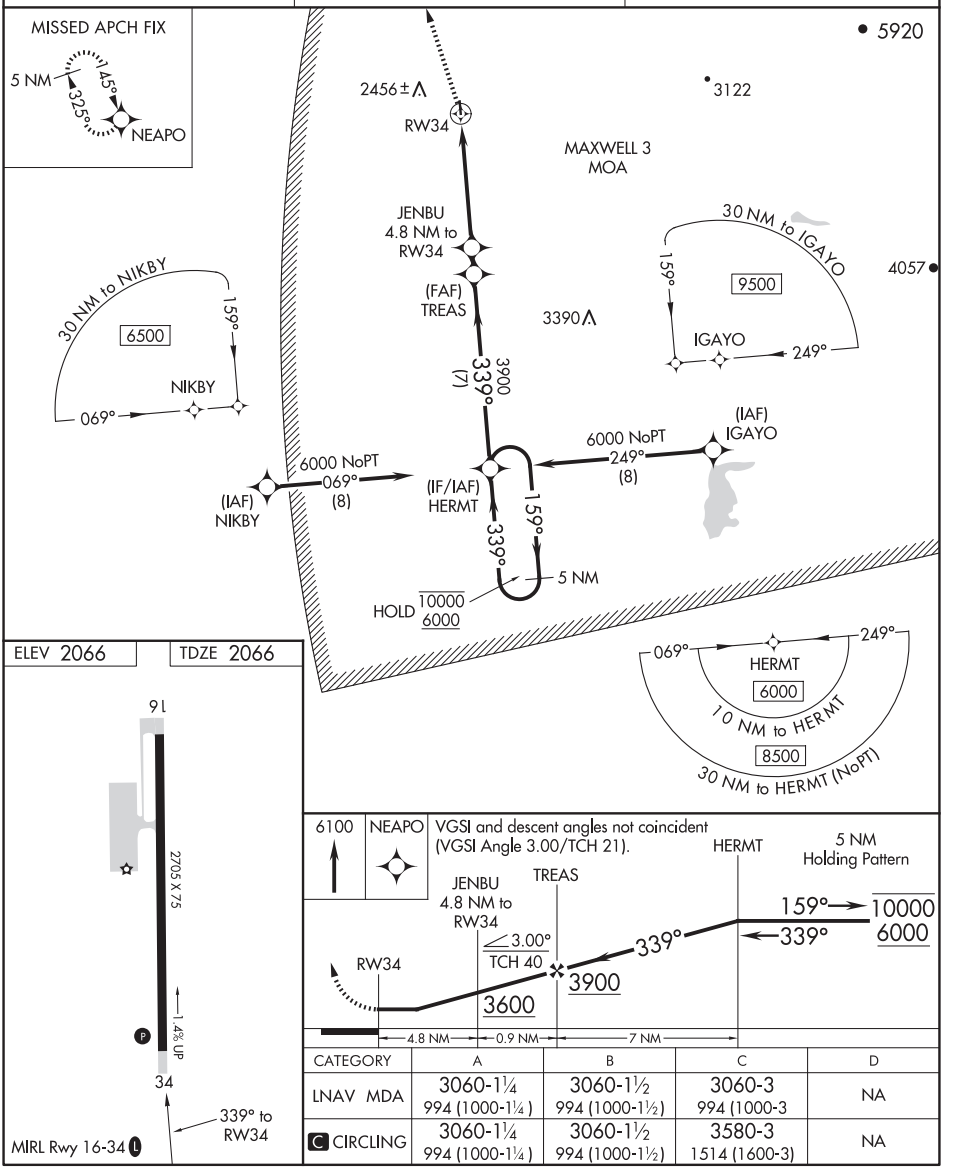
ELLS FLD/WILLITS MUNI (O28)

RNP APCH - GPS.

Circling NA west of Rwy 16-34. Rwy 34 helicopter visibility reduction below 1 SM NA. Procedure NA at night. Use Ukiah altimeter setting; when not received, procedure NA.

MISSED APPROACH: Climb to 6100 direct NEAPO and hold, continue climb-in-hold to 6100.

UKI ASOS	OAKLAND CENTER	UNICOM
119.275	132.2 350.3	122.8 (CTAF)



ELEV 2066 | TDZE 2066

CATEGORY	A	B	C	D
LNAV MDA	3060-1¼ 994 (1000-1¼)	3060-1½ 994 (1000-1½)	3060-3 994 (1000-3	NA
C CIRCLING	3060-1¼ 994 (1000-1¼)	3060-1½ 994 (1000-1½)	3580-3 1514 (1600-3)	NA

WILLITS, CALIFORNIA
Amdt 2 02DEC21

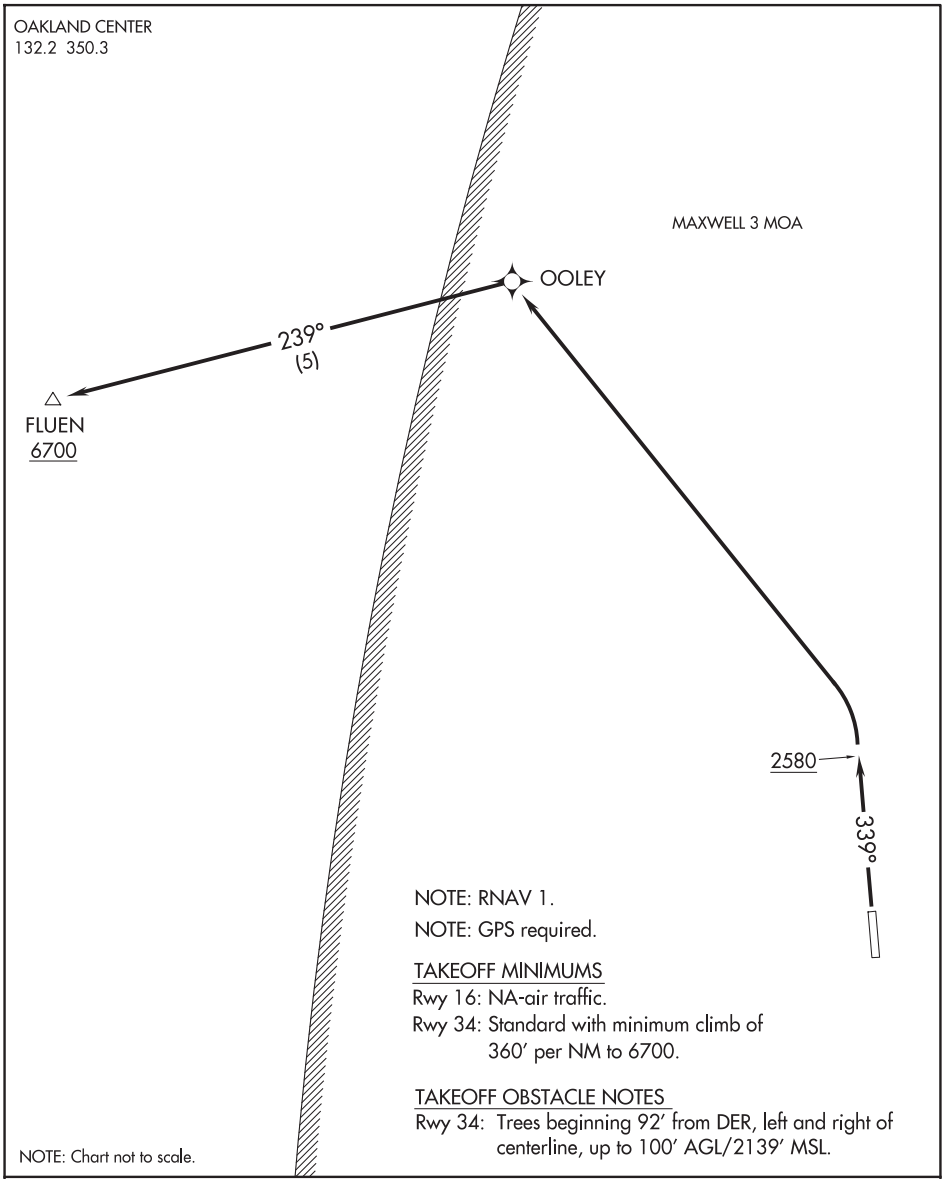
39°27'N-123°22'W

ELLS FLD/WILLITS MUNI (O28)

RNAV (GPS) RWY 34

SW-2, 07 AUG 2025 to 02 OCT 2025

FLUEN TWO DEPARTURE (OBSTACLE) (RNAV)



SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 34: Climb heading 339° to 2580, then left turn direct OOLEY, and on track 239° to cross FLUEN at or above 6700.

(ENI1.ENI) 21336

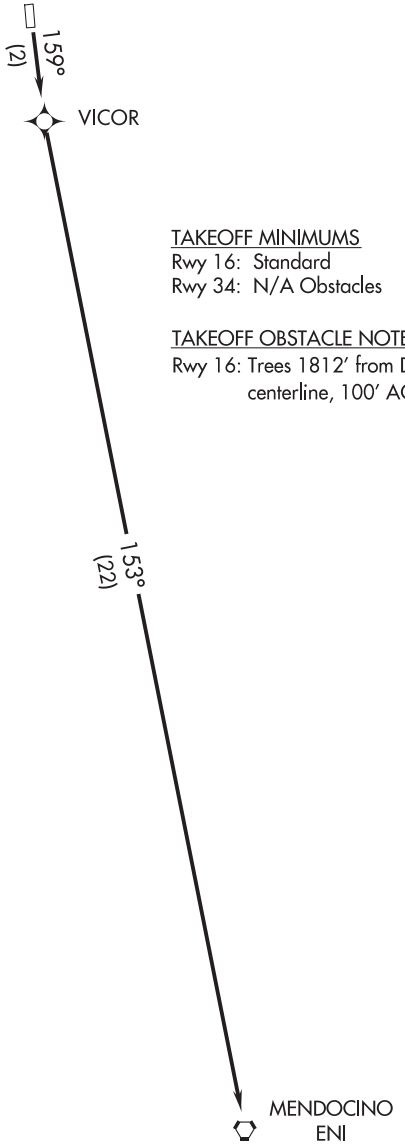
AL-9480 (FAA)

MENDOCINO ONE DEPARTURE (OBSTACLE) (RNAV)

ELLS FLD/WILLITS MUNI (O28)
WILLITS, CALIFORNIA

SW-2, 07 AUG 2025 to 02 OCT 2025

OAKLAND CENTER
132.2 350.3
UNICOM 122.8 (CTAF)



TAKEOFF MINIMUMS
Rwy 16: Standard
Rwy 34: N/A Obstacles

TAKEOFF OBSTACLE NOTES
Rwy 16: Trees 1812′ from DER, 844′ left of centerline, 100′ AGL/2139′ MSL.

NOTE: GPS required.
NOTE: RNAV 1

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb to 6000 direct VICOR WP, then via 153° track to ENI VORTAC, thence proceed on course.

WAAS CH 78422 W34A	APP CRS 344°	Rwy Idg 4125 TDZE 138 Apt Elev 141

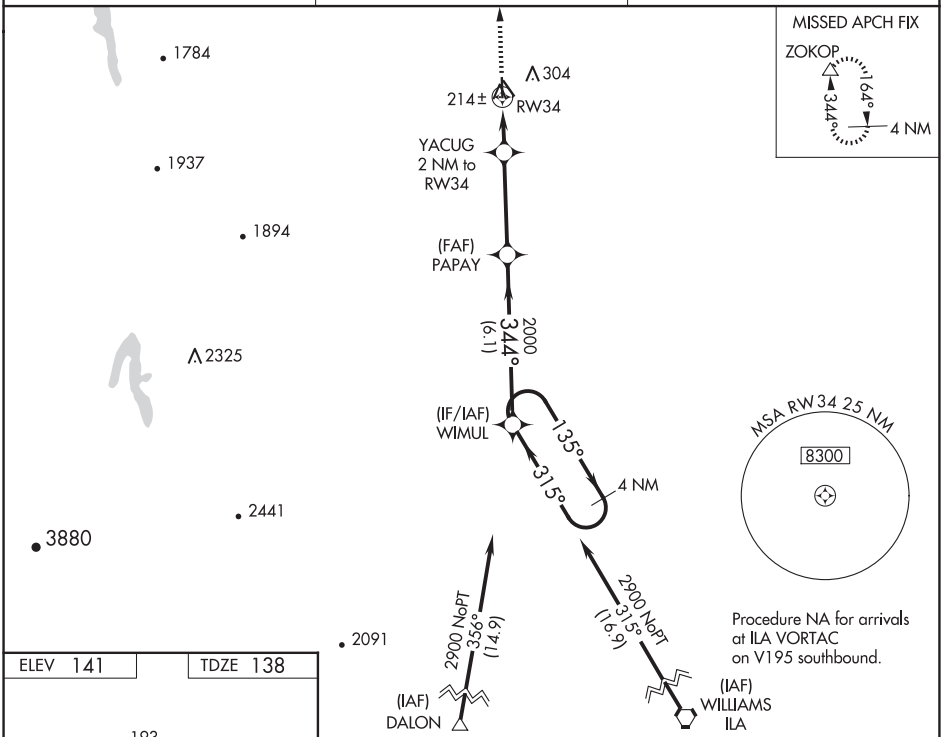
RNAV (GPS) RWY 34

WILLOWS/GLENN COUNTY (WLW)

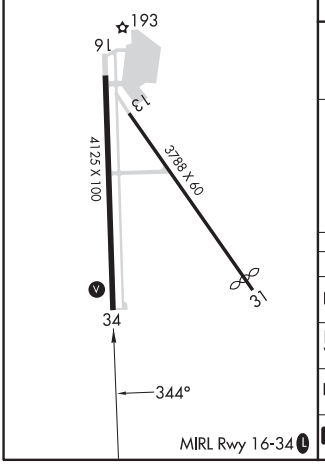
T NA — When Oroville Muni altimeter setting not received, procedure NA. Baro-VNAV NA. DME/DME RNP-0.3 NA. Use Oroville altimeter setting.

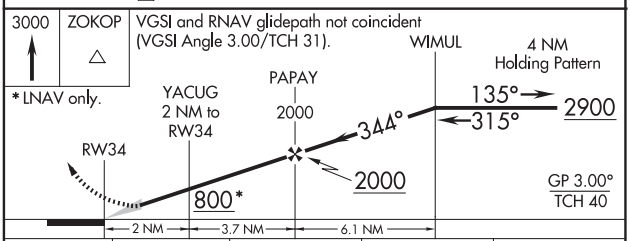
MISSED APPROACH: Climb to 3000 direct ZOKOP and hold.

OVE ASOS	OAKLAND CENTER	UNICOM
121.425	132.2 350.3	122.8 (CTAF) L



ELEV 141 TDZE 138





CATEGORY	A	B	C	D
LPV DA	460-1⅛ 322 (400-1⅛)			NA
LNAV/VNAV DA	460-1⅛ 322 (400-1⅛)			NA
LNAV MDA	540-1 402 (400-1)		540-1⅛ 402 (400-1⅛)	NA
C CIRCLING	680-1 539 (600-1)		680-1½ 539 (600-1½)	NA

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

WILLOWS, CALIFORNIA AL-5296 (FAA) 24081

VOR RWY 34

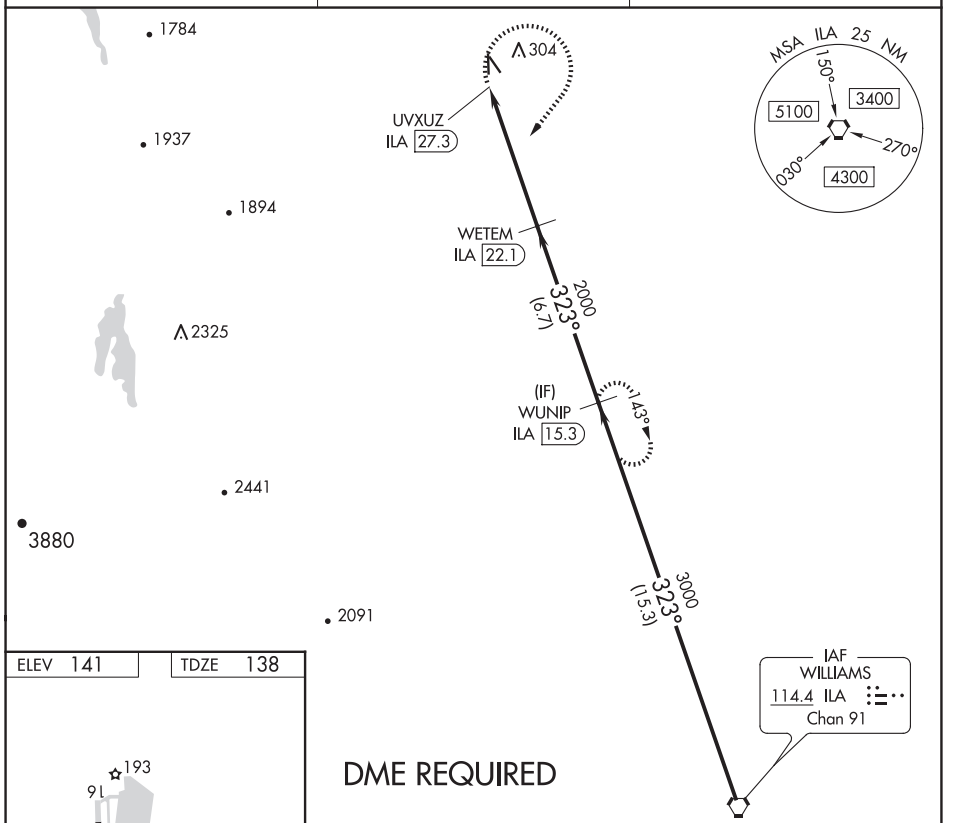
WILLOWS/GLENN COUNTY (WLW)

VORTAC ILA	APP CRS	Rwy Idg	4125
114.4	323°	TDZE	138
Chan 91		Apt Elev	141

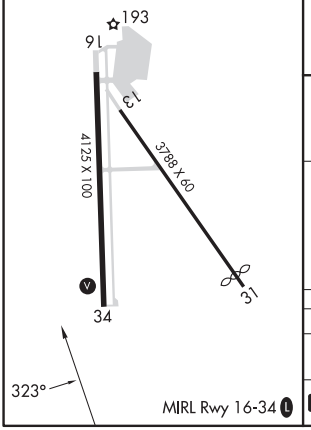
T NA When Oroville Muni altimeter setting not received, procedure NA.
DME required.
Use Oroville Muni altimeter setting.

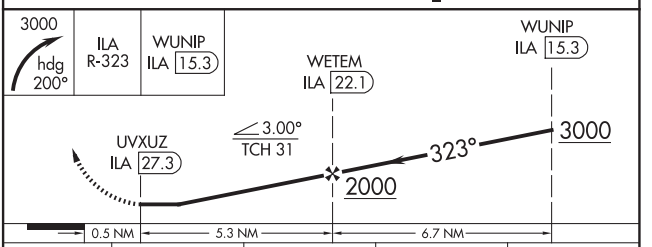
MISSED APPROACH: Climbing right turn to 3000 on heading 200° and on ILA VORTAC R-323 to WUNIP/ILA 15.3 DME and hold.

OVE ASOS	OAKLAND CENTER	UNICOM
121.425	132.2 350.3	122.8 (CTAF) L



ELEV 141 TDZE 138





CATEGORY	A	B	C	D
S-34	1000-1 862 (900-1)	1000-1¼ 862 (900-1¼)	1000-2½ 862 (900-2½)	NA
C CIRCLING	1000-1¼ 859 (900-1¼)		1000-2½ 859 (900-2½)	NA

WILLOWS, CALIFORNIA
Orig 22JUN17

39°31'N-122°13'W

WILLOWS/GLENN COUNTY (WLW)

VOR RWY 34

SW-2, 07 AUG 2025 to 02 OCT 2025

APP CRS	Rwy Idg	3244
004°	TDZE	125
	Apt Elev	125

RNAV (GPS) RWY 36

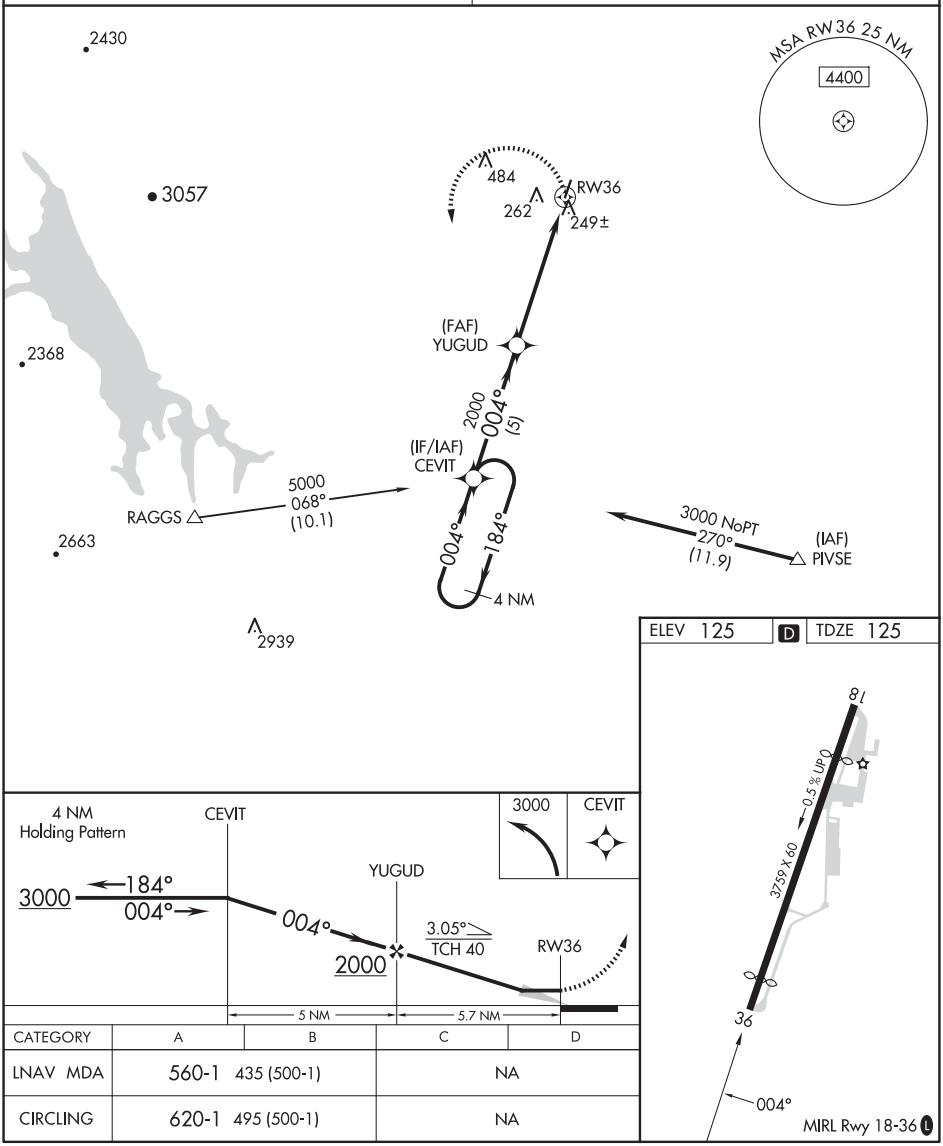
WATTS-WOODLAND (O41)

T
A NA

DME/DME RNP- 0.3 NA.
Procedure NA at night.
Use Sacramento Intl altimeter setting; when not received, use Sacramento Exec altimeter setting and increase all MDA 20 feet.

MISSED APPROACH: Climbing left turn to 3000 direct CEVIT and hold.

TRAVIS APP CON	UNICOM
126.6 281.45	122.8 (CTAF) L



CATEGORY	A	B	C	D
LNAV MDA	560-1	435 (500-1)	NA	
CIRCLING	620-1	495 (500-1)	NA	

SW-2, 07 AUG 2025 to 02 OCT 2025
SW-2, 07 AUG 2025 to 02 OCT 2025

INTENTIONALLY

LEFT

BLANK

SW-2, 07 AUG 2025 to 02 OCT 2025

SW-2, 07 AUG 2025 to 02 OCT 2025

INSIDE BACK COVER

INTENTIONALLY

LEFT

BLANK

U.S. TERMINAL PUBLICATION VOLUMES

AREA OF COVERAGE

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NSN 7641015059598

NGA REF. NO. OK-10-2859 TERMXFAABTPPSW2

EFF. DATE 25219