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Southwest (SW) Vol 2 of 4

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11 JUL 2024
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05 SEP 2024

Consult the Change Notice (CN) effective 08 AUG 2024 for revised Instrument Procedure Charts for this volume

Consult NOTAMs for latest information
Consult/Subscribe to FAA Safety Alerts and Charting Notices at:
http://www.faa.gov/air_traffic/flight_info/aeronav/safety_alerts/
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<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inoperative Components or Visual Aids Table</td>
<td>A1</td>
</tr>
<tr>
<td>Explanation of Terms/Landing Minima Data</td>
<td>B1</td>
</tr>
<tr>
<td>General Information</td>
<td>C1</td>
</tr>
<tr>
<td>Abbreviations</td>
<td>D1</td>
</tr>
<tr>
<td>Legend—IAP Planview</td>
<td>E1</td>
</tr>
<tr>
<td>Legend—IAP Profile</td>
<td>F1</td>
</tr>
<tr>
<td>Legend—Standard Terminal Arrival Charts</td>
<td>G1</td>
</tr>
<tr>
<td>Legend—Departure Procedure Charts</td>
<td>G2</td>
</tr>
<tr>
<td>Legend—Airport Diagram/Sketch</td>
<td>H1</td>
</tr>
<tr>
<td>Legend—Approach Lighting Systems</td>
<td>I1</td>
</tr>
<tr>
<td>Frequency Pairing</td>
<td>J1</td>
</tr>
<tr>
<td>Index of Terminal Charts and Minimums</td>
<td>K1</td>
</tr>
<tr>
<td>IFR Takeoff Minimums, Departure Procedures, and Diverse Vector Area</td>
<td>L1</td>
</tr>
<tr>
<td>IFR Alternate Airport Minimums</td>
<td>M1</td>
</tr>
<tr>
<td>Radar Minimums</td>
<td>N1</td>
</tr>
<tr>
<td>Land and Hold-Short Operations (LAHSO)</td>
<td>O1</td>
</tr>
<tr>
<td>Hot Spots</td>
<td>P1</td>
</tr>
<tr>
<td>Standard Terminal Arrival Charts</td>
<td>Z1</td>
</tr>
<tr>
<td>Terminal Charts</td>
<td>Page 1</td>
</tr>
<tr>
<td>Rate of Climb/Descent Table</td>
<td>Inside Back Cover</td>
</tr>
<tr>
<td>Area of Coverage</td>
<td>Back Cover</td>
</tr>
</tbody>
</table>

**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

FOR PROCUREMENT:
For digital products, visit our website at: https://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/

For a list of approved FAA Print Providers, visit our website at: https://www.faa.gov/air_traffic/flight_info/aeronav/print_providers/

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
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

<table>
<thead>
<tr>
<th>Inoperative Component or Visual Aid</th>
<th>Increase Visibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>All ALS types (except ODALS)</td>
<td>¼ mile</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Inoperative Component or Visual Aid</th>
<th>Increase Visibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALSF 1 &amp; 2, MALSR, SSALR</td>
<td>To RVR 4000†</td>
</tr>
<tr>
<td>TDZL or RCLS</td>
<td>To RVR 4500*</td>
</tr>
<tr>
<td>RVR</td>
<td>To 1/2 mile</td>
</tr>
</tbody>
</table>

*For ILS, LPV, GLS procedures with a 200 foot HAT, RVR 1800 authorized with use of FD or AP or HUD to DA.

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

<table>
<thead>
<tr>
<th>Inoperative Component or Visual Aid</th>
<th>Increase Visibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALSF 1 &amp; 2, MALSR, SSALR</td>
<td>½ mile</td>
</tr>
<tr>
<td>MALSF, MALS, SSALF, SSALS, SALSF, SALS</td>
<td>¼ mile</td>
</tr>
</tbody>
</table>

(4) Sidestep minima (CAT C-D)

<table>
<thead>
<tr>
<th>Inoperative Component or Visual Aid to Sidestep Runway</th>
<th>Increase Visibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALSF 1 &amp; 2, MALSR, SSALR</td>
<td>½ mile</td>
</tr>
</tbody>
</table>

(5) All Approach Types, All lines of minima

<table>
<thead>
<tr>
<th>Inoperative Component or Visual Aid</th>
<th>Increase Visibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>ODALS (CAT A-B)</td>
<td>¼ mile</td>
</tr>
<tr>
<td>ODALS (CAT C-D)</td>
<td>⅛ mile</td>
</tr>
</tbody>
</table>
TERMS/LANDING MINIMA DATA

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.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-ILS 27</td>
<td>1352/24</td>
<td>200</td>
<td>(200-1/2)</td>
<td></td>
</tr>
<tr>
<td>S-LOC 27</td>
<td>1440/24</td>
<td>288</td>
<td>(300-1/2)</td>
<td>1440/50</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>1540-1</td>
<td>1640-1</td>
<td>1640-1/2</td>
<td>1740-2</td>
</tr>
<tr>
<td>MDA</td>
<td>361 (400-1)</td>
<td>461 (500-1)</td>
<td>461 (500-1/2)</td>
<td>561 (600-2)</td>
</tr>
<tr>
<td>HAA</td>
<td>Visibility in Statute Miles</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: The 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 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

<table>
<thead>
<tr>
<th>HEIGHT ABOVE AIRPORT IN FEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>-10</td>
</tr>
<tr>
<td>-20</td>
</tr>
<tr>
<td>-30</td>
</tr>
<tr>
<td>-40</td>
</tr>
<tr>
<td>-50</td>
</tr>
</tbody>
</table>

COLD TEMPERATURE AIRPORTS

NOTE: The 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 will be removed.

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COLD TEMPERATURE ERROR TABLE

<table>
<thead>
<tr>
<th>HEIGHT ABOVE AIRPORT IN FEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>-10</td>
</tr>
<tr>
<td>-20</td>
</tr>
<tr>
<td>-30</td>
</tr>
<tr>
<td>-40</td>
</tr>
<tr>
<td>-50</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>MANEUVERING TABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approach Category</td>
</tr>
<tr>
<td>Speed (Knots)</td>
</tr>
</tbody>
</table>

TERMS/LANDING MINIMA DATA
TERMS/LANDING MINIMA DATA

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 tables below. The resultant arcs are then connected tangentially to define the protected area.

STANDARD CIRCLING APPROACH MANEUVERING RADIUS

Circling approach protected areas developed prior to late 2012 used the radius distances shown in the following table, expressed in nautical miles (NM), dependent on aircraft approach category. The approaches using standard circling approach areas can be identified by the absence of the C symbol on the circling line of minima.

<table>
<thead>
<tr>
<th>Circling MDA in feet MSL</th>
<th>Approach Category and Circling Radius (NM)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CAT A</td>
</tr>
<tr>
<td>All Altitudes</td>
<td>1.3</td>
</tr>
</tbody>
</table>

C EXPANDED CIRCLING APPROACH MANEUVERING AIRSPACE

Circling approach protected areas developed after late 2012 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. The approaches using expanded circling approach areas can be identified by the presence of the C symbol on the circling line of minima.

<table>
<thead>
<tr>
<th>Circling MDA in feet MSL</th>
<th>Approach Category and Circling Radius (NM)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CAT A</td>
</tr>
<tr>
<td>1000 or less</td>
<td>1.3</td>
</tr>
<tr>
<td>1001-3000</td>
<td>1.3</td>
</tr>
<tr>
<td>3001-5000</td>
<td>1.3</td>
</tr>
<tr>
<td>5001-7000</td>
<td>1.3</td>
</tr>
<tr>
<td>7001-9000</td>
<td>1.4</td>
</tr>
<tr>
<td>9001 and above</td>
<td>1.4</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>RVR (feet)</th>
<th>Visibility (SM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1600</td>
<td>¼</td>
</tr>
<tr>
<td>1800</td>
<td>½</td>
</tr>
<tr>
<td>2000</td>
<td>¾</td>
</tr>
<tr>
<td>2200</td>
<td>½</td>
</tr>
</tbody>
</table>

Radar Minima

1. Minimums 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 500-1/4.

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

Additionally, unmonitored frequencies which are available on request from the controlling agency may be annotated with an "x".

Alternate Minimums not standard. Civil users refer to tabulation. USA/USN/USAF pilots refer to appropriate regulations.

RA Alternate minimums are Not Authorized due to unmonitored facility or absence of weather reporting service.

Airport is published in the Takeoff Minimums, (Obstacle) Departure Procedures, and Diverse Vector Area (Radar Vectors) tabulation.
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 (OPDs), 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 OPDs 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 91. 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.

FAA Procedure Amendment Number Orig 31DEC09 Procedure Amendment Effective Date Amdt 2B 12MAR09

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.
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

<table>
<thead>
<tr>
<th>PBN Requirements Box</th>
<th>Equipment Requirements Box</th>
<th>From WINRZ, UBJGE: RNAV-1 GPS, RNAV-1GPS from MAP to YARKU. DME required for LOC only.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Procedure Notes Box</td>
<td>From WINRZ, UBJGE: RNAV-1 GPS, RNAV-1GPS from MAP to YARKU. DME required for LOC only.</td>
<td></td>
</tr>
</tbody>
</table>

RNAV STAR and DP PBN/Equipment Requirements Notes Box

<table>
<thead>
<tr>
<th>PBN Requirements Box</th>
<th>Equipment Requirements Box</th>
<th>RNAV 1 - DME/DME/IRU or GPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circling to Rwy 25 NA at night. For inop MALSR increase $-ILS 16R all cats visibility to 2½ SM.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 controlled lighting, e.g., 🔴, 🔵.

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

To activate lights, use frequency indicated in the communications section of the chart with a 🔵.

<table>
<thead>
<tr>
<th>KEY MIKE</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 times within 5 seconds</td>
<td>Highest intensity available</td>
</tr>
<tr>
<td>5 times within 5 seconds</td>
<td>Medium or lower intensity (Lower REIL or REIL-off)</td>
</tr>
<tr>
<td>3 times within 5 seconds</td>
<td>Lowest intensity available (Lower REIL or REIL-off)</td>
</tr>
<tr>
<td>ABBREVIATIONS</td>
<td>Definition</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>AAUP</td>
<td>Attention All Users Page</td>
</tr>
<tr>
<td>ADF</td>
<td>Automatic Direction Finder</td>
</tr>
<tr>
<td>ADIZ</td>
<td>Air Defense Identification Zone</td>
</tr>
<tr>
<td>AFIS</td>
<td>Automatic Flight Information Service</td>
</tr>
<tr>
<td>ALS</td>
<td>Approach Light System</td>
</tr>
<tr>
<td>ALSF</td>
<td>Approach Light System with Sequenced Flashing Lights</td>
</tr>
<tr>
<td>AOB</td>
<td>At or Below</td>
</tr>
<tr>
<td>AP</td>
<td>Autopilot System</td>
</tr>
<tr>
<td>APCH</td>
<td>Approach Control</td>
</tr>
<tr>
<td>APP CON</td>
<td>Authorization Required</td>
</tr>
<tr>
<td>AR</td>
<td>Arrival</td>
</tr>
<tr>
<td>ASOS</td>
<td>Automated Surface Observing System</td>
</tr>
<tr>
<td>ASR/PAR</td>
<td>Published Radar Minimums at this Airport</td>
</tr>
<tr>
<td>ASSC</td>
<td>Airport Surface Surveillance Systems</td>
</tr>
<tr>
<td>ATIS</td>
<td>Automated Terminal Information Service</td>
</tr>
<tr>
<td>AUNICOM</td>
<td>Automated UNICOM</td>
</tr>
<tr>
<td>AWOS</td>
<td>Automated Weather Observing System</td>
</tr>
<tr>
<td>AZ</td>
<td>Azimuth</td>
</tr>
<tr>
<td>BC</td>
<td>Back Course</td>
</tr>
<tr>
<td>BND</td>
<td>Bound</td>
</tr>
<tr>
<td>C</td>
<td>Circling</td>
</tr>
<tr>
<td>CAT</td>
<td>Category</td>
</tr>
<tr>
<td>CW</td>
<td>Clockwise</td>
</tr>
<tr>
<td>CIR</td>
<td>Circling</td>
</tr>
<tr>
<td>CLNC DEL</td>
<td>Clearance Delivery</td>
</tr>
<tr>
<td>CNF</td>
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<td>CPDLC</td>
<td>Controller Pilot Data Link</td>
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<td>Common Traffic Advisory Frequency</td>
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<td>D-AVIS</td>
<td>Digital-Automated Terminal Information Service</td>
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<tr>
<td>DA</td>
<td>Decision Altitude</td>
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<td>DER</td>
<td>Departure End of Runway</td>
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<td>DH</td>
<td>Decision Height</td>
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<td>Diverse Vector Area</td>
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<td>Final Approach Fix</td>
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<td>Ground Communications Outlet</td>
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<td>Ground based Augmentation System Landing System</td>
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<td>HAL</td>
<td>Height above Landing</td>
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<td>HAT</td>
<td>Height above Touchdown</td>
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<td>Height above Threshold</td>
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<td>Heads-up Guidance System</td>
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<td>INT</td>
<td>Intersection</td>
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<td>Localizer Performance with Vertical Guidance</td>
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<td>Lead Radial, Provides at least 2 NM (Copter 1 NM) of lead to assist in turning onto the intermediate/final course.</td>
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<td>MALSF</td>
<td>Medium Approach Lighting System with Sequenced Flashers</td>
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*Procedure Turn shall not be executed without ATC clearance.*
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<tr>
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<td>Omnidirectional Approach Light System</td>
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<td>Obstacle Departure Procedure</td>
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<td>Runway Alignment Indicator Lights</td>
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<td>Runway Centerline Light System</td>
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<td>TAC</td>
<td>TACAN</td>
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<tr>
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<td>Threshold Crossing Height (height in feet above ground level)</td>
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<td>Touchdown Zone</td>
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<td>Touchdown Zone Elevation</td>
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<td>Visual Climb over Airport</td>
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<td>Wide Area Augmentation System</td>
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<td>WP/WPT</td>
<td>Waypoint (RNAV)</td>
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**Planview Symbols**

**Routes**
- Procedure Track
- Feeder Route
- Missed Approach
- Visual Flight Path

**Altitudes**
- 5500 Mandatory Altitude
- 3000 Recommended Altitude
- 2500 Minimum Altitude
- 5000 Mandatory Block
- 4300 Maximum Altitude
- 3000 Altitude

**Indicated Airspeed**
- 175K Mandatory Airspeed
- 120K Minimum Airspeed
- 250K Maximum Airspeed
- 180K Recommended Airspeed

**Radio Aids to Navigation**
- 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.

**Fixes/ATC Reporting Requirements**
- Reporting Point
- Waypoint
- MAP WP (Flyby)
- MAP WP (Flyover)
- Flyover Point
- Computer Navigation Fix (CNF): No ATC Function
  (*X* omitted when it is a MAP)

**Legend**
- 23334

**Holding Patterns**
Hold-in-lieu of Procedure Turn
- 090° 1 min 270°
- 090° 270°

**Arrival**
- HOLD 8000

**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**
- 23334

**RADIO AIDS TO NAVIGATION**
- VOR
- VORTAC
- TACAN
- VOR/DME
- DME
- NDB
- NDB/DME
- LOM

**Fixes/ATC Reporting Requirements**
- Reporting Point
- Waypoint
- MAP WP (Flyby)
- MAP WP (Flyover)
- Flyover Point
- Computer Navigation Fix (CNF): No ATC Function
  (*X* omitted when it is a MAP)
INSTRUMENT APPROACH PROCEDURES (CHARTS)

PLANVIEW SYMBOLS

MINIMUM SAFE ALTITUDE (MSA)

Legend:
- Facility Identifier
- Airport Identifier
- Straight-in Area
- Right Base Area
- Left Base Area
- Minimum Safe Altitude (MSA)
- Terminal Arrival Area (TAA)
- Obstacles
- Spot Elevation
- Highest Spot Elevation
- Group of Obstacles
- Highest Obstacle
- Doubtful accuracy

TERMINAL ARRIVAL AREA (TAA)

Distance not to scale
- International Boundary
- Air Defense Identification Zone

MISCELLANEOUS

SPECIAL USE AIRSPACE

- Joint (Civil-Military)
- Civil
- Seaplane Base
- Heliport
- VOR Changeover Point
- End of Rwy Coordinates
- RWY 15: S12° 00.52' W77° 06.91'
- R-352
- R-Restricted
- W-Warning
- P-Prohibited
- A-Alert
- MOA-Military Operations Area

SW-2, 11 JUL 2024 to 05 SEP 2024
**AIRPORT DIAGRAM/AIRPORT SKETCH**

**LEGEND**

Runways
- **Hard Surface**
- **Other Than Hard Surface**
- **Stopways, Taxiways, Parking Areas**
- **Metal Surface**

Closed Runway
- **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.

**REFERENCE FEATURES**
- Displaced Threshold
- Hot Spot
- Runway Holding Position Markings
- Buildings
- Self-Serve Fuel ##
- Tanks
- Obstructions
- Airport Beacon #
- Runway Radar Reflectors
- Bridges
- Control Tower #
- 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/6/W/T; S-75, D-185, 2D-325, 2D/2D2-1120

**NOTE:**
- Landmark features depicted on Copter Approach insets and sketches are provided for visual reference only.
- 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.
- The airport sketch box includes the final approach course or final approach course extended.

**SCOPE**
- Runway slope
- Runway dimensions (in feet)
- Runway heading (magnetic)
- Field elevation
- Displaced threshold
- Runway identification
- Visual screen
- Movement area dimensions (in feet)

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.

**NOTE:**
- Landmark features depicted on Copter Approach insets and sketches are provided for visual reference only.
- Runway TDZ elevation
- Runway slope...
- 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.

**LEGEND**
- Helicopter Alighting Areas
- Negative Symbols used to identify Copter Procedures landing point
- Arresting System (EMAS)
- Jet Barrier

**ARRESTING SYSTEM** (EMAS)
Approach lighting and visual glide slope systems are indicated on the airport sketch by an identifier, e.g., A, D, etc.

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

**CATEGORY I APPROACH LIGHTING SYSTEM**

**ALSF-1**

![ALSF-1 Diagram]

(High Intensity) LENGTH 2400/3000 FEET

**CATEGORY II APPROACH LIGHTING SYSTEM**

**ALSF-2**

![ALSF-2 Diagram]

(High Intensity) LENGTH 2400/3000 FEET

**SHORT APPROACH LIGHTING SYSTEM**

**SALS/SALSF**

![SALS/SALSF Diagram]

(High Intensity) LENGTH 1500 FEET

**SIMPLIFIED SHORT APPROACH LIGHTING SYSTEM**

**SSALR**

![SSALR Diagram]

(High Intensity) LENGTH 2400/3000 FEET

**MEDIUM INTENSITY APPROACH LIGHTING SYSTEM**

**MALSR**

![MALSR Diagram]

LENGTH 2400 FEET

**OMNIDIRECTIONAL APPROACH LIGHTING SYSTEM**

**ODALS**

![ODALS Diagram]

LENGTH 1500 FEET

**RUNWAY TOUCHDOWN ZONE AND CENTERLINE LIGHTING SYSTEMS**

**TDZ/CL**

![TDZ/CL Diagram]

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

LEGEND 22195

NOTE: CIVIL ALSF-2 MAY BE OPERATED AS SSALR DURING FAVORABLE WEATHER CONDITIONS.
Approach lighting and visual glide slope systems are indicated on the airport sketch by an identifier, , etc.

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

**LEGEND** 22195

**INSTRUMENT APPROACH PROCEDURES (CHARTS)**

**APPROACH LIGHTING SYSTEM - UNITED STATES**

**Legend:** White Red

**P** PRECISION APPROACH PATH INDICATOR

- **PAPI**
  - Too low
  - Slightly low
  - On correct approach path
  - Slightly high
  - Too high

**V** PULSATING VISUAL APPROACH SLOPE INDICATOR

- **PVASI**
  - Pulsating White
  - Pulsating Red
  - Steady White
  - Steady Red

**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.

**NAV** TRI-COLOR VISUAL APPROACH SLOPE INDICATOR

- **TRCV**
  - Amber
  - Green
  - Red

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

**V** ALIGNMENT OF ELEMENTS SYSTEMS

- **APAP**
  - Above glide path
  - On Glide Path
  - Below Glide Path

Painted panels which may be lighted at night. To use the system the pilot positions the aircraft so the elements are in alignment.
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<th>VHF FREQUENCY</th>
<th>TACAN CHANNEL</th>
<th>VHF FREQUENCY</th>
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</table>

See the Chart Supplement for a complete listing.
# INDEX OF TERMINAL CHARTS AND MINIMUMS

<table>
<thead>
<tr>
<th>NAME</th>
<th>PROC</th>
<th>SECT PG</th>
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## INDEX OF TERMINAL CHARTS AND MINIMUMS

### NAME | PROC | SECT PG | NAME | PROC | SECT PG
--- | --- | --- | --- | --- | ---
| COLUSA, CA | TAKEOFF MINIMUMS | L | DSLA | TAKEOFF MINIMUMS | L |
| COLUSA COUNTY(O08) | IAPS ........ RNAV (GPS)-B | | | IAPS ........ RNAV (GPS) RWY 12 | .64 |
| | RNAV (GPS) RWY 32 | | | RNAV (GPS) RWY 30 | .65 |
| | VOR-A | | | AIRPORT DIAGRAM | .66 |
| CONCORD, CA | TAKEOFF MINIMUMS | L | DSLA | TAKEOFF MINIMUMS | L |
| BUCHANAN FLD(CCR) | IAPS ........ RNAV (GPS) RWY 32 | | | IAPS ........ RNAV (GPS) RWY 12 | .64 |
| | VOR-A | | | RNAV (GPS) RWY 30 | .65 |
| | AIRPORT DIAGRAM | .48 | | | AIRPORT DIAGRAM | .66 |
| CRESTWOOD, CA | ALTERNATE MINIMUMS | M | DSLA | ALTERNATE MINIMUMS | M |
| JACK MC NAMARA FLD(CEC) | IAPS ........ ILS OR LOC RWY 12 | | | IAPS ........ ILS Y OR LOC Y RWY 29R | .67 |
| | RNAV (GPS) RWY 12 | | | ILS Y RWY 29R (SA CAT I) | .68 |
| | RNAV (GPS) RWY 36 | | | ILS Y RWY 29R (CAT II - III) | .69 |
| | VOR/DME RWY 12 | | | RNAV (GPS) RWY 11L | .70 |
| | VOR/DME RWY 36 | | | RNAV (GPS) RWY 11R | .71 |
| | GPS RWY 29 | | | RNAV (GPS) RWY 28L | .72 |
| | GPS RWY 29R | | | RNAV (GPS) RWY 29R | .73 |
| | GPS RWY 12 | | | LOC Y RWY 11L | .74 |
| | GPS RWY 27 | | | TACAN RWY 11L | .75 |
| | GPS RWY 29R | | | TACAN RWY 29R | .76 |
| | AIRPORT DIAGRAM | .77 | | | AIRPORT DIAGRAM | .78 |
| | BULLDOG THREE | | | COALDALE FOUR | .79 |
| | YOSEMITE THREE | | | | .80 |
| DAVIS, CA | TAKEOFF MINIMUMS | L | DSLA | TAKEOFF MINIMUMS | L |
| UNIVERSITY(EDU) | IAPS ........ RNAV (GPS) RWY 36 | | | IAPS ........ RNAV (GPS) RWY 34 | .80 |
| DAVIS/WOOLAND/WINTERS, CA | VOR-A | | | | .81 |
| YOLO COUNTY(DWA) | AIRPORT DIAGRAM | .58 | | | AIRPORT DIAGRAM | .82 |
| ELLS FLD/WILLITS MUNI | ALTERNATE MINIMUMS | M | DSLA | ALTERNATE MINIMUMS | M |
| ---SEE WILLITS, CA | IAPS ........ ILS OR LOC RWY 12 | | | IAPS ........ ILS Y OR LOC Y RWY 29R | .67 |
| | RNAV (GPS) RWY 12 | | | ILS Y RWY 29R (SA CAT I) | .68 |
| | RNAV (GPS) RWY 36 | | | ILS Y RWY 29R (CAT II - III) | .69 |
| | VOR/DME RWY 12 | | | RNAV (GPS) RWY 11L | .70 |
| | VOR/DME RWY 36 | | | RNAV (GPS) RWY 11R | .71 |
| | GPS RWY 29 | | | RNAV (GPS) RWY 28L | .72 |
| | GPS RWY 29R | | | RNAV (GPS) RWY 29R | .73 |
| | GPS RWY 12 | | | LOC Y RWY 11L | .74 |
| | GPS RWY 27 | | | TACAN RWY 11L | .75 |
| | GPS RWY 29R | | | TACAN RWY 29R | .76 |
| EUREKA, CA | IAPS ........ RNAV (GPS) RWY 17 | | | | .56 |
| MURRAY FLD(eka) | IAPS ........ RNAV (GPS) RWY 34 | | | | .58 |
| FAIRFIELD, CA | IAPS ........ RNAV (GPS) RWY 16 | | | | .57 |
| ---SEE TRAVIS AFB | | | | | .58 |
| FIREBAUGH, CA | TAKEOFF MINIMUMS | L | DSLA | TAKEOFF MINIMUMS | L |
| FIREBAUGH(F34) | IAPS ........ RNAV (GPS)-B | | | IAPS ........ RNAV (GPS) RWY 12 | .59 |
| | RNAV (GPS)-B | | | RNAV (GPS) RWY 32 | .60 |
| FORTUNA, CA | TAKEOFF MINIMUMS | L | DSLA | TAKEOFF MINIMUMS | L |
| ROHNERVILLE(FOT) | IAPS ........ RNAV (GPS) RWY 11 | | | IAPS ........ RNAV (GPS) RWY 29 | .61 |
| | GPS RWY 29 | | | | .63 |

---

**INDEX**

24193

---

**FRESNO, CA**

**FRESNO CHANDLER EXEC(FCH)**

TAKEOFF MINIMUMS ............................................. L
ALTERNATE MINIMUMS ....................................... M
IAPS ........ RNAV (GPS) RWY 12 ..................... .64
RNAV (GPS) RWY 30 ................................. .65
AIRPORT DIAGRAM ..................................... 66

**FRESNO YOSEMITE INTL(FAT)**

TAKEOFF MINIMUMS ............................................. L
ALTERNATE MINIMUMS ....................................... M
IAPS ........ ILS Y OR LOC Y RWY 29R ................ .67
ILS Y RWY 29R (SA CAT I) ............................. .68
ILS Y RWY 29R (CAT II - III) ......................... .69
RNAV (GPS) RWY 11L .................................... .70
RNAV (GPS) RWY 11R .................................... .71
RNAV (GPS) RWY 28L .................................... .72
RNAV (GPS) RWY 29R .................................... .73
LOC Y RWY 11L ............................................. .74
TACAN RWY 11L ............................................ .75
TACAN RWY 29R ............................................ .76
AIRPORT DIAGRAM ..................................... 77
DPS ........ BULLDOG THREE ......................... .78
COALDALE FOUR ........................................... .79
YOSEMITE THREE ......................................... .80

**GNOSS FLD**

---SEE NOVATO, CA

**GRASS VALLEY, CA**

**NEVADA COUNTY(GOO)**

TAKEOFF MINIMUMS ............................................. L
ALTERNATE MINIMUMS ....................................... M
IAPS ........ RNAV (GPS) RWY 07 ........................ .81
AIRPORT DIAGRAM ..................................... .82

**GROVELAND, CA**

**PINE MOUNTAIN LAKE(E45)**

TAKEOFF MINIMUMS ............................................. L
IAPS ........ RNAV (GPS) RWY 09 ..................... .83
GPS RWY 27 ............................................. .84

**HAIGH FLD**

---SEE ORLAND, CA

**HALF MOON BAY, CA**

**HALF MOON BAY(HAF)**

TAKEOFF MINIMUMS ............................................. L
DIVERSE VECTOR AREA ..................................... .85
IAPS ........ RNAV (GPS) RWY 12 ..................... .85
RNAV (GPS) RWY 30 .................................... .86
DPS ........ SEEMS ONE (OBSTACLE) (RNAV) .......... .87

**HANFORD, CA**

**HANFORD MUNI(HJO)**

TAKEOFF MINIMUMS ............................................. L
IAPS ........ RNAV (GPS) RWY 32 ..................... .88
RNAV (GPS)-B ............................................ .89
<table>
<thead>
<tr>
<th>NAME</th>
<th>PROC</th>
<th>SECT PG</th>
</tr>
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<tbody>
<tr>
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<td>STARS</td>
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<td>HEALDSBURG MUNI</td>
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<td>JACK MC NAMARA FLD</td>
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### INDEX OF TERMINAL CHARTS AND MINIMUMS

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### INDEX

24193
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<td></td>
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<td>COAST NINE</td>
<td>202</td>
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</tr>
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<td>TAKEOFF MINIMUMS</td>
<td></td>
<td></td>
<td>HUSSH TWO (RNAV)</td>
<td>204</td>
<td></td>
</tr>
<tr>
<td>IAPS .... RNAV (GPS) RWY 10</td>
<td>180</td>
<td></td>
<td>KATFH THREE (RNAV)</td>
<td>205</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) RWY 28</td>
<td>181</td>
<td></td>
<td>NIMITZ FIVE</td>
<td>206</td>
<td></td>
</tr>
<tr>
<td>VOR-A</td>
<td>182</td>
<td></td>
<td>NUEVO EIGHT</td>
<td>207</td>
<td></td>
</tr>
<tr>
<td>OROVILLE, CA</td>
<td></td>
<td></td>
<td>OAKLAND SIX</td>
<td>209</td>
<td></td>
</tr>
<tr>
<td>OROVILLE MUNI(OVE)</td>
<td></td>
<td></td>
<td>QUAKE TWO</td>
<td>211</td>
<td></td>
</tr>
<tr>
<td>TAKEOFF MINIMUMS</td>
<td></td>
<td></td>
<td>SALAD FIVE</td>
<td>212</td>
<td></td>
</tr>
<tr>
<td>IAPS .... RNAV (GPS) RWY 02</td>
<td>219</td>
<td></td>
<td>SILENT THREE</td>
<td>213</td>
<td></td>
</tr>
<tr>
<td>OROVILLE MUNI(OVE)</td>
<td></td>
<td></td>
<td>SKYLINE ONE</td>
<td>215</td>
<td></td>
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<td></td>
<td></td>
<td>SUNNE ONE</td>
<td>217</td>
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<td>HAIGH FLD(O37)</td>
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<td>218</td>
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<td>TAKEOFF MINIMUMS</td>
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<td>OROVILLE MUNI(OVE)</td>
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<td>218</td>
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<td></td>
<td>IAPS .... RNAV (GPS) RWY 02</td>
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<td>IAPS .... RNAV (GPS) A</td>
<td>218</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>IAPS .... RNAV (GPS) RWY 31</td>
<td>221</td>
<td></td>
<td>IAPS .... RNAV (GPS) RWY 31</td>
<td>221</td>
<td></td>
</tr>
</tbody>
</table>
## INDEX

### INDEX OF TERMINAL CHARTS AND MINIMUMS

<table>
<thead>
<tr>
<th>NAME</th>
<th>PROC</th>
<th>SECT PG</th>
</tr>
</thead>
<tbody>
<tr>
<td>PETALUMA, CA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PETALUMA MUNI(O69)</td>
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</tr>
<tr>
<td>TAKEOFF MINIMUMS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALTERNATE MINIMUMS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAPS RNAV (GPS) RWY 05</td>
<td>225</td>
<td></td>
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<td>VOR OR GPS-A</td>
<td>228</td>
<td></td>
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<tr>
<td>PINE MOUNTAIN LAKE</td>
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<td>--SEE GROVELAND, CA</td>
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<tr>
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</tr>
<tr>
<td>ALTERNATE MINIMUMS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAPS RNAV (GPS) RWY 15</td>
<td>229</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) RWY 33</td>
<td>230</td>
<td></td>
</tr>
<tr>
<td>VOR/DME RWY 15</td>
<td>231</td>
<td></td>
</tr>
<tr>
<td>VOR RWY 33</td>
<td>232</td>
<td></td>
</tr>
<tr>
<td>RED BLUFF, CA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RED BLUFF MUNI(RBL)</td>
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</tr>
<tr>
<td>TAKEOFF MINIMUMS</td>
<td></td>
<td></td>
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<tr>
<td>ALTERNATE MINIMUMS</td>
<td></td>
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</tr>
<tr>
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<td>229</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) RWY 33</td>
<td>230</td>
<td></td>
</tr>
<tr>
<td>VOR/DME RWY 15</td>
<td>231</td>
<td></td>
</tr>
<tr>
<td>VOR RWY 33</td>
<td>232</td>
<td></td>
</tr>
<tr>
<td>REDDING, CA</td>
<td></td>
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</tr>
<tr>
<td>BENTON FLD(O85)</td>
<td></td>
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</tr>
<tr>
<td>TAKEOFF MINIMUMS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALTERNATE MINIMUMS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAPS RNAV (GPS) A</td>
<td>233</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) B</td>
<td>234</td>
<td></td>
</tr>
<tr>
<td>DPS REDDING ONE (OBSTACLE)</td>
<td>235</td>
<td></td>
</tr>
<tr>
<td>REDDING RNL(RDD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAKEOFF MINIMUMS</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>IAPS RNAV (GPS) A</td>
<td>233</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) B</td>
<td>234</td>
<td></td>
</tr>
<tr>
<td>DPS HOMAN THREE</td>
<td>242</td>
<td></td>
</tr>
<tr>
<td>KENDL FOUR</td>
<td>243</td>
<td></td>
</tr>
<tr>
<td>KRESTR FOUR</td>
<td>244</td>
<td></td>
</tr>
<tr>
<td>SHASTA FOUR</td>
<td>245</td>
<td></td>
</tr>
<tr>
<td>REEDLEY, CA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REEDLEY MUNI(O32)</td>
<td></td>
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</tr>
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<td>TAKEOFF MINIMUMS</td>
<td></td>
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</tr>
<tr>
<td>ALTERNATE MINIMUMS</td>
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</tr>
<tr>
<td>IAPS RNAV (GPS) RWY 16</td>
<td>246</td>
<td></td>
</tr>
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<td>RNAV (GPS) RWY 34</td>
<td>247</td>
<td></td>
</tr>
<tr>
<td>RIO VISTA, CA</td>
<td></td>
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</tr>
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<td>RIO VISTA MUNI(O88)</td>
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<td></td>
</tr>
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<td></td>
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<td>VOR/DME RWY 34</td>
<td>250</td>
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<tr>
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<td>249</td>
<td></td>
</tr>
<tr>
<td>VOR/DME RWY 34</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>AIRPORT DIAGRAM</td>
<td>251</td>
<td></td>
</tr>
<tr>
<td>SACRAMENTO EXEC(SAC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAKEOFF MINIMUMS</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>HOT SPOT</td>
<td></td>
<td></td>
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<tr>
<td>IAPS RNAV (GPS) RWY 02</td>
<td>252</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) RWY 02</td>
<td>253</td>
<td></td>
</tr>
<tr>
<td>VOR/DME RWY 02</td>
<td>254</td>
<td></td>
</tr>
<tr>
<td>AIRPORT DIAGRAM</td>
<td>255</td>
<td></td>
</tr>
<tr>
<td>SACRAMENTO INTL(SMF)</td>
<td></td>
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</tr>
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<td>ALTERNATE MINIMUMS</td>
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<td></td>
</tr>
<tr>
<td>HOT SPOT</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>256</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) RWY 17R</td>
<td>257</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) RWY 35L</td>
<td>258</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) RWY 17R (SA CAT I)</td>
<td>259</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) RWY 17R (CAT II - III)</td>
<td>260</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) RWY 17L (SA CAT I)</td>
<td>261</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) Z RWY 17L</td>
<td>262</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) Z RWY 17R</td>
<td>263</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) Z RWY 35L</td>
<td>264</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) Z RWY 35R</td>
<td>265</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) Y RWY 17R</td>
<td>266</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) Y RWY 35L</td>
<td>267</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) Y RWY 35R</td>
<td>268</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) Z RWY 35R</td>
<td>269</td>
<td></td>
</tr>
<tr>
<td>AIRPORT DIAGRAM</td>
<td>270</td>
<td></td>
</tr>
<tr>
<td>DPS FROGO ONE</td>
<td>271</td>
<td></td>
</tr>
<tr>
<td>FTHIL THREE (RNAV)</td>
<td>272</td>
<td></td>
</tr>
<tr>
<td>RVRCFT FOUR (RNAV)</td>
<td>273</td>
<td></td>
</tr>
<tr>
<td>SCTWN FOUR (RNAV)</td>
<td>274</td>
<td></td>
</tr>
<tr>
<td>SACRAMENTO MATHER(MHR)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAKEOFF MINIMUMS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALTERNATE MINIMUMS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STARS AMRVR TWO (RNAV)</td>
<td>274</td>
<td></td>
</tr>
<tr>
<td>IAPS RNAV (GPS) RWY 22L</td>
<td>275</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) RWY 22L (SA CAT I - II)</td>
<td>277</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) RWY 04R</td>
<td>278</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) RWY 22L</td>
<td>279</td>
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</tr>
<tr>
<td>RNAV (GPS) RWY 22R</td>
<td>280</td>
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<tr>
<td>AIRPORT DIAGRAM</td>
<td>281</td>
<td></td>
</tr>
</tbody>
</table>

---

SW-2, 11 JUL 2024 to 05 SEP 2024

INDEX

<table>
<thead>
<tr>
<th>NAME</th>
<th>PROC</th>
<th>SECT PG</th>
</tr>
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<tbody>
<tr>
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<td></td>
</tr>
<tr>
<td>ALTERNATE MINIMUMS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STARS AMRVR TWO (RNAV)</td>
<td>274</td>
<td></td>
</tr>
<tr>
<td>IAPS RNAV (GPS) RWY 22L</td>
<td>275</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) RWY 22L (SA CAT I - II)</td>
<td>277</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) RWY 04R</td>
<td>278</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) RWY 22L</td>
<td>279</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) RWY 22R</td>
<td>280</td>
<td></td>
</tr>
<tr>
<td>AIRPORT DIAGRAM</td>
<td>281</td>
<td></td>
</tr>
</tbody>
</table>

---

INDEX

<table>
<thead>
<tr>
<th>NAME</th>
<th>PROC</th>
<th>SECT PG</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>TAKEOFF MINIMUMS</td>
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<td></td>
</tr>
<tr>
<td>ALTERNATE MINIMUMS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STARS AMRVR TWO (RNAV)</td>
<td>274</td>
<td></td>
</tr>
<tr>
<td>IAPS RNAV (GPS) RWY 22L</td>
<td>275</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) RWY 22L (SA CAT I - II)</td>
<td>277</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) RWY 04R</td>
<td>278</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) RWY 22L</td>
<td>279</td>
<td></td>
</tr>
<tr>
<td>RNAV (GPS) RWY 22R</td>
<td>280</td>
<td></td>
</tr>
<tr>
<td>AIRPORT DIAGRAM</td>
<td>281</td>
<td></td>
</tr>
</tbody>
</table>
# SAN ANDREAS, CA
**CALAVERAS COUNTY-MAURY RAMUSSEN FIELD (CPU)**
- **Takeoff Minimums**: L
- **Alternate Minimums**: M
- **IAPs**: Rnav (GPS) RWY 31
- **Diverse Vector Area**: Z26
- **Alternate Minimums**: M

# SAN CARLOS, CA
**SAN CARLOS (SQL)**
- **Takeoff Minimums**: L
- **Alternate Minimums**: M
- **IAPs**: Rnav (GPS) RWY 31
- **Diverse Vector Area**: Z26

# SAN FRANCISCO, CA
**SAN FRANCISCO INTL (SFO)**
- **Takeoff Minimums**: L
- **Alternate Minimums**: M
- **Hot Spot**: P
- **Stars**: Always Three (RNAV)
- **IAPs**: Rnav (GPS) RWY 31
- **Diverse Vector Area**: Z26

---

**INDEX OF TERMINAL CHARTS AND MINIMUMS**

<table>
<thead>
<tr>
<th>NAME</th>
<th>PROC</th>
<th>SECT PG</th>
<th>NAME</th>
<th>PROC</th>
<th>SECT PG</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SW-2, 11 JUL 2024 to 05 SEP 2024</strong></td>
<td>K7</td>
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<td><strong>SW-2, 11 JUL 2024 to 05 SEP 2024</strong></td>
<td>K7</td>
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<td><strong>SAN ANDREAS, CA</strong></td>
<td></td>
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</tr>
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<td></td>
<td><strong>SALINAS MUNI (SNS)</strong></td>
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</tr>
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<td></td>
<td>Takeoff Minimums</td>
<td>L</td>
<td></td>
</tr>
<tr>
<td>Alternate Minimums</td>
<td>M</td>
<td></td>
<td>Alternate Minimums</td>
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## INDEX OF TERMINAL CHARTS AND MINIMUMS

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</tr>
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<td>OSVEE TWO (RNAV)</td>
<td></td>
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</tr>
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<td>PALISADES ONE</td>
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<td>222</td>
</tr>
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<td>SEATO FOUR</td>
<td></td>
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TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

INSTRUMENT APPROACH PROCEDURE CHARTS

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 NAVAIN in a specified direction, and/or 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.

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

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.

TAKEOFF 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, 30' 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' right 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 4000' 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.
Trees beginning 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 329' 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 4749' from DER, 1344' 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.
Trees beginning 3085' from DER, 565' left of centerline, up to 329' 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.
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.

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, 253’ right of centerline, up to 1589’ MSL.
Trees beginning 5546’ from DER, 1593’ left of centerline, 1496’ 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’ right 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.

BECKWORTH, 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
BECKWORTH, 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 31’ 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.

BISHOP, CA
BISHOP (BHI)
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.
Rwy 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…

TAKEOFF OBSTACLE NOTES:
Rwy 26, trees and bushes beginning 69’ from DER, 150’ right of centerline, up to 4197’ MSL.
Rwy 35, trees beginning 238’ from DER, 31’ left 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, 200-1/1’ 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:
Rwys 5, 12, climbing left turn heading 010°, thence…
Rwy 30, climbing right turn heading 065°, thence…

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, buildings, 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.

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.

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

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 poles 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 starting between 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.
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. NAVIAID 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, NAVIAID 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 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’ right 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, 882’ left of centerline, 2212’ 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, fences, 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. Buildings beginning 1477’ from DER, 429’ left of centerline, 161’ 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.
CONT
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

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, 51’ AGL/72’ 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, 881’ 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 buildings beginning 1750’ from DER, 30’ left of centerline, up to 105’ MSL.

Tree 2570’ from DER, 93’ right of centerline, 92’ MSL.

Buildings beginning 543’ from DER, 99’ left of centerline, up to 177’ MSL.

Pole 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, 91’ 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.
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 41’ MSL.
Vehicles on road beginning 751’ from DER, 216’ right of centerline, up to 41’ 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 beginning 1 NM 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’ left 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.
Refinery 1.4 NM from DER, 1954’ right of centerline, 355’ AGL/378’ MSL.
Flagpole, signs, and vehicles on road beginning 117’ from DER, 111’ left of centerline, up to 21’ AGL/43’ 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:
Rwy’s 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.
Trees 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
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

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 2966’ 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.

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.
Tree 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.
Tree 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.
Trees beginning 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.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

DAVIS/WOODLAND/WINTERS, CA
YOLO COUNTY (DWA)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2  19JUL18  (18200)  (FAA)
DEPARTURE PROCEDURE:
  Rw 16, climb heading 144° to 2200 before turning right.
  Rw 34, climb heading 344° to 1500 before turning left.
TAKEOFF OBSTACLE NOTES:
  Rw 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, up to 195' MSL.
  Rw 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.

EUREKA, CA
MURRAY FLD (EKA)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4  27AUG09  (21196)  (FAA)
TAKEOFF MINIMUMS:
  Rw 12, std. w/min. climb of 465' per NM to 1800 or 3800-3 for climb in visual conditions.
DEPARTURE PROCEDURE:
  Rw 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.
  Rw 30, climbing left turn heading 265° to intercept V27.
TAKEOFF OBSTACLE NOTES:
  Rw 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.
  Rw 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.

FIREBAUGH, CA
FIREBAUGH (F34)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2  20SEP12  (12264)  (FAA)
TAKEOFF MINIMUMS:
  Rw 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.
TAKEOFF OBSTACLE NOTES:
  Rw 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:
  Rw 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.
FRESNO, CA
FRESNO CHANDLER EXEC (FCH)
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, traverse way, 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, 36' 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, traverse way 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 3069' from DER, 146' left of centerline, 377' MSL.

Trees 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, tree 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, 644' left of centerline, 389' MSL.

FRESNO YOSEMITE INTL (FAT)
FRESNO YOSEMITE INTL (FAT)
AMDT 9  10OCT19 (19283)  (FAA)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

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 before 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 105' 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
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.

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.

Rwy 29L, lighting 9’ from DER, 54’ right of centerline, 2’ AGL/334’ MSL.

Rwy 29R, lighting 9’ from DER, 54’ right of centerline, 2’ AGL/334’ 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.

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, up to 3093’ MSL.

Trees beginning 698’ from DER, 175’ right of centerline, up to 3094’ MSL.

Trees beginning 748’ from DER, 138’ right of centerline, 3096’ MSL.

Trees beginning 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, 600-2½ 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, climh 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, 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.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

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 1 13JAN11 (21140) (FAA)
DEPARTURE PROCEDURE:
Rwys 10L, 10R, climbing right turn direct OSI VORTAC.
Rwys 28L, 28R, climbing left turn direct OSI VORTAC.
TAKEOFF OBSTACLE NOTES:
Rwy 10L, hangars, trees and buildings beginning 625’ from DER, 67’ left of centerline, up to 100’ AGL/155’ MSL.
Trees beginning 2050’ from DER, 1’ right of centerline, up to 60’ AGL/107’ MSL.
Rwy 10R, trees, poles, and buildings beginning 21’ from DER, 61’ left of centerline, up to 100’ AGL/155’ MSL.
Windsock, blast fence, trees, buildings and pole beginning 23’ from DER, 38’ right of centerline, up to 74’ AGL/119’ MSL.
Rwy 28L, trees beginning 899’ from DER, 141’ left of centerline, up to 93’ AGL/108’ MSL.
Antennas, road, and trees beginning 108’ from DER, 68’ right of centerline, up to 87’ AGL/102’ MSL.
Rwy 28R, antenna and trees beginning 728’ from DER, 28’ left of centerline, up to 87’ AGL/102’ MSL.
Trees beginning 391’ from DER, 4’ right of centerline, up to 95’ AGL/125’ MSL.

HAYWARD EXECUTIVE (HWD)
DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 1 07JAN16 (16007) (FAA)
Rwys 10L/R, 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.
Trees 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.
Terrain beginning 188’ from DER, 193’ right of centerline, up to 1703’ 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 1112’ from DER, 740’ right of centerline, 1764’ MSL.
Poles, 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.
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.

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 FIELD) (KNLC)
LEMOORE, CA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 15JUN23 (23166) (USN)
TAKEOFF MINIMUMS:
Rwys 32L/R, std. w/min. climb of 220’ per NM to 6400.

DEPARTURE PROCEDURE:
Rwy 32L, climb on hdg between 142° to 283° from DER.
Rwy 32R, climb on hdg between 142° to 281° from DER.

DIVERSE VECTOR AREA (RADAR VECTORS)
ORIG 17JUN21 (21168) (USN)
Rwys 32L/R, hdgs as assigned by ATC.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

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, then.....
Rwy 26, climb heading 256° to 800 climbing right turn on heading 080° to intercept LIN R-290 to LIN VOR/DME, then.....
...continue climb in hold (hold Southeast, right turns, 32° inbound) to MCA or MEA for route of flight.
TAKEOFF OBSTACLE NOTES:
Rwy 8, hangs, 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, climbing left turn heading 080° to intercept V-230.
Rwy 30, climbing right turn heading 110° to intercept V-230.

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

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 966’ 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.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

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:
 Rwys 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.
 Rwys 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.
 Rwys 28R, vehicles on road beginning 47’ from DER, 332’ right of centerline, up to 15’ AGL/114’ MSL.
Pole 75’ 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.
 Rwys 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:
 Rwys 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.
 Rwys 35, 4000-2 or std. with a min. climb of 300’ per NM to 7000.
DEPARTURE PROCEDURE:
 Rwys 17, climb direct MOG NDB. Continue climb to 10000 in MOG holding pattern (hold N, right turns, 176° inbound).
 Rwys 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:
 Rwys 10L, std. w/min. climb of 449’ per NM to 1800, or 1700-2½ for climb in visual conditions.
 Rwys 10R, std. w/min. climb of 459’ per NM to 1800, or 1700-2½ for climb in visual conditions.
 Rwys 28L, std. w/min. climb of 218’ per NM to 3300, or 1700-2½ for climb in visual conditions.
 Rwys 28R, std. w/min. climb of 205’ per NM to 3300, or 1700-2½ for climb in visual conditions.
DEPARTURE PROCEDURE:
 Rwys 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.
 Rwys 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.
 Rwys 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.
 Rwys 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:
 Rwys 10L, NAVAID 556’ from DER, 217’ right of centerline, 20’ AGL/272’ MSL.
 Bushes beginning 1.6 NM from DER, 1186’ 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.
Bushes beginning 1.5 NM from DER, 2381’ left of centerline, up to 9’ AGL/645’ 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 79’ 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.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

NOVATO, CA
GNOSO FLD (DVO)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 02MAY13 (21222) (FAA)
TAKEOFF MINIMUMS:
Rwy 13, 400-2½ 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, climbing right 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 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
METRO OAKLAND INTL (OAK)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 7 17OCT13 (21168) (FAA)
DEPARTURE PROCEDURE:
Rwys 10L/R, 12, 15, 30, climbing right turn to intercept V107-301, thence...
Rwys 28L/R, climbing 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.
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, 20' AGL/240' MSL.
Tree beginning 1480' from DER, 399' right of centerline, up to 313' 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, 300-1⅝ 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.
Rwy 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 20' AGL/203' MSL.
Vertical structure 177' from DER, 493' left of centerline, 184' MSL.
Trees beginning 109' 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, 300-1½ 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/111’ 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 88’ left of centerline, up to 40’ AGL/121’ 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-330 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.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

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, poles, tree beginning 84' from DER, 260' left of centerline, up to 748' MSL.
trees, fence beginning 116' from DER, 182' right of centerline, up to 46' AGL/765' MSL.
Pole, tree 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, trees beginning 152' from DER, 463' right of centerline, 12' AGL/495' MSL.
Airplane on taxiway, pole, and trees beginning 223' from DER, 68' right of centerline, up to 44' AGL/544' MSL.
Airplane on taxiway, pole, and building beginning 223' from DER, 13' left of centerline, up to 44' AGL/544' MSL.
Tree 1411' 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 1862' 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 39' from DER, 125' right of centerline, 4' AGL/508' MSL.
Sign 38' 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 2622' 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.
Tree beginning 3181' 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.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

REEDLEY, CA
REEDLEY MUNI (O32)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 03JAN19 (19003) (FAA)
DEPARTURE PROCEDURE:
Rwy 16, climb on a heading between 32° CW to 323° from DER.
Rwy 34, climb on a heading between 24° 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 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’ 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, 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 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 33, 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.
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.
Tree, 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’ right 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 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.
- TAKING 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, climb 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.
- RwY 26, pole, vehicle on road, tree beginning 110’ from DER, 266’ left of centerline, up to 34’ AGL/98’ MSL.
- RwY 31, trees, building beginning 171’ from DER, 390’ right of centerline, up to 133’ MSL.
- Fence, transmission line, poles beginning 1141’ from DER, 202’ right of centerline, up to 60’ AGL/145’ MSL.

SAN ANDREAS, CA

CALAVERAS CO-MAURY RASMUSSEN FIELD (CPU)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 10NOV16 (16315) (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, windscoop 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.
SAN CARLOS, CA
SAN CARLOS (SQL)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 10AUG23 (23222) (FAA)

TAKEOFF MINIMUMS:

Rwy 12, 300-1/2 or std w/min climb of 240'/NM to 300.
Rwy 30, 300-1/2 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 1639' 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 852' from DER, on centerline, up to 41' AGL/46' MSL.
Tree, building beginning 169' from DER, 346' 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, tree 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 852' from DER, on centerline, up to 41' AGL/46' MSL.
Tree, building beginning 169' from DER, 346' 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, tree 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 beginning 1 NM from DER, 1557' right of centerline, 211' AGL/217' MSL.
Pole 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)

ORIG 26MAY16 (16147) (FAA)

Rwy 12, headings as assigned by ATC; requires minimum climb of 470' per NM to 3400.

SW-2, 11 JUL 2024 to 05 SEP 2024
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 1L, 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.
Rwys 1L/R, sign 62' from DER, 300' left of centerline, 4' AGL/15' MSL.
Building and road 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 383'1 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, 588' left of centerline, up to 22' AGL/35' MSL.
Multiple buildings, trees beginning 1487' 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.
Oli on blast fence, 156’ from DER, 57’ left of centerline, 72’ 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.

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

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.
Buildings beginning 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, 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.

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.
Buildings beginning 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, 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.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 1 21JUL16 (16203) (FAA)

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, 745’ 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.
Tree, 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.
SAN JOSE, CA

REID-HILLVIEW OF SANTA CLARA COUNTY (RHV)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

TAKEOFF MINIMUMS:
Rwy 13L, 13R, NA - environmental.

DEPARTURE PROCEDURE:
Use DECOT DEPARTURE.

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. Traverse way 73’ from DER, 429’ right of centerline, up to 300’ MSL. Traverse way 127’ from DER, 321’ right of centerline, up to 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 (21168) (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 2200 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. 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, 659’ left of centerline, up to 166’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

SANTA ROSA, CA (CON’T)

CHARLES M SCHULZ-SONOMA COUNTY (STS) (CON’T)

Rwy 2 (CON’T), 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 539’ 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.
Tree 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

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, 300-1% 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 1085’ from DER, 8’ right of centerline, up to 107’ AGL/6392’ MSL.

Trees beginning 1700’ 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, 8266’ MSL.

Trees, vehicle on road beginning 51’ from DER, 330’ right of centerline, up to 47’ AGL/6296’ MSL.

Trees, 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.

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.

CONT
**SOUTH LAKE TAHOE, CA (CON’T)**

**LAKE TAHOE (TVL) (CON’T)**

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

Rwy 36 (CON’T), 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.

Rwy 1324’ from DER, 664’ 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, 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.

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**STOCKTON, CA**

**STOCKTON METRO (SCK)**

**TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES**

**AMDT 1  20JUN19  (21168)  (FAA)**

**TAKEOFF MINIMUMS:**

Rwy 29R, 200-1/2 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.

Pole 653’ from DER, 515’ left of centerline, 32’ AGL/58’ 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.

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**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, 3’ 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.

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 1998’ from DER, 504’ left of centerline, 66’ AGL/270’ MSL.

CON’T
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

TRACY, CA (CON’T)

TRACY MUNI (TCY) (CON’T)

Rwy 12 (CON’T), poles starting 832’ from DER, 396’ right of centerline, up to 56’ AGL/240’ MSL.
Obstruction light on hopper 1934’ from DER, 74’ AGL/255’ MSL.
Vehicle 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 1110’ from DER, 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 (Kasu)

FAIRFIELD, CA

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

23APR20 (2014)

TAKEOFF MINIMUMS:

All Rwys, std. w/min climb of 305’ per NM to 4000, or 2400-3 for VCOA

VCOA:

All Rwys, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Travis AFB airport at or above 2300 proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 3L, potential acft 23’ to 1290’ from DER, 500’ left of cntrln, 65’ AGL/120’ MSL.
Potential acft 620’ to 1925’ from DER, 600’ right of cntrln, 65’ AGL/125’ MSL.
Parked acft 860’ to 1780’ from DER, 770’ left of cntrln, 58’ AGL/125’ MSL.
Potential acft 1925’ from DER, 385’ left and right of cntrln, 65’ AGL/125’ MSL.

Rwy 3R, pylon 5508’ from DER, 1641’ left of cntrln, 105’ AGL/154’ MSL.

Rwy 21L, potential acft 210’ from DER, 650’ right of cntrln, 65’ AGL/118’ MSL.
Light poles 140’ to 920’ from DER, 550’ to 670’ left of cntrln, 50’ AGL/82’ 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.
Trees beginning 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, 9’ 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 5969’ 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.

CON’T
SW-2, 11 JUL 2024 to 05 SEP 2024

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

TRUCKEE, CA (CON’T)

TRUCKEE-TAHOE (TRK) (CON’T)

TAKEOFF OBSTACLE NOTES:

Rwy 29 (CON’T), 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 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

AAMD 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 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 783’ from DER, 424’ left of centerline, 13’ AGL/286’ MSL.

Pole 1141’ from DER, 580’ left of centerline, 110’ AGL/383’ 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.

UKIAH, CA

UKIAH MUNI (UKI)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AAMD 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.

CON’T
UKIAH, CA (CON’T)

UKIAH MUNI (UKI) (CON’T)

VCA:

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, 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.

Pole, building, tree 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, building 269’ from DER, 154’ right of centerline, up to 36’ AGL/645’ MSL.

Tree 461’ from DER, 555’ left of centerline, 854’ 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.

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.

VCA:

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 284’ MSL.

Tree, pole beginning 1576’ from DER, 344’ right of centerline, up to 190’ MSL.

T-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 3085’ 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.

Terrain, tree 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 4088’ from DER, 110’ right of centerline, 264’ MSL.

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

VACAVILLE, CA (CON’T)
NUT TREE (VCB) (CON’T)
Rwy 20 (CON’T), 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, 683’ 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.

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.
Trees 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.
Tree, pole, 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, 166’ 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.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

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.

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.
### IFR Alternate Minimums

Pilots must review the IFR Alternate Minimums Notes to determine alternate airport suitability.

A 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 A designation are not listed in this section. A 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.

#### Alternate Minima (ref: 14 CFR 91.169)

<table>
<thead>
<tr>
<th>NAME</th>
<th>ALTERNATE MINIMUMS</th>
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</thead>
<tbody>
<tr>
<td><strong>ALTERNATE MINS</strong></td>
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<tr>
<td>NAME</td>
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</tr>
<tr>
<td>ALTURAS, CA</td>
<td>ALTERNATE MINIMUMS</td>
</tr>
<tr>
<td>MUNI (AAT)</td>
<td>RNAV (GPS) Rwy 31</td>
</tr>
<tr>
<td>Category B, 900-2</td>
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</tr>
<tr>
<td>ARCATA/EUREKA, CA</td>
<td>CALIFORNIA REDWOOD COAST-HUMBOLDT</td>
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<td>RNAV (GPS) Rwy 1</td>
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<td>BYRON (C83)</td>
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<td>BUCHANAN FLD (CCR)</td>
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<tr>
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</table>

**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).

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### Precision Approach vs. Non-Precision Approach

<table>
<thead>
<tr>
<th>Precision Approach</th>
<th>Non-Precision Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>600-2</td>
</tr>
<tr>
<td>Non-Standard or restrictions</td>
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<td>Helicopters</td>
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<td>Ceiling: 200' above published ceiling</td>
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<tr>
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<td>Visibility: the greater of 1 SM visibility or the published visibility</td>
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<tr>
<td>US Military</td>
<td>See Service Regulations</td>
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### Standard or Non-Standard

- 600-2
- 800-2
- For the selected approach:
  - Ceiling: 200' above published ceiling
  - Visibility: the greater of 1 SM visibility or the published visibility
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<thead>
<tr>
<th>Name</th>
<th>CA/CA</th>
<th>Alternate Minimums</th>
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<tbody>
<tr>
<td>CRESCENT CITY, CA</td>
<td>JACK MC NAMARA FLD (CEC)</td>
<td>RNAV (GPS) Rwy 12 VOR Rwy 12 VOR/DME Rwy 12 VOR/DME Rwy 36</td>
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<td><strong>MOUNTAIN VIEW, CA</strong></td>
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<td>VOR Rwy 6&lt;sup&gt;5&lt;/sup&gt;</td>
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<td>METRO OAKLAND INTL (OAK)</td>
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<td>ILS or LOC Rwy 30&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>ILS or LOC/DME Rwy 28R&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>2Category D, 1400-3.</td>
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<td><strong>PALO ALTO, CA</strong></td>
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<td>PETALUMA MUNI (O69)</td>
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<td>3Category D, 800-2¼.</td>
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<td>LOC Rwy 31¹</td>
<td>SAN MARTIN (E16)................</td>
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<td>RNAV (GPS) Rwy 10L¹</td>
<td>RNAV (GPS) Rwy 322</td>
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<td>RNAV (GPS) Rwy 19L¹</td>
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<td>Categories A, B, 1100-2.</td>
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<td>RNAV (GPS) Z Rwy 28R¹</td>
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<td>RNAV (RNP) Z Rwy 10R²</td>
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<td>¹Category D, 1600-3.</td>
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<td>²Category D, 1500-3.</td>
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<td>³Category D, 900-2¾.</td>
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<td>²Category A, B, 900-2.</td>
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<td>SAN FRANCISCO, CA</td>
<td>SAN FRANCISCO INTL (SFO).................................ILS or LOC Rwy 19L¹</td>
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<td>RNAV (RNP) Z Rwy 10R²</td>
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<td>⁵Categories A, B, 1100-2; Categories C, D, 1100-2½.</td>
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<td>⁶Categories A, B, 1100-2; Category C, 1600-3; Category D, 1100-2½.</td>
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<td>⁷Categories A, B, 1200-2; Category C, D, 1200-3.</td>
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<td>⁸Categories A, B, C, D, 1400-4.</td>
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<td>⁹Category B, 1000-2; Category C, 1600-3.</td>
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<td>UKIAH, CA</td>
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<td>RNAV (GPS)-B²</td>
<td>TRUCKEE-TAHOE (TRK)................RNAV (GPS)-A¹</td>
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<td>RNAV (GPS) Rwy 15¹</td>
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<td>RNAV (GPS) Rwy 15¹</td>
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<td>²Categories A, B, 1900-2; Category C, 1900-3.</td>
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<td>VACAVILLE, CA</td>
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<td>RNAV (GPS) Rwy 20¹</td>
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<td>¹Categories A, B, 1700-2; Category C, 1700-3; Category D, 2200-3.</td>
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<td>²Categories A, B, 1500-2; Category C, 1600-3; Category D, 2200-3.</td>
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<td>³Categories A, B, 2800-2; Categories C, D, 2800-3.</td>
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<td>⁵Categories A, B, C, D, 1400-3.</td>
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<td>⁶Categories A, B, C, D, 1400-3.</td>
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<td>⁷Categories A, B, C, D, 1400-3.</td>
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</table>
LEMOORE NAS (REEVES FIELD)(KNLC), Leemore, CA Amdt 8

19MAY22 (22139) (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

PAR\(^1\)\(^4\)  RWY   GS/TCH/RPI   CAT   DH/MDA-VIS  HAT/HATH/HAA  CEIL-VIS
32L\(^2\)\(^3\)  3.0°/40/743  ABCDE  327-¼  100  (100-¼)
14L   3.0°/54/983  ABCDE  319-½  100  (100-½)
14R\(^5\)  3.0°/52/977  ABCDE  328-½  100  (100-½)
32R\(^3\)  3.0°/46/870  ABCDE  321-½  100  (100-½)

ASR\(^4\)  32L\(^3\)\(^7\)  AB  580-½  353  (400-½)
          CDE  580-¾  353  (400-¾)
14L   ABCDE  560-1  341  (400-1)
14R\(^6\)  AB  680-1  452  (500-1)
          CDE  680-1½  452  (500-1½)
32R\(^8\)  AB  760-1  539  (600-1)
          CDE  760-1½  539  (600-1½)

CIR\(^9\)  14L, 14R, 32L  AB  680-1  452  (500-1)
          C  700-1½  472  (500-1½)
          DE  780-2  552  (600-2)
32R  AB  760-1  532  (600-1)
          C  760-1½  532  (600-1½)
          DE  780-2  552  (600-2)

\(^1\)No-NOTAM MP: PAR-Rwy 14R-32L 1600-2400Z++ Mon, Rwy 14L-32R 1600-2400Z++ Wed.
\(^2\)When ALS inop, increase vis to ½ mile.
\(^3\)When ALS inop, increase vis to 1 mile.
\(^4\)Simultaneous approaches authorized.
\(^5\)Pattern at 2800 ft.
\(^6\)Caution: WCH group 4: 15 ft less than required 20 ft.
\(^7\)Step Down Fix at 3 NM from thld, 1100 min.
\(^8\)Circling authorized only from ASR.

2When ALS inop, increase vis to ½ mile.
3When ALS inop, increase vis to 1 mile.
4Simultaneous approaches authorized.
5Pattern at 2800 ft.
6Caution: WCH group 4: 15 ft less than required 20 ft.
7Step Down Fix at 3 NM from thld, 1100 min.
8Circling authorized only from ASR.
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.

<table>
<thead>
<tr>
<th>CITY/AIRPORT</th>
<th>LDG RWY</th>
<th>HOLD-SHORT POINT</th>
<th>AVBL LDG DIST</th>
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<tr>
<td>NAPA, CA</td>
<td>24</td>
<td>01L-19R</td>
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<td>NAPA COUNTY (APC)</td>
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<td>SANTA ROSA, CA</td>
<td>02</td>
<td>14-32</td>
<td>4,608 feet</td>
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<tr>
<td>CHARLES M SCHULZ - SONOMA</td>
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<td>COUNTY (STS)</td>
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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 polygons 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.

<table>
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<th>CITY/AIRPORT</th>
<th>HOT SPOT</th>
<th>DESCRIPTION*</th>
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<tr>
<td><strong>ATWATER, CA</strong></td>
<td>HS 1 Twy A, Twy A1, Twy B, and Twy G complex int.</td>
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<tr>
<td>CASTLE (MER)</td>
<td>HS 2 Twy A and southeast ramp, traffic congestion.</td>
<td></td>
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<tr>
<td><strong>BEALE AFB, CA</strong></td>
<td>HS 1 Twy B, high-speed U-2 mobile traffic when Rwy 15 in use.</td>
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<tr>
<td>BEALE AFB (BAB)</td>
<td>HS 2 Twy E, high-speed U-2 mobile traffic when Rwy 33 in use.</td>
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<tr>
<td></td>
<td>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.</td>
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<tr>
<td><strong>CONCORD, CA</strong></td>
<td>HS 1 Rwy 32L and run-up area, Twy J.</td>
<td></td>
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<tr>
<td>BUCHANAN FLD (CCR)</td>
<td>HS 2 Complex int at Rwy 01R-19L, Twy J, Twy A, Twy C, and Twy K.</td>
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<td>HS 3 Rwy 32L apch, Twy A.</td>
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<tr>
<td></td>
<td>HS 4 Rwy 32R, Twy B, Twy J, and the run up area.</td>
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</tr>
<tr>
<td><strong>FAIRFIELD, CA</strong></td>
<td>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.</td>
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<td>TRAVIS AFB (SUU)</td>
<td>HS 2 Twy J, Twy A, Twy C, and Twy K.</td>
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<td>HS 3 Twy J, Twy A, Twy C, and Twy K.</td>
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<td>HS 4 Twy J, Twy A, Twy C, and Twy K.</td>
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<td>HS 5 Rwy 28L hold bars on Twy A1 and Twy Z1.</td>
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<td><strong>HAYWARD, CA</strong></td>
<td>HS 1 Rwy 10L-28R, Twy E and Twy A.</td>
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<tr>
<td>HAYWARD EXEC (HWD)</td>
<td>HS 2 Area not visible from ATCT.</td>
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<td>HS 3 Area not visible from ATCT.</td>
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<tr>
<td></td>
<td>HS 4 Area not visible from ATCT.</td>
<td></td>
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<tr>
<td></td>
<td>HS 5 Rwy 28L hold bars on Twy A1 and Twy Z1.</td>
<td></td>
</tr>
<tr>
<td><strong>LIVERMORE, CA</strong></td>
<td>HS 1 Rwy 25R, Twy B.</td>
<td></td>
</tr>
<tr>
<td>LIVERMORE MUNI (LVK)</td>
<td>HS 2 Rwy 25L, Twy C.</td>
<td></td>
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<tr>
<td></td>
<td>HS 3 Rwy 07L, Twy H.</td>
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<tr>
<td></td>
<td>HS 4 Rwy 07R, Twy G.</td>
<td></td>
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<tr>
<td></td>
<td>HS 5 Rwy 25R, Twy G.</td>
<td></td>
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<tr>
<td></td>
<td>HS 6 Ints of Twy J, Twy A, and Twy G.</td>
<td></td>
</tr>
<tr>
<td><strong>NAPA, CA</strong></td>
<td>HS 1 Twy A, Twy A2, Twy C, Twy E and the ramp.</td>
<td></td>
</tr>
<tr>
<td>NAPA COUNTY (APC)</td>
<td>HS 2 Rwy 24, Twy A.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HS 3 Rwy 24 and Rwy 01L.</td>
<td></td>
</tr>
<tr>
<td><strong>OAKLAND, CA</strong></td>
<td>HS 1 Rwy 28R, Twy A and Twy B.</td>
<td></td>
</tr>
<tr>
<td>METRO OAKLAND INTL (OAK)</td>
<td>HS 2 Rwy 10L-28R, Twy H, Twy G, Twy C and Twy D.</td>
<td></td>
</tr>
<tr>
<td><strong>SACRAMENTO, CA</strong></td>
<td>HS 1 Inbound Twy A and outbound Twy B.</td>
<td></td>
</tr>
<tr>
<td>SACRAMENTO EXEC (SAC)</td>
<td>HS 2 Portion of Twy E not visible from twr.</td>
<td></td>
</tr>
<tr>
<td><strong>SACRAMENTO, CA</strong></td>
<td>HS 1 Twy Y2 between Concourse A and Concourse B.</td>
<td></td>
</tr>
<tr>
<td>SACRAMENTO INTL (SMF)</td>
<td>HS 2 Vehicle Service Road crossing Twy W and Twy Y.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HS 3 Twy A at the int of Twy A13, Twy G1 and Twy P.</td>
<td></td>
</tr>
</tbody>
</table>

(SEE CONTINUATION PAGE FOR MORE LISTINGS)
<table>
<thead>
<tr>
<th>CITY/AIRPORT</th>
<th>HOT SPOT</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAN FRANCISCO, CA</td>
<td>HS 1</td>
<td>Complex int Twy B and Twy F.</td>
</tr>
<tr>
<td>SAN FRANCISCO INTL (SFO)</td>
<td>HS 2</td>
<td>Rwy 01L-19R, Twy C and Twy E.</td>
</tr>
<tr>
<td></td>
<td>HS 3</td>
<td>Rwy 28R and Twy T.</td>
</tr>
<tr>
<td>SAN JOSE, CA</td>
<td>HS 1</td>
<td>Rwy 30L and Twy D &quot;Run-up Area&quot; near Active rwy.</td>
</tr>
<tr>
<td>NORMAN Y. MINETA SAN JOSE INTL (SJC)</td>
<td>HS 2</td>
<td>Numerous inbounds and outbounds at twy intersections Twy D, Twy Z, and Twy Y.</td>
</tr>
<tr>
<td></td>
<td>HS 2</td>
<td>Maintain vigilance when maneuvering at Twy Y, Twy Z, Twy A and Rwy 31R run-up area.</td>
</tr>
<tr>
<td>SAN JOSE, CA</td>
<td>HS 1</td>
<td>Twy A, Twy A5, Twy Z complex int in close proximity to Rwy 14-32.</td>
</tr>
<tr>
<td>REID-HILLVIEW OF SANTA CLARA COUNTY (RHV)</td>
<td>HS 2</td>
<td>South run-up area not visible from the twr.</td>
</tr>
<tr>
<td></td>
<td>HS 3</td>
<td>North run-up area east of Twy A and Twy H int in close proximity of Rwy 20 Apch Hold.</td>
</tr>
<tr>
<td></td>
<td>HS 4</td>
<td>Wrong rwy departure risk.</td>
</tr>
<tr>
<td>SANTA ROSA, CA</td>
<td>HS 1</td>
<td>Area not visible from control twr.</td>
</tr>
<tr>
<td>CHARLES M SCHULZ-SONOMA COUNTY (STS)</td>
<td>HS 2</td>
<td>Closely spaced rwys on Twy H.</td>
</tr>
<tr>
<td>STOCKTON, CA</td>
<td>HS 1</td>
<td>Simultaneous ops on Rwy 11-29 and Rwy 02-20.</td>
</tr>
<tr>
<td>STOCKTON METRO (SCK)</td>
<td>HS 2</td>
<td></td>
</tr>
</tbody>
</table>
**ARRIVAL ROUTE DESCRIPTION**

**RBUCL TRANSITION (RBUCLAANET1)**

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.

**SPAMY TRANSITION (SPAMY.AANET1)**

NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Corresponding STAR is WNDSR. Expect WNDSR at or above 13000.

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

NOTE: Chart not to scale.

---

**NOTE:**

- D-ATIS 133.775
- OAKLAND CENTER 125.85 323.0
- NORCAL APP CON 125.35 310.8
- OAKLAND TOWER 127.2 256.9 (Rwy 12)
- GND CON 121.75

**RNAV 1.**

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

**NOTE:**

- Chart not to scale.

---

**ARRIVAL ROUTE DESCRIPTION**

**RBUCL TRANSITION (RBUCLAANET1)**

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.
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.
NOTE: Expect "descend via" clearance from Oakland Center. Northern California TRACON will assign landing runway.
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.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.

(CONTINUED ON FOLLOWING PAGE)
LANDING RUNWAY 12: From BANND on track 277° to cross SULRR at or below 13000, then on track 264° to cross KEENR at 8000, then on track 262° to cross LOHGN at 6000 and at 230K, 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 RADAR vectors to final approach course.

NOTE: DME/DME/IRU or GPS required.
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 1300.

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.

BDEGA FOUR ARRIVAL (RNAV)

(LOZIT.BDEGA4) 2024-07-11 to 05/09/2024
NOTE: Turbojet aircraft only.

NOTE: Chart not to scale.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: GPS required.
NOTE: Turbojet and turboprop aircraft only.
NOTE: Landing KSUU: Expect RADAR vectors to Rwy 21L or 3L unless otherwise assigned by ATC.
NOTE: Landing KCCR: Expect Rwy 19R, unless otherwise assigned by ATC.

(NARRATIVE ON FOLLOWING PAGE)
ARRIVAL ROUTE DESCRIPTION

NURAY TRANSITION (NURAY.BMBER1)
PEMKE TRANSITION (PEMKE.BMBER1)
RPARK TRANSITION (RPARK.BMBER1)

LANDING KUU, 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

KUU: 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.
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.
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.

BRIXX FOUR ARRIVAL (RNAV)

(BRIXX.BRIXX4) 21MAR24
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.
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.

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

RGOOD TRANSITION (RGOOD.EMZOH3)

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 RUNWAYS 28L/R: 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, then on track 292° to cross MYSHN at or above 6200, then on track 264° to cross CYMBL at 5300. Expect assigned instrument approach procedure.

LANDING RUNWAY 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, then on track 292° to cross MYSHN at or above 6200, then on track 264° to cross FIXME at or above 5200, then on track 264° to cross MYCAF at or above 5000, then on track 264° to cross BIGPD at or above 4500, then on track 264° to cross FRNNY at or above 4100. Expect assigned instrument approach procedure.

NOTE: Radar required.
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.
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.
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.

NOTE: Chart not to scale.
NOTE: Chart not to scale.

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.

[CONTINUED ON FOLLOWING PAGE]
ARRIVAL ROUTE DESCRIPTION

From OAKES on track 244° to cross GRUDG between FL200 and FL230 and at 280K, then on track 244° to cross BANND at or below FL190.

LANDING RUNWAYS 28L/R: From BANND on track 244° to cross TOOOL between 11000 and 17000 and at 280K, then on track 250° to cross EVOLV between 7000 and 9000, then on track 249° to cross BBUBB at 5000. Expect assigned instrument approach procedure.

LANDING RUNWAY 30: From BANND on track 244° to cross TOOOL between 11000 and 17000 and at 280K, then on track 238° to cross FFIST between 7000 and 9000, then on track 251° to cross PRFCT at or above 5000, then on track 256° to cross PARBB at 4500, then on track 243°. Expect assigned instrument approach procedure.

NOTE: Chart not to scale.
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.

NOTE: Chart not to scale.
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.
**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.

**NOTE:** Chart not to scale.

**NOTE:** RADAR required.

**NOTE:** DME required.

**NOTE:** Chart not to scale.
PEBLL TWO ARRIVAL (RNAV)

NOTE: Chart not to scale.

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.
ARRIVAL ROUTE DESCRIPTION

ALCOA TRANSITION (ALCOA.PIRAT3)

CINNY TRANSITION (CINNY.PIRAT3)

HUNTS TRANSITION (HUNTS.PIRAT3)

PAINT TRANSITION (PAINT.PIRAT3)

PASIF TRANSITION (PASIF.PIRAT3)

WUSES TRANSITION (WUSES.PIRAT3)

LANDING KOAK/KSFO: From PIRAT on track 060° to BRINY, then on track 060° to cross ARGGG at 8000 and at 230K, then on track 060°. Expect assigned instrument approach or RADAR vectors to final approach course.

NOTE: Jet and turboprop aircraft only.
NOTE: Landing SFO expect Runway 28L/R unless otherwise assigned by ATC.
NOTE: Landing OAK expect Runway 28L/R or Runway 30 unless otherwise assigned by ATC.
NOTE: GPS required.
ARIVAL 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.

NOTE: Chart not to scale.

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

NOTE: RADAR required.

POINT REYES THREE ARRIVAL

(PYE,PYE3) 22JUN17

SAN FRANCISCO, CALIFORNIA

(2334)

NORCAL APP CON
133.95 317.6
KNJG ATIS
124.175 283.0
PAO ATIS
135.275
RHY ATIS
125.2
SFO D-ATIS
113.7 115.8 118.85
SJC D-ATIS
126.95
SQL ATIS
125.9
MOFFETT TOWER*
119.55 259.65
PALO ALTO TOWER*
118.6
REID-HILLVIEW TOWER*
119.8 RFW 13L/31R
126.1 RFW 13R/31L
SAN CARLOS TOWER*
119.0 326.2
SAN FRANCISCO TOWER
120.5 269.1
SAN JOSE TOWER*
124.0 257.6

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.
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 GOTEEL 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 HITIR 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 KUID at or above 4000 and at 230K. Expect assigned instrument approach or RADAR vectors to final approach course.

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.
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.

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

NOTE: Chart not to scale.

REBAS ONE ARRIVAL (RNAV) Arrival Routes

(BRIXX.REBAS1) 11 JUL 24

NAPA, CALIFORNIA

NOTE:  Chart not to scale.

REBAS ONE ARRIVAL (RNAV) Arrival Routes

(BRIXX.REBAS1) 11 JUL 24

NAPA, CALIFORNIA
NOTE: Chart not to scale.

NOTE: GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.

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.
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.
ARRIVAL ROUTE DESCRIPTION

From SERFR on track 314° to cross NRRU at or above FL200 and at 280K, then on track 313° to cross WWAVS between 15000 and FL190 and at 280K, then on track 333° to cross EPICK between 10000 and 15000 and at 280K, then on track 329° to cross FOLET at or above 8000 and at 240K, then on track 329° to cross EDDYY at 6000 and at 240K. Expect assigned instrument approach (Rwy 28L/R).

NOTE: Chart not to scale.

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: RNAV 1.

NOTE: RADAR required.
ARRIVAL ROUTE DESCRIPTION

MRLET TRANSITION (MRLET.SHARR1)
RPARK TRANSITION (RPARK.SHARR1)
RUSME TRANSITION (RUSME.SHARR1)

LANDING OAK: From SHARR on track 232° to LOCKE, then on track 232° to cross CATTY at 8000, then on heading 280° or as assigned by ATC. Expect RADAR vectors to final approach course.

LANDING HWD: From SHARR on track 232° to LOCKE, then on track 232° to cross CATTY at 8000, then on heading 232° or as assigned by ATC. Expect RADAR vectors to final approach course.

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet and turboprop aircraft only.
NOTE: Landing OAK expect runway 10L/R and 12 unless otherwise assigned by ATC.
NOTE: Landing HWD expect runway 28L/R unless otherwise assigned by ATC.
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 Rwy 30L/R.
NOTE: Landing south indicates Rwy 12L/R.
NOTE: Expect landing north unless otherwise advised.

NOTE: Chart not to scale.
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 instrument approach or RADAR vectors to final approach course.
(
5)

5000

WHYEE

LOHGN

6000 230K

(
4)

261°
(
11)

279
°

SKIZM TWO ARRIVAL(RNAV)

(SKIZM.SKIZM2)24MAY18

Z38

)
12
(

FL220 280K

MYJAW

)

EMZOH

vectors to final approach course.

METRO OAKLAND INTL(OAK)

OAKLAND, CALIFORNIA

SW-2, 11 JUL 2024 to 05 SEP 2024

261° to cross HIRMO at 4000, then on track 261°. Expect RADAR

*6

121.75

GND CON

127.2 256.9

OAKLAND TOWER

133.775

D-ATIS

124.525 348.675

1
1
0
2 00
3 00
FL280 280K ( 02
5
2 °
)
RGOOD

11

11 NM

*5 00
5
0
30 00
(1 4°
9

12
4°

then on track 261° to cross WHYEE at or above 5000, then on track

NOTE: Chart not to scale.

2°
32

at 7000, then on track 279° to cross LOHGN at 6000 and at 230K,

FOOTO between 7000 and 8000, then on track 303° to cross BRRZI

)

133.7 285.4
NORCAL APP CON

AL-294 (FAA)

between 9000 and 10000 and at 240K, then on track 322° to cross

between 11000 and 14000, then on track 322° to cross WNDML

FL190
15000

1
*6 100
00 0
30 0
(2 4°
9

14000
11000

EMAAA

SKIZM

)
12
(

LANDING RUNWAY 12: From SKIZM on track 322° to cross EMAAA

WNDML
10000 240K
9000

2°
32

RGOOD TRANSITION (RGOOD.SKIZM2)

MYJAW TRANSITION (MYJAW.SKIZM2)

)
12
(

2°
32

ARRIVAL ROUTE DESCRIPTION

8000
7000

FOOTO

N

OAKLAND CENTER

SKIZM TWO ARRIVAL(RNAV)

Northern California TRACON will assign landing runway.

)

30
(
13 3°

7000

BRRZI

NOTE: Expect to receive "descend via" clearance from Oakland Center.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.

NOTE: RADAR required.

Ldg Rwy 12

4000

HIRMO

261°

SW-2, 11 JUL 2024 to 05 SEP 2024

261°

(SKIZM.SKIZM2)21168
METRO OAKLAND INTL(OAK)
OAKLAND, CALIFORNIA


ARRIVAL ROUTE DESCRIPTION

ANAHO TRANSITION (ANAHO.SLMMR5)
CARVV TRANSITION (CARVV.SLMMR5)
CRASY TRANSITION (CRASY.SLMMR5)
DONNR TRANSITION (DONNR.SLMMR5)
WEBGO TRANSITION (WEBGO.SLMMR5)

From SLMMR on track 239° to cross POZUR at or above 8000.

LANDING RUNWAYS 17L/R: From POZUR on track 238° to cross TENCO at 4000, then on track 255°. Expect RADAR vectors for assigned instrument approach procedure.

LANDING RUNWAYS 35L/R: From POZUR on track 240° to RICEE, then on track 219° to cross PKAAY at or above 6000 and at 210K, then on track 221° to THANN, then on track 168° to cross BANZA at 4000 and at 210K, then on track 168°. Expect RADAR vectors to final approach course.
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 (RGB.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.
ARRIVAL ROUTE DESCRIPTION

AMAKR TRANSITION (AMAKR.STLER4)

LEGGS TRANSITION (LEGGS.STLER4)

MBECE TRANSITION (MBECE.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.
ARRIVAL ROUTE DESCRIPTION

OKNIE TRANSITION (OKNIE.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.
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.

NOTE: Expect runway assignment prior to PNNEN.
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.
NOTE: Chart not to scale. (CONTINUED ON FOLLOWING PAGE)

RNAV 1 - DME/DME/IRU or GPS.
RADAR required.
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 REEVIR, then on track 291°. Expect RADAR vectors to final approach course.

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.
**ARRIVAL ROUTE DESCRIPTION**

**RBUCI TRANSITION (RBUCI.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.
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.
ARRIVAL ROUTE DESCRIPTION

From YOSEM on track 248° to SNORA, then on track 248° to cross ZOMER at/above FL270 and at 280K.

LANDING RUNWAYS 28L/R: From ZOMER on track 247° to cross FRIGG at/below FL190, then on track 249° to cross SOOIE between 11000 and 13000 and at 250K, then on track 248° to cross FAITH at 8000. Expect assigned instrument approach procedure, or expect RADAR vectors to final.

NOTE: Chart not to scale.

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: YOSEM3 STAR ATC assigned only.
**RNAV (GPS) RWY 31**  
**ALTURAS MUNI (AAT)**

<table>
<thead>
<tr>
<th>ASOS</th>
<th>SEATTLE CENTER</th>
<th>UNICOM</th>
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<tr>
<td>124.175</td>
<td>127.6</td>
<td>122.8 (CTAF)</td>
</tr>
</tbody>
</table>

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.

---

**Category**  
- **LPV DA:**  
  - 4830-1⅔ (500-1⅓)  
  - 5120-1 (742-800-1 ⅓)  
  - 5120-1¼ (742-800-1 ¼)  
  - 5120-⅔ (742-800-½)

- **LNAV/VNAV DA:**  
  - 4880-1⅔ (502-600-1⅓)  
  - 5120-1 (742-800-1⅓)  
  - 5120-½ (742-800-½)

- **LNAV MDA:**  
  - 5120-1 (742-800-1⅓)  
  - 5120-1¼ (742-800-1¼)  
  - 5120-⅔ (742-800-½)

- **CIRCLING:**  
  - 5120-1 (742-800-1⅓)  
  - 5120-1¼ (742-800-1¼)  
  - 5120-⅔ (742-800-½)

---

Procedure NA for arrivals at BACHS via V452 northwest bound.
Alturas, California

**Takeoff Minums**
- Runway 3: Standard with minimum climb of 340° per NM to 5900.
- Runway 13: Standard with minimum climb of 230° per NM to 8200.
- Runway 21: Standard with minimum climb of 365° per NM to 6000.
- Runway 31: Standard with minimum climb of 450° per NM to 5800.

**Takeoff Obstacle Notes**
- Runway 3: Trees, buildings, poles and a road with vehicles beginning 1' from DER, right and left of centerline, up to 100' AGL/4659' MSL.
- Runway 21: Trees and road with vehicles beginning 1' from DER, right and left of centerline, to 100' AGL/4469' MSL.
- Runway 13: Trees and a road with vehicles beginning 1' from DER, right and left of centerline, up to 100' AGL/4519' MSL.
- Runway 31: Trees and road with vehicles beginning 1' from DER, right and left of centerline, up to 100' AGL/4659' MSL.

**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.

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.
ILS or LOC RWY 32

CALIFORNIA REDWOOD COAST-HUMBOLDT COUNTY (ACV)

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

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

Circling NA northeast of Rwy 14-32. DME required.

SW-2, 11 JUL 2024 to 05 SEP 2024

ARCATA/EUREKA, CALIFORNIA

Amdt 3 12OCT17

SW-2, 11 JUL 2024 to 05 SEP 2024
RNAV (GPS) RWY 1

CALIFORNIA REDWOOD COAST-HUMBOLDT COUNTY (ACV)

**For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -2°C or above 54°C. Circling NA northeast of Rwy 14-32.**

**MISSING APPROACH:** Climb to 3200 direct HIPGI and on track 295° to CULDU and hold.

### Category

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>LPV DA</td>
<td></td>
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<td>870-2 1/2</td>
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<td>1080-1</td>
<td>1080-1/4</td>
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<td>876 (900-2 1/2)</td>
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<td>CIRCLING</td>
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<td>858 (900-1/4)</td>
<td>1080-2 1/2</td>
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**VGS and RNAV glidepath not coincident (VGS Angle 3.00°/TCH 48)**

**TDZ CL Rwy 32**

**ARCATA/EUREKA, CALIFORNIA**

Amdt 2B 20APR23

**CALIFORNIA REDWOOD COAST-HUMBOLDT COUNTY (ACV)**

40°59'N-124°07'W
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 3/4 SM NA.

**MISSED APPROACH:**
- Climbing right turn to 3000 direct SEGVE and hold.

### ASOS
- **118.525**

### SEATTLE CENTER
- **124.85 306.3**

### UNICOM
- **123.0 (CTAF)**

---

**HOLDING PATTERN**

- **CULDU**
- **UYFOR**
- **3000**
- **316°**
- **136°**
- **2100**
- **1.8 NM to RW14**
- **LNAV only**

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

---

**CATEGORY**

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<td>820-1/4 615 (600-3/4)</td>
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<td>840-1/4 618 (700-3/4)</td>
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<tr>
<td><strong>LNAV MDA</strong></td>
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<td>880-2 658 (700-2)</td>
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**ARCATA/EUREKA, CALIFORNIA**

Amdt 1B 12OCT17

**CALIFORNIA REDWOOD COAST-HUMBOLDT COUNTY (ACV)**

40°59'N-124°07'W
Baro-VNAV NA. Circling NA northeast of Rwy 14-32.

DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3000 direct CULDU and hold.

LNAV only.

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00°/TCH 43).

316° (3.3) 3700

316° (2.1) 3200

316° (1.4) 5700

648 ±

136° (18.7) 5700 to VOMAC

5700 to VOMAC 136° (18.7)

679 (700-1)

679 (700-2)

678 (700-2)

678 (700-1)

2 NM to RW32

5 NM to RW32

5 NM

4700

3700

3200

316°

316°

5700

6.4 NM to RW32

136° (9.9)

136° (3.4)

2 NM to RW32

3 NM to RW32

3.4 NM

3.3 NM

3.3 NM

3.4 NM

1.4 NM

1.4 NM

1.4 NM

1.4 NM

1 2

1 2

1 2

1 2

186°

230°

3200

5700

316°

316°

316°

222 (14.4)

ARCATA/EUREKA, CALIFORNIA

RNAV (GPS) RWY 32

CALIFORNIA REDWOOD COAST-HUMBOLDT COUNTY (ACV)

AL-519 (FAA) 24081

ARCATA/EUREKA, CALIFORNIA

Amdt 2A 26APR18

CALIFORNIA REDWOOD COAST-HUMBOLDT COUNTY (ACV)

40°59'N-124°07'W

RNAV (GPS) RWY 32
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.
RNAV (GPS) RWY 13
CASTLE (MER)

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 1/2 SM, increase LNAV Cats A/B visibility to 1 SM, and increase LNAV Cat C/D visibility to 1/2 SM.

Procedure NA for arrivals at AWALI on V23 southeast bound.

Procedure NA for arrivals at PATYY on V111-113 southwest bound and on V113 northwest bound.

Procedure NA for arrivals at VOLTA on V113 southeast bound.

**MISSED APPROACH:** Climb to 600 then climbing left turn to 4000 direct TURLO and hold, continue climb-in-hold to 4000.
**RNAV (GPS) RWY 31**

**CASTLE (MER)**

**Circling NA southwest of Rwy 13-31. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C or above 54°C. For inoperative ALS, increase LNAV/VNAV all Cats visibility to 1/2 SM and LNAV Cats C/D visibility to 1 SM.**

**Procedure NA for arrivals at VOLTA on V113 northwest bound.**

**Procedure NA for arrival on PXN VORTAC airway radials 296 CW 061.**

**Category**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<td>LPV DA</td>
<td>381-1½</td>
<td>200 [200-1½]</td>
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<td>560-5/₉</td>
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<td>CIRCLING</td>
<td>660-1</td>
<td>470 [500-1]</td>
<td>720-1½</td>
<td>800-2</td>
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<td></td>
<td></td>
<td></td>
<td>530 [600-1½]</td>
<td>610 [700-2]</td>
</tr>
</tbody>
</table>
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
Circle RWY25 NA at night. RWY7 helicopter visibility reduction below ½ SM NA. For uncompensated BARO-VNAV systems, LNAV/VNAV NA below -18°C or above 54°C.

MISSING APPROACH: Climb to 5000 direct AVPEY and left turn on track 311° to EKUJA and on track 289° to MRGGO and hold.

AWOS-3 119.375
NORCAL APP CON 125.4 317.5
UNICOM 122.7 (CTAF)

RNAV (GPS) RWY 7
AUBURN MUNI (AUN)

AL-9143 (FAA)

23110
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.

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.
**ILS or LOC Y RWY 33**

**BEALE AFB (KBAB)**

---

### ATIS

**124.55 273.5**

### NORCAL APP CON

**125.4 259.1**

### TOWER

**119.4 284.75**

### GND CON

**121.6 257.75**

---

**Missed Approach:** Climb to 3600 intercept BAB TACAN R-326 to HAPAK and hold.

- **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.**

---

**EMERG SAFE ALT 100 NM 13,700**

---

**ZAPUX** 1.5

**RUENZ** 3.7

**ZEGSO** 5.8

**BAB** 25

**HAPAK** 16

**BAB** 15

**BAB** 15

**ZUTUK** 15

---

**CATEGORY**

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<td>S-ILS 33*</td>
<td>305/24</td>
<td>200</td>
<td>(200-1/2)</td>
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<td>S-LOC 33**</td>
<td>520/24 415 (500-½)</td>
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<tr>
<td>C CIRCLING***</td>
<td>600-1 487 (500-1)</td>
<td>600-1 1/2 487 (500-1/2)</td>
<td>800-2 1/4 687 (700-2½)</td>
<td>687 (700-2½)</td>
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</tbody>
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**MARYSVILLE, CALIFORNIA**

**Amdt 6  22FEB24**

---

**39°08'N - 121°26'W**

---

**SW-2, 11 JUL 2024 to 05 SEP 2024**

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**SW-2, 11 JUL 2024 to 05 SEP 2024**

---

**SW-2, 11 JUL 2024 to 05 SEP 2024**

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**SW-2, 11 JUL 2024 to 05 SEP 2024**
**RNAV (GPS) RWY 33**

***Circling not authorized NE of Rwy 15-33.***

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

**ATIS**

| 124.55 | 273.5 |

**NORCAL APP CON**

| 125.4 | 259.1 |

**TOWER**

| 119.4 | 284.75 |

**GND CON**

| 121.6 | 257.75 |

**EMERG SAFE ALT 100 NM 13,700**

**SW-2, 11 JUL 2024 to 05 SEP 2024**

**RNAV (GPS) RWY 33**

**MARYSVILLE, CALIFORNIA**

**Amrd 2 22FEB24**
**TACAN Y RWY 15**

**MARYSVILLE, CALIFORNIA**

<table>
<thead>
<tr>
<th>TACAN BAB</th>
<th>APCH CRS</th>
<th>Ryd 1dg</th>
<th>TDZE</th>
<th>Arpt Elev</th>
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<tr>
<td>Chan 23</td>
<td>153°</td>
<td>12,001</td>
<td>113</td>
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- (USAF)

**BEALE AFB (KBAB)**

**ATIS**

- 124.55 273.5

**NORCAL APP CON**

- 125.4 259.1

**TOWER**

- 119.4 284.75

**GND CON**

- 121.6 257.75

---

**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.

**IF** AHART

**BAB**

**ZH**

**BBEEZ**

**BAB**

**ZINUX**

**BAB**

**JUMPS**

**BAB**

**EMERG SAFE ALT 100 NM 13,700**

**MARYSVILLE, CALIFORNIA**

Amdt 6 22FEB24

**39°08'N - 121°26'W**

**BEALE AFB (KBAB)**

**ELEV 113**

**TDZE 113**

**ZARAG**

**AHART**

**BAB**

**BBEEZ**

**ZINUX**

**JUMPS**

**TACAN**

**AGED**

**TWR 274**

**BCN 240**

**HIRL all Ryws**

---

**CATEGORY**

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<th>S-15*</th>
<th>560/24 447 (500-½)</th>
<th>560/45 447 (500-½)</th>
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<tr>
<td>CIRCLING**</td>
<td>600-1 487 (500-1)</td>
<td>600-1½ 487 (500-1½)</td>
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</tbody>
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**MARYSVILLE, CALIFORNIA**

**SW-2, 11 JUL 2024 to 05 SEP 2024**

**SW-2, 11 JUL 2024 to 05 SEP 2024**

**SW-2, 11 JUL 2024 to 05 SEP 2024**
**ALS-1**

MISSED APPROACH: Climb to 3600 intercept BAB TACAN R-326 to HAPAK and hold.

**ATIS**

124.55 273.5

**NORCAL APP CON**

125.4 259.1

**TOWER**

119.4 284.75

**GND CON**

121.6 257.75

**EMERG SAFE ALT 100 NM 13,700**

**MARYSVILLE, CALIFORNIA**

Amdt 6  25JAN24
PYNUN-SEVEN DEPARTURE (PYNUN7 • PYNUN)

FOR USE BY 9 RW AIRCRAFT ONLY

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.
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 3/4 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.

Transition on V452 northwest bound does not require holding.

Apt Elev 4900

Category A 6787.2 1891 (1900-2) 6787.3 1891 (1900-3)

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 3/4 SM not authorized.
RNAV (RNP) RWY 30

**BISHOP (BIH)**

**APP CRS:** 301°
- **Rwy Idg:** 6743
- **TDZE:** 4111
- **Apt Elev:** 4124

**For uncompensated Baro-VNAV systems, procedure NA below -12°C or above 54°C.**

**RNAP AR APCH, RF required.**

**AUTHORIZATION REQUIRED**

**ASOS**
- **119.025**

**OAKLAND CENTER**
- **125.75 284.65**

**UNICOM**
- **123.0 (CTAF)**

**Procedure NA for arrivals at EVERR via V381 northwest bound.**

**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.
BISHOP, CALIFORNIA

RNAV (GPS) Y RWY 12
BISHOP (BIH)

ASOS
119.025

OAKLAND CENTER
125.75 284.65

UNICOM
123.0 (CTAF)

Rwy 12, helicopter visibility reduction below 1/2 SM NA.

Procedure NA for arrivals at NIKOL on V244, T298 westbound and on V381 northwest bound.

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.

Visual Segment - Obstacles.

RNAV (GPS) Y RWY 12
BISHOP (BIH)

Orig-F 08SEP22

RWP Idg 7098
TDZE 4123
Apt Elev 4124

ELEV 4124
TDZE 4123

MIRL Rwys 8-26, 12-30, and 17-35
REIL Rwys 12, 17, 30 and 35

MSCS: 118° 22' W 37° 22' N

BISHOP, CALIFORNIA
Orig F 08SEP22
BISHOP, CALIFORNIA

RNAV (GPS) Z RWY 12
BISHOP (BIH)

ASOS
119.025

OAKLAND CENTER
125.75 284.65

UNICOM
123.0 (CTAF)

RNAV (GPS) Z RWY 12
MISSION 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.

Procedure NA for arrivals at NIKOL on
V244-T298 westbound and on V381
northwest bound.

MISSION 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.

Procedure NA for arrivals at NIKOL on
V244-T298 westbound and on V381
northwest bound.

BISHOP, CALIFORNIA
Orig F 08SEP22

RNAV (GPS) Z RWY 12
BISHOP (BIH)
BISHOP, CALIFORNIA

LOD/DME I-BIH  

<table>
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<th>C</th>
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<td>6340-1(^\frac{1}{4})</td>
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**DME** required.

**ASOS**

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<th>119.025</th>
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**OAKLAND CENTER**

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<th>125.75</th>
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**UNICOM**

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<tr>
<th>123.0 (CTAF)</th>
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</thead>
</table>

**MISSING 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.
**ILS or LOC RWY 13L**

**CHICO RGNL (CIC)**

**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.

**DME required.**

Circling NA east of Rwy 13L/31R.

**ATIS**

119.675

**OAKLAND CENTER**

132.2 350.3

**CHICO TOWER**

121.0 (CTAF) 239.3

**GND CON**

121.9

**UNICOM**

122.95

**CHICO, CALIFORNIA**

**AL-557 (FAA)**

**32**
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 1/2 SM, and increase LNAV Cats C/D visibility to 1 SM.

Procedure NA for arrival on Red Bluff VORTAC airway radials 122 CW.

**RNAV (GPS) RWY 13L**

**CHICO RGNL (CIC)**

<table>
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<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
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<td>LPV DA</td>
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<tr>
<td>LNAV/ VNAV DA</td>
<td>530-1/2</td>
<td>290 (300-1/2)</td>
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<tr>
<td>LNAV MDA</td>
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<td>360 (400-1/2)</td>
<td>600-1/2</td>
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<td>CIRCLING</td>
<td>640-1</td>
<td>400 (400-1)</td>
<td>700-1</td>
<td>460 (500-1)</td>
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CHICO, CALIFORNIA
AL-557 (FAA)

RNAV (GPS) RWY 31R
CHICO RGNL (CIC)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 48°C.

misSed APPCh: Climb to 3000 direct ZOTWY and hold.

ATIS
119.675

Oakland Center
132.2 350.3

Chico Tower *
121.0 (CTAF) 239.3

Gnd Con
121.9

Unicom
122.95

Missed ApCh Fix

4 NM

ZOTWY

Elev 240  D
TDZE 226

Procedure NA for arrivals at GRIDD on V23 and T261 southeast bound.

Category

A

B

C

D

LpV DA
476-1 250 (300-1)

LNAV/ VNAV DA
733-1 4 507 (500-1 4)

LNAV MDA
600-1 374 (400-1)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 48°C.

39°48’N-121°52’W

Chico, California
Orig-D 15AUG19

Chico RGNL (CIC)

RNAV (GPS) RWY 31R

Chico RGNL (CIC)
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
CHICO, CALIFORNIA
CHICO RGNL (CIC)
CHICO, CALIFORNIA

CHICO FIVE DEPARTURE
AL-557 (FAA)

NOTE: Chart not to scale.

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.
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.

Procedure NA for arrivals at ROZZA on V301 north bound, V108 northwest bound and V494 west bound.

MISSED APPROACH: Climbing left turn to 6000 direct. Sanic NA and hold, continue climb-in-hold to 6000.

Final approach course offset 2.68°.

CATEGORY

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<td>1044 (1100-2)</td>
<td>1320-3</td>
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<td>CIRCLING</td>
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<td>1224 (1300-2)</td>
<td>2180-2</td>
<td>1904 (2000-2)</td>
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Category D NA.
RNAV (GPS) RWY 30
NEW COALINGA MUNI (C80)

AWOS-3
119.275

OAOKLAND CENTER
128.7 307.0

UNICOM
122.7 (CTAF)

procedure NA for arrival on AVE VOR/DME
airway radials 257 CW 313.

MISSED APPROACH: Climb to 1200, then climbing right turn
to 3000 direct OXOFE and hold.

Circling to Rwy 1, 19 NA at night. For uncompensated
Baro-VNAV systems, LNAV/VNAV NA below -16°C
or above 54°C.

COALINGA, CALIFORNIA
Orig 05OCT23
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.
**RNAV (GPS) RWY 35**

**COLUMBIA, CALIFORNIA**

**OAKLAND CENTER (O22)**

**AL-6786 (FAA)**

**CIRCLING**

1. **CIRCLING**
   - 354°
   - KEKDE (FAF)
   - HOFED (IAF)
   - HABXU (IAF)

2. **Visual Segment - Obstacles**
   - 4673 x 75
   - 4000 ft (5.1)
   - 342°
   - 3400 ft

3. **MISSED APPROACH**
   - Climbing left turn to 7000 direct.
   - Continue climb-in-hold to 7000.

4. **Terrain**
   - 7 NM
   - 250°
   - 2251

5. **RNAV (GPS) RWY 35**
   - 354° to LNAV MDA
   - 6.1 NM

6. **REIL Rwys 17 and 35**
   - MIRL Rwy 17-35

7. **354° to**
   - 2251

8. **Circling NA to Rwys 11 and 29.**

9. **Circling NA east of HABXU and hold, continue climb-in-hold to 7000.**

**RNP APCH.**

**visibility reduction below 1 SM NA.**

**CATEGORY**

- A
- B
- C
- D
- E

**Visibility Reduction**

- 1 SM NA
- 0.5 SM NA
- 0.3 SM NA
- 0.1 SM NA

**Altimeter Settings**

- 29.92 in Hg
- 29.92 in Hg
- 29.92 in Hg
- 29.92 in Hg

**Runway**

- 121.25 363.2 (NORTH/WEST)
- 121.25 327.0 (EAST/SOUTH)

**7000**

**NA**

**LNAV MDA**

**RNAV (GPS) RWY 35**

**354° to LNAV MDA**

**6.1 NM**

**SW-2, 11 JUL 2024 to 05 SEP 2024**
NOTE: Chart not to scale.

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.

TAKEOFF MINIMUMS

Rwy 11, 29: NA-Environmental.
Rwy 35: NA-ATC.
Rwy 17: 300-1½ or standard with minimum climb of 790' per NM to 2400.

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.
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.

Procedure NA for arrival on IIA VORTAC airway radials 251 CW 057.

VGSI and descent angles not coincident (VGSI Angle 3.00°/TCH 25).

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIRCLING</td>
<td>600-1</td>
<td>551 (600-1)</td>
<td>620-1½</td>
<td>NA</td>
</tr>
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</table>

COLUSA, CALIFORNIA

Amdt 1 11JUL24

SW-2, 11 JUL 2024 to 05 SEP 2024

COLUSA COUNTY (08)
RNAV (GPS) RWY 32
COLUSA COUNTY (O08)

**RNAV APCH - GPS.**

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 -1.5°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 1/2 SM; increase all MDAs 100 feet and LNAV Cat C visibility 1/2 SM and Circling Cat C visibility 1/2 SM.

**MISSING APPROACH:** Climb to 2600 direct VACIA and hold.

**UNICOM**

OAKLAND CENTER 132.2 350.3

UNICOM 122.8 (CTAF)

Procedure NA for arrivals at GRIME on V23 southbound.

Procedure NA for arrivals at ELEGY on V195 southbound.

**ELEV 49**

TDZE 49

**GRIME on V23 southbound.**

**SIXTO (FAF)**

**KYILE (IF)**

**GRIME (IAF)**

**ELEGY (IAF)**

**GRIME on V23 southbound.**

**VACIA 2600 direct VACIA and hold.**

Amdt 2 11JUL24
COLUSA, CALIFORNIA

COLUSA COUNTY (08)

VOR-A

DME required.

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.

---

COLUSA, CALIFORNIA

AL-5147 (FAA)

24193

COLUSA COUNTY (08)

VOR-A

DME required.

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.
VOR/DME CCR
117.0
APP CRS
172°
Rwy Idg 4400
TDZE 22
Apt Elev 26


MALS

MASS

VOR/DME CCR
BUCHANAN FLD (CCR)

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.

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 22).

---

Category

A
B
C
D

S-19R*
640-1
618 (700-1)
640-1¼
618 (700-1¼)

S-19R
1020-1¼
998 (1000-1¼)
1020-1¼
998 (1000-1¼)

CIRCLING
1020-1¼
994 (1000-1¼)
1020-1¼
994 (1000-1¼)

---

CONCORD, CALIFORNIA
Amdt 14B 14JUL22

37°59’N-122°03’W
BUCHANAN FLD (CCR)
CONCORD, CALIFORNIA

AIRPORT DIAGRAM

ATIS
124.7
CONCORD TOWER ★
119.7 (CTAF) ★ 257.8
GND CON
121.9
CLNC DEL
118.75

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

REIL Rwys 1L and 32R
MIRL Rwy 14L-32R
HIRL Rwy 1L-19R

122°03.0’W
37°59.5’N

JANUARY 2020
ANNUAL RATE OF CHANGE
0.1° W
BUCHANAN TWO DEPARTURE

TAKING OFF RUNWAYS 1L, 14L, 19L: Climbing left turn direct CCR VOR/DME, thence. . . .
TAKING OFF 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.
DME required. S-ILS 12: ½ mile visibility authorized with use of FD or AP or HUD to DA. If not available, increase S-LOC 12 all categories visibility to ½ mile. When local altimeter setting not received, use Brookings altimeter setting and increase DA to 407 feet and all MDAs 100 feet; increase S-LOC 12 Cat C/D, and circling Cat D visibilities to ½ mile. For inop MALSR, when using Brookings altimeter setting, increase S-ILS 12 all Categories 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.

**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:** 119.925
- **SEATTLE CENTER:** 124.85 306.3
- **UNICOM:** 122.8 (CTAF)
**Category**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPV DA</td>
<td>310-3/4</td>
<td>250 (300-3/4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LNAV/ VNAV DA</td>
<td>387-3/4</td>
<td>327 (400-3/4)</td>
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<td></td>
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<tr>
<td>LNAV MDA</td>
<td>460-3/4</td>
<td>400 (400-3/4)</td>
<td>460-7/8</td>
<td>400 (400-7/8)</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>540-1</td>
<td>479 (500-1)</td>
<td>640-1/2</td>
<td>579 (600-1/2)</td>
</tr>
</tbody>
</table>

**MISSED APPROACH:** Climb to 600 then climbing right turn to 3000 direc CHIDE and hold, continue climb-in-hold to 3000.

- 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 ½ mile, LNAV/VNAV all Cats visibility to 1½ miles, LNAV Cat C/D to 1½ mile, and Circling Cat C to 2 miles, Cat D to 2½ miles. For inop MALSR, increase LNAV/VNAV all Cats visibility to 1 mile and LNAV Cat A/B visibility to 1½ mile, Cat C/D to 1½ mile. For inop MALSR, when using Brookings altimeter setting, increase LPV all Cats visibility to 1½ mile, LNAV/VNAV all Cats visibility to 1½ mile, and LNAV Cat A/B to 1 mile, Cat C/D to 1½ 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 VGI glidepath until threshold.
RNAV (GPS) RWY 36
JACK MC NAMARA FLD (CEC)

**Amdt 1A  22APR21**

**MISSED APPROACH:** Climb to 1300 then climbing left turn to 2400 direct CIGCA and hold.

**ASOS**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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</thead>
<tbody>
<tr>
<td>HPV DA</td>
<td>309-1</td>
<td>250 (300-1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LNAV/VNAV DA</td>
<td>408-1½</td>
<td>349 (400-1½)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LNAV MDA</td>
<td>500-1</td>
<td>441 (500-1)</td>
<td>500-1½</td>
<td>441 (500-1½)</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>540-1</td>
<td>479 (500-1)</td>
<td>640-1½</td>
<td>579 (600-1½)</td>
</tr>
</tbody>
</table>

**UNICOM 122.8 (CTAF)**

**ASOS 119.925**

**SEATTLE CENTER 124.85 306.3**

**WAAS CH 72027**

**W36A**

**APP CRS 359°**

**Rwy Ldg 4850**

**TDZE 59**

**Apt Elev 61**

**MISSED APPROACH:** Climb to 1300 then climbing left turn to 2400 direct CIGCA and hold.

**ELEV 61 D TDZE 59**

**HIRM Rwy 12-30**

**REIL Rwys 18, 30 and 36**

**MIRL Rwy 18-36**

**JACK MC NAMARA FLD (CEC)**

**RNAV (GPS) RWY 36**

**CRESCENT CITY, CALIFORNIA**

**AL-34 (FAA)**

**23138**

**CRESCENT CITY, CALIFORNIA**

**Amdt 1A  22APR21**

**41°47'N-124°14'W**

**52**

**SW-2, 11 JUL 2024 to 05 SEP 2024**

**W-93 SOUTH**

**KAWIS (FAF)**

**CIGCA (IF/IAF)**

**OLJEK**

**CEC**

**W36A**

**239**

**2000 N**

**M5A RW36 2.5 NM**

**8600**

**359°**

**150°**

**330°**

**4 NM**

**Holding Pattern**

**2400**

**1600**

**1300**

**2400**

**CIGCA**

**KAWIS**

**1600**

**4.7 NM**

**5.3 NM**

**GP 3.00°**

**TCH 58°**
### VOR/DME RWY 12

**JACK MC NAMARA FLD (CEC)**

**ASOS**

<table>
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<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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</thead>
<tbody>
<tr>
<td>S-12</td>
<td>480-3/4</td>
<td>420 (500-3/4)</td>
<td>480-1</td>
<td>420 (500-1)</td>
</tr>
</tbody>
</table>

**CIRCLING**

|                | 540-1 | 479 (500-1) | 640-1 | 579 (600-1/2) | 640-2 | 579 (600-2) |

**MISSED APPROACH:**

Operational VGSI required, remain on or above VGSI glidepath until threshold. For inop MALSR, increase S-12 Cat C/D visibility to 1 mile, and Circling Cat C visibility 1/2 mile.

**MALSR**

3000 on CEC VORTAC R-166 then right turn direct CEC VORTAC and hold.

**UNICOM**

122.8 (CTAF)

---

**Route**

1. Climb right turn to 3000 on CEC VORTAC CEC 17.5.
2. R-325 311° (5) 2300 to ROZEY.
3. R-311 348° 4500 NoPT.
4. R-166 then right turn.
5. As per the channel.

---

**Category**

<table>
<thead>
<tr>
<th>Channel</th>
<th>109.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chan 27</td>
<td></td>
</tr>
</tbody>
</table>

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**Location**

- **W-93 SOUTH**
- **CEC 25 NM**
- **ASOS** 119.925
- **SEATTLE CENTER** 124.85 306.3
- **UNICOM** 122.8 (CTAF)

---

**Notes**

- 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 1/2 mile, and Circling Cat C visibility 1/2 mile. For inop MALSR, increase S-12 Cats A/B visibility to 1 mile, Cats C/D visibility to 1 1/2 mile. For inop MALSR when using Brookings altimeter setting, increase S-12 Cats A/B visibility to 1 mile, Cats C/D visibility to 1 1/2 mile. Night Landing: RWY 18, 30 NA. Night Landing: RWY 36 operational VGSI required, remain on or above VGSI glidepath until threshold.
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 1/2 mile and Circling Cat C visibility 1/2 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.

ASOS 119.925
SEATTLE CENTER 124.85 306.3
UNICOM 122.8 (CTAF)

CEC VORTAC and hold, continue then climbing left turn to 3000 direct.

MISSED APPROACH: Climb to 1000 then climbing left turn to 3000 direct.

CEC VORTAC and hold, continue climb-in-hold to 3000.

CATEGORY

<table>
<thead>
<tr>
<th></th>
<th>A</th>
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<th>C</th>
<th>D</th>
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</thead>
<tbody>
<tr>
<td>S-36</td>
<td>500-1</td>
<td>441 (500-1)</td>
<td>500-1 1/2</td>
<td>441 (500-1/2)</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>540-1</td>
<td>479 (500-1)</td>
<td>640-1/2</td>
<td>579 (600-1/2)</td>
</tr>
</tbody>
</table>
When local altimeter setting not received, use Brookings altimeter setting and increase all MDA 100 feet; increase S-12 Cat C/D visibility ½ mile and 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 1½ 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 1½ mile. Night Landing: Rwy 36 operational VGSI required, remain on or above VGSI glidepath until threshold. Night Landing: Rwy 18, 30 NA.

Remain within 10 NM

MISSED APPROACH: Climbing right turn to 3000 on CEC VORTAC R-166 then right turn direct CEC VORTAC and hold.

CATEGORY

<table>
<thead>
<tr>
<th></th>
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<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-12</td>
<td>520-3/4</td>
<td>460 (500-3/4)</td>
<td>520-1</td>
<td>460 (500-1)</td>
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<tr>
<td>CIRCLING</td>
<td>540-1</td>
<td>479 (500-1)</td>
<td>640-1½</td>
<td>579 (600-1½)</td>
</tr>
</tbody>
</table>

JACK MC NAMARA FLD (CEC)

VOR RWY 12

AL-34 (FAA)

23138
RNAV (GPS) RWY 17
UNIVERSITY (EDU)

MISSED APPROACH: Climbing right turn to 2000 direct CODRU and hold.

DME/DME RNP - 0.3 NA. When local altimeter setting not received, use Travis AFB altimeter setting and increase all MDA 60 feet. Helicopter visibility reduction below 1 SM not authorized. Procedure NA at night.

Procedure NA for arrivals at ILA VORTAC via V195 northbound.

Procedure NA for arrivals on SAC VORTAC airway radials 257 CW 329.

Procedure NA for arrivals at ILA VORTAC via V195 northbound.

Visual Segment - Obstacles.

MIRL Rwy 17-35
REIL Rwys 17 and 35

ELEV 69
TDZE 64

LNAV MDA 520-1 456 (500-1) NA
CIRCLING 580-1 511 (600-1) 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’s mile. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (59°F) or above 43°C (109°F). Baro-VNAV NA when using Travis AFB altimeter setting.

**AWOS-3P**

**TRAVIS APP CON**

**UNICOM**

**RNAV (GPS) RWY 16**

**YOLO COUNTY (DWA)**

Procedures NA for arrivals at ILA VORTAC airway radials 057 CW 210.

Procedure NA for arrivals at ILA VORTAC airway radials 057 CW 210.

**ELEV 100**

**TDZE 99**

**RNAV (GPS) RWY 16**

**YOLO COUNTY (DWA)**

**AWOS-3P**

**TRAVIS APP CON**

**UNICOM**

**RNAV (GPS) RWY 16**

**YOLO COUNTY (DWA)**

Procedures NA for arrivals at ILA VORTAC airway radials 057 CW 210.
RNAV (GPS) RWY 34

YOLO COUNTY (DWA)

**UNICOM**
123.0 (CTAF)

**SAFETY ADVISORY**
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 ½ mile, LNAV/VNAV visibility all Cats ¼ mile, and LNAV Cat C and D visibility ½ 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.

---

**RNP APCH.**

<table>
<thead>
<tr>
<th>AWOS-3P</th>
<th>TRAVIS APP CON</th>
<th>UNICOM</th>
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</thead>
<tbody>
<tr>
<td>125.775</td>
<td>126.6 281.45</td>
<td>123.0 (CTAF)</td>
</tr>
</tbody>
</table>

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**RNAV (GPS) RWY 34**

**COUPs**

3000 direct GHEER and hold.

**MISSED APCH FIX**

---

**PROAP**

- TRIMM
- PROAP

---

**CONCORD**

- CCR

---

**OAKLEY**

- PROAP

---

**GHEER**

- LNAV only

---

**TRIMM**

- LPV DA 415-1 315 (400-1)
- LNAV/VNAV DA 425-1 325 (400-1)
- LNAV MDA 500-1 400 (400-1) 500-1½ 400 (400-1½)

---

**GHEER**

- 4 NM 344°
  - 4 NM 344°
  - 4 NM 344°
  - 4 NM 344°
  - 4 NM 344°

---

**ELEV 100**

**TDZE 100**

---

**AWOS-3P**

SW-2, 11 JUL 2024 to 05 SEP 2024

---

**TRIMM**

- GP 3.00°
  - TCH 58
  - 6.6 NM
  - 5.1 NM
  - 1.6 NM

---

**EMBER**

- 4000 344°
  - 2300
  - 2300
  - *660

---

**OAKLEY**

- PROAP

---

**GHEER**

- LNAV only

---

**TRIMM**

- LPV DA 415-1 315 (400-1)
- LNAV/VNAV DA 425-1 325 (400-1)
- LNAV MDA 500-1 400 (400-1) 500-1½ 400 (400-1½)
RNP APCH.

RNAV (GPS) RWY 12

MURRAY FLD (EKA)

EUREKA, CALIFORNIA
AL-5888 (FAA)

ACV ASOS  
118.525

SEATTLE CENTER  
124.85 306.3

UNICOM  
122.7 (CTAF)

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 1/2 SM.

Final approach course offset 5.06°.

Procedure NA for arrivals at FOT VORTAC on V494 south bound.

HOLD 8000 3000

4 NM

SCUPY

WAVLI

XUNXO

3000 SCUPY

ELEV 11

TDZE 11

CATEGORY

A

B

C

D

LNAV MDA

760-1

749 (800-1)

749 (800-1 1/4)

749 (800-2 1/4)

NA

MIRL Rwy 12-30

40°48'N-124°07'W

EUREKA, CALIFORNIA

Orig-8 18JUL19

MURRAY FLD (EKA)

RNAV (GPS) RWY 12

SW-2, 11 JUL 2024 to 05 SEP 2024
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
133.8

SEATTLE CENTER
124.85 306.3

CTAF
122.9

ROHNERVILLE (FOT)

ULINN
2000
2000
3000

JAYEF
110°

Procedures
Turn NA

RW-11

CATEGORY
S-11
CIRCLING

A
1140-1
1140-1

B
1160-1¾
1360-1½

C
1200-2½
1720-3

D
1560-3
1780-3

110°

40°33'N-124°08'W

AL-960 (FAA)

FORTUNA, CALIFORNIA
Orig B 09SEP21

ROHNERVILLE (FOT)

MISSED APPROACH: Climbing right turn to 3000 direct FOT VORTAC and hold.

AWOS-3
133.8

SEATTLE CENTER
124.85 306.3

CTAF
122.9

ROHNERVILLE (FOT)

ULINN
2000
2000
3000

JAYEF
110°

Procedures
Turn NA

RW-11

CATEGORY
S-11
CIRCLING

A
1140-1
1140-1

B
1160-1¾
1360-1½

C
1200-2½
1720-3

D
1560-3
1780-3

110°

40°33'N-124°08'W

AL-960 (FAA)

FORTUNA, CALIFORNIA
Orig B 09SEP21

ROHNERVILLE (FOT)

MISSED APPROACH: Climbing right turn to 3000 direct FOT VORTAC and hold.

AWOS-3
133.8

SEATTLE CENTER
124.85 306.3

CTAF
122.9

ROHNERVILLE (FOT)

ULINN
2000
2000
3000

JAYEF
110°

Procedures
Turn NA

RW-11

CATEGORY
S-11
CIRCLING

A
1140-1
1140-1

B
1160-1¾
1360-1½

C
1200-2½
1720-3

D
1560-3
1780-3

110°

40°33'N-124°08'W

AL-960 (FAA)

FORTUNA, CALIFORNIA
Orig B 09SEP21

ROHNERVILLE (FOT)
When local altimeter setting not received, use Arcata altimeter setting. Circling NA for Cat D north of Rwy 11-29.

NA

MISSED APPROACH: Climb to 1500 then climbing right turn to 3000 direct FOT VORTAC and hold.
RNAV (GPS) RWY 12
FRESNO CHANDLER EXEC (FCH)

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.

UNICOM 123.0 [CTAF]

ELEV 280 TDZE 280

RNAV (GPS) RWY 12
FRESNO APP CON 119.0 323.25

CATEGORY C

LPV DA 530-1 250 (300-1) NA
LNAV/ VNAV DA 809-1½ 529 (600-1½) NA
LNAV MDA 780-1 500 (500-1) 780-1¾ 500 (500-1¾) NA
MIRL Rwy 12:30
REIL R wys 12 and 30

RNAV (GPS) RWY 12
MISSED APCH FIX

FRAME

800 2000 4 NM

4 NM Holding Pattern

SIPZY

GP 3.00°

TCH 40

EWNEL

1900

14 NM to RW12

1.4 NM to RW12

2000

EWNEL

512A RW12

643A

634A

557A

876A

111° to RW12

312±

3000 x 20

352

340±
RNAV (GPS) RWY 11L
FRESNO YOSEMITE INTL (FAT)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1°C or above 54°C.

ATIS: 121.35 273.6
FRESNO APP CON: 119.6 351.95
FRESNO TOWER: 118.2 251.1
GND CON: 121.7 348.6
CLNC DEL: 124.35 348.6

MISSED APPROACH: Climb to 2600 direct SANGO and hold.

Procedure NA for arrivals at SIBOC on V459 southeast bound.

HOLD 3000 NoPT 061° (13.7)

112° to RW11L

1800

GSA RW11L 25 NM

7800

292° 112°

WEPOX

1.3 NM to RW11L

2600 SANGO

112° to RW11L

* LNAV only

ELEV 336
TDZE 336

TWR 445

362

REIL Rwys 11 L and 11 R
HIRL Rwy 11L-29R
MIIR Rwy 11R-29L
TDZ/CL Rwy 29R

36°47'N-119°43'W

RNAV (GPS) RWY 11L
FRESNO YOSEMITE INTL (FAT)

Amdt 2  10OCT19

FD-- 1 JUL 2024 to 05 SEP 2024
### RNAV (GPS) RWY 11R

**FRESNO YOSEMITE INTL (FAT)**

**RNP APCH.**

- Rwy 11R helicopter visibility reduction below ½ 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.

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<thead>
<tr>
<th>ATIS</th>
<th>FRESNO APP CON</th>
<th>FRESNO TOWER</th>
<th>GND CON</th>
<th>CLNC DEL</th>
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</thead>
<tbody>
<tr>
<td>121.35</td>
<td>273.6</td>
<td>119.6</td>
<td>351.95</td>
<td>118.2</td>
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</table>

### Diagram:

- Procedure NA for arrivals at SIBOC on V459 southeast bound.

### RNAV/MDA

- LNAV only

### Category:

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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</thead>
<tbody>
<tr>
<td>LPV DA</td>
<td>584-¾</td>
<td>251 (300-¾)</td>
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<tr>
<td>LNAV/VNAV DA</td>
<td>620-¾</td>
<td>287 (300-¾)</td>
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<tr>
<td>LNAV MDA</td>
<td>700-1</td>
<td>367 (400-1)</td>
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<tr>
<td>CIRCLING</td>
<td>820-1</td>
<td>484 (500-1)</td>
<td>920-1½</td>
<td>920-2</td>
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**Amdt 3 10OCT19**

**36°47'N-119°43'W**

**FRESNO, CALIFORNIA**

**W11B**

**RW11R**

**FRESNO YOSEMITE INTL (FAT)**

**SW-2, 11 JUL 2024 to 05 SEP 2024**
RNAV (GPS) RWY 29L
FRESNO YOSEMITE INTL (FAT)

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 3/4 SM NA.

**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 3/4 SM NA.**

**MISSED APPROACH:** Climb to 2000 direct WOSIM and hold.

---

**ATIS**
- **FRESNO APP CON:** 121.35 273.6
- **FRESNO TOWER:** 119.6 351.95
- **GND CON:** 118.2 251.1
- **CLNC DEL:** 121.7 348.6

**TDZE**
- 331

**Apt Elev**
- 336

**WOSIM**
- 3112

**WOSIM**
- 4 NM

Procedure NA for arrivals at FRA VORTAC on V230 northeast bound.

**LNAV only.**
- 2000 WOSIM
- 782

**ZUDAB**
- 1.4 NM to RW29L

**IFFA**
- 1.4 NM to RW29L

**LATON**
- 4 NM

**CUMUX**
- 1.4 NM to RW29L

**IAPJ**
- 292°

**GP 3.00° TCH 52**

**CATEGORY**
- A
- B
- C
- D

**LPV DA**
- 581-1/4°

**LNAV/ VNAV DA**
- 667-1/8°

**LNAV MDA**
- 760-1/4°

**CIRCLING**
- 820-1°

---

**TDZE**
- 331

**Apt Elev**
- 336

**WOSIM**
- 3112

**WOSIM**
- 4 NM

Procedure NA for arrivals at FRA VORTAC on V230 northeast bound.
RNAV (GPS) RWY 29R
FRESNO YOSEMITE INTL (FAT)

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.

For arrivals, climb to 2000 direct MORLA and hold.

Procedure NA for arrivals at FRA VORTAC on V230 northbound.

RNVA (GPS) RWY 29R

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.

For arrivals, climb to 2000 direct MORLA and hold.

Procedure NA for arrivals at FRA VORTAC on V230 northbound.

RNAV (GPS) RWY 29R

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.

For arrivals, climb to 2000 direct MORLA and hold.

Procedure NA for arrivals at FRA VORTAC on V230 northbound.
FRESNO, CALIFORNIA

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.
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**

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**FRESNO APP CON**

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**FRESNO TOWER**

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**MISSED APCH FIX**

- CLNC DEL

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**FRESNO, CALIFORNIA**

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**ELEV 336**

- TDZE 11L 336
- TDZE 11R 333

**CLOVIS**

- Chan 76
- CZQ 494

**REIL**

- Rwy 11L and 11R
- HIRL Rwy 11L-29R
- MIRL Rwy 11R-29L
- TDZ/CL Rwy 29R

**CATEGORY**

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<tr>
<th>Type</th>
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<tr>
<td>S-11L</td>
<td>760-1/4 424 (500-1/4)</td>
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<tr>
<td>SIDESTEP 11R</td>
<td>760-1/4 427 (500-1/4)</td>
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<tr>
<td>CIRCLING</td>
<td>820-1 484 (500-1)</td>
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**Rwy 11L helicopter visibility reduction below ¾ SM NA.**

**GND CON**

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**AL-162 (FAA)**

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**FRESNO, YOSEMITE INTL (FAT)**

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**FRESNO, CALIFORNIA**

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**TACAN RNVD**

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**SW-2, 11 JUL 2024 to 05 SEP 2024**

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**GTY 11L**

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**GTY 11R**

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**REIL RWY 11L**

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**ELEV 336**

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ANNUAL RATE OF CHANGE
JANUARY 2020
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.

VAR 12.7° E
D
AL-162 (FAA)
FORESTRY
U.S.
119°42'W

124.35  348.6
CLNC DEL
121.7  348.6

118.2  251.1
GND CON

121.35  273.6
FRESNO TOWER

FRESNO, CALIFORNIA
AIRPORT DIAGRAM
FIELD
ELEV 336
AIR CARGO
119°43'W
36°47'N
336
8008 X 150
8530 X 150

MARINE DETACHMENT
USAF RAMP
119°44'W
36°47'N

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
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.
TAKEOFF MINIMUMS
Rwys 11L/R, 29L/R: Standard with minimum climb of 260' per NM to 10700.

NOTE: Chart not to scale.

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.
NOTE: RADAR required.

**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.
Missed Approach: (Do not exceed 250K until MRGGO) Climb to 3900 then climbing right turn to 6000 direct MRGGO and hold.

Procedure NA for arrivals at MRGGO on V332 northwest bound and V200 westbound.
RNAV (GPS) RWY 9
PINE MOUNTAIN LAKE (E45)

O22 AWOS-3
124.65

OAKLAND CENTER
121.25 327.0

CTAF
122.9(1)

RNP APCH-GPS.

NA
Procedure NA at night. Rw 9 helicopter visibility reduction below 1 SM NA. Use Columbia altimeter setting.

HOFED and hold, continue climb-in-hold to 7000.

MISSED APPROACH: Climbing right turn to 7000 direct HOFED and hold, continue climb-in-hold to 7000.

GROVELAND, CALIFORNIA
AL-9084 (FAA)

GROVELAND, CALIFORNIA
37°52'N-120°11'W

RNAV (GPS) RWY 9
PINE MOUNTAIN LAKE (E45)

MIRL Rwy 9-27

RNAV (GPS) RWY 9

NGA JISAV 25 NM

4500

3.5 NM

1.4 NM

7000

HOFED

△

5.2 NM

3.04°

TCH 40

4500

3624

2922

Apt Elev

SW-2, 11 JUL 2024 to 05 SEP 2024
<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-27</td>
<td>3860-1</td>
<td>3860-1½</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

**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**
  - 124.65

- **OAKLAND CENTER**
  - 121.25
  - 327.0

- **CTAF**
  - 122.9

For more detailed information, refer to the map and diagram provided in the document.
MISSED APPROACH: Climb to 700 then climbing right turn to 4000 direct SEEMS and hold, continue climb-in-hold to 4000.

**AWOS**

127.275

**NORCAL APP CON**

135.1 307.2

**UNICOM**

122.8 (CTAF)

**HALF MOON BAY, CALIFORNIA**

Amdt 1A 18JUL19

SW-2, 11 JUL 2024 to 05 SEP 2024

SW-2, 11 JUL 2024 to 05 SEP 2024
MISSED APPROACH: Climb to 4000 direct LAYKI and on track 267° to SEEMS and hold, continue climb-in-hold to 4000.

**AWOS-3** 127.275

**NORCAL APP CON** 135.1 307.2

**UNICOM** 122.8 (CTAF)

**LNAV MDA** 620-1 566 (600-1) 620-1½ 566 (600-1½)

**LPV DA** 381-1 327 (400-1)

**MISSED APCH FIX**

**AWOS-3**

**NORCAL APP CON**

**UNICOM**

**MISSED APPROACH**

Climb to 4000 direct LAYKI and on track 267° to SEEMS and hold, continue climb-in-hold to 4000.

**ELEV 66**

**TDZE 54**
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.
RNAV (GPS) RWY 32
HANFORD MUNI (HJO)

Misssed Approach: Climb to 700 then climbing right turn to 2000 direct OYUGO and hold, continue climb-in-hold to 2000.

ASOS
134.75

Fresno APP CON
123.9

CNCl DEL
123.9

Unicom
122.8 (CTAF)

Rwy 32 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -3°C or above 54°C.
HANFORD, CALIFORNIA

RNAV (GPS)-B
HANFORD MUNI (HJO)

APP CRS
137°

Rwy Idg
N/A

TDZE
N/A

Apt Elev
240

RNP APCH.

Circling Rwy 14 NA at night.

ASOS
134.75

FRESNO APP CON
123.9

CLNC DEL
123.9

UNICOM
122.8 (CTAF)

MISSED APPROACH: Climb to 3100 direct MAXKA and on track 122° to PIXEY and hold.

HOLD
10000
3400

300 NAF
(12.9)

[IF/IAF]

YEKUT

3600
(12.9)

FRAME

137°

(5.9)

137°

(11.8)

4 NM

PIXEY

317°

4 NM

Holding Pattern

10000
3400

317°

137°

137°

317°

WANUS

2500

3.00°

TCH 45

200°

317°

555

339°

MAXKA

137° to PIXEY

122°

MISSAPCH FIX

122°

122°

PIXEY

3400

10000

3.00°

TCH 45

122°

SW-2, 11 JUL 2024 to 05 SEP 2024

HANFORD, CALIFORNIA

Amdt 1 15AUG19

36°19'N-119°38'W

89
GPS RWY 1
WESTOVER FLD AMADOR COUNTY (JAQ)

AWOS-3
121.125

NORCAL APP CON
125.1 363.2

UNICOM
123.075 (CTAF) 0

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
121.125

NORCAL APP CON
125.1 363.2

UNICOM
123.075 (CTAF) 0

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
121.125

NORCAL APP CON
125.1 363.2

UNICOM
123.075 (CTAF) 0

When local altimeter setting not received, use Sacramento Exec altimeter setting.

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AWOS-3
121.125

NORCAL APP CON
125.1 363.2

UNICOM
123.075 (CTAF) 0

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
121.125

NORCAL APP CON
125.1 363.2

UNICOM
123.075 (CTAF) 0

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
121.125

NORCAL APP CON
125.1 363.2

UNICOM
123.075 (CTAF) 0

When local altimeter setting not received, use Sacramento Exec altimeter setting.

MISSED APPROACH: Climb to 4500 on 006° course to VOHBO and hold.
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-3 121.125
NORCAL APP CON 125.1 363.2
UNICOM 123.075 (CTAF)
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.

Procedure NA for arrivals on ENI VORTAC airway radial 320 CW 073.

Procedure NA for arrivals at night. When local altimeter setting not received, circling NA south of Rwy 10-28. DME/DME RNP-0.3 NA.

Climbing left turn to 8000 direct WEPLO and hold.

MISSED APPROACH:
Category A

- 2580-1/4 NA
- 1200 (1200-1/4)

Category B

- 2580-1/2 NA
- 1200 (1200-1/2)

Category C

- NA
- 1200 (1200-1/2)

Category D

- NA
- 1200 (1200-1/2)
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.
Simultaneous approaches authorized.
LNAV procedure NA during simultaneous operations.
Use of FD or AP providing RNAV track guidance required during simultaneous operations.

For uncompensated Baro-VNAV systems, LNAV/VNAV procedure NA below -15° C (5°F) and above 54° C (129°F).

EMERG SAFE ALT 100 NM 16,500

LEMOORE, CALIFORNIA

Amdt 6 19MAY22
**RNAV (GPS) RWY 14R**

**LEMOORE, CALIFORNIA**

**ATIS**
121.575 327.15

**APP CON**
124.1 269.025 (N)
118.15 269.025 (S)

**TOWER**
128.3 360.2

**GND CON**
121.65 305.2

**CLNC DEL**
124.1 371.9

**ASR/PAR**

**HOLD 4000 2800**

**IF/IAF**

**HELMM**

**[FAF]**

**MIKSE**

**HOLD 2000 2000**

**PHROG**

**4 NM Holding Pattern**

** CATEGORY **

**LPV DA**
428-3/4 200 (200-3/4)

**LNAV/ VNAV DA**
483-3/4 255 (300-3/4)

**LNAV MDA**
680-1 452 (500-1) 680-1 452 (500-1)

**CIRCLING**
680-1 452 (500-1) 700-1 472 (500-1) 552 (600-2)

**Simultaneous approaches authorized.**

LNAV procedure NA during Simultaneous operations.

Use of FD or AP providing RNAV track guidance required during simultaneous operations.

For uncompensated Baro-VNAV systems, LNAV/VNAV procedure NA below -1.5° C (5° F) and above 54° C (129° F).

**EMERG SAFE ALT 100 NM 16,500**

**ELEV 228**

**TDZE 228**

**SW-2, 11 JUL 2024 to 05 SEP 2024**

**Almdt 7 19MAY22**
For uncompensated Baro-VNAV systems, LNAV/VNAV procedure NA below -15° C (-5° F) and above 54° C (129° F).

Simultaneous approaches authorized.

LNAV procedure NA during Simultaneous operations.

Use of FD or AP providing RNAV track guidance required during simultaneous operations.
**SW-2, 11 JUL 2024 to 05 SEP 2024**

### TACAN Y RWY 14L

**LEMOORE NAS (REEVES FIELD) (KNLC)**

**ATIS**
- 121.575 327.15

**APP CON**
- 124.1 269.025 (N)
- 118.15 269.025 (S)

**TOWER**
- 128.3 340.2

**GND CON**
- 121.65 305.2

**CLNC DEL**
- 124.1 371.9

**ASR/PAR**
- 3100

**CLOVIS**
- Chan 76 CZQ

**PANOCE**
- Chan 73

**EMERG SAFE ALT 100 NM 16,500**

**LEMOORE**
- Chan 80 NLC

**HAYEN**
- IAF CREEZ NLC 13

**FLEET**
- NLC 7

**AVENAL**
- (AVE transition requires VOR)

**AVENAL**
- 117.1 AVE

**HOKDA**
- TACAN

**TACAN Y RWY 14L**

**HiRL all rwyrs**
- TACAN

**REIL all rwyrs**
- TACAN

**TACAN Y RWY 14L**

**CIRCLING**
- 680-1 452 (500-1)
- 700-1½ 472 (500-1½)
- 780-2 552 (600-2)

**TACAN Y RWY 14L**

**CIRCLING**
- 680-1 452 (500-1)
- 700-1½ 472 (500-1½)
- 780-2 552 (600-2)

**TACAN Y RWY 14L**

**CIRCLING**
- 680-1 452 (500-1)
- 700-1½ 472 (500-1½)
- 780-2 552 (600-2)
LEMOORE-ONE DEPARTURE (NLC1 • NLC)

**ATIS** 121.575 327.15
CLNC DEL
124.1 371.9
GND CON
121.65 305.2
LEMOORE TOWER ★
128.3 340.2
(Rwy 14L, 32L)
128.3 360.2
(Rwy 14R, 32R)
LEMOORE DEP CON
124.1 318.8 (N)
118.15 318.8 (S)

**LEMOORE NAS (REEVES FIELD) (KNLC)**
AL-5067 [USN]
LEMOORE, CALIFORNIA

<table>
<thead>
<tr>
<th>Rwy</th>
<th>Knots</th>
<th>60</th>
<th>120</th>
<th>180</th>
<th>240</th>
<th>300</th>
<th>360</th>
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<tr>
<td>☒32L/R</td>
<td>V/VI (fpm)</td>
<td>318</td>
<td>636</td>
<td>954</td>
<td>1272</td>
<td>1590</td>
<td>1908</td>
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<tr>
<td>☒32R/L</td>
<td>V/VI (fpm)</td>
<td>397</td>
<td>794</td>
<td>1191</td>
<td>1588</td>
<td>1985</td>
<td>2382</td>
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</tbody>
</table>

† ATC climb rate, CETTA transition to 15,000
‡ ATC climb rate, WADDE transition to 11,000

**COALDALE**
117.7 OAL 036° Chan 124
L-9, H-3

**CETTA**
15,000

**Radar Required**
EMERG SAFE ALT 100 NM 16,500
NOTE: Chart not to scale

▼
**DEPARTURE ROUTE DESCRIPTION**

**TAKE-OFF RUNWAYS 32L/32R:** Climb to 2000 via heading 322° then radar vectors to join assigned transition or route.

**CETTA TRANSITION (NLC1-CETTA):** From over EOCIN direct CETTA thence as filed. Cross CETTA at or above 15,000.

**COALDALE TRANSITION (NLC1-OAL):** From over EOCIN direct CETTA, direct CANDA, direct COALDALE VORTAC. Cross CETTA at or above 15,000.

**WADDE TRANSITION (NLC1-WADDE):** From over WADDE thence 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.

LEMOORE-ONE DEPARTURE (NLC1 • NLC)
Amdt 2 17JUN21

LEMOORE, CALIFORNIA
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 14L/14R: Climb to 2000 via heading 142° then radar vectors to join assigned transition or route.

CARRL TRANSITION (REVES4.CARRL): From over CARRL thence as filed. Cross CARRL at or above 11,000.

COALDALE TRANSITION (REVES4.OAL): From over BUMPI direct OMEGA, direct ANDA, direct COALDALE VORTAC. Cross OMEGA at or above 15,000.

OMEGA TRANSITION (REVES4.OMEGA): From over BUMPI direct OMEGA thence 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 established on departure radial climb to filed altitude.
RNAV (GPS) RWY 15
LINCOLN RGNL/KARL HARDER FLD (LHM)

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
1/2 SM. For inop ALS when using Beale AFB altimeter setting, increase LNAV Cat D visibility to 1/4.

Procedure NA for arrival at YUBBA on V200 southwest bound and V23 northwest bound.
RNAV (GPS) RWY 33

Lincoln Rgnl/Karl Harder Fld (LHM)

Rwy 33 Helicopter visibility reduction below 1/8 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 1/8 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.

Procedure NA for arrival at GRIME on V23 northwest bound.

Procedure NA for arrival at MUCGU on V6 northeast bound.

Category

A

B

C

D

LNAV MDA 480-1 359 (400-1)
RNAV (GPS) RWY 29
LITTLE RIVER (LLR)

AWOS-AV
121.125

OAKLAND CENTER
132.2 350.3

AUNICOM
122.7 (CTAF)

LITTLE RIVER, CALIFORNIA
AL-10390 (FAA)

RNP APCH:
- Circling NA northeast of Rwy 11-29.
- Procedure NA at right.
- 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.

- HG 500-1 WIMUK
- HG 1400-2 826-1 (900-2)
- HG 3411 5500
- HG 2736 5200
- HG 2692 5000

- 3100
- 3120

- 624
- 724

- 574
- 574

- 5249
- 574

- 19283

Rwy 29 helicopter visibility reduction below 1 SM NA.

Procedure NA for arrivals at ENI VORTAC on airway radials 305 CW 330.

293°

293°

980-1

426 (500-1)

1000-1

426 (500-1)

1080-1

506 (600-1)
NOTE: GPS required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwy 11: 300-1 with minimum climb of 330' per NM climb to 2100'.
Rwy 29: 300-1.

NOTE: Chart not to scale.

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.
ILS RWY 25R
LIVERMORE MUNI (LVK)

DME required.

ATIS 119.65
NORCAL APP CON 123.85 278.3
LIVERMORE TOWER* 118.1 (CTAF) 239.25
GND CON 121.6
UNICOM 122.95

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.
Circling to Rwy 25L NA at night. Inop table does not apply to S-25R Cats C/D.
Circling NA of Rwy 7L-25R.
DME required.

At 0.6% UP: Missed approach requires minimum climb of 235 feet per NM to 3600.
At 0.5% UP: *

MALSR:

PROCEDURE NA for arrivals at LIN VOR/DME on V108 eastbound.
VAR 13.3° E

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

AIRPORT DIAGRAM

LIVERMORE, CALIFORNIA (LVK)

AL-6075 (FAA)

ELEV 373

ELEV 379

0.5% UP

0.6% UP

RWY 07L-25R
S-45, D-90

RWY 07R-25L
S-12.5

NORTHWEST APRON

TERMINAL

TWR 463

FIRE STATION

NE HANGARS

FIELD ELEV 400

SE HANGARS

SE HANGARS

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
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.

NOTE: Chart not to scale.
TAKEOFF OBSTACLE NOTES

Rwy 25L: 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 25R: 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.
Buildings and trees beginning 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.
Buildings beginning 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: Trees beginning 2192’ from DER, 292’ right 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.
NoPT for arrival on LIN VOR/DME airway radials 124 CW 158.
RNAV (GPS) RWY 14
LOS BANOS MUNI (LSN)

**RNAV (GPS) RWY 14**

**LOS BANOS MUNI (LSN)**

**AWOS-3** 118.675  
**NORCAL APP CON** 120.95 269.45  
**UNICOM** 122.8 (CTAF)

**A** 2407

**M** 2526±

**L** 1722

**L** 1880

**L** 907±

**L** 810±

**L** 3481

**RNAV (GPS) RWY 14**

**NA** Rwy 14 helicopter visibility reduction below 3/4 SM NA. Baro-VNAV and VDP NA when using Merced Yosemite Rgnl altimeter setting. For uncompensated Baro-VNAV systems, UNAV/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 3/4 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** 118.675

**NORCAL APP CON** 120.95 269.45

**UNICOM** 122.8 (CTAF)
RNAV (GPS) RWY 32
LOS BANOS MUNI (LSN)

**RNP APCH:**
- Rwy 32 helicopter visibility reduction below 1/4 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 1/4 SM.

**AWOS:**
- 118.675

**NORCAL APP CON**
- 120.95 269.45

**UNICOM**
- 122.8 (CTAF)

**MISSING APCH FIX**
- VOLTA

**AIRPORT**
- LOS BANOS, CALIFORNIA
- LOS BANOS MUNI (LSN)

**MWSA RW32 25 NM**
- 5200

**ELEV**
- 121

**UNICOM (IF)**
- PANOCHE PXN

**GEM AL-5819 (FAA)**

**Amdt 1A 18JUL19**

**SW-2, 11 JUL 2024 to 05 SEP 2024**

**SW-2, 11 JUL 2024 to 05 SEP 2024**

**LSN**
RNAV (GPS) RWY 12
MADERA MUNI (MAE)

ASOS 134 725
FRESNO APP CON 119 45
CLNC DEL 119 45
UNICOM 122 8 (CTAF)

ELEV 255
TDZE 253

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.

Procedure NA for arrivals at BLEAR on V230 northeast bound.

VGSI and RNAV glideslant not coincident (VGSI Angle 3.00°/TCH 34).

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -2°C or above 54°C.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -2°C or above 54°C.
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.

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.
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)
TO OENNS ONE DEPARTURE (RNAV)

**NOTE:** GPS required.

**OENNS ONE DEPARTURE (RNAV)**

**OAKLAND CENTER**
125.75 284.65
**UNICOM**
122.8 (CTAF)
**AWOS-3**
118.05

**NOTE:** Chart not to scale.

**SHAFTER TRANSITION (OENNS1.EHF)**

**RBRTS TRANSITION (OENNS1.RBRTS)**

**FRIANT TRANSITION (OENNS1.FRA)**

**COALDALE TRANSITION (OENNS1.OAL)**

**MAMMOTH YOSEMITE (MMH)**
**MAMMOTH LAKES, CALIFORNIA**

**AL-6841 (FAA)**

**OENNS ONE DEPARTURE ROUTE DESCRIPTION**

**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.

**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)**
RNAV (GPS) RWY 11

MARINA MUNI (OAR)

Procedure NA for arrivals at MOV for arrivals at MOV on V25:87 northwest bound.

Procedure NA for arrivals at PENI on V27 northwest bound.

NORCAL APP CON
133.0 251.15

UNICOM
122.7 (CTAF)

AWOS-3PT
134.025

Rwy 11 helicopter visibility reduction below 3/4 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
134.025

UNICOM
122.7 (CTAF)

Procedure NA for arrivals at PENI on V27 northwest bound.

NORCAL APP CON
133.0 251.15

AWOS-3PT
134.025

UNICOM
122.7 (CTAF)

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NORCAL APP CON
133.0 251.15

UNICOM
122.7 (CTAF)

AWOS-3PT
134.025

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122.7 (CTAF)

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122.7 (CTAF)

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Procedure NA for arrivals at PENI on V27 northwest bound.

NORCAL APP CON
133.0 251.15

UNICOM
122.7 (CTAF)

AWOS-3PT
134.025

MISSED APPROACH: Climb to 600, then climbing left turn to 2700 direct FOMET and hold, continue climb-in-hold to 2700.
RNAV (GPS) RWY 29

MARINA, CALIFORNIA

APP CRS
288°

Rwy Idg 3483
TDZE 137

Apt Elev 137

RNP APCH.

NA

AWOS-3PT
134.025

NORCAL APP CON
133.0 251.15

UNICOM
122.7 [CTAF]

MARINA MUNI (OAR)

ELEV 137
TDZE 137

MISSED APPROACH: Climb to 2700 direct FOMET and hold, continue climb-in-hold to 2700.

Procedure NA for arrivals at HAGRO on V25 southeast bound.

RNAV (GPS) RWY 29

MARINA MUNI (OAR)

Amdt 2 10SEP20

36°41'N-121°46'W

129
Procedure NA at night. When local altimeter setting not received, use Atwater circling and increase all MDA 360 feet.

**MISSED APPROACH:** Climbing left turn to 7000 direct COGOL and hold.

Procedure NA for arrival at COGOL via V459 southeast bound.
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.

Procedure NA for arrivals at HOFED via V459 northwestbound.

Procedure NA for arrivals at HOFED via V459 northwestbound.

MISSED APPROACH: Climb to 7000 direct TOTOY and via 127° track to COGOL and hold.

Procedure NA for arrivals at HOFED via V459 northwestbound.

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Procedure NA for arrivals at HOFED via V459 northwes
Circling Rwy 5, 23 NA at night. Autopilot coupled approach NA below 695.

**ASOS**

**NORCAL APP CON**

**UNICOM**

**Alternate missed approach fix**

Procedure NA for arrivals at MRGGO on V200 northeast bound.

**Amdt 6A 10SEP20**
RNAV (GPS) RWY 14
YUBA COUNTY (MYV)

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 ½ 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 ½ mile, LNAV Cats C/D visibility ¼ 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.

UTNAC

Procedure
Turn NA

GP 3.0°
TCH 5°

CATEGORY

A

B

C

D

LPV DA

264-¾ 200 (200-¾)

LNAV/VNAV DA

470-¾ 406 (500-¾)

LNAV MDA

500-¾ 436 (500-¾)

CIRCLING

540-1 476 (500-1)

540-1 ½ 476 (500-1 ½)

620-2

556 (600-2)

HIRL Rwy 14-32

MARYSVILLE, CALIFORNIA
Orig'D 12NOV15

39°06'N-121°34'W

133
RNAV (GPS) RWY 32
YUBA COUNTY (MYV)

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 ½ mile, LNAV Cats C/D visibility ¼ mile. Night landing: Rwy 5, 23 NA. Baro-VNAV and VDP NA when using Lincoln altimeter setting.

MISSUED APPROACH: Climb to 4000 direct HALOW and via track 295° to GRIDD and hold.

<table>
<thead>
<tr>
<th>ASOS</th>
<th>NORCAL APP CON</th>
<th>UNICOM</th>
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<tbody>
<tr>
<td>118.475</td>
<td>125.4 259.1</td>
<td>123.05 (CTAF)</td>
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<table>
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<tr>
<th>Missed APCH Fix</th>
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<tbody>
<tr>
<td>HALOW to RW32</td>
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<tr>
<td>RW32 to GRIDD</td>
</tr>
<tr>
<td>(FAF) TUXUY</td>
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<tr>
<td>(IF) VUJOR</td>
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<tr>
<td>(IAF) EYPOF</td>
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<tr>
<td>MROGO SC</td>
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<td>4900</td>
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<th>ELEV</th>
<th>TDZE</th>
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<table>
<thead>
<tr>
<th>4000</th>
<th>HALOW</th>
<th>GRIDD</th>
<th>*LNAV only</th>
<th>Procedure Turn</th>
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<tbody>
<tr>
<td>295°</td>
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<tr>
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<tr>
<td>LPV DA</td>
<td>313-7/8</td>
<td>250 (300-7/8)</td>
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<tr>
<td>LNAV/VNAV DA</td>
<td>374-1/8</td>
<td>311 (400-1/8)</td>
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<td>LNAV MDA</td>
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<td>417 (500-1)</td>
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<tr>
<td>CIRCLING</td>
<td>540-1</td>
<td>476 (500-1)</td>
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MARYSVILLE, CALIFORNIA
Orig-D 12NOV15

39°06'N-121°34'W

YUBA COUNTY (MYV)

RNAV (GPS) RWY 32
RNAV (GPS) RWY 12
MERCED YOSEMITE RGNL (MCE)

**Category**

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPV DA</td>
<td>405-3/4</td>
<td>250 (300-3/4)</td>
<td></td>
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<tr>
<td>LNAV/ VNAV DA</td>
<td>434-7/8</td>
<td>279 (300-7/8)</td>
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<tr>
<td>LNAV MDA</td>
<td>520-1</td>
<td>365 (400-1)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**RNP APCH.**

- Rwy 12 helicopter visibility reduction below ½ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -3°C or above 54°C.
- Procedure NA for arrivals at PATYY on V113 northwest bound.

**MISSED APPROACH:** Climb to 3600 direct CHOWA and hold.

**ASOS**

| 132.175 |

**NORCAL APP CON**

| 120.95 | 269.45 |

**UNICOM**

| 122.7 (CTAF) |

**ELEV**

| 155 |

**TDZE**

| 155 |
LOC BC RWY 12
MERCED YOSEMITE RGNL (MCE)

MISSED APPROACH: Climb to 1000 then climbing right turn to 3000 direct MOD VOR/DME and hold.

BACK COURSE

Disregard glide slope indications.

S-12
640-1 485 (500-1)

MISSED APCH FIX

ZH 197

LOC/DME  I-MCE 109.3
Rwy 12-30

ASOS
132.175

NORCAL APP CON
120.95 269.45

UNICOM
122.7 (CTAF) 0

Amdt 11 15AUG19

MERCED, CALIFORNIA

DME or RADAR required.

\( \text{NA} \) Rwy 12 helicopter visibility reduction below \( \frac{3}{4} \) SM NA. Circling NA northeast of Rwy 12:30.

\( \text{TA} \) UNICOM 122.7 (CTAF)

L-ASOS 132.175

\( \text{ASOS} \) 132.175

\( \text{NORCAL APP CON} \) 120.95 269.45

\( \text{UNICOM} \) 122.7 (CTAF)

FAF to MAP 5 NM

Knots 60 90 120 150 180
Min:Sec 5:00 3:20 2:30 2:00 1:40

REIL Rwy 12
HIRL Rwy 12-30

\( \text{MERCED, CALIFORNIA} \)

Amdt 11 15AUG19
DME required for LOC only.

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 1 1/2 SM.

MISSED APPROACH: Climb to 1500 then climbing right turn to 2000 direct MOD VOR/DME and hold.

ATIS 127.7
NORCAL APP CON 120.95 269.45
MODESTO TOWER* 125.3 (CTAF) 257.8
GND CON 121.7
UNICOM 122.95

MALSR 111.9

ILS or LOC RWY 28R
MODESTO CITY-COUNTY-HARRY SHAM FLD (MOD)

MOBILE ATLANTIC (FAA)

MOD VOR/DME and hold.

turn to 2000 direct to 1500 then climbing right
MISSED APPROACH: Climb

to 2000 then climbing right
turn to 2000 direct
MOD VOR/DME and hold.

One Minute Holding Pattern

GS 3.00° TCH 53
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

* Rwy 10R-28L closed to aircraft over 12,500 LBS GWT.
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.

**Category**
- **A**: 3760-1½
- **B**: 3760-1½
- **C**: 3980-3
- **D**: 4220-3

**Circling**
- **Min.Knots**
  - 60: 2:42
  - 90: 1:48
  - 120: 1:21
  - 150: 1:05
  - 180: 0:54

**Map Details**
- **ASOS**: 121.125
- **SEATTLE CENTER**: 124.85 306.3
- **UNICOM**: 123.0 (CTAF)
- **NAD**: 404 MOG
- **APP CRS**: 356°
- **MONTAGUE**: 404 MOG
- **TDZE**: 289°
- **Rwy Idg**: 17-35
- **Apt Elev**: 2534
- **FAF to MAP**: 2.7 NM
- **MIRL Rwy 17-35**
- **MOG NDB**
- **REIL Rwys 17 and 35**

**Amdt**: 7B 09SEP21

**MONTAGUE, CALIFORNIA**

**AIRPORT FACILITIES**
- **SEATTLE CENTER**: 124.85 306.3
- **UNICOM**: 123.0 (CTAF)

**NAV AID**
- **NDB**: 404 MOG
- **MOG**: 2691
- **NDB or GPS-A**
- **SISKIYOU COUNTY (SIY)**

**REMINDERS**
- **Direct MOG and hold**
- **Circling**
- **MISSED APPROACH**

**Additional Information**
- **ASOS**: 121.125
- **SEATTLE CENTER**: 124.85 306.3
- **UNICOM**: 123.0 (CTAF)
MONTEREY, CALIFORNIA
AL-271 (FAA)

DME required.

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.

ATIS NORCAL APP CON MONTEREY TOWER * GND CON CLNC DEL UNICOM
119.25 133.0 251.15 250.15 (001°-135°) 118.4 (CTAF) 257.8 120.875 348.6 135.45 122.95

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.

Procedure NA for arrival on SNS VORTAC airway radials 167 CW 293.

GS 3.00° TCH 45

3.7 NM 2.5 NM 1.7 NM 0.5

CATEGORY A B C D
S-ILS 10R 398/24 200 (200-1/2)
S-ILS 10R 583/35 385 (400-1/4)
S-LOC 10R 920/24 722 (700-1/2) 920.15 722 (700-1/3)

CIRCLING 920-1 663 (700-1) 1280-3 1023 (1100-3) NA

MIRL Rwy 10L-28R
HIRL Rwy 10R-28L
REIL Rwy 28L
REIL Rwy 10L and 28R

MONTEREY RGNL (MRY)

ILS or LOC RWY 10R

SW-2, 11 JUL 2024 to 05 SEP 2024

SW-2, 11 JUL 2024 to 05 SEP 2024

SW-2, 11 JUL 2024 to 05 SEP 2024

SW-2, 11 JUL 2024 to 05 SEP 2024

SW-2, 11 JUL 2024 to 05 SEP 2024

SW-2, 11 JUL 2024 to 05 SEP 2024

SW-2, 11 JUL 2024 to 05 SEP 2024

SW-2, 11 JUL 2024 to 05 SEP 2024

SW-2, 11 JUL 2024 to 05 SEP 2024
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 119.25
NORCAL APP CON 133.0 251.15 (001°-135°) 127.15 307.125 (136°-360°)
MONTEREY TOWER 118.4 (CTAF) 257.8
GND CON 120.875 348.6
CLNC DEL 135.45
UNICOM 122.95

Procedure NA for arrivals at JEJMA on V111 northbound.

Procedure NA for arrivals at BASEC on V230 eastbound.

Procedure NA for arrivals at JEJMA on V111 northbound.

Procedure NA for arrivals at BASEC on V230 eastbound.

Authorization Required

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tr>
<td>RNP 0.10 DA</td>
<td>527/45</td>
<td>270 (300-360)</td>
<td>NA</td>
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<tr>
<td>RNP 0.15 DA</td>
<td>767-11/2</td>
<td>510 (600-11/2)</td>
<td>NA</td>
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<tr>
<td>RNP 0.20 DA</td>
<td>1236-3</td>
<td>979 (1000-3)</td>
<td>NA</td>
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</tbody>
</table>

Amdt 1 30APR15

MONTEREY, CALIFORNIA

145
LOC RWY 28L
MONTEREY RGNL (MRY)

**ATIS**
119.25

**NORCAL APP CON**
133.0  251.15 (001°-135°)
127.15  307.125 (136°-360°)

**MONTEREY TOWER**
118.4 (CTAF)  257.8

**GND CON**
120.875  348.6

**CLNC DEL**
135.45

**UNICOM**
122.95

**Holding Pattern**
One Minute

**Circling NA south of Rwy 10R-28L. Rwy 28L helicopter visibility reduction below 1/2 SM NA.**

**Procedure NA for arrival on SNS VORTAC airway radials 083 CW 188.**

**Circling NA south of Rwy 10R-28L. Rwy 28L helicopter visibility reduction below 1/2 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.

**LOC/DME I-MTB**
110.7 Chan 44

**APP CRS**
278°

**Rwy ldg**
7000

**TDZE**
257

**Apt Elev**
257

**DME required. DME or RADAR required for procedure entry.**

**Amdt 5  30JAN20**

**MONTEREY, CALIFORNIA**

**LOC CRN**

**LOCALIZER 110.7 I-MTB**
Chan 44

**I-MTB DME**
0.1

**I-MTB**
1.7%

**P**

**301**

**TWR**

**MIRL Rwy 10L-28R**

**HIRL Rwy 10R-28L**

**REIL Rwy 28L**

**REIL Rwyys 10L and 28R**

**LOCALIZER**

**I-MTB**

**Chan 44**

**SNS VORTAC**

**WUXUN I-MTB**
10

**RODNE I-MTB**
11.5

**ZILKU I-MTB**
7.3

**I-MTB**

**Chan 120**

**One Minute Holding Pattern**

**3020**

**4060**

**4600**

**5400**

**6100**

**6300**

**4200**

**5045**

**5000**

**SNS**

**5000**

**SNS VORTAC**

**WIGGL (IAF)**

**SNS 12.7**

**SNS 18.6**

**I-MTB**

**3242**

**782 ± 487 ± 302 ± 982 ± 1467 ± 1615 ± 2196 ± 2220 ± 278° 084° 264°**

**SW-2, 11 JUL 2024 to 05 SEP 2024**

**5045**

**5000**

**3000**

**278° 098° 278° 6100**

**36°35'N-121°51'W**
**RACEWAY VISUAL 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).

**RACEWAY VISUAL APPROACH RWY 28L**

Weather Minimums: 3000 foot ceiling and 3 SM visibility.

Vertical Guidance Navaid and Angle: Rwy 28L PAPI (GS 3.50°)

**RADAR REQUIRED**

- **Weather Minimums:** 3000 foot ceiling and 3 SM visibility.
- **Vertical Guidance Navaid and Angle:** Rwy 28L PAPI (GS 3.50°)
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
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.
TOP ALTITUDE: 7000

SALINAS 117.3 SNS Channel 120

WOODSIDE 113.9 OSI Channel 86

SAN JOSE 114.1 SJC Channel 88

WOODSIDE

PANOCE 112.6 PXN Channel 73

SALINAS

BIG SUR 114.0 BSR Channel 87

B210

MONTEREY, CALIFORNIA

NOTE: Chart not to scale.

TOP ALTITUDE: 7000

SALINAS 117.3 SNS Channel 120

WOODSIDE

PANOCE 112.6 PXN Channel 73

SALINAS

BIG SUR 114.0 BSR Channel 87

B210

NOTE: Chart not to scale.

TAKEOFF MINIMUMS
Rwys 10L/R: Standard with minimum climb of 449' per NM to 4600.

NOTE: Takeoff Rwys 28L/R NA.

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.
RNAV (GPS) RWY 14L
MOUNTAIN VIEW, CALIFORNIA
AL-410 (FAA)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 0°C or above 54°C.

Procedure NA for arrivals at OAK VOR/DME on V25 and V87 northwest bound.

MISSED APPROACH: Climb to 500 then climbing left turn to 3200 direct PEYIC and hold.

GND CON

ATIS

124.175 283.0
120.1 290.25
119.55 259.65
121.85 278.95
296.75

CLNC DEL

RNAV (GPS) RWY 14L
MOUNTAIN VIEW, CALIFORNIA
37°25'N-122°03'W

RNAV (GPS) RWY 14L
MOFFETT FEDERAL AIRFIELD (NUQ)

RNAV (GPS) RWY 14L
MOFFETT FEDERAL AIRFIELD (NUQ)

Amdt 1 20JUN19

MOUNTAIN VIEW, CALIFORNIA
Amdt 1 20JUN19

37°25'N-122°03'W

MOFFETT FEDERAL AIRFIELD (NUQ)

RNAV (GPS) RWY 14L

RNAV (GPS) RWY 14L
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.

Procedure NA for arrivals at OAK VOR/DME on V25 and V87 northwest bound.

**PEYIC**

**EVOCU**

**WHelp**

**14R**

**3200**

**3200 130° (3.4)**

**OAKLAND**

**MOUNTAIN VIEW, CALIFORNIA**

**37°25'N-122°03'W**

**MOFFETT FEDERAL AIRFIELD (NUQ)**

**RNAV (GPS) RWY 14R**

**RNAV (GPS) RWY 14R**

**MOFFETT FEDERAL AIRFIELD (NUQ)**

**RNAV (GPS) RWY 14R**

**MOFFETT FEDERAL AIRFIELD (NUQ)**

**RNAV (GPS) RWY 14R**

**MOFFETT FEDERAL AIRFIELD (NUQ)**

**RNAV (GPS) RWY 14R**

**MOFFETT FEDERAL AIRFIELD (NUQ)**

**RNAV (GPS) RWY 14R**

**MOFFETT FEDERAL AIRFIELD (NUQ)**

**RNAV (GPS) RWY 14R**

**MOFFETT FEDERAL AIRFIELD (NUQ)**

**RNAV (GPS) RWY 14R**
RNAV (GPS) RWY 32L
MOFFETT FEDERAL AIRFIELD (NUQ)

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.
TACAN RWY 32L
MOUNTAIN VIEW, CALIFORNIA
AL-410 (FAA) 23334

MISSED APPROACH: Climb to 3200 on NUG TACAN R-321 to PEYIC/16 DME and hold.

RADAR required for procedure entry.

Rwy 32L helicopter visibility reduction below 3/4 SM NA.

SW-2, 11 JUL 2024 to 05 SEP 2024
Radar required for procedure entry.

For inop ALS, increase Cat E visibility to 1 1/2 SM.

Missed Approach: Climb to 3200 on NUG TACAN R-321 to PEYIC/16 DME and hold.

For inop ALS, increase Cat E visibility to 1 SM.
Maintain 1100 (Recommended) until clear of the KPAO traffic pattern and intercepting the KNUQ Runway 14L centerline.

Weather Minimums: 2500 foot ceiling and 3 SM visibility.

Vertical Guidance Navaid and Angle:
Rwy 14L: PAPI-4L, 3.00°/53' TCH

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.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
**TLE**

**NOTE:** Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

**HOOKS TWO DEPARTURE**

MOFFETT FEDERAL AIRFIELD (NUQ)

MOUNTAIN VIEW, CALIFORNIA

**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.

**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, 11 JUL 2024 to 05 SEP 2024**

**163**
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.
Rwys 14L/R: 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.
ILS or LOC Z RWY 1L
NAPA COUNTY (APC)

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
124.05

Oakland Center
127.8 353.5

Napa Tower
118.7 (CTAF) 257.8

Gnd Con
121.7

Clnc Del
127.85

Unicom
122.95

Amdt 1 10OCT19

564 (600-1) 1244 (1300-3)

Circling Cats A/B/C NA northeast of Rwys 19R and 24. Circling Cats D NA east of Rwy 19L-1R. Circling Rwy 6 NA at night.

Category A

I-APC 2.4

ROOSE INT

Hold 4500 then turn left 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.

Category B

I-APC 12.5

ROOSE INT

Hold 4500 then turn left 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.

Category C

I-APC 6.5

ROOSE INT

Hold 4500 then turn left 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.

Category D

I-APC 11.1

ROOSE INT

Hold 4500 then turn left 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.
RNAV (GPS) RWY 6
NAPA COUNTY (APC)

RNAPACH-GPS.

Rwy 6 helicopter visibility reduction below ½ 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 124.05  OAKLAND CENTER 127.8 353.5  NAPA TOWER* 118.7 (CTAF) 257.8  GND CON 121.7  CLNC DEL 127.85  UNICOM 122.95

Procedure NA for arrivals at ROZZA on V301
northbound, V108 northwest bound and V494
westbound.

Procedure NA for arrival
on PYE VOR/DME airway
radials 335 CW 144.

Procedure NA for arrivals
at SAU VOR/DME on V150
southwest bound.

NAPA, CALIFORNIA

APP CRS
062°

Rwy Idg
5008

Apt Elev
36

1170

1.69

5000

1129

11041

481

38°13'N-122°17'W

NAPA TOWER

124.05

IF

ZAPIX

2800

2600

1920

(6.4)

1600

1700

(IAF)

1700

5008 X 150

082°

6.9 NM

3.0°

1.8°

1304 X 150

2.4°

062°

TCH 50

2800

057°

1700

38°13'N-122°17'W

NAPA, CALIFORNIA

ATIS
124.05

OAKLAND CENTER
127.8 353.5

NAPA TOWER*
118.7 (CTAF) 257.8

GND CON
121.7

CLNC DEL
127.85

UNICOM
122.95

(IAF)

WHITLE

2800

(IAF)

SAUSAITO

2600

(IAF)

PYE

2800

(IAF)

ROZZA

2800

(IAF)

POINT REYES

(FAF)

CEBAN

ZAPIX

MISSED APCH FIX

5 NM

POPES

34°09'N-122°17'W

NAPA COUNTY (APC)

RNP APCH-GPS.

Rwy 6 helicopter visibility reduction below ½ 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 124.05  OAKLAND CENTER 127.8 353.5  NAPA TOWER* 118.7 (CTAF) 257.8  GND CON 121.7  CLNC DEL 127.85  UNICOM 122.95

Procedure NA for arrivals at ROZZA on V301
northbound, V108 northwest bound and V494
westbound.

Procedure NA for arrival
on PYE VOR/DME airway
radials 335 CW 144.

Procedure NA for arrivals
at SAU VOR/DME on V150
southwest bound.

NAPA, CALIFORNIA

APP CRS
062°

Rwy Idg
5008

Apt Elev
36

1170

1.69

5000

1129

11041

481

38°13'N-122°17'W

NAPA TOWER

124.05

IF

ZAPIX

2800

2600

1920

(6.4)

1600

1700

(IAF)

1700

5008 X 150

082°

6.9 NM

3.0°

1.8°

1304 X 150

2.4°

062°

TCH 50

2800

057°

1700

38°13'N-122°17'W

NAPA, CALIFORNIA

ATIS
124.05

OAKLAND CENTER
127.8 353.5

NAPA TOWER*
118.7 (CTAF) 257.8

GND CON
121.7

CLNC DEL
127.85

UNICOM
122.95

(IAF)

WHITLE

2800

(IAF)

SAUSAITO

2600

(IAF)

PYE

2800

(IAF)

ROZZA

2800

(IAF)

POINT REYES

(FAF)

CEBAN

ZAPIX

MISSED APCH FIX

5 NM

POPES

34°09'N-122°17'W

NAPA COUNTY (APC)

RNP APCH-GPS.

Rwy 6 helicopter visibility reduction below ½ 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 124.05  OAKLAND CENTER 127.8 353.5  NAPA TOWER* 118.7 (CTAF) 257.8  GND CON 121.7  CLNC DEL 127.85  UNICOM 122.95

Procedure NA for arrivals at ROZZA on V301
northbound, V108 northwest bound and V494
westbound.

Procedure NA for arrival
on PYE VOR/DME airway
radials 335 CW 144.

Procedure NA for arrivals
at SAU VOR/DME on V150
southwest bound.
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.

Procedure NA for arrivals at HABAP on V108 northwest bound.

Procedure NA for arrivals at MICRA on V107-301 westbound.

Procedure NA for arrivals at SAU VOR/DME on V150 southwest bound.

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.

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.

Procedure NA for arrivals at HABAP on V108 northwest bound.

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Procedure NA for arrivals at HABAP on V108 northwest bound.
**RNAV (GPS) Z RWY 1L**

NAPA COUNTY (APC)

**RNP APCH-GPS.**

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 ½ 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.

**MISSED APPROACH:** Climb to 5000 direct CIVDA and on track 326° to POPES and hold, continue climb-in-hold to 5000.

**HOLD**

5000

Procedure NA for arrivals at HABAP on V108 northwest bound.

**2600**

Procedure NA for arrivals at MICRA on V107-301 northwest bound.

**5000, 2600**

Procedure NA for arrivals at SAU VOR/DME on V150 southwest bound.

**5000**

**2600**

**006°**

**186°**

**1800**

**1800**

**6 NM**

**3.8 NM**

**1.7 NM**

**GP 3.00°**

**TCH 50**

**NAPA, CALIFORNIA**

**AMDT 2A 08SEP22**

**38°13'N-122°17'W**

**RNAV (GPS) Z RWY 1L**

**NAPA COUNTY (APC)**

**WAAS**

<table>
<thead>
<tr>
<th>APP CRS</th>
<th>Rdg Idg</th>
<th>TDZE</th>
<th>Apt Elev</th>
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<tr>
<td>CH 40313</td>
<td>006°</td>
<td>17</td>
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**MALS**

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<td>200 (200-½)</td>
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<tr>
<td>LNAV/DA</td>
<td>330-½</td>
<td>313 (300-½)</td>
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<tr>
<td>LNAV MDA</td>
<td>560-3/4</td>
<td>543 (600-3/4)</td>
<td>560-1/6</td>
<td>543 (600-1/6)</td>
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</table>
**Rwy 6 helicopter visibility reduction below 3/4 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**
- **VOR RWY 6**
  - **NAPA COUNTY (APC)**
  - **AL-281 (FAA)**
  - **23334**
  - **NAPA, CALIFORNIA**

**VOR RWY 6**
- **NAPA COUNTY (APC)**
- **AL-281 (FAA)**
- **23334**
- **NAPA, CALIFORNIA**

**PROcedure NA for arrivals at PYE VOR/DME on V107-301 westbound.**

**Ream within 10 NM**

---

**ATIS**
- **124.05**

**OAKLAND CENTER**
- **127.8**
- **353.5**

**NAPA TOWER**
- **118.7**
- **[CTAF] 257.8**

**CLNC DEL**
- **121.7**

**GND CON**
- **127.85**

**UNICOM**
- **122.95**

---

**NAPA COUNTY (APC)**
- **AL-281 (FAA)**
- **23334**
- **NAPA, CALIFORNIA**

**PROcedure NA for arrivals at PYE VOR/DME on V107-301 westbound.**

**Ream within 10 NM**

---

**ATIS**
- **124.05**

**OAKLAND CENTER**
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**NAPA TOWER**
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- **122.95**

---

**NAPA COUNTY (APC)**
- **AL-281 (FAA)**
- **23334**
- **NAPA, CALIFORNIA**

**PROcedure NA for arrivals at PYE VOR/DME on V107-301 westbound.**

**Ream within 10 NM**

---

**ATIS**
- **124.05**

**OAKLAND CENTER**
- **127.8**
- **353.5**

**NAPA TOWER**
- **118.7**
- **[CTAF] 257.8**

**CLNC DEL**
- **121.7**

**GND CON**
- **127.85**

**UNICOM**
- **122.95**
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
TAKEOFF MINIMUMS
Rwy 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: 300-1½ 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.

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.
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 1.7 NM from DER, 3269' right of centerline, up to 345' MSL.
    Electrical system, terrain, 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.
    Terrain, fence and tree beginning 2 NM from DER, 1089' right of centerline, up to 528' MSL.
    Fence, trees, terrain and building beginning 2.1 NM from DER, 2007' right of centerline, up to 5' AGL/554' MSL.
    Terrain 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, terrain 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, terrain, building and fence beginning 1.4 NM from DER, 2008' right of centerline, up to 417' MSL.
    Electrical system, fence and terrain 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, terrain and trees beginning 2.2 NM from DER, 1515' right of centerline, up to 116' AGL/544' MSL.
    Terrain and fence beginning 2.3 NM from DER, 2076' right of centerline, up to 551' MSL.
    Trees, fence, terrain and building beginning 2.3 NM from DER, 1494' right of centerline, up to 561' MSL.
    Terrain and tree beginning 2.4 NM from DER, 1626' right of centerline, up to 581' MSL.
    Terrain 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)
(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.
Trees and fence beginning 5865’ from DER, 1761’ left of centerline, up to 211’ MSL.
Trees, terrain 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 terrain 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, 51’ 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.
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.
NOTE: Chart not to scale.

RED BLUFF
115.7 RBL
Chan 104

MENDOCINO
112.3 ENI
Chan 70

SCAGGS ISLAND
112.1 SGD
Chan 58

POINT REYES
113.7 PYE
Chan 84

SAUSALITO
116.2 SAU
Chan 109

CONCORD
117.0 CCR
Chan 117

LINDEN
114.8 LIN
Chan 95

SACRAMENTO
115.2 SAC
Chan 99

WILLAMS
114.4 IIA
Chan 91

OAKLAND
116.8 OAK
Chan 115

TOP ALTITUDE:
ASSIGNED BY ATC

TAKEOFF MINIMUMS
Rwy 1L: Standard with minimum climb of 420’ per NM to 2900.
Rwy 1R: Standard with minimum climb of 460’ per NM to 3000.
Rwy 6: Standard with minimum climb of 430’ per NM to 1600.
Rwy 19L: Standard with minimum climb of 320’ per NM to 1500.
Rwy 19R: Standard with minimum climb of 330’ per NM to 1600.
Rwy 24: Standard with minimum climb of 255’ per NM to 1300.

NOTE: RADAR required.

(CONTINUED ON FOLLOWING PAGE)
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.
NOTE: Chart not to scale.

NAPA, CALIFORNIA

OZIEE

WAVED

INSLO

JSICA

350°

6000

048°

16000

048°

(136)

NOTE: RNAV 1.

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.
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)
RNAV (GPS) RWY 13

GNOSS FLD (DVO)

Amdt 2 23FEB23

Circling NA southwest of Rwy 13-31. Circling Rwy 31 NA at night.
Rwy 13 helicopter visibility reduction below ½ SM NA.

RNAV (GPS) RWY 13

CIRCLING

AWOS-3P
120.675

UNICOM
123.075 (CTAF)

OAKLAND CENTER
127.8 353.5

Procedure NA for arrivals at ROZZA on V301 northbound,
V108 northwest bound and V494 westbound.

Final approach course
offset 6.5°.

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PROcedure NA for arrivals at MOD VOR/DME on V113 southbound.

VGSi and RNAV glidepath not coincident (VGSi Angle 2.50/TCH 26).

Baro-VNAV NA. Use Modesto altimeter setting; when not received, use Stockton Metro altimeter setting: increase LPV DA to 627 feet and all visibilities ½ SM; increase LNAV/VNAV DA to 588 feet and all visibilities ½ SM; increase all MDAs 40 feet and LNAV Cat C visibility ½ SM.

MISSED APPROACH: Climb to 4000 direct NOMAE and on track 114° to AWALI and hold, continue climb-in-hold to 4000.

<table>
<thead>
<tr>
<th>MOD ASOS</th>
<th>NORCAL APP CON</th>
<th>UNICOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>127.7</td>
<td>125.1 363.2</td>
<td>122.8 (CTAF)</td>
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</table>

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>LPV DA</td>
<td>593-1</td>
<td>357 (400-1)</td>
<td>NA</td>
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<tr>
<td>LNAV/VNAV DA</td>
<td>554-7/8</td>
<td>318 (400-7/8)</td>
<td>NA</td>
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<tr>
<td>LNAV MDA</td>
<td>760-1</td>
<td>524 (600-1)</td>
<td>760-1 1/2</td>
<td>524 (600-1/2)</td>
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<tr>
<td>CIRCLING</td>
<td>760-1</td>
<td>523 (600-1)</td>
<td>820-1</td>
<td>583 (600-1)</td>
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</tbody>
</table>
RNAV (GPS) RWY 28
OAKDALE (027)

Rwy 28 helicopter visibility reduction below \( \frac{3}{4} \) SM NA. Baro-VNAV NA. Use Modesto altimeter setting; when not received, use Stockton altimeter setting; increase LPV DA to 381 feet and all visibilities \( \frac{1}{2} \) SM; increase LNAV/VNAV DA to 728 feet; increase all MDAs 40 feet.

**MISSING APPROACH:** Climb to 7000 direct ZOSON and on track 328° to LIN VOR/DME and hold, continue climb-in-hold to 7000.

**MOD ASOS**
127.7

**NORCAL APP CON**
125.1 363.2

**UNICOM**
122.8 (CTAF)

**REIL Rwy 10 and 28**
MIRL Rwy 10-28

**PROCEDURE NA** for arrivals at MOD VOR/DME on V113 southbound.

**PROCEDURE NA** for arrivals at AWALI on V23 southeast bound.

**CATEGORY**

<table>
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<th>A</th>
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<tbody>
<tr>
<td>LPV DA</td>
<td>547-( \frac{3}{9} )</td>
<td>310 (400-( \frac{3}{9} ))</td>
<td>NA</td>
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<tr>
<td>LNAV/VNAV DA</td>
<td>694-( \frac{1}{9} )</td>
<td>457 (500-( \frac{1}{9} ))</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>LNAV MDA</td>
<td>820-1</td>
<td>583 (600-1)</td>
<td>820-( \frac{1}{9} \frac{1}{3} )</td>
<td>820-( \frac{1}{9} \frac{1}{3} )</td>
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<tr>
<td>CIRCLING</td>
<td>820-1</td>
<td>583 (600-1)</td>
<td>920-2</td>
<td>683 (700-2)</td>
</tr>
</tbody>
</table>

**OAKDALE, CALIFORNIA**

**MISSED APCH FIX**

**LINDEN**
LIN

28°
7 NM

**RPN APCH GPS**

**OAKDALE, CALIFORNIA**

37°45'N-120°48'W

181
DME required. Use Modesto altimeter setting, when not received, use Stockton altimeter setting and increase all MDA 40 feet.

MISSED APPROACH: Climb to 3000 on heading 027° and LIN R-124 to WRAPS INT/LIN 16.7 DME and hold, continue climb-in-hold to 3000.
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.
DME or RADAR required. CAT II: RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown. Missed approach requires minimum climb of 240 feet per NM to 2700, if unable to meet climb gradient, see ILS or LOC RWY 30.

MISSING 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 133.775 NORCAL APP CON 125.35 263.15

OAKLAND TOWER 186.3 291.65 (Rwy 10L/R-28L/R, 15-33)

127.2 256.9 (Rwy 12-30)

SAUSALITO 116.2 SAU Chan 109

OAKLAND 116.8 OAK Chan 115

LOCALIZER 108.7 Chan 24

RNAV 1-GPS or RADAR REQUIRED

ELEV 9 TDZE 9

METRO OAKLAND INTL (OAK)

CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

Amdt 31 07DEC17

37°43'N-122°13'W

ILS RWY 30 (CAT II & III)

OAKLAND, CALIFORNIA

188
RNAV (RNP) Z RWY 12
METRO OAKLAND INTL (OAK)

For uncompensated Baro-VNAV systems, procedure NA below 0°C or above 54°C. For in-aps increase RNP 0.15 visibility all Cats to RVR 4500, RNP 0.30 visibility all Cats to RVR 5500.

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.

See planview for multiple IF locations.

VGSI and RNAV glidepath not coincident (VGSI Angle 2.75°/TCH 70°).

RNP AR APCH.

individuals to keep RVR 4500, RNP 0.30 visibility.

For uncompensated Baro-VNAV systems, procedure NA below 0° or above 54°C. For in-aps increase RNP 0.15 visibility all Cats to RVR 4500, RNP 0.30 visibility all Cats to RVR 5500.

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.

See planview for multiple IF locations.

VGSI and RNAV glidepath not coincident (VGSI Angle 2.75°/TCH 70°).

RNP AR APCH.

individuals to keep RVR 4500, RNP 0.30 visibility.

For uncompensated Baro-VNAV systems, procedure NA below 0°C or above 54°C. For in-aps increase RNP 0.15 visibility all Cats to RVR 4500, RNP 0.30 visibility all Cats to RVR 5500.

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.

See planview for multiple IF locations.

VGSI and RNAV glidepath not coincident (VGSI Angle 2.75°/TCH 70°).

RNP AR APCH.

individuals to keep RVR 4500, RNP 0.30 visibility.
For uncompensated Baro-VNAV systems, procedure NA below 0°C (32°F) or above 54°C (130°F). GPS required.

MISSED APPROACH: Climb to 3000 on track 278° to OPLIE and on track 348° to REBAS and hold.
For uncompensated Baro-VNAV systems, procedure NA below 1°C (34°F) or above 5°C (41°F). For inop MALSR, increase RNP 0.11 DA all Cats visibility to RVR 4500. GPS required.

For uncompensated Baro-VNAV systems, procedure NA below 1°C (34°F) or above 5°C (41°F). For inop MALSR, increase RNP 0.11 DA all Cats visibility to RVR 4500. GPS required.

MISSED APPROACH: Clim to 3000 on track 278° to ZERMO and on track 335° to REBAS and hold.

Amdt 2 10DEC15
RNAV (RNP) Z RWY 30

METRO OAKLAND INTL (OAK)

AUTHORIZATION REQUIRED

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.

GPS required. For uncompensated Baro-VNAV systems, procedure NA below 1°C (34°F) or above 54°C (130°F). For inop ALS increase RNP 0.11 visibility all Cats to RVR 4000.

D-ATIS NORCAL APP CON OAKLAND TOWER GND CON CLNC DEL CPDLC
133.775 125.35 263.15 118.3 291.65 127.2 256.9 121.9 212.15 121.75 121.1

See planview for multiple IF locations.

GND CON

MISSING SENSORS

Amdt 3B 08DEC16

REIL Rwys 12-30, 10L-28R, 10R-28L
MIRL Rwy 15-33
HIRL Rwys 12-30, 10L-28R, 10R-28L
RNAV (GPS) RWY 10L
METRO OAKLAND INTL (OAK)

DME/DME RNP-0.3 NA.
Helicopter visibility reduction below 3/4 SM not authorized.

Procedure NA for arrivals at MICRA on V107-301 westbound.

Final approach course offset 11.16°.

MISSED APPROACH: Climbing left turn to 5200 direct HAYZE and hold, continue climb-in-hold to 5200.

Procedure NA for arrivals at MICRA on V107-301 westbound.

Final approach course offset 11.16°.

MISSED APPROACH: Climbing left turn to 5200 direct HAYZE and hold, continue climb-in-hold to 5200.
RNAV (GPS) RWY 10R

METRO OAKLAND INTL (OAK)

Final approach course offset 13.17°.

Helicopter visibility reduction below 3/4 SM not authorized.

Procedure NA for arrivals at MICRA on V107-301 westbound.

Final approach course offset 13.17°.

RNAV (GPS) RWY 10R

DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing left turn to 5200 direct HAYZE and hold, continue climb-in-hold to 5200.

OAKLAND TOWER

OAKLAND, CALIFORNIA

APR CRS 111°

APP CRS

Rwy Idg 6213

TDZE 9

Apt Elev 9

DATIS 133.775

NORCAL APP CON 125.35 263.15

OAKLAND TOWER 118.3 291.6 (Rwys 10L/R-28L/R, 15-33)

GND CON 121.75 (Rwy 12-30)

RNAV (GPS) RWY 10R

METRO OAKLAND INTL (OAK)
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 1°C (34°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. For inop ALS, increase LNAV/VNAV all Cats visibility to RVR 4500 and LNAV Cat C/D visibility to 1% SM.

MISSED APPROACH: Climb to 4000 direct PLAZA and on track 282° to SAU VOR/DME and hold, continue climb-in-hold to 4000.

RADAR REQUIRED

Amdt 5D 07DEC17

**SAU**
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
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)

NOTE: Chart not to scale.
NOTE: Radar required.
NOTE: DME required.

TAKEOFF MINIMUMS
Rwys 10L, 10R, 12, 15, 33: NA - Air Traffic

(Continued on following page)
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.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 30: Climb heading 296° to at or above 520, then left turn direct HUSSH, then on depicted route, maintain FL190. Expect filed altitude 10 minutes after departure.

DEDHD TRANSITION (HUSSH2.DEDHD)
GOBBS TRANSITION (HUSSH2.GOBBs)
GRTFL TRANSITION (HUSSH2.GRTFL)
MOGEE TRANSITION (HUSSH2.MOGEE)
ORRCA TRANSITION (HUSSH2.ORRCA)
SYRAH TRANSITION (HUSSH2.SYRAH)
TIPRE TRANSITION (HUSSH2.TIPRE)

TAKEOFF MINIMUMS
Rwys 10L, 10R, 12, 15, 28L, 28R, 33: NA-ATC.
Rwy 30: Standard with minimum climb of 500’ per NM to 520.

NOTE: Chart not to scale.
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.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 28L/R and 30: Climbing right turn heading 31.5° 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.
NORCAL DEP CON
127.2  256.9 (Rwy 30)
NORCAL DEP CON
118.3  291.65 (Rwys 28L/R)
121.75 (Rwy 30)
121.9 (Rwys 28L/R)
CLNC DEL
133.775
D-ATIS
135.1  307.2
METRO OAKLAND INTL (OAK)
OAKLAND, CALIFORNIA

NOTE: RADAR required.
NOTE: DME required.

TAKEOFF MINIMUMS
Rwys 10L, 10R, 12, 15, 33: NA- Air traffic.

NOTE: Chart not to scale.
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.
OAKLAND SIX DEPARTURE

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**

**RAWS 25 NM**

**OAKLAND DEPARTURE**

Rwy 12: Standard with minimum climb of 270'/NM to 1400.
Rwy 10R: Standard with minimum climb of 330'/NM to 2300.
Rwy 10L: Standard with minimum climb of 340'/NM to 2300.
Rwy 15, 33: NA-ATC.

**TAKEOFF MINIMUMS**

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)
**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.
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.
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.

NOTE: Chart not to scale.

NOTE: For Cat A/B prop aircraft only.

TOP ALTITUDE: ASSIGNED BY ATC

TAKEOFF MINIMUMS
Rwys 10L, 10R, 12, 15, 30, 33: NA-ATC.
Rwys 28L, 28R: Standard with minimum climb of 370` per NM to 3000.

NOTE: For use 2200-0600L.
NOTE: Chart not to scale.
OAKLAND, CALIFORNIA

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

NOTE: RADAR required for Rwys 12, 28L/R, and 30 departures.
NOTE: DME required.

NOTE: Chart not to scale.
SKYLINE ONE DEPARTURE
(SKYL1.WAGES) 15AUG19

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.
PANOCHI TRANSITION (SKYL1.PXN): From over WAGES INT on PXN R-274 to PXN VORTAC.
TAKEOFF MINIMUMS
Rwys 10L/R, 12, 15, 33: NA-Air Traffic.

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.
RNAV (GPS)-A

HAIGH FLD (O37)

APP CRS
280°

Rwy Idg
N/A
TDZE
N/A
Apt Elev
218

ELEV
218

 CATEGORY
B
C
D

ORLAND, CALIFORNIA
Orig 21MAY20

39°43'N-122°09'W

Use Chico altimeter setting; when not received, use Redding altimeter setting and increase all MDA 120 feet. Increase visibility Cat C and D 1/4 SM.

MISSED APPROACH: Climbing left turn to 4800 direct JITIM and hold, continue climb-in-hold to 4800.

Procedure NA for arrivals at TALUM on V23-195 southeast bound.

SATNE

UNICOM
122.7 (CTAF) ✈

MARBN

3000 N x PT 249° (8.1)

JEVLA

JILLOX

DURHA

HAIGH FLD

MARBN

SW-2, 11 JUL 2024 to 05 SEP 2024
Procedure NA for arrivals at YUBBA on V23 southbound.

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.

Procedure NA at MRGGO for arrivals on V332 southeast bound.

**RNAV (GPS) RWY 2 OROVILLE MUNI (OVE)**

**ASOS**
121.425

**NORCAL APP CON**
125.4 259.1

**UNICOM**
122.8 (CTAF)

**Category**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPV DA</td>
<td>432-7/8</td>
<td>250 (300-5/8)</td>
<td></td>
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<tr>
<td>LNAV/VNAV DA</td>
<td>432-7/8</td>
<td>250 (300-5/8)</td>
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<tr>
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<td>338 (400-1)</td>
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<tr>
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<td>580-1</td>
<td>660-1</td>
<td>660-1/2</td>
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<tr>
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<td>386 (400-1)</td>
<td>466 (500-1)</td>
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**Amdt 1A  29MAR18**

**OREDOLE, CALIFORNIA**

**AL-5938 (FAA)**

**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.**

**SW-2, 11 JUL 2024 to 05 SEP 2024**

**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.**

**Procedure NA for arrivals at YUBBA on V23 southbound.**

**Procedure NA for arrivals at MRGGO on V332 southeast bound.**

**SW-2, 11 JUL 2024 to 05 SEP 2024**

**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.**
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)

OROVILLE MUNI (OVE)

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)

OROVILLE MUNI (OVE)
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.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

JANUARY 2020
ANNUAL RATE OF CHANGE
0.1° W
RNAV (GPS) RWY 29
PETALUMA MUNI (O69)

Missed Approach: Climb to 3500 direct XIKIY and on track 216° to HIRUV.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Circling Rwy 11 NA at night.

Procedure NA for arrivals at HABAP on V108 northwest bound.

Procedure NA for arrivals at REBAS on V87 southbound.

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 44).

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Circling Rwy 11 NA at night.

Procedure NA for arrivals at CROIT on V195 southbound and V108 southeast bound.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Circling Rwy 11 NA at night.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Circling Rwy 11 NA at night.
Circling Rwy 11 NA at night.

MISSING APPROACH: Climb to 2000 via SGD R-276 then climbing left turn to 3500 direct PYE VOR/DME.
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-3 128.125
NORCAL APP CON 127.4 317.5
UNICOM 122.8 (CTAF)

Procedure NA for arrivals at CORLY 
on V6 northeast bound.

Procedure NA for arrivals at MUREQ 
on V338 southbound.

VGS and RNAV glidepath not coincident 
(VGS Angle 3.00°/TCH 22).

CIRCLING
3180-1 594 (600-1) 3440-1 854 (900-1)  NA

LPV DA 2966-1 380 (400-1) NA
LNAV/ VNAV DA 2970-1 384 (400-1)  NA
LNAV MDA 3080-1 494 (500-1)  NA

RNAV (GPS) RWY 5
PLACERVILLE (PVF')
RNAV (GPS) RWY 15
RED BLUFF MUNI (RBL)

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 ½ SM; increase all MDAs 80 feet and LNAV visibility Cats C/D ½ SM; increase all 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 ½ SM; increase all MDAs 80 feet and LNAV visibility Cats C/D ½ SM.

**MISSING APPROACH:** Climb to 3500 direct TOWAN and hold.
When local altimeter setting not received, use Redding altimeter setting and increase all MDAs and all Cat C/D visibility 1/2 SM. VDP NA with Redding altimeter setting.

MISSER APPROACH: Climb to 2000 direct RBL VORTAC and hold.

- **ASOS** 120.775
- **OAKLAND CENTER** 132.2 350.3
- **UNICOM** 123.0 (CTAF)
RED BLUFF, CALIFORNIA

**AL-344 (FAA)**

**VOR RWY 33**

RED BLUFF MUNI (RBL)

---

**ASOS**

120.775

**OAKLAND CENTER**

132.2 350.3

**UNICOM**

123.0 (CTAF)

---

**MISSED APPROACH:** Climb to 1500, then climbing right turn to 2000 direct RBL VORTAC and hold.

---

**UNICOM**

OAKLAND CENTER

115.7

300 180

**REIL Rwys 15 and 33**

**MIRL Rwy 15-33**

**REL Rwy 15 and 33**

---

**Category A:**

**B:**

**C:**

**D:**

---

**CIRCLING**

880-1 528 (600-1)

900-1 548 (600-1 1/2)

1060-1 708 (800-2 1/4)

---

**RED BLUFF, CALIFORNIA**

Amdt 8B 23APR20

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SW2, 11 JUL 2024 to 05 SEP 2024

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**RED BLUFF MUNI (RBL)**

VOR RWY 33

40°09'N 122°15'W
RNAV (GPS)-A
BENTON FLD (O85)

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.

**RNAV (GPS)-A**

- **AWOS-2**: 118.675
- **OAKLAND CENTER**: 132.2 350.3
- **UNICOM**: 122.8 (CTAF)

**REDING, CALIFORNIA**

**APP CRS**
- **166°**
- **N/A**
- **723**

**Rwy Ldg**
- **N/A**

**Apt Elev**
- **N/A**

**UNICOM (CTAF)**
- **122.8**

**ELEV 723**

**REDING, CALIFORNIA**

**RNAV (GPS)-A**

**BENTON FLD (O85)**

**SW-2, 11 JUL 2024 to 05 SEP 2024**

**PROCEDURE NA for arrivals at MOSTY on V33 northwest bound.**

**PROCEDURE NA for arrivals at FARRO on T261 southbound.**

**PROCEDURE NA for arrivals at MOSTY**

**PROCEDURE NA for arrivals at FARRO on T261 southbound.**

**PROCEDURE NA for arrivals at MOSTY**

**PROCEDURE NA for arrivals at FARRO on T261 southbound.**

**PROCEDURE NA for arrivals at MOSTY**

**PROCEDURE NA for arrivals at FARRO on T261 southbound.**

**PROCEDURE NA for arrivals at MOSTY**

**PROCEDURE NA for arrivals at FARRO on T261 southbound.**

**PROCEDURE NA for arrivals at MOSTY**

**PROCEDURE NA for arrivals at FARRO on T261 southbound.**
RNAV (GPS)-B
BENTON FLD (O58)

**RNAV (GPS)-B**

**BENTON FLD (O58)**

**REDWOOD, CALIFORNIA**

**AL-10033 (FAA)**

**Category C**

**SW-2, 11 JUL 2024 to 05 SEP 2024**

**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.**

**Rwy Ldg**

**TDZE**

**Apt Elev**

**723**

**NA**

**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)**

**SW-2, 11 JUL 2024 to 05 SEP 2024**

**355°**

**3000**

**723**

**REDWOOD, CALIFORNIA**

**Orig 05OCT23**

**40°34'N-122°24'W**
**Rwy 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.

**TAKEOFF MINIMUMS**

Rwys 16, 34: Standard or 5200-3 for VCOA.

**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.
ILS or LOC RWY 34
REDDING RGNL (RDD)

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.

S-ILS 34 Cat E visibility to 1 SM.

For inop ALS, increase S-ILS 34 Cat E visibility to 3/4 SM and S-LOC 34 Cat C/D/E visibility to 1 SM.

DME required for LOC only.

Use I-RDD DME when on the localizer course.

* LOC only.
RNAV (GPS) RWY 34
REDDING RGNL (RDD)

**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 ½ SM.**

**MISSED APPROACH:** Climb to 1700 then climbing right turn to 5000 direct ITMOR, continue climb-in-hold to 5000.

<table>
<thead>
<tr>
<th>ATIS</th>
<th>OAKLAND CENTER</th>
<th>REDDING TOWER</th>
<th>GND CON</th>
<th>UNICOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>124.1</td>
<td>132.2</td>
<td>119.8 (CTAF)</td>
<td>121.7</td>
<td>122.95</td>
</tr>
</tbody>
</table>

**MALSR**

**APP CRS**

**124.1**

**ATIS**

**7003**

**CH**

**56402**

**W34A**

**TWR**

**603**

**Apt Elev**

**505**

**MALSR**

**REDUCED VFR**

**LNAV only.**

**RNP APCH.**

**REDUCED VFR**

**LNAV only.**

**AVAIABILITY**

**LPV DA**

**699-½**

**200 (200-½)**

**LNAV/ VNAV DA**

**754-½**

**255 (300-½)**

**LNAV MDA**

**860-½**

**361 (400-½)**

**860-5/8**

**361 (400-½)**

**CIRCLING**

**940-1**

**435 (500-1)**

**1000-1**

**495 (500-1)**

**1120-1¾**

**615 (700-1¼)**

**1340-2¾**

**835 (900-2¼)**

**SW-2, 11 JUL 2024 to 05 SEP 2024**
### ATIS
- **ATIS**: 124.1

### OAKLAND CENTER
- **APK CRS**: 132.2
- **TWR**: 350.3

### REDDING TOWER
- **Rwy Idg**: R 020°
- **Apt Elev**: 5005
- **DME**: Required
- **Rwy 16 helicopter visibility reduction below 1/2 SM NA.

### REDDING RGNL (RDD)
- **Appr CRS**: 119.8
- **TDZE**: 505
- **Apt Elev**: 505
- **LOC/DME I-RDD**: 108.7
- **Chan 24**

#### ALTERNATE MISSED APCH FIX
- **LOCALIZER 108.7**
- **I-RDD**: 11
- **Loc: Chan 24**

#### BACK COURSE
- **VGSI and descent angles not coincident (VGSI Angle 3.43/TCH 40).**
- **Disregard glideslope indications.**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
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<td>S-16</td>
<td>265</td>
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<td>CIRCLING</td>
<td>455</td>
<td>500</td>
<td>495</td>
<td>500</td>
</tr>
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#### LOCALIZER 108.7
- **I-RDD**: 11
- **Loc: Chan 24**

#### 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.

#### WYSKI I-RDD
- **350°**
- **15.9**
- **Loc: Chan 104**

#### TWR
- **603**
- **34°**
- **2000 X 3000**
- **340°**
- **2000 X 1500**
- **357°**
- **2000 X 3500**
- **237°**
- **2000 X 1500**

#### REDDING CALIFORNIA
- **Amdt 8 30JAN20**
- **REDDEING RGNL (RDD)**

#### SW-2, 11 JUL 2024 to 05 SEP 2024

#### ALTERNATE MISSED APCH FIX
- **REDDEING RGNL (RDD)**
- **Loc: Chan 90(Y)**

#### SW-2, 11 JUL 2024 to 05 SEP 2024
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
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.
DEPARTURE ROUTE DESCRIPTION

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.

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.
KREST THREE DEPARTURE

DEPARTURE ROUTE DESCRIPTION

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.

SHATA TRANSITION (KREST3.SHATA): From over KREST DME Fix on RDD 12 DME Arc counterclockwise to SHATA INT.

ITMOR TRANSITION (KREST3.ITMOR): From over KREST DME Fix on RDD 12 DME Arc clockwise to ITMOR INT.

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).

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.
**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.
RNAV (GPS) RWY 16
REEDLEY MUNI (O32)

AWOS-3PT
120.175

FRESNO APP CON
132.35 323.25

UNICOM
122.7 (CTAF)

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 ¾ SM; increase all MDAs 60 feet.

MISSED APPROACH: Climb to 3100 direct DEICE and hold, continue climb-in-hold to 3100.
RNAV (GPS) RWY 34
REEDLEY MUNI (O32)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°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 3/4 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 3/4 SM; increase all MDAs 60 feet.

MISSED APPROACH: Climb to 3100 direct DEICE and hold, continue climb-in-hold to 3100.

AWOS-3PT
120.175

FRESNO APP CON
132.35 323.25

UNICOM
122.7 (CTAF)

Category B C D

LPV DA 636-34 250 (300-34) NA
LNAV/ VNAV DA 740-1 354 (400-1) NA
LNAV MDA 860-1 474 (500-1) NA
C IRCLING 860-1 474 (500-1) NA

REEDLEY, CALIFORNIA
Orig 03JAN19

36°40'N-119°27'W

247
RNAV (GPS) RWY 25
RIO VISTA MUNI (O88)

AWOS-AV
127.075

TRAVIS APP CON
119.9 257.9

UNICOM
122.725 (CTAF)

SW-2, 11 JUL 2024 to 05 SEP 2024

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.

CATEGORY
A    B    C    D
LPV  DA  223-3/4 200 (200-3/4)  NA
LNAV/VNAV DA  353-1  330 (400-1)  NA
LNAV MDA 460-1  437 (500-1)  460-1/4  437 (500-1/4)  NA
CIRCLING 460-1  437 (500-1)  600-1  577 (600-1)  940-23/4  917 (1000-23/4)  NA

VNAV
LNAV/DA

RIO VISTA, CALIFORNIA
Amdt 4 24MAR22
When local altimeter setting not received, use Sacramento Int'l altimeter setting and increase DA to 322 feet, increase all MDAs 40 feet and Circling Cat D visibility 1/2 SM. Autopilot coupled approach NA below 335 feet. For inop MALSR, increase S-ILS 2 all Cats visibility to 1 SM and S-LOC 2 Cat C/D visibility to 1 SM. For inop MALSR when using Sacramento Int'l altimeter setting, increase S-ILS 2 all Cats visibility to 1 SM.

**ATIS** | **NORCAL APP CON** | **EXEC TOWER** | **GND CON** | **UNICOM**
---|---|---|---|---
125.5 | 125.25 257.9 | 119.5 (CTAF) 278.8 | 125.0 | 122.95

**MISSING APPROACH:**
Climb to 600 then climbing left turn to 1600 direct SARC VORTAC and hold.
RNAV (GPS) RWY 2
SACRAMENTO EXEC (SAC)

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 ½ SM, increase LNAV all Cats visibility to 1 SM.

ATIS  125.5
NORCAL APP CON  125.25 257.9
EXEC TOWER*  119.5 (CTAF)  278.8
GND CON  125.0
UNICOM  122.95

Procedure NA for arrivals at EMBER on V130 southwest bound.
Procedure NA for arrivals at COUPS on V6 southbound.
Procedure NA for arrivals at VISTO on V334-392 southbound.

RNAP APCH-GPS.

MISSED APPROACH: Climb to 440 then climbing left turn to 2000 direct JIRAG and hold.

Amdt 1  22APR21

SACRAMENTO EXEC (SAC)

38°31'N-121°30'W

253
When local altimeter setting not received, use Sacramento Intl altimeter setting and increase all MDAs 40 feet and Circling Cat D visibility 1/4 SM.

MISSED APPROACH: Climbing left turn to 1600 direct SAC VORTAC and hold.

ATIS 125.5
NORCAL APP CON 125.25 257.9
EXEC TOWER* 119.5 (CTAF) 278.8
GND CON 125.0
UNICOM 122.95

One Minute Holding Pattern

VOR RWY 2
SACRAMENTO EXEC (SAC)

SACRAMENTO, CALIFORNIA
AL-358 (FAA)

24193

ELEV 24
TDZE 21

One Minute Holding Pattern

VOR RWY 2
SACRAMENTO EXEC (SAC)

SACRAMENTO, CALIFORNIA
Amdt 10F 22APR21

38°31'N-121°30'W
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
**ILS or LOC RWY 35L**

**SACRAMENTO INTL (SMF)**

**DME required.**

- Circling NA east of Rwy 17R-35L. Autopilot coupled approach NA below 312 MSL. For inop ALS, increase S-LOC 335L Cats C/D viability to RVR 4500.

- *RVR 1800 authorized with the use of FD or AP or HUD to DA.*

**Procedure NA for arrivals on SAC VORTAC airway radials 257 CW 329.**

**VGSI and ILS glidepath not coincident** (VGSI Angle 3.00/TCH 76).

**Procedure NA**

**ILS or LOC RWY 35L**

- **Amdt 8  24MAR22**

**ELEV** 27  **TDZE** 24

**FAF to MAP 4.1 NM**

**Knots**  60  90  120  150  180

**Min:Sec**  4:06  2:44  2:03  1:38  1:22
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.

ATIS 126.75 NORCAL APP CON 125.4 259.1 (W-NE) 125.25 257.9 (SW) 127.4 317.5 (E-SE)

CAPITOL TOWER GND CON CLNC DEL CPDLC 125.7 256.7 121.7 256.7 121.1 256.7

SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SAFETY AREA 150' RA 154/14 DA 175

TDZ/CL Rwy 17L and 17R
HIRL Rwy 17R 35L and 17L-35R

TDZ/CL Rwy 17L and 17R
HIRL Rwy 17R 35L and 17L-35R

TDZ/CL Rwy 17L and 17R
HIRL Rwy 17R 35L and 17L-35R

TDZ/CL Rwy 17L and 17R
HIRL Rwy 17R 35L and 17L-35R

TDZ/CL Rwy 17L and 17R
HIRL Rwy 17R 35L and 17L-35R

TDZ/CL Rwy 17L and 17R
HIRL Rwy 17R 35L and 17L-35R
**ILS RWY 17R (CAT II & III)**

**SACRAMENTO INTL (SMF)**

**LOC/DME**  I-SMF  
111.1  
Chan 48

**APP CRS**  
168°  
Rwy Idg 8598  
TDZE 25  
Apt Elev 27

Aircraft not GPS equipped - RADAR required for procedure entry. DME or RADAR required. RNP APCH-GPS. From TECO.

**Simultaneous approach authorized.**

**D-ATIS**  
126.75

**NORCAL APP CON**  
125.4  259.1 (W-NE)  
125.25  257.9 (SW)  
127.4  317.5 (E-SE)

**CAPITOL TOWER**  
125.7  256.7

**GND CON**  
121.7  256.7

**CLNC DEL**  
121.1  256.7

**CPDLC**

**38°42'N-121°35'W**

**AIRPLANE CATEGORY**  
A  
B  
C  
D

**S-ILS 17R**  
**CAT II RA 103/12 100 DA 125**

**S-ILS 17R**  
**CAT III RVR 06**

**ALTERNATE MISSED APCH FIX**

**WILLIAMS IFA 114.4 Chan 91**

**ILS RWY 17R**

**TDZ/CL Rwy 17L and 17R**

**HIRL Rwy 17R 35L and 17L 35R**

**RVR 06**

**GS 3.00°**

**TCH 57**

**SIMULTANEOUS APPROACH AUTHORIZED.**

**MISSING 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.

**SACRAMENTO, CALIFORNIA**

**AL-5490 (FAA)**

**24025**

**SACRAMENTO, CALIFORNIA**

**38°42'N-121°35'W**

**SACRAMENTO INTL (SMF)**

**Amdt 16E 23FEB23**

**SW-2, 11 JUL 2024 to 05 SEP 2024**

**ALSF-2**

**RNP APCH-GPS.**

**FROM TECO.**
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.

**MISSED APPROACH:** Climb to 500 then climbing left turn to 3000 direct SAC VORTAC and hold.

**ALTERNATE MISSED APCH FIX**

**TENCO**

**LOCALIZER 111.75 I-MDK 18.1**

**SACRAMENTO INTL (SMF)**

**SA CATEGORY II ILS-SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**
RNAV (RNP) Z RWY 17L
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 0.12 all Cats visibility to RVR 4000; increase RNP 0.30 all Cats visibility to RVR 4500.

**MISSING 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**
126.75
125.4 259.1 (W-NE) 125.25 257.9 (SW)
127.4 317.5 (E-SE)

**NORCAL APP CON**
CAPITOL TOWER 125.7 256.7
GND CON 121.7 256.7
CLNC DEL 121.1 256.7
CPDLC

**APP CRS**
168°

**Rwy Idg**
8605
TDZE 27

**Apt Elev**
27

**MALSR**
A

**AUTHORIZATION REQUIRED**

See planview for multiple IF locations.
RNAV (RNP) Z RWY 17R
SACRAMENTO INTL (SMF')

For uncompensated Baro VNAV systems, procedure NA below -2°C or above 54°C. For inap 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.

**MISSED APPROACH:** Climb to 500 then climbing right turn to 2000 direct GRIME and hold.

**AUTHORIZATION REQUIRED**
RNAV (RNP) Z RWY 35L
SACRAMENTO INTL (SMF)

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.

MISSED APPROACH: Climb to 2000 on track 348° to JARNU and track 321° to GRIME and hold.

See planview for multiple IF locations.

AUTHORIZATION REQUIRED
For uncompensated Baro-VNAV systems, procedure NA below.

-2°C or above 54°C.

RNAP AR APCH-GPS.

MISSED APPROACH: Climb to 2000 on track 348° to ZUNEG and on track 315° to GRIME and hold.

MISSED APCH FIX

GRIME 3.2 NM

See planview for multiple IF locations.
RNAV (GPS) Y RWY 17L
SACRAMENTO INTL (SMF')

Amdt 3B   23FEB23

RNAV (GPS) Y RWY 17L
SACRAMENTO INTL (SMF')
RNAV (GPS) Y RWY 17R
SACRAMENTO INTL (SMF)

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.

### RNAV (GPS) Y RWY 17R

- **Category**: A
- **LPV DA**: 225/18 200 (200-1/2)
- **LNAV/VNAV DA**: 323/24 298 (300-1/2)
- **LNAV MDA**: 400/24 375 (400-1/2) 400/35 375 (400-1/2)
- **Circling**: 440-1 480-1 480-1/2 580-2
- **TDZ/CL Rwys 17L and 17R**
- **HIRL Rwys 17R-35L and 17L-35R**
- **TDZE 25**
- **Elev 27**
- **GRIME TUDOR**
- **JARNU**
- **FAPIN**
- **AMUNE**
- **500 2000**
- **1 NM to RW17R**
- **540**
- **533**
- **569**
- **GP 3.00° TCH 57**
- **168°**
- **168°**
- **1800 1800**
- **1100**
- ** category A B C D**
- **SA2590 (FAA)**
- **Amdt 2D 23FEB23**
- **SW-2, 11 JUL 2024 to 05 SEP 2024**

SW-2, 11 JUL 2024 to 05 SEP 2024
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.

**MISSED APPROACH:** Climb to 800 then climbing left turn to 2000 direct GRIME and hold.

**ELEV** 27  **TDZE** 24

**TDZ/CL Rwy 17L and 17R**

**HIRL** Rwy 17R-35L and 17L-35R
**RNAV (GPS) Y RWY 35R**

**SACRAMENTO INTL (SMF)**

**MISSED APPROACH:** Climb to 800 then climbing left turn to 2000 direct GRIME and hold.

**Circling NA west of Rwy 17L-35R. Rwy 35R helicopter visibility reduction below 1/3 SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -2°C or above 54°C.**

<table>
<thead>
<tr>
<th>D-ATIS</th>
<th>NORCAL APP CON</th>
<th>CAPITOL TOWER</th>
<th>GND CON</th>
<th>CLNC DEL</th>
<th>CPDLC</th>
</tr>
</thead>
<tbody>
<tr>
<td>126.75</td>
<td>125.4 259.1 (W-NE) 125.25 257.9 (SW)</td>
<td>125.7 256.7</td>
<td>121.7 256.7</td>
<td>121.1 256.7</td>
<td></td>
</tr>
</tbody>
</table>

**RNAV (GPS) Y RWY 35R**

- **Circling NA west of Rwy 17L-35R. Rwy 35R helicopter visibility reduction below 1/3 SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -2°C or above 54°C.**
- **NA**

**SACRAMENTO, CALIFORNIA**

**RNAV (GPS) Y RWY 35R**

**SACRAMENTO INTL (SMF)**

**38°42'N-121°35'W**

**Amdt 2A  23FEB23**

**AL-5490 (FAA) 23054**

**RNAV (GPS) Y RWY 35R**

**SACRAMENTO INTL (SMF)**

**38°42’N-121°35’W**

**Amdt 2A  23FEB23**

**AL-5490 (FAA) 23054**
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

JANUARY 2020 ANNUAL RATE OF CHANGE
0.1° W

DENOTES DE-ICING AREA

ROTATION CORRECTION
121°35’W

SACRAMENTO INTL (SMF)
SACRAMENTO, CALIFORNIA
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.
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)
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.
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.
ILS Z RWY 22L (SA CAT I & II)
SACRAMENTO MATHER (MHR)

ATIS
118.325

NORCAL APP CON
127.4  317.5

MATHER TOWER
120.65 (CTAF)

GND CON
121.85  307.9

CLNC DEL
121.85  307.9

UNICOM
122.95

PATCRS
APP CRS
Rwy Idg
TDZE
Apt Elev

MALSR
MISSPDED 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.

Procedure NA for arrivals at COLOM on V6 northeast bound.

SA CATEGORY I & II - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-ILS 22L</td>
<td>SA CAT I</td>
<td>RA 136/14</td>
<td>150</td>
<td>DA 248</td>
</tr>
<tr>
<td>S-ILS 22L</td>
<td>SA CAT II</td>
<td>RA 95/12</td>
<td>100</td>
<td>DA 198</td>
</tr>
</tbody>
</table>

SA CATEGORY I & II - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-2, 11 JUL 2024 to 05 SEP 2024

38°33'N-121°18'W
RNAV (GPS) RWY 4R
SACRAMENTO MATHER (MHR)

MISSED APPROACH: Climb to 3300 direct STNGR and hold.
*Missed approach requires minimum climb of 220 feet per NM to 2500.

Procedure NA for arrival on SAC VORTAC airway radials 021 CW 113.

Circling NA northwest of Rwy 4R-22L. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

Category A: LPV DA* 338-1/4 250 (300-1/4)
Category B: LNAV/ VNAV DA* 351-1/8 263 (300-8)
Category C: LNAV MDA* 460-1 372 (400-1) 480-1 392 (400-1/1)
Category D: LNAV MDA 700-1 612 (700-1) 720-1/4 632 (700-1/4) 652 (700-1/3) 740-1/8 672 (700-1/3) 692 (700-1/2) 740-2 642 (700-2)

* CIRCLING

Amdt: 2 11JUL24

SW-2, 11 JUL 2024 to 05 SEP 2024

SACRAMENTO, CALIFORNIA
AL-356 (FAA)
SW-2, 11 JUL 2024 to 05 SEP 2024

278
RNAV (GPS) RWY 22L
SACRAMENTO MATHER (MHR)

**Categories and MSLR**

- **MISSED APPROACH:** Climb to 3000 direct XAKBE and track 233° to SAC VORTAC and hold.
- **MALSR:** 580°

**ATIS**

- 118.325

**NORCAL APP CON**

- 127.4 317.5

**MATHER TOWER**

- 120.65 (CTAF) 282.25

**GND CON**

- 121.85 307.9

**CLNC DEL**

- 121.85 307.9

**UNICOM**

- 122.95

**Miscellaneous**

- Procedure NA for arrivals at HAGAN on V392-494 northbound.
- Procedure NA for arrivals on HNW VOR/DME airway radials 180 CW 303.

**RNP APCH**

- CIRCLING
- LPV DA
- LPV MDA
- LNAV/ VNAV DA
- LNAV MDA
- LNAV only

**NOTAM**

- SW-2, 11 JUL 2024 to 05 SEP 2024

**Applicable Procedures**

- *LNAV only
- *1 NM to RW22L
- *1.4 NM to RW22L

**Holding Pattern**

- 4 NM Holding Pattern

**VGS and RNAV glidepath not coincident**

- (VGSI Angle 3.00/TCH 50)

**LNAV only**

- 233°

**Miscellaneous**

- SACRAMENTO MATHER (MHR)

**UNICOM**

- 121.85 307.9

**ATIS**

- 118.325

**NORCAL APP CON**

- 127.4 317.5

**MATHER TOWER**

- 120.65 (CTAF) 282.25

**GND CON**

- 121.85 307.9

**CLNC DEL**

- 121.85 307.9

**UNICOM**

- 122.95
RNAV (GPS) RWY 22R

SACRAMENTO MATHER (MHR)

ATIS 118.325
NORCAL APP CON 127.4 317.5
MATHER TOWER* 120.65 (CTAF) 282.25
GND CON 121.85 307.9
CLNC DEL 121.85 307.9
UNICOM 122.95

MISSED APPROACH: Climbing to 500 then climb to 3000 direct SAC VORTAC and hold.

Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Procedure NA at night.

Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Procedure NA at night.

Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Procedure NA at night.

Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Procedure NA at night.

Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Procedure NA at night.

Procedure NA for arrivals at HAGAN on V392-494 northbound.

Procedure NA for arrival on HNW VOR/DME airway radials 180 CW 303.

HANGTOWN HNW

HAGAN (IAF)

BUZEF (IF/IAF)

GRDEN (FAF)

RW22R

2.4 NM to NUMBY

4 NM

221°

1800 (3.8)

1130

IF/IAF

MIRL Rwy 4L-22R

RNAV (GPS) RWY 22R

Procedure NA for arrival on HNW VOR/DME airway radials 180 CW 303.

HANGTOWN HNW

HAGAN (IAF)

BUZEF (IF/IAF)

GRDEN (FAF)

RW22R

2.4 NM to NUMBY

4 NM

221°

1800 (3.8)

1130

IF/IAF

MIRL Rwy 4L-22R

RNAV (GPS) RWY 22R

Procedure NA for arrival on HNW VOR/DME airway radials 180 CW 303.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
**ILS RWY 31**

**SALINAS TOWER**

**LOCALIZER** 108.5

**ATIS** 124.85

**NORCAL APP CON** 133.0 251.15

**SALINAS TOWER**

**SALINAS MUNI (SNS)**

**UNICOM** 123.0

**GND CON** 121.7

**ELEV** 84

**TDZE** 82

**LOC 1-SNS 108.5**

**APP CRS 315°**

**Rwy Idg** 4825

**TDZE** 82

**Apt Elev** 84

**MISSED APPROACH:** Climb to 3000, 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.

**DME required.**

DME from SNS VORTAC. DME use requires simultaneous reception of I-SNS and SNS DME.

**Procedure NA for arrival on SNS VORTAC**

**AIRPORT**

**SALINAS, CALIFORNIA**

**AL-363 (FAA)**

**24137**

**SALINAS, CALIFORNIA**

**Amdt 7 16MAY24**
Procedure NA for arrivals at CAATE on T257 northbound and T259 westbound.

Procedure NA for arrivals at ISIFU on V230 westbound.

Procedure NA for arrivals at PEBBS on V27 northwest bound.

MISSED APPROACH: (Do not exceed 185K until CODOG) Climbing left turn to 2900 direct CODOG and hold, continue climb-in-hold to 2900.
RNAV (GPS) RWY 13
SALINAS MUNI (SNS)

Rwy 13 helicopter visibility reduction below ½ 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 1-31.

Procedure NA for arrivals at MOVER on V25-V87 northwest bound.

Procedure NA for arrivals at SHOEY on V27 northwest bound.

Procedure NA for arrivals at ISIFU on V230 west bound.

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 124.85
NORCAL APP CON 133.0 251.15
SALINAS TOWER * 119.525 [CTAF] 0 239.3
GND CON 121.7
UNICOM 123.0

RNAV (GPS) RWY 13
SALINAS MUNI (SNS)

RNAV (GPS) RWY 13
SALINAS MUNI (SNS)

RNAV (GPS) RWY 13
SALINAS MUNI (SNS)

RNAV (GPS) RWY 13
SALINAS MUNI (SNS)

Procedure NA for arrivals at RANCK on V87 eastbound and T333 northwest bound.


Missed Approach: Climb to 600, then climbing left turn to 3000 direct MARNA and hold, continue climb-in-hold to 3000.

Circling NA for Cat D northeast of Rwy 13-31.

Misssed Approach Fix: Climb to 600, then climbing left turn to 3000 direct MARNA and hold, continue climb-in-hold to 3000.
MISSED APPROACH: Climb to 600, then climbing left turn to 3000 direct MARNA and hold, continue climb-in-hold to 3000.

Procedure NA for arrivals at RANCK on V87 east bound and T333 southeast bound.

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 59).

MARNA

GIPVY

ACIYO

WABUB

6000

3000

3300

3700

GP 3.00°

TCH 50

315°

302°

5 NM

3.5 NM

10 NM

CATEGORY

A

B

C

D

LPV DA

302/24 220 (300-½)

LNAV/ VNAV DA

465/35 383 (400-½)
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.
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.

Procedure NA for arrivals at SNS VORTAC on V25-87 southeast bound and V230 east bound for Cat C northeast of Rwy 13 and north of Rwy 26 and NA for Cat D northeast of Rwy 13-31.

Remain within 10 NM

CATEGORY
S-13 600-1 516 (600-1) 600-1 676 (700-1)
CIRCLING 600-1 516 (600-1) 800-2 960-2
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
NOTE: Chart not to scale.

**TAKEOFF MINIMUMS**

Rwy 8, 13: Standard with minimum climb of 360' per NM to 6000.
Rwy 26, 31: Cats A/B standard with minimum climb of 380' per NM to 6000.
Cats C/D standard with minimum climb of 550' per NM to 6000.

NOTE: Cat A/B aircraft departing Rwy 26 and 31 - Do not exceed 210 K until passing SARDO INT.

**DEPARTURE ROUTE DESCRIPTION**

TAKEOFF RUNWAY 8: Climb heading 081° to 500 then climbing right turn heading 144° to intercept SNS R-114 (V248) southeast bound to SARDO INT. Thence . . . .

TAKEOFF RUNWAY 13: Climb heading 132° to 500 then climbing left turn to intercept SNS R-114 (V248) southeast bound to SARDO INT. Thence . . . .

TAKEOFF RUNWAY 26: Climb heading 261° to 500 then climbing right turn heading 144° to intercept SNS R-114 (V248) southeast bound to SARDO INT. Thence . . . .

TAKEOFF RUNWAY 31: Climb heading 312° to 500 then climbing left turn heading 084° to intercept SNS R-114 (V248) southeast bound to SARDO INT. Thence . . . .

. . . . Proceed on assigned route. Expect clearance to filed altitude 5 minutes after departure.
SALINAS THREE DEPARTURE

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.
Circling NA southwest of Rwy 31-13.

MISSED APPROACH: Climb to 4400 direct ZEGEX and hold, continue climb-in-hold to 4400.
RNAV (GPS) Z RWY 30
SAN CARLOS (SQL)

ATIS
125.9
NORCAL APP CON
133.95 317.6
SAN CARLOS TOWER *(CTAF) 326.2
GND CON
121.6
UNICOM
122.95

Rwy 30 helicopter visibility reduction below ½ SM NA.

Final approach course offset by 5.60°.

Procedure NA for arrivals at SAPID on T259 southwest bound.

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 25).

Category A
LNAV MDA 900-1¼ 894 (900-1¼)

RSW-2, 11 JUL 2024 to 05 SEP 2024

Amdt 1C 11 JUL 2024

SAN CARLOS, CALIFORNIA

AL-9219 (FAA)

24193

RNAV (GPS) Z RWY 30
SAN CARLOS (SQL)

SAN CARLOS, CALIFORNIA

Amdt 1C 11 JUL 2024

37°31'N-122°15'W

SAN CARLOS (SQL)

RNAV (GPS) Z RWY 30
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
**ILS RWY 28R (CAT II & III)**

**SAN FRANCISCO INTL (SFO)**

**MISSING APCH FIX:** 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.

**MISSED APPROACH:** Climb to 3000 on SFO VOR/DME R-281 to VIKYU INT/SFO 12 DME and hold.

**ALTERNATE MISSED APCH FIX**

**SAN FRANCISCO, CALIFORNIA**

**Communication Frequencies**

- **NORCAL APP CON:** 134.5
- **SAN FRANCISCO TOWER:** 120.5
- **GND CON:** 121.8
- **CLNC DEL:** 118.2
- **CPDLC**

**Navigation Aids**

- **LOC/DME I-GWQ 111.7**
- **APPR CRS 130°**
- **Rwy Idg 1236**
- **TDZE 13**
- **Apt Elev 13**

**RNAV 1-GPS or RADAR required for procedure entry.**

**MAP**

- **SAN FRANCISCO INTL (SFO)**
- **SAUSALITO**
- **OAKLAND**
- **WINDSIDE**
- **WOODSIDE**
- **VIKYU INT**
- **CEPIN INT**
- **AXMUL INT**
- **R-281**

**CATEGORIES**

- **CATEGORIES II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

**Amdt 15B 19MAY22**

**Effective Dates:**

- **SW-2, 11 JUL 2024 to 05 SEP 2024**
SAN FRANCISCO, CALIFORNIA

ILS RWY 28L (SA CAT II)
SAN FRANCISCO INTL (SFO)

LOC/DME I-SFO
109.55
Chan 32(y)

APP CRS Rwy Idg 10275
TTrze 13
Apt Elev 13

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

SAN FRANCISCO, CALIFORNIA

Amdt 27C 11AUG22

DTZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L
HIRL All Rwys

† Requires specific OPSPEC, MSPEC, or LOA approval.

ALTERNATE MISSED
APCH FIX
SAN JOSE
SJC
Chan 88

D-ATIS
113.7  115.8  118.85
813
606
781
783
283
813
659

LOCALIZER 109.55
I-SFO 32(y)
Chan 32(y)

SAN FRANCISCO
115.8 SFO
Chan 105

1953±
196
1294±
207
196
207
832±
203±
177
72
4000
3500
5000

DUNTET I-SFO 7.7
(IAF)
HEMAN I-SFO
12

ROKME I-SFO
15

WETOR I-SFO
21.6

HEMANN I-SFO
12

PONKE I-SFO
21.6

DIVEC I-SFO
24.9

SIDBY
(IAF)

D-ATIS
115.8 SFO
Chan 105

10275
284°

1501±
13
d

ELEV TDZE 13

HIRL All Rwys
TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R and 10L

SAN FRANCISCO INTL
ILS RWY 28L (SA CAT II)

SA CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED

AL-375 (FAA)
23334

SW-2, 11 JUL 2024 to 05 SEP 2024
Autopilot coupled approach NA below 293 feet. For inop ALS, increase GLS visibility to RVR 4500.

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.

VGSI and GLS glidepath not coincident (VGSI Angle 3.00°/TCH 71).

For inop ALS, increase GLS visibility to RVR 4500.

Autopilot coupled approach NA below 293 feet. For inop ALS, increase GLS visibility to RVR 4500.

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.

VGSI and GLS glidepath not coincident (VGSI Angle 3.00°/TCH 71).

For inop ALS, increase GLS visibility to RVR 4500.
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.
**GLS RWY 28L**

**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. 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.*

**D-ATIS**

- **113.7 115.8 118.85**
- **NORCAL APP CON**
- **134.5 338.2**
- **SAN FRANCISCO TOWER**
- **120.5 269.1**
- **GND CON**
- **121.8**
- **CLNC DEL**
- **118.2**
- **CPDLC**

**MISSAPCH FIX**

- **OLYMM**
- **278°**
- **2520**
- **1501**

**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, use RNAV (GPS) RW 28L.

**GLS RWY 28L**

**RVR 1800 authorized with use of FD or AP or HUD to DA.**

**Category**

- **A**
- **B**
- **C**
- **D**

- **GLS DA**
- **213/24**
- **200 (200-1/2)**

**Orig 02DEC21**

**Sw-2, 11 Jul 2024 to 05 Sep 2024**

**SAN FRANCISCO, CALIFORNIA**

**37°37'N-122°23'W**
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.

Procedure NA for arrivals at STINS on V25-199 and V27 northwest bound.

VRNAV glidepath not coincident (VGSi Angle 3.00/TCH 68).

MISSING APPROACH: Climb to 3600 on track 104° to IGUKE and on track 103° to DUMBA and hold.

AUTHORIZATION REQUIRED.
Procedure NA for arrivals at STINS on V25, V27 and V199 northwest bound.

Final approach course offset 3.00°.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 4°C or above 54°C. Rwy 10L helicopter visibility reduction below RVR 4000 NA.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 4°C or above 54°C. Rwy 10L helicopter visibility reduction below RVR 4000 NA.

Procedure NA for arrivals at STINS on V25, V27 and V199 northwest bound.

Final approach course offset 3.00°.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 4°C or above 54°C. Rwy 10L helicopter visibility reduction below RVR 4000 NA.

Final approach course offset 3.00°.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 4°C or above 54°C. Rwy 10L helicopter visibility reduction below RVR 4000 NA.

Final approach course offset 3.00°.
RNAV (GPS) RWY 19L
SAN FRANCISCO INTL (SFO)

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.
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.

**2600**

**3.7 NM to RW19R**

**4000**

**1540**

**3000**

**THHEO**

**194°**

**1005-4**

**994 (1000-4)**

**1320-1½**

**1309 (1400-1½)**

**1320-3**

**1309 (1400-3)**

**THHEO**

**11870 X 200**

**8650 X 200**

**7650 X 200**

**312**

**SW-2, 11 JUL 2024 to 05 SEP 2024**
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).

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.
RNAV (GPS) Z RWY 28R
SAN FRANCISCO INTL (SFO)

**RNAV (GPS) Z RWY 28R**

**SFO, SAN FRANCISCO INTL**

**Category A**

- **CIRCLING**
  - CIRCLING NA to Rwy 10L, 10R, 19L, and 19R. CIRCLING RWY 1L, 1R NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 3° or above 54°. For inop ALS, increase LNAV/VNAV all Cats visibility to 1¾ SM, increase LNAV Cat C/D visibility to 2 SM.

- **MISSED APPROACH:** Climb to 3200 direct VIKYU and hold, continue climb-in-hold to 3200.

- **D-ATIS**
  - 113.7 115.8 118.85

- **NORCAL APP CON**
  - 134.5 338.2

- **SAN FRANCISCO TOWER**
  - 120.5 269.1

- **GND CON**
  - 121.8

- **CLNC DEL**
  - 118.2

- **CPDLC**

**WP List**

- **WD**
  - 284°

- **WPT**
  - VIKYU
  - CEPIN
  - (FAF) AXMUL
  - (IF) CEPIN
  - (IAF) DUMBA
  - (IAF) SIDBY
  - (IAF) EDDYY
  - (IF) CEPIN
  - (IAP) DUMBA

**VNAV**

- 3200 VIKYU

**GP 3.00°**

- 213/18
- 200 (200-1¼)

**LNAV/VNAV DA**

- 642-1¾ 629 (700-1¼)

**LNAV MDA**

- 760/24 747 (800-3¾)
- 760/40 747 (800-3¾)
- 760-1¾ 747 (800-1¾)

**CIRCLING**

- 284° to RW28R

**LAT/LOM**

- 284° to RW28R

**RNP APCH.**

- CIRCLING NA to Rwy 10L, 10R, 19L, and 19R. CIRCLING RWY 1L, 1R NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 3° or above 54°. For inop ALS, increase LNAV/VNAV all Cats visibility to 1¾ SM, increase LNAV Cat C/D visibility to 2 SM.

- **MISSED APPROACH:** Climb to 3200 direct VIKYU and hold, continue climb-in-hold to 3200.
Vertical Guidance Navaid and Angle: LOC I-GWQ (GS 3.00°)

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).

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.

Amdt 12 08NOV18
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)

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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 heading 265°. For a go-around on Runway 28R, heading 280°, climb and maintain 3000 or as directed by ATC.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.

NOTE:

B/A: BOARDING AREA

ASSC in use. Operate transponders with altitude reporting mode and ADS-B (if equipped) enabled on all airport surfaces.

Runway Status Lights in Operation.

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
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)
GRFGL 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.

NOTE: Chart not to scale.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
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.
**DEPARTURE ROUTE DESCRIPTION**

**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.

**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)**
MOLEN NINE DEPARTURE

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.
DEPARTURE ROUTE DESCRIPTION

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.

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.GOBB)
GRTFL TRANSITION (NIITE4.GRTFL)
MOGEE TRANSITION (NIITE4.MOGEE)
ORRCA TRANSITION (NIITE4.ORRCA)
SYRAH TRANSITION (NIITE4.SYRAH)
TIPRE TRANSITION (NIITE4.TIPRE)
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 10L:** Climb on heading 104° to 520, then climb direct ORYAN, then on track 102° to SAHEY, thence . . .

**TAKEOFF RUNWAY 10R:** Climb on heading 104° to 520, then climb direct URRSA, then on track 101° to SAHEY, thence . . .

**TAKEOFF RUNWAYS 19L/R:** Climb on heading 194° to 520, then climbing left turn direct to SAHEY, thence . . .

. . . on (transition). Maintain FL190, expect filed altitude 10 minutes after departure.

**KAYEX TRANSITION (SAHEY4.KAYEX)**

**KTINA TRANSITION (SAHEY4.KTINA)**

**NTELL TRANSITION (SAHEY4.NTELL)**

**SUSEY TRANSITION (SAHEY4.SUSEY)**

**NOTE: Chart not to scale.**
SAN FRANCISCO FOUR DEPARTURE

TOP ALTITUDE: ASSIGNED BY ATC

RED BLUFF
115.7 RBL
Chan 104

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.

NOTE: Chart not to scale.

NOTE:  Chart not to scale.

NOTE:  RADAR required.
NOTE:  Rwys 1L/R: DME required.

TAKEOFF MINIMUMS
Rwys 1L/R: Standard.
Rwys 28L/R: Standard with a minimum climb of 351' per NM to 1300.

NOTE:  Rwys 1L/R: DME required.

NOTE:  RADAR required.

DEPARTURE 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.
SEGDY

284°

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 11L/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: Chart not to scale.
TOP ALTITUDE: 3000

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)
GRFL TRANSITION (SNTNA2.GRFL)
MOGEE TRANSITION (SNTNA2.MOGEE)
ORRCA TRANSITION (SNTNA2.ORRCA)
SYRAH TRANSITION (SNTNA2.SYRAH)
TIPRE TRANSITION (SNTNA2.TIPRE)

NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: Chart not to scale.

NOTE: Chart not to scale.

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NOTE: Chart not to scale.
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)

NOTE: GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Do not exceed 210K until leaving 520 feet.

NOTE: Chart not to scale.
NOTE: Chart not to scale.

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.

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.

NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: Rwys 28L/R do not exceed 210K until leaving 520'.

DEPARTURE ROUTE DESCRIPTION
DEDHD TRANSITION (TRUKN2.DEDHD)
GRFTL TRANSITION (TRUKN2.GRFTL)
MOGEE TRANSITION (TRUKN2.MOGEE)
ORRCA TRANSITION (TRUKN2.ORRCA)
SYRAH TRANSITION (TRUKN2.SYRAH)
TIPRE TRANSITION (TRUKN2.TIPRE)
**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)**

**NOTE:** Do not exceed 210K until leaving 520 feet.

**NOTE:** Chart not to scale.
RNAV (RNP) Z RWY 12L
NORMAN Y MINETA SAN JOSE INTL (SJCT)

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.

For multiple IF locations, see planview.

COKOR
VGSi and RNAV glidepath not coincident (VGSi Angle 3.00/TCH 70).

See planview for multiple IF locations.

AUTHORIZATION REQUIRED

RNP 0.18 DA
400-1 356 (400-1)

RNP 0.30 DA
451-1/8 407 (400-1/8)

SW2, 11 JUL 2024 to 05 SEP 2024

San Jose, California
Amdt 2B 24MAR22

AL-693 (FAA) 22307

37°22'N-121°56'W
RNAV (RNP) Z RWY 30L
NORMAN Y MINETA SAN JOSE INTL (SJC)

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 1 SM.

See planview for multiple IF locations.

RPN AR APCH.
**RNAV (GPS) Y RWY 12L**

**NORMAN Y MINETA SAN JOSE INTL (SJC)**

**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.**

**RADAR REQUIRED**

**MISSING APPROACH:** Climb to 4600 direct COKOR and on track 124° to GILRO and hold.

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### Table: Radar Required

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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**SAN JOSE, CALIFORNIA**

Amdt 3A 21JUL16

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**SW-2**, 11 JUL 2024 to 05 SEP 2024

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**SAN JOSE, CALIFORNIA**

Amdt 3A 21JUL16
Closely spaced parallel visual approaches may be in progress to Runways 30L/R.
In the event of a go-around on Runway 30L, proceed straight-ahead heading 300°, or on Runway 30R, turn right heading 120°, climb and maintain 4000, or as directed by ATC.

Weather Minimums: 2500 foot ceiling and 5 miles visibility.

RADAR REQUIRED

FAIRGROUNDS VISUAL APPROACH RUNWAYS 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.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 12L/R: Climb heading 126° to 570, then direct to NEVSE, then on track 039° to KIELY, then on track 348° to cross ALMDN at or below 12000. Thence...

. . . on (transition). Maintain 15000 or lower filed altitude, expect higher altitude 10 minutes after departure.

HRNER TRANSITION (ALMDN4.HRNER)

MOGEE TRANSITION (ALMDN4.MOGEE)

ORRCA TRANSITION (ALMDN4.ORRCA)

SYRAH TRANSITION (ALMDN4.SYRAH)

TIPRE TRANSITION (ALMDN4.TIPRE)

NOTE: Chart not to scale.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

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 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)
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)

NOTE: Do not turn direct SJC VOR/DME until instructed to do so by ATC.
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.

PANOCE TRANSITION (SJC3.PXN): From over MOONY INT on PXN R-288 to PXN VORTAC.
NOTE: Chart not to scale.

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)
VLEE TRANSITION (SPTNS1.VLEE)

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.
SUNOL ONE DEPARTURE

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.

NOTE: SUNOL DEPARTURE restricted to prop aircraft only.

NOTE: DME required for Rwys 30L/R departures.

NOTE: RADAR required.

NOTE: Chart not to scale.
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)
Procedure NA for arrivals at DECO on V107 northwest bound.

Procedure NA for arrivals at DECO on V107 northwest bound.

For LPV fly visual to airport, 127° -3.6 NM. For LPV fly visual to airport, 127° -3.6 NM.

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.
Circling RWY 31L NA at night. RWY 31R helicopter visibility reduction below 3/8 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.

Final approach course offset 5.01°.

Procedure NA for arrivals at CATHE on V107 southeast bound.
RNAV (GPS) Z RWY 31R

REID-HILLVIEW OF SANTA CLARA COUNTY (RHV)

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 3/8 SM NA.

ATIS 125.2
NORCAL APP CON 120.1 290.25

REID-HILLVIEW TOWER *(Rwy 13L-31R) *(Rwy 13R-31L) 119.8 (CTAF) 126.1

GND CON 121.65
UNICOM 122.95

RNAV (GPS) Z RWY 31R

MISSED APPROACH: Climb to 4000 direct CEPPEL and on track 313° to DECOT and hold.

ATIS 125.2
NORCAL APP CON 120.1 290.25

REID-HILLVIEW TOWER *(Rwy 13L-31R) *(Rwy 13R-31L) 119.8 (CTAF) 126.1

GND CON 121.65
UNICOM 122.95

Procedure NA for arrivals at CATHE.

Procedure NA for arrivals at GILRO on T333 southeast bound.

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 3/8 SM NA.

ATIS 125.2
NORCAL APP CON 120.1 290.25

REID-HILLVIEW TOWER *(Rwy 13L-31R) *(Rwy 13R-31L) 119.8 (CTAF) 126.1

GND CON 121.65
UNICOM 122.95

Procedure NA for arrivals at CATHE.

Procedure NA for arrivals at GILRO on T333 southeast bound.

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 3/8 SM NA.

ATIS 125.2
NORCAL APP CON 120.1 290.25

REID-HILLVIEW TOWER *(Rwy 13L-31R) *(Rwy 13R-31L) 119.8 (CTAF) 126.1

GND CON 121.65
UNICOM 122.95

Procedure NA for arrivals at CATHE.

Procedure NA for arrivals at GILRO on T333 southeast bound.

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 3/8 SM NA.

ATIS 125.2
NORCAL APP CON 120.1 290.25

REID-HILLVIEW TOWER *(Rwy 13L-31R) *(Rwy 13R-31L) 119.8 (CTAF) 126.1

GND CON 121.65
UNICOM 122.95

Procedure NA for arrivals at CATHE.

Procedure NA for arrivals at GILRO on T333 southeast bound.

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 3/8 SM NA.

ATIS 125.2
NORCAL APP CON 120.1 290.25

REID-HILLVIEW TOWER *(Rwy 13L-31R) *(Rwy 13R-31L) 119.8 (CTAF) 126.1

GND CON 121.65
UNICOM 122.95

Procedure NA for arrivals at CATHE.

Procedure NA for arrivals at GILRO on T333 southeast bound.

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 3/8 SM NA.

ATIS 125.2
NORCAL APP CON 120.1 290.25

REID-HILLVIEW TOWER *(Rwy 13L-31R) *(Rwy 13R-31L) 119.8 (CTAF) 126.1

GND CON 121.65
UNICOM 122.95

Procedure NA for arrivals at CATHE.

Procedure NA for arrivals at GILRO on T333 southeast bound.

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 3/8 SM NA.

ATIS 125.2
NORCAL APP CON 120.1 290.25

REID-HILLVIEW TOWER *(Rwy 13L-31R) *(Rwy 13R-31L) 119.8 (CTAF) 126.1

GND CON 121.65
UNICOM 122.95

Procedure NA for arrivals at CATHE.

Procedure NA for arrivals at GILRO on T333 southeast bound.

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 3/8 SM NA.

ATIS 125.2
NORCAL APP CON 120.1 290.25

REID-HILLVIEW TOWER *(Rwy 13L-31R) *(Rwy 13R-31L) 119.8 (CTAF) 126.1

GND CON 121.65
UNICOM 122.95

Procedure NA for arrivals at CATHE.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
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.

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.
Procedure NA for arrivals at ULENY on T333 southeast bound. 

Procedure NA for arrivals at GELVY on 4 NM airway radials 264 CW 068. 

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.

- RW32: 3600
- ACETY: 3600
- GELVY: 316
- SD16
- SALINAS SNS
- SNS
- ULENY
- 2400
- 3600
- 2 NM to RW32
- 2 NM
- 2.2 NM
- 5.2 NM
- Category A
- Category B
- Category C
- Category D
- LPV DA*: 600-1/6 316 (400-3/6) NA
- LPV DA: 954-1/8 670 (700-1/8) NA
- LNAV MDA*: 1060-1 776 (800-1) 1060-1 776 (800-1/4) NA
- LNAV MDA: 1320-1 1036 (1100-1/4) 1320-1 1036 (1100-1/8) NA
- CIRCLING: 1320-1 1036 (1100-1/4) 1320-1 1036 (1100-1/8) NA
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

MISSING APPROACH: Climb to 1020 then climb to 6000 on ENI VOR TAC R-131 to CABEX/ENI VOR TAC 18 DME and hold, continue climb-in-hold to 6000.

ATS 120.55  OAKLAND CENTER 127.8 353.5  SANTA ROSA TOWER* 118.5 (CTAF) 363.0  GND CON 121.9  UNICOM 122.95

MISSC APCH FIX

CABEX ENI R-131

ALTERNATE MISS APCH FIX

POINT REYES PYE 113.7 Chan 84

EDOVE INT STS 9.8

LOCALIZER 109.3

I-STS

LUSED INT STS 12.2

STS 0.4

CABEX

ENI R-131

GS 3.00°

TCH 53

CATEGORY

A B C D

S-ILS 32

377/24 255 (300½)

S-LOC 32

580/24 458 (500½ )

580/45 458 (500½ )

CIRCLING

600-1 471 (500-1)

680-1 551 (600-1)

1080-3 951 (1000-3)

1420-3 1291 (1300-3)

SANTA ROSA, CALIFORNIA

Amnd 19D 28DEC23

CHARLES M SCHULZ-SONOMA COUNTY (STS)

38°31’N-122°49’W

ILS or LOC RWY 32

SANTA ROSA, CALIFORNIA

AL-696 (FAA)

23362

SW-2, 11 JUL 2024 to 05 SEP 2024

SW-2, 11 JUL 2024 to 05 SEP 2024

SANTA ROSA AIR CENTER (Abandoned)

TWR 201

MIIL Rwy 2-20 X

HIRL Rwy 14-32 X

REIL Rwy 14 X

Point REYES Chan 84

EDOVE INT STS 9.8

LOCALIZER 109.3

I-STS

LUSEE INT STS 12.2

STS 0.4

Point REYES Chan 84

EDOVE INT STS 9.8

LOCALIZER 109.3

I-STS

LUSEE INT STS 12.2

STS 0.4

Point REYES Chan 84

EDOVE INT STS 9.8

LOCALIZER 109.3

I-STS
RNAV (GPS) RWY 2

CHARLES M SCHULZ-SONOMA COUNTY (STS)

SANCTA ROSA, CALIFORNIA
AL-696 (FAA) 24081

WAAS CH 69230 W02A
APP CRS 013° m 4802
TDZE 129 Apt Elev 129

RNP APCH.

Rwy 2 helicopter visibility reduction below ½ SM NA.

ATIS 120.55
OAKLAND CENTER 127.8 353.5
SANTA ROSA TOWER 118.5 (CTAF) 363.0
GND CON 121.9 UNICOM 122.95

Procedure NA for arrivals at BOARS on V199 southeast bound.

Procedure NA for arrivals on PYE VOR/DME airway radials 335 CW 349.

MISSED APPROACH: Climb to 6000 direct UVNOQ and on track 291° to CABEX and hold, continue climb-in-hold to 6000.

Category

LP MDA
LNAV MDA
CIRCLING

MISSED APPROACH FIX

BOARS on V199 southeast bound.

Vincent A. Williams 28MAR19

RNAV (GPS) RWY 2

CHARLES M SCHULZ-SONOMA COUNTY (STS)

SANCTA ROSA, CALIFORNIA
AL-696 (FAA) 24081

WAAS CH 69230 W02A
APP CRS 013° m 4802
TDZE 129 Apt Elev 129

RNP APCH.

Rwy 2 helicopter visibility reduction below ½ SM NA.

ATIS 120.55
OAKLAND CENTER 127.8 353.5
SANTA ROSA TOWER 118.5 (CTAF) 363.0
GND CON 121.9 UNICOM 122.95

Procedure NA for arrivals at BOARS on V199 southeast bound.

Procedure NA for arrivals on PYE VOR/DME airway radials 335 CW 349.

MISSED APPROACH: Climb to 6000 direct UVNOQ and on track 291° to CABEX and hold, continue climb-in-hold to 6000.

Category

LP MDA
LNAV MDA
CIRCLING

MISSED APPROACH FIX

BOARS on V199 southeast bound.

Vincent A. Williams 28MAR19

RNAV (GPS) RWY 2

CHARLES M SCHULZ-SONOMA COUNTY (STS)

SANCTA ROSA, CALIFORNIA
AL-696 (FAA) 24081

WAAS CH 69230 W02A
APP CRS 013° m 4802
TDZE 129 Apt Elev 129

RNP APCH.

Rwy 2 helicopter visibility reduction below ½ SM NA.

ATIS 120.55
OAKLAND CENTER 127.8 353.5
SANTA ROSA TOWER 118.5 (CTAF) 363.0
GND CON 121.9 UNICOM 122.95

Procedure NA for arrivals at BOARS on V199 southeast bound.

Procedure NA for arrivals on PYE VOR/DME airway radials 335 CW 349.

MISSED APPROACH: Climb to 6000 direct UVNOQ and on track 291° to CABEX and hold, continue climb-in-hold to 6000.

Category

LP MDA
LNAV MDA
CIRCLING

MISSED APPROACH FIX

BOARS on V199 southeast bound.

Vincent A. Williams 28MAR19

RNAV (GPS) RWY 2

CHARLES M SCHULZ-SONOMA COUNTY (STS)

SANCTA ROSA, CALIFORNIA
AL-696 (FAA) 24081

WAAS CH 69230 W02A
APP CRS 013° m 4802
TDZE 129 Apt Elev 129

RNP APCH.

Rwy 2 helicopter visibility reduction below ½ SM NA.

ATIS 120.55
OAKLAND CENTER 127.8 353.5
SANTA ROSA TOWER 118.5 (CTAF) 363.0
GND CON 121.9 UNICOM 122.95

Procedure NA for arrivals at BOARS on V199 southeast bound.

Procedure NA for arrivals on PYE VOR/DME airway radials 335 CW 349.

MISSED APPROACH: Climb to 6000 direct UVNOQ and on track 291° to CABEX and hold, continue climb-in-hold to 6000.

Category

LP MDA
LNAV MDA
CIRCLING

MISSED APPROACH FIX

BOARS on V199 southeast bound.

Vincent A. Williams 28MAR19
RNAV (GPS) RWY 14
CHARLES M SCHULZ-SONOMA COUNTY (STS)

SANTA ROSA, CALIFORNIA
AL-696 (FAA)

APP CRS
126°
Rwy Ldg 5880
TDZE 122
Apt Elev 129

RNP APCH.

Procedure NA for arrivals at Lamped and, continue climb-in-hold to 5000.

Final approach course offset 15.08°

Missed Approach: Climb to 5000 direct WDSTC and hold, continue climb-in-hold to 5000.

ATIS
120.55

OAKLAND CENTER
127.8 353.5

SANTA ROSA TOWER
118.5 (CTAF) 363.0

GND CON
121.9

UNICOM
122.95

5 NM Holding Pattern

LOZWU

EHETY

5000

336°

156°

126°

1700

5000

3300

1652

1388±

1940

599

192°

5000

NoPT

126°

122°

5 NM

5 NM

5 NM

7.1 NM

3.5 NM

0.9 NM

0.3 NM

5 NM

5 NM

129

TDZE 122

129

122

A

B

C

D

LNAV MDA
600-1 478 (500-1)
600-1½ 478 (500-1½)

CIRCLING
600-1 471 (500-1)
680-1 551 (600-1)
1080-3 951 (1000-3)
1420-3 1291 (1300-3)

38°31’N-122°49’W

Amdt 2B 28MAR19

SW-2, 11 JUL 2024 to 05 SEP 2024

SW-2, 11 JUL 2024 to 05 SEP 2024

SW-2, 11 JUL 2024 to 05 SEP 2024

SW-2, 11 JUL 2024 to 05 SEP 2024

358
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
NOTE: Chart not to scale.

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.
TAKENOFF 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.

NOTE: Do not exceed 230K until passing ZZITO.
NOTE: Do not exceed 230K until passing KUIPR.
NOTE: Do not exceed 230K until passing ITIZZ.
 NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKENOFF RUNWAY 14: Climb direct to cross ITIZZ at or above 3500 and at or below 230K then on depicted route, thence . . .
TAKENOFF 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 . . .
TAKENOFF 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)
MMORK ONE DEPARTURE (RNAV)

**NOTE:** Do not exceed 230K until passing MMORK.

**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 14: Standard.

**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)**
### 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)

#### NTREM TRANSITION (RREHD1.NTREM)

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**NOTE:** Chart not to scale.

---

### 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.

---

**TOP ALTITUDE:**
- FL230

---

**RNAV 1 - DME/DME/IRU or GPS.**

**Radar required for non-GPS equipped aircraft.**
SW-2, 11 JUL 2024 to 05 SEP 2024

LDA RWY 18
LAKE TAHOE (TVL)

DME required.

NA
When local altimeter setting not received, procedure NA.

LDA RWY 18 helicopter visibility reduction below ¾ SM NA.

Procedure NA for arrivals at SWR VOR/DME on V494 westbound

Procedure NA for arrival on FMG VORTAC airway radials 167 CW 241.

MISSED APPROACH: Climbing right turn to 11000 on heading 329° and SWR VOR/DME R-102 to SWR VOR/DME and hold.

ELEV 6268
TDZE 6259

108.9
171°

7017
6259
6268

124.725
127.95
316.1
134.3
122.85

ASOS
OAKLAND CENTER
CLNC DEL
CTAF

13°C

SOUTH LAKE TAHOE, CALIFORNIA
AL-5416 (FAA) 23334

38°54'N-120°00'W

LOC/DME I-TVL
APP CRS 171°
Rwy Idg
TDZE
Apt Elev

MALSF

LOCALIZER 108.9
I-TVL
171°

SW-2, 11 JUL 2024 to 05 SEP 2024
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.
Reduced lighting: requires specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown. Procedure NA when tower closed.

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.

SA CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED
RNAV (GPS) RWY 11L
STOCKTON METRO (SCK)

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.

**Procedure NA for arrivals on LINDEN VOR/DME airway radials 192 CW 294.**

**VGS1 and RNAV glidepath not coincident (VGS1 Angle 3.00°/TCH 75).**

**Category A**

- LPV DA: 229-3/4
- LNAV/VNAV DA: 471-1/2
- LNAV MDA: 480-1

**Category B**

- 500-1
- 540-1
- 640-1/4

**Category C**

- 480-1
- 540-1
- 640-1/4

**Category D**

- 451 (500-1)
- 607 (700-1/4)
- 607 (700-2)

**Amdt 1A  01FEB18**

**21168**

**SW2-11 JUL 2024 to 05 SEP 2024**
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
RNAV (GPS) RWY 29
SUSANVILLE MUNI (SVE)

AWOS-3 133.8
OAKLAND CENTER 128.8 285.5
UNICOM 122.8

Final approach course offset 5.11°.

Visual Segment - Obstacles.
NW-2, 11 JUL 2024 to 05 SEP 2024

SUSANVILLE, CALIFORNIA

RNAV (GPS)-A

AWOS-3
133.8

OAKLAND CENTER
128.8 285.5

UNICOM
122.8 (CTAF)

RNP APCH.

NA

Circling NA for Cat D southwest of Rwy 11-29.
When local altimeter setting not received, procedure NA.
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.

SUSANVILLE MUNI (SVE)

ELEV 4149

MIRL Rwy 11-29

SW-2, 11 JUL 2024 to 05 SEP 2024
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.

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.
RNAV (GPS) RWY 12
TRACY MUNI (TCY)

### AWOS-3
118.375

### NORCAL APP CON
123.85 278.3

### UNICOM
123.075 (CTAF)

---

**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 1/4 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 1/8 SM.

Procedure NA for arrivals at ALTAM on V334-392 southbound.

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**SW-2, 11 JUL 2024 to 05 SEP 2024**

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### CATEGORY

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPV DA</td>
<td>443-1/2</td>
<td>250 (300-1/2)</td>
<td>NA</td>
</tr>
<tr>
<td>LNAV/VNAV DA</td>
<td>447-1/2</td>
<td>254 (300-1/2)</td>
<td>NA</td>
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<tr>
<td>LNAV MDA</td>
<td>520-1</td>
<td>327 (400-1)</td>
<td>NA</td>
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<tr>
<td>CIRCLING</td>
<td>580-1</td>
<td>660-1</td>
<td>660-1/2</td>
</tr>
</tbody>
</table>

---

**TCH 41**

---

**D**
RNAV (GPS) RWY 26
TRACY MUNI (TCY)

**Baro-VNAV NA when using Stockton altimeter setting.** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C or above 54°C. Circling NA southwest of Rw 12-30. Circling Rw 30 NA at night. Rw 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 ½ SM.

**MISSED APPROACH:** Do not exceed 210K until OMWAP. Climb to 640 then climbing right turn to 3000 direct OMWAP and hold.

<table>
<thead>
<tr>
<th>AWOS-3</th>
<th>NORCAL APP CON</th>
<th>UNICOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>118.375</td>
<td>123.85 278.3</td>
<td>123.075 (CTAF)</td>
</tr>
</tbody>
</table>

**Procedure NA for arrivals at ALTAM on V28 southwest bound and V334 northbound.**

**Procedure NA for arrivals at PATYY on V111-113 southbound.**

**OMWAP and hold.**

**MISSED APPROACH:** (Do not exceed 210K until OMWAP). Climb to 640 then climbing right turn to 3000 direct OMWAP and hold.

**Panels and Abbreviations:**
- **MAP:** Master Approach Panel
- **FAF:** Final Approach Fix
- **ILS:** Instrument Landing System
- **IF:** Initial Fix
- **IF/IAF:** Initial Fix/Initial Approach Fix
- **IAF:** Initial Approach Fix
- **LCW:** Localizer Course
- **LNAV:** Localizer Navigation
- **MIRL:** Master Inertial Reference System
- **MVA:** Master VORT/OMD Adapter
- **MVA-1:** Master VORT/OMD Adapter 1
- **MVA-2:** Master VORT/OMD Adapter 2
- **OMWAP:** Outer Marker/WAYpoint
- **PATH:** Pathpoint
- **PCN:** Precision Approach Category
- **Rwy:** Runway
- **TDZE:** Touchdown Zone
- **VNAV:** Vertical Navigation
- **VGSI:** Vertical Guidance System Interface
- **VOR:** VHF Omnidirectional Range
- **WPT:** Waypoint
- **WTHR:** Weather
- **WXR:** Weather Radar
- **X-OUT:** Extra Outbound
- **X-UP:** Extra Upwind
- **Z-OUT:** Extra Outbound

**Tables:**

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPV DA</td>
<td>436-7/8</td>
<td>250 (300-31/8)</td>
<td>NA</td>
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<tr>
<td>LNAV/VNAV DA</td>
<td>493-1/8</td>
<td>307 (300-1/8)</td>
<td>NA</td>
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<td>LNAV MDA</td>
<td>540-1</td>
<td>354 (400-1)</td>
<td>NA</td>
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<tr>
<td>CIRCLING</td>
<td>580-1</td>
<td>660-1/2</td>
<td>387 (400-1)</td>
<td>660-1/2</td>
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</tbody>
</table>

**Amdt 1C 07NOV19**

**TRACY, CALIFORNIA**

**TRACY MUNI (TCY)**
RNAV (GPS) RWY 30
TRACY MUNI (TCY)

AWOS-3 118.375
NORCAL APP CON 123.85 278.3
UNICOM 123.075 (CTAF)

Misssed Approach: Climb to 700 then climbing right turn to 3200 direct HAIRE and hold, continue climb-in-hold to 3200.

RNAV (GPS) RWY 30
TRACY MUNI (TCY)

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 307 feet; increase all MDAs 60 feet and visibility LNAV Cat C ½ SM.

Missed Approach: Climb to 700 then climbing right turn to 3200 direct HAIRE and hold, continue climb-in-hold to 3200.

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 307 feet; increase all MDAs 60 feet and visibility LNAV Cat C ½ SM.

Misssed Approach: Climb to 700 then climbing right turn to 3200 direct HAIRE and hold, continue climb-in-hold to 3200.

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 307 feet; increase all MDAs 60 feet and visibility LNAV Cat C ½ SM.

Misssed Approach: Climb to 700 then climbing right turn to 3200 direct HAIRE and hold, continue climb-in-hold to 3200.
**VOR RWY 26**

**TRACY MUNI (TCY)**

**AWOS-3**
118.375

**NORCAL APP CON**
123.85  278.3

**UNICOM**
123.075 (CTAF)

**DME required.**

- Circling NA southwest of Rwy 12-30. Circling Rwy 30 NA at night. Rwy 26 helicopter visibility reduction below 3/4 SM NA. When local altimeter setting not received, use Stockton altimeter setting; increase all MDAs 60 feet and visibility Cat C, 3/4 SM.

**VOR DWY 26**

**TRACY MUNI (TCY)**

**MISSED APPROACH:**
Climbing right turn to 3000 direct LIN VOR/DME and hold.

**UNICOM**
123.075 (CTAF)

**MISSED APCH FIX**
LINDEN
**114.8**

**ALTERNATE MISSED APCH FIX**
MODesto
114.6 MOD  
Ch 93

**ELEV** 193

**TDZE** 186

**Amdt 1A** 07NOV19

**37°41'N-121°26'W**
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°.
ILS RWY 21L (CAT II)

ATIS 135.55 292.125

APP CON 119.9 322.325 (S) 281.45 (N)

TOWER 120.75 254.4

GND CON 121.8 289.4

CLNC DEL 127.55 335.8

Radar required for CAT II aircraft for full procedure off of SEATO.

Misapproach: Climb to 2200 then climbing right turn to 4500 direct SEATO and hold, continue climb in hold to 4500.

Category II ILS Special Aircrew & Aircraft Certification Required

Max 250 KIAS N/A for Sacramento or Straight-in Entry.

Emerg Safe Alt 100 NM 13,000

VGSI and glideslope not coincident (VGSI Angle 2 80/TCH 75).

Category A B C D E

S-ILS 21L RA 83/12 100 DA 158

Fairfield, California

Orig 19MAY22
RNAV (GPS) RWY 03R

FAIRFIELD, CALIFORNIA

ATIS 135.55 292.125

APP CON 119.9 322.325 (S) 126.6 281.45 (N)

TOWER 120.75 254.4

GND CON 121.8 289.4

CLNC DEL 127.55 335.8

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

EMERG SAFE ALT 100 NM 12,600

HABAL 3000

IRL 900 1900 035°

LG 2500 1159

SEATO

RADAR required when holding above 6000.

* Circling NA NW of RWY 3L-21R.

CIRCLING

5 NM

SW-2, 11 JUL 2024 to 05 SEP 2024
EMERG SAFE ALT 100 NM 12,600 FROM SUU TACAN
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)

YOGIE 175K

REJOY 3000

LINDEN TRANSITION

HAIRE 5000

PANOCE PXN 7000

AVENAL AVE

RNAV - 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)

REJOY ONE DEPARTURE (RNAV) (REJOY1 • REJOY)
Orig 07OCT21
RNAV (GPS) RWY 20
TRUCKEE-TAHOE (TRK)

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 that climb to 12000 direct GRIOT and on track 016° to AWEGA and hold, continue climb-in-hold to 12000.

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.

Final approach course offset 14.51°.

Final approach course offset 14.51°.
TRUCKEE, CALIFORNIA

RNAV (GPS)-A
TRUCKEE-TAHOE (TRK)

APP CRS 058°
Rwy Idg N/A
TDZE N/A
Apt Elev 5904

D-ATIS 118.0
OAKLAND CENTER 127.95 316.1
TRUCKEE TOWER 120.575 (CTAF)
GND CON 118.3
UNICOM 122.95

RNAP ACH.

-18°C

Procedure NA for arrivals at SIGNA on V200-392 southwest bound.

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.

REIL Rwy 11
MIRL Rwys 11-29 and 2-20

CATEGORY
A  B  C  D

CIRCLING
7500-1½ 7500-1½ 7700-3 NA
1596 (1600-1½) 1596 (1600-1½) 1796 (1800-3)

ELEV 5904

TRUCKEE, CALIFORNIA
Orig 20JUN19

39°19’N 120°08’W
391

Orig 20JUN19

-18°C

Revised 23110

23110

SW-2, 11 JUL 2024 to 05 SEP 2024

SW-2, 11 JUL 2024 to 05 SEP 2024
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
TRUCKEE-TAHOE (TRK)

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.
TRUCKEE, CALIFORNIA

TRUCKEE-TAHOE (TRK)

AL-6021 (FAA)

TRUCKEE, CALIFORNIA

TRUCK FIVE DEPARTURE (OBSTACLE)
**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)**

**PALSADIES TRANSITION (MOWGL2.SWR)**

**SIGNA TRANSITION (MOWGL2.SIGNA)**

**WNDEL TRANSITION (MOWGL2.WNDEL)**

---

**TOP ALTITUDE:**

13000
RNAV (GPS) RWY 13
MEFFORD FLD (TLR)

3901 X 75

CATEGORY
A
B
C
D

LNAV MDA
740-1 475 (500-1)
740-1½ 475 (500-1½)
NA

CIRCLING
760-1 495 (500-1)
760-1½ 495 (500-1½)
NA

MIRL Rwy 13-31

SW-2, 11 JUL 2024 to 05 SEP 2024

36°09'N-119°20'W
Circling NA southwest of Rwy 15-33. Circling Rwy 33 NA at night. Rwy 15 helicopter visibility reduction below 1/2 SM NA.

When local altimeter setting not received, procedure NA.

Procedure NA for arrivals at FLUEN on V27-T257 northwest bound.

Procedure NA for arrivals at MENSE on V199 northeast bound.

MISSING 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.
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 MERI and hold, continue climb-in-hold to 6700.

Procedure NA for arrivals at GETER on V25 southbound, and on V27-494 southeast bound.

RNAP CH - GPS:

ASOS
119.275

OAKLAND CENTER
127.8 353.5

UNICOM
123.0 (CTAF)

MISSED APCH FIX
7 NM
AKGIC

MAXWELL 3 MOA

MAXWELL 1 MOA

MERRI

SW-2, 11 JUL 2024 to 05 SEP 2024

Amdt 1A 07SEP23

UKIAH, CALIFORNIA

UKIAH MUNI (UKI)

RNAV (GPS)-B

UKIAH MUNI (UKI)

RNAV (GPS)-B
Circling NA southwest of Rwy 15-33. Circling Rwy 33 NA at night. Rwy 15 helicopter visibility reduction below 1/2 SM NA. When local altimeter setting not received, procedure NA.

misplaced 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 /-UKI 16.5 DME and hold.

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 /-UKI 16.5 DME and hold.

Circling NA southwest of Rwy 15-33. Circling Rwy 33 NA at night. Rwy 15 helicopter visibility reduction below 1/2 SM NA. When local altimeter setting not received, procedure NA.

misplaced 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 /-UKI 16.5 DME and hold.

Circling NA southwest of Rwy 15-33. Circling Rwy 33 NA at night. Rwy 15 helicopter visibility reduction below 1/2 SM NA. When local altimeter setting not received, procedure NA.

misplaced 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 /-UKI 16.5 DME and hold.

Circling NA southwest of Rwy 15-33. Circling Rwy 33 NA at night. Rwy 15 helicopter visibility reduction below 1/2 SM NA. When local altimeter setting not received, procedure NA.

misplaced 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 /-UKI 16.5 DME and hold.

Circling NA southwest of Rwy 15-33. Circling Rwy 33 NA at night. Rwy 15 helicopter visibility reduction below 1/2 SM NA. When local altimeter setting not received, procedure NA.

misplaced 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 /-UKI 16.5 DME and hold.

Circling NA southwest of Rwy 15-33. Circling Rwy 33 NA at night. Rwy 15 helicopter visibility reduction below 1/2 SM NA. When local altimeter setting not received, procedure NA.

misplaced 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 /-UKI 16.5 DME and hold.

Circling NA southwest of Rwy 15-33. Circling Rwy 33 NA at night. Rwy 15 helicopter visibility reduction below 1/2 SM NA. When local altimeter setting not received, procedure NA.

misplaced 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 /-UKI 16.5 DME and hold.

Circling NA southwest of Rwy 15-33. Circling Rwy 33 NA at night. Rwy 15 helicopter visibility reduction below 1/2 SM NA. When local altimeter setting not received, procedure NA.

misplaced 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 /-UKI 16.5 DME and hold.

Circling NA southwest of Rwy 15-33. Circling Rwy 33 NA at night. Rwy 15 helicopter visibility reduction below 1/2 SM NA. When local altimeter setting not received, procedure NA.

misplaced 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 /-UKI 16.5 DME and hold.

Circling NA southwest of Rwy 15-33. Circling Rwy 33 NA at night. Rwy 15 helicopter visibility reduction below 1/2 SM NA. When local altimeter setting not received, procedure NA.

misplaced 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 /-UKI 16.5 DME and hold.

Circling NA southwest of Rwy 15-33. Circling Rwy 33 NA at night. Rwy 15 helicopter visibility reduction below 1/2 SM NA. When local altimeter setting not received, procedure NA.

misplaced 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 /-UKI 16.5 DME and hold.

Circling NA southwest of Rwy 15-33. Circling Rwy 33 NA at night. Rwy 15 helicopter visibility reduction below 1/2 SM NA. When local altimeter setting not received, procedure NA.

misplaced 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 /-UKI 16.5 DME and hold.

Circling NA southwest of Rwy 15-33. Circling Rwy 33 NA at night. Rwy 15 helicopter visibility reduction below 1/2 SM NA. When local altimeter setting not received, procedure NA.

misplaced 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 /-UKI 16.5 DME and hold.

Circling NA southwest of Rwy 15-33. Circling Rwy 33 NA at night. Rwy 15 helicopter visibility reduction below 1/2 SM NA. When local altimeter setting not received, procedure NA.

misplaced 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 /-UKI 16.5 DME and hold.

Circling NA southwest of Rwy 15-33. Circling Rwy 33 NA at night. Rwy 15 helicopter visibility reduction below 1/2 SM NA. When local altimeter setting not received, procedure NA.

misplaced 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 /-UKI 16.5 DME and hold.

Circling NA southwest of Rwy 15-33. Circling Rwy 33 NA at night. Rwy 15 helicopter visibility reduction below 1/2 SM NA. When local altimeter setting not received, procedure NA.
**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)**

**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 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)
**RNAV (GPS) RWY 20**

**VACAVILLE, CALIFORNIA**

**ASOS**

| 134.75 |

**TRAVIS APP CON**

| 128.4 | 281.45 |

**CTAF**

| 122.85 |

**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.

**Category**

<table>
<thead>
<tr>
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<th>B</th>
<th>C</th>
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<td>LPV</td>
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**RNAV (GPS) RWY 20**

**NUT TREE (VCB)**

**CTAF** 122.85

**SW-2, 11 JUL 2024 to 05 SEP 2024**

**Amdt 1B 12AUG21**

**Amdt 1B 12AUG21**
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.

Procedure NA for arrivals on SAC VORTAC airway radials 137 CW 237.

heading 100° and SAC R-241 to DOLCE/14 DME and hold.

MISSED APPROACH: Climbing right turn to 2200 on heading 100° and SAC R-241 to DOLCE/14 DME and hold.

Procedure NA for arrivals on SAC VORTAC airway radials 137 CW 237.

heading 100° and SAC R-241 to DOLCE/14 DME and hold.

Procedure NA for arrivals on SAC VORTAC airway radials 137 CW 237.

heading 100° and SAC R-241 to DOLCE/14 DME and hold.

Procedure NA for arrivals on SAC VORTAC airway radials 137 CW 237.

heading 100° and SAC R-241 to DOLCE/14 DME and hold.

Procedure NA for arrivals on SAC VORTAC airway radials 137 CW 237.
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.
**ILS or LOC RWY 30**

**VISALIA MUNI (VIS)**

**AWOS 3PT**

**FRESNO APP CON**

**CLNC DEL**

**UNICOM**

**LOCALIZER**

**LOC/DME I-VIS**

**APP CRS**

**Rwy Idg**

**TDZE**

**Apt Elev**

**DME required.**

**NA**

For inap ALS, increase S-LOC 30 Cat C/D visibility to 1 SM.

**MALSR**

**MISSING APP: 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**

**LOCALIZER**

**LOC/DME I-VIS**

**APP CRS**

**Rwy Idg**

**TDZE**

**Apt Elev**

**DME required.**

**NA**

For inap ALS, increase S-LOC 30 Cat C/D visibility to 1 SM.

**MALSR**

**MISSING APP: 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**

**LOCALIZER**

**LOC/DME I-VIS**

**APP CRS**

**Rwy Idg**

**TDZE**

**Apt Elev**

**DME required.**

**NA**

For inap ALS, increase S-LOC 30 Cat C/D visibility to 1 SM.

**MALSR**

**MISSING APP: 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.**
RNAV (GPS) RWY 12
VISALIA MUNI (VIS)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

Procedure NA for arrival at FRAME on V23 northwest bound.

Procedure NA for arrival at ALTTA on V459 northwest bound.

Class D

Awos-3pt 119.925
Fresno App Con 118.5
ClnC del 118.5
Unicom 123.05 (CTAF)

Amdt 2 15AUG19

Holding Pattern CALRY

* LNAV only.

LPV da 543-3/4 250 (300-3/4)
LNAV da 697-1/6 404 (500-1/6)
LNAV MDA 680-1 387 (400-1)
LNAV MDa 680-1/6 387 (400-1/6)

CIRCLING

720-1 452 (500-1)
760-1 465 (500-1)
760-1/2 465 (500-1/2)
940-2 645 (700-2)

Category A B C D

Holding Pattern CALRY

* 2900

RNAV (GPS) RWY 12
VISALIA MUNI (VIS)

36°19'N-119°24'W

300° 4 NM

04778

19227

Visalia, California

Amdt 2 15AUG19

36°19'N-119°24'W

407

SW-2, 11 JUL 2024 to 05 SEP 2024
RNAV (GPS) RWY 30
VISALIA MUNI (VIS)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C or above 54°C. For inop ALS, increase LNAV/VNAV all Cats visibility to ⅓ SM, LNAV Cats C/D to 1 SM.

**AWOS-3PT**
119.925

**FRESNO APP CON**
118.5

**CLNC DEL**
118.5

**UNICOM**
123.05 (CTAF)

**ELEV 295**

**TDZE 295**

**MALSR**

**MISSED APPROACH:** Climb to 3000 direct INOCI and on track 267° to LATON and hold, continue climb-in-hold to 3000.

**RAP**

**VISALIA MUNI (VIS)**

Amdt 2 15AUG19
Rwy 2 helicopter visibility reduction below \( \frac{3}{5} \) 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 1/8 SM. Increase LNAV/VNAV DA to 834 feet and all visibilities 1/4 SM. Increase all MDAs 80 feet and LNAV visibility Cat C/D 1/8 SM, and Circling visibility Cat C 1/6 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 200K until IFAFY) Climb to 740 then climbing right turn to 3000 direct.

**Procedure NA for arrival on SNS VORTAC airway radials 264 CW 293.**

**UNICOM**

<table>
<thead>
<tr>
<th>ASOS</th>
<th>NORCAL APP CON</th>
<th>UNICOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>132.275</td>
<td>127.15 307.125</td>
<td>122.8 (CTAF)</td>
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</table>
Rwy 2 helicopter visibility reduction below 1/4 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 132.275
NORCAL APP CON 127.15 307.125
UNICOM 122.8 (CTAF) 7

LOCALIZER 108.3
I-AYN

NALLS INT
SNS 16.5
RADAR

SANTY
SNS 29.5

LOCALIZERS

MONTEREY ALTM 108.3 (FAA)

SW-2, 11 JUL 2024 to 05 SEP 2024

WATSONVILLE, CALIFORNIA

Amdt 4E 21MAR24

36°56′N-121°47′W

ELEV 163
TDZE 152
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
132.275

NORCAL APP CON
127.15  307.125

UNICOM
122.8 (CTAF)

VOR-A
WATSONVILLE MUNI (WVI)

Categories

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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TAKEOFF ROUTE DESCRIPTION

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. Pole 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 pole 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, 320’ 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.
**TAKEOFF MINIMUMS**

Rwy 2, 27: NA - ATC.
Rwy 20: Standard.
Rwy 9: 300-1 or standard with minimum climb of 270' per NM to 400'.

**NOTE:** RNAV 1.
**NOTE:** DME/DME/IRU or GPS required.
**NOTE:** For non-GPS equipped aircraft, SNS and OSI DMEs must be operational.
**NOTE:** RADAR required for non-GPS equipped aircraft.

**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)**
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.

NOTE: Chart not to scale.

NOTE: RNAV 1.
NOTE: GPS required.

TAKEOFF MINIMUMS
Rwy 14: NA-obstacles.
Rwy 32: Standard with minimum climb of 325' per NM to 12000.
RNAV (GPS) RWY 16

ELLS FLD/WILLITS MUNI (O28)

**Amdt 2 02DEC21**

**APP CRS 145°**
- **Rwy Idg**: 2705
- **TDZE**: 2066
- **Apt Elev**: 2066

**RNP APCH - GPS**

- **UKI ASOS**: 119.275
- **OAKLAND CENTER**: 132.2 350.3
- **UNICOM**: 122.8 (CTAF)

**RNAV (GPS) RWY 16**

**AL-9480 (FAA)**

- **RNAV (GPS) RWY 16 (O28)**
- **3620-1 1/4**
- **3620-1 1/2**
- **3620-3**
- **NA**

**Category**
- **A**
- **B**
- **C**
- **D**

- **CIRCLING**
  - **LNAV MDA**
  - **3620-1 1/4**
  - **3620-1 1/2**
  - **3620-3**
  - **NA**

**Final approach course offset 14.25°.**
WILLITS, CALIFORNIA

RNAV (GPS) RWY 34

MISSED APCH - GPS

NEAPEO MOA (VGSI Angle 3.00/TCH 21).

NA

MISSED APPROACH: Climb to 6100 direct NEAPEO

339° to HERMT

and hold, continue climb-hold to 6100.

Ukiah altimeter setting; when not received, procedure NA.

VGSI and descent angles not coincident

RNP APCH - GPS.

Rwy 34 helicopter visibility

reduction below 1 SM NA. Procedure NA at night. Use

Circling NA west of Rwy 16-34. Rwy 34 helicopter visibility

and hold, continue climb-in-hold to 6100.

Ukiah altimeter setting when not received, procedure NA.

SW-2, 11 JUL 2024 to 05 SEP 2024
**FLUEN TWO DEPARTURE (OBSTACLE) (RNAV)**

**NOTE:** Chart not to scale.

**TAKEOFF MINIMUMS**
- Rwy 16: NA-air traffic.
- Rwy 34: Standard with minimum climb of 360' per NM to 6700.

**TAKEOFF OBSTACLE NOTES**
- Rwy 34: Trees beginning 92' from DER, left and right of centerline, up to 100' AGL/2139' MSL.

**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.

NOTE: RNAV 1.
NOTE: GPS required.

OAKLAND CENTER
132.2 350.3

FLUEN 6700

MAXWELL 3 MOA

NOTE: Chart not to scale.

ELLS FLD/WILLITS MUNI (O28)
AL-9480 (FAA)
WILLITS, CALIFORNIA

SW-2, 11 JUL 2024 to 05 SEP 2024

419
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb to 6000 direct VICOR WP, then via 153° track to ENI VORTAC, thence proceed on course.

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
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 121.425

OAKLAND CENTER 132.2 350.3

UNICOM 122.8 (CTAF)

MISA RW34 25 NM

Procedure NA for arrivals at ILA VORTAC on V195 southbound.
**VOR RWY 34**

**WILLOWS/GLENN COUNTY (WLW)**

**CATEGORY**

- **B**
- **C**
- **D**

**APP CRS**

- **323°**

**WILLOWS/CALIFORNIA**

**Veridian Airport**

**TDZE**

- **138**

**Apt Elev**

- **141**

**MISSED APPROACH:** Climbing right turn to 3000 on heading 200° and on IIA VORTAC R-323 to WUNIP/ILA 15.3 DME and hold.

**NA**

When Oroville Muni altimeter setting not received, procedure NA.

DME required.

Use Oroville Muni altimeter setting.

**MIRL Rwy 34 to WUNIP/ILA 15.3 DME and hold.**

**ELEV 141**

**TDZE 138**

**DME REQUIRED**

- **ILA 27.3**
- **ILA 22.1**
- **ILA 15.3**
- **ILA 22.1**
- **ILA 15.3**
- **UVXUZ**

**UNICOM**

- **122.8 (CTAF)**

**THE END**

**WILLOWS, CALIFORNIA**

**Orig 22JUN17**

**39°31'N-122°13'W**
RNAV (GPS) RWY 36
WOODLAND, CALIFORNIA

APP CRS
004°

Rwy Idg  3244
TDZE  125
Apt Elev  125

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
126.6  281.45

UNICOM
122.8 (CTAF)

WOODLAND, CALIFORNIA
Orig 07MAY09

RNAV (GPS) RWY 36
WOODLAND, CALIFORNIA

SW-2, 11 JUL 2024 to 05 SEP 2024

Orig 07MAY09
A rate of climb/descent table is provided for use in planning and executing climbs or descents under known or approximate ground speed conditions. It will be especially useful for approaches when the localizer only is used for course guidance. A best speed, power, altitude combination can be programmed which will result in a stable glide rate and altitude favorable for executing a landing if minimums exist upon breakout. Care should always be exercised so that minimum descent altitude and missed approach point are not exceeded.

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