U.S. Terminal Procedures Publication
Southwest (SW) Vol 3 of 4

Effective: 0901Z
30 NOV 2023 to 25 JAN 2024

Consult the Change Notice (CN) effective 28 DEC 2023 for revised Instrument Procedure Charts for this volume.
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CORRECTIONS, COMMENTS AND/OR PROCUREMENT

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

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

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.

<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></td>
<td>To RVR 4500*</td>
</tr>
<tr>
<td>TDZL or RCLS</td>
<td>To RVR 2400#</td>
</tr>
<tr>
<td>RVR</td>
<td>To ½ 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</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></td>
</tr>
<tr>
<td>CIRCLING</td>
<td>1540/24</td>
<td>288</td>
<td>(300-1/2)</td>
<td></td>
</tr>
</tbody>
</table>

#### DISPLAYED LEVEL OF SERVICE

As the WAAS coverage is expanded, the **W** will be removed.

#### HAT

In the absence of COPTER MINIMA, helicopters may use the CAT A minimums of other procedures.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>COPTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAT</td>
<td>680-1/2</td>
</tr>
</tbody>
</table>

#### COLD TEMPERATURE AIRPORTS

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

#### NAVIGATIONAL AID OUTAGES

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 ERROR TABLE

<table>
<thead>
<tr>
<th>TEMP °C</th>
<th>200</th>
<th>300</th>
<th>400</th>
<th>500</th>
<th>600</th>
<th>700</th>
<th>800</th>
<th>900</th>
<th>1000</th>
<th>1500</th>
<th>2000</th>
<th>3000</th>
<th>4000</th>
<th>5000</th>
</tr>
</thead>
<tbody>
<tr>
<td>+10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>60</td>
<td>80</td>
<td>90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>90</td>
<td>100</td>
<td>150</td>
<td>200</td>
<td>290</td>
<td>390</td>
<td>490</td>
</tr>
<tr>
<td>-10</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>90</td>
<td>100</td>
<td>150</td>
<td>200</td>
<td>290</td>
<td>390</td>
<td>490</td>
</tr>
<tr>
<td>-20</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>90</td>
<td>100</td>
<td>150</td>
<td>200</td>
<td>290</td>
<td>390</td>
<td>490</td>
</tr>
<tr>
<td>-30</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>100</td>
<td>120</td>
<td>140</td>
<td>160</td>
<td>210</td>
<td>260</td>
<td>380</td>
<td>570</td>
<td>710</td>
</tr>
<tr>
<td>-40</td>
<td>50</td>
<td>60</td>
<td>80</td>
<td>100</td>
<td>120</td>
<td>140</td>
<td>160</td>
<td>180</td>
<td>220</td>
<td>340</td>
<td>480</td>
<td>570</td>
<td>670</td>
<td>760</td>
</tr>
<tr>
<td>-50</td>
<td>60</td>
<td>80</td>
<td>100</td>
<td>120</td>
<td>140</td>
<td>160</td>
<td>180</td>
<td>200</td>
<td>240</td>
<td>450</td>
<td>590</td>
<td>890</td>
<td>1190</td>
<td>1500</td>
</tr>
</tbody>
</table>

#### AERIAL 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 certificated 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>Approach Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed (Knots)</td>
<td>0-90</td>
<td>91-120</td>
<td>121-140</td>
<td>141-165</td>
<td>Abv 165</td>
</tr>
</tbody>
</table>
### 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 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>

#### EXPANDED CIRCLING APPROACH MANEUVERING AIRSPACE RADIUS

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 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>1/2</td>
</tr>
<tr>
<td>1800</td>
<td>1/2</td>
</tr>
<tr>
<td>2000</td>
<td>1/2</td>
</tr>
<tr>
<td>2200</td>
<td>1/2</td>
</tr>
</tbody>
</table>

#### RADAR MINIMA

Radar Minima:

1. Minima shown are the lowest permitted by established criteria. Pilots should consult applicable directives for their category of aircraft.

2. The circling MDA and weather minima to be used are those for the runway to which the final approach is flown, not the landing runway. In the above RADAR MINIMA example, a category C aircraft flying a radar approach to runway 10, circling to land on runway 28, must use an MDA of 560 feet with weather minima of 500-1.

NOTE: Military RADAR MINIMA may be shown with communications symbology that indicates emergency frequency monitoring capability by the radar facility as follows:
- (E) VHF emergency frequency (121.5) monitored
- (U) UHF emergency frequency (243.0) monitored

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

- ** Alternate Minimums not standard. Civil users refer to tabulation. USA/USN/USAF pilots refer to appropriate regulations.
- ** NA 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 (ODPs), IFR Alternate Minimums, and Radar Instrument Approach Minimums for use by civil and military aviation. The organization responsible for SIAPS, Radar Minimums, SIDs, STARs and graphic ODPs is identified in parentheses in the top margin of the procedure; e.g., (FAA), (FAA-O), (USA), (USAF), (USN). SIAPS with the (FAA) and (FAA-O) designation are regulated under 14 CFR, Part 97. SIAPS with the (FAA-O) designation have been developed under Other Transaction Agreement (OTA) by private providers and have been certified by the FAA. 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

| PBN Requirements Box
| Equipment Requirements Box
| Standard Procedure Notes Box

From WINRZ, UJBE: RNAV-1 GPS, RNAV-1GPS from MAP to YARKU.

Circling to Rwy 25 NA at night.

# For inop MALSR increase S-ILS 16R all cats visibility to 2½ SM.

RNAV STAR and DP PBN/Equipment Requirements Notes Box

| PBN Requirements Box
| Equipment Requirements Box

RNAV 1 - DME/DME/IRU or GPS

RADAR required

PILOT CONTROLLED AIRPORT LIGHTING SYSTEMS

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

Available FAA standard approach lighting systems are charted as a negative symbol to indicate pilot 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 communication section of the chart with a ☑ or the appropriate lighting system identification e.g., UNICOM 122.8 ☑, ☑, ☑.

KEY MIKE

| Function
| 7 times within 5 seconds | Highest intensity available |
| 5 times within 5 seconds | Medium or lower intensity (Lower REIL or REIL-off) |
| 3 times within 5 seconds | Lowest intensity available (Lower REIL or REIL-off) |
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<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</td>
</tr>
<tr>
<td>APP CON</td>
<td>Approach Control</td>
</tr>
<tr>
<td>AR</td>
<td>Authorization Required</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>CCW</td>
<td>Counter Clockwise</td>
</tr>
<tr>
<td>CDI</td>
<td>Course Deviation Indicator</td>
</tr>
<tr>
<td>Chan</td>
<td>Channel</td>
</tr>
<tr>
<td>CIFP</td>
<td>Codes Instrument Flight Procedures</td>
</tr>
<tr>
<td>CIR</td>
<td>Circling</td>
</tr>
<tr>
<td>CLNC DEL</td>
<td>Clearance Delivery</td>
</tr>
<tr>
<td>CNF</td>
<td>Computer Navigation Fix</td>
</tr>
<tr>
<td>CPDLC</td>
<td>Controller Pilot Data Link</td>
</tr>
<tr>
<td>CTAF</td>
<td>Communication</td>
</tr>
<tr>
<td>CW</td>
<td>Clockwise</td>
</tr>
<tr>
<td>D-ATIS</td>
<td>Digital-Automated Terminal Information Service</td>
</tr>
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<td>KIAS</td>
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<td>Local Area Augmentation System</td>
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<td>Localizer Type Augmentation Aid</td>
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<td>Low Intensity Runway Lights</td>
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<td>LNAV</td>
<td>Lateral Navigation</td>
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<td>LOC</td>
<td>Localizer</td>
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<td>LP</td>
<td>Localizer Performance</td>
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<tr>
<td>LPV</td>
<td>Localizer Performance with Vertical Guidance</td>
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<tr>
<td>LR</td>
<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>Maximum Authorized Altitude</td>
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<td>Medium Intensity Approach Light System</td>
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<td>Missed Approach Point</td>
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<td>Minimum Reception Altitude</td>
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<td>Non-directional Radio Beacon</td>
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<td>No Procedure Turn Required (Procedure Turn shall not be executed without ATC clearance)</td>
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<td>Abbreviation</td>
<td>Description</td>
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<td>Obstacle Departure Procedure</td>
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<td>Outer Marker</td>
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<td>Precision Approach Radar</td>
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<td>Pre-Departure Clearance</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>Runway End Identifier Lights</td>
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<td>Radius-to-Fix</td>
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<td>Runway Lead-in Light System</td>
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<td>RNAV</td>
<td>Area Navigation</td>
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<td>Runway Point of Intercept(ion)</td>
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<td>Runway Remaining Lights</td>
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<td>Short Approach Lighting System with Sequenced Flashing Lights</td>
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<td>Simultaneous Offset Instrument Approach</td>
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<td>Terminal Arrival Area</td>
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<td>TACAN</td>
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<td>TCH</td>
<td>Threshold Crossing Height (height in feet above ground level)</td>
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<td>TDZ</td>
<td>Touchdown Zone</td>
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<td>Touchdown Zone Elevation</td>
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<td>TDZ/CL</td>
<td>Touchdown Zone and Runway Centerline Lighting</td>
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<td>Touchdown Zone Lights</td>
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<td>Visual Approach Slope Indicator</td>
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<td>Visual Climb over Airport</td>
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<td>Vertical Descent Angle</td>
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<td>VDP</td>
<td>Visual Descent Point</td>
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<td>Visual Glide Slope Indicator</td>
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<td>Vertical Navigation</td>
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<tr>
<td>WAAS</td>
<td>Wide Area Augmentation System</td>
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<tr>
<td>WP/WPT</td>
<td>Waypoint (RNAV)</td>
</tr>
</tbody>
</table>
**Artist Approach Procedures (Charts)**

**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**
- Underline indicates No Voice transmitted on this frequency
- LOC to VOR
- VOR to VOR
- TACAN
- VOR/DME
- DME
- NDB
- NDB/DME
- LOM (Compass locator at Outer Marker)
- Localizer Front Course (LOC/LDA)
- Right side shading: Front course
- Localizer Back Course (LOC/LDA)
- Left side shading: Back course
- SDF Course
- LOC/LDA/SDF Transmitter
- LOC/DME

**Fixes/ATC Reporting Requirements**
- Reporting Point
- Waypoint
- MAP WP (Flyby)
- MAP WP (Flyover)
- Flyover Point

**Computer Navigation Fix (CNF) - No ATC Function**
- R-198: Radial line and value
- LR-198: Lead Radial
- LB-198: Lead Bearing

**Legend 23334**
**Legend 23110**

**Instrument Approach Procedures (Charts)**

**Planview Symbols**

**Minimum Safe Altitude (MSA)**

- Facility Identifier
- Airport Identifier

- MSA CRW 25 NM
- MSA AIA 25 NM

(arrows on distance circle identify sectors)

**Terminal Arrival Area (TAA)**

- Straight-in Area
- Right Base Area
- Left Base Area

**Miscellaneous**

- VOR Changeover Point
- End of Rwy Coordinates (DoD only)

**Special Use Airspace**

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

**Obstacles**

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

**Airports**

- Primary and Secondary (named in planview)
- Civil
- Seaplane Base
- Joint (Civil-Military)
- Heliport

**Distance not to scale**

- International Boundary
- Air Defense Identification Zone

**End of Rwy Coordinates**

SW-3, 30 Nov 2023 to 25 Jan 2024
**RADIO AIDS TO NAVIGATION**

### Compulsory:
- ✅ VOR
- ✅ VORTAC
- ✅ DME
- 🚭 NDB/DME
- 🔴 VOR/DME

### Non-Compulsory:
- ❌ VOR
- ❌ VORTAC
- ❌ DME
- ❌ NDB/DME
- 🔴 VOR/DME

### Special Indicators:
- 🎨 LOM (Compass locator at outer marker)
- 🚭 Marker Beacon
- 🎨 Localizer Front Course
- 🎨 Localizer Back Course (Shading on left)
- 🎨 VHF Paired Frequency
- 🎨 ORLANDO 112.25 (T) ORL
- 🎨 Chan 59(Y)
- 🍀 SCOTT Chan 59
- 🍀 SKE

**Legend:**
- (T) indicates frequency protection range
- Underline indicates no voice transmitted on this frequency
- (Y) TACAN must be placed in "Y" mode to receive distance information

### FIXES/ATC REPORTING REQUIREMENTS
- ➩ Unnamed DME fix
- ▲ Reporting Point (Compulsory)
- △ Reporting Point (Non-Compulsory)
- ➩ Obvious DME (DME mileage matches route mileage)
- ☀ Waypoint (Compulsory)
- ☀ Waypoint (Non-Compulsory)
- ✖ Flyover Point
- ✖ (CFTSP) Computer Navigation Fix (CNF) - No ATC Function

### SPECIAL USE AIRSPACE
- R-Restricted
- W-Warning
- P-Prohibited
- A-Alert
- MOA-Military Operations Area

### AIRPORTS
- 🚦 Civil
- 🏳️ Military
- 🇺🇸 Joint (Civil-Military)

- 🚦 Civil
- 🏳️ Military
- 🇺🇸 Joint (Civil-Military)

**Indicated Airspeed**
- 175K Mandatory Airspeed
- 120K Minimum Airspeed
- 250K Maximum Airspeed
DEPARTURE PROCEDURE (DP) CHARTS

RADIO AIDS TO NAVIGATION

Compulsory:
- VOR
- VORTAC
- DME
- NDB/DME

Non-Compulsory:
- VOR/DME
- TACAN
- LOC/DME (shown when installation is offset from its normal position off the end of the runway.)

LOCALIZER BACK COURSE

Symbol for LOCALIZER BACK COURSE (Shading on left)

FIXES/ATC REPORTING REQUIREMENTS

- Unnamed DME fix
- ▲ Reporting Point (Compulsory)
- ▲ Reporting Point (Non-Compulsory)
- Obvious DME (DME mileage matches route mileage)
- Waypoint (Compulsory)
- Waypoint (Non-Compulsory)
- Flyover Point
- (CFTSP) Computer Navigation Fix (CNF) - No ATC Function

MISCELLANEOUS

- Changeover Point
- Distance not to scale
- International Boundary
- Sector Boundary
- Air Defense Identification Zone
- ▼ Takeoff Minimums and (Obstacle) Departure Procedures entry published.

ROUTES

4500 MEA-Minimum Enroute Altitude
*3500 MOCA-Minimum Obstruction Clearance Altitude
270° (65) Departure Route

Transition Route
R-275 Radial line and value
Lost Communications Track
Visual Flight Path

V12 Holding Pattern
J80 Airway/Jet Route Identification

SPECIAL USE AIRSPACE

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

ALTIMETES

5500 Mandatory Altitude (Cross at)
2300 Minimum Altitude (Cross at above)
4800 Maximum Altitude (Cross at below)
12000 Block Altitude

INDICATED AIRSPEED

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

AIRPORTS

Civil
Military
Heliport
Joint (Civil-Military)

MINIMUM SAFE ALTITUDE (MSA)

4500 Facility Identifier
4100 Airport Identifier
5300 MSA CRW
14700 (arrows on distance circle identify sectors)
LEGEND

INSTRUMENT APPROACH PROCEDURES (CHARTS)

AIRPORT DIAGRAM/AIRPORT SKETCH

Runways

Hard Surface
Other Than Hard Surface
Stopways, Taxiways, Parking Areas
Metal Surface

X

Closed Runway
Closed Surface
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.

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

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...................................................

Unlit    Lit

Displacement Area ............... Displacement Area

# See appropriate Chart Supplement for information.

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

SCOPE

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

HELicopter Alighting Areas

NOTE:

ARRESTING SYSTEM

(EMAS)

Negative Symbols used to identify Copter Procedures landing point..........................

NOTE:

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

Runway TDZ elevation......................................TDZE 123

Runway Slope...... — 0.3% Down......0.8% UP —

(note when rounded runway slope is ≥ 0.3%)

NOTE:

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

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

Approach light symbols are shown in the Flight Information Handbook.

Airport diagram scales are variable.

True/magnetic North orientation may vary from diagram to diagram

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

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

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

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

NOTE:

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

(Foreign Only)

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

LEGEND
Approach lighting and visual glide slope systems are indicated on the airport sketch by an identifier, e.g., \( \text{A} \), \( \text{B} \), etc.

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

### Approach Lighting System - United States

<table>
<thead>
<tr>
<th>Category</th>
<th>Approach Lighting System</th>
<th>Short Approach Lighting System</th>
<th>Medium Intensity Approach Lighting System</th>
</tr>
</thead>
<tbody>
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<td>I</td>
<td>ALSF-1</td>
<td>SALS/SALSF</td>
<td>MALS R</td>
</tr>
<tr>
<td>II</td>
<td>ALSF-2</td>
<td>SSALR</td>
<td>ODALS</td>
</tr>
</tbody>
</table>

**LEGEND 22195**

**INSTRUMENT APPROACH PROCEDURES (CHARTS)**

**APPROACH LIGHTING SYSTEM - UNITED STATES**

**Approach Lighting System**

- **ALSF-1**
  - Short Approach Lighting System (SALS/SALSF)
  -Medium Intensity Approach Lighting System (MALS)

**Category II**

- **ALSF-2**
  - Simplified Short Approach Lighting System (SSALR)

**Medium Intensity (MALS and MALSF) or Simplified Short (SSALR and SSALF) Approach Lighting Systems**

**Runway Touchdown Zone and Centerline Lighting Systems**

NOTE: CIVIL ALSF-2 MAY BE OPERATED AS SSALR DURING FAVORABLE WEATHER CONDITIONS.

AVAILABILITY of TDZ/CL will be shown by NOTE in SKETCH e.g. "TDZ/CL Rwy 15"
Approach lighting and visual glide slope systems are indicated on the airport sketch by an identifier, \( \text{\textbullet} \), \( \text{\textbullet} \), etc.

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

**LEGEND**

**APPROACH LIGHTING SYSTEM - UNITED STATES**

**APPROACH PATH INDICATOR**

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

Legend: \( \text{\textbullet} \) White \( \text{\textbullet} \) Red

**VISUAL APPROACH SLOPE INDICATOR**

- **VASI**
  - Visual approach slope indicator with standard threshold clearance provided.
  - All lights white — too high
  - Far lights red, near lights white — on glide slope
  - All lights red — too low

- **VASI 2**
- **VASI 4**
- **VASI 6**
- **VASI 12**
- **VASI 16**

**TRI-COLOR VISUAL APPROACH SLOPE INDICATOR**

- **TRCV**

**ALIGNMENT OF ELEMENTS SYSTEMS**

- **APAP**

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

**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.
## Frequency Pairing Table

<table>
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<tr>
<th>TACAN Channel</th>
<th>VHF Frequency</th>
<th>TACAN Channel</th>
<th>VHF Frequency</th>
<th>TACAN Channel</th>
<th>VHF Frequency</th>
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<td>108.05</td>
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<td>110.30</td>
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---SEE PALM SPRINGS, CA

---SEE SAN DIEGO, CA
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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 mininums other than standard, are listed below. Takeoff Mininums and Departure Procedures apply to all runways unless otherwise specified. An entry may also be listed that contains only Takeoff Obstacle Notes. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

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

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

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

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

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

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

APPLE VALLEY, CA

APPLE VALLEY (AVP)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1A 19JUL18 (18200) (FAA)

TAKEOFF MINIMUMS:

Rwy 8, 18, 26, NA - Environmental.

DEPARTURE PROCEDURE:

Rwy 36, use EXCON DEPARTURE.

TAKEOFF OBSTACLE NOTES:

Rwy 36, vegetation 219' from DER, 283' left of centerline, 3069' MSL.
Vegetation 681' from DER, 415' right of centerline, 3084' MSL.
Rising terrain, fence beginning 718' from DER, 403' left of centerline, up to 3108' MSL.
Rising terrain, vegetation beginning 742' from DER, 222' left of centerline, up to 3109' MSL.

AVALON, CA

CATALINA (AVX)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 10MAR77 (22363) (FAA)

DEPARTURE PROCEDURE:

Rwys 4, 22, climb straight ahead to 2300 then proceed on course.

TAKEOFF OBSTACLE NOTES:

Rwy 22, 1670' MSL terrain 1576' from DER, 798' left of centerline.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

BAKERSFIELD, CA

BAKERSFIELD MUNI (L45)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 06FEB14 (14037) (FAA)

TAKEOFF MINIMUMS:

Rwy 34, 400-1½ or std. with a min. climb of 555' per NM to 900.

DEPARTURE PROCEDURE:

Rwy 16, climbing right turn direct EHF VORTAC, thence...
Rwy 34, climbing left turn direct EHF VORTAC, thence...

... Aircraft departing EHF VORTAC R-180 CW R-360 climb on course, aircraft departing EHF VORTAC R-001 CW R-100 continue climb in EHF VORTAC holding pattern (hold NW, right turns, 144° inbound) to cross EHF VORTAC at or above 5200 then proceed on course, aircraft departing EHF VORTAC R-101 CW R-179 continue climb in EHF VORTAC holding pattern (hold NW, right turns, 144° inbound) to cross EHF VORTAC at or above 4100 then proceed on course.

TAKEOFF OBSTACLE NOTES:

Rwy 16, light pole 168' from DER, 498' left of centerline, 26' AGL/400' MSL.
Tree 395' from DER, 491' left of centerline, 40' AGL/400' MSL.
Powerlines beginning 946' from DER, 608' right of centerline, 120' AGL/474' MSL.
Pole 644' from DER, 474' left of centerline, 30' AGL/403' MSL.
Trees beginning 1603' from DER, 196' right of centerline, up to 40' AGL/453' MSL.
Obstruction light on transmission tower 2464' from DER, 780' left of centerline, 106' AGL/477' MSL.
Catenary 2486' from DER, 484' left of centerline, 106' AGL/477' MSL.
Catenary 2529' from DER, 725' right of centerline, 111' AGL/483' MSL.
Obstruction light on transmission tower 2539' from DER, 214' right of centerline, 107' AGL/478' MSL.
Catenary 2540' from DER, 482' right of centerline, 111' AGL/482' MSL.
Rwy 34, trees beginning 604' from DER, 341' left of centerline, up to 15' AGL/399' MSL.
Tower 510' from DER, 1646' right of centerline, 266' AGL/656' MSL.
Vehicles on road 764' from DER, 499' left of centerline, up to 15' AGL/399' MSL.
Hanger 372' from DER, 545' left of centerline, 20' AGL/404' MSL.

MEADOWS FLD (BFL)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 26MAY16 (21112) (FAA)

DEPARTURE PROCEDURE:

All aircraft, climbing right turn direct EHF VORTAC. Aircraft departing EHF R-180 CW R-350 climb on course. All others continue climb northwest bound via EHF R-324, then climbing left turn to cross EHF VORTAC at or above: EHF R-110 CW R-179 3000; EHF R-351 CW R-109 4000.

TAKEOFF OBSTACLE NOTES:

Rwy 12L, trees beginning 2221' from DER, 684' left of centerline, up to 72' AGL/546' MSL.
Ground 146' from DER, 525' left of centerline, 479' MSL.
Rwy 12R, tree 2612' from DER, 1158' left of centerline, 69' AGL/533' MSL.
Trees beginning 456' from DER, 575' right of centerline, up to 46' AGL/510' MSL.
Pole 1248' from DER, 113' left of centerline, 31' AGL/543' MSL.
Transmission tower 3632' from DER, 1097' left of centerline, 94' AGL/602' MSL.
Poles beginning 2297' from DER, 925' right of centerline, up to 36' AGL/577' MSL.
Pump 529' from DER, 538' right of centerline, 5' AGL/523' MSL.
Building 373' from DER, 257' right of centerline, 10' AGL/524' MSL.
Towers beginning 4350' from DER, 499' right of centerline, up to 110' AGL/650' MSL.
NAVAID 388' from DER, 266' right of centerline, 21' AGL/535' MSL.
Tree 3252' from DER, 1072' right of centerline, 101' AGL/610' MSL.

BIG BEAR CITY, CA

BIG BEAR CITY (L35)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 20APR00 (00111) (FAA)

TAKEOFF MINIMUMS:

Rwy 8, 1200-2 or std. with a min. climb of 282' per NM to 8000.
Rwy 26, NA.

DEPARTURE PROCEDURE:

Use OKACO RNAV DEPARTURE.

Rwy 26, NA.
BLYTHE, CA

BLYTHE (BLH)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A 22AUG13 (13234) (FAA)
TAKEOFF MINIMUMS:
Rwy 26, 600-2½ or std. with a min. climb of 348’ per NM to 1200.
DEPARTURE PROCEDURE:
Rwy 26, turn right, climb to 1500 via heading 180° and BLH R-120, then climbing left turn direct BLH VORTAC, MCA 2000.
TAKEOFF OBSTACLE NOTES:
Rwy 26, tower 2.4 NM from DER, 991’ left of centerline, 159’ AGL/957’ MSL.

BORREGO SPRINGS, CA

BORREGO VALLEY (L08)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 10APR08 (08101) (FAA)
DEPARTURE PROCEDURE:
Use ZUNGU DEPARTURE (RNAV).

BRAWLEY, CA

BRAWLEY MUNI (BWC)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 30MAR17 (17089) (FAA)
TAKEOFF MINIMUMS:
Rwy 26, NA-Obstacles and noise abatement.
DEPARTURE PROCEDURE:
Rwy 8, climbing right turn heading 120° to intercept IPL VORTAC R-009 to 3000 to IPL VORTAC, then climb on course.
TAKEOFF OBSTACLE NOTES:
Rwy 8, trees, beginning 81’ from DER, 314’ left of centerline, up to -106’ MSL.
Trees, beginning 274’ from DER, 441’ right of centerline, up to -124’ MSL.
Vehicles on road, beginning 380’ from DER, 348’ right of centerline, up to -116’ MSL.
Tree 458’ from DER, 406’ left of centerline, -94’ MSL.

BURBANK, CA

BOB HOPE (BUR)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 5 28JUL11 (11209) (FAA)
TAKEOFF MINIMUMS:
Rwy 8, std. w/min. climb of 410’ per NM to 5000.
Rwy 15, std. w/min. climb of 335’ per NM to 5000.
Rwy 26, std. w/min. climb of 325’ per NM to 5000.
Rwy 33, std. w/min. climb of 550’ per NM to 5000’ or 600-2½ w/min. climb of 300’ per NM to 5000.
DEPARTURE PROCEDURE:
Rwys 8, 15, climbing right turn direct VNY VOR/DME.
Rwy 26, climb direct VNY VOR/DME.
Rwy 33, Climbing left turn direct VNY VOR/DME.
All aircraft continue climb in VNY holding pattern (SE, left turns, 295° inbound) to cross VNY VOR/DME at or above 5100, then westbound on V326 to GINNA or eastbound on V186 to DARTS.
TAKEOFF OBSTACLE NOTES:
Rwy 8, multiple trees, poles, and buildings beginning 124’ from DER, 42’ right of centerline, up to 65’ AGL/745’ MSL.
Multiple trees, buildings and poles beginning 278’ from DER, 73’ left of centerline, up to 56’ AGL/746’ MSL.
Rwy 15, multiple trees, buildings, poles, and blast fence beginning 50’ from DER, 2’ right of centerline, up to 65’ AGL/762’ MSL.
Multiple trees, buildings, poles, blast fence beginning 185’ from DER, 53’ left of centerline, up to 108’ AGL/777’ MSL.
Rwy 26, multiple trees, poles, transmission towers, buildings, and roads, and terrain beginning 26’ from DER, 4’ right of centerline, up to 145’ AGL/731’ MSL.
Multiple trees, poles, transmission towers, railroad, and buildings beginning 302’ from DER, 437’ left of centerline, up to 117’ AGL/846’ MSL.
Rwy 33, multiple trees, poles, terrain, buildings, road beginning 33’ from DER, 30’ right of centerline, up to 100’ AGL/1333’ MSL.
Multiple trees, poles, buildings, antenna, railroad, and blast fence beginning 97’ from DER, 11’ left of centerline, up to 50’ AGL/878’ MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)
ORIG 26MAY16 (16147) (FAA)
Rwy 8, heading as assigned by ATC; requires minimum climb of 420’ per NM to 2500.
Rwy 15, heading as assigned by ATC; requires minimum climb of 340’ per NM to 2100.
Rwy 26, heading as assigned by ATC; requires minimum climb of 380’ per NM to 4800.
Rwy 33, heading as assigned by ATC; requires minimum climb of 460’ per NM to 4900.

ORIG 26MAY16 (16147) (FAA)

23334
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

CALIFORNIA CITY, CA
CALIFORNIA CITY MUNI (L71)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 17MAR05 (05076) (FAA)
DEPARTURE PROCEDURE:
Use CALIFORNIA CITY (RNAV) DEPARTURE.

CLALIPATRIA, CA
CLIFF HATFIELD MEML (CLR)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 12OCT17 (21112) (FAA)
DEPARTURE PROCEDURE:
Rwy 8, climb runway heading to 400, then climbing right turn to 3000 via heading 200° and IPL R-336 to IPL VORTAC.
Rwy 26, climb runway heading to 400, then climbing left turn to 3000 via IPL R-336 to IPL VORTAC.
TAKEOFF OBSTACLE NOTES:
Rwy 8, pole 525' from DER, 140' right of centerline, 15' AGL/-166' MSL.
Poles beginning 616' from DER, 204' right of centerline, 15' AGL/-165' MSL.
Building, pole beginning 748' from DER, 307' right of centerline, 25' AG/-155' MSL.
Transmission line 838' from DER, 150' right of centerline, 31' AGL/-150' MSL.
Rwy 26, pole 190' from DER, 329' right of centerline, -152 MSL.
Road 223' from DER, on centerline -170' MSL.
Tree 328' from DER, 484' left of centerline, -155' MSL.
Tree 541' from DER, 634' right of centerline, -125' MSL.
Pole 1103' from DER, 582' right of centerline, -140' MSL.
Antenna 1444' from DER, 565' left of centerline, -131' MSL.

CAMARILLO, CA
CAMARILLO (CMA)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4 10NOV16 (16315) (FAA)
DEPARTURE PROCEDURE:
Rwy 8, climbing left turn to 2500 on CMA VOR/DME R-058 thence . . .
Rwy 26, climb to 2500 on CMA VOR/DME R-265 thence...
... Climbing left turn direct CMA VOR/DME before proceeding on course.

CAMP PENDLETON MCAS (MUNN FLD) (KNFG)
OCEANSIDE, CA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 30DEC21 (22083) (USN)
DEPARTURE PROCEDURE:
Rwys 3, 21, diverse departures NA.
TAKEOFF OBSTACLE NOTES:
Rwy 3, palm trees 1900-2350' from DER, 500-1100' right of centerline, max height 210' MSL.
Telephone pole 2.4 NM from DER, 3310' right of centerline, 79' AGL/443' MSL.
Terrain 1.7 NM from DER, 2945' right of centerline, 456' MSL.
Palm tree 981' from DER, 939' right of centerline, 159' MSL.
Light pole 3251' from DER, 843' left of centerline, 179' MSL.
Light pole 3300' from DER, 880' left of centerline, 182' MSL.
Light pole 3347' from DER, 915' left of centerline, 185' MSL.
Light pole 3448' from DER, 1226' left of centerline, 195' MSL.
Light pole 3473' from DER, 1015' left of centerline, 191' MSL.
Light pole 3524' from DER, 1150' left of centerline, 192' MSL.
Rwy 21, pylon 2.4 NM from DER, 2362' left of centerline, 108' AGL/516' MSL.
Terrain 1.5 NM from DER, 2583' right of centerline, 659' MSL.
Palm tree 2868' from DER, 94' left of centerline, 148' MSL.
Tree southwest of airfield 1204' from DER, 90' right of centerline, 91' MSL.
Tree southwest of airfield 1262' from DER, 594' left of centerline, 105' MSL.
Tree southwest of airfield 1267' from DER, 253' left of centerline, 110' MSL.
Tree southwest of airfield 841' from DER, 710' left of centerline, 108' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

CARLSBAD, CA
MCCLELLAN-PALOMAR (CRQ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 5 21JUL16 (22139) (FAA)
TAKEOFF MINIMUMS:
Rwy 6, std. w/min. climb of 255’ per NM to 1700 or 2700-3 for VCOA.

DEPARTURE PROCEDURE:
Rwy 6, climbing left turn heading 245° to 3000 before proceeding on course. Do not exceed 210K until established on heading 245°.
Rwy 24, climb heading 245° to 2400 before proceeding on course. Do not exceed 210K until established on heading 245°.

VCOA:
Rwy 6, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross McClellan-Palomar airport at or above 2900 before proceeding on course.

TAKEOFF OBSTACLE NOTES:
Rwy 6, fence beginning 6’ from DER, 453’ left of centerline, up to 1’ AGL/328’ MSL.
Obstruction light on blast fence beginning 96’ from DER, 398’ right of centerline, up to 18’ AGL/332’ MSL.
Tree 325’ from DER, 508’ left of centerline, 347’ MSL.
Trees beginning 519’ from DER, 504’ left of centerline, up to 379’ MSL.
Tree 3682’ from DER, 945’ left of centerline, 424’ MSL.
Trees, equipment on building, obstruction light on flagpole beginning 3682’ from DER, 333’ left of centerline, up to 428’ MSL.
Trees beginning 4032’ from DER, 431’ right of centerline, up to 465’ MSL.
Light poles beginning 4705’ from DER, 485’ right of centerline, up to 30’ AGL/457’ MSL.
Trees 4866’ from DER, 988’ left of centerline, 457’ MSL.
Trees beginning 4944’ from DER, 431’ right of centerline, up to 465’ MSL.
Light poles beginning 4985’ from DER, 536’ right of centerline, up to 42’ AGL/468’ MSL.
Tree, light poles beginning 5123’ from DER, 576’ right of centerline, up to 476’ MSL.
Trees 5403’ from DER, 753’ right of centerline, 490’ MSL.
Trees, light poles beginning 5663’ from DER, 569’ right of centerline, up to 502’ MSL.
Trees 6015’ from DER, 896’ right of centerline, 507’ MSL.
Tree 1.1 NM from DER, 1131’ right of centerline, 506’ MSL.

CHINA LAKE NAWS (ARMITAGE FLD) (KNID)
RIDGECREST, CA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
15JUL21 (21196) (USN)

DEPARTURE PROCEDURE:
Diverse departures NA, use published departure.

TAKEOFF OBSTACLE NOTES:
Rwy 14, pylon 2252’ from DER, 1094’ right of centerline, 49’ AGL/2309’ MSL.
Pylon 2519’ from DER, 945’ right of centerline, 49’ AGL/2311’ MSL.
Pylon 2681’ from DER, 1182’ left of centerline, 49’ AGL/2289’ MSL.
Pylon 2772’ from DER, 807’ right of centerline, 49’ AGL/2312’ MSL.
Pylon 2909’ from DER, 1176’ left of centerline, 49’ AGL/2286’ MSL.
Pylon 2952’ from DER, 580’ right of centerline, 49’ AGL/2305’ MSL.
Pylon 3128’ from DER, 351’ right of centerline, 49’ AGL/2305’ MSL.
Pylon 3131’ from DER, 580’ left of centerline, 49’ AGL/2305’ MSL.
Pylon 3131’ from DER, 1177’ left of centerline, 49’ AGL/2298’ MSL.
Pylon 3132’ from DER, 214’ left of centerline, 49’ AGL/2295’ MSL.
Pylon 3133’ from DER, 52’ right of centerline, 49’ AGL/2289’ MSL.
Pylon 3135’ from DER, 1022’ left of centerline, 49’ AGL/2288’ MSL.
Pylon 3134’ from DER, 876’ left of centerline, 49’ AGL/2287’ MSL.

CHINO, CA
CHINO (CNO)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 5 30NOV00 (00335) (FAA)

TAKEOFF MINIMUMS:
Rwy 3, std. with a min. climb of 270’ per NM to 4800.
Rwys 8L/R, std. with a min. climb of 270’ per NM to 4800.
Rwy 21, Cat A/B std. with a min climb of 290’ per NM to 4800, Cat C/D std. with a min climb of 400’ per NM 4800.  Rwys 26L/R, Cat A/B std. with a min. climb of 270’ per NM to 4800, Cat C/D std. with a min. climb of 400’ per NM to 4800.

DEPARTURE PROCEDURE:
Rwys 3, 8L/R, climbing right turn direct PDZ VORTAC.
Rwys 21, 26L/R, climbing left turn direct PDZ VORTAC.
All aircraft climb in PDZ VORTAC holding pattern (Hold E, right turns, 258° inbound) to the appropriate MEA.

TAKEOFF OBSTACLE NOTES:
108’ AGL trees 1200’ from DER 3, 600’ left of centerline.
CHINO, CA (CON’T)
CHINO (CNO) (CON’T)
DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 1  15OCT15  (15288)  (FAA)
   Rwy 3, heading as assigned by ATC; requires minimum climb of 250’ per NM to 4300.
   Rwy 8L, 8R, heading as assigned by ATC; requires minimum climb of 370’ per NM to 4100.
   Rwy 21, heading as assigned by ATC; requires minimum climb of 320’ per NM to 1800.
   Rwys 26L, 26R, heading as assigned by ATC; requires minimum climb of 270’ per NM to 2100.

CORONA, CA
CORONA MUNI (AJO)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3A  15JUN23  (23166)  (FAA)
TAKEOFF MINIMUMS:
   Rwy 7, NA-Environmental.
   Rwy 25, 600-2 or std. w/min. climb of 280’ per NM to 1200.
DEPARTURE PROCEDURE:
   Rwy 25, climbing right turn.
   All aircraft continue climb direct to PDZ VORTAC. Aircraft departing PDZ R-091 CW R-140 and R-231 CW R-280 climb on course. All others continue climb in PDZ VORTAC holding pattern (hold northeast, right turns, 210° inbound) to cross PDZ VORTAC at or above: R-141 CW R-230 4000, R-281 CW R-090 6700.

DAGGETT, CA
BARSTOW-DAGGETT (DAG)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3  29JUL10  (10210)  (FAA)
DEPARTURE PROCEDURE:
   Use DAGGETT DEPARTURE.

DELANO, CA
DELANO MUNI (DLO)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3A  08MAY08  (08129)  (FAA)
TAKEOFF MINIMUMS:
   Rwy 32, 400-1 or std. with a min. climb rate of 390’ per NM to 400.
DEPARTURE PROCEDURE:
   Rwy 32, climb via heading 320° and EHF VORTAC R-324 to 3000 before proceeding on course.
   Rwy 32, climb via heading 140° and EHF VORTAC R-324 to 3000 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
   65’ AGL tree 600’ from DER, 500’ left of centerline runway 14.

EDWARDS AF AUX NORTH BASE (9L2)
EDWARDS, CA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
Rwy 6-24, climb on course, cross 15 NM from ARP at or above 4500.

EDWARDS AFB (KEDW)
EDWARDS, CA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
06OCT22  (22279)  (USAF)
DEPARTURE PROCEDURE:
   Rwys 5L/R, climb on hdg between 046° CW to 226° from DER.
   Rwys 23L/R, climb on hdg between 226° CCW to 046° from DER.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

EL CENTRO NAF (VRAUCI FLD) (KNJK)
EL CENTRO, CA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 13JUL23 (23194) (USN)
TAKEOFF MINIMUMS:
Rwys 8, 12, 26, 30, std or 2900-3 for climb in visual conditions.

DEPARTURE PROCEDURE:
Rwy 8, climb on heading between 290° CW to 154° from DER.
Rwy 12, climb on heading between 305° CW to 157° from DER.
Rwy 26, climb on heading between 305° CW to 078° from DER.
Rwy 30, climb on heading between 305° CW to 124° from DER.

VCOA:
Rwys 8, 12, 26, 30, climb in visual conditions to cross El Centro NAF airport at or above 2700 before proceeding on course. Obtain ATC approval for VCOA when requesting IFR clearance.

TAKEOFF OBSTACLE NOTES:
Rwy 8, road 182' from DER, 99' left of centerline, 10' AGL/-37' MSL.
Road 183' from DER, 3' right of centerline, 10' AGL/-37' MSL.
Road 183' from DER, 100' right of centerline, 10' AGL/-37' MSL.
Rwy 12, terrain 0' from DER, 500' left of centerline, -39' MSL.
Terrain 0' from DER, 500' right of centerline, -36' MSL.
Fence 200' from DER, 306' left of centerline, 8' AGL/-34' MSL.
Road 279' from DER, 101' left of centerline, 10' AGL/-35' MSL.
Fence 290' from DER, 214' left of centerline, 8' AGL/-34' MSL.
Rwy 26, terrain 0' from DER, 500' left of centerline, -45' MSL.

EL MONTE, CA
SAN GABRIEL VALLEY (EMT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 7 13SEP18 (18256) (FAA)
TAKEOFF MINIMUMS:
Rwy 1, std. w/min. climb of 290' per NM to 1800, or 1600-3 for VCOA.

DEPARTURE PROCEDURE:
Rwy 1, climb heading 011° to 700 then climbing right turn on heading 128° and on PDZ R-278 to PDZ VORTAC thence...
Rwy 19, climb heading 191° to 1500 then climbing left turn on heading 068° and on PDZ R-278 to PDZ VORTAC thence...
...aircraft departing PDZ R-078 CW R-292 climb on course. All others continue climb in PDZ VORTAC holding pattern (hold northeast, right turn, 210° inbound) to cross PDZ VORTAC at or above MEA for route of flight.

VCOA:
Rwy 1, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross San Gabriel Valley airport at or above 1700 then intercept PDZ R-278 to PDZ VORTAC. Aircraft departing PDZ R-078 CW R-292 climb on course. All others continue climb in PDZ VORTAC holding pattern (hold northeast, right turn, 210.00 inbound) to cross PDZ VORTAC at or above MEA for route of flight.

TAKEOFF OBSTACLE NOTES:
Rwy 1, sign 18' from DER, 124' right of centerline, 300' MSL.
Building 98' from DER, 269' left of centerline, 334' MSL.
Building 273' from DER, 299' right of centerline, 310' MSL.
Lighting 525' from DER, 257' left of centerline, 338' MSL.
Trees beginning 609' from DER, 277' left of centerline, up to 364' MSL.
Traverse way 662' from DER, on centerline, 322' MSL.
Tree 791' from DER, 205' right of centerline, 335' MSL.
Lighting 942' from DER, 221' right of centerline, 343' MSL.
Lighting 943' from DER, 446' right of centerline, 344' MSL.
Pole 1698' from DER, on centerline, 365' MSL.
Tree 2828' from DER, 23' right of centerline, 404' MSL.
Rwy 19, sign 16' from DER, 130' left of centerline, 285' MSL.
Trees beginning 74' from DER, 179' left of centerline, up to 317' MSL.
Tree, lighting, pole beginning 363' from DER, 86' left of centerline, up to 322' MSL.
Tower 1019' from DER, 692' left of centerline, 40' AGL/333' MSL.
Tree 1051' from DER, 370' right of centerline, 323' MSL.
Tree 1133' from DER, 206' left of centerline, 334' MSL.
Tree 1466' from DER, 382' left of centerline, 348' MSL.
Pole 1661' from DER, 548' left of centerline, 357' MSL.
Pole 1774' from DER, 87' right of centerline, 350' MSL.
Pole 2033' from DER, 370' right of centerline, 358' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 1 27APR17 (17117) (FAA)
Rwys 1, headings as assigned by ATC; requires minimum climb of 290' per NM to 1300.
Rwys 19, headings assigned by ATC.

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

SW-3, 30 NOV 2023 to 25 JAN 2024
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

FALLBROOK, CA
FALLBROOK COMMUNITY AIRPARK (L18)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 10NOV16 (16315) (FAA)
DEPARTURE PROCEDURE:
Use FALLBROOK DEPARTURE.

FULLERTON, CA
FULLERTON MUNI (FUL)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 5 03MAY12 (12124) (FAA)
TAKEOFF MINIMUMS:
Rwy 6, std. w/min. climb of 280' per NM to 600.
DEPARTURE PROCEDURE:
Rwy 6, climbing right turn to 2300 direct SLI VORTAC, thence ...
Rwy 24, climbing left turn to 2300 direct SLI VORTAC, thence ...
... Climb in holding pattern (hold South, left turns, 351° inbound) until at or above MEA for direction of flight before proceeding course.
TAKEOFF OBSTACLE NOTES:
Rwy 6, windsock 58' from DER, 189' right of centerline, 12' AGL/109' MSL.
Obstruction light on pole 109' from DER, 116' left of centerline, 23' AGL/118' MSL.
Multiple poles beginning 115' from DER, left and right of centerline, up to 40' AGL/198' MSL.
Trains 221' from DER, left and right of centerline, up to 23' AGL/144' MSL.
Light standard 486' from DER, 133' right of centerline, 20' AGL/123' MSL.
Obstruction light on building 977' from DER, 468' left of centerline, 36' AGL/132' MSL.
Obstruction light on building 1002' from DER, 31' right of centerline, 25' AGL/126' MSL.
Light pole 1247' from DER, 143' left of centerline, 35' AGL/131' MSL.
Tree 1462' from DER, 35' left of centerline, 75' AGL/168' MSL.
Obstacle light on silo 1620' from DER, 317' right of centerline, 50' AGL/146' MSL.
Building 3206' from DER, 820' right of centerline, 112' AGL/217' MSL.
Obstruction light on building 3390' from DER, 913' right of centerline, 112' AGL/217' MSL.
Trees 16093' from DER, 1936' left of centerline, 94' AGL/267' MSL.
Rwy 24, vehicles on roadway 82' from DER, left and right of centerline, up to 15' AGL/114' MSL.
Light standard 85' from DER, 260' right of centerline, 25' AGL/110' MSL.
Light standard 217' from DER, 320' left of centerline, 104' AGL/122' MSL.
Antenna on building 272' from DER, 227' left of centerline, 31' AGL/116' MSL.
Trees beginning 352' from DER, 227' right of centerline, up to 60' AGL/155' MSL.
Pole 395' from DER, 279' left of centerline, 35' AGL/123' MSL.
Obstruction light on navaid 399' from DER, on centerline, 5' AGL/103' MSL.
Poles beginning 1335' from DER, right and left of centerline, up to 25' AGL/129' MSL.
Tree 1377' from DER, 159' left of centerline, 50' AGL/147' MSL.

HAWTHORNE, CA
JACK NORTHROP FLD/HAWTHORNE MUNI (HHR)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 5 20JUN19 (21168) (FAA)
TAKEOFF MINIMUMS:
Rwy 7, 300-1¾ or std. w/min. climb of 365' per NM to 400.
Rwy 25, 300-1 or std. w/min. climb of 290' per NM to 300.
DEPARTURE PROCEDURE:
Rwy 7, climbing right turn to 3000 heading 220° and the LAX VORTAC R-170 to LIMBO INT.
Rwy 25, climbing left turn to 3000 heading 205° and the LAX VORTAC R-170 to LIMBO INT.
TAKEOFF OBSTACLE NOTES:
Rwy 7, trees, wall, vehicles on road, fence, lighting, pole, signs, buildings beginning 23' from DER, 3' left of centerline, up to 52' AGL/114' MSL.
Pole 29' from DER, 395' right of centerline, 30' AGL/89' MSL.
Signs, poles, wall, fence, lighting, vehicles on road, tree, building beginning 78' from DER, on and right of centerline, up to 38' AGL/94' MSL.
Trees, poles, vehicles on road, buildings, signs beginning 476' from DER, 39' left of centerline, up to 136' MSL.
Buildings, pole beginning 759' from DER, 96' right of centerline, up to 42' AGL/102' MSL.
Pole 1465' from DER, 203' right of centerline, 38' AGL/103' MSL.
Poles beginning 1489' from DER, 20' right of centerline, up to 41' AGL/111' MSL.
Trees beginning 2120' from DER, 110' left of centerline, up to 63' AGL/137' MSL.
Trees, poles beginning 2163' from DER, 84' left of centerline, up to 66' AGL/147' MSL.
Buildings beginning 2168' from DER, 264' right of centerline, up to 36' AGL/116' MSL.
Trees, poles beginning 2704' from DER, 112' left of centerline, up to 72' AGL/161' MSL.
Poles, trees beginning 2799' from DER, 54' right of centerline, up to 61' AGL/148' MSL.
Trees, poles beginning 2876' from DER, 27' left of centerline, up to 78' AGL/168' MSL.
Poles, trees beginning 2915' from DER, 277' right of centerline, up to 59' AGL/149' MSL.
Poles, trees beginning 2971' from DER, 94' right of centerline, up to 157' MSL.
Poles 3192' from DER, 172' right of centerline, 62' AGL/160' MSL.
Trees beginning 3207' from DER, 81' right of centerline, up to 67' AGL/167' MSL.

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

HAWTHORNE, CA (CON’T)

Jack Northrop Fld/Hawthorne MunI (HHR) (CON’T)

Rwy 7 (CON’T), trees, poles beginning 3304’ from DER, 8’ left of centerline, up to 170’ MSL.

Trees, poles beginning 3497’ from DER, 109’ right of centerline, up to 71’ AGL/178’ MSL.

Trees, poles, antenna, building beginning 3712’ from DER, 102’ left of centerline, up to 65’ AGL/179’ MSL.

Trees, poles beginning 3719’ from DER, 2’ right of centerline, up to 74’ AGL/188’ MSL.

Tree 3850’ from DER, 1301’ left of centerline, 41’ AGL/180’ MSL.

Trees, poles beginning 3859’ from DER, 23’ left of centerline, up to 51’ AGL/185’ MSL.

Trees, poles beginning 4061’ from DER, 28’ left of centerline, up to 203’ MSL.

Tree 4079’ from DER, 29’ right of centerline, 69’ AGL/190’ MSL.

Tree 4079’ from DER, 411’ right of centerline, 82’ AGL/202’ MSL.

Trees, poles beginning 4101’ from DER, 17’ right of centerline, up to 90’ AGL/211’ MSL.

Trees, poles building beginning 4484’ from DER, 3’ left of centerline, up to 66’ AGL/235’ MSL.

Pole, tree beginning 4932’ from DER, 31’ left of centerline, up to 46’ AGL/236’ MSL.

Building, pole beginning 4932’ from DER, 46’ right of centerline, up to 68’ AGL/241’ MSL.

Tree, pole, building beginning 4989’ from DER, 1’ right of centerline, up to 220’ MSL.

Tree, pole, building beginning 5058’ from DER, 44’ left of centerline, up to 241’ MSL.

Antenna, trees, buildings, sign, fence, tower beginning 5140’ from DER, 93’ left of centerline, up to 55’ AGL/243’ MSL.

Trees, poles beginning 5202’ from DER, on and right of centerline, up to 78’ AGL/227’ MSL.

Sign, pole beginning 5356’ from DER, 55’ left of centerline, up to 54’ AGL/249’ MSL.

Trees, poles beginning 5383’ from DER, 62’ right of centerline, up to 102’ AGL/257’ MSL.

Towers, transmission lines, poles, sign, buildings, trees, elevator beginning 5428’ from DER, 35’ left of centerline, up to 139’ AGL/307’ MSL.

Tower, tree beginning 1.2 NM from DER, 1711’ left of centerline, up to 115’ AGL/322’ MSL.

Building, monument, trees, tower, antenna, transmission line, pole beginning 1.2 NM from DER, 205’ left of centerline, up to 104’ AGL/328’ MSL.

Tree 1.3 NM from DER, 16’ right of centerline, 76’ AGL/278’ MSL.

Tower 1.4 NM from DER, 824’ right of centerline, 116’ AGL/289’ MSL.

Tower 1.4 NM from DER, 317’ right of centerline, 119’ AGL/302’ MSL.

Rwy 25, sign 24’ from DER, 100’ left of centerline, 3’ AGL/67’ MSL.

Pole, building beginning 51’ from DER, 302’ right of centerline, up to 38’ AGL/105’ MSL.

NAV AID 72’ from DER, 1’ left of centerline, 8’ AGL/73’ MSL.

Building, poles, fence beginning 112’ from DER, 183’ left of centerline, up to 30’ AGL/95’ MSL.

Trees, lighting, fence, vehicles on road, poles, sign, building, antenna beginning 128’ from DER, on and right of centerline, up to 46’ AGL/114’ MSL.

Pole, fence, tree, sign beginning 158’ from DER, 5’ left of centerline, up to 38’ AGL/102’ MSL.

Pole, vehicles on road, tree, sign beginning 206’ from DER, 38’ left of centerline, up to 39’ AGL/103’ MSL.

Tree, vehicles on road, signs, buildings, poles beginning 258’ from DER, 5’ left of centerline, up to 40’ AGL/105’ MSL.

Pole, antenna, building, trees beginning 423’ from DER, 39’ left of centerline, up to 41’ AGL/107’ MSL.

Antenna, buildings, vehicles on road, poles beginning 449’ from DER, 5’ left of centerline, up to 122’ MSL.

Poles, trees, antenna beginning 670’ from DER, 7’ right of centerline, up to 54’ AGL/120’ MSL.

Trees, poles beginning 1054’ from DER, 12’ right of centerline, up to 136’ MSL.

Trees beginning 2208’ from DER, 32’ right of centerline, up to 78’ AGL/144’ MSL.

Trees beginning 2218’ from DER, 41’ left of centerline, up to 65’ AGL/131’ MSL.

Tree, building beginning 2222’ from DER, 3’ right of centerline, up to 79’ AGL/145’ MSL.

Trees beginning 2229’ from DER, 152’ left of centerline, up to 66’ AGL/132’ MSL.

Tree 2239’ from DER, 344’ left of centerline, 67’ AGL/135’ MSL.

Trees beginning 2249’ from DER, 11’ left of centerline, up to 80’ AGL/147’ MSL.

Buildings, fence, tree beginning 2423’ from DER, 148’ left of centerline, up to 83’ AGL/154’ MSL.

Pole, tree beginning 2740’ from DER, 360’ right of centerline, up to 77’ AGL/149’ MSL.

Trees beginning 3179’ from DER, 207’ right of centerline, up to 74’ AGL/150’ MSL.

Trees beginning 3222’ from DER, 228’ right of centerline, 76’ AGL/153’ MSL.

Tank 4537’ from DER, 1313’ left of centerline, 137’ AGL/227’ MSL.

Water tower 4539’ from DER, 1321’ left of centerline, 132’ AGL/229’ MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

ORIG 07DEC17 (17341) (FAA)

Rwy 7, heading as assigned by ATC; requires minimum climb of 370’ per NM to 400.

Rwy 25, heading as assigned by ATC; requires minimum climb of 290’ per NM to 300.

DIVERSE VECTOR AREA (RADAR VECTORS)

ORIG 07DEC17 (17341) (FAA)
HEMET, CA
HEMET-RYAN (HMT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 10NOV16 (23334) (FAA)
TAKEOFF MINIMUMS:
Rwy 5, std w/min climb of 440' per NM to 3500, or 1700-3 for VCOA.
Rwy 23, std w/min climb of 495' per NM to 3000, or 1700-3 for VCOA.
DEPARTURE PROCEDURE:
Rwy 5, climbing left turn direct HDF VOR thence...
Rwy 23, climb heading 230° to 3000 then right turn direct HDF VOR thence...
...continue climb in HDF holding pattern (hold SE, right turn, 315° inbound) to cross HDF VOR at or above MEA/MCA for route of flight.
VCOA:
Rwys 5, 23, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Hemet-Ryan airport westbound at or above 3100 then proceed direct HDF VOR and continue climb in HDF holding pattern (hold SE, right turn, 315° inbound) to cross HDF VOR at or above MEA/MCA for route of flight.
TAKEOFF OBSTACLE NOTES:
Rwy 5, vehicles on roadway, 199' from DER, crossing centerline, up to 15' AGL/1534' MSL.
Rwy 23, trees beginning 1.1 NM from DER, 2166' right of centerline, up to 100' AGL/1859' MSL.
Trees beginning 1.3 NM from DER, 2249' right of centerline, up to 100' AGL/2019' MSL.
Trees beginning 1.5 NM from DER, 1686' left of centerline, up to 100' AGL/1808' MSL.

IMPERIAL, CA
IMPERIAL COUNTY (IPL)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2A 27AUG09 (09239) (FAA)
TAKEOFF MINIMUMS:
Rwy 14, 400-2¼ or std. w/ min. climb of 220' per NM to 400, or alternatively, with standard TAKEOFF minimums and a normal 200' per NM climb gradient, TAKEOFF must occur no later than 1800' prior to DER.
DEPARTURE PROCEDURE:
Rwys 8, 32, turn right.
Rwy 14, climb runway heading.
Rwy 26, turn left.
All aircraft climb direct IPL VORTAC.
TAKEOFF OBSTACLE NOTES:
Rwy 8, multiple VASI beginning 687' from DER, 31' right of centerline, up to 5' AGL/-52' MSL.
Antenna on building 1033' from DER, 703' left of centerline, 45' AGL/-12' MSL.
Light on pole, 1984' from DER, 386' left of centerline, 55 ft AGL/-2' MSL.
Rwy 14, building 1770' from DER, 38' left of centerline, 45' AGL/-11' MSL.
Road 430' from DER, 291' left of centerline, 15' AGL/-41' MSL.
Sign 1733' from DER, 35' left of centerline, 45' AGL/-11' MSL.
Pole 1457' from DER, 393' right of centerline, 37' AGL/-19' MSL.
Numerous tanks beginning 3580' from DER, 296' right of centerline, up to 109' AGL/53' MSL.
Tree 373' from DER, 387' right of centerline, 80' AGL/-24' MSL.
Multiple lights beginning 243' from DER, 361' right of centerline, up to 28' AGL/-29' MSL.
Pole 657' from DER, 370' left of centerline, 27' AGL/-30' MSL.
Road 191' from DER, 237' left of centerline, 13' AGL/-44' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

IMPERIAL BEACH NOLF (REAM FIELD) (KNRS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1  01DEC22  (22335)  (USN)

Rwys 8, 9, 26, departures NA.
Rwy 27, diverse departure NA. Departures authorized for military rotorcraft only. Climb on hdg 274° to intercept NRS TACAN R-273 to 2000. Cross NRS TACAN 1.5 DME at or above 800. Minimum ATC climb rate of 600'/NM until 800 with takeoff occurring NLT 2984’ prior to DER or cross DER at or above 303.

TAKEOFF OBSTACLE NOTES:
Rwy 27, pylon 1’ from DER, 497’ right of cntrln, 32’ AGL/42’ MSL.
Pylon 227’ from DER, 513’ right of cntrln, 30’ AGL/42’ MSL.
Terrain 0’ from DER, 434’ left of cntrln, 16’ MSL.
Terrain 0’ from DER, 500’ left of cntrln, 16’ MSL.

INYO KERN, CA

INYO KERN (IYK)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG  04SEP03  (03247)  (FAA)

TAKEOFF MINIMUMS:
Rwys 2, 10, 15, 26, NA.

DEPARTURE PROCEDURE:
Rwy 20, use LAKE HUGHES RNAV DEPARTURE.

LA VERNE, CA

BRACKETT FLD (POC)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6  03JAN19  (21112)  (FAA)

TAKEOFF MINIMUMS:
Rwy 26L, 300-1 or std. w/min. climb of 713’ per NM to 1400.
Rwy 26R, 300-1 or std. w/min. climb of 676’ per NM to 1400.

DEPARTURE PROCEDURE:
Rwys 8L, 8R, climb heading 079° to 1500 then climbing right turn on heading 215° and POM R-164 to PRADO INT thence...
Rwys 26L, 26R, climb heading 259° to 1400 then climbing left turn on heading 130° and POM R-164 to PRADO INT thence...
...continue climb in PRADO holding pattern (hold south, right turn, 344° inbound) to cross PRADO INT at or above MEA for route of flight.

TAKEOFF OBSTACLE NOTES:
Rwy 8L, sign 24’ from DER, 98’ left of centerline, 1015’ MSL.
Vehicles on road beginning 46’ from DER, 479’ left of centerline, up to 1030’ MSL.
Vehicles on road 161’ from DER, 477’ left of centerline, 1031’ MSL.
Vehicles on road, sign beginning 187’ from DER, 462’ left of centerline, up to 1032’ MSL.
Vehicles on road beginning 327’ from DER, 449’ left of centerline, up to 1037’ MSL.
Building, vehicles on road beginning 394’ from DER, 418’ left of centerline, up to 1061’ MSL.
Building, tree beginning 561’ from DER, 397’ left of centerline, up to 1062’ MSL.
Vehicles on road 602’ from DER, 6’ right of centerline, 1029’ MSL.
Building, vehicles on road, pole beginning 683’ from DER, 187’ left of centerline, up to 1069’ MSL.
Pole 1210’ from DER, 518’ right of centerline, 1047’ MSL.
Transmission line 1299’ from DER, 673’ right of centerline, 55’ AGL/1057’ MSL.
Pole beginning 1401’ from DER, 164’ right of centerline, up to 1064’ MSL.
Pole 1566’ from DER, 294’ right of centerline, 1065’ MSL.
Pole beginning 1719’ from DER, 24’ right of centerline, up to 54’ AGL/1067’ MSL.
Pole beginning 1803’ from DER, 148’ left of centerline, up to 72’ AGL/1094’ MSL.
Tree, pole beginning 1806’ from DER, 24’ right of centerline, up to 1090’ MSL.
Rwy 8R, sign 43’ from DER, 239’ right of centerline, 1016’ MSL.
Vehicles on road 118’ from DER, 463’ right of centerline, 1017’ MSL.
Vehicles on road 346’ from DER, 7’ right of centerline, 1021’ MSL.
Vehicles on road 527’ from DER, 294’ left of centerline, 1029’ MSL.
Vehicles on road 715’ from DER, 641’ left of centerline, 1034’ MSL.
Pole 900’ from DER, 515’ left of centerline, 32’ AGL/1049’ MSL.
Pole beginning 1048’ from DER, 217’ right of centerline, up to 56’ AGL/1052’ MSL.
CON’T
**LA VERNE, CA (CON’T)**

**BRACKETT FLD (POC) (CON’T)**

**Rwy 8R (CON’T)**, transmission line 1223’ from DER, 372’ right of centerline, 55’ AGL/1057’ MSL.

Pole beginning 1326’ from DER, 131’ left of centerline, up to 1064’ MSL.

Pole beginning 1347’ from DER, 74’ right of centerline, up to 1062’ MSL.

Pole 1490’ from DER, 5’ left of centerline, 1065’ MSL.

Pole beginning 1517’ from DER, 275’ left of centerline, up to 51’ AGL/1067’ MSL.

Pole, tree beginning 1727’ from DER, 24’ left of centerline, up to 72’ AGL/1094’ MSL.

Trees beginning 1730’ from DER, 869’ right of centerline, up to 1090’ MSL.

Pole, transmission line beginning 3447’ from DER, 982’ left of centerline, up to 1100’ MSL.

Tree 3586’ from DER, 14’ left of centerline, 1101’ MSL.

Tree 4027’ from DER, 403’ left of centerline, 1114’ MSL.

**Rwy 26L**, sign 46’ from DER, 199’ left of centerline, 967’ MSL.

Tree 159’ from DER, 477’ left of centerline, 989’ MSL.

Tree 191’ from DER, 482’ left of centerline, 1003’ MSL.

Vegetation 359’ from DER, 498’ left of centerline, 1010’ MSL.

Vegetation, terrain, tree, building beginning 359’ from DER, 225’ left of centerline, up to 1028’ MSL.

Trees beginning 561’ from DER, 231’ left of centerline, up to 1037’ MSL.

Tree 814’ from DER, 96’ right of centerline, 990’ MSL.

Trees beginning 824’ from DER, 217’ right of centerline, up to 1017’ MSL.

Tree 851’ from DER, 271’ right of centerline, 1018’ MSL.

Trees beginning 889’ from DER, 66’ right of centerline, up to 1021’ MSL.

Trees beginning 998’ from DER, 85’ left of centerline, up to 1041’ MSL.

Trees beginning 1027’ from DER, 114’ right of centerline, up to 1022’ MSL.

Tree 1100’ from DER, 330’ right of centerline, 1023’ MSL.

Trees beginning 1158’ from DER, 0’ right of centerline, up to 1026’ MSL.

Trees beginning 1195’ from DER, 51’ right of centerline, up to 1028’ MSL.

Tree, building beginning 1767’ from DER, 697’ right of centerline, up to 1033’ MSL.

Building, terrain beginning 2358’ from DER, 897’ right of centerline, up to 1131’ MSL.

Antenna, tree, vehicles on road, building, terrain, vegetation beginning 2404’ from DER, 482’ right of centerline, up to 1156’ MSL.

Tree 2760’ from DER, 1102’ right of centerline, 1197’ MSL.

Tree, vehicles on road, terrain, building beginning 2768’ from DER, 483’ right of centerline, up to 1212’ MSL.

Tree, vehicles on road, terrain, building beginning 3147’ from DER, 228’ right of centerline, up to 1224’ MSL.

Tank, vehicles on road, pole, tree, building, vegetation beginning 3429’ from DER, 323’ right of centerline, up to 50’ AGL/1233’ MSL.

Tree 3470’ from DER, 10’ left of centerline, 1065’ MSL.

**Rwy 26R**, building beginning 7’ from DER, 356’ right of centerline, up to 1003’ MSL.

Building 72’ from DER, 488’ right of centerline, 1004’ MSL.

Building, sign beginning 72’ from DER, 210’ right of centerline, up to 1005’ MSL.

Trees beginning 1405’ from DER, 523’ right of centerline, up to 1034’ MSL.

Vegetation, terrain beginning 1463’ from DER, 807’ left of centerline, up to 1028’ MSL.

Trees beginning 1526’ from DER, 541’ right of centerline, up to 1067’ MSL.

Trees beginning 1664’ from DER, 699’ left of centerline, up to 1037’ MSL.

Tree, vehicles on road beginning 1887’ from DER, 942’ right of centerline, up to 1068’ MSL.

Trees beginning 2102’ from DER, 716’ left of centerline, up to 1041’ MSL.

Trees beginning 2233’ from DER, 723’ right of centerline, up to 1100’ MSL.

Trees beginning 2485’ from DER, 987’ right of centerline, up to 1109’ MSL.

Tree, vehicles on road beginning 2974’ from DER, 791’ right of centerline, up to 1125’ MSL.

Tree, vehicles on road beginning 3005’ from DER, 796’ right of centerline, up to 1133’ MSL.

Tree, vehicles on road beginning 3256’ from DER, 919’ right of centerline, up to 1251’ MSL.

Tree, vehicles on road, building, antenna, terrain, pole, vegetation beginning 3300’ from DER, 22’ right of centerline, up to 1258’ MSL.

**LANCASTER, CA**

**GENERAL WM J FOX AIRFIELD (WJF)**

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

**AMDT 1** 05OCT23 (23278) (FAA)

**DEPARTURE PROCEDURE:**

Use PALMDALE DEPARTURE.

**TAKEOFF OBSTACLE NOTES:**

**Rwy 6**, tree beginning 1169’ from DER, 590’ right of centerline, up to 2374’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

LOMPOC, CA

LOMPOC (LPC)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2B 14JUL22 (22195) (FAA)

TAKEOFF MINIMUMS:

Rwy 7, std. w/min. climb of 425' per NM to 1400, or 1500-3 for climb in visual conditions.

Rwy 25, std. w/min. climb of 250' per NM to 1600.

DEPARTURE PROCEDURE:

Rwy 7, climbing right turn.

Rwy 25, turn right heading 130°.

All aircraft climb to 6000 on GVO R-278 to GVO VORTAC. Aircraft departing GVO R-120 CW R-020 climb on course, all others climb in GVO holding pattern (northwest, right turn, 127° inbound) to depart GVO VORTAC at or above MEA for route of flight.

VCOA:

Rwy 7, obtain ATC approval for VCOA when requesting IFR clearance, climb in visual conditions to cross Lompoc airport at or above 1400.

TAKEOFF OBSTACLE NOTES:

Rwy 7, building, vehicles on road, trees, transmission lines beginning 274' from DER, 111' right of centerline, up to 169' MSL.

Aircraft, vehicles on road beginning 395' from DER, 114' left of centerline, up to 139' MSL.

Transmission lines beginning 1997' from DER, 769' left of centerline, up to 67' AGL/149' MSL.

LONG BEACH, CA

LONG BEACH (DAUGHERTY FLD) (LGB)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6B 10SEP20 (21168) (FAA)

TAKEOFF MINIMUMS:

Rwy 26L, std. w/min. climb of 225' per NM to 2300.

Rwy 26R, std. w/min. climb of 230' per NM to 2300.

DEPARTURE PROCEDURE:

Rwys 8L/R, climb on heading 076° to 800, then climbing right turn direct SLI VORTAC then on SLI VORTAC R-210 to PADDR INT.

Rwy 12, climb on heading 121° to intercept SLI VORTAC R-210 to PADDR INT.

Rwys 26L/R, climb on heading 256° to 800, then climbing left turn on heading 200 and LAX VORTAC R-145 to PADDR INT.

Rwy 30, climb on heading 301° to 800, then climbing left turn on heading 200 and LAX VORTAC R-145 to PADDR INT.

TAKEOFF OBSTACLE NOTES:

Rwy 8L, vehicles on road 1' from DER, 272' left of centerline, 52' MSL.

Pole 10' from DER, 489' left of centerline, 27' AGL/66' MSL.

Building, tree, vehicles on road, and poles beginning 63' from DER, 15' left of centerline, up to 41' AGL/77' MSL.

Vehicles on road 121' from DER, 278' right of centerline, 52' MSL.

Buildings and vehicles on road beginning 193' from DER, 2' right of centerline, up to 53' MSL.

Buildings, vehicles on road, poles, and trees beginning 440' from DER, 13' left of centerline, up to 43' AGL/79' MSL.

Building and tree beginning 514' from DER, 13' right of centerline, up to 67' MSL.

Building, poles, and trees beginning 590' from DER, 47' right of centerline, up to 73' MSL.

Tree 716' from DER, 20' right of centerline, 34' AGL/76' MSL.

Trees beginning 769' from DER, 36' right of centerline, up to 80' AGL/116' MSL.

Building and trees beginning 1088' from DER, 22' left of centerline, up to 52' AGL/89' MSL.

Trees beginning 1789' from DER, 280' right of centerline, up to 83' AGL/118' MSL.

Trees beginning 2102' from DER, 180' left of centerline, up to 60' AGL/98' MSL.

Tree 2399' from DER, 612' left of centerline, 112' MSL.

Trees beginning 2427' from DER, 101' left of centerline, up to 123' MSL.

Trees beginning 2739' from DER, 711' right of centerline, up to 121' MSL.

Rwy 8R, wind indicator 715' from DER, 227' left of centerline, 21' AGL/54' MSL.

Tower 746' from DER, 566' right of centerline, 26' AGL/58' MSL.

Building 1038' from DER, 575' left of centerline, 39' AGL/73' MSL.

Buildings beginning 1126' from DER, 570' left of centerline, up to 76' MSL.

Buildings beginning 1528' from DER, 902' left of centerline, up to 58' AGL/90' MSL.

Tree 2755' from DER, 1058' right of centerline, 93' AGL/110' MSL.

Buildings beginning 2978' from DER, 803' right of centerline, up to 85' AGL/118' MSL.

Buildings beginning 3038' from DER, 903' right of centerline, up to 90' AGL/120' MSL.

Buildings beginning 3500' from DER, 1095' right of centerline, up to 133' AGL/162' MSL.

Buildings beginning 3651' from DER, 1203' right of centerline, up to 145' AGL/163' MSL.

Rwy 12, vehicles on road beginning 5' from DER, 432' right of centerline, up to 39' MSL.

Pole and trees beginning 474' from DER, 619' left of centerline, up to 53' MSL.

Tree 678' from DER, 659' right of centerline, 60' MSL.

Trees beginning 981' from DER, 127' right of centerline, up to 89' AGL/92' MSL.

General utility, poles, and trees beginning 990' from DER, 334' left of centerline, up to 71' MSL.

Trees beginning 1341' from DER, 361' left of centerline, up to 50' AGL/72' MSL.

Tree 2055' from DER, 689' left of centerline, 82' MSL.

Trees beginning 2332' from DER, 470' left of centerline, up to 81' AGL/101' MSL.

Tree 2553' from DER, 762' left of centerline, 83' AGL/103' MSL.

Tree 2918' from DER, 1249' right of centerline, 99' MSL.

CON'T
LONG BEACH, CA (CON’T)
LONG BEACH (DAUGHERTY FLD) (LGB) (CON’T)

Rwy 12 (CON’T), tree 3004’ from DER, 1205’ left of centerline, 109’ MSL.
Spires 3095’ from DER, 1181’ right of centerline, 98’ AGL/118’ MSL.
Trees 3394’ from DER, 1063’ left of centerline, 95’ AGL/121’ MSL.
Rwy 26L, buildings beginning 110’ from DER, 505’ left of centerline, up to 81’ MSL.
Pole 227’ from DER, 554’ left of centerline, 87’ MSL.
Buildings beginning 261’ from DER, 520’ right of centerline, up to 73’ MSL.
Trees and poles beginning 482’ from DER, 369 left of centerline, up to 93’ MSL.
Building 722’ from DER, 672’ right of centerline, 122’ MSL.
Trees and sign beginning 1040’ from DER, 235’ left of centerline, up to 118’ MSL.
Building 1112’ from DER, 745’ right of centerline, 123’ MSL.
Buildings, poles, stack, tower, and trees beginning 1149’ from DER, 96’ right of centerline, up to 105’ AGL/163’ MSL.
Trees, buildings, sign, poles, transmission line, and tower beginning 1161’ from DER, 123’ left of centerline, up to 88’ AGL/153’ MSL.

Tree 3009’ from DER, 1450’ left of centerline, 161’ MSL.
Pole 4520’ from DER, 1646’ left of centerline, 175’ MSL.

Rwy 26R, vehicles on road and pole beginning 9’ from DER, 276’ left of centerline, up to 72’ MSL.
Vehicles on road beginning 95’ from DER, 165’ right of centerline, up to 78’ MSL.
Vehicles on road 109’ from DER, 467’ left of centerline, 73’ MSL.
Vehicles on road 192’ from DER, 374’ left of centerline, 76’ MSL.
Vehicles on road beginning 237’ from DER, 289’ left of centerline, up to 77’ MSL.
Trees, buildings, vehicles on road, and poles beginning 241’ from DER, 5’ right of centerline, up to 97’ MSL.
Poles and vehicles on road beginning 320’ from DER, 195’ left of centerline, up to 34’ AGL/95’ MSL.

Tree, vehicles, poles, and road beginning 475’ from DER, 15’ left of centerline, up to 96’ MSL.

Tree, vehicles, poles on road, and buildings beginning 612’ from DER, 52’ left of centerline, up to 97’ MSL.
Trees, buildings, and poles beginning 622’ from DER, on centerline, up to 59’ AGL/122’ MSL.

Signs, poles, and trees beginning 1151’ from DER, 7’ left of centerline, up to 77’ AGL/139’ MSL.

Trees and poles beginning 1262’ from DER, on centerline, up to 65’ AGL/124’ MSL.

Trees and poles beginning 1306’ from DER, 76’ right of centerline, up to 84’ AGL/144’ MSL.

Trees beginning 1886’ from DER, 33’ right of centerline, up to 147’ MSL.

Trees beginning 2804’ from DER, 303’ right of centerline, up to 78’ AGL/150’ MSL.

Trees beginning 2918’ from DER, 7’ right of centerline, up to 82’ AGL/156’ MSL.

Trees beginning 3536’ from DER, 69’ left of centerline, up to 73’ AGL/154’ MSL.

Building 3955’ from DER, 1343’ right of centerline, 173’ MSL.

Building 1.0 NM from DER, 963’ right of centerline, 154’ AGL/243’ MSL.

Buildings beginning 1.1 NM from DER, 935’ right of centerline, up to 156’ AGL/248’ MSL.

Building 1.2 NM from DER, 651’ right of centerline, 157’ AGL/259’ MSL.

Rwy 30, vehicles on road 15’ from DER, 480’ right of centerline, 74’ MSL.

Vehicles on road 190’ from DER, 456’ right of centerline, 75’ MSL.

Pole and vehicles on road beginning 193’ from DER, on centerline, up to 34’ AGL/93’ MSL.

Building 350’ from DER, 554’ left of centerline, 18’ AGL/82’ MSL.

Building and vehicles on road beginning 440’ from DER, 25 left of centerline, up to 21’ AGL/86’ MSL.

Pole, building, and vehicles on road beginning 678’ from DER, 17’ left of centerline, up to 22’ AGL/89’ MSL.

Tree and poles beginning 878’ from DER, 122’ left of centerline, up to 92’ MSL.

Pole 953’ from DER, 564’ right of centerline, 94’ MSL.

Poles beginning 983’ from DER, 516’ left of centerline, up to 25’ AGL/93’ MSL.

Pole and tree beginning 1009’ from DER, 68’ left of centerline, up to 33’ AGL/101’ MSL.

Terrain, tree, poles, and vehicles on road beginning 1024’ from DER, 8’ left of centerline, up to 33’ AGL/102’ MSL.

Poles and trees beginning 1057’ from DER, 23’ right of centerline, up to 102’ MSL.

Terrain, building, poles, and trees beginning 1207’ from DER, 63’ left of centerline, up to 66’ AGL/133’ MSL.

Poles and buildings beginning 1302’ from DER, 52’ right of centerline, up to 35’ AGL/103’ MSL.

Poles beginning 1472’ from DER, 294’ right of centerline, up to 36’ AGL/105’ MSL.

Trees beginning 1614’ from DER, 103 right of centerline, up to 44’ AGL/112’ MSL.

Tree 1701’ from DER, 363’ right of centerline, 121’ MSL.

Trees beginning 1874’ from DER, 196’ right of centerline, up to 57’ AGL/125’ MSL.

Trees and poles beginning 2183’ from DER, 169’ left of centerline, up to 134’ MSL.

Building 2520’ from DER, 776’ right of centerline, 128’ MSL.

Building 2617 from DER, 902’ right of centerline, 66’ AGL/139’ MSL.

Trees beginning 2738’ from DER, 417’ left of centerline, up to 142’ MSL.

Poles beginning 2992’ from DER, 311’ right of centerline, up to 72’ AGL/145’ MSL.

Tree 3379’ from DER, 839’ right of centerline, 150’ MSL.

Tree 3528’ from DER, 1000’ left of centerline, 160’ MSL.

Tree 3643’ from DER, 1074’ left of centerline, 166’ MSL.

Trees beginning 3769’ from DER, 873’ left of centerline, up to 174’ MSL.

Tree 3779’ from DER, 1222’ right of centerline, 158’ MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 2 19JUL18 (18200) (FAA)
Rwys 8L/R, 12, 30 heading as assigned by ATC.
Rwy 26L, heading as assigned by ATC; requires minimum climb of 330’ per NM to 700.
Rwy 26R, heading as assigned by ATC; requires minimum climb of 230’ per NM to 1600.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

LOS ALAMITOS AAF (KSLI)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 17JUN21 (21168) (USA)

DEPARTURE PROCEDURE:

All aircraft, climb direct SLI VORTAC. Aircraft departing SLI VORTAC R-040 CW 345° climb on course. All others continue climb via the SLI R-171 southbound then climbing right turn direct SLI VORTAC to cross at or above 4600.

Rwys 4L/R, climbing right turn.

Rwys 22L/R, 300-1 or std. w/min. climb of 230'/NM to 400, climbing left turn.

TAKEOFF OBSTACLE NOTES:

Rwy 4R, trees 1062' from DER, 615' left of cntrln, 66' AGL/100' MSL.

Bldg 3548' from DER, 770' left of cntrln, 85' AGL/126' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 1 20JUN19 (19171) (FAA)

Rwys 4L, 4R, 22L, 22R, heading as assigned by ATC.

LOS ANGELES, CA

LOS ANGELES INTL (LAX)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 14 17AUG17 (17229) (FAA)

DEPARTURE PROCEDURE:

Rwys 6L/R, 7L/R, climb to 2000 heading 071°, then climbing right turn, thence...

Rwys 24L/R, climb to 2000 heading 251°, then climbing left turn, thence...

...climb direct SLI VORTAC, then climb on course.

TAKEOFF OBSTACLE NOTES:

Rwy 6L, runway light 7' from DER, 4' left of centerline, 1' AGL/120' MSL.

Vehicles on road beginning 12' from DER, 170' left of centerline, up to 131' MSL.

Buildings beginning 1761' from DER, 920' left of centerline, up to 92' AGL/203' MSL.

Rwy 6R, NAVAID 79' from DER, 321' left of centerline, 20' AGL/123' MSL.

NAVAID 83' from DER, 1' right of centerline, 19' AGL/126' MSL.

Pole and light pole beginning 323' from DER, on centerline, up to 16' AGL/138' MSL.

Light poles beginning 528' from DER, 58' left of centerline, up to 30' AGL/137' MSL.

Pole 779' from DER, 1' right of centerline, 34' AGL/140' MSL.

Pole 779' from DER, on centerline, 35' AGL/142' MSL.

Pole 793' from DER, 459' right of centerline, 39' AGL/145' MSL.

Approach light and pole beginning 797' from DER, 305' right of centerline, up to 39' AGL/148' MSL.

Approach lights beginning 1006' from DER, 699' left of centerline, up to 42' AGL/149' MSL.

Tree 1057' from DER, 400' left of centerline, 41' AGL/150' MSL.

Trees beginning 1160' from DER, 320' left of centerline, up to 49' AGL/157' MSL.

Tree 1374' from DER, 309' left of centerline, 47' AGL/159' MSL.

Tree 1385' from DER, 317' left of centerline, 50' AGL/163' MSL.

Tree 1699 from DER, 101' right of centerline, 57' AGL/164' MSL.

Rwy 7L, fences beginning 168' from DER, 31' left of centerline, up to 14' AGL/107' MSL.

Fence and vehicles on road beginning 168' from DER, on centerline, up to 14' AGL/107' MSL.

Vehicles on road 182' from DER, 480' left of centerline, 109' MSL.

Vehicles on road, fence, tower, railroad, and pole beginning 197' from DER, 24' left of centerline, up to 24' AGL/118' MSL.

Runway and vehicles on road beginning 398' from DER, 14' right of centerline, up to 117' MSL.

Runway light, NAVAID, vehicles on road, and pole beginning 444' from DER, on centerline, up to 29' AGL/121' MSL.

Sign 494' from DER, 478' left of centerline, 32' AGL/124' MSL.

Sign and light pole beginning 508' from DER, 263' left of centerline, up to 32' AGL/126' MSL.

Runway light, pole, and building beginning 700' from DER, 53' left of centerline, up to 58' AGL/152' MSL.

Rwy 7R, runway light 10' from DER, 5' right of centerline, 2' AGL/99' MSL.

Runway light 10' from DER, 5' left of centerline, 2' AGL/99' MSL.

Building 792' from DER, 701' right of centerline, 37' AGL/130' MSL.

Tree 1250' from DER, 746' right of centerline, 129' AGL/155' MSL.

Rwy 24L, vehicles on road 1927' from DER, 1010' right of centerline, 163' MSL.

Light pole 2163' from DER, 915' right of centerline, 32' AGL/169' MSL.

Rwy 24R, windsock 137' from DER, 400' left of centerline, 21' AGL/128' MSL.

Tower 211' from DER, 401' left of centerline, 66' AGL/151' MSL.

Tower 212' from DER, 402' left of centerline, 47' AGL/154' MSL.

Rwy 25L, vehicles on road 35' from DER, 422' left of centerline, 130' MSL.

Pole 2365' from DER, 766' left of centerline, 57' AGL/184' MSL.

Base and transmission tower beginning 2486' from DER, 757' left of centerline, up to 66' AGL/200' MSL.

Rwy 25R, building 74' from DER, 364' left of centerline, 27' AGL/135' MSL.

Tree 2959' from DER, 569' left of centerline, 7' AGL/189' MSL.

Pole and antenna beginning 3073' from DER, 212' left of centerline, up to 30' AGL/203' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 6 14SEP17 (17257)

Rwys 6L/R, 7L/R, 24L/R, 25L/R, headings as assigned by ATC.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

LOS ANGELES, CA (CON’T)

WHITEMAN (WHP)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 24MAY18 (18144) (FAA)

DEPARTURE PROCEDURE:
Use WHITEMAN DEPARTURE.

TAKEOFF OBSTACLE NOTES:

Rwy 12, pole beginning 34’ from DER, 276’ right of centerline, up to 20’ AGL/979’ MSL. Building 180’ from DER, 9’ left of centerline, 22’ AGL/978’ MSL. Tower, pole beginning 489’ from DER, 278’ right of centerline, up to 60’ AGL/1012’ MSL. Stack 1 NM from DER, 1131’ left of centerline, 250’ AGL/1183’ MSL. Pole 152’ from DER, 282’ left of centerline, 20’ AGL/1025’ MSL. Pole 262’ from DER, 282’ left of centerline, 20’ AGL/1027’ MSL. Pole 372’ from DER, 283’ left of centerline, 20’ AGL/1028’ MSL. Pole beginning 482’ from DER, 282’ left of centerline, up to 20’ AGL/1029’ MSL. Pole 703’ from DER, 283’ left of centerline, 20’ AGL/1030’ MSL. Pole 812’ from DER, 283’ left of centerline, 20’ AGL/1031’ MSL. Pole beginning 922’ from DER, 283’ left of centerline, up to 20’ AGL/1032’ MSL. Pole 1141’ from DER, 283’ left of centerline, 20’ AGL/1033’ MSL. Tower 1700’ from DER, 511’ right of centerline, 49’ AGL/1075’ MSL. Tower 3532’ from DER, 1118’ right of centerline, 54’ AGL/1098’ MSL.

MARCH ARB (KRIV)

RIVERSIDE, CA

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6 19MAY22 (22139) (USAF)

TAKEOFF MINIMUMS:

Rwys 12, 30, NA.
Rwy 32, 1200-3, or std. w/min. climb rate of 240’ per NM to 3100.

DEPARTURE PROCEDURE:

Rwy 14, climb direct HDF VOR, then climbing right turn on hdg between 155° CW to 181°. Max airspeed 250K. Use caution when departing, rapid rising terrain within 3.5 NM southeast of March ARB.
Rwy 32, climb left turn hdg between 150° to 135° CCW from der. Maximum 250K or 2300-3.

For climb in visual conditions obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions. Within 4.5 NM of March ARB, to cross March ARB at or above 3700 MSL, then climb and maintain 6000 direct HDF VOR, then via HDF R-153 to HDF R-153/PDZ R-130, direct SKYES INT. Do not exceed 250K until passing SKYES. VCOA not available for Cat E aircraft.

TAKEOFF OBSTACLE NOTES:

Rwy 14, tree 2248’ from DER, 1000’ right of centerline, 150’ AGL/1630’ MSL. Tree 1920’ from DER, 1000’ right of centerline, 150’ AGL/1630’ MSL. Tree 1789’ from DER, 1000’ right of centerline, 150’ AGL/1630’ MSL. Tree 2278’ from DER, 1002’ left of centerline, 150’ AGL/1622’ MSL. Aircraft 28’ inward of DER, 542’ left of centerline, 65’ AGL/1550’ MSL. Aircraft 31’ inward of DER, 298’ left of centerline, 30’ AGL/1565’ MSL. Rwy 32, aircraft 30’ from DER, 526’ right of centerline, 65’ AGL/1600’ MSL. Aircraft 5’ from DER, 282’ right of centerline, 30’ AGL/1565’ MSL.

MIRAMAR MCAS (JOE FOSS FLD) (KNKX)

SAN DIEGO, CA

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

13SEP18 (18256)

TAKEOFF MINIMUMS:

Rwys 6L/R, 340° through 150° CW-Civil, std w/min climb of 300’/NM to 7600; Military, std w/min climb of 280’/NM to 7600.
Rwys 24L/R, 100° through 340° CW-Civil, std w/min climb of 290’/NM to 7600; Military, std w/min climb of 270’/NM to 7600.

TAKEOFF OBSTACLE NOTES:

Rwy 6L, building 2321’ from DER, 1084’ left of cntrln, 0’ AGL/539’ MSL. Twr 2322’ from DER, 1083’ left of cntrln, 53’ AGL/538’ MSL. Twr 2366’ from DER, 1083’ left of cntrln, 53’ AGL/538’ MSL. Rwy 24L, terrain 0’ from DER, 500’ left of cntrln, 458’ MSL. Terrain 384’ from DER, 549’ right of cntrln, 459’ MSL. Terrain 50’ from DER, 507’ right of cntrln, 459’ MSL. Landfill 3091’ from DER, 1243’ left of cntrln, 40’ AGL/525’ MSL. Landfill 3312’ from DER, 1197’ left of cntrln, 40’ AGL/525’ MSL. Landfill 3388’ from DER, 1023’ left of cntrln, 40’ AGL/525’ MSL. Landfill 3792’ from DER, 1225’ left of cntrln, 40’ AGL/525’ MSL. Pylon 3978’ from DER, 1295’ left of cntrln, 50’ AGL/498’ MSL. Pylon 4087’ from DER, 1363’ left of cntrln, 50’ AGL/505’ MSL.
MOJAVE, CA

MOJAVE AIR & SPACE PORT/RUTAN FLD (MHV)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 23FEB23 (23054) (FAA)

TAKEOFF MINIMUMS:
Rwys 4, 8, NA-Restricted Airspace.
Rwy 12, use GLAZY DEPARTURE.

Rwy 22, std. w/min. climb of 271' per NM to 3500 or 2800-3 for climb in visual conditions.
Rwy 26, std. w/min. climb of 440' per NM to 3900 or 2800-3 for climb in visual conditions.
Rwy 30, std. w/min. climb of 540' per NM to 4900 or 2800-3 for climb in visual conditions.

DEPARTURE PROCEDURE:
Rwy 12, use GLAZY DEPARTURE.
Rwy 22, climb on heading 218° to 8000 and LHS R-023 to LHS VORTAC.
Rwy 26, climbing left turn heading 218° to 8000 and LHS R-023 to LHS VORTAC.
Rwy 30, climbing left turn heading 218° to 8000 and LHS R-023 to LHS VORTAC.

VCOA:
Rwy 22, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross WAVOR (LHS 023/29 DME) southwest bound at or above 5500, then climb to 8000 on LHS R-023 to LHS VORTAC.
Rwy 26, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross WAVOR (LHS 023/29 DME) southwest bound at or above 5500, then climb to 8000 on LHS R-023 to LHS VORTAC.
Rwy 30, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross WAVOR (LHS 023/29 DME) southwest bound at or above 5500, then climb to 8000 on LHS R-023 to LHS VORTAC.

TAKEOFF OBSTACLE NOTES:
Rwy 22, terrain 9' from DER, 492' right of centerline, 2786' MSL.
Tower, antenna beginning 2517' from DER, 82' left of centerline, up to 93' AGL/2870' MSL.
Rwy 26, sign 31' from DER, 339' right of centerline, 5' AGL/2788' MSL.
Pole 494' from DER, 420' left of centerline, 33' AGL/2806' MSL.
Tower 1796' from DER, 616' left of centerline, 52' AGL/2838' MSL.
Transmission lines beginning 1.8 NM from DER, 299' right of centerline, up to 178' AGL/3171' MSL.
Transmission lines beginning 1.9 NM from DER, 282' left of centerline, up to 178' AGL/3123' MSL.
Tower, windmills beginning 2.3 NM from DER, 1129' right of centerline, up to 413' AGL/3458' MSL.
Windmills beginning 2.3 NM from DER, 2308' left of centerline, up to 413' AGL/3371' MSL.
Windmills beginning 2.4 NM from DER, 39' right of centerline, up to 413' AGL/3538' MSL.
Windmills beginning 2.4 NM from DER, 3367' left of centerline, up to 412' AGL/3372' MSL.
Windmills beginning 2.5 NM from DER, 364' left of centerline, up to 414' AGL/3451' MSL.
Rwy 30, vegetation 304' from DER, 456' right of centerline, 2817' MSL.
Vehicles on road beginning 1241' from DER, 322' right of centerline, up to 2836' MSL.
Vehicles on road 1300' from DER, 464' left of centerline, 2834' MSL.
Vehicles on road 1413' from DER, 489' right of centerline, 2846' MSL.
Vehicles on road beginning 1441' from DER, 9' left of centerline, up to 2845' MSL.
Pole 3082' from DER, 305' right of centerline, 34' AGL/2889' MSL.
Poles beginning 3095' from DER, 552' right of centerline, up to 34' AGL/2892' MSL.
Terrain 1 NM from DER, 2233' right of centerline, 2966' MSL.
Poles beginning 1.1 NM from DER, 2144' right of centerline, up to 2976' MSL.
Terrain 1.2 NM from DER, 2418' right of centerline, 2985' MSL.
Tower 1.3 NM from DER, 1658' left of centerline, 40' AGL/3013' MSL.
Transmission lines beginning 2 NM from DER, 1764' left of centerline, up to 188' AGL/3315' MSL.
Transmission lines beginning 2.1 NM from DER, 135' left of centerline, up to 196' AGL/3317' MSL.
Transmission line, towers beginning 2.1 NM from DER, 356' right of centerline, up to 188' AGL/3293' MSL.
Transmission line 2.4 NM from DER, 2890' left of centerline, 105' AGL/3324' MSL.
Windmill 2.5 NM from DER, 4200' left of centerline, 420' AGL/3670' MSL.

MURRIETA/TEMECULA, CA

FRENCH VALLEY (F70)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 11SEP97 (97254) (FAA)

TAKEOFF MINIMUMS:
Rwy 18, NA.
Rwy 36, 700-2 or std. with a min. climb of 340' per NM to 2200.

DEPARTURE PROCEDURE:
Rwy 36, climb runway heading to 2200, then climbing left turn via HDF R-145 to HDF VOR. Aircraft departing HDF VOR 065° CW 352° climb on course. Aircraft departing northeast bound, climb in HDF holding pattern, (SE, right turns, 315° outbound) to depart HDF VOR at or above: 353° CW 054°, 6800; 055° CW 064°, 5800; before proceeding on course.
NEEDLES, CA
NEEDLES (EED)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 09JAN14 (14009) (FAA)
TAKEOFF MINIMUMS:
Rwy 11, std. w/min. climb of 235’ per NM to 2800, or 2600-3 for climb in visual conditions.
Rwy 20, std. w/min. climb of 420’ per NM to 3700, or 2600-3 for climb in visual conditions.
Rwy 29, std. w/min. climb of 390’ per NM to 2200, or 2600-3 for climb in visual conditions.
DEPARTURE PROCEDURE:
Rwy 2, climb heading 015° to 1700, then climbing right turn direct EED VORTAC, thence . . .
Rwys 11, 20, climbing left turn direct EED VORTAC, thence . . .
Rwy 29, climbing right turn direct EED VORTAC, thence . . .
. . . Climb in EED holding pattern (hold NW, right turns, 139° inbound) to cross EED VORTAC at or above MEA for route of flight before proceeding on course. Or for climb in visual conditions cross Needles airport at or above 3400 before proceeding on course. When executing VCOA, notify ATC prior to departure.
TAKEOFF OBSTACLE NOTES:
Rwy 11, terrain 20’ from DER, 301’ right of centerline, 920’ MSL.
Rwy 20, building 73’ from DER, 451’ left of centerline, 21’ AGL/976’ MSL.
Windsock 181’ from DER, 409’ left of centerline, 23’ AGL/972’ MSL.
Terrain beginning 295’ from DER, 341’ right of centerline up to 1079’ MSL.
Rwy 29, terrain 92’ from DER, 328’ left of centerline 1000’ MSL.

NORTH ISLAND NAS (HALSEY FIELD) (KNZY)
SAN DIEGO, CA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
05NOV20 (20310)
DEPARTURE PROCEDURE:
Rwy 11, diverse departures authorized 131° CW 184°. Std. w/min. climb of 223’ per NM to 500. Make immediate right turn to assigned heading within 1.4 DME of NZY TACAN to avoid over flying the city of Coronado.
Rwy 18, diverse departures authorized 131° CW 177°.
Rwy 29, diverse departures not authorized. Use published departure procedure.
Rwy 36, departure not authorized.
TAKEOFF OBSTACLE NOTES:
Rwy 11, numerous trees left and right of Rwy cntrln from 9’ prior to DER to 2018’, 33’ MSL to 95’ MSL.
Golf ball fencing 2226’ from DER, 1215’ left of cntrln, 74’ AGL/88’ MSL.
Tree 8’ inward of DER, 429’ right of cntrln, 48’ AGL/74’ MSL.
Tree 11’ from DER, 525’ right of cntrln, 46’ AGL/73’ MSL.
Multiple trees 159’ from DER, 433’ right of cntrln, 43’ AGL/71’ MSL.
Tree 78’ from DER, 371’ right of cntrln, 29’ AGL/56’ MSL.
Tree 91’ from DER, 460’ right of cntrln, 28’ AGL/55’ MSL.
Palm 90’ from DER, 468’ right of cntrln, 27’ AGL/54’ MSL.
Rwy 18, top of light pole 1031’ from DER, 626’ right of cntrln, 40’ MSL.
Top of light pole 491’ from DER, 627’ right of cntrln, 35’ MSL.
Top of light pole 669’ from DER, 625’ right of cntrln, 38’ MSL.
Top of light pole 850’ from DER, 627’ right of cntrln, 40’ MSL.
Rwy 29, shipping channel accommodating vessels, starting 2577’ from DER, on cntrln, up to 200’ AGL (206’ MSL with tidal range).
Twin twrs 1.4 NM from DER, 2645’ left of cntrln, 145’ AGL/534’ MSL.
Twr 1.5 NM from DER, 1969’ left of cntrln, 479’ MSL.
Twr 1.5 NM from DER, 2054’ left of cntrln, 100’ AGL/455’ MSL.
Twr 1139’ from DER, 2.1 NM left of cntrln, 120’ AGL/544’ MSL.

OCEANSIDE, CA
BOB MAXWELL MEML AIRFIELD (OKB)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4A 28APR16 (21112) FAA
TAKEOFF MINIMUMS:
Rwy 6, 400-1 or std. w/min. climb of 320’ per NM to 500.
Rwy 24, 300-1 or std. w/min. climb of 670’ per NM to 300.
DEPARTURE PROCEDURE:
Rwy 6, climbing right turn.
Rwy 24, climbing left turn.
All aircraft, climb via heading 235° to 1500, then climbing right turn direct OCN VORTAC.
ONTARIO, CA
ONTARIO INTL (ONT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 9A  24MAR22  (22083)  (FAA)
TAKEOFF MINIMUMS:
Rwys 8L/R std. w/min. climb of 285' per NM to 3000.
DEPARTURE PROCEDURE:
Rwys 8L/R, climb on heading 078° to 2600 then climbing right turn direct PDZ VORTAC thence…
Rwys 26L/R, climb on heading 258° to 2600 then climbing left turn direct PDZ VORTAC thence…
…climb in PDZ holding pattern (hold northeast, right turn, 210° inbound) to cross PDZ VORTAC at or above MEA for route of flight before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 8L, vehicle on road 3’ from DER, 196’ left of centerline, 934’ MSL.
Vehicle on road, sign beginning 4’ from DER, 398’ left of centerline, up to 937’ MSL.
Sign, terrain beginning 65’ from DER, 195’ left of centerline, up to 2’ AGL/939’ MSL.
Building 1606’ from DER, 846’ left of centerline, 975’ MSL.
Tree 2035’ from DER, 248’ left of centerline, 41’ AGL/983’ MSL.
Tree 2037’ from DER, 303’ left of centerline, 46’ AGL/988’ MSL.
Tree 2039’ from DER, 514’ left of centerline, 54’ AGL/999’ MSL.
Tree, pole beginning 2039’ from DER, 483’ left of centerline, up to 59’ AGL/1005’ MSL.
Rwy 8R, vehicle on road 11’ from DER, 502’ left of centerline, 928’ MSL.
Trees beginning 2035’ from DER, 948’ left of centerline, up to 46’ AGL/988’ MSL.
Tree 2089’ from DER, 334’ right of centerline, 985’ MSL.
Rwy 26L, vehicle on road 12’ from DER, 392’ right of centerline, 937’ MSL.
Sign 87’ from DER, 440’ right of centerline, 4’ AGL/943’ MSL.
Tower, terrain beginning 124’ from DER, 339’ right of centerline, up to 46’ AGL/982’ MSL.
Pole 754’ from DER, 670’ left of centerline, 964’ MSL.
Tree 1049’ from DER, 708’ left of centerline, 985’ MSL.
Tree 1986’ from DER, 329’ left of centerline, 986’ MSL.
Rwy 26R, terrain beginning 34’ from DER, 393’ right of centerline, up to 950’ MSL.
Building 193’ from DER, 397’ left of centerline, 950’ MSL.
Lighting 223’ from DER, 5’ right of centerline, 7’ AGL/951’ MSL.
NAVAID, lighting beginning 368’ from DER, 2’ left of centerline, up to 962’ MSL.
NAVAID 380’ from DER, on centerline, 953’ MSL.
Pole, vehicle on road beginning 483’ from DER, 265’ left of centerline, up to 973’ MSL.
Pole, lighting beginning 579’ from DER, on centerline, up to 978’ MSL.
Pole 1144’ from DER, 210’ right of centerline, 981’ MSL.
Pole 1243’ from DER, 215’ right of centerline, 986’ MSL.
Tree 1671’ from DER, 698’ right of centerline, 996’ MSL.
Trees beginning 2881’ from DER, 672’ right of centerline, up to 1030’ MSL.
DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 2  26MAY16  (16147)  (FAA)
Rwy 8L, headings as assigned by ATC; requires min. climb of 280’ per NM to 2900.
Rwy 8R, headings as assigned by ATC; requires min. climb of 280’ per NM to 2900.
Rwys 26L/R, headings as assigned by ATC.

OXNARD, CA
OXNARD (OXR)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6  15JUN00  (00167)  (FAA)
TAKEOFF MINIMUMS:
Rwy 7, 2100-5 or std. with a min. climb of 290’ per NM to 2600.
DEPARTURE PROCEDURE:
Rwy 7, climbing left turn.
Rwy 25, climb runway heading.
All aircraft continue climb to 6000 (or assigned altitude) via CMA R-249 to SQUID INT. Aircraft departing SQUID INT 040° CW 300° climb on course. All others continue climb in SQUID holding pattern (hold W, right turns, 069° inbound) to cross SQUID INT at or above 2300.
TAKEOFF OBSTACLE NOTES:
Rwy 7, 59’ AGL tree 527’ from DER, 501’ left of centerline.

PALM SPRINGS, CA
BERMUDA DUNES (UDD)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1  15SEP16  (16259)  (FAA)
DEPARTURE PROCEDURE:
Use BERMUDA DUNES DEPARTURE.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

PALM SPRINGS, CA (CON’T)

JACQUELINE COCHRAN RGNL (TRM)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3  15SEP16  (16259)  (FAA)

TAKEOFF MINIMUMS:

- Rwy 12, std. w/min. climb of 364' per NM to 3400.
- Rwy 17, std. w/min. climb of 374' per NM to 3400.
- Rwy 30, std. w/min. climb of 340' per NM to 3400.
- Rwy 35, std. w/min. climb of 402' per NM to 3400.

DEPARTURE PROCEDURE:

- Rwy 12, climbing right turn to intercept TRM VORTAC R-136 to MECCA, thence...
- Rwy 17, climbing left turn heading 100° to intercept TRM VORTAC R-136 to MECCA, thence...
- Rwsys 30, 35, climbing right turn heading 180° to intercept TRM VORTAC R-136 to MECCA, thence...
- ...aircraft departing MECCA on TRM VORTAC R-101 CW R-139, climb on course. All others turn left direct TRM VORTAC and climb in TRM VORTAC holding pattern (hold east, right turns, 289° inbound) until reaching MEA/MCA for route of flight. DME required.

TAKEOFF OBSTACLE NOTES:

- Rwy 12, tree 52' from DER, 495' left of centerline, 14' AGL/-117' MSL.
- Tree 131' from DER, 455' right of centerline, 20' AGL/-111' MSL.
- Windsock 195' from DER, 444' left of centerline, 22' AGL/-109' MSL.
- Tree 623' from DER, 403' right of centerline, 18' AGL/-113' MSL.
- Tree 1427' from DER, 403' left of centerline, 6' AGL/-117' MSL.
- ...windsock 403' from DER, 389' left of centerline, 22' AGL/-119' MSL.

PALM SPRINGS INTL (PSP)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5A  27JUN13  (13178)  (FAA)

TAKEOFF MINIMUMS:

- Rwy 13L, minimum climb of 440' per NM to 2300' or 5900-3 for climb in visual conditions.
- Rwy 13R, minimum climb of 422' per NM to 2300' or 5900-3 for climb in visual conditions.
- Rwy 31L, minimum climb of 386' per NM to 4500' or 5900-3 for climb in visual conditions.
- Rwy 31R, minimum climb of 405' per NM to 4500' or 5900-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

- Rwys 13L/R, climbing left turn heading 090° to intercept TRM R-304 to TRM VORTAC or for climb in visual conditions cross Palm Springs Intl airport at or above 6300 then direct PSP VORTAC thence ...
- Rwy's 31L/R, climbing right turn direct PSP VORTAC thence ..., or for climb in visual conditions cross Palm Springs Intl airport at or above 6300 then direct PSP VORTAC thence ...
- ...via PSP R-124 and TRM R-304 to TRM VORTAC.
- All Rwsy not at MEA/MCA at TRM VORTAC, climb in TRM holding pattern (hold E, right turns, 289° inbound) until reaching MEA/MCA for assigned route of flight. When executing VCOA, notify ATC prior to departure.

TAKEOFF OBSTACLE NOTES:

- Rwy 13L, trees beginning 299' from DER, 530' left of centerline, up to 66' AGL/465' MSL.
- HGR 935' from DER, 552' left of centerline, 31' AGL/440' MSL.
- Tree 3016' from DER, 66' right of centerline, 93' AGL/22' MSL.

TAKEOFF OBSTACLE NOTES:

- Rwy 13R, minimum climb of 422' per NM to 2300' or 5900-3 for climb in visual conditions.
- Rwy 31R, minimum climb of 386' per NM to 4500' or 5900-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

- Rwys 13L/R, climbing left turn heading 090° to intercept TRM R-304 to TRM VORTAC or for climb in visual conditions cross Palm Springs Intl airport at or above 6300 then direct PSP VORTAC thence ...
- Rwy's 31L/R, climbing right turn direct PSP VORTAC thence ..., or for climb in visual conditions cross Palm Springs Intl airport at or above 6300 then direct PSP VORTAC thence ...
- ...via PSP R-124 and TRM R-304 to TRM VORTAC.
- All Rwsy not at MEA/MCA at TRM VORTAC, climb in TRM holding pattern (hold E, right turns, 289° inbound) until reaching MEA/MCA for assigned route of flight. When executing VCOA, notify ATC prior to departure.

TAKEOFF OBSTACLE NOTES:

- Rwy 13L, trees beginning 299' from DER, 530' left of centerline, up to 66' AGL/465' MSL.
- HGR 935' from DER, 552' left of centerline, 31' AGL/440' MSL.
- Poles 1170' from DER, 239' right of centerline, up to 100' AGL/599' MSL.
- Tree 3016' from DER, 66' right of centerline, 43' AGL/562' MSL.

- Rwy 31R, multiple trees and bushes beginning 305' from DER, 233' right of centerline, up to 48' AGL/507' MSL.
- Vent on building 319' from DER, 399' right of centerline, 15' AGL/474' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

PALM SPRINGS, CA (CON’T)
PALM SPRINGS INTL (PSP) (CON’T)
DIVERSE VECTOR AREA (RADAR VECTORS)
ORIG 12NOV15 (15316) (FAA)

- **Rwy 13L**, heading as assigned by ATC; requires minimum climb of 310’ per NM to 4800.
- **Rwy 13R**, heading as assigned by ATC; requires minimum climb of 340’ per NM to 2700.
- **Rwy 31L**, heading as assigned by ATC; requires minimum climb of 480’ per NM to 7000.

PALMDALE, CA

PALMDALE USAF PLANT 42 (PMD)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 03JUN10 (10154) (FAA)

**TAKEOFF MINIMUMS:**
- **Rwy 22**, std. with a min. climb of 300’ per NM to 3800 or 1300-3 for climb in visual conditions.

**DEPARTURE PROCEDURE:**

- **Rwy 4**, 7, climbing left turn intercept PMD VORTAC R-298 to cross FISCH INT at or above MEA/MCA for route of flight, if not at MEA/MCA continue climb in FISCH INT holding pattern (hold Southeast, left turns, 298° inbound) to cross FISCH INT at or above 6500 or MCA for route of flight.
- **Rwy 22**, climbing right turn intercept PMD VORTAC R-298 to cross FISCH INT at or above MEA/MCA for route of flight, if not at MEA/MCA continue climb in FISCH INT holding pattern (hold Southeast, left turns, 298° inbound) to cross FISCH INT at or above 6500 or MCA for route of flight, or for climb in visual conditions cross Palmdale Rgnl/USAF Plant 42 at or above 3700 then via PMD VORTAC R-298 to cross FISCH INT at or above MEA/MCA for route of flight, if not at MEA/MCA continue climb in FISCH INT holding pattern (hold Southeast, left turns, 298° inbound) to cross FISCH INT at or above 6500 or MCA for route of flight.
- **Rwy 25**, climbing right turn intercept PMD VORTAC R-298 to cross FISCH INT at or above MEA/MCA for route, if not at MEA/MCA continue climb in FISCH INT holding pattern (hold Southeast, left turns, 298° inbound) to cross FISCH INT at or above 6500 or MCA for route of flight.

**TAKEOFF OBSTACLE NOTES:**
- **Rwy 25**, tree 2395’ from DER 986’ left of centerline, 100’ AGL/2659’ MSL.

PASO ROBLES, CA

PASO ROBLES MUNI (PRB)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2A 19MAY22 (22139) (FAA)

**DEPARTURE PROCEDURE:**

- Use PASO ROBLES DEPARTURE.

**TAKEOFF OBSTACLE NOTES:**
- **Rwy 1**, lighting 9’ from DER, 115’ right of centerline, 804’ MSL.
- Lighting 10’ from DER, 113’ left of centerline, 805’ MSL.
- Tree 301’ from DER, 425’ left of centerline, 812’ MSL.
- **Rwy 13**, pole 34’ from DER, 29’ left of centerline, 840’ MSL.
- Trees, pole beginning 766’ from DER, 395’ left of centerline, up to 900’ MSL.
- Trees beginning 1656’ from DER, 389’ left of centerline, up to 906’ MSL.
- Trees beginning 1746’ from DER, 13’ left of centerline, up to 910’ MSL.
- Tree 1948’ from DER, 1’ right of centerline, 907’ MSL.
- Trees beginning 2045’ from DER, 56’ left of centerline, up to 911’ MSL.
- Trees beginning 2256’ from DER, 409’ left of centerline, up to 915’ MSL.
- Tree 2581’ from DER, 511’ left of centerline, 917’ MSL.
- Trees beginning 2601’ from DER, 635’ left of centerline, up to 923’ MSL.
- Tree 3261’ from DER, 856’ left of centerline, 932’ MSL.
- Tree 3860’ from DER, 952’ left of centerline, 944’ MSL.
- Tree 3961’ from DER, 784’ left of centerline, 950’ MSL.
- **Rwy 19**, pole 10’ from DER, 39’ left of centerline, 815’ MSL.
- Tree 992’ from DER, 705’ left of centerline, 851’ MSL.
- Trees beginning 1098’ from DER, 618’ left of centerline, up to 876’ MSL.
- **Rwy 31**, wind indicator 78’ from DER, 334’ right of centerline, 823’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

POINT MUGU NAS (NAVAL BASE VENTURA CO) (KNTD)
OXNARD, CA

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1  31DEC20  (20366)  (USN)

DEPARTURE PROCEDURE:

Rwy 3, diverse departures authorized 220° to 270° CW. Right turns on departure NA. Turn left to assigned hdg within 3 DME of NTD TACAN. Do not exceed 300K until established on assigned hdg.

Rwy 9, diverse departures NA.

Rwy 21, diverse departures authorized 140° to 290°.

Rwy 27, diverse departures authorized 140° to 290° CW. Right turns on departure NA. Turn left to assigned hdg. Do not exceed 310K until established on assigned hdg.

CAUTION: Mountainous terrain NW thru SE.

TAKEOFF OBSTACLE NOTES:

Rwy 3, trees 2921' from DER, 1197' left of cntrln, 90' MSL.

Twr 3006' from DER, 1235' left of cntrln, 90' MSL.

Rwy 27, DASR antenna 960' from DER, 983' right of cntrln, 56' AGL/66' MSL.

Pole 1318' from DER, 582' right of cntrln, 44' MSL.

RAMONA, CA

RAMONA (RNM)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3A  25JUL13  (13206)  (FAA)

TAKEOFF MINIMUMS:

Rwy 9, std. w/ min. climb of 500' per NM to 4000, or 3800-3 for climb in visual conditions.

Rwy 27, std. w/ min. climb of 332' per NM to 2600, or 3800-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

Rwy 9, climb via heading 088° to 4000, then climbing left turn via heading 330° and JLI VORTAC R-263/OCN VORTAC R-083 to ROBNN INT before proceeding on course, or for climb in visual conditions, cross Ramona airport at or above 5000 before proceeding on course. When executing VCOA, notify ATC prior to departure.

Rwy 27, climb via heading 268° to 2600, then climbing right turn via PGY VORTAC R-336 to ROBNN INT before proceeding on course, or for climb in visual conditions, cross Ramona airport at or above 5000 before proceeding on course. When executing VCOA, notify ATC prior to departure.

TAKEOFF OBSTACLE NOTES:

Rwy 9, sign 23' from DER, 178' left of centerline, 9' AGL/1399' MSL.

Tree 94' from DER, 343' right of centerline, 20' AGL/1403' MSL.

Trees beginning 2468' from DER, 180' right of centerline, up to 100' AGL/1539' MSL.

Rwy 27, tree 657' from DER, 12' left of centerline, 100' AGL/1499' MSL.

Trees 1.85 NM from DER, 92' left of centerline, up to 100' AGL/1719' MSL.

REDLANDS, CA

REDLANDS MUNI (REI)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-B  07OCT21  (21280)  (FAA)

TAKEOFF MINIMUMS:

Rwy 8, NA-Terrain.

Rwy 26, 1700-2 or std. w/min. climb of 300' per NM to 4000.

DEPARTURE PROCEDURE:

Rwy 26, climbing left turn direct PDZ VORTAC. Aircraft departing PDZ VORTAC R-091 CW R-140 and R-231 CW R-280 climb on course. All others continue to PDZ VORTAC holding pattern (hold NE, right turns, 210° inbound) to cross PDZ VORTAC at or above, R-281 CW R-090, 7700 and continue climb on course; R-141 CW R-230, 4900 and continue climb on course.

TAKEOFF OBSTACLE NOTES:

Rwy 26, vegetation 16' from DER, 278' left of centerline, 1477' MSL.

Tree 1114' from DER, 229' left of centerline, 1502' MSL.

Tree 1268' from DER, 289' left of centerline, 1506' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

RIVERSIDE, CA
RIVERSIDE MUNI (RAL)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 12 31DEC20 (20366) (FAA)
TAKEOFF MINIMUMS:
Rwy 16, NA - Terrain.
DEPARTURE PROCEDURE:
Rwys 9, 27, 34, use RIVERSIDE DEPARTURE.
TAKEOFF OBSTACLE NOTES:
Rwy 9, terrain 4' from DER, 836' MSL.
Fence, vegetation, terrain beginning 77' from DER, 843' MSL.
Tree beginning 989' from DER, 867' MSL.
Rwy 27, tree 600' from DER, 766' MSL.
Tree 1073' from DER, 803' MSL.
Rwy 34, building 29' from DER, 800' MSL.

RIVERSIDE/RUBIDOUX, CA
FLABOB (RIR)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 30JUN11 (11181) (FAA)
TAKEOFF MINIMUMS:
Rwy 6, std. w/min. climb of 670' per NM to 4000 or 400-2 w/min. climb of 480' per NM to 2100-3 for climb in visual conditions.
Rwy 24, std. w/min. climb of 630' per NM to 3000 or 800-2¾ w/min. climb of 305' per NM to 2100-3 for climb in visual conditions.
DEPARTURE PROCEDURE:
Rwy 6, climbing right turn.
Rwy 24, climbing left turn.
All aircraft climb direct PDZ VORTAC. Aircraft departing PDZ R-091 CW R-140 and R-231 CW R-280 climb on course. All others continue climb in PDZ holding pattern (Hold NE, right turns, 210° inbound) to cross PDZ VORTAC at or above: R-281 CW R-090, 7700; R-141 CW R-230, 4900.

DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 1 23FEB23 (23054) (FAA)
Rwy 24, heading as assigned by ATC; requires min. climb of 310' to 2600.

SAN BERNARDINO, CA
SAN BERNARDINO INTL (SBD)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 09DEC93 (93343) (FAA)
TAKEOFF MINIMUMS:
Rwy 6, CAT A, B 2100-2 or std. with a min. climb of 340' per NM to 3700. CAT C, D 3100-2 or std. with a min. climb of 480' per NM to 4600.
DEPARTURE PROCEDURE:
Rwy 6, climbing right turn.
Rwy 24, climbing left turn.
All aircraft climb direct PDZ VORTAC. Aircraft departing PDZ R-091 CW R-140 and R-231 CW R-280 climb on course. All others continue climb in PDZ holding pattern (Hold NE, right turns, 210° inbound) to cross PDZ VORTAC at or above: R-281 CW R-090, 7700; R-141 CW R-230, 4900.

DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 1 23FEB23 (23054) (FAA)
Rwy 24, heading as assigned by ATC; requires min. climb of 310' to 2600.
SAN CLEMENTE ISLAND NALF (FREDERICK SHERMAN FLD) (KNUC)
SAN CLEMENTE ISLAND, CA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
25APR19 (19115)
DEPARTURE PROCEDURE:
Rwy 6, diverse departures authorized 235° to 092° CW.
Rwy 24, diverse departures authorized 162° to 055° CW.
TAKEOFF OBSTACLE NOTES:
Rwy 6, terrain 958' from DER, 613' right of cntrln, 199' MSL.

SAN DIEGO, CA
BROWN FLD MUNI (SDM)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4 03JUN10 (21168) (FAA)
TAKEOFF MINIMUMS:
Rwy 8L, std. w/min. climb of 570' per NM to 3100.
Rwys 8R, 26L, NA-ATC.
DEPARTURE PROCEDURE:
Rwy 8L, climbing left turn, thence...
Rwy 26R, climbing right turn, thence...
...via heading 280° to intercept MZB R-160 to MZB VORTAC.
TAKEOFF OBSTACLE NOTES:
Rwy 26R, tree 1284' from DER, 778' left of centerline, 52' AGL/561' MSL.

MONTGOMERY-GIBBS EXEC (MYF)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4A 08NOV18 (21168) (FAA)
TAKEOFF MINIMUMS:
Rwy 5, NA-Environmental.
DEPARTURE PROCEDURE:
Rrwys 10L/R, climbing right turn.
Rwys 28L/R, climbing left turn.
All aircraft, climb direct to MZB VORTAC. Aircraft departing MZB VORTAC R-090 CW R-360 climb on course. All other climb in MZB holding pattern (hold west, right turns, 075° inbound) to cross MZB VORTAC at or above 2300.
TAKEOFF OBSTACLE NOTES:
Rwy 23, trees beginning 958' from DER, 549' left of centerline, up to 456' MSL.
Tree 1070' from DER, 719' left of centerline, 458' MSL.
Tree 1093' from DER, 558' right of centerline, 62' AGL/468' MSL.
Tree 1152' from DER, 532' left of centerline, 459' MSL.
Trees beginning 1165' from DER, 531' left of centerline, up to 473' MSL.
Trees beginning 1255' from DER, 125' right of centerline, up to 472' MSL.
Trees, vehicles on road beginning 1560' from DER, 79' right of centerline, up to 81' AGL/483' MSL.
Tree 1824' from DER, 189' left of centerline, 87' AGL/485' MSL.
Tree, pole beginning 1854' from DER, 131' right of centerline, up to 86' AGL/485' MSL.
Trees beginning 1954' from DER, 22' right of centerline, up to 95' AGL/489' MSL.
Trees, antenna beginning 1965' from DER, 333' left of centerline, up to 493' MSL.
Tree 2400' from DER, 867' left of centerline, 500' MSL.
Transmission lines, trees beginning 2618' from DER, 414' left of centerline, up to 102' AGL/529' MSL.
Tree 2703' from DER, 831' right of centerline, 491' MSL.
Trees beginning 2732' from DER, 321' right of centerline, up to 74' AGL/495' MSL.
Transmission lines, poles, tree beginning 2786' from DER, 17' right of centerline, up to 106' AGL/535' MSL.
Transmission line, trees beginning 2986' from DER, 15' right of centerline, up to 114' AGL/548' MSL.
Rwy 10L, vegetation 48' from DER, 495' right of centerline, 430' MSL.
Vegetation beginning 88' from DER, 76' left of centerline, up to 7' AGL/434' MSL.
Trees beginning 209' from DER, 493' left of centerline, up to 8' AGL/439' MSL.
Tree 826' from DER, 680' left of centerline, 478' MSL.
Trees beginning 832' from DER, 632' right of centerline, up to 45' AGL/466' MSL.
Trees beginning 951' from DER, 671' left of centerline, up to 479' MSL.
Trees beginning 1063' from DER, 578' right of centerline, up to 55' AGL/472' MSL.
Trees beginning 1149' from DER, 492' right of centerline, up to 77' AGL/493' MSL.
Trees beginning 1610' from DER, 677' left of centerline, up to 69' AGL/498' MSL.
Trees beginning 1728' from DER, 664' left of centerline, up to 501' MSL.
Rwy 10R, lighting 39' from DER, 69' left of centerline, 3' AGL/423' MSL.
Electrical system 40' from DER, 65' left of centerline, 6' AGL/426' MSL.
Building, tree beginning 233' from DER, 106' right of centerline, up to 441' MSL.
Tree, vegetation beginning 284' from DER, 230' left of centerline, up to 433' MSL.
Tree 1039' from DER, 719' right of centerline, 462' MSL.
Tree 1135' from DER, 670' right of centerline, 466' MSL.
Tree 1183' from DER, 805' right of centerline, 476' MSL.
Trees beginning 1247' from DER, 582' right of centerline, up to 479' MSL.
Trees beginning 1536' from DER, 342' right of centerline, up to 482' MSL.
Trees beginning 1925' from DER, 86' right of centerline, up to 88' AGL/497' MSL.
Trees beginning 2808' from DER, 1185' left of centerline, up to 69' AGL/498' MSL.

CON'T
SAN DIEGO, CA (CON’T)
MONTGOMERY-GIBBS EXEC (MYF) (CON’T)

Rwy 28L, sign, vegetation beginning 11’ from DER, 247’ right of centerline, up to 2’ AGL/415’ MSL.

Sign beginning 12’ from DER, 125’ left of centerline, up to 2’ AGL/418’ MSL.

Vehicles on DER ramp 523’ from DER, 523’ left of centerline, up to 429’ MSL.

Antenna 788’ from DER, 570’ left of centerline, 450’ MSL.

Trees, sign beginning 903’ from DER, 8’ left of centerline, up to 461’ MSL.

Trees, pole beginning 954’ from DER, 263’ right of centerline, up to 53’ AGL/460’ MSL.

Trees, building beginning 1265’ from DER, 135’ right of centerline, up to 59’ AGL/470’ MSL.

Tree 1349’ from DER, 546’ left of centerline, 464’ MSL.

Tree 1405’ from DER, 496’ right of centerline, 62’ AGL/473’ MSL.

Tree 1513’ from DER, 541’ left of centerline, 467’ MSL.

Trees, tower beginning 1676’ from DER, 224’ right of centerline, up to 474’ MSL.

Tree 2034’ from DER, 236’ right of centerline, 67’ AGL/475’ MSL.

Trees beginning 2092’ from DER, 174’ right of centerline, up to 68’ AGL/477’ MSL.

Rwy 28R, sign 11’ from DER, 251’ left of centerline, 2’ AGL/415’ MSL.

Pole 594’ from DER, 615’ right of centerline, 449’ MSL.

Pole, sign beginning 735’ from DER, 323’ right of centerline, up to 450’ MSL.

Trees, poles beginning 862’ from DER, 253’ right of centerline, up to 469’ MSL.

Trees beginning 888’ from DER, 215’ left of centerline, up to 33’ AGL/444’ MSL.

Tree 1006’ from DER, 507’ left of centerline, 451’ MSL.

Poles, trees beginning 1206’ from DER, 17’ right of centerline, up to 64’ AGL/475’ MSL.

Trees beginning 1278’ from DER, 12’ left of centerline, up to 56’ AGL/467’ MSL.

Sign, tree, building beginning 1303’ from DER, 26’ right of centerline, up to 62’ AGL/483’ MSL.

Sign, trees beginning 1324’ from DER, 12’ right of centerline, up to 68’ AGL/488’ MSL.

Trees, tower beginning 1406’ from DER, 2’ left of centerline, up to 62’ AGL/473’ MSL.

Trees, pole beginning 1487’ from DER, 319’ right of centerline, up to 71’ AGL/493’ MSL.

Tree 2034’ from DER, 263’ left of centerline, 67’ AGL/475’ MSL.

Trees beginning 2092’ from DER, 290’ left of centerline, up to 68’ AGL/477’ MSL.

SAN DIEGO INTL (SAN)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 9 10NOV16 (16315) (FAA)
TAKEOFF MINIMUMS:
Rwy 9, 400-1½ w/min. climb of 290’ per NM to 900.
Rwy 27, 400-2½ or std. w/min. climb of 353’ per NM to 500.

DEPARTURE PROCEDURE:
Rwy 9, climb heading 095° to 900, then climbing left turn direct MZB VORTAC. Thence ...
Rwy 27, climb heading 275° to 900, then climbing right turn direct MZB VORTAC. Thence ...

...Aircraft departing MZB VORTAC R-180 CW R-360 climb on course. All others climb in MZB VORTAC holding pattern (hold West, right turn, 075° inbound) to cross MZB VORTAC at or above 2300 before proceeding on course.

TAKEOFF OBSTACLE NOTES:
Rwy 9, fence, terrain, beginning 14’ from DER, 67’ left of centerline, up to 14’ AGL/35’ MSL.

Pole, building, terrain, fence, beginning 21’ from DER, 8’ right of centerline, up to 35’ AGL/50’ MSL.

Sign, terrain, beginning 268’ from DER, 137’ left of centerline, up to 50’ AGL/77’ MSL.

Tree, pole beginning 381’ from DER, 265’ right of centerline, up to 91’ MSL.

Building, terrain, beginning 877’ from DER, 180’ left of centerline, up to 66’ AGL/106’ MSL.

Building 1385’ from DER, 356’ right of centerline, 55’ AGL/95’ MSL.

Electric sys, terrain, beginning 1395’ from DER, 319’ left of centerline, up to 44’ AGL/138’ MSL.

Tree, terrain, beginning 1822’ from DER, 561’ left of centerline, up to 196’ MSL.

Tree 1857’ from DER, 45’ left of centerline, 45’ AGL/144’ MSL.

Tree, terrain, building, beginning 2140’ from DER, 119’ left of centerline, up to 198’ MSL.

Building, terrain, beginning 2596’ from DER, 101’ right of centerline, up to 89’ AGL/158’ MSL.

Trees, terrain, beginning 2681’ from DER, 190’ left of centerline, up to 215’ MSL.

T-tower, terrain, building, pole, tree, beginning 2948’ from DER, 40’ left of centerline, up to 67’ AGL/272’ MSL.

Tree, terrain, building, beginning 2965’ from DER, 30’ right of centerline, up to 211’ MSL.

Building, terrain, beginning 3857’ from DER, 39’ right of centerline, up to 44’ AGL/216’ MSL.

Building 4376’ from DER, 1295’ left of centerline, 117’ AGL/364’ MSL.

Building, terrain, beginning 4410’ from DER, 322’ left of centerline, up to 128’ AGL/389’ MSL.

Building, beginning 4433’ from DER, 1207’ right of centerline, up to 165’ AGL/296’ MSL.

Ant on oil building 4460’ from DER, 1482’ left of centerline, 403’ MSL.

Terrain, Building, tree, pole, beginning 4510’ from DER, 213’ left of centerline, up to 132’ MSL.

Tree, building, beginning 5159’ from DER, 325’ right of centerline, up to 113’ AGL/301’ MSL.

Building 6023’ from DER, 1934’ right of centerline, 224’ AGL/370’ MSL.

Building 1 NM from DER, 1543’ right of centerline, 234’ AGL/372’ MSL.

Building, tree, beginning 1 NM from DER, 21’ right of centerline, up to 287’ AGL/401’ MSL.

Monument 1.3 NM from DER, 1339’ left of centerline, 53’ AGL/310’ MSL.

Pole 1.3 NM from DER, 1721’ left of centerline, 35’ AGL/306’ MSL.

Stack, tree, beginning 1.4 NM from DER, 501’ left of centerline, up to 170’ AGL/374’ MSL.

Tree 1.9 NM from DER, 490’ left of centerline, 330’ MSL.

CON’T
RAWS 3, 30 NOV 2023 to 25 JAN 2024

SAN DIEGO, CA (CON’T)
SAN DIEGO INTL (SAN) (CON’T)

Rwy 27, pole 192’ from DER, 347’ right of centerline, 17’ AGL/29’ MSL.
NAVAID 284’ from DER, 317’ left of centerline, 19’ AGL/28’ MSL.
Trees, pole beginning 1 NM from DER, 156’ right of centerline, 24’ AGL/34’ MSL.
Tree 1021’ from DER, 620’ right of centerline, 71’ MSL.
Pole 2515’ from DER, 707’ left of centerline, 103’ AGL/118’ MSL.
Tree 2594’ from DER, 353’ right of centerline, 90’ AGL/107’ MSL.
Tree 3179’ from DER, 410’ right of centerline, 111’ MSL.
Tree 3494’ from DER, 947’ right of centerline, 169’ MSL.
Tower 4675’ from DER, 14’ right of centerline, 60’ AGL/115’ MSL.
Tree 4248’ from DER, 403’ left of centerline, 75’ AGL/150’ MSL.
Tree 4441’ from DER, 1199’ right of centerline, 111’ AGL/199’ MSL.
Trees, beginning 5046’ from DER, 7’ left of centerline, up to 96’ AGL/235’ MSL.
Tree, building, beginning 5693’ from DER, 272’ right of centerline, up to 227’ MSL.
Tree 6050’ from DER, 1703’ left of centerline, 256’ MSL.
Trees, beginning 1 NM from DER, 532’ left of centerline, up to 65’ AGL/261’ MSL.
Building, pole, tree, beginning 1 NM from DER, 257’ right of centerline, up to 40’ AGL/238’ MSL.
Tree 1.9 NM from DER, 3367’ left of centerline, 65’ AGL/328’ MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 1 20AUG15 (15232) (FAA)
Rwy 27, headings as assigned by ATC; requires minimum climb of 360’ per NM to 800.

SAN DIEGO/EL CAJON, CA
GILLESPIE FLD (SEE)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 7 22APR21 (21168) (FAA)

DEPARTURE PROCEDURE:
Use MISSION BAY DEPARTURE.

TAKEOFF OBSTACLE NOTES:

Rwy 9L, terrain 11’ from DER, 202’ left of centerline, 395’ MSL.
Terrain 189’ from DER, 236’ left of centerline, 398’ MSL.
Vehicle on road beginning 604’ from DER, 12’ right of centerline, up to 428’ MSL.
Sign, bridge, vehicle on road, pole beginning 739’ from DER, on centerline, up to 42’ AGL/448’ MSL.
Building 916’ from DER, 354’ left of centerline, 24’ AGL/448’ MSL.
Tree, pole beginning 940’ from DER, 314’ left of centerline, up to 468’ MSL.
Tree 1259’ from DER, 676’ right of centerline, 451’ MSL.
Tree, pole, vehicle on road beginning 1287’ from DER, 4’ right of centerline, up to 480’ MSL.
Tree, building, pole beginning 1413’ from DER, 420’ left of centerline, up to 486’ MSL.
Tree, poles beginning 1423’ from DER, 176’ left of centerline, up to 499’ MSL.
Tree 1630’ from DER, 620’ left of centerline, 519’ MSL.
Tree, poles beginning 1834’ from DER, 8’ left of centerline, up to 522’ MSL.
Poles beginning 2125’ from DER, 39’ right of centerline, up to 42’ AGL/485’ MSL.
Pole 2226’ from DER, 19’ right of centerline, 43’ AGL/488’ MSL.
Trees, poles beginning 2333’ from DER, 55’ right of centerline, up to 509’ MSL.
Tree, poles, transmission line beginning 2601’ from DER, 1’ left of centerline, up to 530’ MSL.
Trees, transmission line, poles, building beginning 2949’ from DER, 88’ left of centerline, up to 566’ MSL.
Trees, poles beginning 3042’ from DER, 26’ right of centerline, up to 532’ MSL.
Poles beginning 3611’ from DER, 246’ left of centerline, up to 44’ AGL/575’ MSL.
Poles, transmission line beginning 3802’ from DER, 119’ left of centerline, up to 43’ AGL/583’ MSL.
Poles, transmission line beginning 3920’ from DER, 38’ left of centerline, up to 43’ AGL/589’ MSL.
Transmission line, poles beginning 4371’ from DER, 362’ left of centerline, up to 62’ AGL/594’ MSL.
Poles beginning 4389’ from DER, 131’ right of centerline, up to 45’ AGL/533’ MSL.
Tree, poles, building, pole beginning 4443’ from DER, 14’ left of centerline, up to 624’ MSL.
Pole 4576’ from DER, 53’ right of centerline, 45’ AGL/541’ MSL.
Poles beginning 4720’ from DER, 102’ right of centerline, up to 50’ AGL/545’ MSL.
Transmission line, pole beginning 5111’ from DER, 246’ right of centerline, up to 55’ AGL/548’ MSL.
Poles beginning 5145’ from DER, 340’ left of centerline, up to 39’ AGL/841’ MSL.
Tree, poles beginning 5412’ from DER, 5’ left of centerline, up to 654’ MSL.
Transmission line 5476’ from DER, 374’ right of centerline, 55’ AGL/552’ MSL.
Tree, poles beginning 5712’ from DER, 23’ left of centerline, up to 672’ MSL.
Trees, poles, transmission line beginning 5782’ from DER, 67’ right of centerline, up to 628’ MSL.
Pole 1.1 NM from DER, 2125’ left of centerline, 40’ AGL/1219’ MSL.
Tower 1.1 NM from DER, 2086’ left of centerline, 60’ AGL/1236’ MSL.
Tower, poles, trees, terrain, fence, vegetation, transmission lines beginning 1.1 NM from DER, 51’ left of centerline, up to 63’ AGL/1242’ MSL.
Tree 1.1 NM from DER, 523’ right of centerline, 672’ MSL.
Pole 1.1 NM from DER, 2249’ right of centerline, 37’ AGL/689’ MSL.
Transmission line 1.2 NM from DER, 1980’ right of centerline, 38’ AGL/771’ MSL.
Poles beginning 1.2 NM from DER, 1962’ right of centerline, up to 57’ AGL/774’ MSL.
Building, pole beginning 1.2 NM from DER, 517’ right of centerline, up to 29’ AGL/813’ MSL.
Trees, poles, transmission lines beginning 1.2 NM from DER, 52’ right of centerline, up to 824’ MSL.

CON’T
SAN DIEGO/EL CAJON, CA (CON’T)

GILLESPIE FLD (SEE) (CON’T)

Rwy 9R, pole 921’ from DER, 521’ right of centerline, 42’ AGL/432’ MSL. Vehicle on road 1544’ from DER, 404’ left of centerline, 428’ MSL.
Transmission line, sign beginning 1669’ from DER, 24’ right of centerline, up to 51’ AGL/452’ MSL.
Vehicle on road 1827’ from DER, 409’ left of centerline, 430’ MSL.
Building 1855’ from DER, 772’ left of centerline, 24’ AGL/448’ MSL.
Trees, poles beginning 1879’ from DER, 732’ left of centerline, up to 468’ MSL.
Poles beginning 1960’ from DER, 67’ right of centerline, up to 60’ AGL/455’ MSL.
Tower, tree beginning 2042’ from DER, 258’ right of centerline, up to 65’ AGL/459’ MSL.
Trees, pole beginning 2226’ from DER, 173’ left of centerline, 480’ MSL.
Tree, pole building beginning 2352’ from DER, 264’ left of centerline, up to 486’ MSL.
Tree, pole beginning 2363’ from DER, 594’ left of centerline, up to 499’ MSL.
Tree, poles beginning 2490’ from DER, 41’ right of centerline, up to 480’ MSL.
Tree 2569’ from DER, 1038’ left of centerline, 519’ MSL.
Trees, pole, vegetation beginning 2673’ from DER, 92’ left of centerline, up to 522’ MSL.
Trees, transmission line beginning 3540’ from DER, 4’ left of centerline, up to 530’ MSL.
Tree, pole beginning 3633’ from DER, 82’ right of centerline, up to 505’ MSL.
Trees, poles, transmission line beginning 3888’ from DER, 45’ left of centerline, up to 566’ MSL.
Poles, transmission line beginning 4572’ from DER, 259’ left of centerline, up to 38’ AGL/567’ MSL.
Poles, transmission line beginning 4885’ from DER, 116’ left of centerline, up to 43’ AGL/584’ MSL.
Transmission line, pole beginning 5310’ from DER, 288’ left of centerline, up to 62’ AGL/594’ MSL.
Tree, trees, transmission line beginning 5382’ from DER, 173’ left of centerline, up to 624’ MSL.
Poles beginning 1 NM from DER, 118’ left of centerline, up to 39’ AGL/641’ MSL.
Tree, trees, transmission line beginning 1 NM from DER, 44’ left of centerline, up to 654’ MSL.
Trees, poles, beginning 1 NM from DER, 51’ left of centerline, up to 672’ MSL.
Trees, pole, transmission line beginning 1.1 NM from DER, 16’ right of centerline, up to 628’ MSL.
Pole 1.2 NM from DER, 2543’ left of centerline, 40’ AGL/1219’ MSL.
Tower 1.2 NM from DER, 2507’ left of centerline, 60’ AGL/1236’ MSL.
Tower, trees, poles, terrain, fence, vegetation, transmission lines beginning 1.2 NM from DER, 11’ left of centerline, up to 63’ AGL/1242’ MSL.
Tree 1.3 NM from DER, 103’ right of centerline, 672’ MSL.
Tree 1.3 NM from DER, 1829’ right of centerline, 37’ AGL/689’ MSL.
Transmission line 1.3 NM from DER, 1559’ right of centerline, 38’ AGL/771’ MSL.
Poles beginning 1.3 NM from DER, 1541’ right of centerline, up to 57’ AGL/774’ MSL.
Building, pole beginning 1.3 NM from DER, 97’ right of centerline, up to 29’ AGL/813’ MSL.
Trees, poles, beginning 1.3 NM from DER, 193’ right of centerline, up to 824’ MSL.
Rwy 17, fence 14’ from DER, 43’ right of centerline, 9’ AGL/393’ MSL.
Pole 36’ from DER, 456’ right of centerline, 40’ AGL/424’ MSL.
Poles, building beginning 50’ from DER, 123’ right of centerline, up to 45’ AGL/428’ MSL.
Poles, buildings beginning 266’ from DER, 149’ right of centerline, up to 42’ AGL/429’ MSL.
Trees, pole, building beginning 390’ from DER, 33’ right of centerline, up to 457’ MSL.
Trees, pole, building beginning 970’ from DER, 57’ left of centerline, up to 470’ MSL.
Tree, building beginning 1145’ from DER, 377’ right of centerline, up to 473’ MSL.
Trees, buildings, poles beginning 1618’ from DER, 54’ left of centerline, up to 472’ MSL.
Pole 1.4 NM from DER, 2367’ right of centerline, 43’ AGL/814’ MSL.
Pole 1.5 NM from DER, 2346’ right of centerline, 43’ AGL/858’ MSL.
Poles, vegetation beginning 1.6 NM from DER, 2319’ right of centerline, up to 38’ AGL/746’ MSL.
Rwy 27L, tree 1548’ from DER, 765’ right of centerline, 428’ MSL.
Trees beginning 2189’ from DER, 700’ right of centerline, up to 453’ MSL.
Tree 2943’ from DER, 655’ left of centerline, 441’ MSL.
Tree, building beginning 3732’ from DER, 464’ left of centerline, up to 470’ MSL.
Tree, pole beginning 5745’ from DER, 827’ left of centerline, up to 572’ MSL.
Vehicle 1.4 NM from DER, 1507’ left of centerline, 722’ MSL.
Rwy 27R, tree, building beginning 178’ from DER, 235’ right of centerline, up to 411’ MSL.
Vehicle on road 510’ from DER, 412’ left of centerline, 379’ MSL.
Trees, poles beginning 525’ from DER, 38’ right of centerline, up to 453’ MSL.
Pole 799’ from DER, 83’ left of centerline, 41’ AGL/390’ MSL.
Trees, poles beginning 2068’ from DER, 19’ left of centerline, up to 470’ MSL.
Tree, tower beginning 4080’ from DER, 978’ left of centerline, 572’ MSL.
Vegetation 1.2 NM from DER, 1924’ left of centerline, 722’ MSL.
Rwy 35, pole 34’ from DER, 202’ right of centerline, 21’ AGL/388’ MSL.
Poole, building beginning 51’ from DER, 248’ right of centerline, up to 29’ AGL/399’ MSL.
Trees, poles, buildings beginning 231’ from DER, 29’ right of centerline, up to 447’ MSL.
Poles beginning 381’ from DER, 336’ left of centerline, up to 42’ AGL/405’ MSL.
Tree 1107’ from DER, 118’ left of centerline, 408’ MSL.
Trees 1145’ from DER, 581’ left of centerline, 427’ MSL.
Tree 1486’ from DER, 293’ left of centerline, 438’ MSL.
Trees beginning 1487’ from DER, 344’ left of centerline, up to 439’ MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

ORIG 16OCT14 (14289) (FAA)

Rwy 27L, heading as assigned by ATC; requires min. climb of 320’ per NM to 1200.
Rwy 27R, heading as assigned by ATC; requires min. climb of 420’ per NM to 1200.
Rwy 35, heading as assigned by ATC; requires min. climb of 400’ per NM to 1600.
SAN LUIS OBISPO, CA  
SAN LUIS COUNTY RGNL (SBP)  
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES  
AMDT 8  25FEB21 (21056)  (FAA)  
TAKEOFF MINIMUMS:  
Rwys 7, 25, NA - Obstacles.  
Rwy 29, std. w/ min. climb of 412’ per NM to 2100 or 2800-3 for VCOA.  
DEPARTURE PROCEDURE:  
Rwy 11, climb on heading 110° to 700, then climbing right turn to intercept MQO VORTAC R-115 to MQO VORTAC and hold, continue climb in MQO holding pattern (hold southeast, left turns, 306° inbound) to cross MQO VORTAC at or above 4000 or MEA for route of flight.  
Rwy 29, climb on heading 290° to intercept MQO VORTAC R-050 to MQO VORTAC and hold, continue climb in MQO holding Pattern (hold southeast, left turns, 306° inbound) to cross MQO VORTAC at or above 4000 or MEA for route of flight.  
VCOA:  
Rwys 11, 29, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross San Luis County Rgnl at or above 2900 before proceeding direct MQO VORTAC.  
TAKEOFF OBSTACLE NOTES:  
Rwy 11, fence 14’ from DER, 492’ left of centerline, 6’ AGL/214’ MSL.  
Tree 295’ from DER, 565’ left of centerline, 27’ AGL/235’ MSL.  
Vehicle on road 398’ from DER, 389’ right of centerline, 223’ MSL.  
Trees beginning 498’ from DER, 383’ left of centerline, up to 34’ AGL/240’ MSL.  
Rwy 11, vehicle on road 591’ from DER, 396’ right of centerline.  
231’ MSL.  
Vehicle on road 600’ from DER, 507’ right of centerline, 240’ MSL.  
Vehicle on road, building beginning 621’ from DER, 269’ right of centerline, up to 247’ MSL.  
Tree, terrain beginning 994’ from DER, 596’ right of centerline, up to 10’ AGL/262’ MSL.  
Tree 1061’ from DER, 751’ right of centerline, 54’ AGL/311’ MSL.  
Tree 1072’ from DER, 808’ left of centerline, 26’ AGL/242’ MSL.  
Lighting 1090’ from DER, 22’ left of centerline, 34’ AGL/252’ MSL.  
Pole, lighting, terrain beginning 1101’ from DER, on centerline, up to 27’ AGL/253’ MSL.  
Trees, pole, lighting, terrain, building, vehicle on road beginning 1107’ from DER, 2’ right of centerline, up to 56’ AGL/316’ MSL.  
Terrain 1696’ from DER, 96’ left of centerline, 256’ MSL.  
Vehicle on road 1795’ from DER, 488’ left of centerline, 258’ MSL.  
Terrain 1798’ from DER, 99’ left of centerline, 259’ MSL.  
Terrain beginning 1883’ from DER, 14’ left of centerline, up to 261’ MSL.  
Vehicle on road 1980’ from DER, 561’ left of centerline, 264’ MSL.  
Trees, terrain beginning 1989’ from DER, 3’ left of centerline, up to 25’ AGL/284’ MSL.  
Trees, terrain, buildings, poles, vehicle on road beginning 2099’ from DER, 3’ left of centerline, up to 35’ AGL/290’ MSL.  
Building, vehicle on road beginning 2245’ from DER, 592’ left of centerline, up to 30’ AGL/291’ MSL.  
Buildings, vehicle on road beginning 2267’ from DER, 198’ left of centerline, up to 31’ AGL/293’ MSL.  
Buildings, vehicle on road beginning 2400’ from DER, 54’ left of centerline, up to 44’ AGL/294’ MSL.  
Rwy 29, trees beginning 69’ from DER, 463’ right of centerline, up to 26’ AGL/176’ MSL.  
Terrain 2 NM from DER, 2497’ right of centerline, 507’ MSL.  
Terrain beginning 2 NM from DER, 2948’ right of centerline, up to 514’ MSL.  
Terrain 2.1 NM from DER, 2713’ right of centerline, 557’ MSL.  
Fence 2.1 NM from DER, 2691’ right of centerline, 3’ AGL/560’ MSL.  
Fence 2.1 NM from DER, 2698’ right of centerline, 3’ AGL/561’ MSL.  
Terrain 2.2 NM from DER, 2704’ right of centerline, 564’ MSL.  
Fence, terrain beginning 2.2 NM from DER, 2481’ right of centerline, up to 3’ AGL/565’ MSL.  
SAN NICHOLAS ISLAND NOLF (KNSI)  
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES  
AMDT 1  03JAN19 (19003)  
DEPARTURE PROCEDURE:  
Rwy 30, diverse departures authorized 301° to 121° CW.  
TAKEOFF OBSTACLE NOTES:  
Rwy 12, terrain 0’ from DER, 500’ right of cntrln, 515’ MSL.  
Rwy 30, locator antenna 51’ from DER, 3’ right of cntrln, 8’ AGL/491’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

SANTA ANA, CA

JOHN WAYNE/ORANGE COUNTY (SNA)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6 18SEP14 (21168) (FAA)

DEPARTURE PROCEDURE:

Rwys 2L/R, climbing left turn direct SLI VORTAC.

Rwys 20L/R, climbing right turn direct SLI VORTAC.

All aircraft climb in SLI holding pattern (hold S, left turns, 351° inbound) to cross SLI VORTAC at or above MEA for direction of flight before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 2L, pole and trees beginning 94' from DER, 490' left of centerline, up to 26' AGL/63' MSL.

Trees beginning 970' from DER, 608' left of centerline, up to 90' AGL/127' MSL.

Rwy 2R, navaid 497' from DER, 125' right of centerline, 19' AGL/55' MSL.

Pole 1104' from DER, 307' right of centerline, 19' AGL/55' MSL.

Building 1681' from DER, 671' right of centerline, 49' AGL/87' MSL.

Tree 1745' from DER, 309' right of centerline, 52' AGL/85' MSL.

Rwy 20R, pole and trees beginning 204' from DER, 490' right of centerline, up to 38' AGL/91' MSL.

Wsk on hangar 536' from DER, 605' left of centerline, 40' AGL/92' MSL.

Poles and trees beginning 808' from DER, 489' right of centerline, up to 58' AGL/108' MSL.

Tree 1574' from DER, 765' left of centerline, 60' AGL/113' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 1 16OCT14 (14289) (FAA)

Rwys 2L, 2R, headings as assigned by ATC.

Rwy 20L, headings as assigned by ATC; requires minimum climb of 260' per NM to 1300.

Rwy 20R, headings as assigned by ATC; requires minimum climb of 270' per NM to 1300.

SANTA BARBARA, CA

SANTA BARBARA MUNI (SBA)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 8A 29MAR18 (18088) (FAA)

TAKEOFF MINIMUMS:

Rwys 33L, 33R: NA - ATC.

Rwy 7, std. w/ min. climb of 260' per NM to 1100, or 2800-3 for VCOA.

DEPARTURE PROCEDURE:

Rwy 7, climbing right turn heading 170°, thence . . .

Rwy 25, climbing left turn heading 155°, thence . . .

Rwy 15L, 15R, climbing heading 152°, thence . . .

...on RZS R-185 to GOLET INT. Climb in GOLET INT holding pattern (SE, right turns, 307° inbound), to cross GOLET INT at or above MEA/MCA for route of flight, before proceeding on course.

VCOA:

Rwy 7, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Santa Barbara Muni airport southbound at or above 2700, thence . . .

...on RZS R-185 to GOLET INT. Climb in GOLET INT holding pattern (SE, right turns, 307° inbound), to cross GOLET INT at or above MEA/MCA for route of flight, before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 7, vehicles on parking lot 88' from DER, 516' right of centerline, 25' MSL.

Pole 208' from DER, 243' left of centerline, 25' AGL/36' MSL.

Vehicles on parking lot beginning 255' from DER, 518' right of centerline, up to 26' MSL.

Poles and a tree beginning 715' from DER, 579' right of centerline, up to 47' MSL.

...on RZS R-185 to GOLET INT. Climb in GOLET INT holding pattern (SE, right turns, 307° inbound), to cross GOLET INT at or above MEA/MCA for route of flight, before proceeding on course.

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

SANTA BARBARA, CA (CON’T)
SANTA BARBARA MUNI (SBA) (CON’T)

Rwy 15R, bushes beginning 18' from DER, 33' right of centerline, up to 8' AGL/15' MSL.
Bushes and a sign beginning 25' from DER, 240' left of centerline, up to 6' AGL/17' MSL.
Bush 993' from DER, 758' right of centerline, 61' MSL.
Trees, fence, pole, sign, building, overpass, and vehicle on road beginning 1099' from DER, 26' right of centerline, up to 91' AGL/145' MSL.
Trees beginning 1355' from DER, 16' left of centerline, up to 25' AGL/55' MSL.
Trees and a bush beginning 1676' from DER, 728' right of centerline, up to 13' AGL/88' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 1  26MAY16  (16147)  (FAA)

Rwy 7, heading as assigned by ATC; requires minimum climb of 270' per NM to 1100.
Rwy 15L/R, heading as assigned by ATC.

SANTA MARIA, CA
SANTA MARIA PUB/CAPT G ALLAN HANCOCK FLD (SMX)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6  03MAY12  (21112)  (FAA)

TAKEOFF MINIMUMS:
Rwy 20, NA - Obstacles.
Rwy 12, 400-2½ w/min. climb of 287' per NM to 1500 or std. w/min. climb of 388' per NM to 1200.

DEPARTURE PROCEDURE:
Rwy 2, climbing left turn;
Rwy 12, climbing left turn (do not exceed 230 KIAS until established northwest bound to GLJ VOR).
Rwy 30, climb heading 294°.

All aircraft: climb direct GLJ VOR, then continue climb to airway MEA via GLJ R-300 to intercept MQO R-137 to MQO VORTAC. Cross MQO VORTAC at or above MEA/MCA for assigned route of flight.

TAKEOFF OBSTACLE NOTES:
Rwy 2, trees beginning 541' from DER, 153' right of centerline, up to 108' AGL/332' MSL.
Tree 1018' from DER, 246' left of centerline, 34' AGL/254' MSL.
Rwy 12, trees beginning 988' from DER, 271' right of centerline, up to 83' AGL/402' MSL.
Trees beginning 54' from DER, 277' left of centerline, up to 84' AGL/409' MSL.

SANTA MONICA, CA
SANTA MONICA MUNI (SMO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 7A  15JUN23  (23166)  (FAA)

TAKEOFF MINIMUMS:
Use TOPANGA DEPARTURE.

TAKEOFF OBSTACLE NOTES:
Rwy 3, wall 8' from DER, 352' right of centerline, 188' MSL.
Wall 15' from DER, 337' left of centerline, 191' MSL.
Fence, light poles, vertical structures beginning 15' from DER, 290' right of centerline, up to 189' MSL.
Walls beginning 45' from DER, 337' left of centerline, up to 192' MSL.
Fence, light pole beginning 112' from DER, 308' left of centerline, up to 194' MSL.
Trees beginning 764' from DER, 478' right of centerline, up to 213' MSL.
Tree 995' from DER, 619' right of centerline, 217' MSL.
Tree 1063' from DER, 236' left of centerline, 206' MSL.
Tree 1102' from DER, 289' left of centerline, 207' MSL.
Trees beginning 1126' from DER, 402' left of centerline, up to 214' MSL.
Rwy 21, pole, tree beginning 39' from DER, 358' right of centerline, up to 13' AGL/154' MSL.
Pole 213' from DER, 437' right of centerline, 30' AGL/174' MSL.
Trees, pole beginning 409' from DER, 390' right of centerline, up to 191' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 3  15JUN23  (23166)  (FAA)

Rwy 3, heading as assigned by ATC; requires min. climb of 339' per NM to 1100.
Rwy 21, heading as assigned by ATC; requires min. climb of 350' per NM to 3900.
SANTA YNEZ, CA
SANTA YNEZ/KUNKLE FLD (IZA)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 04FEB16 (22363) (FAA)
TAKEOFF MINIMUMS:
Rwy 8, 500-2¼ w/min. climb of 251’ per NM to 1700 or std. w/min. climb of 317’ per NM to 1300.
Rwy 26, 300-2 or std. w/min. climb of 226’ per NM to 1100.
DEPARTURE PROCEDURE:
Rwy 8, climbing left turn heading 260° to 6000, intercept GVO VORTAC R-307 to ORCUT INT/MQO 30.00 DME. Do not exceed 150 KIAS until established on GVO VORTAC R-307.
Rwy 26, climb heading 264° to 6000, intercept GVO VORTAC R-307 to ORCUT INT/MQO 30.00 DME.
TAKEOFF OBSTACLE NOTES:
Rwy 8, sign 23’ from DER, 81’ left of centerline, 28’ AGL/675’ MSL. Building 384’ from DER, 240’ left of centerline, 7’ AGL/684’ MSL. Tree 973’ from DER, 592’ right of centerline, 57’ AGL/704’ MSL.
Rwy 26, buildings and hangars beginning 9’ from DER, 330’ right of centerline, up to 27’ AGL/693’ MSL. Tree 299’ from DER, 415’ right of centerline, 24’ AGL/664’ MSL. Fence 315’ from DER, 407’ left of centerline, 2’ AGL/666’ MSL. Trees 391’ from DER, 233’ left of centerline, 56’ AGL/696’ MSL. Trees 435’ from DER, 305’ right of centerline, up to 58’ AGL/698’ MSL. Fence 749’ from DER, 273’ right of centerline, 7’ AGL/678’ MSL. Tree 859’ from DER, 427’ right of centerline, 54’ AGL/688’ MSL. Tree 1271’ from DER, 296’ left of centerline, 47’ AGL/687’ MSL.

SHAFTER, CA
SHAFTER-MINTER FLD (MIT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 02MAY13 (21224) (FAA)
DEPARTURE PROCEDURE:
Rwys 12, 17, 26, climbing right turn heading 300° to 4000. Thence ...
Rwys 8, 30, 35, climbing left turn heading 240° to 4000. Thence ...
Westbound aircraft intercept V248 until reaching 4000, then proceed on course. Eastbound aircraft intercept V248 upon reaching 4000 turn right direct EHF VORTAC, then proceed on course.
TAKEOFF OBSTACLE NOTES:
Rwy 8, vehicles on road beginning 41’ from DER, 7’ left of centerline, up to 15’ AGL/442’ MSL.
Rwy 12, windsock 504’ from DER, 397’ left of centerline, 26’ AGL/439’ MSL.
Trees beginning 2476’ from DER, 344’ left of centerline, up to 75’ AGL/488’ MSL.
Trees beginning 862’ from DER, 378’ right of centerline, up to 31’ AGL/441’ MSL.
Rwy 17, vehicles on road 489’ from DER, left and right of centerline, 15’ AGL/429’ MSL.
Tree 1150’ from DER, 724’ left of centerline, 51’ AGL/463’ MSL.
Windsock 1340’ from DER, 43’ right of centerline, 46’ AGL/455’ MSL.
Rwy 30, vehicles on road 146’ from DER, 273’ left of centerline, 10’ AGL/420’ MSL.
Rwy 35, vehicles on road 461’ from DER, 86’ right of centerline to 386’ right of centerline, 15’ AGL/442’ MSL.

TORRANCE, CA
ZAMPERINI FLD (TOA)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A 29JUL10 (21168) (FAA)
TAKEOFF MINIMUMS:
Rwy 11L, 400-2 or std. w/min. climb of 325’ per NM to 600.
Rwy 11R, 400-2½ or std. w/min. climb of 325’ per NM to 600.
DEPARTURE PROCEDURE:
Rwys 29L/R, climb runway heading.
Rwys 11L/R, climbing left turn to heading 290°.
Both departures climb to 3000, intercept LAX R-170 to LIMBO Int.

TUSI AHP (KHGT)
HUNTER LIGGETT, CA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 25SEP08 (08269)
Helicopter use only. Climb on a heading between 010° CW to 190° from heliport (or a minimum climb rate of 530’ per NM to 7800 for all other courses).
TWENTYNINE PALMS, CA
TWENTYNINE PALMS (TNP)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 05OCT00 (00279) (FAA)
TAKEOFF MINIMUMS:
Rwy 17, NA.
Rwys 8, 26, 35, std. with a min. climb of 280' per NM to 5500.
DEPARTURE PROCEDURE:
Rwys 8, 26, 35, turn right direct TNP VORTAC. Eastbound on V264 continue climb on course. All others climb in TNP holding pattern (E, left turns, 255° inbound) to cross TNP VORTAC at or above 6000 before proceeding on course. Northeast bound on V514-538 cross TNP VORTAC at or above 7900.

UPLAND, CA
CABLE (CCB)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3A 19JUL18 (18200) (FAA)
TAKEOFF MINIMUMS:
Rwy 6, 300-1⅞ or std. w/min. climb of 332' per NM to 1900.
DEPARTURE PROCEDURE:
Rwy 6, climbing right turn.
Rwy 24, climbing left turn.
All aircraft climb direct PDZ VORTAC and hold (east, right turns, 258°, inbound), continue climb-in-hold to MEA for route of flight.
TAKEOFF OBSTACLE NOTES:
Rwy 6, pole, sign beginning 21’ from DER, 99’ right of centerline, up to 40’ AGL/1464’ MSL.
Sign 31’ from DER, 100’ left of centerline, 7’ AGL/1451’ MSL.
Tree, pole, traverse way, fence, building beginning 37’ from DER, 7’ right of centerline, up to 41’ AGL/1472’ MSL.
Traverse way, fence beginning 94’ from DER, 82’ left of centerline, up to 1461’ MSL.
Building, pole, traverse way, fence beginning 106’ from DER, 100’ left of centerline, up to 40’ AGL/1495’ MSL.
Tree, building, traverse way beginning 260’ from DER, 6’ right of centerline, up to 1484’ MSL.
Pole 35’ from DER, 410’ left of centerline, 40’ AGL/1498’ MSL.
Pole, vertical point, building, fence, traverse way, vegetation, tree beginning 411’ from DER, 193’ left of centerline, up to 36’ AGL/1499’ MSL.
Pole, building, fence, tree, general utility, traverse way beginning 628’ from DER, 34’ left of centerline, up to 32’ AGL/1500’ MSL.
Pole, tree, general utility, tower, building beginning 961’ from DER, 180’ left of centerline, up to 57’ AGL/1532’ MSL.
Pole, building beginning 1228’ from DER, 541’ left of centerline, up to 76’ AGL/1545’ MSL.
Trees beginning 1271’ from DER, 80’ right of centerline, up to 1498’ MSL.
Pole, building, traverse way, tree beginning 1289’ from DER, 29’ left of centerline, up to 75’ AGL/1548’ MSL.
Trees beginning 1860’ from DER, 16’ right of centerline, up to 1506’ MSL.
Tree, building, traverse way beginning 933’ from DER, 25’ left of centerline, up to 1555’ MSL.
Tree, building beginning 2152’ from DER, 67’ left of centerline, up to 1565’ MSL.
Tree, building, pole beginning 2241’ from DER, 58’ left of centerline, up to 1573’ MSL.
Trees beginning 2485’ from DER, 104’ right of centerline, up to 1511’ MSL.
Trees beginning 2787’ from DER, 0’ right of centerline, up to 1524’ MSL.
Tree, building, pole beginning 3512’ from DER, 0’ left of centerline, up to 1575’ MSL.
Tree, pole, building, traverse way beginning 3782’ from DER, 384’ left of centerline, up to 1593’ MSL.
Tree, building, pole, traverse way beginning 4075’ from DER, 668’ left of centerline, up to 1610’ MSL.
Tree, building, traverse way, pole beginning 4235’ from DER, 596’ left of centerline, up to 1619’ MSL.
Tree, pole beginning 5480’ from DER, 949’ left of centerline, up to 1620’ MSL.
Tree 1 NM from DER, 1434’ left of centerline, 1632’ MSL.
Rwy 24, traverse way, tree beginning 15’ from DER, 60’ right of centerline, up to 1408’ MSL.
Sign beginning 24’ from DER, 97’ left of centerline, up to 13’ AGL/1396’ MSL.
Traverse way, tree, pole beginning 313’ from DER, 383’ right of centerline, up to 1412’ MSL.
Tree 699’ from DER, 682’ right of centerline, 1416’ MSL.
Pole 1296’ from DER, 747’ right of centerline, 47’ AGL/1427’ MSL.
Pole 1357’ from DER, 583’ right of centerline, 62’ AGL/1436’ MSL.

VAN NUYS, CA
VAN NUYS (VNY)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6 21JUL16 (16203) (FAA)
TAKEOFF MINIMUMS:
Rwys 16L/R, std. w/min. climb of 370’ per NM to 7100.
Rwys 34L/R, std. w/min. climb of 370’ per NM to 7100.
DEPARTURE PROCEDURE:
Rwys 16L/R, climbing left turn on heading 053° and VNY R-095 to DARTS INT, thence...
Rwys 34L/R, climbing right turn on heading 143° and VNY R-095 to DARTS INT, thence...
...aircraft eastbound on V186 and southeast bound on V459 climb on course, all others climb in DARTS holding pattern (hold W, right turns, 095° inbound) to depart DARTS INT at or above 7100.
CON’T

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

VAN NUYS, CA (CON’T)

TAKEOFF MINIMUMS (VNY) (CON’T)

TAKEOFF OBSTACLE NOTES:

Rwy 16L, light on hangar 713’ from DER, 27’ AGL/2873’ MSL.

Rwy 16R, hangar 209’ from DER, 516’ right of centerline, 15’ AGL/755’ MSL.

Flagpole 570’ from DER, 549’ right of centerline, 21’ AGL/761’ MSL.

Building 941’ from DER, 599’ left of centerline, 28’ AGL/774’ MSL.

Trees beginning 1129’ from DER, left and right of centerline, up to 81’ AGL/821’ MSL.

Rwy 34L, blast fence 169’ from DER, 405’ left of centerline, 10’ AGL/812’ MSL.

Obstruction light on blast fence, 241’ from DER, 195’ left of centerline, 17’ AGL/819’ MSL.

Multiple trees beginning 325’ from DER, 549’ right of centerline, up to 91’ AGL/921’ MSL.

Train 305’ from DER, 369’ right of centerline, 23’ AGL/832’ MSL.

Building 424’ from DER, 589’ right of centerline, 32’ AGL/831’ MSL.

Trees beginning 324’ from DER, left and right of centerline, up to 91’ AGL/921’ MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

ORIG  21JUL16  (16203)  (FAA)

Rwy 16L, heading as assigned by ATC; requires minimum climb of 380’ per NM to 2600.

Rwy 16R, heading as assigned by ATC; requires minimum climb of 450’ per NM to 2600.

VANDENBERG SFB (KVBG)

LOMPOC, CA

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2  10SEP20  (21336)  (USSF)

TAKEOFF MINIMUMS:

Rwy 12, 300-1/2 w/min. climb of 310’/NM to 3300 or std. w/min. climb of 330’/NM to 3200.

DEPARTURE PROCEDURE:

Rwy 30, use VANDENBERG THREE DEPARTURE.

VCOA:

Rwys 12, 30, for climb in visual conditions 1700-2½. Obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Vandenberg airport at or above 1900 before proceeding on course. Remain within 4 NM of Vandenberg airport during climb in visual conditions.

NOTE: Aircrews must notify ATC prior to executing this VCOA procedure.

DIVERSE VECTOR AREA (RADAR VECTORS)

ORIG  09SEP21  (21336)  (USSF)

Rwy 12, hdg as assigned by ATC; requires min. climb of 296’/NM to 3300.

Rwy 30, hdg as assigned by ATC; requires min. climb of 247’/NM to 3300.

VICTORVILLE, CA

SOUTHERN CALIFORNIA LOGISTICS (VCV)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2  15MAR07  (07074)  (FAA)

TAKEOFF MINIMUMS:

Rwy 3, std. w/min. climb of 266’ per NM to 3500 or 5300-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

Rwy 3, climbing left turn heading 220°, thence . . .

or for climb in visual conditions cross Southern California Logistics Airport at or above 8000 MSL before proceeding on course.

Rwys 17, 21, climbing right turn heading 325°, thence . . .

Rwy 35, climbing left turn heading 220°, thence . . .

. . . All aircraft climb via VCV VOR/DME R-269 to ETHER INT. Continue climb in ETHER holding pattern (NE PMD VORTAC, left turn, 247° inbound) to MEA for direction of flight.

TAKEOFF OBSTACLE NOTES:

Rwy 3, pole 408’ from DER, 511’ right of centerline, 29’ AGL/2873’ MSL.

Terrain beginning 153’ from DER, 41’ right of centerline, up to 3196’ MSL.

Terrain beginning 17’ from DER, 104’ left of centerline, up to 2855’ MSL.

Tree 2.1 NM from DER, 3735’ right of centerline, 50’ AGL/3269’ MSL.

Rwy 17, sign 248’ from DER, 277’ left of centerline, 14’ AGL/2896’ MSL.

Antenna on building 701’ from DER, 203’ left of centerline, 20’ AGL/2902’ MSL.
INSTRUMENT APPROACH PROCEDURE CHARTS

IFR ALTERNATE AIRPORT 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>
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<tr>
<td>BAKERSFIELD, CA</td>
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<tr>
<td>FLD (BFL)</td>
<td>ILS or LOC Rwy 30R¹</td>
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<td>RNAV (GPS) Rwy 12L</td>
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<td>RNAV (GPS) Rwy 30R</td>
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<td></td>
<td>NA when local weather not available.</td>
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<td>¹NA when control tower closed.</td>
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<tr>
<td>BIG BEAR CITY, CA</td>
<td>BLYTHE (BLH)</td>
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<td>RNAV (GPS) Rwy 26¹</td>
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<td>VOR/DME Rwy 26²</td>
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<td>¹Categories A, B, 1700-2; Categories C, D, 1700-3</td>
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<td>²Category D, 900-2¾.</td>
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<td>BORREGO SPRINGS, CA</td>
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<td>VALLEY (L08)</td>
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<td>BURBANK, CA</td>
<td>BOB HOPE (BUR)</td>
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<td>RNAV (GPS) A2</td>
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<td>RNAV (GPS) Z Rwy 8⁴</td>
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<td>RNAV (RNP) Y Rwy 8⁵</td>
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<td>¹LOC, Category B, 900-2; Category C, 1500-3; Category D, 1600-3.</td>
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<td>²Categories A, B, 1100-2; Category C, 1500-3; Category D, 1600-3.</td>
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<td>³ILS Categories A, B, C, D 900-2½; LOC, Categories A, B, 900-2; Category C, 1500-3; Category D, 1600-3.</td>
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<td>⁴Categories A, B, 900-2; Category C, 1500-3; Category D, 1600-3.</td>
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<td>⁵Categories A, B, C, D, 800-2½.</td>
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<td>CAMARILLO, CA</td>
<td>CAMARILLO (CMA)</td>
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<td>RNAV (GPS) Y Rwy 26¹²</td>
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<td>VOR Rwy 26¹³</td>
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<td>³Category D, 1100-3.</td>
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<td>⁴Categories A, B, 1100-2; Category C, 1100-3.</td>
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</tbody>
</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).
<table>
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<th>NAME</th>
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<tr>
<td>MC CLELLAN-PALOMAR (CRQ)</td>
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<td>RNAV (GPS) Y Rwy 6</td>
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<td>BARSTOW-DAGGETT (DAG)</td>
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<td>VOR or TACAN Rwy 22</td>
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<td>RNAV (GPS) Rwy 24</td>
</tr>
<tr>
<td></td>
<td>VOR-B 3</td>
</tr>
<tr>
<td>1NA when local weather not available.</td>
<td></td>
</tr>
<tr>
<td>2Category C, 800-2¼; Category D, 800-2½.</td>
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</tr>
<tr>
<td>3Categories A, B, 1000-2; Categories C, D, 1000-3.</td>
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<td>LOMPOC, CA</td>
<td>RNAV (GPS) Rwy 25</td>
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<td>LOMPOC (LPC)</td>
<td>RNAV (GPS) Rwy 25</td>
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<tr>
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<td>3Categories A, B, 1300-2.</td>
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<td>LONG BEACH, CA</td>
<td>RNAV (GPS) Rwy 30</td>
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<td>LONG BEACH (DAUGHERTY FLD) (LGB)</td>
<td>RNAV (GPS) Rwy 30</td>
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<td>RNAV (RNP) Y Rwy 30</td>
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<td>VOR or TACAN Rwy 30</td>
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</tr>
<tr>
<td>1LOC, Category C, 800-2¼; Category D, 800-2½.</td>
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<tr>
<td>2Category C, 800-2¼; Category D, 800-2½.</td>
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<tr>
<td>LOS ANGELES, CA</td>
<td>RNAV (GPS) Rwy 25</td>
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<tr>
<td>WHITEMAN (WHP)</td>
<td>RNAV (GPS) Rwy 25</td>
</tr>
<tr>
<td>Category B, 900-2; Category C, 1200-3.</td>
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**ALTERNATE MINS**

SW-3, 30 NOV 2023 to 25 JAN 2024

SW-3, 30 NOV 2023 to 25 JAN 2024
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<th>NAME</th>
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<td><strong>MOJAVE, CA</strong></td>
<td>MOJAVE AIR AND SPACE PORT/RUTAN FLD (MHV).................................................. RNAV (GPS) Rwy 4&lt;sup&gt;12&lt;/sup&gt;</td>
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<td>RNAV (GPS) Rwy 22&lt;sup&gt;12&lt;/sup&gt;</td>
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<td>RNAV (GPS) Rwy 30&lt;sup&gt;3&lt;/sup&gt;</td>
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<td></td>
<td>&lt;sup&gt;1&lt;/sup&gt;NA when local weather not available.</td>
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<tr>
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<td><strong>NEEDLES, CA</strong></td>
<td>NEEDLES (EED)................................................................................................. RNAV (GPS) Rwy 29</td>
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<td>VOR-A</td>
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<td><strong>OCEANSIDE, CA</strong></td>
<td>BOB MAXWELL MEML AIRFIELD (OKB).................................................................. RNAV (GPS) Rwy 25&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>VOR-A&lt;sup&gt;2&lt;/sup&gt;</td>
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<td>ILS or LOC Rwy 26L&lt;sup&gt;2&lt;/sup&gt;</td>
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<td>&lt;sup&gt;2&lt;/sup&gt;LOC, Categories C, D, 800-2½.</td>
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<td>&lt;sup&gt;3&lt;/sup&gt;LOC, Category C, 800-2½; Category D, 800-2½.</td>
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<td><strong>OXNARD, CA</strong></td>
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<td>RNAV (GPS) Rwy 25&lt;sup&gt;5&lt;/sup&gt;</td>
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<td>VOR Rwy 25&lt;sup&gt;5&lt;/sup&gt;</td>
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<td>&lt;sup&gt;1&lt;/sup&gt;NA when control tower closed.</td>
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<td>&lt;sup&gt;2&lt;/sup&gt;LOC, Categories A, B, 1200-2; Category C, 1800-3.</td>
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<td>&lt;sup&gt;3&lt;/sup&gt;Categories A, B, 1200-2; Category C, 1800-3.</td>
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<td><strong>PALM SPRINGS, CA</strong></td>
<td>JACQUELINE COCHRAN RGNL (TRM)............................................................................ RNAV (GPS) Rwy 30&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>RNAV (GPS) Rwy 35&lt;sup&gt;2&lt;/sup&gt;</td>
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<td>&lt;sup&gt;3&lt;/sup&gt;Categories A, B, 1600-2; Categories C, D, 1600-3.</td>
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<td><strong>RIVERSIDE, CA</strong></td>
<td>RIVERSIDE MUNI (RAL)......................................................................................... ILS or LOC Rwy 9&lt;sup&gt;123&lt;/sup&gt;</td>
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<td>RNAV (GPS) Rwy 9&lt;sup&gt;34&lt;/sup&gt;</td>
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<td>RNAV (GPS) Rwy 27&lt;sup&gt;3&lt;/sup&gt;</td>
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<td>VOR-A&lt;sup&gt;36&lt;/sup&gt; VOR Rwy 9&lt;sup&gt;35&lt;/sup&gt;</td>
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<td>&lt;sup&gt;1&lt;/sup&gt;NA when control tower closed.</td>
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<td>&lt;sup&gt;2&lt;/sup&gt;LOC, Categories B, 900-2; Category C, 1000-3; Category D, 1200-3.</td>
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<td>&lt;sup&gt;3&lt;/sup&gt;Categories A, B, 1300-2; Category C, 1300-3.</td>
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<td>&lt;sup&gt;4&lt;/sup&gt;Categories A, B, 1500-2; Categories C, D, 1500-3.</td>
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<td><strong>PALMDALE, CA</strong></td>
<td>PALMDALE USAF...................................................................................................... ILS or LOC Rwy 25&lt;sup&gt;12&lt;/sup&gt;</td>
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<td>RNAV (GPS) Rwy 7&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>RNAV (GPS) Rwy 22&lt;sup&gt;2&lt;/sup&gt;</td>
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<td>RNAV (GPS) Rwy 25&lt;sup&gt;3&lt;/sup&gt;</td>
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<td>VOR or TACAN Rwy 25&lt;sup&gt;4&lt;/sup&gt;</td>
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<td>&lt;sup&gt;1&lt;/sup&gt;NA when control tower closed.</td>
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<tr>
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<td>&lt;sup&gt;2&lt;/sup&gt;ILS, LOC, Categories A, B, 1000-2; Category C, 1000-3; Category D, 1200-3; Category E, 1300-3.</td>
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<td></td>
<td>&lt;sup&gt;3&lt;/sup&gt;Category D, 1200-3.</td>
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<tr>
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<td>&lt;sup&gt;4&lt;/sup&gt;Category D, 1200-3; Category E, 1300-3.</td>
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<tr>
<td><strong>PASO ROBLES, CA</strong></td>
<td>PASO ROBLES MUNI (PRB).................................................................................... RNAV (GPS) Rwy 19&lt;sup&gt;12&lt;/sup&gt;</td>
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<td>RNAV (GPS) Rwy 31&lt;sup&gt;12&lt;/sup&gt;</td>
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<td>VOR Rwy 19&lt;sup&gt;12&lt;/sup&gt; VOR-B&lt;sup&gt;5&lt;/sup&gt;</td>
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<td>&lt;sup&gt;1&lt;/sup&gt;NA when local weather not available.</td>
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<td><strong>RAMONA, CA</strong></td>
<td>RAMONA (RNM)..................................................................................................... RNAV (GPS)-B&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>RNAV (GPS) Rwy 25&lt;sup&gt;5&lt;/sup&gt;</td>
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<td>VOR/DME-A&lt;sup&gt;2&lt;/sup&gt;</td>
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<tr>
<td></td>
<td>NA when local weather not available.</td>
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<tr>
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<td>&lt;sup&gt;1&lt;/sup&gt;Categories A, B, 1400-2; Category C, 1800-3.</td>
</tr>
<tr>
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<td>&lt;sup&gt;2&lt;/sup&gt;Categories A, B, 900-2; Category C, 1800-3.</td>
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<td>&lt;sup&gt;3&lt;/sup&gt;Categories A, B, 1200-2; Category C, 1800-3.</td>
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<td><strong>OXNARD, CA</strong></td>
<td>RAMONA (RNM)..................................................................................................... RNAV (GPS)-B&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>RNAV (GPS) Rwy 25&lt;sup&gt;5&lt;/sup&gt;</td>
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<td>VOR/DME-A&lt;sup&gt;2&lt;/sup&gt;</td>
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<td>NA when local weather not available.</td>
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<td>&lt;sup&gt;1&lt;/sup&gt;Categories A, B, 1400-2; Category C, 1800-3.</td>
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<td>&lt;sup&gt;2&lt;/sup&gt;Categories A, B, 900-2; Category C, 1800-3.</td>
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<td></td>
<td>&lt;sup&gt;3&lt;/sup&gt;Categories A, B, 1200-2; Category C, 1800-3.</td>
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## NAME  ALTERNATE MINIMUMS

### SAN BERNARDINO, CA

**SAN BERNARDINO**  
INTL (SBD)……………………  
- ILS or LOC Z Rwy 6\textsuperscript{12}
- LOC Y Rwy 6\textsuperscript{13}
- RNAV (GPS) Y Rwy 6\textsuperscript{4}
- RNAV (GPS) Z Rwy 6\textsuperscript{5}

NA when local weather not available.  
\textsuperscript{1}NA when control tower closed.  
\textsuperscript{2}LOC, Category D, 1500-3.  
\textsuperscript{3}Categories A, B, 1000-2; Category C, 1000-3; Category D, 1500-3.  
\textsuperscript{4}Categories A, B, 1400-2; Category C, 1400-3; Category D, 1500-3.  
\textsuperscript{5}Category D, 1500-3.

### SAN DIEGO, CA

**BROWN FLD**  
MUNI (SDM)……………………  
- RNAV (GPS) Rwy 8L\textsuperscript{1}
- VOR or TACAN-A\textsuperscript{2}

NA when local weather not available.  
\textsuperscript{1}LOC, Category D, 1800-3.  
\textsuperscript{2}Categories A, B, C, 900-2½; Category D, 1800-3.

**MONTGOMERY-GIBBS**  
EXEC (MYF)……………………  
- ILS or LOC Rwy 28R\textsuperscript{1}
- RNAV (GPS) Rwy 28R

NA when local weather not available.  
\textsuperscript{1}NA when control tower closed.

### SAN DIEGO/EL CAJON, CA

**GILLESPIE FLD** (SEE)………………  
- LOC-D\textsuperscript{12}
- RNAV (GPS) Rwy 9L\textsuperscript{35}
- RNAV (GPS) Rwy 17\textsuperscript{45}

\textsuperscript{1}NA when control tower closed.  
\textsuperscript{2}Categories A, B, 1200-2; Categories C, D, 1600-3.  
\textsuperscript{3}Categories A, B, 1400-3.  
\textsuperscript{4}Categories A, B, 1100-2; Categories C, D, 1100-3.  
\textsuperscript{5}NA when local weather not available.

### SAN LUIS OBISPO, CA

**SAN LUIS**  
COUNTY RGNL (SBP)………………  
- ILS Rwy 11\textsuperscript{1}
- LOC Rwy 11\textsuperscript{124}
- RNAV (GPS) Rwy 11\textsuperscript{34}
- RNAV (GPS) Rwy 29\textsuperscript{34}
- VOR or TACAN-A\textsuperscript{45}

\textsuperscript{1}NA when control tower closed.  
\textsuperscript{2}Category A, 1000-2; Category B, 1100-2; Category C, 1300-3; Category D, 1400-3.  
\textsuperscript{3}Categories A, B, 1100-2; Category C, 1300-3; Category D, 1400-3.  
\textsuperscript{4}NA when local weather not available.  
\textsuperscript{5}Categories A, B, 1500-2; Categories C, D, 1500-3.

### SANTA ANA, CA

**JOHN WAYNE/ORANGE COUNTY** (SNA)………………  
- ILS or LOC Rwy 20R\textsuperscript{13}
- LDA Rwy 20R\textsuperscript{12}
- LOC BC Rwy 2L\textsuperscript{12}
- RNAV (GPS) Y Rwy 2L\textsuperscript{2}
- RNAV (GPS) Y Rwy 20R\textsuperscript{2}

NA when local weather not available.  
\textsuperscript{1}NA when control tower closed.  
\textsuperscript{2}Category C, 800-2¼; Category D, 1200-3.  
\textsuperscript{3}LOC, Categories A, B, 1000-2; Category C, 1000-3; Category D, 1200-3.

### SANTA BARBARA, CA

**SANTA BARBARA**  
MUNI (SBA)………………  
- ILS or LOC Rwy 7\textsuperscript{12}
- RNAV (GPS) Rwy 7\textsuperscript{13}
- VOR or GPS Rwy 25\textsuperscript{4}

\textsuperscript{1}NA when local weather not available.  
\textsuperscript{2}ILS, Categories A, B, 800-2; Category C, 800-2¼; Category D, 1000-3.  
\textsuperscript{3}LOC, Category C, 800-2¼; Category D, 1000-3.  
\textsuperscript{4}Categories A, B, 1000-2; Categories C, D, 1000-3.

### SANTA MARIA, CA

**SANTA MARIA PUB/CAPT G ALLAN HANCOCK FLD** (SMX)………………  
- ILS or LOC Rwy 12\textsuperscript{145}
- LOC/DME BC-A\textsuperscript{245}
- RNAV (GPS) Rwy 12\textsuperscript{25}
- RNAV (GPS) Rwy 30\textsuperscript{256}
- VOR Rwy 12\textsuperscript{256}

\textsuperscript{1}LOC, Category C 1200-3; Category D, 1300-3.  
\textsuperscript{2}Categories A, B, 1200-3; Category D, 1300-3.  
\textsuperscript{3}Category D, 1100-3.  
\textsuperscript{4}NA when control tower closed.  
\textsuperscript{5}NA when local weather not available.  
\textsuperscript{6}Categories A, B, 1400-2; Category C, 1400-3.
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<th>NAME</th>
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<td>SANTA MONICA</td>
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<td>RNAV (GPS) Z Rwy 3</td>
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<td>SANTA YNEZ/</td>
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<td>KUNKLE FLD (IZA)…………….RNAV (GPS)-A</td>
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<td>ZAMPERINI FLD (TOA)………ILA or LOC Rwy 29R</td>
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<td>SOUTHERN CALIFORNIA</td>
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<td>LOGISTICS (VCV)……………ILS or LOC Rwy 17</td>
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<td>NA when KBUR control tower closed.</td>
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# RADAR INSTRUMENT APPROACH MINIMUMS

**CAMP PENDLETON MCAS (MUNN FLD) (KNFG),** Oceanside, CA  
Amdt 3  30DEC21 (22083) (USN)  
ELEV 78

**RADAR MINS**  
23250

**RADAR INSTRUMENT APPROACH MINIMUMS**

**CAMP PENDLETON MCAS (MUNN FLD) (KNFG),** Oceanside, CA  
Amdt 3  30DEC21 (22083) (USN)  
ELEV 78

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<td>AB</td>
<td>393-¾</td>
<td>315 (400-¾)</td>
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<td>W/O GS †</td>
<td>21 5 6 9 10</td>
<td>AB</td>
<td>760-¾</td>
<td>682 (700-¾)</td>
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<td>ASR</td>
<td>21 3 8 11 12</td>
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<td>940-¾</td>
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<td>All Rwy 4 7 8</td>
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<td>1260-1½</td>
<td>1182 (1200-1½)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CD</td>
<td>1500-3</td>
<td>1422 (1500-3)</td>
</tr>
</tbody>
</table>

†Caution: Missed Approach

Minimum Climb Rate to 1600

<table>
<thead>
<tr>
<th>Knots</th>
<th>V/V (fpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>275</td>
</tr>
<tr>
<td>120</td>
<td>550</td>
</tr>
<tr>
<td>180</td>
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<tr>
<td>240</td>
<td>1100</td>
</tr>
<tr>
<td>300</td>
<td>1375</td>
</tr>
<tr>
<td>360</td>
<td>1650</td>
</tr>
</tbody>
</table>

*CAUTION - Trees penetrate 34:1 visual obstacle surfaces approximately 2300’ from threshold, 500’ left of cntrln. Pilots must have trees in sight prior to descending from DH/MDA.

2When ALS inop, increase CAT ABCD vis to ⅞ mile.

3When ALS inop, increase CAT A vis to 1 mile, CAT B to 1⅛ miles.

4Cir auth fr ASR and PAR W/O GS only.

5No-NOTAM preventative maint sked: PAR 2100-0100Z++ Mon.

6When ALS inop, increase CAT AB vis to 1 mile, CAT CD to 2 miles.

7Circling to Rwy 3 NA at night when PAPI OTS.

8Visibility reduction for Helicopters NA.

9Step Down Fix at 3NM from RPI, 1180 min.

10Step Down Fix at 3NM from RPI altitude is less than Circling CAT BCD MDA.

11Step Down Fix at 3NM from thld, 1120 min.

12Step Down Fix at 3NM altitude is less than Circling CAT BCD MDA.
# RADAR INSTRUMENT APPROACH MINIMUMS

**MIRAMAR MCAS (JOE FOSS FLD) (KNKX),** San Diego, CA  Amdt 1                  ELEV 477

**RADAR 1 - (E) 133.625 134.3x 266.8x 270.35 307.9x 328.4x 348.75 350.275 371.9 379.125**

<table>
<thead>
<tr>
<th>RWY</th>
<th>GS/TCH/RPI</th>
<th>CAT</th>
<th>DH/MDA-VIS</th>
<th>HAT/HAA</th>
<th>CEIL-VIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAR2</td>
<td>24R3</td>
<td>3.0°/53/1136</td>
<td>ABCDE</td>
<td>575-½</td>
<td>100 (100-½)</td>
</tr>
<tr>
<td></td>
<td>24L</td>
<td>3.0°/46/1036</td>
<td>ABCDE</td>
<td>577-½</td>
<td>100 (100-½)</td>
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<tr>
<td></td>
<td>AB</td>
<td>820-½</td>
<td>345 (400-½)</td>
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</tr>
<tr>
<td></td>
<td>CDE</td>
<td>820-⅜</td>
<td>345 (400-⅜)</td>
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</tr>
<tr>
<td></td>
<td>ABCDE</td>
<td>840-1</td>
<td>363 (400-1)</td>
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<tr>
<td>ASR Z</td>
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<td>AB</td>
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<td>388 (400-1)</td>
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<td>388 (400-1½)</td>
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<tr>
<td></td>
<td>AB</td>
<td>940-⅜</td>
<td>465 (500-⅜)</td>
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<td></td>
<td>CDE</td>
<td>940-⅜</td>
<td>465 (500-⅜)</td>
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<tr>
<td>ASR Y</td>
<td>6L</td>
<td>AB</td>
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<td>708 (700-1)</td>
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<td>CDE</td>
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<td>708 (700-2)</td>
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<tr>
<td>CIR10</td>
<td>All Rwy</td>
<td>A</td>
<td>920-1</td>
<td>443 (500-1)</td>
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<td>B</td>
<td>960-1</td>
<td>483 (500-1)</td>
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<td></td>
<td>C</td>
<td>980-1½</td>
<td>503 (600-1½)</td>
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<tr>
<td></td>
<td>D</td>
<td>1180-2¼</td>
<td>703 (800-2¼)</td>
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<tr>
<td></td>
<td>E</td>
<td>1380-3</td>
<td>903 (1000-3)</td>
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<td></td>
</tr>
</tbody>
</table>

---

1. Other APP CON freq as asgn.
3. When ALS inop, increase vis to ½ mile.
4. When ALS inop, increase vis to 1 mile.
5. Step Down Fix at 4 NM from RPI, 1900 min, Step Down Fix at 2 NM from RPI, 1260 min.
6. Step Down Fix at 2 NM from thld, 1120 min.
7. Missed approach requires minimum climb of 238 ft/NM to 3900.
8. When ALS inop, increase CAT AB vis to 1 mile, CAT CDE vis to 1½ miles.
9. Step Down Fix at 4 NM from thld, 1900 min, Step Down Fix at 2 NM from thld, 1260 min.
10. CAT E circling not authorized S of Rwy 6R-24L.
NORTH ISLAND NAS (HALSEY FIELD) (KNZY), San Diego, CA  Amrdt 1
05NOV20  (23082)  (USN)  ELEV 26
RADAR - (E)  127.7x  133.175x  318.8x  360.8x  353.5x  382.0x  385.5x

PAR¹

<table>
<thead>
<tr>
<th>RWY</th>
<th>GS/TCH/RPI</th>
<th>CAT</th>
<th>DH/MDA-VIS</th>
<th>HAT/HATh/CEIL-VIS</th>
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</thead>
<tbody>
<tr>
<td>36²</td>
<td>3.0°/45/846</td>
<td>ABCDE</td>
<td>119-¼</td>
<td>100</td>
</tr>
<tr>
<td>29³⁴⁵</td>
<td>3.0°/35/722</td>
<td>ABCDE</td>
<td>276-¾</td>
<td>250</td>
</tr>
<tr>
<td>36⁶</td>
<td>AB</td>
<td>CDE</td>
<td>420-1</td>
<td>401</td>
</tr>
<tr>
<td>29⁷⁸</td>
<td>AB</td>
<td>CDE</td>
<td>540-¾</td>
<td>514</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>540-1</td>
<td>514</td>
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PAR W/O GS¹

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<th>HAT/HATh/CEIL-VIS</th>
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<tr>
<td>36²</td>
<td>3.0°/45/846</td>
<td>ABCDE</td>
<td>119-¼</td>
<td>100</td>
</tr>
<tr>
<td>29³⁴⁵</td>
<td>3.0°/35/722</td>
<td>ABCDE</td>
<td>276-¾</td>
<td>250</td>
</tr>
<tr>
<td>36⁶</td>
<td>AB</td>
<td>CDE</td>
<td>420-1</td>
<td>401</td>
</tr>
<tr>
<td>29⁷⁸</td>
<td>AB</td>
<td>CDE</td>
<td>540-¾</td>
<td>514</td>
</tr>
<tr>
<td></td>
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<td>514</td>
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PAR E RWY 29 SHORT (OFFSET)

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<th>HAT/HATh/CEIL-VIS</th>
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</thead>
<tbody>
<tr>
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<td>620-2</td>
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PAR or PAR W/O GS D RWY 29 (OFFSET)

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<th>HAT/HATh/CEIL-VIS</th>
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</thead>
<tbody>
<tr>
<td>29¹³⁴⁵⁷</td>
<td>3.0°/35/722</td>
<td>ABCDE</td>
<td>620-2</td>
<td>594</td>
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ASR

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<th>HAT/HATh/CEIL-VIS</th>
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<td>CDE</td>
<td>540-¾</td>
<td>514</td>
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<tr>
<td>36¹¹</td>
<td>A</td>
<td>CDE</td>
<td>760-¾</td>
<td>741</td>
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<td>760-1¾</td>
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ASR C RWY 29 (OFFSET)

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<th>HAT/HATh/CEIL-VIS</th>
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<tbody>
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<td>29²⁷</td>
<td>ABCDE</td>
<td></td>
<td>620-2</td>
<td>594</td>
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</tbody>
</table>

CIR

<table>
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<th>HAT/HATh/CEIL-VIS</th>
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</thead>
<tbody>
<tr>
<td>29²⁷</td>
<td>AB</td>
<td>CDE</td>
<td>620-2</td>
<td>594</td>
</tr>
</tbody>
</table>

1. No-NOTAM MP sked 2000-2400Z++ Mon.
2. When ALS inop, increase vis to ½ mile.
3. CAUTION: WCH Group 3: 15' and Group 4: 10' is less than required 20'.
4. Rwy 29 VGS1 and PAR TCH not coincident, VGS1 TCH 46'.
5. Visibility Reduction by Helicopters NA.
6. When ALS inop, increase CAT AB vis to 1 mile, CAT CDE to 1¼ miles.
7. Cir auth to Rwy 18 only. Cir not auth W Rwy 18-36.
8. When ALS inop, increase CAT AB vis to 1¼ miles, CAT CDE to 1¼ miles.
9. Minima applicable for rotorcraft short offset approaches.
10. When ALS inop, increase CAT AB vis to 1 mile, CAT CDE to 1¾ miles.
11. When ALS inop, increase CAT A vis to 1 mile, CAT B to 1½ miles, CAT CDE to 2 miles.
### POINT MUGU NAS (NAVAL BASE VENTURA CO) (KNTD),
Oxnard, CA Amdt 2  31DEC20  (20366)  (USN)  ELEV 13

<table>
<thead>
<tr>
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<th>GS/TCH/RPI</th>
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<th>DH/MDA-VIS</th>
<th>HAT/HATh/VIS</th>
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<td>ABCDE</td>
<td>110-½</td>
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<td>(100-½)</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>ABCDE</td>
<td>113-½</td>
<td>100</td>
<td>(100-½)</td>
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<tr>
<td>PAR</td>
<td>21 (altn MAP)^3</td>
<td>ABCDE</td>
<td>650-1¾</td>
<td>637</td>
<td>(700-1¾)</td>
</tr>
<tr>
<td>PAR W/O GS</td>
<td>3^4/5</td>
<td>ABCDE</td>
<td>300-¾</td>
<td>290</td>
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<tr>
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<td>AB</td>
<td>420-½</td>
<td>407</td>
<td>(500-½)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CDE</td>
<td>420-¾</td>
<td>407</td>
<td>(500-¾)</td>
<td></td>
</tr>
<tr>
<td>ASR</td>
<td>21 (altn MAP)^8/9</td>
<td>ABCDE</td>
<td>420-1¾</td>
<td>407</td>
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<td>CDE</td>
<td>420-¾</td>
<td>407</td>
<td>(500-¾)</td>
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<td>480-1¾</td>
<td>467</td>
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<tr>
<td></td>
<td>A</td>
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<td>427</td>
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<tr>
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<td>C</td>
<td>480-1½</td>
<td>467</td>
<td>(500-1½)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>580-2</td>
<td>567</td>
<td>(600-2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>NOT AUTHORIZED</td>
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</table>

Expanded RADAR svc-All flt conducted under positive ctl. Inbd acft not opr under ATC or PLEAD ctc APP CON 25 NM out on 307.275 or 128.65.

Circling NA E of Rwy 3-21 with PAR approach or when Alternate MAP Rwy 21 in use.

1. No-NOTAM preventive maint 1500-2000Z ++ Tue.
2. When ALS inop, increase vis to ½ mile.
3. When ALS inop, increase vis to 1¾ miles.
4. When ALS inop, increase vis to 1 mile.
5. Step down fix at 2 NM from RPI, 460 min.
6. When ALS inop, increase CAT AB vis to 1 mile, CAT CDE vis to 1¾ miles.
7. Step down fix at 3 NM from RPI, 1000 min.
8. When ALS inop, increase vis to 2½ miles.
9. Step down fix at 3 NM from thld, 1000 min.
10. Step down fix at 2 NM from thld, 460 min.
11. Step down fix at 4 NM from thld, 1300 min, 3 NM from thld, 1000 min.
SAN CLEMENTE ISLAND NALF (FREDERICK SHERMAN FLD) (KNUC), San Clemente Island, CA. Amdt 4 24FEB22 (22055) (USN)

RADAR - (E) 127.05X 282.275 292.15 351.85X

RADAR INSTRUMENT APPROACH MINIMUMS

SAN CLEMENTE ISLAND NALF (FREDERICK SHERMAN FLD) (KNUC), San Clemente Island, CA. Amdt 4 24FEB22 (22055) (USN)

PAR134

<table>
<thead>
<tr>
<th>RWY</th>
<th>GS/TCH/RPI</th>
<th>CAT</th>
<th>DH/MDA-VIS</th>
<th>HAT/HAA</th>
<th>CEIL-VIS</th>
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<tr>
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<td>CDE</td>
<td>580-1½</td>
<td>396</td>
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<td>AB</td>
<td>860-1</td>
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<td>CDE</td>
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CIR2 W/O GS All Rwy

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<th>HAT/HAA</th>
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<td></td>
<td>580-1</td>
<td>396</td>
<td>(400-1)</td>
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<td>640-1½</td>
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<td>556</td>
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CIR2 All Rwy

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<td>A</td>
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<td></td>
<td>580-1</td>
<td>396</td>
<td>(400-1)</td>
</tr>
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<td>640-1</td>
<td>456</td>
<td>(500-1)</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td>640-1½</td>
<td>456</td>
<td>(500-1½)</td>
</tr>
<tr>
<td>DE</td>
<td></td>
<td></td>
<td>740-2</td>
<td>556</td>
<td>(600-2)</td>
</tr>
</tbody>
</table>

1No-NOTAM MP PAR/ASR 1800-2200Z++ Tue.
2Circling NA S of Rwy 6-24.
3CAUTION: WCH Group 3: 19ft and Group 4: 14ft is less than required 20ft.
4PAR TCH not coincident with RNAV TCH (50ft).
LAND AND HOLD-SHORT OPERATIONS (LAHSO)

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

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

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<tr>
<th>CITY/AIRPORT</th>
<th>LDG RWY</th>
<th>HOLD-SHORT POINT</th>
<th>AVBL LDG DIST</th>
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<tr>
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<td>15</td>
<td>08-26</td>
<td>4,250 feet</td>
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<tr>
<td>BOB HOPE (BUR)</td>
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<td></td>
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<tr>
<td>LONG BEACH, CA</td>
<td>26R</td>
<td>12-30</td>
<td>3,400 feet</td>
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<tr>
<td>LONG BEACH (DAUGHERTY FLD) (LGB)</td>
<td>30</td>
<td>08L-26R</td>
<td>5,850 feet</td>
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</tbody>
</table>
**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.

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<th>HOT SPOT</th>
<th>DESCRIPTION*</th>
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<td>BURBANK, CA</td>
<td>HS 1</td>
<td>NW corner of terminal ramp close proximity to Rwy 33-15 rwy holding position markings.</td>
</tr>
<tr>
<td>BOB HOPE (BUR)</td>
<td>HS 2</td>
<td>NW corner of terminal ramp approximately 250 feet west of Gate A1.</td>
</tr>
<tr>
<td>CARLSBAD, CA</td>
<td>HS 1</td>
<td>Large Jets may obscure twr visibility of small aircraft.</td>
</tr>
<tr>
<td>MC CLELLAN-PALOMAR (CRQ)</td>
<td>HS 2</td>
<td>Exiting Rwy 24 at Twy A4</td>
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<tr>
<td>CHINO, CA</td>
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<td>Twy D close proximity to Rwy 08L-26R.</td>
</tr>
<tr>
<td>CHINO (CNO)</td>
<td>HS 2</td>
<td>Twy L close proximity to Rwy 03-21.</td>
</tr>
<tr>
<td></td>
<td>HS 3</td>
<td>Twy K close proximity to Rwy 08L-26R.</td>
</tr>
<tr>
<td></td>
<td>HS 4</td>
<td>Twy L, Twy D, and Twy K complex int.</td>
</tr>
<tr>
<td>EL MONTE, CA</td>
<td>HS 1</td>
<td>Twy A at Twy C.</td>
</tr>
<tr>
<td>SAN GABRIEL VALLEY (EMT)</td>
<td>HS 2</td>
<td>Twy A at Twy D.</td>
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<tr>
<td>HAWTHORNE, CA</td>
<td>HS 1</td>
<td>Rwy 25 run-up area.</td>
</tr>
<tr>
<td>JACK NORTHROP FLD/ HAWTHORNE MUNI (HHR)</td>
<td></td>
<td></td>
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<tr>
<td>LA VERNE, CA</td>
<td>HS 1</td>
<td>Twy A between the apch ends of Rwy 26R and Rwy 26L.</td>
</tr>
<tr>
<td>BRACKETT FLD (POC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LONG BEACH, CA</td>
<td>HS 1</td>
<td>Twy J4 and Rwy 08R-26L.</td>
</tr>
<tr>
<td>LONG BEACH (DAUGHERTY FLD) (LGB)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOS ANGELES, CA</td>
<td>HS 1</td>
<td>Rwy 24L/R and Twy AA.</td>
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<tr>
<td>LOS ANGELES INTL (LAX)</td>
<td>HS 2</td>
<td>Rwy 24L and Twy Z.</td>
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<tr>
<td></td>
<td>HS 3</td>
<td>Rwy 25 L, Rwy 25 R and Twy F.</td>
</tr>
<tr>
<td></td>
<td>HS 4</td>
<td>Twy H and Twy H5.</td>
</tr>
<tr>
<td></td>
<td>HS 5</td>
<td>Twy H, Twy H5, and Twy H6.</td>
</tr>
<tr>
<td>MOJAVE, CA</td>
<td>HS 1</td>
<td>Rwy 08 and Rwy 04 at Twy C and Twy F. Ensure clearance received for each rwy.</td>
</tr>
<tr>
<td>MOJAVE AIR &amp; SPACE PORT/ RUTAN FLD (MHV)</td>
<td>HS 2</td>
<td>Twy A, Twy C, Twy D intersect. Limited tower visibility.</td>
</tr>
<tr>
<td>ONTARIO, CA</td>
<td>HS 1</td>
<td>Twy F at Rwy 08R/26L frequent centerline confusion crossing rwy southbound.</td>
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(SEE CONTINUATION PAGE FOR MORE LISTINGS)
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<th>HOT SPOT</th>
<th>DESCRIPTION*</th>
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<td>PALM SPRINGS, CA</td>
<td>HS 1</td>
<td>Int of Twy B and Twy C.</td>
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<tr>
<td>PALM SPRINGS INTL (PSP)</td>
<td>HS 2</td>
<td>Twy B and Rwy 31R.</td>
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<tr>
<td></td>
<td>HS 3</td>
<td>Twy C and Twy J.</td>
</tr>
<tr>
<td>RIVERSIDE, CA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RIVERSIDE MUNI (RAL)</td>
<td>HS 1</td>
<td>Twy A and Rwy 34.</td>
</tr>
<tr>
<td></td>
<td>HS 2</td>
<td>ATC non-vis area.</td>
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<tr>
<td>SAN DIEGO, CA</td>
<td></td>
<td></td>
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<tr>
<td>MONTGOMERY-GIBBS EXEC (MYF)</td>
<td>HS 1</td>
<td>Rwy 28R and Rwy 28L, Twy M.</td>
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<tr>
<td></td>
<td>HS 2</td>
<td>Rwy 28L-10R and Rwy 05-23.</td>
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<tr>
<td></td>
<td>HS 3</td>
<td>Rwy 28L and Twy B.</td>
</tr>
<tr>
<td>SAN DIEGO INTL (SAN)</td>
<td>HS 1</td>
<td>Twy J at Twy H.</td>
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<tr>
<td>SAN LUIS OBISPO, CA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAN LUIS COUNTY RGNL (SBP)</td>
<td>HS 1</td>
<td>Area directly below the Control Twr “not visible”.</td>
</tr>
<tr>
<td></td>
<td>HS 2</td>
<td>Twy E, Rwy 29.</td>
</tr>
<tr>
<td>SANTA ANA, CA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JOHN WAYNE/ORANGE COUNTY (SNA)</td>
<td>HS 1</td>
<td>Rwy 20L and Twy L.</td>
</tr>
<tr>
<td></td>
<td>HS 2</td>
<td>Rwy 20L and Rwy 20R, Twy H.</td>
</tr>
<tr>
<td></td>
<td>HS 3</td>
<td>Twy A, Twy H, and Twy C.</td>
</tr>
<tr>
<td>SANTA BARBARA, CA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SANTA BARBARA MUNI (SBA)</td>
<td>HS 1</td>
<td>Rwy 07-25, Twy C.</td>
</tr>
<tr>
<td>SANTA MARIA, CA</td>
<td></td>
<td></td>
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<tr>
<td>SANTA MARIA PUB/CAPT G</td>
<td>HS 1</td>
<td>Twy A, Twy A7, Twy A8, Twy V, and Twy W.</td>
</tr>
<tr>
<td>ALLAN HANCOCK FLD (SMX)</td>
<td>HS 2</td>
<td>Twy A, Twy A6, Twy A5, Twy R, and Twy S.</td>
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<tr>
<td></td>
<td>HS 3</td>
<td>Rwy 20 and Twy A.</td>
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<tr>
<td></td>
<td>HS 4</td>
<td>Rwy 12 and Twy B2 and Twy A2.</td>
</tr>
<tr>
<td>TORRANCE, CA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZAMPERINI FLD (TOA)</td>
<td>HS 1</td>
<td>Pilots exiting Rwy 11L-29R sometimes fail to hold short of the Rwy 11R-29L apch hold area on Twy H.</td>
</tr>
<tr>
<td>VICTORVILLE, CA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOUTHERN CALIFORNIA LOGISTICS (VCV)</td>
<td>HS 1</td>
<td>Wrong rwy departure risk.</td>
</tr>
</tbody>
</table>

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

**CGNEY TRANSITION**

**DNERO TRANSITION**

**HAKMN TRANSITION**

**OTOOL TRANSITION**

**SALYY TRANSITION**

**OTOOL TRANSITION**

**HAKMN TRANSITION**

**DNERO TRANSITION**

**CGNEY TRANSITION**

**SMASH TRANSITION**

**ANJLL TRANSITION**

**LEMMN TRANSITION**

**BCALL TRANSITION**

**GLESN TRANSITION**

**AVATR TRANSITION**

**NOTE:** Chart not to scale.

**NOTE:** SHTNR transition restricted to KLAS departures only.

**NOTE:** CGNEY, OTOOL and SALYY transitions ATC only, do not file.

**NOTE:** Turbojet aircraft descend via mach number until intercepting 280K. Maintain 280K until slowed by the STAR.

**NOTE:** Expect local area altimeter reaching FL230.

**NOTE:** Expect runway 25L unless otherwise assigned by ATC.

**NOTE:** Expect ILS or RNAV (RNP) approach to runway 25L.

**NOTE:** Expect runway 25L unless otherwise assigned by ATC.

**NOTE:** LS ANGELES landing west traffic.

**NOTE:** DME/DMR/IRU or GPS required.

**NOTE:** Los Angeles, landing west traffic.

**NOTE:** Expect runway 25L unless otherwise assigned by ATC.

**NOTE:** RNAV 1.

**NOTE:** RADAR required.

**NOTE:** DME/DMR/IRU or GPS required.

**NOTE:** Expect runway 25L unless otherwise assigned by ATC.

**NOTE:** RNAV 1.

**NOTE:** LOS ANGELES, CALIFORNIA

Los Angeles, California

Los Angeles, California

Los Angeles Int'l (LAX)

Los Angeles Int'l (LAX)
ARRIVAL ROUTE DESCRIPTION

THERMAL TRANSITION (TRM.ARKOE1): From over TRM VORTAC on TRM R-237 to KRATZ INT, then on OCN R-054 and PDZ R-113 to ARKOE INT.

From over ARKOE INT expect to intercept the localizer for an ILS Y or LOC RWY 32 or vector VOR/TACAN RWY 32.

NOTE: DME required.

NOTE: Chart not to scale.
NOTE: Turbojet aircraft only.

NOTE: RADAR required.

NOTE: When SAN arrivals are using Rwy 9, aircraft can expect to depart and re-enter the TCA southwest of PGY VORTAC.

TURBOJET VERTICAL NAVIGATION

PLANNING INFORMATION

TNP, EED and PKE transitions
expect FL240 at SALTN
expect 12000 at CARUL

LOCALIZER 111.55
I-SAN
Chan 52 (Y)

MISSION BAY 117.8 MZB
Chan 125

LOCALIZER 110.9
I-UBR
Chan 46

BARET

SARGS

R-255

SAN DIEGO INTL

Chan 109

JULIAN 114.0 JUL
Chan 87

JLI R-177

MISSION BAY

LOCALIZER 112.3
I-SAN
Chan 52 (Y)

SARGS

SW-3, 30 NOV 2023 to 25 JAN 2024
ARRIVAL ROUTE DESCRIPTION

IMPERIAL TRANSITION (IPL.BARET5): From over IPL VORTAC on IPL R-258 and MZB R-076 to BARET INT. Thence . . . .

NEEDLES TRANSITION (EED.BARET5): From over EED VORTAC on EED R-208 to SHADI INT, then on JLI R-040 to SALTN INT, then on PGY R-027 to CARUL INT, then on JLI R-177 to BARET INT. Thence . . . .

PARKER TRANSITION (PKE.BARET5): From over PKE VORTAC on PKE R-227 to SHADI INT, then on JLI R-040 to SALTN INT, then on PGY R-027 to CARUL INT, then on JLI R-177 to BARET INT. Thence . . . .

TWENTYNINE PALMS TRANSITION (TNP.BARET5): From over TNP VORTAC on TNP R-179 to MOMAR INT, then on JLI R-040 to SALTN INT, then on PGY R-027 to CARUL INT, then on JLI R-177 to BARET INT. Thence . . . .

. . . LANDING SAN RWY 9: From BARET INT on PGY R-043 to PGY VORTAC, then on PGY R-270 to IFSOX, then on OCN R-162 to SARGS INT. Expect ILS Rwy 9 approach to SAN or LOC/DME-B to NZY.

. . . LANDING SAN RWY 27 and NZY: From BARET INT on PGY R-043 to IFHEJ, then on I-UBR localizer to VYDDA INT. Expect LOC Rwy 27 approach to SAN or LOC/DME-A to NZY.

LOST COMMUNICATIONS: In the event of lost communications, North Island arrivals shall execute the TACAN Rwy 29 or TACAN Rwy 36.
NOTE: Chart not to scale.

CONTINUED ON FOLLOWING PAGE

SW-3, 30 NOV 2023 to 25 JAN 2024
ARIVAL ROUTE DESCRIPTION

HECTOR TRANSITION (HEC.BASET5): From over HEC VORTAC via HEC R-211 and PDZ R-030 to CIVET INT, then via LAX R-068 to BASET INT. Thence. . . .

JULIAN TRANSITION (JLI.BASET5): From over JLI VORTAC via JLI R-303 to WYVIL, then via PDZ R-105 to PDZ VORTAC, then via PDZ R-277 to ARNES, then via LAX R-068 to BASET. Thence. . . .

PEACH SPRINGS TRANSITION (PGS.BASET5): From over PGS VOR/DME via PGS R-229 and PDZ R-046 to RUSTT INT, then via LAX R-068 to BASET INT. Thence. . . .

TWENTYNINE PALMS TRANSITION (TNP.BASET5): From over TNP VORTAC via TNP R-245 and PDZ R-069 to PDZ VORTAC, then via PDZ R-277 to ARNES, then via LAX R-068 to BASET. Thence. . . .

. . . from BASET on LAX VORTAC R-068 to cross DOWNE at or above 10000, then on LAX R-068 to cross REEDR at or above 9000.

LANDING RUNWAYS 6L/R: From REEDR on SMO VOR/DME R-097 to cross SMO at or above 8000, then on heading 251° or as assigned by ATC. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 7L/R: From REEDR on heading 213° or as assigned by ATC. Expect RADAR vectors to final approach course.

LOST COMMUNICATIONS
In the event of lost communications: If landing Rwys 6L/R proceed on the ILS or LOC RWY 6R. If landing Rwys 7L/R depart REEDR heading 213° to intercept the SLI R-251 to TANDY.
ARRIVAL ROUTE DESCRIPTION

TILLT TRANSITION (TILLT.BAUBB2)

From BAUBB on track 087° to cross STYFF at or below 9000.

LANDING RUNWAY 12: From STYFF on track 078° to cross KAYNN at or below 7000, then on track 015° to cross PADDR between 3000 and 6000, then on track 009° to cross QGATE at or above 3000, then on track 332° to cross BREKE at 3000. Expect RNAV (RNP) RWY 12 approach.

LANDING RUNWAYS 26R, 30: From STYFF on track 078° to cross KAYNN at or below 7000, then on track 055° to cross LAXBB at or below 5000, then on track 055° to cross ALBAS at 4000, then on track 020° to cross EZKEL at or above 4000, then on track 020°. Expect RNAV (RNP) Y RWY 30 or RADAR vectors to final approach course.

LOST COMMUNICATIONS

RUNWAYS 26R, 30: After ALBAS proceed on the RNAV (RNP) Y RWY 30 or ILS or LOC RWY 30 approach.

If unable approach to LGB, after ALBAS/BREKE climb to 4000 direct SII VORTAC and hold.

NOTE: Expect Rwy 30 unless otherwise assigned by ATC.

NOTE: Turbojet and high performance turboprop aircraft only.

NOTE: Chart not to scale.
BURGL TRANSITION (BURGL.BAYST1)
CERNL TRANSITION (CERNL.BAYST1)
FRASR TRANSITION (FRASR.BAYST1)
HUULL TRANSITION (HUULL.BAYST1)
MUPPT TRANSITION (MUPPT.BAYST1)
REBRG TRANSITION (REBRG.BAYST1)
RYDRR TRANSITION (RYDRR.BAYST1)
SNAXX TRANSITION (SNAXX.BAYST1)

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet aircraft only.
NOTE: Expect Rwy 25L unless otherwise assigned by ATC.
NOTE: CERNL TRANSITION GPS required.
NOTE: BURGL, FRASR, HUULL, SNAXX, MUPPT, REBRG, RYDRR
TRANSITIONS DME/DME/IRU or GPS required.
NOTE: Do not file-to be assigned by ATC.

(Continued on following page)
NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

From BAYST on track 084° to cross JUUSE between 8000 and 9000, then on track 084° to cross CLIFY between 7000 and 8000 and at 210K, then on track 110° to cross DWYER at 7000 and at 210K, then on track 095° to cross AYYYY at 6000, then on track 071° to cross PETYR at 5000, then on track 071° or as assigned by ATC. Expect RADAR vectors to ILS or RNAV (RNP) RWY 25L final approach course.

LOST COMMUNICATIONS

After PETYR turn left heading 315° and intercept the Rwy 25L localizer, proceed on the ILS RWY 25L approach.

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet aircraft only.
NOTE: Expect Rwy 25L unless otherwise assigned by ATC.
NOTE: Do not file-to be assigned by ATC.

NOTE: Turbojet aircraft only.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Expect Rwy 25L unless otherwise assigned by ATC.
NOTE: Do not file-to be assigned by ATC.
NOTE:  Radar required.
NOTE:  RNAV 1.
NOTE:  DME/DME/IRU or GPS required.
NOTE:  Turbojet aircraft only.
NOTE:  Los Angeles landing east traffic.
NOTE:  Expect runway 7R unless otherwise assigned.
NOTE:  Expect local area altimeter reaching FL230.
NOTE:  CGNEY and OTOOL transitions ATC assigned only, do not file.
NOTE:  SHTNR transition restricted to LAS departures only.

NOTE:  Chart not to scale.

SW-3, 30 NOV 2023 to 25 JAN 2024
ARRIVAL ROUTE DESCRIPTION

From ANJLL on track 240° to cross KAOSS between FL190 and FL230, then on track 244° to cross TOLLA between 14000 and 17000, then on track 244° to cross SLACR at or below 15000, then on track 244° to cross BIGBR between 13000 and 14000.

LANDING RUNWAYS 6L/R: From BIGBR on track 252° to cross DRYSS between 10000 and 12000, then on track 253° to cross TOMYS at or above 9000, then on track 264° to cross CLIFY at 7000 and at 220K, then on track 259° to HNCHE, then on track 251° to cross SASSI at 7000 and at 210K, then on track 251°. Expect RADAR vectors to ILS or RNAV (RNP) RWY 6L final approach course.

LANDING RUNWAYS 7L/R: From BIGBR on track 237° to cross LADDD between 10000 and 12000, then on track 253° to cross JOELZ between 8000 and 9000, then on track 226° to cross NORML at or above 6000 and at 220K, then on track 251° to cross WNDFL at 6000 and at 210K, then on track 251°. Expect RADAR vectors to ILS or RNAV (RNP) RWY 7R final approach course.

LOST COMMUNICATIONS: In the event of lost communication proceed on the RNAV (RNP) RWY 7R or ILS or LOC RWY 7R approach.
ARRIVAL ROUTE DESCRIPTION

BUGGA TRANSITION (BUGGA.BOGET2)
NEEDLES TRANSITION (EED.BOGET2)
KREME TRANSITION (KREME.BOGET2)
PURSE TRANSITION (PURSE.BOGET2)
WELUM TRANSITION (WELUM.BOGET2)
WNCHL TRANSITION (WNCHL.BOGET2)

LANDING KLAX/KSMO: From BOGET on track 183° to cross MEETT at or above 7500, then on track 173° to cross WATSS at or above 6900, then on track 157° to cross UPDOC at 6000, then on track 140°. Expect RADAR vectors to final approach course.

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

HIHWY TRANSITION (HIHWY.BONJO2)
HONZK TRANSITION (HONZK.BONJO2)
PRPLE TRANSITION (PRPLE.BONJO2)
RDHOT TRANSITION (RDHOT.BONJO2)
REBRG TRANSITION (REBRG.BONJO2)

From ROKKR on track 131° to cross ZEPPE between 9000 and 10000, then on track 129° to cross IVINS at or above 8000, then on track 113° to cross ROLLI at or above 6000, then on track 084° to cross BONJO at 5000, then on track 103°. Expect RADAR vectors to final approach course.
NOTE: Chart not to scale.

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet aircraft only.
NOTE: Los Angeles landing east traffic.
NOTE: Expect runway 7R unless otherwise assigned.
NOTE: Expect local area altimeter reaching FL230.
NOTE: MDLER transition ATC only, do not file.

(CONTINUED ON FOLLOWING PAGE)
ARRIVAL ROUTE DESCRIPTION

From HLYWD on track 251° to cross BRUEN at or below FL320, then on track 252° to cross AVATR between FL240 and FL290 and at 280K, then on track 250° to cross TRUBL between FL190 and FL230, then on track 253° to cross EMMMY between 14000 and 17000, then on track 253° to cross WHDDN at or below 15000, then on track 253° to cross SHRTZ between 13000 and 14000.

LANDING RUNWAYS 6L/R: From SHRTZ on track 267° to cross DRYSS between 10000 and 12000, then on track 253° to cross TOMYS at or above 9000, then on track 264° to cross CLIFY at 7000 and at 220K, then on track 259° to HNCHE, then on track 251° to cross SASSI at 7000 and at 210K, then on track 251° to SHIPM, then on track 251°. Expect RADAR vectors to ILS or RNAV (RNP) RWY 6L final approach course.

LANDING RUNWAYS 7L/R: From SHRTZ on track 252° to cross LADDD between 10000 and 12000, then on track 253° to cross JOELZ between 8000 and 9000, then on track 226° to cross NORML at or above 6000 and at 220K, then on track 251° to cross WNDFL at 6000 and 210K, then on track 251° to NIKEY, then on track 251°. Expect RADAR vectors to ILS or RNAV (RNP) RWY 7R final approach course.

LOST COMMUNICATIONS: In the event of lost communication proceed on the RNAV (RNP) RWY 7R or ILS or LOC RWY 7R approach.
ARRIVAL ROUTE DESCRIPTION

IMPERIAL TRANSITION (IPL.CHASR2)
MOMAR TRANSITION (MOMAR.CHASR2)
PARKER TRANSITION (PKE.CHASR2)
TRUE TRANSITION (TRUE.CHASR2)

NZY/SDM: From TOPGN on track 249° to cross CHASR at 6400, then on track 250°. 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: Descend via mach number until intercepting 270K. Maintain 270K until slowed by the STAR or assigned by ATC.

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

NOTE: DME required.

ARRIVAL ROUTE DESCRIPTION

**BLYTHE TRANSITION (BLH.CLOWD1):** From over BLH VORTAC on BLH R-278 and PSP R-072 to CLOWD DME. Thence.

**DECAS TRANSITION (DECAS.CLOWD1):** From over DECAS INT on BLH R-278 and PSP R-072 to CLOWD DME. Thence.

**GOFFS TRANSITION (GFS.CLOWD1):** From over GFS VORTAC on GFS R-185 and TNP R-028 to TNP VORTAC, then on TNP R-199 to CLOWD DME. Thence.

**NEEDLES TRANSITION (EED.CLOWD1):** From over EED VORTAC on EED R-216 and TRM R-037 to UBABE DME, then on PSP R-072 to CLOWD DME. Thence.

. . . . From over CLOWD DME on TRM R-021 to TRM VORTAC. Expect RADAR vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

HUULK TRANSITION (HUULK.COMIX2)

LOS ANGELES TRANSITION (LAX.COMIX2)

SANTA CATALINA TRANSITION (SXC.COMIX2)

From COMIX on track 134° to FLSHH, then on track 134° to cross LNTRN at or above 9000 and at 230K, then on track 134° to cross XMANS at or above 7000, then on track 094° to cross KLOMN at 6000 and at 210K, then on track 104° to cross NADDO at 6000, then on heading 095° or as assigned by ATC. Expect RADAR vectors to final approach course.

NOTE: Turbojet and turboprop aircraft only.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

RDHOT TRANSITION (RDHOT.DIRBY1)

TILLT TRANSITION (TILLT.DIRBY1)

From DIRBY on track 082° to cross PHUNN at or below 14000, then on track 034° to cross SHHOW at or below 12000, then on track 346° to cross ZAPPP at or above 9000, then on track 346° to cross BUFIE at or below 8000, then on track 332° to cross SLI VORTAC at 7000 and at 210K, then on track 326° to cross TRNDO at 5000 and at 210K. Expect RADAR vectors to ILS or RNAV (RNP) Z RWY 25L final approach course.

LOST COMMUNICATIONS

In the event of lost communications: RNP arrivals proceed on the RNAV (RNP) Z RWY 25L approach. All other aircraft proceed on the ILS or LOC RWY 25L.
NOTE: Chart not to scale.

Transition Routes

NEEDLES TRANSITION (EED.DSNEE5)
NATEE TRANSITION (NATEE.DSNEE5)
MARUE TRANSITION (MARUE.DSNEE5)
LRSON TRANSITION (LRSON.DSNEE5)
HIMDU TRANSITION (HIMDU.DSNEE5)
FEYLA TRANSITION (FEYLA.DSNEE5)
EMLLD TRANSITION (EMLLD.DSNEE5)

(CONTINUED ON FOLLOWING PAGE)

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

**ARRIVAL ROUTE DESCRIPTION**

**LANDING KLGB RUNWAY 12:** From DSNEE on track 236° to cross MCKYE at or above 7200, then on track 236° to cross MOUSS at or above 6500, then on track 236° to cross GOOFY at 4000, then on track 237° to cross PIBBB at 4000, then on track 256° to LUVCI, then on track 269° to cross QGATE at or above 3000, then on track 332° to cross BREKE at 3000. Expect RNAV (RNP) RWY 12 approach.

**LANDING KLGB RUNWAYS 26R, 30:** From DSNEE on track 236° to cross MCKYE at or above 7200, then on track 236° to cross MOUSS at or above 6500, then on track 236° to cross GOOFY at 4000, then on track 236° to cross MIDDS at 4000, then on track 332° to cross BREKE at 3000. Expect RNAV (RNP) RWY 30 approach.

**LANDING KSNA:** From DSNEE on track 235° to cross JWARD, then on heading 260° or as assigned by ATC. Expect vectors to ILS or RNAV (RNP) RWY 20R final approach course.

**LOST COMMUNICATIONS:** In the event of lost communications:

**LANDING LGB RUNWAYS 26R, 30:** After MIDDS proceed on the RNAV (RNP) RWY 30 or ILS RWY 30 approach.

**LANDING LGB RUNWAY 12:** After BREKE proceed on the RNAV (RNP) RWY 12 approach, if unable approach, after MIDDS/BREKE climb to 4000 direct SLI VORTAC and hold.

**LANDING SNA RUNWAY 20R:** After DSNEE proceed on the RNAV (RNP) RWY 20R approach. If unable approach, after DSNEE maintain 6000 direct SLI VORTAC and hold.
NOTE: Radar required.
NOTE: Turboprop and prop aircraft only.

CONTINUED ON FOLLOWING PAGE
ARRIVAL ROUTE DESCRIPTION

DAGGETT TRANSITION (DAG.EMMLN1): From over DAG VORTAC on DAG R-214 to APLES. Thence. . . .

HECTOR TRANSITION (HEC.EMMLN1): From over HEC VORTAC on HEC R-232 to APLES. Thence. . . .

LANDING KLGB/KFUL/KSLI: From over APLES on PARADISE VORTAC (PDZ) R-012 to cross CAPTZ at 10000, then on PDZ R-012 to cross RRIZE at 8100, then on PDZ R-012 to cross PDZ VORTAC at 6000, then on PDZ R-270 to cross DOWDD at 6000, then on POMONA VORTAC (POM) R-187 to cross AHEIM at 6000, then on SEAL BEACH VORTAC (SLI) R-058 to cross SLI VORTAC at 6000.

LANDING KLGB: From over SLI VORTAC, fly heading 210°, expect RADAR vectors to final approach course.

LANDING KFUL: From over SLI VORTAC, expect VOR-A approach.

LANDING KSLI: From over SLI VORTAC, expect VOR or TACAN RWY 22L approach or RADAR vectors to final approach course.

LANDING KHHR: From over APLES on PARADISE VORTAC (PDZ) R-012 to cross CAPTZ at 10000, then on PDZ R-012 to cross RRIZE at 8100, then on PDZ R-012 to cross PDZ VORTAC at 6000, then on PDZ R-270 to cross RNDAL at 6000, then fly heading 250°. Expect RADAR vectors to final approach course.

LANDING KSNA: From over APLES on PARADISE VORTAC (PDZ) R-012 to cross CAPTZ at 10000, then on PDZ R-012 to cross RRIZE at 8100, then on PDZ R-012 to cross PDZ VORTAC at 6000, then on PDZ R-270 to cross RNDAL at 6000, then on POM R-164 to cross POXKU at 6000, then on SLI R-058 to cross SLI VORTAC at 6000. Expect RADAR vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

GORMAN TRANSITION (GMN.FASTO2): From over GMN VORTAC on GMN R-344 to FASTO INT. Thence . . . . .

LAKE HUGHES TRANSITION (LHS.FASTO2): From over LHS VORTAC on LHS R-305 and GMN R-344 to FASTO INT. Thence . . . .

PALMDALE TRANSITION (PMD.FASTO2): From over PMD VORTAC on PMD R-298 and EHF R-123 to MINGI INT, then on I-BFL LOC course to FASTO INT. Thence . . . .

. . . . From over FASTO INT on the I-BFL Localizer for the ILS or LOC RWY 30R procedure.

LOST COMMUNICATIONS: From FASTO INT direct to JUPEX INT maintain 2500; intercept and execute ILS or LOC RWY 30R approach. If unable, proceed to JUPEX INT and hold and maintain 2500.
ARRIVAL ROUTE DESCRIPTION

AVENAL TRANSITION (AVE.FERN7): From over AVE VOR/DME on AVE R-129 and FIM R-310 to FIM VORTAC. Thence. . .

DERBB TRANSITION (DERBB.FERN7): From over DERBB INT on AVE R-129 and FIM R-310 to FIM VORTAC. Thence. . .

FELLOWS TRANSITION (FLW.FERN7): From over FLW VOR/DME on FLW R-116 and FIM R-297 to FIM VORTAC. Thence. . .

OHIGH TRANSITION (OHIGH.FERN7): From over OHIGH INT on FIM R-267 to FIM VORTAC. Thence. . .

. . . From over FIM VORTAC:

LANDING VAN NUYS RWY 16: Via FIM R-053 to UMBER INT, then via I-VNY localizer. Expect ILS RWY 16R.

LANDING VAN NUYS RWY 34: Via FIM R-136 to TOAKS INT, then via I-BUR localizer. Expect LDA-C; circle to land Rwy 34L.

LANDING BOB HOPE: Via FIM R-136 to TOAKS INT, then via I-BUR localizer. Expect ILS RWY 8.

LANDING SANTA MONICA MUNI: Via FIM R-097 and VNY R-277 to VNY then via VNY R-095 to DARTS INT. Expect VOR-A approach.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet and turboprop aircraft only.
NOTE: Expect Rwy 26L unless otherwise assigned by ATC.
NOTE: Expect local area altimeter reaching FL200.
ARRIVAL ROUTE DESCRIPTION

From GLRNO on track 121° to cross JEEYU at or below FL230, then on track 090° to cross TRJAN at or above 15000, then on track 090° to cross DODJR between 14000 and 15000 and at 250K, then on track 100° to cross CASAA at or above 11000, then on track 137° to cross RAFII at 8000 and at 240K.

LANDING RUNWAYS 8L/R: From RAFII on track 167° to cross WELDR at 8000, then on track 210° to cross ESAYE at 6000, then on track 211° to cross EFFXX at 6000 and at 210K, then on track 267° to cross CASIE at 4000, then on track 267°. Expect RNAV (RNP) Z RWY 8L approach or RADAR vectors to final approach course.

LANDING RUNWAYS 26L/R: From RAFII on track 137° to cross BOTIE at 8000, then on track 137°. Expect RNAV (RNP) Z RWY 26L or RADAR vectors to final approach course.

LOST COMMUNICATIONS

LANDING WEST: Proceed on the RNAV (RNP) Z RWY 26L approach.

LANDING EAST: Proceed on the RNAV (RNP) Z RWY 8L approach.
ARRIVAL ROUTE DESCRIPTION

FIKY TRANSITION (FIKY.GOATZ1)

From GOATZ on track 038° to cross DIRBY between 16000 and FL190 and at 280K, then on track 082° to cross PHUNN at or below 14000, then on track 034° to cross SHHOW at or below 12000, then on track 346° to cross ZAPP at or above 9000, then on track 346° to cross BUFIE at or below 8000, then on track 332° to cross SLI VORTAC at 7000 and at 210K, then on track 326° to cross TRNDO at 5000 and at 210K. Expect ILS or RNAV (RNP) RWY 25L.

LOST COMMUNICATIONS

In event of lost communication, proceed on the RNAV (RNP) RWY 25L approach.
Transition Routes

NOTE: Radar required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet and turboprop aircraft only.
NOTE: KREME TRANSITION restricted to KLAS departures only.
NOTE: WNCFL TRANSITION ATC assigned only.

(CONTINUED ON FOLLOWING PAGE)
NOTE: Turbojet and turboprop aircraft only.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Chart not to scale.

**ARRIVAL ROUTE DESCRIPTION**

**LANDING KNJTD RWY 21:** From GUERA on track 233° to FIM VORTAC at or above 5100. Expect ILS Y or LOC/DME RWY 21 approach.

**LANDING KOXR/KCMA:** From GUERA on track 201° to cross SESPE at 5300, then on track 200° to cross DOOBY at 5000, then on track 200°. 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:** Chart not to scale.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet aircraft only.
NOTE: Los Angeles landing west traffic.
NOTE: Expect runway 25L unless otherwise assigned by ATC.
NOTE: Expect local area altimeter reaching FL230.
NOTE: MDLER transition ATC only, do not file.

Note: Chart not to scale.

(Continued on following page)
ARRIVAL ROUTE DESCRIPTION

From HLYWD on track 251° to cross BRUEN between FL240 and FL300 and at 280K, then on track 252° to cross AVATR between FL190 and FL240, then on track 249° to cross DAAAY at or above 17000, then on track 250° to cross WADUP at or above 15000, then on track 250° to cross NEILE at or above 14000, then on track 250° to cross SEAVU between 12000 and 14000 and at 270K. Expect ILS or RNAV (RNP) RWY 25L approach.

LOST COMMUNICATIONS: In the event of lost communication prior to runway assignment proceed on ILS or LOC RWY 25L.

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet aircraft only.
NOTE: Los Angeles landing west traffic.
NOTE: Expect runway 25L unless otherwise assigned by ATC.
NOTE: Expect local area altimeter reaching FL230.

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

LOS ANGELES TRANSITION (LAX.HUBRD1): From over LAX VORTAC on LAX R-118 to OTISS INT, then on LAX R-118 to HUBRD INT. Thence . . . .

SANTA CATALINA TRANSITION (SXC.HUBRD1): From over SXC VORTAC on SXC R-084 to HUBRD INT. Thence . . . .

. . . . From over HUBRD INT via LAX R-118 to CARDI FIX via MZB R-320 to TORIE FIX. Expect vector to final approach course.
ARRIVAL ROUTE DESCRIPTION

TOKIO TRANSITION (TOKIO.HUULL2)

From HUULL on track 079° to cross GNZZO between 13000 and 14000, then on track 079° to cross RYDRR at 11000 and at 250K, then on track 103° to cross KEVVI at or above 10000, then on track 103° to cross BAYST at or above 9000 and at 240K, then on track 084° to cross JUUSE between 8000 and 9000, then on track 084° to cross CLIFY between 7000 and 8000 and at 210K, then on track 066° to cross DAHJR at 6000 and at 210K, then on track 071° to cross GADDDO at 6000, then on track 071°. Expect RADAR vectors to final approach course.

LOST COMMUNICATIONS

In the event of lost communications: RNP LAX arrivals proceed on the RNAV (RNP) Z RWY 24R approach at DAHJR or proceed on the ILS or LOC RWY 24R.

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet aircraft only.
NOTE: Procedure is only for use when Los Angeles landing west.
NOTE: Expect Runway 24R unless otherwise assigned by ATC.

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

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ARRIVAL ROUTE DESCRIPTION

LANDING KLAX/KHHR: From IRNMN on track 131° to cross SYMON between 12000 and 13000 and at 250K, then on track 126° to cross BAYST at or above 9000 and at 240K, then on track 084° to cross JUUSE between 8000 and 9000, then on track 084° to cross CLIFY between 7000 and 8000 and at 210K, then on track 066° to cross DAHJR at 6000 and at 210K, then on track 071° to cross GADDO at 6000, then on track 071°. Expect RADAR vectors to final approach course.

LOST COMMUNICATIONS

In the event of lost communications proceed on the RNAV (RNP) Z RWY 24R approach or the ILS or LOC RWY 24R.

NOTE: Chart not to scale.

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet aircraft only.
NOTE: Procedure is only for use when Los Angeles landing west.
NOTE: Expect Rwy 24R unless otherwise assigned by ATC.

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

HIHWY TRANSITION (HIHWY.IVINS1)
HONZK TRANSITION (HONZK.IVINS1)
PRPLE TRANSITION (PRPLE.IVINS1)
RDHOT TRANSITION (RDHOT.IVINS1)
REBRG TRANSITION (REBRG.IVINS1)

LANDING RWY 16R: From IVINS on track 063° to cross HNTUN at 7000, then on track 058°. Expect RADAR vectors to final approach course.

LANDING RWY 34L: From IVINS on track 126° to cross MIKEI at 7000, then on track 126° to cross EHUNT at 6000, then on track 126°. Expect RADAR vectors to final approach course.

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

**ARRIVAL ROUTE DESCRIPTION**

**BUGGA TRANSITION (BUGGA.JANNY5)**

**NEEDLES TRANSITION (EED.JANNY5)**

**KREME TRANSITION (KREME.JANNY5)**

**PURSE TRANSITION (PURSE.JANNY5)**

**WELUM TRANSITION (WELUM.JANNY5)**

**WNCHL TRANSITION (WNCHL.JANNY5)**

**LANDING KBUR RWY 8:** From JANNY on track 243° to cross PUCCK at 8000, then on track 201° to cross ELMRR at or above 7000, then on track 201° to cross WABBT at 6000, then on track 201°. Expect RNAV (RNP) Y RWY 8 or RADAR vectors to final approach course.

**LANDING KVNY:** From JANNY on track 243° to cross PUCCK at 8000, then on track 243° to cross EIFEL at or above 7000, then on track 189° to cross UMBER at or above 6000. Expect ILS Y RWY 16R or ILS Z RWY 16R.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet aircraft only.
NOTE: Expect Rwy 26L unless otherwise assigned by ATC.
NOTE: Expect local area altimeter setting reaching FL200.
NOTE: HEYNG transition ATC assigned only.
NOTE: FEYLA transition Las Vegas area departures only.

NOTE: Chart not to scale.
NOTE: Expect local area altimeter setting reaching FL200.

NOTE: Expect Rwy 26L unless otherwise assigned by ATC.

NOTE: Turbojet aircraft only.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.

NOTE: RADAR required.

NOTE: RNAV 1.

NOTE: DME/DME/IRU or GPS required.

NOTE: Turbojet aircraft only.

NOTE: Expect Rwy 26L unless otherwise assigned by ATC.

NOTE: Expect local area altimeter setting reaching FL200.
From JCKIE on track 222° to cross GBNEY between 14000 and 16000, then on track 229° to cross GGRAY between 12000 and 14000, then on track 217° to cross HINOH between 11000 and 13000.

LANDING RUNWAY 8L/R: From HINOH on track 196° to cross ARRAN at or above 10000 and at or below 250K, then on track 218° to cross FIXUT at 9000, then on track 218° to cross ILONE at 8000, then on track 218° to cross ESAYE at 6000, then on track 211° to cross EFFXX at 6000 and at 210K then on track 267° to CASIE, then on heading 267° or as assigned by ATC. Expect RNAV (RNP) Z RWY 8L approach or RADAR vectors to final approach course.

LANDING RWY 26L/R: From HINOH on track 196° to cross RUMBL at 10000 and at 240K, then on heading 196° or as assigned by ATC. Expect RNAV (RNP) Z RWY 26L approach or RADAR vectors to final approach course.

LOST COMMUNICATIONS
LANDING WEST: Proceed on the RNAV (RNP) Z RWY 26L approach or ILS or LOC RWY 26L approach.
LANDING EAST: Proceed on the RNAV (RNP) Z RWY 8L approach or ILS or LOC RWY 8L approach.
ARRIVAL ROUTE DESCRIPTION

ELKEY TRANSITION (ELKEY.KARLB3)
FICKY TRANSITION (FICKY.KARLB3)
ROSIN TRANSITION (ROSIN.KARLB3)

From GOATZ on track 038° to DIRBY, then on track 082° to cross PHUNN at or below 14000, then on track 034° to cross SHHOW at or below 12000, then on track 010° to cross OLLLY at or above 9000, then on track 010° to cross KARLB at or below 8000, then on track 010° to cross POXKU at 7000 and at 220K, then on track 061° to cross PDZ VORTAC at 7000, then on heading 049° or as assigned by ATC. Expect RNAV (RNP) Z or RNAV 1 - GPS. RADAR required. Expect RNAV (RNP) Z or RNAV 1 - GPS. RADAR required.

From GOATZ on track 038° to DIRBY, then on track 082° to cross PHUNN at or below 14000, then on track 034° to cross SHHOW at or below 12000, then on track 010° to cross OLLLY at or above 9000, then on track 010° to cross KARLB at or below 8000, then on track 010° to cross POXKU at 7000 and at 220K, then on track 061° to cross PDZ VORTAC at 7000, then on heading 049° or as assigned by ATC. Expect RNAV (RNP) Z or RNAV 1 - GPS. RADAR required.

NOTE: ROSIN Transition ATC assigned only.
NOTE: Jet aircraft only.

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

HECTOR TRANSITION (HEC.KAYOH8): From over HEC VORTAC on HEC R-211 to BULGY then on R-211 and PDZ R-030 to DAWNA, then on HDF R-353 to HDF VOR, then on HDF R-257 to FRETS, then on HDF R-257 and SLI R-075 to KAYOH. Thence . . . .

PALM SPRINGS TRANSITION (PSP.KAYOH8): From over PSP VORTAC on PSP R-260 to BANDS, then on HDF R-054 to HDF VOR, then on HDF R-257 to FRETS, then on HDF R-257 and SLI R-075 to KAYOH. Thence . . . .

. . . . from over KAYOH on SLI R-075 to JOGIT, then on SLI R-075 to SLI VORTAC, expect RADAR vectors to final approach course.
NOTE: Procedure for non-turbojet aircraft only except PALMDALE Transition to Santa Monica Airport.

NOTE: RADAR required.

NOTE: DME required on TULE Transition.

(CONTINUED ON FOLLOWING PAGE)
ARRIVAL ROUTE DESCRIPTION

LAKE HUGHES TRANSITION (LHS.KIMMO3): From over LHS VORTAC on LHS R-139 to KIMMO INT. Thence.

PALMDALE TRANSITION (PMD.KIMMO3): From over PMD VORTAC on PMD R-218 to KIMMO INT. Thence.

SHAFTER TRANSITION (EHF.KIMMO3): From over EHF VORTAC on EHF R-123 and LHS R-329 to LHS VORTAC, then on LHS R-139 to KIMMO INT. Thence.

TULE TRANSITION (TTE.KIMMO3): From over TTE VOR/DME on TTE R-147 and LHS R-329 to LHS VORTAC, then on LHS R-139 to KIMMO INT. Thence.

. . . .From over KIMMO INT on LHS R-139 and SLI R-319 to DARTS INT/SLI 25 DME.

LANDING LOS ANGELES INTL: Depart DARTS INT heading 140°, expect RADAR vectors to final approach course.

LANDING SANTA MONICA MUNI: Depart DARTS INT heading 140°, expect RADAR vectors to final approach course.
TURBOJET VERTICAL NAVIGATION

PLANNING INFORMATION

11000 at BENET
12000 at GOATZ
7000 at MADOW

250K at SXC or as assigned by ATC.

NOTE: RADAR and DME required.

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

BAUBB TRANSITION (BAUBB.LEGOZ2)
BLOXX TRANSITION (BLOXX.LEGOZ2)
BURGL TRANSITION (BURGL.LEGOZ2)
LANDO TRANSITION (LANDO.LEGOZ2)
REBRG TRANSITION (REBRG.LEGOZ2)
TILLT TRANSITION (TILLT.LEGOZ2)

LANDING CRQ RUNWAY 6: From LEGOZ on track 104° to cross BRIKS at or below 13000, then on track 084° to cross AVOLS at 11000 and at 250K, then on track 085° to cross PACIF at 7000. Expect RNAV (RNP) Z RWY 6 approach.

LANDING CRQ RUNWAY 24: From LEGOZ on track 104° to cross BRIKS at or below 13000, then on track 084° to cross AVOLS at 11000 and at 250K, then on track 085° to cross PACIF at 7000, then on track 085° to cross OCN VORTAC at 5000, then on track 085°. Expect RADAR vectors to ILS or LOC RWY 24 final approach course.

LANDING NFG: From LEGOZ on track 104° to cross BRIKS at or below 13000, then on track 084° to cross AVOLS at 11000 and at 250K, then on track 085° to cross PACIF at 7000, then on track 085° to cross OCN VORTAC at 5000, then on track 085°. Expect RNAV (GPS) RWY 21 approach or RADAR vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

HOGGZ TRANSITION (HOGGZ.LUCK1)
IMPERIAL TRANSITION (IPL.LUCK1)
LELL TRANSITION (LELL.LUCK1)
MOMAR TRANSITION (MOMAR.LUCK1)
PARKER TRANSITION (PKE.LUCK1)
TRUE TRANSITION (TRUE.LUCK1)

From LUCKI on track 239° to cross LYNDI at or above 5000 and at 210K. Expect RNAV (GPS) RWY 27 or LOC RWY 27 approach.

LOST COMMUNICATIONS: In the event of lost communication: join the San Diego RNAV (GPS) RWY 27 approach at LYNDI. If unable, proceed direct VYDDA and join the San Diego LOC RWY 27 approach.

NOTE: IPL transition ATC assigned only.
NOTE: Turbojet aircraft only.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: LOC transition ATC assigned only.
NOTE: Chart not to scale.
LYNXX EIGHT ARRIVAL

AL-67 (FAA)

BURBANK, CALIFORNIA

SW-3, 30 NOV 2023 to 25 JAN 2024

NOTE: Chart not to scale.

Lynxx EIGHT ARRIVAL

(Lynxx.Lynxx8) 03AUG06

SW-3, 30 NOV 2023 to 25 JAN 2024

NOTE: Chart not to scale.
From over PMD VORTAC via PMD R-104 to HITOP INT. Thence via HDF R-332 to HDF VOR. Expect VOR approach or vector to intercept ILS Rwy 32.
ARRIVAL ROUTE DESCRIPTION

LANDING RUNWAYS 6L/R: From MDNYT on track 252° to DOWNE, then on track 268° to cross DOYRS at or above 10000, then on track 267° to cross CLIFY between 8000 and 10000 and at 230K, then on track 259° to HNCHE, then on track 251° to cross SASSI at 7000 and at 210K, then on track 251° to SHIPM, then on track 251°. Expect RADAR vectors to ILS or RNAV (RNP) RWY 6R final approach course.

LOST COMMUNICATIONS: In the event of lost communication proceed on the RNAV (RNP) RWY 6R or ILS or LOC RWY 6R approach.

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

AVENAL TRANSITION (AVE.MOOR4): From over AVE VOR/DME on AVE R-129 and FIM R-310 to FIM VORTAC. Thence. . . .

DERBB TRANSITION (DERBB.MOOR4): From over DERBB INT on AVE R-129 and FIM R-310 to FIM VORTAC. Thence. . . .

DINTY TRANSITION (DINTY.MOOR4): From over DINTY INT on RZS R-233 to RZS VORTAC. Then on RZS R-087 and FIM R-267 to FIM VORTAC. Thence. . . .

. . . .From over FIM VORTAC via FIM R-158 to WAKER INT. For Runways 6L/R or 7L/R: From WAKER INT expect vector to final approach course for Los Angeles Intl Airport.

NOTE: DME or RADAR required.
NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

From over JLI VORTAC on JLI R-263 and OCN R-083 to VISTA, then on OCN R-083 to CYNDE DME, then on OCN R-083 to OCN VORTAC, then on OCN R-272 and VTU R-114 to SHILY INT, then on SLI R-251 to DOYLE INT, then on VTU R-129 to EXERT INT, then on LAX R-246 to MERMA INT. Expect RADAR vectors to final approach course for Runways 6 or 7.
OHSEA TWO ARRIVAL (RNAV) Transition Routes

NOTE: Chart not to scale.

NOTE: REESR TRANSITION ATC assigned only.

NOTE: Expect Rwy 20R unless otherwise assigned by ATC.

NOTE: Turbojet and high performance turboprop aircraft only.

NOTE: DME/DME/IRU or GPS required.

NOTE: RNAV 1.

NOTE: RADAR required.

NOTE: RADAR required.

See following page for Arrival Routes.

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

ARRIVAL ROUTE DESCRIPTION

From PCIFC on track 150° to cross CRAYN at or above 17000, then on track 150° to cross SIPPP at or above 14000, then on track 150° to cross TANDY between 13000 and 14000, then on track 152° to OHSEA.

LANDING RUNWAY 2L: From OHSEA on track 111° to cross STYFF at or below 9000, then on track 111° to cross JJAWS at or below 6000, then on track 092° to cross PUZZL at 5000, then on track 017° to cross MINOE at or above 3000 and at 210K. Expect RNAV (RNP) Z RWY 2L or vectors to final approach course.

LANDING RUNWAY 20R: From OHSEA on track 111° to cross STYFF at or below 9000, then on track 080° to cross KAYNN at or below 7000, then on track 057° to cross LAXBB at 5000, then on track 044° to cross KLEVR at 5000, then on track 016° to cross BHEAR at 5000, then on track 016°. Expect RNAV (RNP) Z RWY 20R or vectors to final approach course.

LOST COMMUNICATIONS

LANDING RUNWAY 20R: After BHEAR turn right direct SAGER and proceed on the ILS or LOC RWY 20R approach.

LANDING RUNWAY 2L: Proceed on LOC BC RWY 2L, RNAV (GPS) Y RWY 2L or RNAV (RNP) Z RWY 2L.
ARRIVAL ROUTE DESCRIPTION

From AMMOR on track 289° to cross RNCHO at or above FL260, then on track 282° to cross REGGO at or above FL240, then on track 268° to cross CYNDE at or below 14000, then on track 269° to cross OLAAA between 12000 and 13000, then on track 291° to PESOZ, then on track 328° to cross MADOW at or below 8000, then on track 331° to cross TOZEK at 7000, then on track 331° to cross Sli VORTAC at 7000 and at 210K, then on track 326° to cross TRNDO at 5000 and at 210K. Expect RADAR vectors to ILS or RNAV (RNP) RWY 25L final approach course.

LOST COMMUNICATIONS: In the event of lost communication, proceed on the RNAV (RNP) RWY 25L or the ILS or LOC RWY 25L approach.

NOTE: Chart not to scale.
NOTE: Radar required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet and high performance turboprop aircraft only.
NOTE: Expect Rwy 30 unless otherwise assigned by ATC.
NOTE: REESR Transition ATC assigned only.

(continued on following page)
ARRIVAL ROUTE DESCRIPTION

From PCIFC on track 148° to cross CRAYN at or above 17000, then on track 148° to cross SIPPP at or above 14000, then on track 148° to cross TANDY between 13000 and 14000, then on track 150° to OHSEA, then on track 109° to cross STYFF at or below 9000.

LANDING RUNWAY 12: From STYFF on track 078° to cross KAYNN at or below 7000, then on track 015° to cross PADDR at or below 6000, then on track 009° to cross QGATE at or above 3000, then on track 332° to cross BREKE at 3000. Expect RNAV (RNP) RWY 12 approach.

LANDING RUNWAYS 26R, 30: From STYFF on track 078° to cross KAYNN at or below 7000, then on track 055° to cross LAXBB at or below 5000, then on track 055° to cross ALBAS at 4000, then on track 020° to cross EZKEL at or above 4000, then on track 020°. Expect RNAV (RNP) Y RWY 30 or RADAR vectors to final approach course.

LOST COMMUNICATIONS

LANDING RUNWAYS 26R, 30: After ALBAS proceed on the RNAV (RNP) Y RWY 30 or ILS or LOC RWY 30 approach.

LANDING RUNWAY 12: After BREKE proceed on the RNAV (RNP) RWY 12 approach. If unable approach to LGB, after ALBAS/BREKE climb to 4000 direct SLI VORTAC and hold.
NOTE: Radar required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet and turboprop aircraft only.
NOTE: Landing Rwy 7 expect to cross GRYSN at 4000.
NOTE: For non GPS-equipped aircraft, FIM must be operational.

LANDING RUNWAY 7: From PITBL on track 245° to KWANG, then on track 267° to HHOME, then on track 254° to GRYSN, then on track 254°. Expect RADAR vectors to final approach course.

LANDING RUNWAY 25: From PITBL on track 245° to KWANG, then on track 267° to SWAMM, then on track 267°. Expect RADAR vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

LOS ANGELES TRANSITION (LAX.PLYYA1)

From PLYYA on track 126° to cross MNLYT at or above 4000.

LANDING RUNWAY 9: From MNLYT on track 120° to cross SARGS at or above 2100.

Expect ILS or LOC RWY 9 approach.
ROKKR TWO ARRIVAL (RNAV) Transition Routes

NOTE: Chart not to scale.

CONTINUED ON FOLLOWING PAGE
ARRIVAL ROUTE DESCRIPTION

From ROKKR on track 131° to cross ZEPPE between 9000 and 10000, then on track 129° to cross IVINS at or above 8000.

KBUR RUNWAY 8: From IVINS on track 126° to cross MIKEI at 7000. Expect ILS or LOC RWY 8 approach.

KBUR RUNWAY 15: From IVINS on track 083° to cross MAURK at 6000, then on track 083°. Expect RADAR vectors to final approach course.

KBUR RUNWAY 33: From IVINS on track 126° to cross MIKEI at 7000, then on track 126° to cross EHUNT at 6000, then on track 126°. Expect RADAR vectors to final approach course.
**ARRIVAL ROUTE DESCRIPTION**

**LANDING LGB:** From ROOBY on track 192° to cross SLPPR at or above 8000, then on track 192° to cross WRSTL between 6000 and 8000, then on track 255° to cross JITSU at or above 5500 and at 220K, then on track 255° to cross FYTRR at 4000 and at 210K, then on heading 270° or as assigned by ATC. Expect RADAR vectors to final approach course.

**LANDING SNA:** From ROOBY on track 192° to cross SLPPR at or above 8000, then on track 192° to cross WRSTL between 6000 and 8000, then on track 255° to cross JITSU at or above 5500 and at 220K, then on track 255° to cross FYTRR at 4000 and at 210K, then on heading 242° or as assigned by ATC. Expect RADAR vectors to final approach course.

**LOST COMMUNICATIONS:**

**LANDING LGB RUNWAY 30:** Intercept and proceed on the RNAV (RNP) RWY 30 or ILS RWY 30 approach.

**LANDING LGB RUNWAY 12:** Maintain 3000 and proceed direct BREKE then on the RNAV (RNP) RWY 12 approach. If unable approach to LGB climb to 4000 direct SLI VORTAC and hold.

**LANDING SNA RUNWAY 2L:** Proceed on the RNAV (RNP) RWY 2L approach or maintain 3000 and proceed direct MINOE then on the LOC BC RWY 2L approach. If unable approach to SNA climb to 5000 direct SLI VORTAC and hold.
Arrival Routes.

See following page for Arrival Routes.

NOTE: Chart not to scale.

NOTE: RNAV 1.

NOTE: Procedure is only for use when Los Angeles landing west.

NOTE: CERNL and ELKEY transitions GPS required.

NOTE: SNAXX and EESSA transitions DME/DME/IRU or GPS required.

NOTE: Turbojet and turboprop aircraft only.

NOTE: SNAXX and EESSA transitions only for use when Los Angeles landing west.

NOTE: LAX arrivals expect Rwy 24R unless otherwise assigned by ATC.

NOTE: RNAV 1.

NOTE: RADAR required.

NOTE: Transition Routes

(Continued on following page)
RYDDRR TWO ARRIVAL (RNAV) Arrival Routes

**ARRIVAL ROUTE DESCRIPTION**

**NOTE:** LAX arrivals expect Rwy 24R unless otherwise assigned by ATC.
**NOTE:** Procedure is only for use when Los Angeles landing west.
**NOTE:** Turbojet and turboprop aircraft only.
**NOTE:** RNAV 1.
**NOTE:** Radar required.

**LANDING KLAX/KHHR:** From RYDRR on track 103° to cross KEVVI at or above 10000, then on track 084° to cross JUUSE between 8000 and 9000, then on track 084° to cross CLIFFY between 7000 and 8000, then on track 084° to cross GADDIO at 6000, then on track 066° to cross BAYST at or above 9000 and at 210K, then on track 071° to cross DAHJR at or above 6000 and at 210K, then on track 071° to cross DAHJR at or above 6000, then on track 071°. Expect RADAR vectors to final approach course.

**LOST COMMUNICATIONS:** In the event of lost communications: RNP LAX arrivals proceed on the RNAV (RNP) Z RWY 24R approach at DAHJR or proceed on the ILS or LOC RWY 24R.

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

TURBOJET VERTICAL NAVIGATION

PLANNING INFORMATION

Expect 12000.
250K

Expect 10000

SW-3, 30 NOV 2023 to 25 JAN 2024

NOTE: RADAR required.
NOTE: DME required.
NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

AVENAL TRANSITION (AVE.SADDE8): From over AVE VOR/DME on AVE R-129 and FIM R-310 to FIM VORTAC, then on FIM R-148 to SADDE. Thence.

DERBB TRANSITION (DERBB.SADDE8): From over DERBB on AVE R-129 and FIM R-310 to FIM VORTAC, then on FIM R-148 to SADDE. Thence.

DINTY TRANSITION (DINTY.SADDE8): From over DINTY on RZS R-233 to RZS VORTAC, then on RZS R-109 and VTU R-289 to VTU VOR/DME, then on VTU R-093 to SADDE. Thence.

ELKEY TRANSITION (ELKEY.SADDE8): From over ELKEY on VTU R-226 to VTU VOR/DME then on VTU R-093 to SADDE. Thence.

FILLMORE TRANSITION (FIM.SADDE8): From over FIM VORTAC on FIM R-148 to SADDE. Thence.

PALMDALE TRANSITION (PMD.SADDE8): From over PMD VORTAC on PMD R-251 and FIM R-347 to FIM VORTAC, then on FIM R-148 to SADDE. Thence.

SAN MARCUS TRANSITION (RZS.SADDE8): From over RZS VORTAC on RZS R-109 and VTU R-289 to VTU VOR/DME, then on VTU R-093 to SADDE. Thence.

VENTURA TRANSITION (VTU.SADDE8): From over VTU VOR/DME on VTU R-093 to SADDE. Thence.

...From SADDE on SMO VOR/DME R-261 to cross SMO VOR/DME at or above 7000. Then on heading 070°. Expect RADAR vectors to final approach course.

LOST COMMUNICATIONS
In the event of lost communications proceed on the ILS or LOC RWY 24R.
ARRIVAL ROUTE DESCRIPTION

BLYTHE TRANSITION (BLH.SBONO1): From over BLH VORTAC on BLH R-278 and PSP R-072 to SBONO DME. Thence . . . .

DECAS TRANSITION (DECAS.SBONO1): From over DECAS INT on BLH R-278 and PSP R-072 to SBONO DME. Thence . . . .

GOFFS TRANSITION (GFS.SBONO1): From over GFS VORTAC on GFS R-185 and TNP R-028 to TNP VORTAC, then on TNP R-199 and PSP R-072 to SBONO DME. Thence . . . .

NEEDLES TRANSITION (EED.SBONO1): From over EED VORTAC on EED R-216 and TRM R-037 to UBABE DME, then on PSP R-072 to SBONO DME. Thence . . . .

. . . .From over SBONO DME expect RADAR vectors to final approach course.

NOTE: Chart not to scale.

NOTE: DME required.
NOTE: RADAR required.

NOTE: RNAV 1.

NOTE: DME/DME/IRU or GPS required.

NOTE: For non-GPS equipped aircraft, JLI DME must be operational.

NOTE: Turbojet and high performance turboprop aircraft only.

NOTE: Expect runway 26L unless otherwise advised by ATC.

NOTE: Expect local area altimeter setting reaching FL200.

NOTE: TTRUE transition ATC assigned only, do not file.

NOTE: Chart not to scale.

AMMOR TRANSITION (AMMOR.SCBBY2)
DAFNY TRANSITION (DAFNY.SCBBY2)
PHRED TRANSITION (PHRED.SCBBY2)
TTRUE TRANSITION (TTRUE.SCBBY2)
ARRIVAL ROUTE DESCRIPTION

LANDING RUNWAYS 8L/R: From SCBBY on track 258° to cross RRJAY between 8000 and 9000, then on track 258° to cross HRVEE at or above 7000, then on track 258° to cross HVANI at 6000 and at 240K, then on track 261° to cross EFFXX at 6000 and at 210K, then on track 267° to CASIE, then on track 267°. Expect RNAV (RNP) Z RWY 8L approach or RADAR vectors to final approach course.

LANDING RUNWAYS 26L/R: From SCBBY on track 281° to cross STRKS at or above 7900, then on track 281° to cross CAYDE at or above 6000, then on track 273° to cross KALEA at or above 5000 and at 220K, then on track 272° to cross TAKOE at or above 4300 and at 210K. Expect assigned instrument approach or RADAR vectors to final approach course.

LOST COMMUNICATIONS

LANDING WEST: Proceed on the RNAV (RNP) Z RWY 26L approach or ILS or LOC RWY 26L approach.

LANDING EAST: Proceed on the RNAV (RNP) Z RWY 8L approach or ILS or LOC RWY 8L approach.
NOTE: Expect runway assignment on initial contact with Southern California TRACON. In the event of lost communications prior to runway assignment proceed via ILS Rwy 25L.

NOTE: DME or RADAR required.

**ARRIVAL ROUTE DESCRIPTION**

**TWENTYNINE PALMS TRANSITION (TNP.SEAVU2):**
From over TNP VORTAC on TNP R-245 and PDZ R-069 to CATAW, then on POM R-098 to SEAVU.

**LOST COMMUNICATIONS:** In the event of lost communication prior to runway assignment proceed via ILS Rwy 25L.

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

JULIAN TRANSITION (JLI.SETER5): From over JLI VORTAC on JLI R-315 to SETER. Thence . . . .

PALM SPRINGS TRANSITION (PSP.SETER5): From over PSP VORTAC on PSP R-260 to BANDS, then on PDZ R-078 to SETER. Thence . . . .

LANDING ONTARIO INTL
RUNWAYS 26L/R: From over SETER on SB NDB 292° course to SB NDB; expect ILS approach.
RUNWAYS 8L/R: From over SETER on PDZ R-078 to BERDU, then on PDZ R-078 to PDZ VORTAC; expect vectors to final approach course.

ALL OTHER AIRPORTS
From over SETER via PDZ R-078 to BERDU, then on PDZ R-078 to PDZ VORTAC; expect vectors to final approach course.

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

LOS ANGELES TRANSITION (LAX.SHAMU1): From over LAX VORTAC via LAX R-132 and MZB R-294 to SHAMU FIX. Thence...

...From over SHAMU FIX via heading 135° to intercept MZB R-255 then via MZB R-255 to SARGS INT. Expect RADAR vectors to SAN Rwy 9 localizer.
ARRIVAL ROUTE DESCRIPTION

CLASN TRANSITION (CLASN.SIZLR3)

OYVEY TRANSITION (OYVEY.SIZLR3)

LANDING ALL AIRPORTS: From SIZLR on track 103° to MXIMO, then on track 106° to HITOP, then on track 106° to cross PZUKY at 16000, then on track 106° to cross BITTY at 16000, then on track 106° to cross MORON at 14000, then on track 095° to cross FERNN at 11000, then on track 123° to cross PSP VORTAC at 9000, then on track 124° to cross DEZZY at 9000, then on track 124°. Expect RADAR vectors to final approach course.

LOST COMMUNICATIONS
Proceed direct TRM VORTAC and execute the VOR or GPS-B approach.

NOTE: Turbojet and turboprop aircraft only.

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

From AMMOR on track 289° to cross RNCHO at or above FL260, then on track 298° to cross SNSTT between FL240 and FL260 and at 280K, then on track 328° to cross SOLAY at or below FL190, then on track 316° to cross LAHVA at 17000, then on track 287° to cross LAAMP at or above 15000, then on track 287° to cross SNDDR at or above 14000, then on track 287° to cross SEAVU between 12000 and 14000 and at 270K. Expect ILS or RNAV (RNP) RWY 25L approach.

LOST COMMUNICATIONS

In the event of lost communication prior to runway assignment proceed on ILS or LOC RWY 25L.
TANDY FIVE ARRIVAL  

ARRIVAL ROUTE DESCRIPTION

FELLOWS TRANSITION (FLW.TANDY5): From over FLW VOR/DME on FLW R-123 to SADDE. Thence. 

FILLMORE TRANSITION (FIM.TANDY5): From over FIM VORTAC on FIM R-148 to SADDE. Thence. 

. . . From over SADDE on FIM R-148 to PAROL. From over PAROL on SXC R-310 to SXC VORTAC. Then from over SXC VORTAC on SXC R-037 to ALBAS. Then from ALBAS on SLI R-171 to SLI VORTAC.

NOTE: Chart not to scale
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet and turboprop aircraft only.
NOTE: Expect local area altimeter setting reaching FL200.

(Continued on following page)
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet and turboprop aircraft only.
NOTE: Expect local area altimeter setting reaching FL200.

LANDING KBUR: From THRNE on track 274° to cross BFOON at 10000, then on track 274° to cross CRCUS at 10000, then on track 269° to cross NNEDD at 8000, then on track 253°. Expect RADAR vectors to final approach course.

LANDING KSMO: From THRNE on track 274° to cross BFOON at 10000, then on track 274° to cross CRCUS at 10000, then on track 266° to cross SMEGL at or above 7000, then on track 265° to cross JOFRY at 6000, then on track 265°. Expect RADAR vectors to final approach course.

LANDING KVNY: From THRNE on track 274° to cross BFOON at 10000, then on track 274° to cross CRCUS at 10000, then on track 269° to cross NNEDD at 8000, then on track 272°. Expect RADAR vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION
From TILLT on track 126° to ZIPRR, then on track 134° to WURLL, then on track 134° to cross TCUPS at or above FL260, then on track 109° to cross RUKKI at or above FL210 and at 280K, then on track 109° to cross BAUBB between 11000 and 14000.

LANDING RUNWAY 2L: From BAUBB on track 099° to cross JJAWS at or below 6000, then on track 092° to PUZZL, then on track 017° to cross MINOE at or above 3000 and at 210K. Expect RNAV (RNP) Z RWY 2L or vectors to final approach course.

LANDING RUNWAY 20R: From BAUBB on track 089° to cross STYFF at or below 9000, then on track 080° to cross KAYNN at or below 7000, then on track 057° to cross LAXBB at 5000, then on track 044° to cross KLEVR at 5000, then on track 016° to BHEAR, then on track 016°. Expect RNAV (RNP) Z RWY 20R or vectors to final approach course.

LOST COMMUNICATIONS
LANDING RUNWAY 20R: After BHEAR turn right direct SNAKE and execute the ILS or LOC RWY 20R approach.

LANDING RUNWAY 2L: Proceed on LOC BC RWY 2L, RNAV (GPS) Y RWY 2L, or RNAV (RNP) Z RWY 2L.

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Expect RW 20R unless otherwise assigned by ATC.
NOTE: RW 2L transition ATC assigned only.
NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

IMPERIAL TRANSITION (IPL.TOPGN2)
MOMAR TRANSITION (MOMAR.TOPGN2)
PARKER TRANSITION (PKE.TOPGN2)
TTRUE TRANSITION (TTRUE.TOPGN2)

From TOPGN on track 250° to cross ISEM at or above 6400, then on track 253° to cross ZIPPP between 6000 and 8000, then on track 273° to cross TM CAT at 6000 and at 210K, then on track 270°. Expect RADAR vectors to ILS or LOC RWY 9 approach.

LOST COMMUNICATIONS:
In the event of lost communication: proceed direct SARGS then on the ILS or LOC RWY 9 approach.

NOTE: Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

JULIAN TRANSITION (JLI.VISTA3): From over JLI VORTAC on JLI R-263 and OCN R-083 to VISTA. Thence . . . .

. . . . from VISTA to CYNDE on OCN R-083. From CYNDE to OCN VORTAC on OCN R-083. From OCN VORTAC to SHIVE on OCN R-259 and SLI R-148. From SHIVE to CWARD on SLI R-148. From CWARD to BAYER on SLI R-148. From BAYER to MADOW on SLI R-148. From MADOW to TOZEK on SLI R-148. From TOZEK to SLI VORTAC on SLI R-148. Expect RADAR vectors to final approach course for Runways 24 or 25.
NOTE: RADAR required
NOTE: RNAV 1
NOTE: DME/DME/IRU or GPS required
NOTE: Landing LAX expect Rwy 24R unless otherwise assigned by ATC.
NOTE: Landing SMO expect runway 21 unless otherwise assigned by ATC.
NOTE: This procedure not authorized for turbojet aircraft.

ARRIVAL ROUTE DESCRIPTION
LAKE HUGHES TRANSITION (LHS.WAYVE1)
LOPES TRANSITION (LOPES.WAYVE1)
SHAFTER TRANSITION (EHF.WAYVE1)
TULE TRANSITION (TTE.WAYVE1)

LANDING KLAX/KSMO: From WAYVE on track 142° to SAUGS, then on track 142° to KIMMO, then on track 143° to UPDOC, then on track 140°. Expect RADAR vectors to final approach course.
WEESL ONE ARRIVAL (RNAV)

ARRIVAL ROUTE DESCRIPTION

NINTY TRANSITION (NINTY.WEESL1)
SHAFTER TRANSITION (EHF.WEESL1)
WRING TRANSITION (WRING.WEESL1)

LANDING KBUR/KVNY: From WEESL on track 150° to GRRIT, then on track 145° to cross SWIIM at 9000, then on track 144° to cross LYNXX at 9000, then on track 192°. Expect RADAR vectors to final approach course.

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Landing BUR expect runway 8 unless otherwise assigned by ATC.
NOTE: Landing VNY expect runway 16R unless otherwise assigned by ATC.
NOTE: This procedure not authorized for turbojet aircraft.

NOTE: Chart not to scale.
NOTE: Approximate distance from DAWNA to ONT Runways: 28 NM
Approximate distance from HITOP to ONT Runways: 27 NM
NOTE: HECTOR Transition restricted to turbojet aircraft only.

NOTE: DME required.
NOTE: RADAR required.

NOTE: Chart not to scale

(NARRATIVE ON FOLLOWING PAGE)
ARRIVAL ROUTE DESCRIPTION

HECTOR TRANSITION (HEC.ZIGGY7): From over HEC VORTAC on HEC R-211 and PDZ R-030 to ZIGGY. Thence . . . .

PALMDALE TRANSITION (PMD.ZIGGY7): From over PMD VORTAC on PMD R-104 to HITOP, then on HDF R-332 to ZIGGY. Thence . . . .

SHAFTER TRANSITION (EHF.ZIGGY7): From over EHF VORTAC on EHF R-128 and PMD R-295 to PMD VORTAC, then on PMD R-104 to HITOP, then on HDF R-332 to ZIGGY. Thence . . . .

TULE TRANSITION (TTE.ZIGGY7): From over TTE VOR/DME on TTE R-147 and PMD R-295 to PMD VORTAC, then on PMD R-104 to HITOP, then on HDF R-332 to ZIGGY. Thence . . . .

LANDING ONTARIO INTL

RUNWAYS 8L/R: From over ZIGGY on PDZ R-030 to PDZ VORTAC; expect RADAR vectors to final approach course.

RUNWAYS 26 L/R: From over ZIGGY direct PETIS NDB or on PDZ R-030 to PETIS; expect RADAR vectors for ILS approach.

ALL OTHER AIRPORTS

From over ZIGGY on PDZ R-030 to PDZ VORTAC; expect RADAR vectors to final approach course.
ARRIVAL ROUTE DESCRIPTION

BURGL TRANSITION (BURGL.ZUUMA3)

REBRG TRANSITION (REBRG.ZUUMA3)

LANDING KLAX RUNWAYS 6L/R, 7L/R: From ZUUMA on track 142° to cross WAKER at 6000 and at 210K. Expect ILS or LOC RWY 6L approach or RADAR vectors to final approach course.

LANDING KSMO: From ZUUMA on track 142° to cross WAKER at 6000 and at 210K. Expect RNAV (GPS) RWY 3 approach.

LOST COMMUNICATIONS

LANDING LAX: Proceed on the RNAV (RNP) Z RWY 6L or ILS or LOC RWY 6L approach.

LANDING SMO: Proceed on the RNAV (GPS) RWY 3 approach.

NOTE: Chart not to scale.
RNAV (GPS) RWY 18
APPLE VALLEY (APV)

VCV AWOS-3  
135.475

JOSHUA APP CON  
124.55 363.0

AUNICOM  
122.8 (CTAF)

Circling NA to Rwy 8 and 26. Circling to Rwy 36 NA at night. Rwy 18 helicopter visibility reduction below 3/4 SM NA. Use Victorville altimeter setting; if not received, procedure NA.

Procedure NA for arrivals at BASAL on V210-394 northeast bound.

RNAV (GPS) RWY 18
APPLE VALLEY (APV)

1 NM to
BASAL

3062
206°

BASAL

1000

VCV AWOS-3  
135.475

JOSHUA APP CON  
124.55 363.0

AUNICOM  
122.8 (CTAF)

Circling NA to Rwy 8 and 26. Circling to Rwy 36 NA at night. Rwy 18 helicopter visibility reduction below 3/4 SM NA. Use Victorville altimeter setting; if not received, procedure NA.

 Procedure NA for arrivals at BASAL on V210-394 northeast bound.

CIRCLING

34°35'N-117°11'W
NOTE: GPS required.

NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwy 36: 300-1 or standard with a minimum climb gradient of 340’ per NM until 5800’.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 36: Climb via 002° course to HUNEY WP, then 339° course to EXCON WP, then climb in EXCON WP holding pattern (hold S left turns 339° inbound) to 7500’ MSL then proceed on course.
VOR/DME or GPS-B
CATALINA (AVX)

<table>
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<th>VOR/DME or GPS-B</th>
<th>CATALINA (AVX)</th>
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</thead>
<tbody>
<tr>
<td>VOR/DME or GPS-B</td>
<td>CATALINA (AVX)</td>
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Circling southeast runway 4-22 not authorized.

MISSED APPROACH: Climb to 3400 direct SXC VORTAC

<table>
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<th>ASOS</th>
<th>SOCAL APP CON</th>
<th>UNICOM</th>
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<td>120.675</td>
<td>127.4 323.275</td>
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<th>ELEV 1602</th>
<th>172°</th>
<th>3000 X 75</th>
<th>1.8% UP</th>
</tr>
</thead>
</table>

AERONAUTICAL CHART

1.9% UP

 CATEGORY  A  B  C  D
 CIRCLING  2220-1 618 (700-1) NA

33°24'N-118°25'W

AERONAUTICAL CHART

1.9% UP

CATEGORY  A  B  C  D
CIRCLING  2220-1 618 (700-1) NA
MISSED APPROACH: Climbing left turn to 3400 in SXC VORTAC holding pattern.
**RNAV (GPS) RWY 34**

**BAKERSFIELD MUNI (L45)**

**APP CRS**
- 341°

**Rwy Idg**
- 4000
- 377

**Apt Elev**
- 378

**UNICOM**
- 122.8 (CTAF)

**DIAGRAM**

- RNAV (GPS) RWY 34
- BAKERSFIELD MUNI (L45)
- BAKERSFIELD, CALIFORNIA
- AL-9118 (FAA)

**PROCEDURE**

- **MISSED APPROACH:** Climb to 1200 then climbing left turn to 3000 direct UMKOW and hold.

**AIRPORT INFORMATION**

- **ELEVATION:** 118.6
- **TDZE:** 126.45
- **CTAF:** 270.3

**DME/DME RNP-0.3 NA.** Use Meadows Fld altimeter setting. When Meadows Fld altimeter setting not received, use Porterville altimeter setting and increase all MDA 80 feet, increase LNAV and Circling Cat C and D visibility ¼ mile. Helicopter visibility reduction below 3/4 SM NA. Night Landing Rwy 16 NA.

**VISUAL SEGMENT - OBSTACLES.**

- **Visual Segment:** Obstacles.

**CIRCLING**

- 1060-1 682 (700-1)

**LNAV MDA**

- 840-1 463 (500-1)
- 840-1 463 (500-1)
Use Meadows Fld altimeter setting. When Meadows Fld altimeter setting not received, use Porterville altimeter setting and increase all MDA 80 feet, increase S-34 and Circling Cat C and D visibility ¼ mile. Visibility reduction by helicopters below ½ SM NA. Night Landing Rwy 16 NA.

MISSED APPROACH: Climbing left turn to 3000 on heading 260° to EHF R-196 to STIGR/EHF 10 DME and hold, continue climb-in-hold to 3000.

MIRL Rwy 16 and 34
MIRL Rwy 16-34

ZH Amdt 1B 31MAR16
SW-3, 30 NOV 2023 to 25 JAN 2024

BAKERSFIELD MUNI (I.45)
TAKING MINIMUMS:
Rwy 16: Standard.
Rwy 34: 400-1 ¼ or standard with minimum climb of 555' per NM to 900.

NOTE: DME required.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 16: Climbing right turn heading 260° to intercept V183, to STIGR/EHF 10 DME, thence . . .
TAKEOFF RWY 34: Climbing left turn heading 250° to intercept V183, to STIGR/EHF 10 DME, thence . . .

. . . climb in STIGR holding pattern to cross STIGR/EHF 10 DME at or above 3000 or MEA for route of flight then proceed on course.
**ILS or LOC RWY 30R MEADOWS FLD (BFL)**

**Bakersfield, California**

**LOC/DMC I-BFL 111.9**

**APP CRS 301°**

**Rwy Idg 7429**

**TDZE 493**

**Apt Elev 510**

**Atis 118.6**

**Bakersfield App Con 118.8 284.625 (South)**

**Bakersfield Tower 118.9 270.3 (North)**

**Gnd Con 121.7**

**Unicom 122.95**

---

**Circling NA northeast of Rwy 12L-30R. DME Required. VDP NA with Porterville altimeter setting. When local altimeter setting not received, use Porterville altimeter setting: increase DA to 790 and all visibilities to RVR 2200; increase all MDA 100 feet and visibility Cat C and D to RVR 6000. For inop ALS, increase S-LOC 30R Cat A and B visibility to RVR 5000. For inop ALS when using Porterville altimeter setting, increase S-ILS 30R all Cats visibility to RVR 5000.**

---

**Procedure NA for arrivals at AMONT on V459 southeast bound. Procedure NA for arrivals at GMN VORTAC on V137 southeast bound.**

---

**Missed Approach: Climb to 1000 then climbing right turn to 3000 on EHF VORTAC R-145 direct EHF VORTAC hold and hold, continue climb in holding to 3000.**

---

**One Minute Holding Pattern**

**Category A**

**S-ILS 30R**

**698/18 205 (200-1/2) 940/24 447 (500-1/2) 940/45 447 (500-7/8)**

**Circling**

**960-1 450 (500-1) 960-11/2 450 (500-1/2) 1060-2 550 (600-2)**

---

**Bakersfield, California**

**Amdt 31A 19JUL18**

---

**Al-36 (FAA) 23278**

---

**S-ILS 30R**

**MISSED APPROACH: Climb to 1000 then climbing right turn to 3000 on EHF VORTAC R-145 direct EHF VORTAC hold and hold, continue climb in holding to 3000.**

---

**MEADOWS FLD (BFL)**

---

**35°26′N-119°03′W**

---

**ILS or LOC RWY 30R**
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1°C (31°F) or above 54°C (130°F). Circling NA northeast of Rwy 12L-30R.

**MISSED APPROACH:** Climb to 1000 then climbing right turn to 3500 direct MARIC and hold.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 0°C (32°F) or above 54°C (130°F). Circling NA northeast of Rwy 12L-30R. When local altimeter setting not received, use Porterville altimeter setting; increase LPV DA to 790, LNAV/VNAV DA to 990. Increase LNAV/VNAV all Cats visibilities to 1¼ mile; increase all MDA 100 feet and LNAV visibility Cats C and D to 5000. VDP and Baro-VNAV NA when using Porterville altimeter setting. For inop ALS when using Porterville altimeter setting, increase LPV all Cats visibility to RVR 5000 and LNAV Cat C and D visibility to 1¼. # RVR 2400 when using Porterville altimeter setting.

ATIS 118.6
BAKERSFIELD APP CON 118.8 284.625 118.9 270.3 (SOUTH) (NORTH)
BAKERSFIELD TOWER 118.1 (CTAF) 257.8
GND CON 121.7
UNICOM 122.95

OS-12, 30 NOV 2023 to 25 JAN 2024

RNAV (GPS) RWY 30R
MEADOWS FLD (BFL)

LNAV only

*1.1 NM to RW30R

MALSR

CLIMB TO 1000 then climbing right turn to 3000 direct STEBN and hold.

LNAV Cat C and D visibility to 1 mile; increase all MDA 100 feet and LNAV visibility Cats Porterville altimeter setting: increase LPV DA to 790, LNAV/VNAV DA to 990. Increase (130°F). Circling NA northeast of Rwy 12L-30R. When local altimeter setting not received, use uncompensated Baro-VNAV systems, LNAV/VNAV NA below 0°C (32°F) or above 54°C (130°F).
Circling not authorized northeast of Rwy 12L-30R.

Missed Approach: Climb to 1500 then climbing right turn to 3000 direct EHF VORTAC and hold, continue climb-in-hold to 3000.

ATIS 118.6 BAKERSFIELD APP CON* 118.8 284.625 (SOUTH) BAKERSFIELD TOWER* 118.1 (CTAF) 257.8 GND CON 121.7 UNICOM 122.95

BAKERSFIELD, CALIFORNIA
Orig-B 23APR20

35°26'N-119°03'W
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAYS 12L/R:** Turn right heading 240°. Thence.

**TAKEOFF RUNWAYS 30L/R:** Turn left heading 240°. Thence.

. . . . intercept and proceed on the EHF R-196 to MARIC. Thence via (transition) or (assigned route).

**GORMAN TRANSITION (MARIC4.GMN):** From over MARIC via AVE R-109 and GMN R-328 to GMN VORTAC.

**LAKE HUGHES TRANSITION (MARIC4.LHS):** From over MARIC via AVE R-109 and LHS R-305 to LHS VORTAC.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 12L/R: Climb on heading 121° to 6000 for vector to assigned route/fix. Thence. . . .

TAKEOFF RUNWAYS 30L/R: Climb on heading 301° to 6000 for vector to assigned route/fix. Thence. . . .

. . . . . . . maintain ATC assigned altitude. Expect clearance to requested altitude five minutes after departure.

LOST COMMUNICATIONS: If no radio contact for two minutes, proceed direct SHAFTER VORTAC and hold. Climb in holding pattern to expected altitude prior to proceeding on course.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 12L/R: Climbing right turn direct EHF VORTAC. Thence.

TAKEOFF RUNWAYS 30L/R: Climb direct EHF VORTAC. Thence.

. . . . From over EHF VORTAC via EHF R-067 to cross WRING at or above 5400.

NOTE: Approximate distance from takeoff area to EHF VORTAC.

NOTE: Chart not to scale.
**RNAV (GPS) RWY 26**

**BIG BEAR CITY, CALIFORNIA**

**WAAS CH 99434 W26A**
- APP CRS 256°
- Rwy Idg 5250
- TDZE 6752
- Apt Elev 6752

**RNP APCH:**
- Straight-in Rwy 26 NA at night. Circling Rwy 26 NA at night. Circling NA north of Rwy 8-26. Rwy 26 helicopter visibility reduction below 1 SM NA.
- MISSED APPROACH: Climb to 8800, then climbing right turn to 11000 direct BRGET and hold.

**AWOS-3**
- 135.925

**LOS ANGELES CENTER**
- 126.35
- 290.2

**UNICOM**
- 122.725 (CTAF)

**ELEV 6752**
**TDZE 6752**

**GRAY AND DOTTED LINES**
- VGS and descent angles not coincident (VGS Angle 4.30/TCH 46).

**CATEGORIES**

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<td>MDA</td>
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<td>1388 (1400-1 1/4)</td>
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<td>LNAV MDA</td>
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<td>1508 (1600-1 1/4)</td>
<td>NA</td>
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<tr>
<td>CIRCLING</td>
<td>8260-1 1/4</td>
<td>8260-1 1/2</td>
<td>1508 (1600-1 1/4)</td>
<td>NA</td>
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</table>

**MIRL Rwy 8-26**

**BIG BEAR CITY, CALIFORNIA**

Amdt 2B 20JUN19

34°16’N-116°51’W
NOTE:  Chart not to scale.

OKACO ONE DEPARTURE (OBSTACLE) (RNAV)  

TAKING OFF MINIMUMS

Rwy 8: 1200-2 or standard with minimum climb of 282' per NM to 8000'.

TAKING OFF OBSTACLE NOTE

Rwy 8: 7439' MSL trees 2.5 NM from DER, 2400' right of centerline.

NOTE: For use by slant E, F, and G equipped aircraft only.
NOTE: GPS required.
NOTE: RNAV 1.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKING OFF RUNWAY 8: Climb via course 076° to OKACO WP; maintain 11000 or as assigned by ATC. If not at 11000 or at assigned cruising altitude upon reaching OKACO WP, climb in holding pattern unless otherwise advised by ATC.
RNAV (GPS) RWY 26
BLYTHE (BLH)

When local altimeter setting not received, procedure NA.
DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA.
Missed approach requires a minimum climb of 375 feet per NM to 3500.
Missed approach requires a minimum climb of 345 feet per NM to 3500.

ASOS
BLYTHE, CALIFORNIA
BLH

LOS ANGELES CENTER
128.15 285.6

UNICOM
122.8 (CTAF)

Procedure NA for arrivals at ROGBE on V135 northbound.

Procedure NA for arrivals at SODSE on V16-94 eastbound.

MISSED APPROACH: Climbing right turn to 5400 direct ROGBE and hold, continue climb-in-hold to 5400.

Amdt 1A 31MAR16

SW-3, 30 NOV 2023 to 25 JAN 2024

33°37'N-114°43'W
ASOS
120.175

LOS ANGELES CENTER
128.15 285.6

UNICOM
122.8 (CTAF)

BLH 117.4 BLH 117.4
Chan 121

Amdt 6 15MAY03

S-26
760-1 366 (400-1) 760-1¼ 366 (400-1¼)
CIRCLING
840-1 860-1 960-1½ 1260-2¼
443 (500-1) 463 (500-1) 563 (600-1½) 863 (900-2¼)

MIRL Rwy 8-26 and 17-35

BLH, CALIFORNIA

AL-53 (FAA)
MISSED APPROACH: Climb to 1000, then climbing right turn to 4600 via heading 120° and BLH R-080 outbound to JAROZ.

MISSED APPROACH: Climb to 1000, then climbing right turn to 4600 via heading 120° and BLH R-080 outbound to JAROZ/15.
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 8:** Climb direct CELOP then via depicted route to ZUNGU.

**TAKEOFF RUNWAY 26:** Climb direct HORGA, and left turn 144° track to CEMBI, then via depicted route to ZUNGU.

**TAKEOFF MINIMUMS**
Rwy 8: Standard with a minimum climb of 335' per NM to 2000, do not exceed 220K until ZUNGU.
Rwy 26: Standard with a minimum climb of 465' per NM to 5000, do not exceed 220K until ZUNGU.

**TAKEOFF OBSTACLE NOTES**
Rwy 8: Numerous trees beginning 2000' from DER, on centerline, up to 75' AGL/875' MSL.
Rwy 26: Numerous trees beginning 1000' from DER, 400' left of centerline, up to 75' AGL/634' MSL.

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

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climb direct CELOP then via depicted route to KUMBA.

TAKEOFF RUNWAY 26: Climb direct HORGA, and left turn 144° track to CEMBI, then via depicted route to KUMBA.

NOTE: GPS required
NOTE: RNAV 1
NOTE: Takeoff Rwy 8/26 do not exceed 220K until KUMBA.

TAKEOFF MINIMUMS
Rwy 8: Standard with a minimum climb of 345' per NM to 5000, do not exceed 220K until KUMBA.
Rwy 26: Standard with a minimum climb of 465' per NM to 5000, do not exceed 220K until KUMBA.

NOTE: Chart not to scale.
**RNAV (GPS) Rwy 26**

**Brawley Muni (BWC)**

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
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**APP CRS**

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<td>-135</td>
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<tr>
<td>Apt Elev</td>
<td>-129</td>
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**GPI**

- Use Imperial County altimeter setting.
- Circulating Rwy 8 NA at night.

**RNAV (GPS) Rwy 26**

**Brawley, California**

**Instrument Approach Plate**

- **IPL ASOS**: 132.175
- **LOS ANGELES CENTER**: 128.6 291.7
- **CTAF**: 122.9

**Characteristics**

- **ELEV**: -129
- **TDZE**: -135

**Diagram Notes**

- **RNAV (GPS) Rwy 26**
- **Brawley Muni (BWC)**
- **SW-3, 30 Nov 2023 to 25 Jan 2024**

**Address**

- **33°00'N-115°31'W**
Use Imperial County altimeter setting.
DME Required.
Circling Rwy 8 NA at night.

MISSED APPROACH: Climb to 3000 direct IPL VORTAC and hold.

VOR-B
BRAWLEY MUNI (BWC)

IPL ASOS
132.175

LOS ANGELES CENTER
128.6 291.7

CTAF
122.9

3446

DME REQUIRED

THERMAL
116.2 TRM
Chan 109

(IAF)
SECAN INT
TRM 34.6

(IAF)
CUSAM
IPL 14.6

IPL 27.5

HIHIHO
IPL 19.6

3446

IMPERIAL
115.9 IPL
Chan 106

3080

R-2507N

2580

R-336

R-245

R-115

R-336

58°

116°

IMPERIAL
115.9 IPL
Chan 106

2200

165°

1300

3000

IPL

2200

165°

1300

3000

IPL

1300

IPL

165°

JAMON INT
IPL 27.5

3000

IPL

165°

JAMON INT
IPL 27.5

3000

IPL

165°

JAMON INT
IPL 27.5

3000

IPL

165°

JAMON INT
IPL 27.5

3000

IPL
### MISSED APPROACH:
Climbing right turn to 4600 direct COTSI and on track 263° to VTU VOR/DME and hold.

### RNP APCH.
- Straight-in Rwy 8 at night, Circling to Rwy 33 at night, operational VGSI required, remain on or above VGSI glidepath until threshold.
- Circling Rwy 26 NA at night and Circling Rwy 33 NA at night for Cat D.
- Circling NA for Cats A/B/C northeast of Rwy 15 and 26.
- Circling NA for Cat D east of Rwy 15-33. For inop ALS, increase LP Cat A/B visibility to 1 1/2 SM and LP Cat C/D visibility to 2 1/2 SM. For inop ALS, increase LNAV Cat A/B visibility to 1 1/2 SM. Rwy 8 helicopter visibility reduction below RVR 5000 NA.

### D-ATIS
- 134.5
- 120.4
- 360.0 (North)
- 134.2
- 338.2 (West)

### SOCAL APP CON
- 118.0
- 346.8
- 118.0
- 346.8

### BURBANK TOWER
- 118.7
- 254.3

### GND CON
- 311°

### CLNCE DEL
- 1.3

### CPDLC
- 1.2%

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<td>(900-1/2)</td>
<td>(1500-3)</td>
<td>(1600-3)</td>
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### WAAS CH W08A
- 079°
- 727
- 778

### RNAV (GPS) Z RWY 8
BOB HOPE (BUR)

**BURBANK, CALIFORNIA**

**Amdt 2A** 28FEB19

**AL-67 (FAA)**

**2000** 3000 4000 4000

**173x256** 2000 2000 2000 3000

**V**

**P**

**P**

**A** 5

**8.3**

**079°**

**4100**

**BUBNE** (FAF)

**29.4**

**COTSI**

**5 NM**

**5.7 NM**

**1.3**

**VOR/DME and hold. on track 263° to VTU 4600 direct COTSI and Climbing right turn to**

### RNAV (GPS) Z RWY 8
BOB HOPE (BUR)

**BURBANK, CALIFORNIA**

**Amdt 2A** 28FEB19

**AL-67 (FAA)**

**2000** 3000 4000 4000

**173x256** 2000 2000 2000 3000

**V**

**P**

**P**

**A** 5

**8.3**

**079°**

**4100**

**BUBNE** (FAF)

**29.4**

**COTSI**

**5 NM**

**5.7 NM**

**1.3**

**VOR/DME and hold. on track 263° to VTU 4600 direct COTSI and Climbing right turn to**
**RNAV (GPS)-A**

**BOB HOPE (BUR)**

**BURBANK, CALIFORNIA**

**AL-67 (FAA)**

**ELEV 778**

**5200**

**4600**

**COTSIE**

**IGAXY**

**CEZKA**

**SUMXY**

**MISRAPPED**: Climbing right turn to 4600 direct COTSI on track 263° to VTU VOR/DME and hold.

**Category**

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<td>(1082 1100-1 ½)</td>
<td>1462 (1500-3)</td>
<td>1542 (1600-3)</td>
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**RNAV (GPS)-A**

**CIRCLING**

**ELEV 778**

**5200**

**4600**

**COTSI**

**VTU**

**CEZKA**

**SUMXY**

**IGAXY**

**MIRL Rwy 15-33**

**HIRL Rwy 8-26**

**REIL Rwys 15, 26 and 33**

**Burbank, California**

**Orig A 28FEB19**

**34°12'N-118°22'W**
FOUR STACKS VISUAL APPROACH RWY 15

Weather Minimums: 5500 feet ceiling and 5 mile visibility.

When Visual Approaches to Runway 15 are in progress, clearances will be given to aircraft from the Northwest thru Northeast utilizing the following phraseology:

"[IDENT] CLEARED FOR FOUR STACKS VISUAL APPROACH TO RUNWAY 15."
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climbing right turn heading 123° intercept VNY VOR/DME R-095 to ELMOO.

TAKEOFF RUNWAY 15: Climbing left turn heading 113° intercept VNY VOR/DME R-095 to ELMOO.

TAKEOFF RUNWAY 26: Climbing left turn heading 113° intercept VNY VOR/DME R-095 to ELMOO.

TAKEOFF RUNWAY 33: Climbing left turn heading 123° intercept VNY VOR/DME R-095 to ELMOO.

...thence via assigned route. Maintain ATC assigned altitude.
OROSZ TWO DEPARTURE (RNAV)

TOP ALTITUDE: FL230

NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Maintain at or below 250K unless otherwise directed by ATC.

TAKEOFF MINIMUMS

Rwy 8: Standard with minimum climb of 420' per NM to 2500.
Rwy 15: Standard with minimum climb of 340' per NM to 2100.
Rwy 26: Standard with minimum climb of 380' per NM to 4800.
Rwy 33: Standard with minimum climb of 460' per NM to 4900.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8, 15: Climbing right turn heading 210° or as assigned by ATC, expect vectors to cross TILLR at or above 8000, then on track 324° to cross OROSZ at or above 9000, thence.

TAKEOFF RUNWAY 26: Climbing right turn heading 290° or as assigned by ATC, expect vectors to cross TILLR at or above 8000, then on track 324° to cross OROSZ at or above 9000, thence.

TAKEOFF RUNWAY 33: Climbing left turn heading 270° or as assigned by ATC, expect vectors to cross TILLR at or above 8000, then on track 324° to cross OROSZ at or above 9000, thence.

... on (transition) maintain FL230. Expect filed altitude 10 minutes after departure.

COREZ TRANSITION (OROSZ2.COREZ)
CSTRO TRANSITION (OROSZ2.CSTRO)
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Turbojet only.
NOTE: MISEN transition restricted to aircraft landing LAS terminal area.
NOTE: HAILO transition ATC assigned only.

**Takeoff Minimums**
- Rwy 8: Standard with minimum climb of 420’ per NM to 2500.
- Rwy 15: Standard with minimum climb of 340’ per NM to 2100.
- Rwy 26: Standard with minimum climb of 380’ per NM to 4800.
- Rwy 33: Standard with minimum climb of 460’ per NM to 4900.

(Narrative on following page)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climbing right turn to heading 210°, expect vectors to RAYVE, then on track 009° to cross SLAPP at or above 13000, thence.

TAKEOFF RUNWAY 15: Climbing right turn to heading 210°, or as assigned by ATC, expect vectors to RAYVE, then on track 009° to cross SLAPP at or above 13000, thence.

TAKEOFF RUNWAY 26: Climbing right turn to heading 290°, expect vectors to RAYVE, then on track 009° to cross SLAPP at or above 13000, thence.

TAKEOFF RUNWAY 33: Climbing left turn to heading 270°, expect vectors to RAYVE, then on track 009° to cross SLAPP at or above 13000, thence.

...on (transition) maintain FL230. Expect filed altitude 10 minutes after departure.

BLYTHE TRANSITION (SLAPP2.BLH)
HAilo TRANSITION (SLAPP2.HAILO)
HECTOR TRANSITION (SLAPP2.HEC)
LAS VEGAS TRANSITION (SLAPP2.LAS)
MISEN TRANSITION (SLAPP2.MISEN)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climbing right turn heading 213° . . . .
TAKEOFF RUNWAY 15: Climbing right turn heading 213° . . . .
TAKEOFF RUNWAY 26: Climbing right turn heading 293° . . . .
TAKEOFF RUNWAY 33: Climbing left turn heading 273° . . . .

. . . .expect RADAR vector to VNY VOR/DME. Thence via (transition) or (assigned route).

AVENAL TRANSITION (VNY3.AVE): From over VNY VOR/DME on VNY R-255 and LAX R-323 to TWINE, then on LAX R-323 and GMN R-142 to GMN VORTAC, then on GMN R-310 and AVE R-086 to AVE VOR/DME.
DAGGETT TRANSITION (VNY3.DAG): From over VNY VOR/DME on VNY R-255 and LAX R-323 to TWINE, then on VTU R-046 and PMD R-218 to PMD VORTAC, then on PMD R-067 and DAG R-238 to DAG VORTAC.
FILLMORE TRANSITION (VNY3.FIM): From over VNY VOR/DME on VNY R-255 and FIM R-120 to FIM VORTAC.
GORMAN TRANSITION (VNY3.GMN): From over VNY VOR/DME on VNY R-255 and LAX R-323 to TWINE, then on LAX R-323 and GMN R-142 to GMN VORTAC.
PALMDALE TRANSITION (VNY3.PMD): From over VNY VOR/DME on VNY R-255 and LAX R-323 to TWINE, then on VTU R-046 and PMD R-218 to PMD VORTAC.
TWINE TRANSITION (VNY3.TWINE): From over VNY VOR/DME on VNY R-255 and LAX R-323 to TWINE.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8, 15: Climbing right turn heading 210° or as assigned by ATC, expect vectors to cross CCHUM at or above 6800, then on track 003° to cross KIMMO at or above 7000, then on depicted route to VVERA, thence . . . .

TAKEOFF RUNWAY 26: Climbing right turn heading 290° or as assigned by ATC, expect vectors to cross CCHUM at or above 6800, then on track 003° to cross KIMMO at or above 7000, then on depicted route to VVERA, thence . . . .

TAKEOFF RUNWAY 33: Climbing left turn heading 270° or as assigned by ATC, expect vectors to cross CCHUM at or above 6800, then on track 003° to cross KIMMO at or above 7000, then on depicted route to VVERA, thence . . . .

. . . . on (transition). Maintain 13000. Expect filed altitude 10 minutes after departure.

DAGGETT TRANSITION (VVERA2.DAG)
HECTOR TRANSITION (VVERA2.HEC)
RNAV (GPS) RWY 6
CALIFORNIA CITY MUNI (L71)

RNP APCH.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tr>
<td>LNAV MDA</td>
<td>3660-1/4</td>
<td>3660-1/2</td>
<td>3660-3</td>
<td>NA</td>
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<tr>
<td>REIL Rwy 6-24</td>
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</table>

Radar required.

If local altimeter setting not received, use Edwards AFB altimeter setting and increase all MDAs 60 feet; if neither received, procedure not authorized.

MISSED APPROACH: Climb to 9000 direct HETOM and via 333° track to BACRA and hold, continue climb-in-hold to 9000.

Procedure

Turn NA

ISABELLA MOA

JODIP

GOVVE

HETOM

BACRA

ODACE

MISSED APCH FIX

AWOS-1

120.875

JOSHUA APP CON

133.65 348.7

UNICOM

122.7 (CTAF)

MISSED APCH FIX

AWOS-1

120.875

JOSHUA APP CON

133.65 348.7

UNICOM

122.7 (CTAF)

MISSED APCH FIX

AWOS-1

120.875

JOSHUA APP CON

133.65 348.7

UNICOM

122.7 (CTAF)
RNAV (GPS) RWY 24
CALIFORNIA CITY MUNI (I.71)

**APP CRS**
- Category A: 227°
- Category B: 2429
- Category C: 2429
- Category D: 2454

**Rwy Idg**
- 6027

**Apt Elev**
- 2429

**AWOS-1**
- 120.875

**JOSHUA APP CON**
- 133.65
- 348.7

**UNICOM**
- 122.7 (CTAF)

**ELEV**
- 2454

**TDZE**
- 2429

**MISSED APCH FIX**
- JERID

**MISSED APPROACH**
- Climb to 9000 direct MVDE and via 213° track to JERID and hold, continue climb-in-hold to 9000.

**EXTRA**
- If local altimeter setting not received, use Edwards AFB altimeter setting and increase all MDAs 60 feet; if neither received, procedure not authorized.

**RNAV (GPS) **
- RWY 24

**CALIFORNIA CITY, CALIFORNIA**
- AL-9440 (FAA) 23110

**SW-3, 30 NOV 2023 to 25 JAN 2024**
NOTE: Chart not to scale.

TAKEOFF ROUTE DESCRIPTION

TAKEOFF RUNWAY 6: Climb direct WIRUS, then via depicted route to LHS VORTAC.
Maintain 9000.

TAKEOFF RUNWAY 24: Climb direct ZUSUR, then via depicted route to LHS VORTAC.
Maintain 9000.
RNAV (GPS) RWY 8
CLIFF HATFIELD MEML (CLR)

IPL ASOS 132.175
LOS ANGELES CENTER 128.6 291.7
CTAF 122.9

Procedure NA for arrivals at BOREN via V460 southwest bound.

DME/DME RNP-0.3 NA. Procedure NA at night.
Visibility reduction by helicopters NA.
Use Imperial altimeter setting, when not received, procedure NA.

MISSED APPROACH: Climbing left turn to 7300 direct
OCURO and hold, continue climb-in-hold to 7300.

<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>LNAV MDA</td>
<td>300-1</td>
<td>482 (500-1)</td>
<td>300-1¼</td>
<td>482 (500-1¼)</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>440-1</td>
<td>622 (700-1)</td>
<td>440-1½</td>
<td>622 (700-1½)</td>
</tr>
</tbody>
</table>

CALIFORNIA, CALIFORNIA
AL-9486 (FAA)

Amdt 1 12MAR09

33°08'N-115°31'W

CLIFF HATFIELD MEML (CLR)
RNAV (GPS) RWY 8

SW-3, 30 NOV 2023 to 25 JAN 2024
Circling NA north of Rwy 8-26. DME/DME RNP-0.3 NA.
When local altimeter setting not received, use Oxnard altimeter setting and increase all MDA 20 feet.

Procedure NA for arrivals at DEANO via V27 eastbound.

Procedure NA for arrivals at VTU VOR/DME via airway radials 289 CW 311. Terminal route VTU VOR/DME to HATLI NA when W-289 active.

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

When local altimeter setting not received, use Oxnard altimeter setting and increase all MDA 20 feet.

Procedure NA for arrivals at DEANO via V27 eastbound.

Procedure NA for arrivals at VTU VOR/DME via airway radials 289 CW 311. Terminal route VTU VOR/DME to HATLI NA when W-289 active.
Circling NA north of Rwy 8-26. DME/DME RNP 0.3 NA. If local altimeter setting not received, use Oxnard altimeter setting and increase all MDAs 20 feet. VDP NA when using Oxnard altimeter setting.

**Procedure NA for arrivals at SUANA via V326 eastbound and arrivals at SESPE via V186-597 westbound.**

**VGS I and descent angles not coincident (VGS Angle 3.00/TCH 48).**

**1720 when using Oxnard altimeter setting.**

**Category C**

<table>
<thead>
<tr>
<th>LNAV MDA</th>
<th>620-1</th>
<th>543 (600-1)</th>
<th>620-1½</th>
<th>543 (600-1½)</th>
<th>620-1¾</th>
<th>543 (600-1¼)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIRCLING</td>
<td>620-1</td>
<td>543 (600-1)</td>
<td>640-1½</td>
<td>563 (600-1½)</td>
<td>1100-3</td>
<td>1023 (1100-3)</td>
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</tbody>
</table>
**RNAV (GPS) Z RWY 26**

**Camarillo (CMA)**

**MISSED APPROACH:** Climb to 3000 direct VAANG and via 253° track to HATLI and hold.

**ATIS** 126.025  **POINT MUGU APP CON** 124.7  **CAMARILLO TOWER** 128.2 (CTAF) 269.4

**DME/DME RNP -0.3 NA.** If local altimeter setting not received, use Oxnard altimeter setting and increase DA 18 feet.

**MISSAPED APCH FIX**

**5 NM**

**-073°**

**HATLI**

**VAANG**

**-253°**

**Oxnard**

**Procedure NA for arrivals at SUANA via V326 eastbound and arrivals at SESPE via V186-597 westbound.**

**ATIS Orig-A 27JUN13**
Circling not authorized north of Rwy 8/26.

MISSING APPROACH: Climb to 2000 via CMA R-265 then climbing left turn to 4400 direct CMA VOR/DME and hold.

**CATEGORY**

<table>
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<tr>
<th></th>
<th>A</th>
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<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td><strong>S-26</strong></td>
<td>1100-1/4</td>
<td>1100-1/2</td>
<td>1100-3</td>
<td>NA</td>
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<tr>
<td>Knots</td>
<td>60</td>
<td>90</td>
<td>120</td>
<td>150</td>
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<tr>
<td>Min:Sec</td>
<td>4:54</td>
<td>3:16</td>
<td>2:27</td>
<td>1:58</td>
</tr>
</tbody>
</table>

**CIRCLING**

One Minute Holding Pattern

VOR RWY 26 CAMARILLO (CMA)
Misleading Approach: Climb to 5200 and intercept the VOR-TAC R-026 direct CUPIS and hold. Climb in hold.

CAUTION: High terrain on final approach.

20.1 Penetrations: Until towers 1.5 NM - 1.7 NM from threshold, 1400 ft - 2000 ft left of threshold. Tallast tower 595 ft MSL, Until Terrain 639 ft MSL, 1.6 NM from threshold, 2085 ft left of course. Until Terrain 587 ft MSL, 1.7 NM from threshold, 775 ft left of course.

Aircraft inbound to OCN on V23, 363-597, V165, V208-458 will be cleared to intercept and proceed via OCN 9 mile Arc to WI Pam at 2500 min.

Not for Civil Use

VGS1 and descent angle not coincident (VGS1 Angle 4.00/TCH 68).

Oceanside, California

Amend 5 02DEC21
NOT FOR CIVIL USE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3: Climbing right turn to intercept NFG TACAN R-045 to ZUKEM then right turn direct VISTA. Cross VISTA at 4000 or assigned altitude.

TAKE-OFF RWY 21: Climb on heading 211° to intercept OCN VORTAC R-025 then direct OCN then left turn to intercept OCN R-083 direct VISTA. Cross VISTA at 4000 or assigned altitude.
**Radar Required**

**Not for Civil Use**

**Not for Use by CAT D/E Aircraft**

**Departure Route Description**

**Take-Off RWY 3:** Climb on heading 031° to 1000 then climbing right turn to 3800 and intercept NFG TACAN R-047 to CORRI.

**Take-Off RWY 21:** Climb on heading 211° to 1300 then climbing left turn to 3800 and intercept NFG TACAN R-047 to CORRI.
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3. Climb on heading 031° to 1100 then climbing right turn heading 142° to intercept OCN VORTAC R-083 to ROBNN. Cross ROBNN at 5000 or as directed by ATC.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 21: Climb on heading 211° to intercept OCN VORTAC R-022 to OCN. Cross OCN at assigned altitude, then direct QUNTN.
For uncompensated Baro-VNAV systems, procedure NA below 4°C (40°F) or above 54°C (130°F). GPS required.

**ATIS**

**SOCAL APP CON**

**PALOMAR TOWER**

**GND CON**

**CLNC DEL**

**AUTHORIZATION REQUIRED**

CARLSBAD, CALIFORNIA

**APP CRS 065°**

**Rwy Idg 4600**

**TDZE 331**

**Apt Elev 331**

**RNAV (RNP) Z RWY 6**

**MC CLELLAN-PALOMAR (CRQ)**

**AUTHORIZATION REQUIRED**

SW-3, 30 NOV 2023 to 25 JAN 2024
For uncompensated Baro-VNAV systems, procedure NA below 1°C (34°F) or above 54°C (130°F). For inoperative MALSR, increase RNP 0.10 visibility to RVR 6000 all Cats, RNP 0.30 visibility to 1¾ all Cats. GPS required.

Procedure NA for arrivals at TANNR on V186 northwest bound.

Procedure NA for arrivals on OCN VORTAC airway radials 083 CW 162.

VGSI and RNAV glidepath not coincident (VGSI Angle 3.20/TCH 54).

See Planview for multiple IF locations.
A

P

TWR

GND CON

121.8

ATIS

120.15

SOCAL APP CON

127.3 323.0

PALOMAR TOWER *

118.6 (CTAF) 276.4

MC CLELLAN-PALOMAR

PACIF

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 4°C or above 54°C. When Carlsbad altimeter setting not received, procedure NA.

ATIS

120.15

SOCAL APP CON

127.3 323.0

PALOMAR TOWER *

118.6 (CTAF) 276.4

GND CON

121.8

CLNC DEL

134.85

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 4°C or above 54°C. When Carlsbad altimeter setting not received, procedure NA.

Procedure NA for arrivals at PACIF on V25-27 northwest bound and V208-458 westbound.

VGSI and RNAV glidespath not coincident (VGSI Angle 3.00/TCH 35).

GP 3.00° TCH 55

2500

1700

065°

1700

065°

2.6 NM to RW06

FLEEE

SWWAG

2.6 NM

1.5 NM

2.9 NM

TIZIE

LNAV only

3000

15°

RNP APCH-GPS.

CARLSBAD, CALIFORNIA

AL-5310 (FAA)

MC CLELLAN-PALOMAR (CRQ)

WAAS

CH 40239

065°

4600

Rwy Idg

TDZE

331

Apt Elev

331

1260-2 2/3

929 (1000-2 1/4)

NA

869 (900-1 3/4)

1200-1 3/4

869 (900-1 1/4)

1200-1

869 (900-1)

LNAV MDA

837-1 3/4

506 (600-1 1/4)

851 (900-2 1/2)

796-1 1/2

465 (500-1 1/2)

CIRCLING

LNAV/ VNAV DA

LPV DA

C

D

A

B

796-1 1/2

465 (500-1 1/2)

837-1 3/4

506 (600-1 1/4)

1200-1

869 (900-1)

1200-1 1/4

869 (900-1 1/4)

1200-2 1/2

869 (900-2 1/2)

1260-2 2/3

929 (1000-2 1/4)

NA

CARLSBAD, CALIFORNIA

Orig-A 19MAY22

33°08'N-117°17'W

MC CLELLAN-PALOMAR (CRQ)

RNAV (GPS) Y RWY 6

23278

PACIF

SWWAG

FLEEE

RNP APCH-GPS.

CARLSBAD, CALIFORNIA

AL-5310 (FAA)

MC CLELLAN-PALOMAR (CRQ)

WAAS

CH 40239

065°

4600

Rwy Idg

TDZE

331

Apt Elev

331

1260-2 2/3

929 (1000-2 1/4)

NA

869 (900-1 3/4)

1200-1 3/4

869 (900-1 1/4)

1200-1

869 (900-1)

LNAV MDA

837-1 3/4

506 (600-1 1/4)

1200-1

869 (900-1)

1200-1 1/4

869 (900-1 1/4)

1200-2 1/2

869 (900-2 1/2)

1260-2 2/3

929 (1000-2 1/4)

NA

CARLSBAD, CALIFORNIA

Orig-A 19MAY22

33°08'N-117°17'W

MC CLELLAN-PALOMAR (CRQ)

RNAV (GPS) Y RWY 6

23278

PACIF

SWWAG

FLEEE

RNP APCH-GPS.
VOR-A
MC CLELLAN-PALOMAR (CRQ)

ATIS 120.15
SOCAL APP CON 127.3 323.0
PALOMAR TOWER* 118.6 (CTAF) 276.4
GND CON 121.8
CLNC DEL 134.85

NoPT for arrival on OCN VORTAC airway radial 301.

MISSION BAY
117.8 MZB
Chan 125

One Minute Holding Pattern
3000 -270°
090°

OCN VORTAC

CIRCLING

CATEGORY
A 1300-1½
B 1300-½
C 1300-3
D NA

119° 9.4 NM from FAF

VOR-A
MC CLELLAN-PALOMAR (CRQ)

CARLSBAD, CALIFORNIA

33°08’N-117°1’W

Amdt 8A 27FEB20

VERIFIED

1000-1
1300-1
1600-1
2000-1

712
534±
720±
1736±

482
481

1300

5438
2976
1685
1752

119°
115.3
118.6
121.8

115.3 OCN
118.6 (CTAF)
276.4
121.8
134.85

2000-1
5438
331
2440
127.3
323.0
118.6
276.4

127.3
323.0
118.6
276.4
121.8
134.85
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 6: Climbing left turn heading 245° to 2300, do not exceed 210K until established on heading 245°, expect vectors to cross GYWNN at or above 6000, then on track 308° to PADRZ, then on track 337° to cross CWARD at or below 12000, thence. . . .

TAKEOFF RUNWAY 24: Climb heading 245° to 2300, expect vectors to cross GYWNN at or above 6000, then on track 308° to PADRZ, then on track 337° to cross CWARD at or below 12000, thence. . . .

. . . on transition. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

LOS ANGELES TRANSITION (CWARD2.LAX)
SEAL BEACH TRANSITION (CWARD2.SLI)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 6: Climbing left turn heading 245° to 2300, do not exceed 210K until established on heading 245°, expect vectors to cross GYWNN at or above 8000, then on track 308° to PADRZ, thence...

TAKEOFF RUNWAY 24: Climbing heading 245° to 2300, expect vectors to cross GYWNN at or above 8000, then on track 308° to PADRZ, thence...

...on (transition). Maintain 15000. Expect higher altitude 10 minutes after departure.

CHECK TRANSITION (PADRZ2.CHECK)

DINTY TRANSITION (PADRZ2.DINTY)

IKAYE TRANSITION (PADRZ2.IKAYE)

MALIT TRANSITION (PADRZ2.MALIT)

OROSZ TRANSITION (PADRZ2.OROSZ)

SHAFTER TRANSITION (PADRZ2.EHF)

NOTE: RNAV 1.

NOTE: RADAR required.

NOTE: Turbojets and turboprops only.

NOTE: CHECK, SHAFTER, IKAYE, OROSZ

TRANSITIONS: DME/DME/IRU or GPS required.

NOTE: DINTY, MALIT TRANSITIONS: GPS only.

NOTE: For non-GPS equipped aircraft,

Oceanside (OCN) must be operational.

NOTE: DINTY TRANSITION ATC assigned only.

NOTE: DINTY and MALIT TRANSITIONS NA from

SEE, SDM and RNM airports.

TAKEOFF MINIMUMS

Rwy 6: Standard with minimum climb of 255° per NM to 1700.

Rwy 24: Standard.
CAUTION: Short Intermediate Segment (4 NM), recommend early configuration.

CAUTION: DG from CISUN to IDALE 333 ft/NM. IDALE to HAMEN 440 ft/NM.
## Copter Tacan RWY 32

**AB-914 (USN) CHINA LAKE NAWS (ARMITAGE FLD) (KNID)**

<table>
<thead>
<tr>
<th>TACAN NID</th>
<th>APCH CRS</th>
<th>RWY LDG</th>
<th>Thre</th>
<th>Arpt Elev</th>
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</thead>
<tbody>
<tr>
<td>Chan 53</td>
<td>313°</td>
<td>9013</td>
<td>2241</td>
<td>2284</td>
</tr>
</tbody>
</table>

**Radar Required**

- Limit final approach airspeed to 80 KIAS
- Missed Approach: Climb to 3600, then climbing left turn to 6200, intercept NID TACAN R-133 to OKECI and hold. Continue climb in hold.

### ATIS

- **JOSHUA APP CON/DEP CON**: 322.375
- **TOWER**: 120.15 340.2
- **GND CON**: 360.2
- **CLNC DEL**: 274.7

### Emergency Safe Alt 100 NM 16,500

- **3600**
- **6200**
- **NID R-133**
- **OKECI NID 7**
- **VGS1 and descent angles not coincident**

### Category

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<thead>
<tr>
<th>Category</th>
<th>Copter</th>
<th>Circling</th>
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<tbody>
<tr>
<td>5-32</td>
<td>2860-1</td>
<td>619 [600-1]</td>
</tr>
<tr>
<td>2860-1</td>
<td>576 [600-1]</td>
<td></td>
</tr>
</tbody>
</table>

**HRL all Rwy's**

**Ridgecrest, California**

- **35° 41' N** - **117° 42' W**
- **China Lake NAWS (Armitage FLD)**
  - **Orig**: 20APR23
  - **23110**

**China Lake**

- **Chan 53 NID**
- **R-133**
- **(IAF) OKECI NID 7**
- **HOLD 6200**
- **ELEV 2284**
- **Thre 2241**

**Copter Tacan RWY 32**

**Ridgecrest, California**

- **35° 41' N** - **117° 42' W**
- **China Lake NAWS (Armitage FLD)**
  - **Orig**: 20APR23
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3: Climb heading 028° to 3100, then climbing right turn direct ZUDID. Thence...

TAKE-OFF RWY 14: Climb heading 140° to 3000, then climbing right turn direct ZUDID. Thence...

TAKE-OFF RWY 21: Climb heading 208° to 3000, then climbing left turn direct ZUDID. Thence...

TAKE-OFF RWY 26: Climb heading 257° to 2700, then climbing left turn direct ZUDID. Thence...

TAKE-OFF RWY 32: Climb heading 320° to 3100, then climbing right turn direct BUGWU, then direct ZUDID. Thence...

...from over ZUDID proceed via depicted route to FILLMORE VORTAC. Cross ROSIE at or above 8000 or as assigned.
SW-3, 30 NOV 2023 to 25 JAN 2024

CHINA LAKE NAWS (ARMITAGE FLD) (KNID)

RIDGE CREST, CALIFORNIA

SALTD SEVEN DEPARTURE (SALTD7 • SALTD)

ATIS 322.375
CLNC DEL 274.7
GND CON 360.2

CHINA LAKE TOWER 120.15 340.2
JOSHUA DEP CON 133.65 348.7

Rwy 32: Do not exceed 240 KIAS until leaving 3300.

79
ILS or LOC RWY 26R
CHINO (CNO)

Helicopter visibility reduction below 3/8 SM NA.

When local altimeter setting not received, use Ontario altimeter setting and increase DA to 940 feet and all visibilities 3/8 SM; increase all MDAs 60 feet and visibility S-LOC 26R and Circling Cat C and D 3/4 SM.

MISSUED APPROACH: Climb to 1100 then climbing left turn to 4500 direct RAL VOR and hold, continue climb-in-hold to 4500.

Procedure NA for arrivals on HDF VOR airway radials 257° CW 353.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
### VOR or GPS-A

**CORONA MUNI (AJO)**

**Amdt 4A  28AUG08**

**VOR or GPS-A**

When local altimeter setting not received, use Ontario Intl altimeter setting and increase all MDA 80 feet.

**MISSING APPROACH:** Climbing right turn to 3100 direct PDZ VORTAC and hold, continue climb in hold to 3100.

<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><strong>FAF to MAP</strong></td>
<td>3.6 NM</td>
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<tr>
<td><strong>CIRCLING</strong></td>
<td>1660-1¼</td>
<td>1660-1½</td>
<td>1127 (1200-1¼)</td>
<td>1127 (1200-1½)</td>
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<td><strong>Knots</strong></td>
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<td>90</td>
<td>120</td>
<td>150</td>
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<td>2:24</td>
<td>1:48</td>
<td>1:26</td>
</tr>
</tbody>
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**SW-3, 30 NOV 2023 to 25 JAN 2024**

**AL-5987 (FAA)**

**CORONA, CALIFORNIA**

**AWOS-3PT**

**SOCAL APP CON**

**UNICOM**
RNAV (GPS) RWY 22
BARSTOW-DAGGETT (DAG)

MISSED APPROACH: Climb to 8000 direct CIKVI and on track 275° to BINTE and on track 192° to NUMMN and hold, continue climb-in-hold to 8000.

ASOS
132.175

UNICOM
123.0 (CTAF)

Procedure NA for arrivals at DISBE on V394 northeast bound.

Procedure NA for arrivals at TEELE on V587 northeast bound.

Procedure NA for arrivals at HEC VORTAC on V12-210 eastbound.

MISSAPCH Fix
NUMMN
067°
7 NM

8000 CIKVI tr 275° BINTE tr 192° NUMMN VGS and descent angles not coincident (VGS Angle 3.00/TCH 49).

FALBA 1.6 NM to CUTNO

CIKVI

1 NM
1.6 NM
2.2 NM
6.2 NM

Apt Elev
TDZE
1930
1918

Category
LNAV MDA
A
B
C
D

2800-1\frac{1}{4}
882 (900-1\frac{1}{4})

2800-2\frac{3}{4}
882 (900-2\frac{3}{4})

2800-3
882 (900-3)

34°51'N-116°47’W

DAGGETT, CALIFORNIA
Amdt 2C 18 JUL 19

RNAV (GPS) RWY 22
BARSTOW-DAGGETT (DAG)

SW-3, 30 NOV 2023 to 25 JAN 2024

19199
RNAV (GPS) RWY 26
BARSTOW-DAGGETT (DAG)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -4°C or above 54°C. Circling NA for Cat D south of Rwy 8-26. Rwy 26 helicopter visibility reduction below ½ SM NA.

#Missed approach requires a minimum climb of 220 feet per NM to 8000.

RNP APCH.

ASOS
132.175

LOS ANGELES CENTER
132.5 284.7

UNICOM
123.0 (CTAF)

Procedure NA for arrivals at DISBE on V394 northeast bound.

Limit initial and intermediate approach to 210K.

Procedure NA for arrivals at TEELE on V587 northeast bound.

Procedure NA for arrivals at BASAL on V12-210 southwest bound.

Category

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<td>1570 (1500-3)</td>
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Baro-VNAV NA below -4°C or above 54°C. 54°C. Circling NA for Cat D south of Rwy 8-26. Rwy 26 helicopter visibility reduction below ½ SM NA.

#Missed approach requires a minimum climb of 220 feet per NM to 8000.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -4°C or above 54°C. Circling NA for Cat D south of Rwy 8-26. Rwy 26 helicopter visibility reduction below ½ SM NA.

#Missed approach requires a minimum climb of 220 feet per NM to 8000.

RNP APCH.

ASOS
132.175

LOS ANGELES CENTER
132.5 284.7

UNICOM
123.0 (CTAF)

Procedure NA for arrivals at DISBE on V394 northeast bound.

Limit initial and intermediate approach to 210K.

Procedure NA for arrivals at TEELE on V587 northeast bound.

Procedure NA for arrivals at BASAL on V12-210 southwest bound.

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Baro-VNAV NA below -4°C or above 54°C. 54°C. Circling NA for Cat D south of Rwy 8-26. Rwy 26 helicopter visibility reduction below ½ SM NA.

#Missed approach requires a minimum climb of 220 feet per NM to 8000.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -4°C or above 54°C. Circling NA for Cat D south of Rwy 8-26. Rwy 26 helicopter visibility reduction below ½ SM NA.

#Missed approach requires a minimum climb of 220 feet per NM to 8000.

RNP APCH.

ASOS
132.175

LOS ANGELES CENTER
132.5 284.7

UNICOM
123.0 (CTAF)

Procedure NA for arrivals at DISBE on V394 northeast bound.

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Procedure NA for arrivals at BASAL on V12-210 southwest bound.

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Baro-VNAV NA below -4°C or above 54°C. 54°C. Circling NA for Cat D south of Rwy 8-26. Rwy 26 helicopter visibility reduction below ½ SM NA.

#Missed approach requires a minimum climb of 220 feet per NM to 8000.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -4°C or above 54°C. Circling NA for Cat D south of Rwy 8-26. Rwy 26 helicopter visibility reduction below ½ SM NA.

#Missed approach requires a minimum climb of 220 feet per NM to 8000.

RNP APCH.

ASOS
132.175

LOS ANGELES CENTER
132.5 284.7

UNICOM
123.0 (CTAF)

Procedure NA for arrivals at DISBE on V394 northeast bound.

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Baro-VNAV NA below -4°C or above 54°C. 54°C. Circling NA for Cat D south of Rwy 8-26. Rwy 26 helicopter visibility reduction below ½ SM NA.

#Missed approach requires a minimum climb of 220 feet per NM to 8000.
VOR or TACAN RWY 22
BARSTOW-DAGGETT (DAG)

Circling NA for Cat D south of Rwy 8-26.

ASOS
132.175

LOS ANGELES CENTER
132.5 284.7

UNICOM
123.0 (CTAF)

MSA DAG 25 NM

DAGGETT, CALIFORNIA

5000 hdg 090°

DAG R-224

DAG VORTAC

NEBER INT DAG 6

IF/IAF DAGGETT 113.2 DAG Chan 79

MISSED APPROACH: Climbing right turn to 5000 via heading 090° and via DAG VORTAC R-224 to DAG VORTAC and hold (TACAN aircraft climb to 6000 via DAG VORTAC R-047 to TEELE/DAG 12 DME and hold NE, LT 227° inbound).

CATEGORY
A
B
C
D

S-22
3160-1/4
3440-1/2
3440-3
3540-3

CIRCLING
3160-1/4
3440-1/2
3500-3
3540-3

DAG

6

224°

5000

224°

3700

RAV 227° 5000 N oPT

Rwy Idg TDZE
5123
1918

Apt Elev
1930

ELEV 1930
TDZE 1918

5000 N oPT

5000 N oPT

227°

227°

R-044

R-047

224°

One Minute Holding Pattern

5.6 NM

6 NM

H Hector 112.7 HEC

Chan 74

5.6 NM

5.6 NM

2.93°

TCH 40

2.93°

TCH 40

224°

224°

5000

5000

MIRL Rwys 4-22 and 8-26

5.6 NM

FAF to MAP

Knots
60
90
120
150
180

Min:Sec
5:36
3:44
2:48
1:14
1:52

Barstow-Daggett (DAG)

VOR or TACAN RWY 22

Daggett, California

Amdt 108 06DEC18

34°51'N-116°47'W

3334
DAGGETT ONE DEPARTURE (OBSTACLE)

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF MINIMUMS
Rwy 4: Standard.
Rwy 8: Standard.
Rwy 22: Standard with minimum climb of 452’ per NM to 3700, or 4600-3 for climb in visual conditions.
Rwy 26: Standard with minimum climb of 420’ per NM to 4600, or 4600-3 for climb in visual conditions.

TAKEOFF OBSTACLE NOTES
Rwy 4: Bush 44˚ from DER, 286’ left of centerline, 6’ AGL/1914’ MSL. Bush 51’ from DER, 295’ left of centerline, 7’ AGL/1915’ MSL. Bush 126’ from DER, 86’ left of centerline, 4’ AGL/1912’ MSL.
Rwy 8: Multiple bushes beginning 113’ from DER, 259’ left of centerline, up to 16’ AGL/1924’ MSL.
Rwy 22: Tree 5668’ from DER, 1824’ left of centerline, 40’ AGL/2143’ MSL. Multiple poles 78’ left of centerline, up to 73’ AGL/1995’ MSL. Railroad 1224’ from DER, 402’ left of centerline, 23’ AGL/1968’ MSL. Pole 2635’ from DER, 279’ right of centerline, 72’ AGL/1995’ MSL.
Rwy 26: Vehicles on road 360’ from DER, 265’ left of centerline, 15’ AGL/1946’ MSL. Railroad 953’ from DER, 355’ left of centerline, 23’ AGL/1958’ MSL.

NOTE: Chart not to scale.

TAKEOFF RUNWAY 4: Climbing right turn direct DAG VORTAC, thence . . .
TAKEOFF RUNWAY 8: Climbing left turn direct DAG VORTAC, thence . . .
TAKEOFF RUNWAY 22: Climbing right turn heading 090° to intercept DAG R-224 to DAG VORTAC. Thence . . . or climb in visual conditions to cross Barstow-Daggett Airport at or above 6800 before proceeding on course.
TAKEOFF RUNWAY 26: Climbing right turn heading 090° to intercept DAG R-224 to DAG VORTAC. Thence . . . or climb in visual conditions to cross Barstow-Daggett Airport at or above 6800 before proceeding on course.

. . . on DAG R-047 to TEELE INT/DAG 12 DME, aircraft proceeding via V587 continue climb on course, all others, climbing right turn to 7500 to DAG VORTAC then as assigned.
Circling not authorized Southwest of Rwy 14-32.

MISSED APPROACH: Climbing right turn to 3000 direct TTE VOR/DME and hold.

AWOS-3P 119.55

BAKERSFIELD APP CON * 118.9

UNICOM 122.8 (CTAF)

NoPT for arrivals EHF VORTAC airway radials 123 CW 196
VOR RWY 32
DELANO MUNI (DLO)

AWOS-3P 119.55
BAKERSFIELD APP CON 118.9
UNICOM 122.8 (CTAF)

Circling NA southwest of Rwy 14-32.

AWOS-3P 119.55
BAKERSFIELD APP CON 118.9
UNICOM 122.8 (CTAF)

TULE
116.25 TTE =
Chann 109 (Y)

JUTTY INT
EHF 11.3

2000 NoPT
322° (11.3)

REIL Rwys 14 and 32
MIRL Rwy 14-32

322°

MIRL Rwy 14-32
REIL Rwys 14 and 32

ELEV 316 D
TDZE 315

2000
JUTTY INT

JUTTY INT
EHF 11.3

Remain within 10 NM

2000
EHF
R-322

 CATEGORY

KNOTS
60
90
120
150
180

Min:Sec
5:18
3:32
2:39
2:07
1:46

FAF to MAP
5.3 NM

A
860-1
545 (600-1)

860-1½
545 (600-1½)

860-1¾
545 (600-1¾)

B
544 (600-1)

860-1½
544 (600-1½)

544 (600-1¾)

C

940-2

D

DELANO, CALIFORNIA
Amdt 8B 14JUL22
EDWARDS, CALIFORNIA

APCH CRS
Rwy Ldg 15,024
TDZE 2286
Arpt Elev 2311

AL-500 (USAF)
EDWARDS AFB (KEDW)

† Circling not authorized NW of Rwy 5L-23R.

5010 •
For uncompensated Baro-VNAV systems,
Procedure NA below -19°C
(-2°F) or above 34°C (100°F).

DME/DME RNP-0.3 NA

EMERG SAFE ALT 100 NM 16,500

EMERG SAFE ALT 100 NM 16,500

 CATEGORY | A | B | C | D | E
--------------------------
LNAV/VNAV DA  | 2620-1 | 334 | (400-1)
LNAV MDA  | 2660-1 | 374 | (400-1)
C CIRCLING*  | 2880-1 569 (600-1) | 2880-1½ 569 (600-1½) | 2880-2 569 (600-2)

HAIL Rwy 5L-23L
REIL Rwy 23L

HAIL Rwy 5L-23L
REIL Rwy 23L

HAIL Rwy 5L-23L
REIL Rwy 23L

HAIL Rwy 5L-23L
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HAIL Rwy 5L-23L
REIL Rwy 23L

HAIL Rwy 5L-23L
REIL Rwy 23L

HAIL Rwy 5L-23L
REIL Rwy 23L
Circling to Rwy 30 NA at night. When tower closed, increase visibility to 1 mile.

Missed Approach: Climb to 500, then climbing left turn to 2300 direct BEENY and hold.

Visibility reduction by helicopters NA.

CAUTION: Extensive civil aircraft operations at Imperial County airport.

CAUTION: Missed approach max 250 KIAS until 500.

For uncompensated Baro-VNAV system INAV/VNAV NA below -14°C (5°F) or above 54°C (129°F)

EMERG SAFE ALT 100 NM 17,000

BEENY Holding Pattern

CAUTION: Do not overfly the US-Mexican border.

EMISSIONS PRODUCED: 0.36G

Circling ENTR Rwy 26

EMISSIONS PRODUCED: 0.36G
MISSED APPROACH: Climb to 500, then climbing left turn to 2300 direct BEENY and hold.

**ATIS** | **LOS ANGELES CENTER** | **TOWER** | **GND CON** | **CLNC DEL**
--- | --- | --- | --- | ---
269.275 | 128.6 291.7 | 119.1 360.2 | 121.9 254.35 | 340.2

For uncompensated Baro-VNAV system, LNAV/VNAV NA below -14°C (5°F) or above 54°C (129°F).

**CAUTION:** Missed Approach max 250 KIAS until 500.

**CAUTION:** Missed Approach max 250 KIAS until 500.

**CAUTION:** Missed Approach max 250 KIAS until 500.

**CAUTION:** Extensive civil aircraft operations at Imperial County airport.

20.1 visual area penetrated by fence, lat 289° from thld, 213° right of course, 8 AGL/34 MSL; 19° from thld, 305° right of course, 8 AGL/34 MSL, 504° from thld, 3° right of course, 8 AGL/34 MSL.

**NOTE:** Aircraft inbound from East use ARGUS straight-in. Aircraft inbound from West use BEENY, requires holding.

**EMERG SAFE ALT 100 NM 17,000**

**CAUTION:** Do not overfly the U.S.-Mexican border.

**CATEGORY** | **A** | **B** | **C** | **D**
--- | --- | --- | --- | ---
LPV DA* | 208-1 | 250 | [300-1] | 
LNAV/VNAV DA* | 231-1 | 242-1 | 250-1 | 261-1
(LNAV MDA* | 273 [300-1] | 284 [300-1] | 292 [300-1] | 303 [400-1]
CIRCLING | 360-1 | 402 | [500-1] | 402 | [500-1] |
| | | | | | 480-1½ | 520-2 |
| | | | | | | | 522 [600-1½] | 562 [600-2] |

**HIRL Rwys 8-26, 12-30**
Visibility reduction by helicopters not. Procedure NA at night.

ATIS 269.275
LOS ANGELES CENTER 128.6 291.7

TOWER 119.1 360.2
GND CON 121.9 254.35
CLNC DEL 340.2

Rwy 30: 201 visual area penetrated by
Fence, lit 289 ft from thld, 213 ft right of course, 8 AGL/34 MSL
Fence, 199 ft from thld, 305 ft right of course, 8 AGL/34 MSL,
Fence, 504 ft from thld, 3 ft right of course, 8 AGL/34 MSL.

CAUTION: Extensive civil aircraft operations at Imperial County airport.

EMERG SAFE ALT 100 NM, 17,000 from NJK TACAN

HOLD 4000

CAUTION: CAT CD intmed seg lan S5NM, less than minimum 6NM.

CAUTION: Do not overfly the US-Mexican border.

EMERG SAFE ALT 100 NM, 17,000 from NJK TACAN

HOLD 4000
EL CENTRO, CALIFORNIA

ATIS * LOS ANGELES CENTER
269.275 128.6 291.7

TOWER * GND CON CLNC DEL
119.1 360.2 121.9 254.35 340.2

MISSED APPROACH: Climb to 500, then climbing left turn to 2400
direct IPL VORTAC. Then direct BEENY via IPL R-074 and hold.

EMERG SAFE ALT 100 NM 17,000

500 2400 IPL R-074 BEENY IPL 7

KOHRL NJK 1 3 LEEGH NJK 7 3 SOLVE NJK 14 8

EMERG RECALL TWR 32*50'N-115*40'W

 Orig 13JUL23

EL CENTRO, CALIFORNIA 32*50'N-115*40'W

AL-472 [USN]

EL CENTRO NAF (VRACIU FLD) (KNJK)
Circling to Rwy 30 NA at night.

**Missed Approach:** Climb to 1000, then climbing left turn to 2300 direct Zonas and hold.

---

**ATIS**
269.275

**Los Angeles Center**
128.6 291.7

**Tower**
119.1 360.2

**Gnd Con**
121.9 254.35

**Clnc Del**
340.2

---

Rwy 30: 20:1 visual area penetrated by
Fence, lit, 289 ft from thld, 213 ft right of course, 8 AGL/34 MSL
Fence, 199 ft from thld, 305 ft right of course, 8 AGL/34 MSL,
Fence, 504 ft from thld, 3 ft right of course, 8 AGL/34 MSL,

---

EMERG SAFE ALT 100 NM 17,000

---

**CAUTION:**
Do not overfly the US-Mexican border.

---

EL CENTRO, CALIFORNIA

Amdt 3 13JUL23
Circling Rwy 1 NA at night. Rwy 1, 19 helicopter visibility reduction below 1 SM NA.

Procedure NA for arrivals at DARTS on V459-397 northwest bound, V459 southeast bound and V186 westbound.

Misplaced Approach: Climb to 4000 direct ADAMM and on track 098° to PDZ VORTAC and hold.

Category

34°05'N 118°02'W

AL-5639 (FAA)

RNAV (GPS)-B
SAN GABRIEL VALLEY (EMT)

EL MONTE, CALIFORNIA

Orig-A 02DEC21

3000

APP CRS

096°

ATIS

118.75

SOCAL APP CON

125.5 349.0

EL MONTE TOWER* 121.2 (CTAF)

GND CON 125.9

UNICOM 122.95

RNAV (GPS)-B

SAN GABRIEL VALLEY (EMT)

EL MONTE, CALIFORNIA

Orig-A 02DEC21

34°05'N 118°02'W

AL-5639 (FAA)

RNAV (GPS)-B
SAN GABRIEL VALLEY (EMT)

EL MONTE, CALIFORNIA

Orig-A 02DEC21

34°05'N 118°02'W

AL-5639 (FAA)

RNAV (GPS)-B
SAN GABRIEL VALLEY (EMT)

EL MONTE, CALIFORNIA

Orig-A 02DEC21

34°05'N 118°02'W

AL-5639 (FAA)

RNAV (GPS)-B
SAN GABRIEL VALLEY (EMT)

EL MONTE, CALIFORNIA

Orig-A 02DEC21

34°05'N 118°02'W
Circling Rwy 1 NA at night. When local altimeter setting not received, use Ontario Intl altimeter setting and increase all MDA 160 feet.

Missed Approach: Climbing left turn to 2500 on heading 070° and PDZ VORTAC R-278 to ADAMM INT/PDZ 15.5. DME then continue climb to 4000 to PDZ VORTAC.

DME then continue climb to 4000 to PDZ VORTAC.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
Circling NA west of Rwy 18-36. When local altimeter setting not received, use Miramar MCAS (Joe Foss Fld) altimeter setting and increase all MDAs 120 feet.

MISSED APPROACH: Climbing left turn to 5000 direct ROBNN WP and hold.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-18</td>
<td>1260-1</td>
<td>552 (600-1)</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>CIRCLING</td>
<td>1260-1</td>
<td>552 (600-1)</td>
<td>1380-1</td>
<td>672 (700-1)</td>
</tr>
</tbody>
</table>
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 18: Climb heading 181° to 1200, then climbing left turn on heading 160° to join V208-458. Aircraft westbound proceed on course, aircraft eastbound on V208-458 continue climb in VISTA holding pattern to 5000 before proceeding on course.

TAKEOFF RUNWAY 36: Climb heading 001° to intercept OCN VOR TAN R-027 to TAN NR INT before proceeding on course or, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Fallbrook Community Airpark at or above 2200, then proceed on OCN VOR TAN R-027 to TAN NR INT before proceeding on course.

TAKEOFF MINIMUMS
Rwy 18: Standard.
Rwy 36: Standard with a minimum climb of 340' per NM to 5000 or 1600-3 for VCOA.

NOTE: Chart not to scale.

SOCAL DEP CON
127.3 323.0
CTAF
123.05

SW-3, 30 NOV 2023 to 25 JAN 2024

FALLBROOK ONE DEPARTURE (OBSTACLE)
FALLBROOK COMMUNITY AIRPARK (L18)
FALLBROOK, CALIFORNIA

VISTA
R-083

V208-458

V208-458

TAN NR

19

d

OCEANSIDE
115.3 OCN
Chan 100

181°

160°

1200

181°

160°

263°

083°

175K

VISTA
R-083

MISSION BAY
117.8 MZB
Chan 125

10NOV16

113
FULLERTON, CALIFORNIA
AL-5136 (FAA) 23334

VOR-A
FULLERTON MUNI (FUL)

Maximum entry altitude 6000.
Night landing: Rwy 6 NA.
Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climbing right turn to 2600 via heading 145° and SLI R-058 to SLI VORTAC and hold.

<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>CIRCLING</td>
<td>1500-1½</td>
<td>1500-1½</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1404 (1500-1½)</td>
<td>1404 (1500-1½)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BWALT FIX MINIMUMS

| CIRCLING | 760-1 | 1060-1½ | NA   |      |
|          | 664 (700-1) | 964 (1000-1½) |      |      |

ATIS 125.05
SOCAL APP CON 125.35 316.125
FULLERTON TOWER* 119.1 (CTAF) 
GND CON 121.8
UNICOM 122.95

FULLERTON, CALIFORNIA
Amdt 7C 15JUL21

FULLERTON MUNI (FUL)
VOR-A
33°52'N-117°59'W

SW-3, 30 NOV 2023 to 25 JAN 2024

SW-3, 30 NOV 2023 to 25 JAN 2024

SW-3, 30 NOV 2023 to 25 JAN 2024

SW-3, 30 NOV 2023 to 25 JAN 2024

SW-3, 30 NOV 2023 to 25 JAN 2024
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
NOTE: Chart not to scale.

**Takeoff Minimums**

Rwy 6: Standard with minimum climb of 280' per NM to 600.

Rwy 24: Standard.

NOTE: This departure procedure not authorized for turbo-prop or turbo-jet aircraft.

NOTE: RADAR required.

**Top Altitude:**

2000

---

**NOTE:** Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 6: Turn right heading 120° for vectors to SLI VORTAC, thence.

TAKEOFF RUNWAY 24: Turn left heading 120° for vectors to SLI VORTAC, thence.

. . . on (transition) or (assigned route). Maintain 2000 and expect filed altitude 10 minutes after departure.

HECTOR TRANSITION (ANAHM1.HEC): From over SLI VORTAC on SLI R-058 and PDZ R-238 to PDZ VORTAC, then on PDZ R-012 to APLES, then on HEC R-232 to HEC VORTAC.

LAKE HUGHES TRANSITION (ANAHM1.LHS): From over SLI VORTAC on SLI R-058 and PDZ R-238 to POXKU, then on POM R-164 to BAYJY, then on VNY R-095 to DARTS, then on LHS R-139 to LHS VORTAC.

VENTURA TRANSITION (ANAHM1.VTU): From over SLI VORTAC on SLI R-251 to WILMA, then on LAX R-123 to LAX VORTAC, then on LAX R-276 to SADDE, then on VTU R-093 to VTU VOR/DME.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 6: Climb heading 063° to 596, then right turn on heading 120° to 2000 for vectors to PIJIN, cross PIJIN at or above 4000, then on track 290° to cross HAWWC at or above 5000, thence . . . .

TAKEOFF RUNWAY 24: Climb heading 243° to 596, then on heading 240° to 2000 for vectors to PIJIN, cross PIJIN at or above 4000, then on track 290° to cross HAWWC at or above 5000, thence . . . .

. . . . on (transition). Maintain 6000. Expect higher altitude 10 minutes after departure.

IKAYE TRANSITION (HAWWC3.IKAYE)

NOTE: RADAR required.

NOTE: DME/DME/IRU or GPS required.

NOTE: This procedure not authorized for turbojet aircraft.
**RNAV (GPS) RWY 7**

**JACK NORTHROP FLD/HAWTHORNE MUNI (HHR)**

**ATIS** 118.4  |  **SOCAL APP CON** 124.9 269.0  |  **HAWTHORNE TOWER** 121.1 (CTAF) 257.8  |  **GND CON** 125.1

**ELEV 66**  |  **TDZE 64**

Procedure NA at night. Rwy 7 helicopter visibility reduction below 1 SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 5°C or above 51°C. Circling NA north of Rwy 7-25.

**Procedure NA for arrival on SU VORTAC airway radials 202 CW 319.**

**Orig 03NOV22**

**33°55'N-118°20'W**

**SW-3, 30 Nov 2023 to 25 Jan 2024**
Inop table does not apply. Rwy 25 helicopter visibility reduction below 1 SM NA. Circling Rwy 7 NA at night. When local altimeter setting not received, use Los Angeles Intl altimeter setting. Simultaneous approach authorized with LAX 25L/R 24L/R. Circling NA north of Rwy 7-25. DME from LAX VORTAC. Simultaneous reception of I-HHR and LAX DME required.

MISSED APPROACH: Climbing left turn to 3000 on heading 210° and LAX VORTAC R-170 to LIMBO INT/LAX 10.4 DME and hold.

Procedure NA for arrivals at SU VORTAC on V459-597 southeast bound.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 7: Climb on heading 073° to 580, then turn right direct to cross SPACX at 3000 then on track 200. Thence . . . .

TAKEOFF RUNWAY 25: Climb on heading 253° to intercept course 200° to cross SPACX at 3000 then on track 200°. Thence . . . .

. . . . on assigned course/route. Maintain ATC assigned altitude. Expect filed altitude 5 minutes after departure.
RNAV (GPS) RWY 5
HEMET-RYAN (HMT)

**AWOS-3PT**

[Diagram of airport layout with various navigational points and distances labeled]

**MARCH APP CON**

- 133.5
- 306.975

**UNICOM**

- 123.0 (CTAF)

**MISSED APPROACH:**
- Climb to 2000 then climbing left turn to 6000.
- Direct JESEX and hold, continue climb-in-hold to 6000.

*Missed approach requires minimum climb of 400 feet per NM to 3000.

**Procedure NA for arrivals at NIKKL on V64 westbound.**

**Category and LP MDA**

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP MDA</td>
<td>1960-1</td>
<td>447 (500-1)</td>
<td>1960-1</td>
<td>NA</td>
</tr>
<tr>
<td>LP MDA</td>
<td>2460-1</td>
<td>947 (1000-1)</td>
<td>2460-2</td>
<td>NA</td>
</tr>
<tr>
<td>LNAV MDA</td>
<td>2160-1</td>
<td>647 (700-1)</td>
<td>2160-1</td>
<td>NA</td>
</tr>
<tr>
<td>LNAV MDA</td>
<td>2580-1</td>
<td>1067 (1100-1)</td>
<td>2580-1</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>1065 (1100-1)</td>
<td>1065 (1100-1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIRCLING</td>
<td>2580-1</td>
<td>1065 (1100-1)</td>
<td>2580-1</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>1065 (1100-1)</td>
<td>1065 (1100-1)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**HUMAN**

- 4000
- 035°
- 3400
- 2600

**Final approach course offset 14.91°.**

**ELEV 1515**

**TDZE 1513**

**RNAP APCH - GPS.**

- When local altimeter setting not received, procedure NA.

**HEMET, CALIFORNIA**

<table>
<thead>
<tr>
<th>45645</th>
<th>035°</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDZE</td>
<td>1513</td>
</tr>
<tr>
<td>Apt Elev</td>
<td>1515</td>
</tr>
</tbody>
</table>

**Missed approach:**

- Climb to 2000 then climbing left turn to 6000.
- Direct JESEX and hold, continue climb-in-hold to 6000.

*Missed approach requires minimum climb of 400 feet per NM to 3000.
Circling Rwy 32 NA at night.

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

### MISSED APPROACH

**Procedure turn required for non-DME equipped aircraft.**

**UNICOM**

122.7 (CTAF)

---

**VOR or GPS-A**

### IMPERIAL COUNTY (IPL)

- **VORTAC IPL** 115.9
- **APP CRS** 313°
- **Rwy Idg** TDZE
- **Apt Elev** -54

---

**ASOS**

132.175

**LOS ANGELES CENTER**

128.6 291.7

**UNICOM**

122.7 (CTAF)

---

**UNITED STATES MEXICO**

- **ELEV** -54

---

**CIRCLING**

- Category A: 560-1 614 (700-1)
- Category B: 560-1 614 (700-1)
- Category C: 560-1 614 (700-1)
- Category D: 614 (700-1)

---

**Min:Sec**

- Category A: 5:42 3:48
- Category B: 2:51 2:17
- Category C: 1:54

---

**Map of MIRL Rwys 8-26 and 14-32**

---

**IMPERIAL, CALIFORNIA**

Amdt 4C 21 APR 22

---

**32°30'N-115°35'W**
LAKE HUGHES TWO DEPARTURE (OBLSTACLE) (RNAV)

JOSHUA DEP CON
133.65 348.7

LAKE HUGHES LHS

MOVIA

JAGEG

TAKEOFF MINIMUMS
Rwy 20: Standard with a minimum climb of 240' per NM to 7000.
Rwys 2, 15, 33, 10, 28: NA-restricted airspace.

NOTE: GPS required.
NOTE: RNAV 1.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 20: Climb direct JAGEG then continue climb to 8000 via 197° track to MOVIA and 201° track to LHS VORTAC. Thence via assigned route and altitude.

TAKEOFF RUNWAYS 2, 33, 15, 10, and 28: NA.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 20: Climb to 10000 on heading 207° and LHS VORTAC R-015 to LHS VORTAC, then proceed on course.

NOTE: RADAR required.

NOTE: Chart not to scale.
ILS RWY 26L
BRACKETT FLD (POC)

MISSED APPROACH: Climb to 2100 then climbing left turn to 4000 on POM VORTAC R-164 to PRADO INT/POM 9.3 DME.

When GS not used, use LOC RWY 26L procedure.

Procedure NA for arrivals at PDZ VORTAC on airway radials 292 CW 030.

ALTERNATE MISSED APCH FIX

PARADISE

VGSI and ILS glidepath not coincident (VGSI Angle 3.76/TCH 18).

One Minute Holding Pattern

*at DTHR; 60 at Rwy end.

GS 3.92°

*TCH 20
RNAV (GPS) RWY 26L
BRACKETT FLD (POC)

Baro-VNAV and VDP NA when using Ontario altimeter setting. Rwy 26L helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. When local altimeter setting not received, use Ontario Intl altimeter setting and increase all DA 32 feet and all MDA 40 feet, increase LPV and LNAV/VNAV all Cats visibility ¼ SM. Circling NA for Cat C north of Rwy 8L-26R. Circling to Rwy 8L NA at night. When Circling to Rwy 8R at night, operational VGSI required, remain on or above VGSI glidepath until threshold.

MISSED APPROACH: Climb to 2100 then climbing left turn to 4000 direct PRADO and hold.

Procedure NA for arrivals on PDZ VORTAC airway radials 278 CW 078.

- LPV DA: 1305-7/8
- 300 (300-7/8)

- LNAV/ VNAV DA: 1444-1 439 (500-1 ¼)
- NA

- LNAV MDA: 1500-1
- 495 (500-1)
- 1500-1 ³/₄
- 495 (500-1 ¾)
- NA

- CIRCLING: 1680-1
- 666 (700-1)
- 1760-2¾
- 746 (800-2¼)
- NA

APPROACH

**CIRCLING:**
- Rwy 26L: 2.1 NM to ZEREK
- 0.9 NM to RW26L
- 3.6 NM to RW26L
- 7.2 NM to RW26L

**VSI and RNAV glidepath not coincident**
- (VGSI Angle 3.76/TCH 18).

**Gain/Approach:**
- GP 3.56°
- TCH 58

**Rwy 26L:**
- 1.2 NM to ZEREK
- RW26L
- WUDUS
- LIZZE

**HOLD:**
- 259°
- 259°
- 079°
- 079°
- 6000
- 4000

**At 259°:**
- GP 3.56°
- TCH 58

**FLD:**
- BRACKETT
- W26A
- RW26L

**UNICOM:**
- 122.95
- 124.5
- 125.5
- 349°

**APRT:**
- SW-3, 30 Nov 2023 to 25 Jan 2024

**Notes:**
- SW-3, 30 Nov 2023 to 25 Jan 2024
- 34°06'N-117°47'W

**Other Sites:**
- LA VERNE, CALIFORNIA
- BRACKETT FLD (POC)

**Fitness for Service:**
- RNAV (GPS) RWY 26L

**Reception:**
- RNAV (GPS) RWY 26L

**Airworthiness Directives:**
- RNAV (GPS) RWY 26L
LA VERNE, CALIFORNIA

LOC RWY 26L
BRACKETT FLD (POC)

ATIS 124.4
SOCAL APP CON 125.5 349.0

APP CRS
LOC POC 110.5

BRACKETT TOWER
RYW 8R/26L 118.2 (CIAF)
RYW 8L/26R 133.3

GND CON 125.0
CLNC DEL 121.875
UNICOM 122.95

ASOS
LA VERNE, CALIFORNIA

ELEV 1014
TDZE 1005

CIRCLING

1700-1 695 (700-1)
1700-2 695 (700-2)
1760-2 746 (800-2)

SW-3, 30 NOV 2023 to 25 JAN 2024

REIL Rwys 8R and 26L
MIRL Rwys 8R-26L

FAF to MAP 5.4 NM

Knots 60 90 120 150 180
Min:Sec 5:24 3:36 2:42 2:10 1:48

4198
1268
1379

3.77° TCH 40
3200
259°

1740 when using Ontario Intl altimeter setting.

ZERK INT

HAWNN INT RADAR

LOC RWY 26L

BRACKETT FLD (POC)

ALTERNATE MISSED
APCH FIX

PARADISE
PDZ 112.2
Chan 59

HOLD
079°
010°
079°

4000
3200
259°

259°
6000

PARADISE
PDZ 112.2
Chan 59

1700-1 686 (700-1)
1760-2 746 (800-2)

SW-3, 30 NOV 2023 to 25 JAN 2024

R-164 to PRADO INT/POM 9.3 DME and hold.

1760-1
1460-1

ZERK MIMUMS (DUAL VOR RECEIVERS REQUIRED)

S-LOC 26L
1460-1 455 (500-1)
1760-2 455 (500-1)

CIRCLING

1740-1

1700-1 686 (700-1)
1760-2 746 (800-2)

LOC RWY 26L
BRACKETT FLD (POC)
MISSED APPROACH: Climbing from 4000 to 4000 via POM R-164

When local altimeter setting not received, use Ontario Intl altimeter setting and increase all

VGSI required; remain on or above VGSI glidepath until threshold. Helicopter visibility

MDA 40 feet and visibility Cat C 1 SM not authorized. Circling NA for Cat C north of Rwy 8L-26R

In the event of POM NA, use VOR or GPS-A POC (POC) UNICOM 124.4 GND CON 125.5 349.0 CLNC DEL 121.875 133.3 SOCAL APP CON 118.2 125.0 ATIS 124.4 122.95 124.4
VAR 11.8° E

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

AIRPORT DIAGRAM

ATIS 124.4
BRACKETT TOWER*
118.2 (RWY 08R-26L)
133.3 (RWY 08L-26R)
GND CON 125.0
CLNC DEL 121.875

NORTHWEST HANGARS
NORTH FBO HELICOPTER PARKING
NORTH HANGARS
TWR 1064
NORTH HELICOPTER PARKING
HELICOPTER PRACTICE PAD

SOUTH HELICOPTER PARKING
TERMINAL AND ADMINISTRATION
TRANSIENT PARKING
SOUTH HANGARS
EAST PARKING
HANGARS

FBO

AIRPORT DIAGRAM

LA VERNE, CALIFORNIA

SW-3, 30 NOV 2023 to 25 JAN 2024
RNAV (GPS) RWY 6
GENERAL WM J FOX AIRFIELD (WJF)

When VGSi inop, Straight-in/Circling Rwy 6 procedure NA at night.

DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 45°C (113°F). When local altimeter setting not received, use Palmdale altimeter setting: increase LPV DA to 2661 feet, LNAV/VNAV DA to 2709 feet and all MDAs 60 feet, and increase Circling Cats C/D visibility ½ SM.

Baro-VNAV NA when using Palmdale altimeter setting.

MISSED APPROACH: Climb to 6000 direct SISOY and via 091° track to ETHER and hold.

LANCASTER, CALIFORNIA
AL-5065 (FAA)
21252

SW-3, 30 NOV 2023 to 25 JAN 2024

140
RNAV (GPS) RWY 24
GENERAL WM J FOX AIRFIELD (WJF)

APP CRS
252°
Rwy Ldg
7201
TDZE
2341
Apt Elev
2351

RNP APCH - GPS

RNAV (GPS) RWY 24

Rwy 24 helicopter visibility reduction below ¾ NA. VDP NA when using
Palmdale altimeter setting. When local altimeter setting not received, use
Palmdale altimeter setting and increase all MDAs 60 feet and LNAV
visibility Cat C/D ½ SM, and Circling visibility Cat C/D ¼ SM.

Final approach course offset 15.00°.

Procedure NA for arrivals at ETHER
on V12 eastbound.

Procedure NA for arrivals at PURPS
on V137 southeast bound.

ATIS
126.3

JOSHUA APP CON
126.1  290.3

FOX TOWER*
118.525 (CTAF)  256.9

GND CON
121.7  256.9

UNICOM
122.95

LANCASTER, CALIFORNIA
AL-5065 (FAA)

R-2515

LANCASTER, CALIFORNIA
Orig-B  05OCT23

GENERAL WM J FOX AIRFIELD (WJF)
RNAV (GPS) RWY 24

LANCASTER, CALIFORNIA
AL-5065 (FAA)

SW-3, 30 NOV 2023 to 25 JAN 2024

LANCASTER, CALIFORNIA
Orig-B  05OCT23

34°44'N-118°13'W
MISSED APPROACH: Climb to 4500 direct PMD VORTAC and hold.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
LANCASTER, CALIFORNIA

NOTE: Chart not to scale.

LANCASTER, CALIFORNIA

AL-5065 (FAA)

PMD1.PMD) 23278

PMDALDE ONE DEPARTURE (OBSTACLE)

TAKEOFF MINIMUMS

Rwy 6: Standard with minimum climb of 240’ per NM to 4800,
or 3700-3 for climb in visual conditions.

Rwy 24: Standard with minimum climb of 351’ per NM to 4800,
or 3700-3 for climb in visual conditions.

TAKEOFF OBSTACLE NOTES

Rwy 6: Trees beginning 1169’ from DER, 590’ right of centerline, up to 2374’ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 6: Climbing right turn direct PMD VORTAC and hold, thence. . . .

TAKEOFF RUNWAY 24: Climbing left turn direct PMD VORTAC and hold, thence. . . .

. . . . continue climb-in-hold to cross PMD VORTAC at or above MCA/MEA for route of flight.

VCOA ALL RUNWAYS: Obtain ATC approval for VCOA when requesting IFR clearance.
Climb in visual conditions to cross General WM J Fox Airfield at or above 5900 before proceeding on course.

PALMDALE ONE DEPARTURE (OBSTACLE)

(PMD1.PMD) 05OCT23
RNAV (GPS) RWY 25
LOMPOC (LPC)

When local altimeter setting not received, use Santa Maria Pub/Capt G Allan Hancock Field altimeter setting and increase all MDA 60 feet, and increase LNAV and Circling Cat B visibility ½ SM. Procedure NA at night.

MISSED APPROACH: Climbing right turn to 3300 direct LIVAQ and hold.

Procedure NA for arrivals at GVO VORTAC via V27 southeast bound.

When local altimeter setting not received, use Santa Maria Pub/Capt G Allan Hancock Field altimeter setting and increase all MDA 60 feet, and increase LNAV and Circling Cat B visibility ½ SM. Procedure NA at night.

MISSED APPROACH: Climbing right turn to 3300 direct LIVAQ and hold.

Procedure NA for arrivals at GVO VORTAC via V27 southeast bound.
Procedure NA at night.

MISSED APPROACH: Climb to 1400, then climbing right turn to 3500 direct GLJ VOR and hold.

AWOS-3PT 133.875  SANTA BARBARA APP CON *  124.15 327.8  UNICOM 122.7  (CTAF)

VOR/DME-A
LOMPOC (LPC)

LOMPOC, CALIFORNIA

VORTAC GVO
113.8  Chan 85

APP CRS 278°
Rwy Idg TDZE Apt Elev N/A 88

ELEV 88

CIRCLING

Categoria A 1340-1 1/2 1252 (1300-1 1/2) 1252 (1300-1 1/2)
B  NA

SW-3, 30 NOV 2023 to 25 JAN 2024

34°40’N-120°28’W
**RNAV (RNP) RWY 12**

**LONG BEACH (DAUGHERTY FLD) (LGB)**

**MISSING APPROACH:** Climb to 3000 on track 121° to GUNEY, right turn to LUVCI, and on track 183° to ALBAS and hold.

For uncompensated Baro-VNAV systems, procedure NA below 4°C (40°F) or above 54°C (130°F). RF required. GPS required.

**ATIS**
- 127.75

**SOCAL APP CON**
- 125.35
- 316.125

**LONG BEACH TOWER**
- 120.5
- 257.6 (Rwy 12)
- 119.4 (CTAF) 257.6 (Rwy 30)

**CLNC DEL**
- 118.15

**UNICOM**
- 122.95

**R ADAR REQUIRED**

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**AUTHORIZATION REQUIRED**

**LONG BEACH, CALIFORNIA**

Amdt 2 10NOV16

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**LONG BEACH, CALIFORNIA**

Amdt 2 10NOV16

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**LONG BEACH (DAUGHERTY FLD) (LGB)**

**RNAV (RNP) RWY 12**

---

**LONG BEACH (DAUGHERTY FLD) (LGB)**

**RNAV (RNP) RWY 12**

---

**LONG BEACH, CALIFORNIA**

Amdt 2 10NOV16

---
**RNAV (RNP) Y RWY 30**

**LONG BEACH (DAUGHERTY FLD) (LGB)**

<table>
<thead>
<tr>
<th>ATIS</th>
<th>SOCAL APP CON</th>
<th>LONG BEACH TOWER</th>
</tr>
</thead>
<tbody>
<tr>
<td>127.75</td>
<td>125.35</td>
<td>119.4 (CTAF)</td>
</tr>
</tbody>
</table>

**PADDR and hold.**

Procedure NA for arrivals at MIDS on V23-165-597 southeast bound.

**MISSED APPROACH:** Climb to 800 then climbing left turn to 3000 direct PADDR and hold.

**UNICOM:** 122.95

**AUTHORIZATION REQUIRED**

For uncompensated Baro-VNAV systems, procedure NA below 4º C or above 54º C.

**RNP 0.30 DA**

**384/30 346 (400-%)**
Vertical Guidance Navaid and Angle:
LOC I-LGB Glide Slope 3.00°.
VGSI and ILS glidepath not coincident
(VGSI Angle 3.00/TCH 64).

RADAR REQUIRED

Weather Minimums: 5000 foot ceiling
and 10 miles visibility.
Radar Required
Weather Minimums: 5000 foot ceiling and 10 miles visibility.

Procedure Not Authorized at Night.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
NOTE: Chart not to scale.

NOTE: RADAR required.

NOTE: This departure procedure not authorized for turbo-prop or turbo-jet aircraft.

(CONTINUED ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8L/R: Climb heading 076° to 800, thence.
TAKEOFF RUNWAY 12: Climb heading 121° to 800, thence.
TAKEOFF RUNWAYS 26L/R: Climb heading 256° to 800, thence.
TAKEOFF RUNWAY 30: Climb heading 301° to 800, thence.
HECTOR or LAKE HUGHES TRANSITION: Expect vectors to SLI VORTAC.
VENTURA TRANSITION: Expect vectors to LAX VORTAC.

. . . . on (transition) or (assigned route). Maintain assigned altitude and expect filed altitude
10 minutes after departure.

HECTOR TRANSITION (ANAHM1.HEC): From over SLI VORTAC on SLI R-058 and PDZ
R-238 to PDZ VORTAC, then on PDZ R-012 to APLES, then on HEC R-232 to HEC VORTAC.
LAKE HUGHES TRANSITION (ANAHM1.LHS): From over SLI VORTAC on SLI R-058 and
PDZ R-238 to POXKU, then on POM R-164 to BAYJY, then on VNY R-095 to DARTS, then
on LHS R-139 to LHS VORTAC.
VENTURA TRANSITION (ANAHM1.VTU): From over SLI VORTAC on SLI R-251 to WILMA,
then on LAX R-123 to LAX VORTAC, then on LAX R-276 to SADDE, then on VTU R-093 to
VTU VOR/DME.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 12: Climb heading 121° to 600, then on heading 121° or as assigned by ATC for vectors to cross FRITR at or above 5000, then on track 076° to DOTSS, thence.

TAKEOFF RUNWAY 26R: Climb heading 256° to 580, then on heading 180° or as assigned by ATC for vectors to cross FRITR at or above 5000, then on track 076° to DOTSS, thence.

TAKEOFF RUNWAY 30: Climb heading 301° to 1500, then left turn heading 180° or as assigned by ATC for vectors to cross FRITR at or above 5000, then on track 076° to DOTSS, thence.

. . . .on (transition). Maintain 17000. Expect higher altitude 10 minutes after departure.

AVRRY TRANSITION (FRITR3.AVRRY)
CNERY TRANSITION (FRITR3.CNERY)
TCATE TRANSITION (FRITR3.TCATE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 30:
- Climb heading 301° to 580, then on heading 270°
- then on track 290° to cross HAWWC at or above 5000, thence . . .
- or as assigned by ATC for vectors to PIJIN, cross PIJIN at or above 5000, thence . . .
- NOTE: This procedure not authorized for turbojet aircraft.

TAKEOFF MINIMUMS
Rwy 8L/R, 12, 30: Standard.
Rwy 26L: Standard with minimum climb of 330' per NM to 700.
Rwy 26R: Standard with minimum climb of 230' per NM to 1600.

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

TAKEOFF RUNWAY 26R:
- Climb heading 256° to 800, then on heading 270°
- then on track 290° to cross HAWWC at or above 5000, thence . . .
- or as assigned by ATC for vectors to PIJIN, cross PIJIN at or above 4000, thence . . .
- NOTE: Chart not to scale.

TAKEOFF RUNWAY 26L:
- Climb heading 256° to 580, then on heading 270°
- then on track 290° to cross HAWWC at or above 5000, thence . . .
- or as assigned by ATC for vectors to PIJIN, cross PIJIN at or above 4000, thence . . .
- NOTE: Chart not to scale.

TAKEOFF RUNWAY 26L:
- Climb heading 256° to 580, then on heading 270°
- then on track 290° to cross HAWWC at or above 5000, thence . . .
- or as assigned by ATC for vectors to PIJIN, cross PIJIN at or above 5000, thence . . .
- NOTE: Chart not to scale.

TAKEOFF RUNWAY 12:
- Climb heading 121° to 580, then on heading 076°
- or as assigned by ATC for vectors to PIJIN, cross PIJIN at or above 5000, thence . . .
- or as assigned by ATC for vectors to PIJIN, cross PIJIN at or above 4000, thence . . .
- NOTE: Chart not to scale.

TAKEOFF RUNWAY 8L/R:
- Climb heading 076° to 580, then on heading 076°
- or as assigned by ATC for vectors to PIJIN, cross PIJIN at or above 5000, thence . . .
- or as assigned by ATC for vectors to PIJIN, cross PIJIN at or above 4000, thence . . .
- NOTE: Chart not to scale.

TOP ALTITUDE: 6000

NOTE: Chart not to scale.

SW-3, 30 Nov 2023 to 25 Jan 2024
TOP ALTITUDE:
IKAYE TRANSITION: 12000;
CSTRO AND COREZ
TRANSITIONS: 15000

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet aircraft only.
NOTE: Some departures may be vectored
to OROSZ when required for traffic.
NOTE: IKAYE TRANSITION ATC assigned only.
NOTE: Departing Rwy 26R, do not exceed 210K
until established on 302° course to TOPMM.
NOTE: Maintain at or below 250K unless otherwise
directed by ATC.

TAKEOFF MINIMUMS
Rwys 8L/R, 26L: NA-ATC.
Rwy 12: Standard.
Rwy 26R: Standard with minimum climb of 270’ per NM to 600.
Rwy 30: Standard with minimum climb of 285’ per NM to 600.

NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 12: Climb heading 121° to 600, then direct to cross OMMAA at 3000 and at or below 210K, then on track 196° to PLTAA, then on track 269° to AAYJY, then on track 350° to cross QMARY at 4000 and at or below 230K, then on track 312° to TOPMM, thence. . . .

TAKEOFF RUNWAY 26R: Climb heading 256° to intercept course 302° to TOPMM, thence. . . .

TAKEOFF RUNWAY 30: Climb heading 301° to intercept course 269° to TOPMM, thence. . . .

. . . .on (transition). IKAYE transition maintain 12000; COREZ and CSTRO transitions maintain 15000. Expect filed altitude 10 minutes after departure.

COREZ TRANSITION (TOPMM4.COREZ)
CSTRO TRANSITION (TOPMM4.CSTRO)
IKAYE TRANSITION (TOPMM4.IKAYE)
**TOP ALTITUDE:**
**(TURBOJETS) 17000**

- **NOTE:** Chart not to scale.

**ZOOMM THREE DEPARTURE**

**RNAV**

- **NOTE:** NA-ATC.
- **NOTE:** DME/DME/IRU or GPS required.
- **NOTE:** RNAV 1.
- **NOTE:** Radar required.
- **NOTE:** Turboprop only.
- **NOTE:** MISEN transition restricted to aircraft landing LAS terminal area.
- **NOTE:** HAILO/LAS/NNAVY transitions ATC only.

**TAKEOFF MINIMUMS**
- **Rwy 8L/R, 26L:** NA-ATC.
- **Rwy 12, 30:** Standard.
- **Rwy 26R:** Standard with a minimum climb of 230’ per NM to 1600.

**SOCIAL DEP CON**
- **Rwy 26R, 30:** 125.35 316.125 (Rwy 12)
- **Rwys 8L/R, 26L:** 127.2 269.6

**TOP ALTITUDE:**
**(TURBOJETS) 17000**

**ATIS**
- 127.75
- 118.15

**GND CON**
- 133.0

**SW-3, 30 NOV 2023 to 25 JAN 2024**

**LONG BEACH CALIFORNIA**

**LONG BEACH (DAUGHERTY FLD) (LGB)**
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 12: Climb on heading 121° to 600, then on heading 121° or as assigned by ATC for vectors to cross CAHIL at or above 15000, then on track 023° to cross ZOOMM at or above 16000, thence. . . .

TAKEOFF RUNWAY 26R: Climb on heading 256° to 580, then on heading 180° or as assigned by ATC for vectors to cross CAHIL at or above 15000, then on track 023° to cross ZOOMM at or above 16000, thence. . . .

TAKEOFF RUNWAY 30: Climb on heading 301° to 1500, then left turn heading 180° or as assigned by ATC for vectors to cross CAHIL at or above 15000, then on track 023° to cross ZOOMM at or above 16000, thence. . . .

. . . .on (transition) turbojets maintain 17000, expect filed altitude 10 minutes after departure.

BEALE TRANSITION (ZOOMM3.BEALE)
HAILO TRANSITION (ZOOMM3.HAILO)
LAS VEGAS TRANSITION (ZOOMM3.LAS)
MISEN TRANSITION (ZOOMM3.MISEN)
NNAVY TRANSITION (ZOOMM3.NNAVY)
LOS ALAMITOS, CALIFORNIA

APCH CRS

Rwy Idg 8001
TDZE 35
Arpt Elev 35

ATIS *
118.875 379.975
SOCAL APP CON
125.35 316.125
TOWER *
123.85 (CTAF) 251.15
GND CON
126.95 257.95

When Los Alamitos altimeter setting not available, use Santa Ana altimeter setting.

Procedure NA for arrivals on POM VORTAC airway R-112 CW R-254.

VDP NA when using Santa Ana altimeter setting.

DME/DME RNP 0.3 N/A.

When Los Alamitos altimeter setting not available, use CAT D vis to 1 mile.
When ALS inop using SANTA ANA altimeter setting, increase CAT D vis to 1 1/8 mile.
Circling not authorized N of Rwy 4L-22L.

SW-3, 30 NOV 2023 to 25 JAN 2024

RNAV (GPS) RWY 22L

LOS ALAMITOS AAF (KSLI)

RNAV (GPS) RWY 22L

LOS ALAMITOS AAF (KSLI)

Amdt 1 07DEC17
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 4R: Climb heading 041° to 540, then on heading 041° or as assigned by ATC for vectors to PIJIN, cross PIJIN at or above 4000, then on track 290° to cross HAWWC at or above 5000, thence . . . .

TAKEOFF RUNWAY 22L: Climb heading 221° to 540, then on heading 181° or as assigned by ATC for vectors to PIJIN, cross PIJIN at or above 4000, then on track 290° to cross HAWWC at or above 5000, thence . . . .

. . . . on (transition). Maintain 6000. Expect higher altitude 10 minutes after departure.

IKAYE TRANSITION (HAWWC3.IKAYE)

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: This procedure not authorized for turbojet aircraft.

TOP ALTITUDE: 6000

NOTE: Chart not to scale.
Inop table does not apply to Sidestep 6R Cats A/B. For inop ALS, increase S-LOC 6L Cat C/D visibility to RVR 5500. Simultaneous approach authorized. Autopilot coupled approach NA below 503.

**Procedure NA for arrivals on FIM VORTAC airway radials 087 CW 195.**

Procedures for arrivals on TCH 77.

**Procedure NA for arrivals at EXERT on V25**

**Procedure NA for arrivals on FIM VORTAC airway radials 087 CW 195.**

**DME or RADAR REQUIRED**

- Category A: 600 AMTRA
- Category B: 3000 LAX R-046
- Category C: 600 I-LOC
- Category D: 3000 I-LOC

**RNAV 1- GPS REQD**

**FILLMORE**

- 071° (5.7)
- 050° hdg (4.7)
- 3600 to NATHN
- 071° (5.7)

**Procedure NA for arrivals at EXERT on V25**

- 3600 to NATHN
- 071° (5.7)
- 3600 I-LOC

**NAV and ILS glidepath not coincident**

**Procedure NA for arrivals at EXERT on V25**

- VGS 3.0°/TCH 77
- 3600 I-LOC
- GS 3.0° TCH 55
- 0.8 NM
- 1.3 NM
- NATHN 071° (5.7)
- 3600 I-LOC
- 1800
- 071°
- 3600 I-LOC

**Category**

- A
- B
- C
- D

**RNAV 1- GPS REQD**

- S-ILS 6L
- 369/24 250 (300-½)
- 460/24 341 (400-½)
- 460/30 341 (400-½)

**S-LOC 6L**

- 460/24 341 (400-½)
- 460/30 341 (400-½)

**SIDESTEP 6R**

- 460/55 344 (400-1)
- 460-1½ 344 (400-1½)

**AMATRADA**

- 600
- 3000
- LAX R-046

**FILM Nav**

- 071° (5.7)
- 050° hdg (4.7)
- 3600 to NATHN

**TCH 55**

- 071° (5.7)
- 3600 I-LOC

**RNAV 1- GPS REQD**

- S-ILS 6L
- 369/24 250 (300-½)
- 460/24 341 (400-½)
- 460/30 341 (400-½)

**S-LOC 6L**

- 460/24 341 (400-½)
- 460/30 341 (400-½)

**SIDESTEP 6R**

- 460/55 344 (400-1)
- 460-1½ 344 (400-1½)

**AMATRADA**

- 600
- 3000
- LAX R-046

**FILM Nav**

- 071° (5.7)
- 050° hdg (4.7)
- 3600 to NATHN

**RNAV 1- GPS REQD**

- S-ILS 6L
- 369/24 250 (300-½)
- 460/24 341 (400-½)
- 460/30 341 (400-½)

**S-LOC 6L**

- 460/24 341 (400-½)
- 460/30 341 (400-½)

**SIDESTEP 6R**

- 460/55 344 (400-1)
- 460-1½ 344 (400-1½)
From CRCUS, SEAVU, TRNDO, CLPWR: RNAV 1-GPS required. DME or RADAR required.

Simultaneous approach authorized. Simultaneous approach authorized with HHR. For inop ALS increase Sidestep 25L Cat C visibility to 1/2 SM. #RVR 1800 authorized with use of FD or AP or HUD to DA.

SIMULTANEOUS APPROACH: Climb to 2000 on heading 251° until crossing SMO R-160 then left turn on heading 236° and SMO VOR/DME R-195 to CATLY INT/SMO 15.7 DME and hold.

LOC/DMER 1-CFN

111.1

Chan 48

APP CRS
251°

Rwy Idg 11134 11095
TDZE 104 104
Apt Elev 128 128

MALS Rwy 25R

ALSF 2 Rwy 25L

GND CON

N 121.65 327.0
S 121.75 327.0
W 121.4 327.0

CLNC DEL

120.35

CPDLC

LOS ANGELES INTL (LAX)

SW-3, 30 NOV 2023 to 25 JAN 2024

LOS ANGELES, CALIFORNIA

AL-237 (FAA)
LOS ANGELES, CALIFORNIA

From CRCUS, SEAVU: RNAV 1-GPS required. DME or RADAR required.

Simultaneous approach authorized with HHR. Simultaneous approach authorized.

MISSING APPROACH: Climb to 2000 on heading 251° and LAX VORTAC R-260 to RAFFS INT/LAX 15.1 DME and hold.

D-ATIS
ARR 133.8
DEP 135.65

SOCAL APP CON
124.3 363.2
124.9 269.0
124.5 238.975
128.5 360.7

LOS ANGELES TOWER
N 133.8 239.3
S 120.95 379.1

GND CON
N 121.65 327.0
W 121.4 327.0

LOCALIZER 108.5
I-OSS 113.6
Chan 83

LOCALIZER 108.5
I-OSS 113.6
Chan 83

MISSING APCH FIX
RAFFS INT
LAX

113.6 LAX
R-260
Chan 83

SANTA MONICA
110.8 SMO
Chan 45

LOS ANGELES
113.6 LAX
Chan 83

ELEV 128
TDZE 122

2000
LAX
R-260
RAFFS INT

000
KOBEE
I-OSS 8.3
RADAR

2200
KOBE
I-OSS 16.2
RADAR

251°

VGS1 and ILS glidepath not coincident
(VGS1 Angle 3.00°/TCH 73).

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

S-ILS 24R
CAT II RA 118/12 100 DA 222

S-ILS 24R
CAT III BVR 06

33°57’N-118°24’W

ILS RWY 24R (CAT II & III)
For uncompensated Baro-VNAV systems, procedure NA below 5°C (41°F) or above 54°C (130°F). Simultaneous approach authorized. GPS required. For inop MALSR, increase RNP 0.30 all Cats visibility to RVR 6000.

Procedure NA for arrivals at EXERT on V25 westbound and V27 northwest bound.
For uncompensated Baro-VNAV systems, procedure NA below 5°C (41°F) or above 54°C (129°F). GPS required. Simultaneous approach authorized. For inop ALS, increase RNP 0.30 all Cats visibility to RVR 6000.

**RNAV (RNP) Z RWY 6R**  
**LOS ANGELES INTL (LAX)**

**APP CRS:** 071°  
**Rwy Idg:** 9748  
**TDZE:** 116  
**Apt Elev:** 128

**LOS ANGELES TOWER**  
N 133.9 239.3  
S 120.95 379.1  
W 121.4 327.0

**CLNC DEL**  
120.35 327.0

**CPDLC**

**D-ATIS**

**SOCAL APP CON**

**LOS ANGELES INTL**  
23334

**CNC DEL**  
120.35 327.0

**AMTRA**

**MERGED CLNC DEL**

**MISSED APCH FIX**

**4 NM**

**GND CON**

**ARR 133.8**

**DEP 135.65**

**SASSI**

**RF REQD**

**IWO**

**EXERT**

**VGSI and RNAV glidepath not coincident**  
(VGSI Angle 3.00/TCH 69).

**6 NM**

**5.1 NM**

**CATEGORY**

A  B  C  D

**RNP 0.30 DA**

471/40 355 (400-¼)

**AUTHORIZATION REQUIRED**

**LOS ANGELES, CALIFORNIA**  
Amdt 1 10NOV16

**LOS ANGELES INTL (LAX)**

**RNAV (RNP) Z RWY 6R**

**33°57′N-118°24′W**

**179**
For uncompensated Baro-VNAV systems, procedure NA below 5°C (41°F) or above 54°C (130°F). GPS required. Simultaneous approach authorized. For inop ALS, increase RNP 0.11 all Cats visibility to RVR 5000 and RNP 0.30 all Cats visibility to RVR 6000.

Procedure NA for arrivals at EXERT on V25 westbound and V27 northwest bound.

For uncompensated Baro-VNAV systems, procedure NA below 5°C (41°F) or above 54°C (130°F). GPS required. Simultaneous approach authorized. For inop ALS, increase RNP 0.11 all Cats visibility to RVR 5000 and RNP 0.30 all Cats visibility to RVR 6000.

Procedure NA for arrivals at EXERT on V25 westbound and V27 northwest bound.
For uncompensated Baro-VNAV systems, procedure NA below 5°C (41°F) or above 54°C (130°F). For inop MALSR, increase RNP 0.11 all Cats visibility to RVR 4500. Simultaneous approach authorized.

MISSED APPROACH: Climb to 3000 on track 071° to ESINE and on track 071° to DOWNE and hold.

Procedure NA for arrivals at EXERT on V25 westbound and V27 northwest bound.

RGPS REQUIRED

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00°/TCH 57).

ủng Authorization Required

33°57' N-118°24' W

389

181
Simultaneous approach authorized with HHR. For uncompensated Baro-VNAV systems, procedure NA below 5°C or above 54°C. For inop ALS, increase RNP 0.15 all Cats visibility to RVR 6000 and RNP 0.30 all Cats visibility to 1½ SM. Simultaneous approach authorized.

TDZ/CL Rwys 6R, 7L, 24R, and 25L HIRL all Rwys

LOS ANGELES, CALIFORNIA

Amdt 1D 07OCT21

SW-3, 30 NOV 2023 to 25 JAN 2024
**RNAV (RNP) Z RWY 25L**

**LOS ANGELES INTL (LAX)**

**RNP AR APCH.**

<table>
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<th>D-ATIS ARR</th>
<th>133.8</th>
<th>CALIFORNIA</th>
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</thead>
<tbody>
<tr>
<td>DEP</td>
<td>135.65</td>
<td>STATE</td>
</tr>
</tbody>
</table>

**SOCIAL APP CON**

| 124.3 | 363.2 | (APCH FM WEST) |
| 124.5 | 235.975 | (226°-044°) |

**Los Angeles Tower**

| N 123.9 | 239.3 |
| S 120.95 | 379.1 |

**GND CON**

| N 121.65 | 327.0 |
| S 121.75 | 327.0 |

**CLNC DEL**

| 120.35 | 327.0 |

**PF/RS**

- 6R, 7L, 24R, and 25L
- HIRL all Rwys

**Authorization Required**

**Los Angeles, California**

**Amdt 2D 09SEP21**

**Category**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>RNP 0.15 DA</td>
<td>445/30</td>
<td>341 (400-5%)</td>
<td></td>
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<tr>
<td>RNP 0.30 DA</td>
<td>543/50</td>
<td>439 (500-1)</td>
<td></td>
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</tbody>
</table>

**Map**

- See planview for multiple IF locations.
- MISSED APPROACH: Climb to 2000 ft on track 251° to ZERAN and on track 187° to CATLY and hold.
- GPS required. For uncompensated Baro-VNAV systems, procedure NA below 5°C or above 54°C. Simultaneous approach authorized with HIRL.
RNAV (RNP) Z RWY 25R
LOS ANGELES INTL (LAX)

For uncompensated Baro-VNAV systems, procedure NA below 5°C (41°F) or above 54°C (130°F). Simultaneous approach authorized. Simultaneous approach authorized with HHR. GPS required. For inop ALS, increase RNP 0.11 all Cats' visibility to RVR 6000.

Category
A: 0.3% UP
B: 0.3% UP
C: 0.3% UP
D: 0.3% UP

For uncompensated Baro-VNAV systems, procedure NA below 5°C (41°F) or above 54°C (130°F). Simultaneous approach authorized. Simultaneous approach authorized with HHR. GPS required. For inop ALS, increase RNP 0.11 all Cats' visibility to RVR 6000.

Category
A: 0.3% UP
B: 0.3% UP
C: 0.3% UP
D: 0.3% UP

AUTHORIZATION REQUIRED

LOS ANGELES, CALIFORNIA
Orig-A  09SEP21

33°57'N-118°24'W

RNAV (RNP) Z RWY 25R
LOS ANGELES INTL (LAX)
**RNAV (GPS) Y RWY 6L**

**LOS ANGELES INTL (LAX)**

**For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 5°C (41°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations. Simultaneous approach authorized.**

### Chart Information
- **D-ATIS:** Procedure NA for arrival on FIM VORTAC airway radial DBZ-CW 196
- **AMTRA:** Procedure NA for arrivals at EXERT on V25 westbound and V27 northwest bound.

### Chart Details
- **VGS1 and RNAV glidepath not coincident (VGS1 Angle 3.00°/TCH 77).**
- **MALSR:** Climb to 3000 direct ZANAV and track 042° to AMTRA and hold.

### Navigation Points
- **KILIE**
- **CLVVR**
- **NATHN**
- **ALISN**
- **WAKER**

### Categories

<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>369/24</td>
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<td>411/24</td>
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<td>LNAV MDA</td>
<td>500/24</td>
<td>381 (400-½)</td>
<td>500/35</td>
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</table>

### Additional Information
- **TDZ/CL Rwys 6R, 7L, 24R, and 25L HIRL all Rwys**
- **Los Angeles Airspace**
- **Los Angeles Tower Coordination**
- **GND CON**
- **CLNC DEL**
- **CPDLC**

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**Los Angeles, California**

Amdt 2 10NOV16

**33°57'N-118°24'W**

**Los Angeles Intl (LAX)**

**RNAV (GPS) Y RWY 6L**

**23334**
For uncompensated bars-VNAV systems, LNAV/VNAV NA below 5°C (41°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. For inop ALS, increase LNAV/VNAV all Cat visibility to RVR 4500, LNAV Cat C and D visibility to RVR 5500. Simultaneous approach authorized. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNP guidance required during simultaneous operations. # RVR 1800 authorized with use of FD or AP or HIRL to DA.

Procedure NA for arrivals at EXERT on V25 westbound and V27 northwest bound.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 5°C (41°F) or above 54°C (130°F). DME/DME RNP -0.3 NA. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations. Simultaneous approach authorized.

D-ATIS

ARR 133.8
DEP 135.65
SOCAL APP CON
124.3 363.2
(ARP WH WEST)
124.8 286.975
(82°-224°)
128.5 360.7
(045°-089°)

Procedure NA for arrivals on FIM VORTAC

Procedure NA for arrivals at EXERT on V25 westbound, V27 northwest bound.

MISSED APPROACH: Climb to 3000 direct FILBA and on track 072° to DOWNE and hold.

MASR

LOOS ANGELES TOWER
N 133.9  239.3
S 120.95  379.1
W 121.4  327.0

RNAV (GPS) Y RWY 7L

Los Angeles INTL (LAX)

Amnd 3A  07DEC17

RNAV (GPS) Y RWY 7L

Los Angeles INTL (LAX)
For uncompensated Baro VNAV systems, LNAV/VNAV NA below 5°C (41°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Simultaneous approach authorized. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations. # RVR 1800 authorized with use of FD or AP or HUD to DA.


Procedure NA for arrivals at EXERT on V25 westbound, and V27 northwest bound.

For uncompensated Baro VNAV systems, LNAV/VNAV NA below 5°C (41°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Simultaneous approach authorized. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations. # RVR 1800 authorized with use of FD or AP or HUD to DA.

Procedure NA for arrivals at EXERT on V25 westbound, and V27 northwest bound.

For uncompensated Baro VNAV systems, LNAV/VNAV NA below 5°C (41°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Simultaneous approach authorized. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations. # RVR 1800 authorized with use of FD or AP or HUD to DA.

Procedure NA for arrivals at EXERT on V25 westbound, and V27 northwest bound.

For uncompensated Baro VNAV systems, LNAV/VNAV NA below 5°C (41°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Simultaneous approach authorized. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations. # RVR 1800 authorized with use of FD or AP or HUD to DA.

Procedure NA for arrivals at EXERT on V25 westbound, and V27 northwest bound.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 5° or above 54°. Simultaneous approach authorized. Simultaneous approach authorized with HHH 25. In apron use LNAV/VNAV all cats visibility to RVR 5500, LNAV Cat C/D visibility to 1½ SM. LNAV procedure NA during simultaneous operations. Use of FD or AP required during simultaneous operations.

**MISSING APCH FIX:** Climb to 2000 direct ZERAN and on track 187° to CATLY and hold.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 5°C or above 54°C. Simultaneous approach authorized. Simultaneous approach authorized with HHR.

RNAV procedure NA during simultaneous operations. Use of FD or AP required during simultaneous operations. RVR 1800 authorized with use of FD or AP or HUD to DA.

Simultaneous approach authorized. Simultaneous approach authorized with HHR.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 5°C or above 54°C. Simultaneous approach authorized. Simultaneous approach authorized with HHR.

LNAV procedure NA during simultaneous operations. Use of FD or AP required during simultaneous operations. RVR 1800 authorized with use of FD or AP or HUD to DA.

Simultaneous approach authorized. Simultaneous approach authorized with HHR.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 5°C or above 54°C. Simultaneous approach authorized. Simultaneous approach authorized with HHR.

RNAV procedure NA during simultaneous operations. Use of FD or AP required during simultaneous operations. RVR 1800 authorized with use of FD or AP or HUD to DA.

Simultaneous approach authorized. Simultaneous approach authorized with HHR.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 5°C or above 54°C. Simultaneous approach authorized. Simultaneous approach authorized with HHR.

RNAV procedure NA during simultaneous operations. Use of FD or AP required during simultaneous operations. RVR 1800 authorized with use of FD or AP or HUD to DA.

Simultaneous approach authorized. Simultaneous approach authorized with HHR.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 5°C or above 54°C. Simultaneous approach authorized. Simultaneous approach authorized with HHR.

RNAV procedure NA during simultaneous operations. Use of FD or AP required during simultaneous operations. RVR 1800 authorized with use of FD or AP or HUD to DA.

Simultaneous approach authorized. Simultaneous approach authorized with HHR.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 5°C or above 54°C. Simultaneous approach authorized. Simultaneous approach authorized with HHR.

RNAV procedure NA during simultaneous operations. Use of FD or AP required during simultaneous operations. RVR 1800 authorized with use of FD or AP or HUD to DA.

Simultaneous approach authorized. Simultaneous approach authorized with HHR.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 5°C or above 54°C. Simultaneous approach authorized. Simultaneous approach authorized with HHR.

RNAV procedure NA during simultaneous operations. Use of FD or AP required during simultaneous operations. RVR 1800 authorized with use of FD or AP or HUD to DA.

Simultaneous approach authorized. Simultaneous approach authorized with HHR.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
**TOP ALTITUDE: ASSIGNED BY ATC**

**NOTE: Chart not to scale.**

**TAKEOFF MINIMUMS**
- Rwys 6L/R, 7L/R: Standard.

**NOTE: Radar required.**

**NOTE: This is a RADAR vector departure to SXC VORTAC. Route depicted is a lost communication procedure only.**

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAYS 6L/R, 7L/R:** Climb heading 071° for vectors to SXC VORTAC. Then on (assigned route). All aircraft expect further clearance to filed altitude 5 minutes after departure.

**LOST COMMUNICATIONS:**

**TAKEOFF RUNWAYS 6L/R, 7L/R:** If not in contact with Departure Control after reaching 2000’, turn right heading 245°. Cross LAX R-170 at or above 5000’, then turn left and proceed direct SXC VORTAC. Cross SLI R-235 at or below 9000’.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 6L/R: Climb heading 041° for vector to V23, thence.

TAKEOFF RUNWAYS 7L/R: Climb heading 071° for vector to V23, thence.

. . . then on (transition) or (assigned route). Expect filed altitude 5 minutes after departure.

LOST COMMUNICATIONS

RUNWAYS 6L/R, 7L/R: If not in contact with departure control within 3 minutes after departure, turn left heading 270°, intercept V23 to CHATY INT and resume the CHATY FIVE DEPARTURE. Continue on course.

GORMAN TRANSITION (CHATY5.GMN): From over CHATY INT on LAX R-323 and GMN R-142 to GMN VORTAC.

HENER TRANSITION (CHATY5.HENER): From over CHATY INT on LAX R-323 to JOSUL, then on FIM R-097 to FIM VORTAC, then on FIM R-250 to HENER INT.

KWANG TRANSITION (CHATY5.KWANG): From over CHATY INT on LAX R-323 to JOSUL, then on FIM R-097 to FIM VORTAC, then on FIM R-250 to KWANG INT.

SAN MARCUS TRANSITION (CHATY5.RZS): From over CHATY INT on LAX R-323 to JOSUL, then on FIM R-097 to FIM VORTAC, then on FIM R-267 to OHIGH INT, then on RZS R-087 to RZS VORTAC.
NOTE: Chart not to scale.

SW-3, 30 NOV 2023 to 25 JAN 2024
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 24L: Climb heading 251° to 640, then climb direct to cross DLREY at or below 3000, then on track 256° to cross ENNEY at or below 5000, then on track 253° to NAANC, then on track 253° to cross DARRK at or below 12000, thence. . . .

TAKEOFF RUNWAY 24R: Climb heading 251° to 640, then climb direct to cross FABRA at or below 3000, then on track 253° to cross ENNEY at or below 5000, then on track 253° to NAANC, then on track 253° to cross DARRK at or below 12000, thence. . . .

TAKEOFF RUNWAY 25L: Climb heading 251° to 640, then climb direct to cross HIIPR at or below 3000, then on track 256° to cross EVOSE at or below 5000, then on track 252° to MKGEE, then on track 258° to cross DARRK at or below 12000, thence. . . .

TAKEOFF RUNWAY 25R: Climb heading 251° to 640, then climb direct to cross DOCKR at or below 3000, then on track 252° to cross EVOSE at or below 5000, then on track 252° to MKGEE, then on track 258° to cross DARRK at or below 12000, thence. . . .

. . . on (transition) maintain FL230. Expect filed altitude 5 minutes after departure.

DINY TRANSITION (DARRK3.DINTY)
MCKEY TRANSITION (DARRK3.MCKEY)
RIZIN TRANSITION (DARRK3.RIZIN)
SCTR TRANSITION (DARRK3.SCTR)
STOKD TRANSITION (DARRK3.STOKD)
NOTE: Chart not to scale.  

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Turn at HIIPR and DOCKR are required for ATC separation.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 24L: Climb heading 251° to 640, then climb direct to cross DLREY at or below 3000, then on track 256° to cross ENNEY at or below 5000, then on depicted route to cross DOTSS at or above 15000, thence. . . .

TAKEOFF RUNWAY 24R: Climb heading 251° to 640, then climb direct to cross FABRA at or below 3000, then on track 253° to cross ENNEY at or below 5000, then on depicted route to cross DOTSS at or above 15000, thence. . . .

TAKEOFF RUNWAY 25L: Climb heading 251° to 640, then climb direct to cross HIIPR at or below 3000, then on track 221° to cross ADORE at or below 5000, then on depicted route to cross DOTSS at or above 15000, thence. . . .

TAKEOFF RUNWAY 25R: Climb heading 251° to 640, then climb direct to cross DOCKR at or below 3000, then on track 256° to cross WEILR at or below 5000, then on depicted route to cross DOTSS at or above 15000, thence. . . .

. . . . on (transition). Maintain 17000. Expect filed altitude five minutes after departure.

CLEEE TRANSITION (DOTSS2.CLEE)

CNERY TRANSITION (DOTSS2.CNERY)
D-ATIS DEP
135.65
CLNC DEL
120.35 327.0
CPDLC
GND CON
(N) 121.65 327.0
(S) 121.75 327.0
(W) 121.4 327.0
LOS ANGELES TOWER
(N) 133.9 239.3
(S) 120.95 379.1
SOCAL DEP CON
124.3 363.2 (045°-224°)
125.2 263.025 (225°-044°)

TAKEOFF MINIMUMS
 Rwys 6L/R, 7L/R: Standard with minimum climb of 500’ per NM to 640.
 Rwys 24L/R, 25L/R: NA-ATC.

NOTE: Chart not to scale.

NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: HAILO/LAS VEGAS/NNAVY TRANSITIONS ATC only.
NOTE: MISEN TRANSITION restricted to aircraft landing LAS terminal area.
NOTE: If unable climb restrictions, use the TUSTI or LAXX SID.
NOTE: Maintain 250K until otherwise advised by ATC.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 6L: Climb on heading 071° to intercept course 056° to CHVEZ, then on track 058° to cross TRAAP at 8000, then on track 064° to cross JIIVE at or above 10000, then on track 048° to cross CLUTZ at or above 13000, then on track 048° to cross GARDY at or above 16000, thence.

TAKEOFF RUNWAY 6R: Climb on heading 071° to intercept course 056° to KOFAX, then on track 057° to cross TRAAP at 8000, then on track 064° to cross JIIVE at or above 10000, then on track 048° to cross CLUTZ at or above 13000, then on track 048° to cross GARDY at or above 16000, thence.

TAKEOFF RUNWAYS 7L/R: Climb on heading 071° to 640, then on heading 071° or as assigned by ATC, expect vectors to cross TRAAP at 8000, then on track 064° to cross JIIVE at or above 10000, then on track 048° to cross CLUTZ at or above 13000, then on track 048° to cross GARDY at or above 16000, thence.

...on (transition). Maintain ATC assigned altitude. Expect filed altitude five minutes after departure.

BEALE TRANSITION (GARDY4.BEALE)
HAILO TRANSITION (GARDY4.HAILO)
LAS VEGAS TRANSITION (GARDY4.LAS)
MISEN TRANSITION (GARDY4.MISEN)
NNAVY TRANSITION (GARDY4.NNAVY)
GORMAN SEVEN DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 6L/R: Climb on heading 071° until LAX VORTAC 3 DME, then turn left heading 056° for vector to join VNY R-126 to VNY VOR/DME, then on VNY R-317 and GMN R-136 to GMN VORTAC, thence.

TAKEOFF RUNWAYS 7L/R: Climb on heading 071° for vector to join VNY R-126 to VNY VOR/DME, then on VNY R-317 and GMN R-136 to GMN VORTAC, thence.

TAKEOFF RUNWAYS 24L/R, 25L/R: Climb on heading 251° to cross SMO R-154 at or below 3000, then on RADAR vector to LAX R-323 and GMN R-142 to GMN VORTAC, thence.

.on (transition) or (assigned route). All aircraft expect further clearance to filed flight level 5 minutes after departure.

LOST COMMUNICATIONS: If not in contact with Departure Control within five minutes after departure, climb to FL230 or filed altitude whichever is lower. Aircraft filing FL240 or above climb to filed altitude ten minutes after departure.

AVENAL TRANSITION (GMN7.AVE): From over GMN VORTAC on GMN R-310 to COREZ then on AVE R-086 to AVE VOR/DME.

SHAFTER TRANSITION (GMN7.EHF): From over GMN VORTAC on GMN R-328 and EHF R-150 to EHF VORTAC.
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: Restricted to turbojet aircraft only.
NOTE: Some departures may be RADAR vectored to MLIBU, LADYJ, or OROSZ.
NOTE: Maintain at or below 250K unless otherwise directed by ATC.
NOTE: Use the DARRK, SUMMR, or VENTURA DEPARTURE during the time periods of 2100-0700 local in lieu of the LADYJ DEPARTURE.

TAKEOFF MINIMUMS
Rwys 6L/R, 7L/R: NA-ATC.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 24L: Climb heading 251° to 640, then climb direct to cross DLREY at or below 3000, then on track 256° to cross ENNEY at or below 5000, then on track 253° to EYENO, then on track 316° to cross MLIBU at or above 7000, then on track 351° to cross LADYJ at 8000, thence. . . .

TAKEOFF RUNWAY 24R: Climb heading 251° to 640, then climb direct to cross FABRA at or below 3000, then on track 253° to cross ENNEY at or below 5000, then on track 253° to EYENO, then on track 316° to cross MLIBU at or above 7000, then on track 351° to cross LADYJ at 8000, thence. . . .

TAKEOFF RUNWAY 25L: Climb heading 251° to 640, then climb direct to cross HIIPR at or below 3000, then on track 256° to cross EVOSE at or below 5000, then on track 252° to MKGEE, then on track 319° to cross MLIBU at or above 7000, then on track 351° to cross LADYJ at 8000, thence. . . .

TAKEOFF RUNWAY 25R: Climb heading 251° to 640, then climb direct to cross DOCKR at or below 3000, then on track 252° to cross EVOSE at or below 5000, then on track 252° to MKGEE, then on track 319° to cross MLIBU at or above 7000, then on track 351° to cross LADYJ at 8000, thence. . . .

. . . . on (transition) maintain 8000. Expect filed altitude 5 minutes after departure.

COREZ TRANSITION (LADYJ4.COREZ)

CSTRO TRANSITION (LADYJ4.CSTRO)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 6L/R, 7L/R: Climb heading 071° for vectors to SLI VORTAC, thence . . .
TAKEOFF RUNWAYS 24L/R: Climb on heading 251° to cross SMO R-160 at or below 3000,
then on RADAR vectors to assigned route/fix/transition, thence . . .
TAKEOFF RUNWAYS 25L/R: Climb on heading 251°, at the SMO R-160 turn left
heading 221°, cross SMO R-160 at or below 3000, expect RADAR vectors to assigned
route/fix/transition thence . . .

. . . .all aircraft expect further clearance to flight level five minutes after departure.

IMPERIAL TRANSITION (LAXX1.IPL): From over SLI VORTAC on SLI R-120 to DANAH,
then on OCN R-301 to OCN VORTAC, then on OCN R-105 to PILLO, then on MZB R-076 and
IPL R-258 to IPL VORTAC.

MISSION BAY TRANSITION (LAXX1.MZB): From over SLI VORTAC on SLI R-120 to DANAH,
then on OCN R-301 to OCN VORTAC, then on OCN R-145 to CARIF, then on MZB R-326 to
MZB VORTAC.

OCEANSIDE TRANSITION (LAXX1.OCN): From over SLI VORTAC on SLI R-120 to DANAH,
then on OCN R-301 to OCN VORTAC.

ROSIN TRANSITION (LAXX1.ROSIN): From over SLI VORTAC on SLI R-202 and SXC R-022
to SXC VORTAC, then on SXC R-213 to ROSIN.

THERMAL TRANSITION (LAXX1.TRM): From over SLI VORTAC on SLI R-080 to TUSTI, then on
SLI R-080 and TRM R-263 to HEMET, then on TRM R-263 to TRM VORTAC.

LOST COMMUNICATIONS

RUNWAYS 6L/R, 7L/R: If not in contact with Departure Control within five minutes after
departure, climb to FL230 or filed altitude whichever is lower, turn right direct SLI VORTAC and
proceed on assigned route. Aircraft filed FL240 or above, maintain FL230 for five minutes then
continue climb to filed altitude.

RUNWAYS 24L/R, 25L/R: If not in contact with Departure Control within five minutes after
departure, turn left heading 080°, climb to FL230 or filed altitude whichever is lower,
and when able proceed direct filed or assigned route. Aircraft filed FL240 or above, maintain
FL230 for five minutes then continue climb to filed altitude.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 24L/R, 25L/R: Climb heading 251° to 640, then on heading 251° or as assigned by ATC, expect vectors to cross DTAIL at or above 3100, then on track 282° to cross MOOOS at or above 4900 and at or below 8000, thence . . .

. . . . on (transition). Maintain 9000. Expect filed altitude five minutes after departure.

LOST COMMUNICATIONS: If not in contact with Departure Control within five minutes after departure, turn right and proceed direct MOOOS WP, climb to 9000' or filed altitude whichever is lower, and when able proceed direct filed or assigned route/fix/transition. Aircraft filing 10000 or above, climb to filed altitude ten minutes after departure.

IKAYE TRANSITION (MOOOS2.IKAYE)

TAKEOFF MINIMUMS
Rwys 6L/R, 7L/R: NA-ATC.

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

NOTE: Chart not to scale.
TOP ALTITUDE: 10000

NOTE: Chart not to scale.

LOS ANGELES, CALIFORNIA

NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: Turbojets only.
NOTE: Maintain at or below 250K unless otherwise directed by ATC.

SW-3, 30 NOV 2023 to 25 JAN 2024
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 24L: Climb on heading 251° to 640, then climb direct to cross DLLREY at or below 3000, then on track 256° to cross ENNEY at or above 1300 and at or below 5000, then on depicted route to cross FIXIT at 10000, thence. . . .

TAKEOFF RUNWAY 24R: Climb on heading 251° to 640, then climb direct to cross FABRA at or below 3000, then on track 253° to cross ENNEY at or above 1300 and at or below 5000, then on depicted route to cross FIXIT at 10000, thence. . . .

TAKEOFF RUNWAY 25L: Climb on heading 251° to 640, then climb direct to cross HIIPR at or below 3000, then on track 256° to cross EVOSE at or above 1300 and at or below 5000, then on depicted route to cross FIXIT at 10000, thence. . . .

TAKEOFF RUNWAY 25R: Climb on heading 251° to 640, then climb direct to cross DOCKR at or below 3000, then on track 252° to cross EVOSE at or above 1300 and at or below 5000, then on depicted route to cross FIXIT at 10000, thence. . . .

. . . . on (transition). Maintain 10000. Expect filed altitude five minutes after departure.

KWANG TRANSITION (MUELR4.KWANG)
SAN MARCUS TRANSITION (MUELR4.RZS)
Orcka Five Departure (RNAV)

Top Altitude: FL230

Takeoff Minimums:
- Rwy 6L/R, 7L/R, NA-ATC
- Rwy 24L/R, 25L/R: Standard with minimum climb of 500' per NM to 640.

NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV required.
NOTE: Radar required.
NOTE: RNAV 1.
NOTE: SW-3, 30 Nov 2023 to 25 Jan 2024

Transitions:
- HIIPR/BEALE/YELAH Transitions at ATC assigned only.
- MISEN Transition restricted to aircraft landing LAS terminal area.
- If unable to meet crossing restriction at KEGGS within 30 flying miles, use the OSHNN DEPARTURE.
- File the OSHNN DEPARTURE during the period 2100-0700 local time in lieu of the ORCKA DEPARTURE.
- Turn at HIIPR and DOCKR are required for ATC separation.
- RNAV 1.

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 24L: Climb on heading 251° to 640, then climb direct to cross DLREY at or below 3000, then on heading 251° or as assigned by ATC, expect left turn to cross KLIPR at or above 10000, then on track 044° to cross KEGGS at or above 13000 and at or below FL190, then on track 044° to cross COOPP at or above 15000, then on track 044° to ORCKA, thence.

TAKEOFF RUNWAY 24R: Climb on heading 251° to 640, then climb direct to cross FABRA at or below 3000, then on heading 251° or as assigned by ATC, expect left turn to cross KLIPR at or above 10000, then on track 044° to cross KEGGS at or above 13000 and at or below FL190, then on track 044° to cross COOPP at or above 15000, then on track 044° to ORCKA, thence.

TAKEOFF RUNWAY 25L: Climb on heading 251° to 640, then climb direct to cross HIIPR at or below 3000, then on heading 236° or as assigned by ATC, expect left turn to cross KLIPR at or above 10000, then on track 044° to cross KEGGS at or above 13000 and at or below FL190, then on track 044° to cross COOPP at or above 15000, then on track 044° to ORCKA, thence.

TAKEOFF RUNWAY 25R: Climb on heading 251° to 640, then climb direct to cross DOCKR at or below 3000, then on heading 236° or as assigned by ATC, expect left turn to cross KLIPR at or above 10000, then on track 044° to cross KEGGS at or above 13000 and at or below FL190, then on track 044° to cross COOPP at or above 15000, then on track 044° to ORCKA, thence.

. . . on (transition). Maintain FL230. Expect filed altitude five minutes after departure.

LOST COMMUNICATIONS: If not in contact with departure control within five minutes after departure, turn left and proceed direct KLIPR Waypoint, climb to FL230 or filed altitude whichever is lower, and when able proceed direct filed or assigned route/fix/transition. Aircraft filing FL240 or above, climb to filed altitude ten minutes after departure.

BEALE TRANSITION (ORCKA5.BEALE)
HAILO TRANSITION (ORCKA5.HAIILO)
LAS VEGAS TRANSITION (ORCKA5.LAS)
MISEN TRANSITION (ORCKA5.MISEN)
YELAH TRANSITION (ORCKA5.YELAH)
TOP ALTITUDE: 17000

TAKEOFF MINIMUMS
Rwy 6L/R, 7L/R: NA-ATC.
Rwy 24L/R, 25L/R: Standard with minimum climb of 500’ per NM to 640.

NOTE: Chart not to scale.

NOTE: SW-3, 30 NOV 2023 to 25 JAN 2024

NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: This departure to be used only if unable to use the ORCKA DEPARTURE.
NOTE: Rwys 24L/R departure expect RADAR vector to PEVEE prior to NAANC.
NOTE: Turn at HIIPR and DOCKR are required for ATC separation.
NOTE: MISEN TRANSITION restricted to aircraft landing LAS terminal area.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 24L: Climb on heading 251° to 640, then climb direct to cross DLREY at or below 3000, then on track 256° to cross ENNEY at or below 5000, then on depicted route to OSHNN, thence. . . .

TAKEOFF RUNWAY 24R: Climb on heading 251° to 640, then climb direct to cross FABRA at or below 3000, then on track 253° to cross ENNEY at or below 5000, then on depicted route to OSHNN, thence. . . .

TAKEOFF RUNWAY 25L: Climb on heading 251° to 640, then climb direct to cross HIIPR at or below 3000, then on track 221° to cross ADORE at or below 5000, then on depicted route to OSHNN, thence. . . .

TAKEOFF RUNWAY 25R: Climb on heading 251° to 640, then climb direct to cross DOCKR at or below 3000, then on track 220° to cross WEILR at or below 5000, then on depicted route to OSHNN, thence. . . .

. . . .on (transition). Maintain 17000. Expect filed altitude five minutes after departure.

BEALE TRANSITION (OSHNN1.BEALE)
MISEN TRANSITION (OSHNN1.MISEN)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 6L/R, 7L/R: Climb on heading 071° for RADAR vectors to DINTY or FICKY, thence. . .

TAKEOFF RUNWAYS 24L/R, 25L/R: Climb on heading 251° to cross SMO R-160 at or below 3000, then on RADAR vectors to DINTY or FICKY, thence. . .

. . . .on (assigned route). All aircraft expect further clearance to filed altitude 5 minutes after departure.

LOST COMMUNICATIONS:

TAKEOFF RUNWAYS 6L/R, 7L/R: If not in contact with Departure Control within 3 minutes after departure, turn right heading 250°, cross SMO R-210 at or above 5000 and at or below 10000. After leaving 10000, turn right heading 270° to intercept and proceed on LAX R-249 to PERCH INT. Climb to FL230 or filed altitude whichever is lower. Aircraft filing FL240 or above climb to filed altitude 10 minutes after departure.

TAKEOFF RUNWAYS 24L/R, 25L/R: If not in contact with Departure Control within 5 minutes after departure, proceed to PERCH INT on LAX R-249. Climb to FL230 or filed altitude whichever is lower. Aircraft filing FL240 or above climb to filed altitude 10 minutes after departure.
NOTE: Chart not to scale.

NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: Turbojet aircraft only.
NOTE: Turn at HIIPR and DOCKR are required for ATC separation.

TOP ALTITUDE:
FL200
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 24L: Climb heading 251° to 640, then climb direct to cross DLREY at or below 3000, then on track 256° to cross ENNEY at or below 5000, then on depicted route to PNDAH, thence. . . .

TAKEOFF RUNWAY 24R: Climb heading 251° to 640, then climb direct to cross FABRA at or below 3000, then on track 253° to cross ENNEY at or below 5000, then on depicted route to PNDAH, thence. . . .

TAKEOFF RUNWAY 25L: Climb heading 251° to 640, then climb direct to cross HIIPR at or below 3000, then on track 221° to cross ADORE at or below 5000, then on depicted route to PNDAH, thence. . . .

TAKEOFF RUNWAY 25R: Climb heading 251° to 640, then climb direct to cross DOCKR at or below 3000, then on track 220° to cross WEILR at or below 5000, then on depicted route to PNDAH, thence. . . .

. . . .on (transition). Maintain FL200. Expect filed altitude five minutes after departure.

OTAYY TRANSITION (PNDAH2.OTAYY)
TCATE TRANSITION (PNDAH2.TCATE)
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION


TAKEOFF RUNWAYS 24L/R: Climb on heading 251° to cross SMO R-154 at or below 3000, then RADAR vectors to SLI VORTAC, thence. . . .

TAKEOFF RUNWAYS 25L/R: Climb on heading 251° to cross SMO R-154 at or below 3000, then turn left heading 201° for RADAR vectors to SLI VORTAC, thence. . . .

. . . .on (assigned route). All aircraft expect further clearance to filed altitude 5 minutes after departure.

LOST COMMUNICATIONS: If not in contact with Departure Control within five minutes after departure, climb to FL230 or filed altitude whichever is lower. Aircraft filing FL240 or above climb to filed altitude ten minutes after departure.

NOTE: South Complex turn at SMO R-154 to 201° is required for ATC separation.
**SEBBY THREE DEPARTURE**

**(SEBBY3.DAG)** 23334

**SEBBY THREE DEPARTURE**

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAYS 24L/R:** Climb on heading 251° to cross SMO VOR/DME R-160 at or below 3000, thence . . .

**TAKEOFF RUNWAYS 25L/R:** Climb on heading 251° at the SMO VOR/DME R-160 turn left heading 221°, cross SMO R-160 at or below 3000, thence . . .

. . . .on RADAR vectors to cross SLI VORTAC at or above 14000, then on SLI R-022 to cross SEBBY/23 DME FIX at or above 16000. Then on DAG R-214 to DAG VORTAC. All aircraft expect further clearance to filed flight level five minutes after departure.

**LOST COMMUNICATIONS:** If not in contact with Departure Control within five minutes after departure, turn left direct SLI VORTAC and proceed on assigned route, climb to FL230 or filed altitude whichever is lower. Aircraft filed FL240 or above climb to filed altitude ten minutes after departure.

**NOTE:** Chart not to scale.

---

**NOTE:** DME and RADAR required.

---

**TOP ALTITUDE:**

**ASSIGNED BY ATC**

SEBBY THREE DEPARTURE

(LAX) LOS ANGELES INTL

LOS ANGELES, CALIFORNIA

AL-237 (FAA)

---

**SOCIAL DEP CON**

124.3  363.2 (045°-224°)
125.2  263.025 (225°-044°)

**D-ATIS DEP**

135.65

**CLNC DEL**

120.35  327.0

**CDLC**

GND CON

(N) 121.65  327.0
(S) 121.75  327.0
(W) 121.4  327.0

LOS ANGELES TOWER

(N) 133.9  239.3
(S) 120.95  379.1

---

**TAKEOFF MINIMUMS**

Rwys 6L/R, 7L/R: NA-Operational.

---

**TURN MANDATORY FOR ATC SEPARATION**

South complex turn at SMO R-160 to 221° is required for ATC separation.

---

**NOTE:**

SW-3, 30 NOV 2023 to 25 JAN 2024
SKWRL TWO DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 24L/R, 25L/R: Climb heading 251° to 640, then on heading 251° or as assigned by ATC, expect vectors to cross RCKYY at or above 4000, then on track 330° to cross SKWRL at or above 5000, thence...

...on (transition). Maintain ATC assigned altitude. Expect filed altitude five minutes after departure.

LOST COMMUNICATIONS: If not in contact with departure control within five minutes after departure, turn right and proceed direct SKWRL WP, climb to 7000 or filed altitude whichever is lower, and when able proceed direct filed or assigned route/fix/transition. Aircraft filing 8000 or above, climb to filed altitude ten minutes after departure.

GORMAN TRANSITION (SKWRL2.GMN)

VALEY TRANSITION (SKWRL2.VALEY)
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: STOKD, SCTRR and MCKEY transitions:
DME/DME/IRU or GPS required.
NOTE: DINTY and FICKY transitions: GPS only.
NOTE: Turbojet aircraft only.
NOTE: File the RIZIN TRANSITION in lieu of the LADYJ DEPARTURE during
time periods 2100-0700 LCL. All other times RIZIN TRANSITION ATC
assigned only.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 24L: Climb heading 251° to 640, then climb direct to cross DLREY at or below 3000, then on track 256° to cross ENNEY at or below 5000, then on track 253° to NAANC, then on track 253° to cross DARRK at or below 12000, then on track 260° to SUMMR, thence.

TAKEOFF RUNWAY 24R: Climb heading 251° to 640, then climb direct to cross FABRA at or below 3000, then on track 253° to cross ENNEY at or below 5000, then on track 253° to NAANC, then on track 253° to cross DARRK at or below 12000, then on track 260° to SUMMR, thence.

TAKEOFF RUNWAY 25L: Climb heading 251° to 640, then climb direct to cross HIIPR at or below 3000, then on track 256° to cross EVOSE at or below 5000, then on track 252° to MKGEE, then on track 258° to cross DARRK at or below 12000, then on track 260° to SUMMR, thence.

TAKEOFF RUNWAY 25R: Climb heading 251° to 640, then climb direct to cross DOCKR at or below 3000, then on track 252° to cross EVOSE at or below 5000, then on track 252° to MKGEE, then on track 258° to cross DARRK at or below 12000, then on track 260° to SUMMR, thence.

. . . on (transition) maintain FL230. Expect filed altitude 5 minutes after departure.

DINTY TRANSITION (SUMMR2.DINTY)
FICKY TRANSITION (SUMMR2.FICKY)
MCKEY TRANSITION (SUMMR2.MCKEY)
RIZIN TRANSITION (SUMMR2.RIZIN)
SCTR TRANSITION (SUMMR2.SCTR)
STOKD TRANSITION (SUMMR2.STOKD)
TOP ALTITUDE: FL230

NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: STOKD, SCTRR and MCKEY transitions:
      DME/DME/IRU or GPS required.
NOTE: DINTY and FICKY transitions: GPS required.
NOTE: Turbojet aircraft only.

TAKEOFF MINIMUMS
Rwys 24L/R, 25L/R: NA-ATC.
Rwys 6L/R, 7L/R: Standard with a minimum climb of 500’ per NM to 640.

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 6L/R, 7L/R: Climb on heading 071° to 640, then climb on
heading 071° or as assigned by ATC, expect vectors to cross TRTON at or above
8000, then on track 277° to cross DARRK at or below 12000', thence. . . .

. . . .on (transition) maintain FL230. Expect filed altitude 5 minutes after departure.

LOST COMMUNICATIONS
If not in contact with departure control within 5 minutes after departure, turn right and proceed
direct DARRK WP, cross DARRK at or below 12000'. Climb to FL230 or filed altitude,
whichever is lower, and when able proceed direct filed route or assigned route/fix/transition.
Aircraft filing FL240 or above, climb to filed altitude ten minutes after departure.

DINTY TRANSITION (TRTON2.DINTY)
FICKY TRANSITION (TRTON2.FICKY)
MCKEY TRANSITION (TRTON2.MCKEY)
SCTRR TRANSITION (TRTON2.SCTRR)
STOKD TRANSITION (TRTON2.STOKD)
NOTE: Chart not scale.

DEPARTURE ROUTE DESCRIPTION


TAKEOFF RUNWAYS 24L/R, 25L/R: Climb on heading 251° for RADAR vectors to VTU VOR/DME, cross SMO R-154 at or below 3000, thence. . . .

. . . .on (assigned route). All aircraft expect further clearance to filed altitude 5 minutes after departure.

LOST COMMUNICATIONS: If not in contact with Departure Control within five minutes after departure climb to FL230 or filed altitude, whichever is lower. Aircraft filing FL240 or above climb to filed altitude ten minutes after departure.

DINTY TRANSITION (VTU8.DINTY): From over VTU VOR/DME on VTU R-272 to SUDDO INT then on RZS R-233 to DINTY.

SAN MARCUS TRANSITION (VTU8.RZS): From over VTU VOR/DME on VTU R-289 and RZS R-109 to RZS VORTAC.

NOTE: DINTY Transition: DME required.
NOTE: RADAR required.
NOTE: DINTY Transition: DME required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Maintain at or below 250K unless otherwise directed by ATC.
NOTE: Turbojet aircraft only.

TAKEOFF MINIMUMS
Rwys 24L/R, 25L/R: NA-ATC.
Rwys 6L/R, 7L/R: Standard with a minimum climb of 500' per NM to 640.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 6L: Climb heading 071° to intercept course 056° to CHVEZ, then on track 332° to cross JRGSN at or above 6300, then on track 315° to WNNDY, thence. . . .

TAKEOFF RUNWAY 6R: Climb heading 071° to intercept course 056° to KOFAX, then on track 333° to cross JRGSN at or above 6300, then on track 315° to WNNDY, thence. . . .

TAKEOFF RUNWAYS 7L/R: Climb heading 071° to 640, then on heading 071° or as assigned by ATC, for vectors to cross JRGSN at or above 6300, then on track 315° to WNNDY, thence. . . .

. . . . on (transition) maintain FL230. Expect filed altitude 5 minutes after departure.

LOST COMMUNICATIONS

If not in contact with departure control within 5 minutes after departure, turn left and proceed direct JRGSN WP, cross JRGSN at or below 7000. Climb to FL230 or filed altitude whichever is lower, and when able proceed direct filed or assigned route/fix/transition. Aircraft filing FL240 or above, climb to filed altitude ten minutes after departure.

COREZ TRANSITION [WNNDY3.COREZ]

CSTRO TRANSITION [WNNDY3.CSTRO]
NOTE: Chart not to scale.

(TOP ALTITUDE: 14000)

(TAKEOFF MINIMUMS)
Rwys 6L/R, 7L/R: NA-ATC.
Rwys 24L/R, 25L/R: Standard with minimum climb of 500' per NM to 640.

NOTE: Turn at HIIPR and DOCKR are required for ATC separation.
NOTE: Rwys 24L/R Departures: Expect RADAR vector to TANDY, ZILLI, LAUER, or BEAUT prior to NAANC.
NOTE: Some aircraft may be RADAR vectored to TANDY, ZILLI, LAUER, or BEAUT.
NOTE: GROGU Transition ATC assigned only. Do not file.
NOTE: Expect GROGU Transition when W292E in use.

[NARRATIVE ON FOLLOWING PAGE]
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 24L: Climb on heading 251° to 640, then climb direct to cross DLREY at or below 3000, then on track 256° to cross ENNEY at or below 5000, then on depicted route to ZILLI, thence . . . .

TAKEOFF RUNWAY 24R: Climb on heading 251° to 640, then climb direct to cross FABRA at or below 3000, then on track 253° to cross ENNEY at or below 5000, then on depicted route to ZILLI, thence . . . .

TAKEOFF RUNWAY 25L: Climb on heading 251° to 640, then climb direct to cross HIIPR at or below 3000, then on track 221° to cross ADORE at or below 5000, then on depicted route to ZILLI, thence . . . .

TAKEOFF RUNWAY 25R: Climb on heading 251° to 640, then climb direct to cross DOCKR at or below 3000, then on track 220° to cross WEILR at or below 5000, then on depicted route to ZILLI, thence . . . .

. . . . on (transition). Maintain 14000, expect filed altitude five minutes after departure.

FICKY TRANSITION (ZILLI.FICKY)
GROGU TRANSITION (ZILLI.GROGU)
**RNAV (GPS) RWY 12**

**WHITEMAN (WHP)**

<table>
<thead>
<tr>
<th>APP CRS</th>
<th>3181</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rwy Idg</td>
<td>998</td>
</tr>
<tr>
<td>Apt Elev</td>
<td>1003</td>
</tr>
</tbody>
</table>

**RNP ACH.**

- **NA**: Procedure NA at night. When local altimeter setting not received, use Burbank altimeter setting. Rwy 12 helicopter visibility reduction below 1 SM NA.

- **MISSUED APPROACH**: Climbing right turn to 4000 direct CANOG and hold.

### ATIS

| 132.1 |

### SOCAL APP CON

| 120.4 | 360.6 (NORTH) |
| 134.2 | 338.2 (WEST) |

### WHITEMAN TOWER

| *135.0* (CTAF) |

### GND CON

| *125.0* |

### UNICOM

| *122.95* |

---

**Final approach course offset 15.69°.**

---

**End of document.**
When local altimeter setting not received, use Burbank altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

Procedure NA for arrivals at FIM VORTAC on V518 westbound.

Procedure NA at night.

When local altimeter setting not received, use Burbank altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

When local altimeter setting not received, use Burbank altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

When local altimeter setting not received, use Burbank altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

When local altimeter setting not received, use Burbank altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

When local altimeter setting not received, use Burbank altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

When local altimeter setting not received, use Burbank altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

When local altimeter setting not received, use Burbank altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

When local altimeter setting not received, use Burbank altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

When local altimeter setting not received, use Burbank altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

When local altimeter setting not received, use Burbank altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

When local altimeter setting not received, use Burbank altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

When local altimeter setting not received, use Burbank altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

When local altimeter setting not received, use Burbank altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

When local altimeter setting not received, use Burbank altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

When local altimeter setting not received, use Burbank altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

When local altimeter setting not received, use Burbank altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

When local altimeter setting not received, use Burbank altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

When local altimeter setting not received, use Burbank altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

When local altimeter setting not received, use Burbank altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

When local altimeter setting not received, use Burbank altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 3900 direct VNY VOR/DME then on VNY VOR/DME R-255 to CANOG INT/ 5.1 DME and hold.

When local altimeter setting not received, use Burbank altimeter setting. Procedure NA at night.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 12:** Climbing right turn direct VNY VOR/DME, then on VNY R-325 to 4600, thence . . . .

**TAKEOFF RUNWAY 30:** Climbing left turn heading 260° and on VNY VOR/DME R-325 to 4600, thence . . . .

. . . . climbing left turn direct VNY VOR/DME to depart VNY VOR/DME at or above MEA for route of flight.
ILS or LOC X RWY 32

RIVERSIDE, CALIFORNIA

LOC I-RIV 110.1
APCH CRS 315*
Rwy Idg 13,302
TDZE 1497
Arpt Elev 1536
AL-348 [USAF]

MARCH ARB (KRIV)

فاتعإ علاج امود رأد وبوج في 0.5 ميل.

** When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile
and CAT CDE RVR to 60 and vis to 1½ miles.

ATIS 134.75 239.05
APP/DEP CON * 133.5 306.975
TOWER 127.65 253.5
GND CON 121.75 335.8
CLNC DEL 127.75 268.7

*** Circling not authorized NE of Rwy 14-32. Rapid rising terrain.

†Missed approach requires use of RNAV or ATC monitoring

EMERG SAFE ALT 100 NM
13,700 from "RIV" TACAN

CATEGORY
A 1697/24 200 (200½)
B 1900/24 403 (400-½)
C 1900/40 403 (400-¼)

S-LOC 32 **
1900/24 403 (400-½)
1900/40 403 (400-¼)

S-ILS 32 *
1900/24 403 (400-½)

S-ILS 32 *
1900/40 403 (400-¼)

CIRCLING
2180-1
2260-1
2300-2½
2440-3
2840-3

644 (700-1)
724 (800-1)
764 (800-2½)
904 (1000-3)
1304 (1400-3)

33°53’N-117°16’W

Riverside, California
Amdt 10 08NOV18

HRL Rwy 14-32
FAF to MAP 5 NM
Knots 60 90 120 150 180
Min:Sec 5.54 3.56 2.57 2.22 1.58

MARCH 1377
2539
1978
6000
5300
315*
7200
5400
3600
3600
33°53’N-117°16’W

Riverside, California
Amdt 10 08NOV18

HRL Rwy 14-32
FAF to MAP 5 NM
Knots 60 90 120 150 180
Min:Sec 5.54 3.56 2.57 2.22 1.58
RNAP APCH

* Circling NA NE of Rwy 14-32. Rapid rising terrain.

MISSED APPROACH: Climb to 2300 then climbing right turn direct ZALUR and hold, continue climb in hold to 7700.

For uncompensated Baro-VNAV systems, procedure NA below -3°C (27°F) or above 54°C (130°F).

ATIS

Rwy Idg 13,302
TDZE 1536
Arpt Elev 1536

APP CON/DEP CON

134.75 239.05

TOWER

127.65 253.5

GND CON

121.75 335.8

CLNC DEL

127.775 268.7

EMERG SAFE ALT 100 NM 13,700

CAUTION: Ultralights, balloons, parachutists in vicinity of Perris Valley Arpt.
SW-3, 30 NOV 2023 to 25 JAN 2024

**SKYES-FOUR DEPARTURE (SKYES 4•SKYES)**

**ATIS** 134.75 239.05
**CLNC DEL** 127.775 268.7
**GND CON** 121.75 335.8
**TOWER** 127.65 253.5
**DEP CON** 133.5 306.975
**LOS ANGELES CENTER** 132.5 284.7

**Radar Required TRM Transition**

- **Paradise**
  - **Rwy** 112.2 PDZ **Chan 59**

**Max 310 KIAS until passing DIAMD (JLI transition MAX 310 KIAS until passing JLI)**

**DIAMD**
- **N33° 37.85'**
- **W117° 17.37'**

**Perris Valley Arpt**
- **3040**

**Homeland**
- **N33° 32.68'**
- **W116° 01.55'**

**Thermal**
- **116.2 TRM Chan 109**
  - **N33° 37.69'**
  - **W116° 09.61'**

**Ocean Side**
- **115.3 OCN Chan 100**
  - **N33° 14.44'**
  - **W117° 25.06'**

**Mission Bay**
- **117.8 MBZ Chan 125**

**SkYES**
- **N33° 22.13'**
- **W117° 04.33'**

**Thermal Transition (SkYES 4 TRM)**
- **059°**
- **5128**

**Julian Transition (SkYES 4 JLI)**
- **114.0 JLI Chan 87**
  - **N33° 08.43'**
  - **W116° 35.16'**

**Departure Route Description**

**Takeoff Rwy 14:** Climb via Riv Tacan R-136 or climb direct HDF VOR, then via HDF R-136 to Murre, intercept MBZ Tacan R-357 to SkYES, cross Murre at or above 7000, and SkYES at or above 12,000. Thence via transition or assigned route.

**Takeoff Rwy 32:** Climb on track 315°, then turn left crossing PDZ Tacan R-073/Riv Tacan 1.4 DME direct DIAMD, proceed no closer than 7.5 DME PDZ. Remain within 5 DME Riv. Cross DIAMD at or above 5800. Intercept PDZ R-130 to SkYES, cross SkYES at or above 12,000. Thence via transition or assigned route.

**Julian Transition (SkYES 4 JLI):** From over SkYES via JLI Tacan R-284 direct JLI Max 310 KIAS until passing Julian Tacan.

**Ocean Side Transition (SkYES 4 OCN):** From over SkYES via PDZ Tacan R-130 direct Higop, intercept OCN Tacan R-085 direct OCN.

**Thermal Transition (SkYES 4 TRM):** From over SkYES track 059° to TRM. (Radar required)

---

**Skyes-Four Departure (Skyes 4•Skyes)**

**Orig 28Feb19**

**Riverside, California**

**March Arb (Kriv)**

---

**23110**

**AL-348 [USAF]**

**Riverside, California**

**March Arb (Kriv)**

---

**243**
**TACAN or RADAR required.**

- * When ALS inop, increase vis to 1/4 mile.
- ** When ALS inop, increase CAT A8 vis to 1 mile.
- *** CAT E circling not authorized S of RWY 6R-24L.

---

**ATIS** 114.0 JUL**

**SOCIAL APP CON** 114.0 JUL**

**FOSS TOWER** 114.0 JUL**

**GND CON** 114.0 JUL**

**CLINC DEL** 114.0 JUL**

**LA CENTER** 114.0 JUL**

**ASR/PAR** 114.0 JUL**

---

**ILS glideslope not useable beyond 5° of ctrln.**

**LOCALIZER 111.15**

**I-NKX Chan 18(Y)**

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**EMERG SAFE ALT 100 NM 13,600**

**VGS1 and descent angles not coincident.**

---

**LOC/DME I-NKX**

**APCH CRS**

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<tr>
<th>LOC/DME</th>
<th>I-NKX</th>
<th>APCH CRS</th>
<th>TDZE</th>
<th>Arpl Elev</th>
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<tr>
<td>111.15</td>
<td>48 (Y)</td>
<td>243*</td>
<td>477</td>
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**Rwy Idg**

<table>
<thead>
<tr>
<th>24L</th>
<th>24R</th>
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<tbody>
<tr>
<td>8001</td>
<td>12,000</td>
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</tbody>
</table>

**ALS-1**

**MISS LD APPROACH:** Climb to 1500, then climbing right turn to 3000 via heading 340°. Expect radar vectors.

---

**244**

---

**SAN DIEGO, CALIFORNIA**

**Orig 14JUL22**

**ILS Y or LOC/DME Y RWY 24R**

**AL-903 [USN]**

**MIRAMAR MCAS (JOE FOSS FLD)**

**(KNX)**

**EMERG SAFE ALT 100 NM 13,600**

---

**CATEGOR**

<table>
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<tr>
<th>CATEGORY</th>
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<td>920-1 443 (500-1)</td>
<td>920-1 443 (500-1)</td>
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<td>960-1 483 (500-1)</td>
<td>483 (500-1)</td>
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**SAN DIEGO, CALIFORNIA**

**32°52'N-117°09'W**

**MIRAMAR MCAS (JOE FOSS FLD)**

**(KNX)**

---

**ILS Y or LOC/DME Y RWY 24R**

**AL-903 [USN]**

**MIRAMAR MCAS (JOE FOSS FLD)**

**(KNX)**
For uncompensated Baro- VNAV systems, procedure NA below -15°C (5° F) or above 54° C (130° F).

CAUTION: intermediate deceleration segment descent gradient 309 FPM is greater than 150 FPM.
For uncompensated Baro-VNAV systems, procedure NA below -15°C (5°F) or above 54°C (130°F).

CAUTION: Intermediate deceleration segment descent gradient 309 FPM is greater than 150 FPM.
LAKCEE-THREE DEPARTURE (LAKCEE3 • LAKCEE)

ATIS: 133 475 352.0

CLNC DEL
125 275 254 325
GND CON
128 625 307 325
FOSS TOWER
135.2 298.925
SOCAL DEP CON
132 2 269.1 E

AL-903 [USN]

<table>
<thead>
<tr>
<th>Rwy</th>
<th>Knots</th>
<th>60</th>
<th>120</th>
<th>180</th>
<th>240</th>
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<th>360</th>
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<tr>
<td>*24L/R G</td>
<td>V/V[ft]</td>
<td>260</td>
<td>520</td>
<td>780</td>
<td>1040</td>
<td>1300</td>
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<tr>
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<td>280</td>
<td>560</td>
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<td>1400</td>
<td>1680</td>
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<td>†24L/R G</td>
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<td>678</td>
<td>1356</td>
<td>2034</td>
<td>2712</td>
<td>3390</td>
<td>4068</td>
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<tr>
<td>†24L/R G</td>
<td>V/V[ft]</td>
<td>235</td>
<td>470</td>
<td>705</td>
<td>940</td>
<td>1175</td>
<td>1410</td>
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*Military Minimum **Civil Minimum †ATC Climb Rate

<table>
<thead>
<tr>
<th>to 3600</th>
<th>to 7000</th>
</tr>
</thead>
<tbody>
<tr>
<td>to 3800</td>
<td>7500 to 11,000</td>
</tr>
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</table>

THERMAL
116.2 TRM
- Chan 109

ADUDE
(To operate in KANE MOA)

MISSION BAY
117.8 MZB
- Chan 125

CAUTION: Do not overshoot MZB R-360. This pro inc a turn rad of less than 2 NM to join MZB R-360. Advise ATC prior to dep if this maneuver is unacceptable.

3018' Twr 12.5 NM from DER.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF Rwy 24L/R: Turn right to intercept and proceed via MZB VORTAC R-360 to LAKEE INT. Cross HELSI at or below 6000. Cross GERNE at or above 7000. Thence...

ADUDE TRANSITION (LAKEE3 • ADUDE): Via JLI VORTAC R-245 to JLI. Then via JLI R-070 to ADUDE. Cross TOCOR at or above 7500. Cross JLI VORTAC at or above 11,000. (To operate in KANE MOA.)

IMPERIAL TRANSITION (LAKEE3 • IPL): Via JLI VORTAC R-245 to JLI. Then via JLI R-115 to KUMBA INT, then via IPL VORTAC R-258 to IPL. Cross TOCOR at or above 7500. Cross JLI VORTAC at or above 11,000.

(Continued on next page)
JULIAN TRANSITION (LAKEE3 • JLI): Via JLI VORTAC R-245 to JLI. Cross TOCOR at or above 7500. Cross JLI VORTAC at or above 11,000.

RAMON TRANSITION (LAKEE3 • RAMON): Via JLI VORTAC R-245 to NKX TACAN 13 DME. Then arc NE of NKX via the 13 DME arc to RAMON. Cross RAMON at 7000 mandatory.

THERMAL TRANSITION (LAKEE3 • TRM): Via JLI VORTAC R-245 to JLI. Then via JLI R-021 to TRM VORTAC. Cross TOCOR at or above 7500. Cross JLI VORTAC at or above 11,000.
RESTRICTED TO CAT A & B ACFT ONLY

EMERG SAFE ALT 100 NM 13,600

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF Rwy 24L/R: Climbing right turn to 2000 via heading 303° to intercept and proceed via NKX TACAN R-283 to SWOLF. Complete turn within NKX 2 DME. Cross NKX R-283/3 DME at 2000 mandatory. Maintain 2000 at SWOLF mandatory.

REDIN TRANSITION (REDIN4 • REDIN): Turn left heading 276° to intercept MZB VORTAC R-304 at REDIN.
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 24L/R: Climbing right turn to 2000 via heading 303° to intercept and proceed via NKX TACAN R-283 to SWOLF. Complete turn within NKX 2 DME Cross NKX R-283/3 DME at 2000 mandatory. Maintain 2000 at SWOLF mandatory. Thence...

MOUSE TRANSITION (SWOLF9 • MOUSE): Turn left heading 255° to intercept NKX R-262 at MOUSE. Maintain 2000 for entry into W-291.

(Continued on next page)
RODEN TRANSITION (SWOLF9 • RODEN): Turn left heading 254° to intercept NKX R-268 at TRAHP. Then turn left heading 197° to intercept NKX R-229 at RODEN. Maintain 2000 for entry into W-291 via heading 250°.

NOTE:
(1) FLETA HOT-ACTIVE FIRING AREA (DANGER, REMAIN CLEAR)
(2) ALL AIRCRAFT SHOULD MAINTAIN LAST ASSIGNED HEADING/RADIAL AND ALTITUDE TO AVOID INBOUND MILITARY OR CIVIL AIRCRAFT AT HIGHER ALTITUDES
TINNY-FOUR DEPARTURE (TINNY4•TINNY)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 24L/R: Climbing right turn to 2000 heading 303° to intercept and proceed via NKX TACAN R-283 to SWOLF. Complete turn within NKX 2 DME. Cross NKX R-283/3 DME at 2000 mandatory. Maintain 2000 at SWOLF mandatory. Then turn left heading 256° to intercept and proceed via MZB VORTAC R-300 to TINNY int. Thence...

SAN MARCUS TRANSITION (TINNY4•RZS): Via VTU VOR/DME R-111 to VTU, then via RZS VORTAC R-109 to RZS.

SHAFTER TRANSITION (TINNY4•EHF): Via EHF VORTAC R-144 to EHF.
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RWY 6L/R:** Climb via heading 063° to intercept and proceed via MZB VORTAC R-041 to VITKO. Join MZB R-041 at or above 3000. Thence...

**ADUDE TRANSITION (VITKO3 · ADUDE):** Via MZB R-041 to JLI VORTAC. Then JLI R-070 to ADUDE. Cross FARLO at or above 5000. Cross IDIME at or above 8000. Cross JLI VORTAC at or above 11,000. (To operate in KANE MOA.)

**IMPERIAL TRANSITION (VITKO3 · IPL):** Via MZB R-041 to JLI VORTAC. Then via JLI R-115 to KUMBA INT, then via IPL VORTAC R-258 to IPL. Cross FARLO at or above 5000. Cross IDIME at or above 8000. Cross JLI VORTAC at or above 11,000.

(Continued on next page)
RODEN TRANSITION (VITKO3 • RODEN): Arc N of MZB VORTAC via the 13 mile arc to REDIN. Then turn left heading 197° to intercept NKX R-229 at RODEN. Then turn right heading 250° for entry into W-291. Cross MUNDE at or above 5000. Cross WIPAK at or above 7000.

SANTA CATALINA TRANSITION (VITKO3 • SXC): Arc N of MZB VORTAC via the 13 mile arc to REDIN. Then via MZB R-304 to PACIF INT. Then via SXC R-084 to SXC VORTAC. Cross MUNDE at or above 5000. Cross WIPAK at or above 7000.

THERMAL TRANSITION (VITKO3 • TRM): Via MZB R-041 to JLI VORTAC. Then via JLI R-021 to TRM VORTAC. Cross FARLO at or above 5000. Cross IDIME at or above 8000. Cross JLI VORTAC at or above 11,000.

NOTE:
(1) FLETA HOT-ACTIVE FIRING AREA (DANGER, REMAIN CLEAR).
(2) ALL AIRCRAFT SHOULD MAINTAIN LAST ASSIGNED HEADING/RADIAL AND ALTITUDE TO AVOID INBOUND MILITARY OR CIVIL AIRCRAFT AT HIGHER ALTITUDES!
Circling NA southeast of Rwy 4 and south of Rwy 26. Rwy 4 helicopter visibility reduction below 1/4 SM NA.

Procedure NA for arrivals at LHS VORTAC on V165-459, T259 at LHS VORTAC on Procedure NA for arrivals.

Procedure NA for arrival on PMD VORTAC airway radials 218 CW 298.

Final approach course offset 8.56°.

VGSI and descent angles not coincident (VGSI Angle 4.00/TCH 39).

Final approach course offset 8.56°.

Final approach course offset 8.56°.
Circling NA southeast of runway 4 and south of Rwy 26.

Procedure NA for arrivals at AMONT on V459 southeast bound.

AWOS-3 132.225
JOSHUA APP CON 133.65 348.7
MOJAVE TOWER* 127.6 (CTAF) 288.35
GND CON 123.9

MOJAVE, CALIFORNIA
Amdt 1 26MAR20

RNAV (GPS) RWY 22
MOJAVE AIR & SPACE PORT/RUTAN FLD (MHV)

MISSED APPROACH: Climb to 6000 direct UGONE and on track 205° to JERID and hold.
Missed Approach: (Do not exceed 200K until MEDGE) Climb direct COVMA, then climbing left turn to 6000 on track 214° to MEDGE and track 185° to JERID and hold.

*Missed approach requires minimum climb of 350 feet per NM to 5000.

Procedure NA for arrival on PMD VORTAC airway radials 233 CW 298.

Redacted: SW-3, 30 Nov 2023 to 25 Jan 2024
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
NOTE: Do not file - to be assigned by ATC.

TAKEOFF MINIMUMS
Rwy 12: Standard with minimum climb of 415’ per NM to 4800.
All other Rwys - NA ATC.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 12: Climb on heading 121° to intercept course 192° to cross GLAZY at or above 8000, then on depicted route. Expect filed altitude 10 minutes after departure.

JERID TRANSITION (GLAZY1.JERID)

PALMDALE TRANSITION (GLAZY1.PMD)
NOTE: Chart not to scale.

NOTE: RNAV 1.
NOTE: GPS required.

TAKEOFF MINIMUMS
Rwys 4, 8, 12: NA - restricted airspace.
Rwys 22 and 26: Standard with minimum climb of 480’ per NM to 7600.
Rwy 30: Standard with minimum climb of 497’ per NM to 7000.

TAKEOFF RUNWAY 22: Climb direct PGRAC, then on track 209° to JERID, thence.
TAKEOFF RUNWAY 26: Climb direct OFYEP, then on track 206° to JERID, thence.
TAKEOFF RUNWAY 30: Climb direct SHAWK, then climbing left turn on track 205° to JERID, thence. . . .
. . . maintain 10000, expect filed altitude 10 minutes after departure.
RNAV (GPS) RWY 18
FRENCH VALLEY (F70)

Apt Elev 1350

<table>
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<tr>
<th>Function</th>
<th>Category</th>
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<th>C</th>
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<td>250 (300-7/6)</td>
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<td>521 (600-1/3)</td>
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<td>LNAV MDA</td>
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<td>CIRCLING</td>
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<td>670 (700-1)</td>
<td>2060-2</td>
<td>710 (800-2)</td>
<td>NA</td>
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</table>

RNAV (GPS) RWY 18
MURRIETA/TEMECULA, CALIFORNIA
Amdt 2 08JAN15

Missed Approach: Climb to 2500 then climbing right turn to 5000 direct JEXES and hold.

Apt Elev 1350

MIRL Rwy 18-36
REIL Rws 18 and 36

RNAV (GPS) RWY 18
FRENCH VALLEY (F70)
Circling NA for Cats C and D south of Rwy 11-29.

MISSED APPROACH: Climbing right turn to 6000 direct EED VORTAC and hold.

<table>
<thead>
<tr>
<th>ASOS</th>
<th>LOS ANGELES CENTER</th>
<th>UNICOM</th>
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</thead>
<tbody>
<tr>
<td>128.325</td>
<td>134.65 360.65</td>
<td>123.0 (CTAF)</td>
</tr>
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</table>

ASOS 128.325

LOS ANGELES CENTER 134.65 360.65

UNICOM 123.0 (CTAF)

Circling NA for Cats C and D south of Rwy 11-29.
**CAUTION:** Maneuvering for circling approach not authorized W of Rwy 18-36 centerline. Approach authorized for Rwy 18 or left downwind approach to Rwy 29 after flying down Rwy 18.

**MISSING APPROACH:** Climb and maintain 2000 via hdg 177°, intercept PGY VORTAC R-250 to HANIS and hold.

**CAUTION:** Aircraft executing missed approach after beginning circling maneuver do not return to missed approach point.
Visibility reduction by helicopters not authorized.

CAUTION:
Final apch length 12 2 NM.
Final apch intersects RCL at 3726 ft.
Final aprh crs 117 ft from RCL at 3000 ft from thld.

RADAR required for westbound V317 arrivals at PGY VORTAC.
** CAUTION: Maneuvering for circling approach not authorized W of Rwy 18-36 centerline. Circling approach authorized for Rwy 18 only.

CAUTION: Intnseg descent gradient 350'/NM.
CAUTION: Intnseg len 4 NM.

** WHEN ALS INOP, INCREASE CAT AB VIS TO 1 MILE, CAT CD VIS TO 13/4 MILE.
Aircraft avoid overflying Coronado Cayes and City of Coronado below 2500’ MSL. Proceed visually via the NZY R-128 or MZB R-148 until reaching NZY 2 DME / MZB 6.5 DME, then maneuver to runway centerline for straight-in Runway 29.
DEPARTURE ROUTE DESCRIPTION

**TAKE-OFF RWY 11:** Turn right as soon as practicable climbing to 2000 via heading 177°, remain within NZY TACAN 1 4 DME to not overfly the City of Coronado, thence...

**TAKE-OFF RWY 18:** Climbing left turn to 2000 intercept the NZY R-178 (MZB R-168) to NASNI, thence...

**TAKE-OFF RWY 29 (CIVIL):** Turn left as soon as practicable climbing to 2000, remain within NZY TACAN 1 DME to not overfly Point Loma, intercept the MZB R-168 to NASNI, thence...

**TAKE-OFF RWY 29 (MILITARY):** Turn left as soon as practicable climbing to 2000, remain within NZY TACAN 1 DME to not overfly Point Loma, intercept the NZY R-178 to NASNI, thence...

... Expect RADAR vectors to join assigned route.
RNAV (GPS) RWY 7
BOB MAXWELL MEML AIRFIELD (OKB)

Misssed Approach: Climbing right turn to 2000 direct
CATHO and hold.

Procedure NA for arrivals at PACIF on V208-458
westbound and V25-27 northwest bound.

Final approach course offset 4.94°.

Holding Pattern

4 NM

R-w 7 Straight-in and Circling minimums NA at night.

Rwy 7 helicopter visibility reduction below 1 SM NA.

Holding Pattern

4 NM

CATHO

OCICE

2000

CATHO

MIRL Rwy 7-25

REIL Rwy 25

OCEANSIDE, CALIFORNIA

33°13'N-117°21'W

BOB MAXWELL MEML AIRFIELD (OKB)

RNAV (GPS) RWY 7

AMDT 1 02DEC21

SW-3, 30 NOV 2023 to 25 JAN 2024
RNAV (GPS) RWY 25
BOB MAXWELL MEML AIRFIELD (OKB)

**RNAV (GPS) RWY 25**

**BOB MAXWELL MEML AIRFIELD (OKB)**

- **ASOS**: 127.8
- **SOCAL APP CON**: 127.3 323.0
- **UNICOM**: 122.725 (CTAF)

**ELEV**
- **28**

**RNP APCH-GPS.**
- **Circling Rwy 7 NA at night.**

- **Rwy 25 helicopter visibility reduction below ¾ SM NA.**

**CIRCLING**
- **RW25**
- **2.2 NM to RW25**
- **1200**
- **2.2 NM**
- **0.8**
- **2.1 NM**
- **1.9 NM**
- **3 NM**

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

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<tr>
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<td>NA</td>
</tr>
<tr>
<td>C</td>
<td>920-1¼</td>
<td>892 (900-1¾)</td>
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<tr>
<td>D</td>
<td></td>
<td>NA</td>
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</table>

**SDM 30 NOV 2023 to 25 JAN 2024**

**MIRL Rwy 7-25**
- **REIL Rwy 25**

**33°13’N-117°21’W**

**OCEANSIDE, CALIFORNIA**

**Amdt 1 02DEC21**

**BIRD 2020**

**BIRD 2020**
VOR-A
BOB MAXWELL MEML AIRFIELD (OKB)

ASOS
127.8
SOCAL APP CON
127.3 323.0
UNICOM
122.725 (CTAF) B

Helicopter visibility reduction below 1 SM NA.
Night Landing: Rwy 6 NA.

MISSED APPROACH: Climbing left turn to 4000 via heading 030°
and OCN R-083 to VISTA INT/OCN 9.3 DME and hold.

VOR-A
BOB MAXWELL MEML AIRFIELD (OKB)

One Minute Holding Pattern

 CATEGORY  A  B  C  D  FAF to MAP 3.4 NM
CIRCLING  1140-1¼ 1140-1½ NA
  1112 (1200-1¼) 1112 (1200-1½) 1250-1½

Knots  60  90  120  150  180
Min:Sec  3:24  2:16  1:42  1:21  1:08
**MISSED APPROACH:** Climb to 2800 then climbing left turn to 5400 direct PDZ VORTAC and hold, continue climb-in-hold to 5400.

**ONTARIO TOWER**

**RNP APCH - GPS. From TAKOE.**

**ONTARIO, CALIFORNIA**

**SW-3, 30 NOV 2023 to 25 JAN 2024**

**CATEGORIES & AIRCRAFT CERTIFICATION REQUIRED**

**CATEGORY II & III ILS - SPECIAL AIRCREW**
ILS RWY 26R (CAT II & III)
ONTARIO INTL (ONT)

1599

Procedure NA for arrival on PDZ VORTAC airway radials 012 CW 078.

2800 5400 PDZ

VGSI and ILS glidepath not coincident (VGSI Angle 3.00°/TCH 75).

ELEV 944  TDZE 932

ONTARIO, CALIFORNIA

ONTARIO, CALIFORNIA

TDZ/CL Rwys 8L, 26L and 26R
HIRL Rwys 8L-26R and 8R-26L

Amdt 6 10AUG23

SW-3, 30 NOV 2023 to 25 JAN 2024

34°03'N-117°36'W

ILS RWY 26R (CAT II & III)

CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED
For uncompensated Baro-VNAV systems, procedure NA below 2°C (36°F) or above 54°C (130°F).

MISSED APPROACH: Climb to 5300 on track 078° to HOYQU and on track 165° to DLIUS and hold, continue climb-in-hold to 5300.

GPS REQUIRED

ELEV 944  TDZE 936

VGSi and RNAV glidepath not coincident (VGSi Angle 3.00/TCH 65).

See planview for multiple IF locations.

See planview for multiple IF locations.

Seaplane Approach Required

ONeA, California

Org 27APR17

34°03'N-117°36'W

Ontario, California

Ontario INTL (ONT)

286
AIR NAV

RNAV (RNP) Z RWY 26L
ONTARIO INTL (ONT)

For uncompensated Baro-VNAV systems, procedure NA below 1°C or above 54°C. For inop ALS, increase RNP 0.10 visibility all Cats to RVR 4500, RNP 0.17 visibility all Cats to RVR 5000, RNP 0.30 visibility all Cats to RVR 6000.

See planview for multiple IF locations.

VGS and RNAV glidepath not coincident (VGS Angle 3.00°/TCH 74).

MISSED APPROACH: Climb to 3400 on track 258° to AXOYO and track 174° to LAKVE and track 079° to ADRYN and hold.

Procedure NA for arrivals at GAREY on V8-21 northeast bound.

Procedure NA for arrivals at GAREY on PDZ VORTAC airway radials 012 CW 078.

VGS and RNAV glidepath not coincident (VGS Angle 3.00°/TCH 74).

See planview for multiple IF locations.

AUTHORIZATION REQUIRED

ONTARIO, CALIFORNIA
Amdt 3 24MAR22

34°03'N-117°36'W

ONTARIO, CALIFORNIA
AL-965 (FAA) 23334

TDZ/CL Rwys B1, 26R and 26L
HIRL Rwys B1, 26R and B1-26L

ONTARIO INTL (ONT)

RNAV (RNP) Z RWY 26L

AUTHORIZATION REQUIRED

ONTARIO, CALIFORNIA
Amdt 3 24MAR22

34°03'N-117°36'W

287
RNAV (RNP) Z RWY 26R
ONTARIO INTL (ONT)

For uncompensated Baro-VNAV systems, procedure NA below 1°C or above 5°C. For inop ALS, increase RNP 0.12 visibility all Cats to RVR 4500, RNP 0.21 visibility all Cats to RVR 5500, RNP 0.30 visibility all Cats to RVR 6000.

Algorithm - GPS

Autorization required

See planview for multiple IF locations.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
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<td>1239/40</td>
<td>307 (300-3/4)</td>
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</tr>
<tr>
<td>RNP 0.21 DA</td>
<td>1297/40</td>
<td>365 (400-3/4)</td>
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<tr>
<td>RNP 0.30 DA</td>
<td>1321/40</td>
<td>389 (400-3/4)</td>
<td></td>
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</tbody>
</table>

See planview for multiple IF locations.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). Circling NA north of Rwy 8L-26R. DME/DME RNP-0.3 NA. For inoperative MALS increase LPV visibility all Cats to RVR 6000.

**Procedure NA for arrivals on V186 westbound.**

Procedure NA for arrivals at ELMOO on V186 westbound.

### Categories and DA

<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>1266/30</td>
<td>322 (400-%)</td>
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<tr>
<td>LNAV/VNAV DA</td>
<td>1520-1½</td>
<td>576 (600-1½)</td>
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<tr>
<td>LNAV MDA</td>
<td>1480/24</td>
<td>536 (600-½)</td>
<td>1480/55</td>
<td>536 (600-1)</td>
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<td>CIRCLING</td>
<td>1480-1</td>
<td>536 (600-1)</td>
<td>1540-1½</td>
<td>1600-2</td>
</tr>
</tbody>
</table>

### EA and DA

- **5 NM Holding Pattern**
- **GP 3.0° TCH 45**

**MALSR**

**MISSED APPROACH:** Climb to 4400 direct CABUB and on track 168° to PDZ VORTAC and hold, continue climb-in-hold to 4700.

**RNAV (GPS) Y RWY 8L**

<table>
<thead>
<tr>
<th>A DATIS</th>
<th>SOCAL APP CON</th>
<th>ONTARIO TOWER</th>
<th>GND CON</th>
<th>CLNC DEL</th>
<th>CPDLC</th>
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<tbody>
<tr>
<td>124.25</td>
<td>127.0 318.2</td>
<td>120.6 360.775</td>
<td>121.9 257.8</td>
<td>118.1</td>
<td></td>
</tr>
</tbody>
</table>

**VGS and RNAV glidepath not coincident**

(VGS Angle 3.0°/ TCH 62)
RNAV (GPS) Y RWY 8R
ONTARIO INTL (ON'T)

For uncompensated Baro-VNAV systems, procedure NA below 2°C (36°F) or above 54°C (130°F). Circling NA north of Rwy 8L-26R. DME/DME RNP-0.3 NA.

**Procedure NA for arrival at AMTRA on V264 westbound.**

- **VGSi and RNAV glidepath not coincident**
  - [VGSi Angle 3.00°/TCH 65]

- **4 NM Holding Pattern**
  - [SEYKO]

- **3300° NoPT 258°/078°**

- **GP 3.00°/TCH 53**

- **CIRCLING**
  - 1440-1 496 (500-1)

- **LNAV MDA**
  - 1440/55 504 (500-1)

- **LNAV/ VNAV DA**
  - 1494-1½ 558 (600-1½)

- **LPV DA**
  - 1220/45 284 (300-¾)

- **5000**

- **1500**

- **IBAXE**

- **1.4 NM to RW08R**

- **4.3 NM**

- **5.9 NM**

**Procedure NA for arrival on PDZ VORTAC airway radials 238 CW 011.**

- **PARADISE PDZ**
- **3800° 283° (125°)**

**MDA 4 NM to RW08R**

**C-ATIS**
- **127.0 318.2**

**ONTARIO TOWER**
- **120.6 360.775**

**GND CON**
- **121.9 257.8**

**CLNC DEL**
- **118.1**

**CPDLC**

**RNAV (GPS) Y RWY 8R**

**RNAV (GPS) Y RWY 8R**

**RNAV (GPS) Y RWY 8R**

**SW-3, 30 NOV 2023 to 25 JAN 2024**

**ONTARIO, CALIFORNIA**

**Amdt 2 27APR17**

**290**

**34°03'N-117°36'W**
Circling NA north of Rwy 8L-26R. For uncompensated Baro-VNAV systems, procedure NA below 2°C or above 54°C. For inop ALS, increase all Cats LNAV/VNAV visibility to RVR 5500.

Procedure NA for arrivals at ACINS on V283-587 southbound.

**RNAV (GPS) Y RWY 26L**

**ONTARIO INTL (ONT)**

**Category**

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<td><strong>LPV DA</strong></td>
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<td><strong>LNAV/VNAV DA</strong></td>
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<td><strong>LNAV MDA</strong></td>
<td>1380/24</td>
<td>454 (500-1/2)</td>
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<td><strong>CIRCLING</strong></td>
<td>1400-1</td>
<td>456 (500-1)</td>
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</tbody>
</table>

SW-3, 30 Nov 2023 to 25 Jan 2024

**Ontario, California**

Amdt 3 10 Aug 23
Circling NA north of Rwy 8L-26R. For uncompensated Baro-VNAV systems, procedure NA below 2°C or above 54°C.

**Procedure NA for arrivals at ACINS**

- **ENSPLY**
- **MAHOY**
- **PDZ**
- **GORPE**

**NOTICE**

- **VGSi and RNAV glidepath not coincident (VGSi Angle 3.00/1CH 73)**

**MISSED APPROACH:** Climb to 4700 direct ENSLY and on track 170° to MAHOY and on track 083° to PDZ. VORTAC and hold, continue climb-in-hold to 4700.

**(labels not transcribed)**

- **SW-3, 30 NOV 2023 to 25 JAN 2024**

**Category**

- **LPV DA**
- **LNAV/VNAV DA**
- **LNAV MDA**

**RNAV GPS**

- **EDDSO**
- **GORPE**
- **DICEG**

**PDZ 2.7 NM to FOLNU**

**RW26R 1.2 NM to FOLNU**

**GOAL 3.00° TCH 60**

- **1.5 NM**
- **3.6 NM**
- **5.7 NM**

**ELEV 944**

**TDZE 932**
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAYS 8L/R:** Climbing right turn direct PDZ VORTAC. Thence.

**TAKEOFF RUNWAYS 26L/R:** Climbing left turn direct PDZ VORTAC, cross 6 DME northwest of PDZ VORTAC at or below 4000'. Thence.

...on (assigned transition) or (assigned route). Cross PDZ VORTAC at or above 2700. Expect filed altitude 10 minutes after departure.

**MISSION BAY TRANSITION (NIKKL1.MZB):** From over PDZ VORTAC on PDZ R-130 and MZB R-355 to MZB VORTAC.

**THERMAL TRANSITION (NIKKL1.TRM):** From over PDZ VORTAC on PDZ R-130, SLI R-080 and TRM R-263 to TRM VORTAC.

**NOTE:** Chart not to scale.
NOTE: DME required.
NOTE: RADAR required for Runways 8L/R. If unable to comply with SULZU restriction, advise ATC prior to departure.
NOTE: The DAG Transition requires a minimum of 373’ per NM to MEA of 14000 when crossing POM VORTAC at 7000.

TAKEOFF MINIMUMS
Rwys 26L/R DAG Transition standard with minimum climb of 470’ per NM to 14000.
Rwys 8L/R DAG Transition standard with minimum climb of 343’ per NM to 12400.
Rwys 26L/R EHF and GMN Transitions standard with minimum climb of 309’ per NM to 8600.
Rwys 8L/R EHF and GMN Transitions standard with minimum climb of 282’ per NM to 8500.

† Approximate distance from takeoff area
Rwy 8 to POM VORTAC.
# Approximate distance from takeoff area
Rwy 26 to POM VORTAC.

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8L/R: Climbing right turn heading 258° to intercept and proceed on POM R-114 to POM VORTAC, cross POM VORTAC at or below 7000. Thence.

TAKEOFF RUNWAYS 26L/R: Climb heading 258° to intercept and proceed on POM R-114 to POM VORTAC, cross POM VORTAC at or below 7000. Thence.

. . . .on (transition). Expect filed altitude ten minutes after departure.

AVENAL TRANSITION (POM1.AVE): From over POM VORTAC on POM R-294 to BUCCK, then on GMN R-113 to GMN VORTAC, then on GMN R-310 to COREZ, then on AVE R-086 to AVE VOR/DME.

DAGGETT TRANSITION (POM1.DAG): From over POM VORTAC on POM R-301 to SULZU then on DAG R-227 to DAG VORTAC.

GORMAN TRANSITION (POM1.GMN): From over POM VORTAC on POM R-294 to BUCCK, then on GMN R-113 to GMN VORTAC.

SHAFTER TRANSITION (POM1.EHF): From over POM VORTAC on POM R-294 to BUCCK, then on GMN R-113 to TOOBD, then on EHF R-137 to EHF VORTAC.
NOTE: Chart not to scale.

**RAJEE THREE DEPARTURE (RNAV)**

**TOP ALTITUDE**
**DINTY AND MALIT TRANSITIONS:**
**15000**

**ALL OTHER TRANSITIONS:**
**ASSIGNED BY ATC**

**NOTE:** Parachute jumping and ultralight activities over L65, 14500' and below, north of track between ELLBO and ARRDY.

**NOTE:** RNAV 1.

**NOTE:** RADAR required.

**NOTE:** OTAYY, MTBAL and AVRRY Transitions: DME/DME/IRU or GPS required.

**NOTE:** DINTY and MALIT Transitions: GPS required.

**NOTE:** Turbojet and turboprop aircraft only.

**NOTE:** MALIT and DINTY Transitions available between 2200 and 0600 local only.

**NOTE:** DINTY Transition ATC assigned only.

**NOTE:** For non-GPS equipped aircraft on the AVRRY Transition, JULIAN VORTAC (JUL) must be operational.

**NARRATIVE ON FOLLOWING PAGE**
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8L/R: Climb heading 078° to 1460, then right turn direct to cross SOEHL at or above 4000, then on track 133° to cross RAJEE at or below 7000, thence . . . .

TAKEOFF RUNWAYS 26L/R: Climb heading 258° to 1460, then left turn direct to cross SOEHL at or above 4000, then on track 133° to cross RAJEE at or below 7000, thence . . . .

. . . . on transition. DINTY and MALIT transitions: Maintain 15000. All other transitions: maintain ATC-assigned altitude. Expect higher altitude 10 minutes after departure.

AVRRY TRANSITION (RAJEE3.AVRRY)
DINTY TRANSITION (RAJEE3.DINTY)
MALIT TRANSITION (RAJEE3.MALIT)
MTBAL TRANSITION (RAJEE3.MTBAL)
OTAYY TRANSITION (RAJEE3.OTAYY)
NOTE: RNAV 1.
NOTE: Radar required.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet and turboprop aircraft only.
NOTE: MISEN transition restricted to aircraft landing LAS terminal area.
NOTE: HAILO/BEALE/YELAH transition ATC only.
NOTE: Maintain at or below 250K unless otherwise directed by ATC.

SW-3, 30 NOV 2023 to 25 JAN 2024
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8L/R: Climb on heading 078° to 1460 at or below 210K, then right turn direct to cross LEESI at or above 5000, then on track 285° to cross POM VORTAC at or below 8000, then on track 300° to SNSHN, thence. . . .

TAKEOFF RUNWAYS 26L/R: Climb on heading 258° to 1460, then direct DINNK, then on track 274° to cross POM VORTAC at or below 8000, then on track 300° to SNSHN, thence. . . .

. . . .on (transition) maintain FL230, expect filed altitude 10 minutes after departure.

BEALE TRANSITION (SNSHN5.BEALE)
COREZ TRANSITION (SNSHN5.COREZ)
HAILO TRANSITION (SNSHN5.HAILO)
LAS VEGAS TRANSITION (SNSHN5.LAS)
MISEN TRANSITION (SNSHN5.MISEN)
SHAFTER TRANSITION (SNSHN5.EHF)
YELAH TRANSITION (SNSHN5.YELAH)
RNAV (GPS) RWY 7
OXNARD (OXR)

ATIS 118.05
POINT MUGU APP CON* 124.7 335.5
OXNARD TOWER* 134.95 (CTAF) 257.8
GND CON 121.9

Procedures for arrival on RZS VORTAC
Airway radials 071 CW 109.

Procedure NA for arrivals on V25 eastbound.
VTU VOR/DME to UVICA terminal route not authorized when W-289 active.

Holding Pattern
4 NM
075°
1700

4 NM Holding Pattern
UVICA

VTU VOR/DME to UVICA terminal route not authorized when W-289 active.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 7: Climb to 8000 (or assigned altitude) on CMA R-249 to CMA VOR/DME, thence. . . .
TAKEOFF RUNWAY 25: Climbing right turn to 8000 (or assigned altitude) on heading 120° to intercept CMA R-249 to CMA VOR/DME, thence. . . . . . . . . . .(assigned route) or (transition).

FILLMORE TRANSITION (CMA6.FIM): From over CMA VOR/DME via CMA R-072 to ACRAT INT then via FIM R-195 to FIM VORTAC.
GINNA TRANSITION (CMA6.GINNA): From over CMA VOR/DME via CMA R-072 to GINNA INT.
VENTURA TRANSITION (CMA6.VTU): From over CMA VOR/DME via VTU R-324 to VTU VOR/DME.

NOTE: Chart not to scale.
SKIFF SEVEN DEPARTURE
(SKIFF7, SKIFF)
1 SEP 16

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 7: Climbing left turn to 6000 (or assigned altitude) to intercept CMA R-249 westbound to SKIFF INT . . . .

TAKEOFF RUNWAY 25: Climb to 6000 (or assigned altitude) on CMA R-249 to cross SKIFF INT at or above 600 . . . .

. . . then on (transition) or (assigned route).

GOLET TRANSITION (SKIFF7, GOLET): From over SKIFF INT via CMA R-249 to (SUPNY), then via GVO R-127 to GOLET INT.

KWANG TRANSITION (SKIFF7, KWANG): From over SKIFF INT via VTU R-282 to KWANG INT.

SQUID TRANSITION (SKIFF7, SQUID): From over SKIFF INT via CMA R-249 to SQUID INT.

VENTURA TRANSITION (SKIFF7, VTU): From over SKIFF INT via CMA R-249 to 2000, then turn left heading 040° to intercept VTU R-270 to VTU VOR/DME.

TAKEOFF OBSTACLE NOTES
Rwy 7: Tree 527' from DER, 501' left of centerline, 59' AGL/108' MSL.

NOTE: Chart not to scale.
RNAV (GPS) RWY 28
BERMUDA DUNES (UDD)

**TRM ASOS**

<table>
<thead>
<tr>
<th>APP CRS</th>
<th>Rwy Idg</th>
<th>TDZE</th>
<th>Apt Elev</th>
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<tbody>
<tr>
<td>296°</td>
<td>4702</td>
<td>66</td>
<td>73</td>
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</table>

**SOCAL APP CON**

118.325

**UNICOM**

122.8 (CTAF)

**RNP APCH:**

Use Jacqueline Cochran Rgnl altimeter setting. Rwy 28 Straight-in and Circling minimums NA at night. Rwy 28 helicopter visibility reduction below 1 SM NA.

**Misssed Approach:** Climbing to 3300 via course 296° to AKEGE WP then right turn via course 298° to PSP VORTAC and hold.

**Category and MDA**

<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>LNAV MDA</td>
<td>1020-1¼</td>
<td>1020-1½</td>
<td>1020-3</td>
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<td>CIRCLING</td>
<td>954 (1000-1¼)</td>
<td>954 (1000-1½)</td>
<td>954 (1000-3)</td>
<td>NA</td>
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</tbody>
</table>

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 33).

**ELEV** 73

**TDZE** 66

**References:**

AL-5848 (FAA)

SW-3, 30 Nov 2023 to 25 Jan 2024

**Palm Springs, California**

Orig-B 17JUN21
Use Jacqueline Cochran Rgnl altimeter setting. Circling to Rwy 28 NA at night.

MISSED APPROACH: Climb to 3300 via PSP R-120 to PSP VORTAC and hold.

TRM ASOS
118.325

SOCAL APP CON
* 135.275 251.1 *

UNICOM
122.8 (CTAF)

One Minute
Holding Pattern

FAF to MAP  8.1 NM
8:06  5:24  4:03  3:14  2:42

Knots 60 90 120 150 180

Min:Sec 8:06 5:24 4:03 3:14 2:42

PRESENT WEATHER
SW-3, 30 NOV 2023 to 25 JAN 2024
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 10: Climbing right turn heading 150° to intercept TRM R-304 to TRM VORTAC, thence . . . . or, obtain ATC approval for VCOA when requesting IFR clearance; climb in visual conditions to cross Bermuda Dunes Airport at or above 2600, then on TRM R-304 to TRM VORTAC, thence . . . .

TAKEOFF RUNWAY 28: Climb heading 282° to 900 then climbing left turn heading 090° to intercept TRM R-304 to TRM VORTAC, thence . . . . or, obtain ATC approval for VCOA when requesting IFR clearance; climb in visual conditions to cross Bermuda Dunes Airport at or above 2600, then on TRM R-304 to TRM VORTAC, thence . . . .

. . . . . continue climbing in TRM VORTAC holding pattern to cross TRM VORTAC at or above MEA/MCA for route of flight.
RNAV (GPS) RWY 30
JACQUELINE COCHRAN RGNL (TRM)

**Rwy 30 helicopter visibility reduction below ½ SM NA.**

**ASOS**
118.325

**SOCAL APP CON**
135.275 251.1

**CLNC DEL**
120.225

**UNICOM**
123.0 (CTAF)

**Procedure NA for arrivals at KARRO on V460 southwestbound.**

**Procedure NA for arrivals at SHADI on V64 eastbound V460 northeastbound.**

**MISSED APPROACH:** (Do not exceed 230K until JEROD)
Climb to 1200 then climbing right turn to 3500 direct JEROD and hold.

**Category**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>LPV DA</td>
<td>129-3/4</td>
<td>250 (300-3/4)</td>
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<tr>
<td>LNAV MDA</td>
<td>260-1 381 (400-1)</td>
<td>260-1 1/2 381 (400-1/2)</td>
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<tr>
<td>CIRCLING</td>
<td>320-1 435 (500-1)</td>
<td>340-1 455 (500-1)</td>
<td>460-1 1/2 575 (600-1/2)</td>
<td>780-3 895 (900-3)</td>
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</tbody>
</table>

**Note:**
- LNAV only
- 1.1 NM to RW30
- 2.5 NM to RW30
- 1.4 NM
- 2.6 NM
- 6.2 NM

**ELEV** -115
**TDZE** -121

**RNAV (GPS) RWY 30**

**Palm Springs, California**

Al-529 (FAA)

**RW30**

**JEROD**

**FINOL**

**122°**

**302°**

**3500**

**GP 3.00°**

**TCH 45**

**JEROD Holding Pattern**

**FINOL**

**[IAF] AVONE**

**[FAF] FORKI**

**[IF/IAF] JEROD**

**[IF] JACQUELINE COCHRAN RGNL**

**RNAV (GPS) RWY 30**

**AL-529 (FAA)**

**Palm Springs, California**

**MISSED APPROACH:** (Do not exceed 230K until JEROD)
Climb to 1200 then climbing right turn to 3500 direct JEROD and hold.

**ASOS**
118.325

**SOCAL APP CON**
135.275 251.1

**CLNC DEL**
120.225

**UNICOM**
123.0 (CTAF)

**Procedure NA for arrivals at KARRO on V460 southwestbound.**

**Procedure NA for arrivals at SHADI on V64 eastbound V460 northeastbound.**

**Category**

<table>
<thead>
<tr>
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<th>A</th>
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<td>250 (300-3/4)</td>
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<tr>
<td>LNAV MDA</td>
<td>260-1 381 (400-1)</td>
<td>260-1 1/2 381 (400-1/2)</td>
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<tr>
<td>CIRCLING</td>
<td>320-1 435 (500-1)</td>
<td>340-1 455 (500-1)</td>
<td>460-1 1/2 575 (600-1/2)</td>
<td>780-3 895 (900-3)</td>
</tr>
</tbody>
</table>

**Note:**
- LNAV only
- 1.1 NM to RW30
- 2.5 NM to RW30
- 1.4 NM
- 2.6 NM
- 6.2 NM

**ELEV** -115
**TDZE** -121

**RNAV (GPS) RWY 30**

**Palm Springs, California**

Al-529 (FAA)

**RW30**

**JEROD**

**FINOL**

**122°**

**302°**

**3500**

**GP 3.00°**

**TCH 45**

**JEROD Holding Pattern**

**FINOL**

**[IAF] AVONE**

**[FAF] FORKI**

**[IF/IAF] JEROD**

**[IF] JACQUELINE COCHRAN RGNL**

**RNAV (GPS) RWY 30**

**AL-529 (FAA)**

**Palm Springs, California**
RNAV (GPS) RWY 35

JACQUELINE COCHRAN RGNL (TRM)

PROCEDURE NA for arrivals at SHADI on V460 northeast bound and on V64 eastbound.

Final approach course offset 11.75°.

Procedure NA for arrivals at KARRO on V460 southwest bound.

MISSED APPROACH: Climb to 1200 then climbing right turn to 4300 direct OPOSE and hold.

**ASOS**

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<th>Elev (ft)</th>
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<td>6500</td>
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<tr>
<td>SHADI</td>
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<td>OPOSE</td>
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<td>RIPSE</td>
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<td>(5 NM)</td>
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**SOCAL APP CON**

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**CLNC DEL**

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**Category**

- A: LNAV MDA 440-1, 568 (600-1)
- B: CIRCLING 440-1, 554 (600-1)
- C: CIRCLING 440-1, 554 (600-1)
- D: CIRCLING 440-1, 554 (600-1)
DME required.

Rwy 30 helicopter visibility reduction below ¾ SM NA.

ASOS
118.325

SOCAL APP CON
135.275 251.1

CLNC DEL
120.225

UNICOM
123.0 (CTAF)

VOR RWY 30
JACQUELINE COCHRAN RGNL (TRM)

MISSED APPROACH: Climb to 1300 on TRM VOR TAC R-316 then climbing right turn to 5400 direct TRM VOR TAC and hold, continue climb-in-hold to 5400.

ASOS
118.325

SOCAL APP CON
135.275 251.1

CLNC DEL
120.225

UNICOM
123.0 (CTAF)

VOR RWY 30
JACQUELINE COCHRAN RGNL (TRM)

MISSED APPROACH: Climb to 1300 on TRM VOR TAC R-316 then climbing right turn to 5400 direct TRM VOR TAC and hold, continue climb-in-hold to 5400.

ASOS
118.325

SOCAL APP CON
135.275 251.1

CLNC DEL
120.225

UNICOM
123.0 (CTAF)

VOR RWY 30
JACQUELINE COCHRAN RGNL (TRM)

MISSED APPROACH: Climb to 1300 on TRM VOR TAC R-316 then climbing right turn to 5400 direct TRM VOR TAC and hold, continue climb-in-hold to 5400.

ASOS
118.325

SOCAL APP CON
135.275 251.1

CLNC DEL
120.225

UNICOM
123.0 (CTAF)

VOR RWY 30
JACQUELINE COCHRAN RGNL (TRM)

MISSED APPROACH: Climb to 1300 on TRM VOR TAC R-316 then climbing right turn to 5400 direct TRM VOR TAC and hold, continue climb-in-hold to 5400.
NOTE: DME required.

TAKEOFF MINIMUMS
Rwys 12, 17, 30: Standard with a minimum climb of 250' per NM to 5000.
Rwy 35: Standard with a minimum climb of 402' per NM to 3400.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 12: Climbing right turn heading 147° to intercept TRM VORTAC R-136 to MECCA, then climbing left turn direct TRM VORTAC. Thence. . . .

TAKEOFF RUNWAY 17: Climbing left turn heading 100° to intercept TRM VORTAC R-136 to MECCA, then climbing left turn direct TRM VORTAC. Thence. . . .

TAKEOFF RUNWAY 30: Climbing right turn heading 180° to intercept TRM VORTAC R-136 to MECCA, then climbing left turn direct TRM VORTAC. Thence. . . .

TAKEOFF RUNWAY 35: Climbing right turn heading 195° to intercept TRM VORTAC R-136 to MECCA, then climbing left turn direct TRM VORTAC. Thence. . . .

. . . .then on (assigned transition). Expect filed altitude 10 minutes after departure.

PALM SPRINGS TRANSITION (MECCA1.PSP): From over TRM VORTAC on TRM R-304 to PSP VORTAC.

TWENTY NINE PALMS TRANSITION (MECCA1.TNP): From over TRM VORTAC on TRM R-021 and TNP R-199 to TNP VORTAC.
RNAV (RNP) Y RWY 31L
PALM SPRINGS INTL (PSP)

Missed approach requires minimum climb of 340’ per NM to 3000. For uncompensated Baro-VNAV systems, procedure NA below 2°C or above 54°C.

Procedure NA for arrival on PSP VORTAC airway.
Procedure NA for arrival on TRM VORTAC airway.

Final approach course offset 1.1°
RNAV (RNP) Z RWY 13R
PALM SPRINGS INTL (PSP)

Missed Approach: Climb to 900 then climbing left turn to 4000 direct TRM VORTAC and hold.

Procedure NA for arrival on TRM VORTAC airway radials 263 CW 021.

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

Authorization Required.
RNAV (GPS) Z RWY 31L
PALM SPRINGS INTL (PSP)

### RNP APCH-GPS.

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**RNAV (GPS) Z RWY 31L**

### INCORPORATED RUNWAY DESIGNATIONS:

- **13L**
- **31R**

### LOCALIZER DESIGNATIONS:

- **EFOLO**
- **MAPCL**
- **PAHOK**
- **TANFY**
- **BANPE**

### FINAL APPROACH COURSE:

- **286°**

### PROCEDURE NA FOR ARRIVAL ON TRM VORTAC:

- Climb to 900 then climbing right turn to 4000 direct TANFY and track 107° to BANPE and track 144° to TRM VORTAC and hold.

### MISSED APPROACH:

- Climb to 900 then climbing right turn to 4000 direct TANFY and track 107° to BANPE and track 144° to TRM VORTAC and hold.

### FINAL APPROACH COURSE:

- **286°**

### PROCEDURE NA FOR ARRIVAL ON TRM VORTAC:

- Climb to 900 then climbing right turn to 4000 direct TANFY and track 107° to BANPE and track 144° to TRM VORTAC and hold.

### RNAV (GPS) Z RWY 31L:

- **ELEV 476**
- **TDZE 429**

### CATEGORY:

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

### LP MDA:

- **700-1 (271-300)**
- **780-1 (351-400)**
- **1320-2½ (891-900-2½)**

### UNAV MDA:

- **780-1 (351-400)**

### LNAV MDA:

- **920-1 (491-500)**
- **1180-1¼ (751-800-1¼)**
- **1440-3 (1011-1000-3)**
- **1760-3 (1284-1300-3)**

### CIRCLING:

- **920-1 (444-500)**
- **1180-1¼ (704-800-1¼)**
- **1440-3 (964-1000-3)**
- **1284-1300-3**

### RUNWAYS:

- **13L**
- **31R**

### LOCALIZERS:

- **EFOLO**
- **MAPCL**
- **PAHOK**
- **TANFY**
- **BANPE**

### FINAL APPROACH COURSE:

- **286°**

### PROCEDURE NA FOR ARRIVAL ON TRM VORTAC:

- Climb to 900 then climbing right turn to 4000 direct TANFY and track 107° to BANPE and track 144° to TRM VORTAC and hold.

### MISSED APPROACH:

- Climb to 900 then climbing right turn to 4000 direct TANFY and track 107° to BANPE and track 144° to TRM VORTAC and hold.

### FINAL APPROACH COURSE:

- **286°**

### PROCEDURE NA FOR ARRIVAL ON TRM VORTAC:

- Climb to 900 then climbing right turn to 4000 direct TANFY and track 107° to BANPE and track 144° to TRM VORTAC and hold.

### RNAV (GPS) Z RWY 31L:

- **ELEV 476**
- **TDZE 429**

### CATEGORY:

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

### LP MDA:

- **700-1 (271-300)**
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- **920-1 (491-500)**
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### CIRCLING:

- **920-1 (444-500)**
- **1180-1¼ (704-800-1¼)**
- **1440-3 (964-1000-3)**
- **1284-1300-3**

### RUNWAYS:

- **13L**
- **31R**

### LOCALIZERS:

- **EFOLO**
- **MAPCL**
- **PAHOK**
- **TANFY**
- **BANPE**

### FINAL APPROACH COURSE:

- **286°**

### PROCEDURE NA FOR ARRIVAL ON TRM VORTAC:

- Climb to 900 then climbing right turn to 4000 direct TANFY and track 107° to BANPE and track 144° to TRM VORTAC and hold.

### MISSED APPROACH:

- Climb to 900 then climbing right turn to 4000 direct TANFY and track 107° to BANPE and track 144° to TRM VORTAC and hold.

### FINAL APPROACH COURSE:

- **286°**

### PROCEDURE NA FOR ARRIVAL ON TRM VORTAC:

- Climb to 900 then climbing right turn to 4000 direct TANFY and track 107° to BANPE and track 144° to TRM VORTAC and hold.

### RNAV (GPS) Z RWY 31L:

- **ELEV 476**
- **TDZE 429**

### CATEGORY:

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

### LP MDA:

- **700-1 (271-300)**
- **780-1 (351-400)**
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### UNAV MDA:

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- **920-1 (491-500)**
- **1180-1¼ (751-800-1¼)**
- **1440-3 (1011-1000-3)**
- **1760-3 (1284-1300-3)**

### CIRCLING:

- **920-1 (444-500)**
- **1180-1¼ (704-800-1¼)**
- **1440-3 (964-1000-3)**
- **1284-1300-3**

### RUNWAYS:

- **13L**
- **31R**

### LOCALIZERS:

- **EFOLO**
- **MAPCL**
- **PAHOK**
- **TANFY**
- **BANPE**

### FINAL APPROACH COURSE:

- **286°**

### PROCEDURE NA FOR ARRIVAL ON TRM VORTAC:

- Climb to 900 then climbing right turn to 4000 direct TANFY and track 107° to BANPE and track 144° to TRM VORTAC and hold.

### MISSED APPROACH:

- Climb to 900 then climbing right turn to 4000 direct TANFY and track 107° to BANPE and track 144° to TRM VORTAC and hold.

### FINAL APPROACH COURSE:

- **286°**

### PROCEDURE NA FOR ARRIVAL ON TRM VORTAC:

- Climb to 900 then climbing right turn to 4000 direct TANFY and track 107° to BANPE and track 144° to TRM VORTAC and hold.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 13L/R: Climbing left turn heading 100° to cross PSP VORTAC R-176, then turn left heading 040° to intercept PSP R-104, thence . . .

TAKEOFF RUNWAYS 31L/R: Climbing heading 310° to cross PSP VORTAC R-268, then turn right direct PSP VORTAC. If not at MEA/MCA at PSP VORTAC, climb in PSP VORTAC holding pattern until reaching MEA/MCA for assigned route of flight.

. . . climb via PSP R-104 to EMRUD INT/PSP 10 DME, then turn right direct PSP VORTAC. If not at MEA/MCA at PSP VORTAC, climb in PSP VORTAC holding pattern until reaching MEA/MCA for assigned route of flight.

TAKEOFF MINIMUMS

Rwy 13L, Standard with minimum climb of 440’ per NM to 2300.
Rwy 13R, Standard with minimum climb of 422’ per NM to 2300.
Rwy 31L, Standard with minimum climb of 386’ per NM to 2700.
Rwy 31R, Standard with minimum climb of 405’ per NM to 2700.
**THERMAL SIX DEPARTURE**

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAYS 13L/R:** Climbing left turn heading 075° to intercept TRM R-304 to TRM VORTAC. Thence . . . .

**TAKEOFF RUNWAYS 31L/R:** Climb heading 090° to intercept TRM R-304 to TRM VORTAC. Thence . . . .

. . . .If not at MEA/MCA at TRM VORTAC, climb in TRM holding pattern until reaching the MEA/MCA for assigned route of flight.

---

**THERMAL SIX DEPARTURE**

**NOTE:** Chart not to scale.
Circling NA for Cats C and D south of RWys 4 and 25.

Procedure NA for arrivals at JEFFY on V165-459 and V137 northwest bound.

Cautions: high terrain 5 NM southwest of airport.

Final approach course offset 3.00°

Caution: high terrain 5 NM southwest of airport.

Procedure NA for arrivals at JEFFY on V165-459 and V137 northwest bound.

Caution: high terrain 5 NM southwest of airport.

Final approach course offset 3.00°

Procedure NA for arrivals at JEFFY on V165-459 and V137 northwest bound.

Caution: high terrain 5 NM southwest of airport.

Final approach course offset 3.00°

Final approach course offset 3.00°
Circling NA for Cats C, D, and E south of Rwys 4 and 25. DME required.

MISSING APPROACH: Climb to 5000 on PMD VORTAC R-282 then climbing right turn to 7000 direct DME VORTAC and hold (TACAN aircraft climbing right turn to 6700 on PMD VORTAC R-298 to FISCH INT/ 14.3 DME and hold SE left turn 298° inbound, continue climb-in-hold to 6700).

DME REQUIRED

Procedure NA for arrival on PMD VORTAC airway radials 067 CW 142.

CAUTION: High terrain 5 NM southwest of airport.

ATIS 118.275
JOSHUA APP CON 124.55 363.0
PALMDALE TOWER * 123.7 (CTAF) 317.6
GND CON 121.9 317.6

ASSAULT STRIP
6000 X 75
0.3 CIRCLING

REIL Rwys 4, 7, 22 and 25
HIRL Rwys 4-22 and 7-25

REIL Rwys 4, 7, 22 and 25
HIRL Rwys 4-22 and 7-25

PALMDALE, CALIFORNIA

Amdt 8 24MAY18

VOR or TACAN RWY 25
PALMDALE USAF PLANT 42 (PMD)

34°38'N-118°05'W

AL-310 (FAA) 23222
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -5°C or above 54°C.

Procedure NA for arrivals at FIKDU on V248 northwest bound.

Procedure NA for arrivals at MBARI on T259 northwest bound.

Procedure NA for arrivals at CHVAL on T259 southwester bound.

HOLD on T259 directly to JEBNO and hold, continue climb-in-hold to 4500.

**MISSPAPRCH:** Climb to 1300 then climbing left turn to 4500 direct JEBNO and hold, continue climb-in-hold to 4500.
RNP APCH.

Procedure NA for arrivals at PRB VORTAC on radials 218 CW 038.

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

Procedure NA for arrivals at MQO VORTAC on T329 southbound.

Category C

LNAV MDA 1400-1 561 (600-1) 1400-1 561 (600-1)

CIRCLING 1400-1 561 (600-1) 1440-1 561 (600-1) 1700-2 561 (600-1)

HOLD 8000 5100
VOR RWY 19

PASO ROBLES MUNI (PRB)

ASOS

120.125

OAKLAND CENTER

128.7 307.0

UNICOM

123.0 (CTAF)

DME required.

MISSED APPROACH: Climb to 1300 then climbing left turn to 4500 on heading 032° and PRB R-077 to JEBNO 12.5 DME and hold, continue climb-in-hold to 4500.

ELEV 839

TDZE 812

VORTAC PRB

114.3

PRB 12.5

Chan 90

APP CRS

172°

Rwy Idg 6008

TDZE 812

Apt Elev 839

MISSED APPROACH: Climb to 1300 then climbing left turn to 4500 on heading 032° and PRB R-077 to JEBNO 12.5 DME and hold, continue climb-in-hold to 4500.

PASO ROBLES MUNI (PRB)

35°40’N-120°38’W

PASO ROBLES, CALIFORNIA

AL-858 (FAA)

Amdt 5 03DEC20

PASO ROBLES, CALIFORNIA

SW-3, 30 NOV 2023 to 25 JAN 2024

332
PASO ROBLES TWO DEPARTURE (OBSTACLE)

TAKEOFF MINIMUMS

Rwy 1: Standard with minimum climb of 230' per NM to 2200, or 1500-3 for VCOA.
Rwy 13: Standard with minimum climb of 220' per NM to 1700, or 1500-3 for VCOA.
Rwy 19: Standard.
Rwy 31: Standard with minimum climb of 235' per NM to 2200, or 1500-3 for VCOA.

TAKEOFF OBSTACLE NOTES

Rwy 1: Lighting 9' from DER, 115' right of centerline, 804' MSL.
Lighting 10' from DER, 113' left of centerline, 805' MSL.
Tree 301' from DER, 425' left of centerline, 812' MSL.
Rwy 13: Pole 34' from DER, 29' left of centerline, 840' MSL.
Trees, pole beginning 766' from DER, 395' left of centerline, up to 900' MSL.
Trees beginning 1656' from DER, 389' left of centerline, up to 906' MSL.
Trees beginning 1746' from DER, 13' left of centerline, up to 910' MSL.
Tree 1948' from DER, 1' right of centerline, 907' MSL.
Trees beginning 2045' from DER, 56' left of centerline, up to 911' MSL.
Trees beginning 2256' from DER, 409' left of centerline, up to 915' MSL.
Tree 2581' from DER, 511' left of centerline, 917' MSL.
Trees beginning 2601' from DER, 635' left of centerline, up to 923' MSL.
Tree 3261' from DER, 856' left of centerline, 932' MSL.
Tree 3860' from DER, 952' left of centerline, 944' MSL.
Tree 3961' from DER, 784' left of centerline, 950' MSL.
Rwy 19: Pole 10' from DER, 39' left of centerline, 815' MSL.
Tree 992' from DER, 705' left of centerline, 851' MSL.
Trees beginning 1098' from DER, 618' left of centerline, up to 876' MSL.
Rwy 31: Wind indicator 78' from DER, 334' right of centerline, 823' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1: Climb on heading 014° to 2800 then climbing right turn heading 160° to intercept PRB VORTAC R-040 to PRB VORTAC before proceeding on course.

TAKEOFF RUNWAY 13: Climb on heading 129° to 2800 then climbing left turn heading 310° to intercept PRB VORTAC R-100 to PRB VORTAC before proceeding on course.

TAKEOFF RUNWAY 19: Climb on heading 194° to 2000 then climbing left turn heading 030° to intercept PRB VORTAC R-155 to PRB VORTAC before proceeding on course.

TAKEOFF RUNWAY 31: Climbing right turn to intercept PRB VORTAC R-326 to 2800 then climbing right turn heading 110° to intercept PRB R-010 to PRB VORTAC before proceeding on course.

VCOA RUNWAYS 1, 13, 31: Obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross PRB VORTAC at or above 2200 before proceeding on course.

PASO ROBLES MUNI (PRB)

PASO ROBLES, CALIFORNIA

PASO ROBLES TWO DEPARTURE (OBSTACLE)

(PR2.PR) 19MAY22

335
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1: Climbing left turn on heading 280° to intercept PRB VORTAC R-326 to BRALY/PRB 15 DME, thence . . .

TAKEOFF RUNWAY 13: Climbing left turn heading 129° to 2800 then climbing left turn heading 310° to intercept PRB VORTAC R-100 to PRB VORTAC, then on R-326 to BRALY/PRB 15 DME, thence . . .

TAKEOFF RUNWAY 19: Climbing left turn heading 194° to 2000 then climbing left turn heading 030° to intercept PRB VORTAC R-155 to PRB VORTAC, then on R-326 to BRALY/PRB 15 DME, thence . . .

TAKEOFF RUNWAY 31: Climbing right turn heading 340° and PRB VORTAC R-326 to BRALY/PRB 15 DME, thence . . .

. . . . maintain ATC assigned altitude; expect clearance to filed altitude 10 minutes after departure.
TAKEOFF MINIMUMS
Rwy 1: Standard with minimum climb of 230' per NM to 2200.
Rwy 13: Standard with minimum climb of 220' per NM to 1700.
Rwy 19: Standard.
Rwy 31: Standard with minimum climb of 235' per NM to 2200.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1: Climb on heading 014° to 2800 then climbing right turn heading 160° to intercept PRB VORTAC R-040 to PRB VORTAC, then PRB VORTAC R-179 to JEDGI/PRB 13 DME, thence. . . .
TAKEOFF RUNWAY 13: Climbing right turn to heading 210° to intercept PRB VORTAC R-179 to JEDGI/PRB 13 DME, thence. . . .
TAKEOFF RUNWAY 19: Climbing left turn heading to 150° to intercept PRB VORTAC R-179 to JEDGI/PRB 13 DME, thence. . . .
TAKEOFF RUNWAY 31: Climbing right turn to intercept PRB VORTAC R-326 to 2800 then climbing right turn to heading 110° to intercept PRB VORTAC R-010 to PRB VORTAC, then PRB VORTAC R-179 to JEDGI/PRB 13 DME, thence. . . .

. . . .maintain ATC assigned altitude; expect clearance to filed altitude 10 minutes after departure.

NOTE: Chart not to scale.
**When ALS inop, increase CAT AB vis to 1 mile, CAT CDE to 1½ miles.**

**Circling not authorized E of Rwy 3-21.**

**MISSING APPROACH:** Climbing left turn to 2600. Intercept the FIM VORTAC R-215, then via FIM R-215 to FEXED. Arc SW of FIM via the 34 DME arc to RENET and hold.

**ATIS:**

- **POINT MUGU APP CON:** 125.55 363.05
- **POINT MUGU TOWER:** 124.85 290.375
- **GND CON:** 121.6 360.2
- **CLNC DEL:** 120.75 279.55
- **ASR/PAR:**

**CAUTION:** Intrim seg length 5 NM.

**EMERG SAFE ALT**: 100 NM 12,100

**RENET**

**LEGEX**

**COXED**

**FILLMORE**

- **112.5 FIM**
- **Chan 72**

**EMERG SAFE ALT**: 100 NM 12,100

**FIM to MAP 3.8 NM**

- **Knots**: 60 90 120 150 180
- **Min:Sec**: 3.48 2.32 1.54 1.31 1.16

**CATEGORY**

- **S-3**: 460-3/4 450 (500-1/4) 460-1 450 (500-1)
- **CIRCLING**: 460-1 476 (500-1) 480-1/2 467 (500-1/2) 580-2 567 (600-2)

**OXNARD, CALIFORNIA**

34°07'N-119°07'W 34°07'N-119°07'W

**POINT MUGU NAS (NAVAL BASE VENTURA CO) (KNTD)**

**Amdt 5 31DEC20**
TACAN REQUIRED

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3: Climbing left turn within 3 DME of NTD TACAN, direct NTD, thence...

TAKE-OFF RWY 21, 27: Left turn, thence...

Intercept NTD R-163 and via NTD R-163 to BIMPE (NTD R-163/24 DME), then via SLI VORTAC R-251 to DOYLE, then via assigned routing. Cross BIMPE at or above 5500.

SANTA CATALINA TRANSITION (DOYLE 9 • SXC): DOYLE (SLI R-251/34 DME) to SANTA CATALINA VORTAC via SXC R-310. Then as filed.
TACAN REQUIRED

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 3: Climbing left turn to 212° within 3 DME of NTD TACAN, thence...

TAKEOFF RWY 21: Turn right, thence...

TAKEOFF RWY 27: Turn left, thence...

...intercept NTD R-248 and via NTD R-248 to FANKO (NTD R-248/16 DME), then via RZS VORTAC R-133 to RZS VORTAC, then via assigned routing. Cross CIBCI (RZS R-133/17 DME) at or above 5700.
RNAV (GPS) Rwy 9
RAMONA (RNM)

Procedure NA for arrivals at ROBNN on V186 northbound.

Procedure NA for arrivals at ROBNN on V186 northbound.
RNAV (GPS)-B

RAMONA (RNM)

ATIS
SOCAL APP CON
RAMONA TOWER
GND CON
UNICOM
132.025
132.2 269.1
119.875 (CTAF)
121.65
122.95

DME/DME RNP: 0.3 NA.
Circling NA north of Rwy 9-27.
When local altimeter setting not received, use Gillespie Fldaltimeter setting and increase all MDA 180 feet.

MISSED APPROACH: Climb to 5000 direct HERDS
and via track 319° to ROBNN and hold.

---

ATIS
SOCAL APP CON
RAMONA TOWER
GND CON
UNICOM
132.025
132.2 269.1
119.875 (CTAF)
121.65
122.95
Circling NA north of Rwy 9-27. When local altimeter setting not received, use Gillespie Fld altimeter setting and increase all MDA 180 feet.

The diagram shows a VOR/DME-A navigation chart for RAMONA, California. It includes the following information:

- **VOR/DME-A Details**
  - VOR: DEGLE
  - DME: DEGLE
  - Frequency: 114.0 (JL)
  - Course: 234°

- **Charts and Frequencies**
  - ATIS: 132.025
  - Social APP CON: 132.2 269.1
  - Ramona Tower: 119.875 (CTAF)
  - GND CON: 121.65
  - UNICOM: 122.95

- **Radials and Bearings**
  - DEGLE: 115.3 OCN R-069 Chan 100
  - Ramona JLI: 116.45 PGY Chan 1111

- **Elevation**
  - Ramona Tower elevation: 1395

- **Missed Approach**
  - Climbing right turn to JLI VOR airway after altimeter setting is received.

- **JLI VOR Airway Details**
  - Radial: 021 CW 170.

- **Restrictions**
  - SW-3, 30 Nov 2023 to 25 Jan 2024

- **ICAO Airport Code**
  - RAMONA (RNM)
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. 
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 27: Climb heading 268° to 2600, expect vectors to cross GYWNN at or above 6000, then on track 308° to PADRZ, then on track 337° to cross CWARD at or below 12000, thence.

. . . . . . . on transition. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

LOS ANGELES TRANSITION (CWARD.2.LAX)

SEAL BEACH TRANSITION (CWARD.2.SLI)

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: GPS or DME/DME/IRU required.
NOTE: Turbojet and turboprop only.
NOTE: Tower En Route control only.

NOTE: Chart not to scale.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Turbojets and turboprops only.
NOTE: CHKNN, SHAFTER, IKAYE, OROSZ TRANSITIONS: DME/DME/IRU or GPS required.
NOTE: DINY, MALIT TRANSITIONS: GPS only.
NOTE: For non-GPS equipped aircraft, Oceanside (OCN) must be operational.
NOTE: DINITY TRANSITION ATC assigned only.
NOTE: DINITY and MALIT TRANSITIONS NA from SEE, SDM and RNM airports.

SW-3, 30 NOV 2023 to 25 JAN 2024

CHKNN TRANSITION (PADRZ2.CHKNN)
IKAYE TRANSITION (PADRZ2.IKAYE)
OROSZ TRANSITION (PADRZ2.OROSZ)
SHAFTER TRANSITION (PADRZ2.EHF)
Circling Rwy 26 NA at night. Helicopter visibility reduction below 1 SM NA. DME/DME RNP-0.3 NA. Use San Bernardino altimeter setting; when not received, use Ontario altimeter setting and increase all MDA 160 feet.

**MISSING APPROACH:** Do not exceed 230K until WEEDD. Climbing left turn to 7000 direct WEEDD and hold, continue climb-in-hold to 7000.

<table>
<thead>
<tr>
<th>SOCAL APP CON</th>
<th>AUNICOM</th>
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<tbody>
<tr>
<td>127.0 318.2</td>
<td>123.05 (CTAF)</td>
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</table>

**APP CRS** 346°

**TDZE** N/A

**Apt Elev** 1574

**REDLANDS MUNI (REI)**

SW-3, 30 NOV 2023 to 25 JAN 2024
Circling NA north of Rwy 9-27 for Cat D. When local altimeter setting not received, use Chino altimeter setting and increase all DA 46 feet and all MDA 60 feet, increase S-ILS 9 visibility ½ mile all Cats, S-LOC 9 Cat C/D visibility ½ mile. Autopilot coupled approach NA below 1192. *Missed approach requires minimum climb of 270 feet per NM to 2500.

Missed approach requires minimum climb of 270 feet per NM to 2500. Visibility 1 mile. Autopilot coupled approach NA below 1192.

MDA 60 feet, increase S-ILS 9 visibility 1 mile all Cats, S-LOC 9 Cat C/D received, use Chino altimeter setting and increase all DA 46 feet and all MDA 60 feet, increase S-ILS 9 visibility ½ mile all Cats, S-LOC 9 Cat C/D visibility ½ mile. Autopilot coupled approach NA below 1192.

*Missed approach requires minimum climb of 270 feet per NM to 2500.

GS 3.00° TCH 4T

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<td>1360-1/3</td>
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<td>541 (600-1)</td>
<td>1680-1/4</td>
<td>1800-3</td>
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</table>

MIRL Rwys 9-27 and 16-34

FAF to Map 5.3 NM

Knots

| Min/Sec | 5:18 | 3:32 | 2:39 | 2:07 | 1:46 |

RIVERSIDE, CALIFORNIA

Amdt 8E 30DEC21

33°57'N 117°27'W
RNAV (GPS) RWY 9

RIVERSIDE MUNI (RAL)

**ATIS**
128.8

**SOCAL APP CON**
135.4 377.125

**RIVERSIDE TOWER**
121.0 (CTAF) 257.8

**GND CON**
124.12

**UNICOM**
122.95

**ENSITY**
33°57’N-117°27’W

**ELEV**
819

**TDZE**
795

**TWR**
885

**JASER**

**EXPAM**

**PRADO**

**PIRRO**

**HOMELAND**

**HDF**

**TCH 41**

**GP 3.00°**

**MIRL Rwys 9-27 and 16-34**

**DA**

**LNAV/VNAV**

**MDA**

**LNAV**

**3.00°**

**DME/DME RNP-0.3 NA.** When local altimeter setting not received, use Chino altimeter setting and increase all DA 46 feet and all MDA 60 feet and increase LPV all Cats and Circling Cats C and D visibility 1/4 mile and LNAV/VNAV all Cats and LNAV/Cats C and D visibility 1/4 mile. VDP and Baro-VNAV NA with Chino altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). Circling NA for Cat D north of Rwy 9-27.

**MISSED APPROACH:**
Climb to 6000 direct JIKUB and on track 121° to HDF VOR and hold, continue climb-in-hold to 6000.

**Procedure NA for arrivals at PRADO on V16-370 westbound, and arrivals at PIRRO on V186 westbound.**

**Procedure NA for arrivals on POM VORTAC airway radials 073 CW 187.**
DME/DME RNP 0.3 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 46°C (116°F). Circling NA for Cat D north of Rwy 9-27. Visibility reduction by helicopters NA.

**MISSED APPROACH:** Climb to 4000 direct ICIYE and via 246° track to PRADO and hold.

**ATIS**

128.8

**SOCAL APP CON**

135.4 377.125

**RIVERSIDE TOWER**

121.0 (CTAF) 257.8

**GND CON**

124.12

**UNICOM**

122.95

**MISSED APCH FIX**

4 NM

076°

256°

PRADO

Procedure NA for arrivals at BANDS via V372 northeast bound and via V16-370 eastbound.

**ATC Reference**

AL-769 (FAA)
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.

READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

January 2020

HS 1
HS 2
S-40, D-50, 2D-80
RWY 16-34

S-48, D-70, 2S-89, 2D-110
RWY 09-27

AIRPORT DIAGRAM

RIVERSIDE, CALIFORNIA

FIELD ELEV
819

HANGAR

AIRPORT DIAGRAM

RIVERSIDE, CALIFORNIA

33°57' N
33°58' N
117°26' W
117°27' W

3460 X 50
2830 X 50

PARKING
COMPANY AIRCRAFT
ITINERANT
GA
HANGARS

FSDO TERMINAL

0.8% UP
166.8°

1.1% UP
271.4°

1.1% DOWN
091.3°

1.0% UP

23.8°

885 TWR

121.0 257.8

RIVERSIDE TOWER

ATIS

GND CON
124.12

RIVERSIDE MUNI (RAL)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb on heading 089° to 1800 then climbing right turn heading 210° to intercept PDZ VORTAC R-093 to PDZ VORTAC, thence. . . .

TAKEOFF RUNWAY 27: Climb on heading 255° to intercept PDZ R-030 to PDZ VORTAC thence. . . .

TAKEOFF RUNWAY 34: Climbing left turn to intercept PDZ VORTAC R-030 to PDZ VORTAC, thence. . . .

. . . . continue climb in PDZ holding pattern to cross PDZ VORTAC at or above 5000 or higher MEA for route of flight before proceeding on course.
Procedure NA at night. Use Riverside Muni altimeter setting; when not received, use Ontario altimeter setting and increase all MDA 60 feet.

MISSED APPROACH: Climbing right turn to 3200 direct PDZ VORTAC and hold.

Procedure NA for arrivals at BAYJY on V186 westbound.

Procedure NA for arrivals at PRADO on V1 6-370 westbound.

Visual Segment - Obstacles.

**Category**

<table>
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<tr>
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<td>1860-1½</td>
<td>2220-1½</td>
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<td>1093 (1100-1½)</td>
<td>1453 (1500-1½)</td>
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**CIRCLING**

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**UNICOM**

122.8 (CTAF)

**RNP APCH.**

**RAL ASOS**

128.8

**SOCAL APP CON**

135.4 377.125

**RNAV (GPS)-A**

FLABOB (RIR)

**RIVERSIDE/RUIDOUTUX, CALIFORNIA**

AL-9974 (FAA)

Rwy 1dg NA

Apt Elev 767

**APP CRS**

064°
ILS or LOC Z RWY 6
SAN BERNARDINO INTL (SBD)

Circling NA northwest of Rwy 6-24. When local altimeter setting not received, use Ontario altimeter setting and increase DA to 1426 feet and all visibilities ¼ SM; increase all MDA 80 feet and S-LOC Cats C/D and Circling Cat C visibility ¼ SM.

MISSED APPROACH: Climb to 2000 then climbing right turn to 6000 direct PDZ VORTAC and hold, continue climb-in-hold to 6000. Missed approach requires minimum climb of 340 feet per NM to 4000; if unable to meet climb gradient, see LOC Y RWY 6.

ATIS
SOCIAL APP CON
SAN BERNARDINO TOWER
GND CON
UNICOM

124.175
127.0 318.2
119.45 (CTAF)
121.8
122.975

SAN BERNARDINO, CALIFORNIA
Amdt 3A, 01DEC22

SAN BERNARDINO INTL (SBD)
W3.30 NOV 2023 to 25 JAN 2024

SAN BERNARDINO, CALIFORNIA
Amdt 3A, 01DEC22

SAN BERNARDINO INTL (SBD)
W3.30 NOV 2023 to 25 JAN 2024
Circling NA northwest of Rwy 6-24. When local altimeter setting not received, use Ontario altimeter setting and increase DA to 1426 feet and all visibilities ½ SM; increase all MDA 80 feet and LNAV Cats C/D and Circling Cat C visibility ½ SM.

Procedure NA for arrival on PDZ VORTAC airway radials 278 CW 078.

Category

<table>
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<tr>
<td>LNAV MDA #</td>
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<td>637 (600-1)</td>
<td>1740-1¾</td>
<td>637 (600-1¾)</td>
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<tr>
<td>CIRCLING</td>
<td>1740-1</td>
<td>581 (600-1)</td>
<td>1760-1¾</td>
<td>601 (700-1¾)</td>
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MISSED APPROACH: Climb to 2000 then climbing right turn to 6000 direct PDZ VORTAC and hold, continue climb-in-hold to 6000. # Missed approach requires minimum climb of 340 feet per NM to 4000; if unable to meet climb gradient, see RNAV (GPS) Y RWY 6.
Circling NA northwest of Rwy 6-24. When local altimeter not received, use Ontario altimeter setting and increase all MDA 80 feet; increase S-LOC Cat B and Circling Cat B visibility ¼ SM.

**MISSING APPROACH:** Climb to 2700 then climbing right turn to 6000 direct PDZ VORTAC and hold, continue climb-in-hold to 6000.

- **ATIS:** 124.175
- **SOCAL APP CON:** 127.0 318.2
- **SAN BERNARDINO TOWER:** 119.45 (CTAF)
- **GND CON:** 121.8
- **UNICOM:** 122.975

Procedure NA for arrival on PDZ VORTAC airway radials 012 CW 030.

**ELEV 1159**

HIRM Rwy 6-24

**TWR**

SW-3, 30 Nov 2023 to 25 Jan 2024

**CATEGORY**

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<th>60</th>
<th>90</th>
<th>120</th>
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<td>6:06</td>
<td>4:04</td>
<td>3:03</td>
<td>2:26</td>
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**SAN BERNARDINO, CALIFORNIA**

Amdt 1A 01DEC22

34°06'N-117°14'W
RNAV (GPS) RWY 24

ATIS 268.6
SAN CLEMENTE APP CON 127.05 292.15
TOWER 126.75 278.8
GND CON 119.55 @ 251.05
ASR/PAR

RNP APCH
Baro-VNAV NA below -15°C (5°F) or above 54°C (130°F)

CAUTION: RNAV TCH not coincident with PAR TCH (38ft)

EMERG SAFE ALT 100 NM 12,100

1500 3000 JUROR

055° 4000 3000

235° 235° 1700

1.7 NM to RW24

4.6 NM

LPV DA 384-¾ (200-¾)

LNAV VNAV DA 632-1¾ 641-1¾ 649-1¾ 661-1¾

LNAV MDA 760-1 576 (600-1) 760-1¾ 576 (600-1¾)

CIRCLING *

SAN CLEMENTE ISLAND, CALIFORNIA

SAN CLEMENTE ISLAND NALF (FREDERICK SHERMAN FLD) (KNUC)
RNAV (GPS) RWY 8L
BROWN FLD MUNI (SDM)

Circling NA south of Rwy 8R-26L. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 1°C or above 54°C.

Procedure NA for arrival on MZB VORTAC airway radials 114 CW 255.

MISSED APPROACH: (Do not exceed 190K until LUGJA) Climb to 980 then climbing left turn to 3000 direct LUGJA and hold.
SAN DIEGO, CALIFORNIA
AL-5814 (FAA) 23334

VOR or TACAN-A
BROWN FLD MUNI (SDM)

MISSED APPROACH: Climbing right turn 4000 to MZB VORTAC and hold. (TACAN aircraft continue on MZB VORTAC R-304 to REDIN INT/MZB VORTAC 13.4 DME and hold NW, LT, 124° inbound)

Procedure NA for arrival on MZB VORTAC airway radials 076 CW 114.

Circling NA south of Rwy 8R-26L.

SAN DIEGO, CALIFORNIA
Orig-A 23MAR23

32°34'N-116°59"W
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
TAKEROFF MINIMUMS
Rwys 8R/26L: NA-ATC.
Rwy 8L: Standard with minimum climb of 570' per NM to 3100.
Rwy 26R: Standard.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8L: Climbing left turn heading 280° to 2900, expect vectors to cross GYWNN at or above 6000, then on track 308° to PADRZ, then on track 337° to cross CWARD at or below 12000, thence.

TAKEOFF RUNWAY 26R: Climbing right turn heading 280° to 2300, expect vectors to cross GYWNN at or above 6000, then on track 308° to PADRZ, then on track 337° to cross CWARD at or below 12000, thence.

... on transition. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

LOS ANGELES TRANSITION (CWARD2.LAX)
SEAL BEACH TRANSITION (CWARD2.SLI)
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Turbojets and turboprops only.
NOTE: CHKNN, SHAFTER, IKAYE, OROSZ
TRANSITIONS: DME/DME/IRU or GPS required.
NOTE: DINTY, MALIT TRANSITIONS: GPS only.
NOTE: For non-GPS equipped aircraft,
Oceanside (OCN) must be operational.
NOTE: DINTY TRANSITION ATC assigned only.
NOTE: DINTY and MALIT TRANSITIONS NA from
SEE, SDM and RNM airports.

NOTE: Chart not to scale.
**RNAV (GPS) RWY 28R**

**MONTGOMERY-GIBBS EXEC (MYF)**

---

**MISSED APCH FIX:** Climb to 3000 direct JOPDO and on track 327° to CARIF and hold.

**LNAV only**

- 1.2 NM to RW28R
- 2.9 NM to RW28R

**NW-3, 30 Nov 2023 to 25 Jan 2024**

---

**LATITUDE:** 32°49'N-117°08'W

---

**MONTGOMERY-GIBBS EXEC (MYF)**

---

**ATIS**
- 126.9

**SOCAL APP CON**
- 124.35
- 279.625

---

**MALSR**

---

**RIPL** 522

**UP 0.3 %**

---

**UPT**

---

**APR**

---

**UP 0.3 %**

---

**ATIS**
- 126.9

**SOCAL APP CON**
- 124.35
- 279.625
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 right turn heading 270° to 2000, expect vectors to cross GYWNN at or above 6000, then on track 308° to PADRZ, then on track 337° to cross CWARD at or below 12000, thence. . . .

TAKEOFF RUNWAY 23: Climbing right turn heading 270° to 2000, expect vectors to cross GYWNN at or above 6000, then on track 308° to PADRZ, then on track 337° to cross CWARD at or below 12000, thence. . . .

TAKEOFF RUNWAYS 28L/R: Climbing left turn heading 270° to 2000, expect vectors to cross GYWNN at or above 6000, then on track 308° to PADRZ, then on track 337° to cross CWARD at or below 12000, thence. . . .

. . . . on transition. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

LOS ANGELES TRANSITION (CWARD2.LAX)
SEAL BEACH TRANSITION (CWARD2.SLI)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 10L/10R: Climbing right turn heading 270° to 2000, expect vectors to cross GYWNN at or above 8000, then on track 308° to PADRZ, thence... TAKEOFF RUNWAY 23: Climbing right turn heading 270° to 2000, expect vectors to cross GYWNN at or above 8000, then on track 308° to PADRZ, thence... TAKEOFF RUNWAYS 28L/28R: Climbing left turn heading 270° to 2000, expect vectors to cross GYWNN at or above 8000, then on track 308° to PADRZ, thence...

...on (transition). Maintain 15000. Expect higher altitude 10 minutes after departure.

NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Turbojets and turboprops only.
NOTE: CHKN, SHAFTER, IKAYE, OROSZ TRANSITIONS: DME/DME/IRU or GPS required.
NOTE: DINTY, MALIT TRANSITIONS: GPS only.
NOTE: For non-GPS equipped aircraft, Oceanside (OCN) must be operational.
NOTE: DINTY TRANSITION ATC assigned only.
NOTE: DINTY and MALIT TRANSITIONS NA from SEE, SDM and RNM airports.
CIRCLING NA north of Rwy 9-27. Autopilot coupled approach NA below 300. When Circling to Rwy 27 at night, operational VGSI required, remain on or above VGSI glideslope until threshold.

For inop ALS, increase S-ILS 9 all Cats visibility to 2½ SM. Rwy 9 helicopter visibility reduction below RVR 4000 NA.

Inop table does not apply to S-ILS 9.

**MISSING APPROACH:** Climb to 5000 on heading 095° and on PGY VORTAC R-300 to PGY VORTAC, then right turn on PGY VORTAC R-268 to CAPUS INT/23.4 DME and hold.

#Missed approach requires minimum climb of 270 feet per NM to 4000.

**LOCALIZER** I-SAN 111.55
Chan 52 (Y)

---

**ADVISORY NOTICE TO AIRMEN**

**Operational Restriction**

- S-ILS 9
- S-LOC 9
- PGY VORTAC

**Missed Approach**

- Climb to 5000 on heading 095° and on PGY VORTAC R-300 to PGY VORTAC, then right turn on PGY VORTAC R-268 to CAPUS INT/23.4 DME and hold.

- Missed approach requires minimum climb of 270 feet per NM to 4000.

**ILM**

- S-ILS 9
- S-LOC 9
- PGY VORTAC

**Airfield**

- SAN DIEGO INTL (SAN)
- 32°44'N-117°11'W
- 381
RNAV (RNP) Z RWY 27
SAN DIEGO INTL (SAN)

**RNAV (RNP) Z RWY 27**

**SAN DIEGO INTL (SAN)**

**SAN DIEGO, CALIFORNIA**

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</tbody>
</table>

---

**For uncompensated Baro-VNAV systems, procedure NA below 6°C or above 46°C. Straight-in Rwy 27 at night, operational VGSI required, remain on or above VGSI glidepath until threshold. For inop ALS, increase RNP 0.30 all Cats visibility to 21/3 SM.**

---

**MISSED APPROACH: Climb to 2500 on track 275° to SARGS and hold.**

---

**AUTHORIZATION REQUIRED**

---

**TDZ/CL Rwys 9 and 27**

**HIRL Rwy 9-27**

---

**SAN DIEGO, CALIFORNIA**

**Orig-A 15AUG19**

---

**SW-3, 30 NOV 2023 to 25 JAN 2024**

---

**ELEV 17**

---

**TDZE 17**

---

**See planview for multiple IF locations.**

---

**RNP 0.11 DA**

617-1½  600 (600-1½)

---

**RNP 0.30 DA**

778-2  761 (800-2)

---

**SW-3, 30 NOV 2023 to 25 JAN 2024**

---

**32°44′N-117°11′W**
RNAV (GPS) RWY 9
SAN DIEGO INTL (SAN)

**RNAV APCH.**

Circling NA north of Rwy 9-27. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 6°C or above 47°C. When Circling to Rwy 27 at night, operational VGSi required, remain on or above VGSi glidepath until threshold. Rwy 9 helicopter visibility reduction below RVR 4000 NA. Inop table does not apply to LPV all Cats. For inop ALS, increase LNAV Cats A/B visibility to RVR 5500.

**PDATIS**

134.8

**SOCAL APP CON**

119.6 363.1 (WEST)
124.35 279.625 (EAST)

**LINDBERGH TOWER**

118.3 338.225

**GND CON**

123.9

**CLNC DEL**

125.9

**CPDLC**

114.6±

Procedure NA for arrivals at SARGS on V165 west bound.

VGSi and RNAV glidepath not coincident (VGSi Angle 3.30°/TCH 76).

**CATEGORY**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>LPV</td>
<td>DA</td>
<td>262/40</td>
<td>245 (300-3¾)</td>
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<tr>
<td>LNAV/VNAV</td>
<td>DA</td>
<td>621-1¹⁄₂</td>
<td>604 (700-1¹⁄₂)</td>
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<tr>
<td>LNAV</td>
<td>MDA</td>
<td>600/40</td>
<td>583 (600-3¾)</td>
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</table>

**CIRCLING**

800-1 | 783 (800-1) 820-1 | 803 (900-1) 820-2¾ | 803 (900-2¾) 940-3 | 923 (1000-3)

**GATTO**

[Diagram showing RW09, SARGS, and other navigation aids with coordinates and angles]

**SAFETY**

Circling NA north of Rwy 9-27. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 6°C or above 47°C. When Circling to Rwy 27 at night, operational VGSi required, remain on or above VGSi glidepath until threshold. Rwy 9 helicopter visibility reduction below RVR 4000 NA. Inop table does not apply to LPV all Cats. For inop ALS, increase LNAV Cats A/B visibility to RVR 5500.

**SAFETY**

Circling NA north of Rwy 9-27. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 6°C or above 47°C. When Circling to Rwy 27 at night, operational VGSi required, remain on or above VGSi glidepath until threshold. Rwy 9 helicopter visibility reduction below RVR 4000 NA. Inop table does not apply to LPV all Cats. For inop ALS, increase LNAV Cats A/B visibility to RVR 5500.

**SAFETY**

Circling NA north of Rwy 9-27. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 6°C or above 47°C. When Circling to Rwy 27 at night, operational VGSi required, remain on or above VGSi glidepath until threshold. Rwy 9 helicopter visibility reduction below RVR 4000 NA. Inop table does not apply to LPV all Cats. For inop ALS, increase LNAV Cats A/B visibility to RVR 5500.

**SAFETY**

Circling NA north of Rwy 9-27. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 6°C or above 47°C. When Circling to Rwy 27 at night, operational VGSi required, remain on or above VGSi glidepath until threshold. Rwy 9 helicopter visibility reduction below RVR 4000 NA. Inop table does not apply to LPV all Cats. For inop ALS, increase LNAV Cats A/B visibility to RVR 5500.

**SAFETY**

Circling NA north of Rwy 9-27. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 6°C or above 47°C. When Circling to Rwy 27 at night, operational VGSi required, remain on or above VGSi glidepath until threshold. Rwy 9 helicopter visibility reduction below RVR 4000 NA. Inop table does not apply to LPV all Cats. For inop ALS, increase LNAV Cats A/B visibility to RVR 5500.

**SAFETY**

Circling NA north of Rwy 9-27. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 6°C or above 47°C. When Circling to Rwy 27 at night, operational VGSi required, remain on or above VGSi glidepath until threshold. Rwy 9 helicopter visibility reduction below RVR 4000 NA. Inop table does not apply to LPV all Cats. For inop ALS, increase LNAV Cats A/B visibility to RVR 5500.

**SAFETY**

Circling NA north of Rwy 9-27. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 6°C or above 47°C. When Circling to Rwy 27 at night, operational VGSi required, remain on or above VGSi glidepath until threshold. Rwy 9 helicopter visibility reduction below RVR 4000 NA. Inop table does not apply to LPV all Cats. For inop ALS, increase LNAV Cats A/B visibility to RVR 5500.

**SAFETY**

Circling NA north of Rwy 9-27. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 6°C or above 47°C. When Circling to Rwy 27 at night, operational VGSi required, remain on or above VGSi glidepath until threshold. Rwy 9 helicopter visibility reduction below RVR 4000 NA. Inop table does not apply to LPV all Cats. For inop ALS, increase LNAV Cats A/B visibility to RVR 5500.

**SAFETY**

Circling NA north of Rwy 9-27. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 6°C or above 47°C. When Circling to Rwy 27 at night, operational VGSi required, remain on or above VGSi glidepath until threshold. Rwy 9 helicopter visibility reduction below RVR 4000 NA. Inop table does not apply to LPV all Cats. For inop ALS, increase LNAV Cats A/B visibility to RVR 5500.

**SAFETY**

Circling NA north of Rwy 9-27. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 6°C or above 47°C. When Circling to Rwy 27 at night, operational VGSi required, remain on or above VGSi glidepath until threshold. Rwy 9 helicopter visibility reduction below RVR 4000 NA. Inop table does not apply to LPV all Cats. For inop ALS, increase LNAV Cats A/B visibility to RVR 5500.

**SAFETY**

Circling NA north of Rwy 9-27. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 6°C or above 47°C. When Circling to Rwy 27 at night, operational VGSi required, remain on or above VGSi glidepath until threshold. Rwy 9 helicopter visibility reduction below RVR 4000 NA. Inop table does not apply to LPV all Cats. For inop ALS, increase LNAV Cats A/B visibility to RVR 5500.
**RNAV (GPS) Y RWY 27**

**SAN DIEGO INTL (SAN)**

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<thead>
<tr>
<th>Category</th>
<th>LP MDA</th>
<th>LNAV MDA</th>
<th>CIRCLING</th>
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<tr>
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<td>760/50</td>
<td>820-1</td>
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<td>B</td>
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<td>820-1/4</td>
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<td>D</td>
<td>663 (700-1</td>
<td>743 (800-1)</td>
<td>940-3</td>
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</tbody>
</table>

**MISSED APPROACH:** Climb to 2500 direct SARGS and hold.

**Rwy 27 helicopter visibility reduction below RVR 5000 NA. Straight-in Rwy 27 at night, operational VGSI required, remain on or above VGSI glidepath until threshold. Circling NA north of Rwy 9-27. For inop ALS, increase LNAV Cats C/D visibility to 2 SM. Inop table does not apply to LP Cats A/B and LNAV Cat A.**

**SAN DIEGO, CALIFORNIA**

**AL-373 (FAA)**

2000 1000 2000 1000

**TWR**

**P**

**A**

**A**

**A**

**A**

**OKAIN**

**RW27**

**CIJHI**

**VYDDA**

**SAN DIEGO INTL (SAN)**

**RNAV (GPS) Y RWY 27**

**SAN DIEGO, CALIFORNIA**

**SAN DIEGO INTL (SAN)**

**TDZE** 17

**Apt Elev** 17

**MALS**

**ATIS** 134.8

**SOCAL APP CON** 119.6 363.1 (WEST)

**124.35 279.625 (EAST)**

**LINDBERGH TOWER** 118.3 338.225

**GND CON** 123.9

**CLNC DEL** 125.9

**CPDLC**

**SAN DIEGO, CALIFORNIA**

**SAN DIEGO INTL (SAN)**
SWEETWATER VISUAL RWY 27

RADAR REQUIRED
Weather Minimums: 5000 feet ceiling and 10 miles visibility.

SWEETWATER VISUAL APPROACH RWY 27
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

**AIRPORT DIAGRAM**

SAN DIEGO INTL (SAN)
SAN DIEGO, CALIFORNIA

**AIRPORT DIAGRAM**

SAN DIEGO INTL (SAN)
SAN DIEGO, CALIFORNIA
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb on heading 093° to intercept MZB VORTAC R-096 to BROWS INT. Thence...
TAKEOFF RUNWAY 27: Climb on heading 278° until PGY R-260, then left turn on heading 123° to intercept PGY VORTAC R-260 and R-069 to BROWS INT. Thence...

. . . . (transition) or (assigned route). Maintain assigned altitude. Expect filed altitude/flight level 10 minutes after departure.

IMPERIAL TRANSITION (BRDR7.IPL): From over BROWS INT on PGY R-069 and IPL R-250 to IPL VORTAC.

JULIAN TRANSITION (BRDR7.JLI): From over BROWS INT on JLI R-182 to JLI VORTAC.

TAKEOFF MINIMUMS
Rwy 9: 400-1 with minimum climb of 610’ per NM to 1900 or standard with minimum climb of 686’ per NM to 1900.
Rwy 27: 400-21/2 or standard with minimum climb of 353’ per NM to 400.

NOTE: Chart not to scale.
CWARD TWO DEPARTURE (RNAV)

**NOTE: Chart not to scale.**

**TAKEOFF MINIMUMS**

Rwy 9: NA-ATC.
Rwy 27: 400-2½ or standard with minimum climb of 500’ per NM to 3000.

**NOTE: Chart not to scale.**

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 27:** Climb heading 275° to 520, then right turn direct WNFLD, then on track 296° to cross GYWNN at or above 6000, then on track 308° to PADRZ, then on track 337° to cross CWARD at or below 12000, thence. . . .

. . . . on transition. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

**LOS ANGELES TRANSITION (CWARD2.LAX)**

**SEAL BEACH TRANSITION (CWARD2.SLI)**
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 9:** Climb heading 095° to 4000, then left turn direct BAUCA, then on track 307° to ECHHO, thence. . . .

**TAKEOFF RUNWAY 27:** Climb heading 275° to 520, then right turn direct LANDN, then on track 330° to ECHHO, thence. . . .

. . . .on (transition), maintain 15000. Expect filed altitude 10 minutes after departure.

**IKAYE TRANSITION (ECHHO2.IKAYE)**

**SEAL BEACH TRANSITION (ECHHO2.SLI)**
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb heading 095° to 4000, then left turn on heading 278° to intercept MZB R-314 to MAFAN INT. Thence.

TAKEOFF RUNWAY 27: Climbing right turn on heading 293° to intercept OCN R-155 to CLSTR INT. Cross CLSTR INT at or below 4000, then on OCN R-155 and MZB R-314 to MAFAN INT. Thence.

. . . . . cross MAFAN INT at or above 8000, then on MZB R-314 to FALCC INT. Then (transition) or (assigned route). Maintain assigned altitude.

SANTA CATALINA TRANSITION (FALCC1.SXC): From over FALCC INT on SXC R-084 to SXC VORTAC.

SEAL BEACH TRANSITION (FALCC1.SLI): From over FALCC INT on SLI R-127 to SLI VORTAC.

NOTE: Chart not to scale.
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 9:** Climb heading 095° to 4000, then left turn direct BAUCA, then on track 307° to ECHHO, then on track 308° to cross GOFUR at or above 15000, then on track 306° to cross MMOTO at or below FL190, thence... . . .

**TAKEOFF RUNWAY 27:** Climb heading 275° to 520, then right turn direct LANDN, then on track 330° to ECHHO, then on track 308° to cross GOFUR at or above 15000, then on track 306° to cross MMOTO at or below FL190, thence... . . .

 . . . on (transition) maintain altitude assigned by ATC, expect filed altitude 10 minutes after departure.

**DINTY TRANSITION (MMOTO2.DINTY)**

**MALIT TRANSITION (MMOTO2.MALIT)**

**NOTE:** Chart not to scale.

**NOTE:** RADAR required.

**NOTE:** RNAV 1.

**NOTE:** GPS required.

**NOTE:** If unable altitude restriction at GOFUR, advise ATC on initial contact.

**NOTE:** DINTY transition ATC only.
TAKING OFF RUNWAY 27: Climb heading 275° to 520, then right turn direct WNFLD, then on track 296° to KERNL, then on track 296° to cross GYWNN at or above 8000, then on track 308° to PADRZ, thence . . .

. . . on (transition). Maintain 15000. Expect higher altitude 10 minutes after departure.

CHKNN TRANSITION (PADRZ2.CHKNN)
DINTY TRANSITION (PADRZ2.DINTY)
IKAYE TRANSITION (PADRZ2.IKAYE)
MALIT TRANSITION (PADRZ2.MALIT)
OROSZ TRANSITION (PADRZ2.OROSZ)
SHAFTER TRANSITION (PADRZ2.EHF)

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 27: Climbing right turn heading 293° until crossing OCN VORTAC R-170, then turn right heading 318° to intercept MZB VORTAC R-293 to cross MELDY INT/MZB 30 DME at or above 14000 (or lower ATC assigned altitude) then on MZB R-293 to PEBLE INT/MZB 39 DME, thence. . . .

. . . . via (transition) or (assigned route). Maintain assigned altitude.

SANTA CATALINA TRANSITION (PEBLE6.SXC): From over PEBLE INT on SXC R-096 to SXC VORTAC.

SEAL BEACH TRANSITION (PEBLE6.SLI): From over PEBLE INT on SLI R-148 to SLI VORTAC.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: If unable altitude restriction at JUNOR, advise ATC on initial contact.

TOP ALTITUDE:
JETS FL190
TURBOPROPS 15000

TAKEOFF MINIMUMS
Rwy 9: 400-1 with minimum climb of 610’ per NM to 1900 or standard with minimum climb of 687’ per NM to 1900. Rwy 27: NA-ATC.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb heading 095° to 520, then direct to cross SAYOW at or above 4900, thence . . . .

. . . . on (transition) jets maintain FL190, turboprops maintain 15000, expect filed altitude 10 minutes after departure.

IMPERIAL TRANSITION (SAYOW2.IPL)

MTBAL TRANSITION (SAYOW2.MTBAL)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 27: Climb direct JETTI, then left turn direct to cross ZZOOO between 6000 and FL230 at or below 230K, thence . . . .

. . . . on (transition). Turbojets maintain FL230, turboprops maintain 15000, expect filed altitude 10 minutes after departure.

CENZA TRANSITION (ZZOOO3.CENZA)
IMPERIAL TRANSITION (ZZOOO3.IPL)
MTBAL TRANSITION (ZZOOO3.MTBAL)

TAKEOFF MINIMUMS

Rwy 9: NA-ATC.
Rwy 27: Standard with minimum climb of 500’ per NM to 520.

NOTE: For non-GPS equipped aircraft using MTBAL or IPL Transitions, PGY DME must be operational.

TOP ALTITUDE:
JETS FL230/ TURBOPROPS 15000

NOTE: Chart not to scale.
SAN DIEGO/EL CAJON, CALIFORNIA

**RNAV (GPS) RWY 9L**

**GILLESPIE FLD (SEE)**

**ATIS** 125.45

**SOCAL APP CON** 124.35

**TDZE 379**

**CLNC DEL** 125.1

**GND CON** 121.7

**Apt Elev 388**

**TDZE 379**

**RNP APCH - GPS.**

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 5°C or above 14°C. Circling NA northeast of Rwys 17 and 27R. Circling Rwy 27R, 35 NA at night. Rwy 9L helicopter visibility reduction below 1 SM NA.

**Procedure NA for arrival at CARIF on V23-363-597 northwest bound.**

**VGSI and RNAV glidepath not coincident (VGSI angle 3.75/TCH 45).**

**RNP APCH - GPS.**

**Category**

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<th>B</th>
<th>C</th>
<th>D</th>
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<td>1720-1½</td>
<td>1332 (1400-1¼)</td>
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**Gillespie Tower** 120.7 (CTAF) 257.8

**SOCAL APP CON** 279.625

**Gillespie Field**

**RNAV (GPS) RWY 9L**

**Gillespie Field**

**San Diego/El Cajon, California**

**Orig-B 29DEC22**

**32°50’N-116°58’W**
**RNAV (GPS) RWY 17**

**GILLESPIE FLD (SEE)**

---

**CIRCLING NA northeast of Rwy 17 and 27R. When local altimeter setting not received, use Miramar MCAS altimeter setting and increase all MDA 40 feet. Rwy 17 helicopter visibility reduction below 1 SM NA. Circling Rwy 27R, 35 NA at night.**

**ATIS**
125.45

**SOCAL APP CON**
124.35 279.625

**GILLESPIE TOWER**
120.7 (CTAF) 257.8

**GND CON**
121.7

**CLNC DEL**
125.1

---

**Procedure NA for arrivals at ROBNN on V186 northwest bound and V208-458 westbound.**

---

**Category**
- A
- B
- C
- D

**LP MDA**
- 1360-1/4
- 1360-1/2
- 1360-3
- 981 (1000-1/4)
- 981 (1000-1/2)
- 981 (1000-3)

**LNAV MDA**
- 1380-1/4
- 1380-1/2
- 1380-3
- 1001 (1000-1/4)
- 1001 (1000-1/2)
- 1001 (1000-3)

**CIRCLING**
- 1440-1/4
- 1440-1/2
- 1440-3
- 1552 (1600-3)

---

**NAV DATA**

**SAN DIEGO/EL CAJON, CALIFORNIA**

**GILLESPIE FLD (SEE)**

**SW-3, 30 NOV 2023 to 25 JAN 2024**

**SAN DIEGO/EL CAJON, CALIFORNIA**

**MIRL Rwy 9L-27R and 17-35**

**REIL Rwy 27R**

---

**SOCAL APP CON**

**GILLESPIE FLD (SEE)**

**Amdt 2G 06OCT22**

**32°50'N-116°58'W**

399
LOC-D
GILLESPIE FLD (SEE)

DME required.

When local altimeter setting not received, use Miramar MCAS altimeter setting and increase all MDA 40 feet. Circling NA northeast of Rwy 27R-17. Circling Rwy 27R, 35 NA at night.

MISSING APPROACH: Climbing left turn to 3000 direct to MZB VORTAC and hold.

ATIS
125.45

SOCAL APP CON
124.35 279.625

GILLESPIE TOWER
120.7 (CTAF) 257.8

GND CON
121.7

CLNC DEL
125.1

MISSAPED APCH
MISSION BAY
MZR
117.8
Chan 125

LOCALIZER
I-SEE
Chan 42

MISSION BAY
117.8 MZB
Chan 125

I-SEE

1500-1 269°

Amdt 11D 20JUN19

32°50'N-116°58'W

SAN DIEGO/EL CAJON, CALIFORNIA

AL-5402 (FAA)

4000

400

LOC-D
4000

400

SAN DIEGO/EL CAJON, CALIFORNIA

Amdt 11D 20JUN19

32°50'N-116°58'W
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

SAN DIEGO/EL CAJON, CALIFORNIA

SW-3, 30 NOV 2023 to 25 JAN 2024

SW-3, 30 NOV 2023 to 25 JAN 2024
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 9L/R: Climbing right turn on heading 165°, thence . . . .

TAKEOFF RUNWAY 17: Climb on heading 165°, thence . . . .

TAKEOFF RUNWAYS 27L/R: Climbing right turn on heading 062° and on PGY R-348, thence . . . .

TAKEOFF RUNWAY 35: Climbing left turn on heading 165°, thence . . . .

. . . . on MZB R-076 to MZB VORTAC.

ALL RUNWAYS: Obtain ATC approval for VCOA when requesting IFR clearance.

Climb in visual conditions to cross Gillespie Fld at or above 4600 before proceeding on assigned route of flight.

NOTE: Chart not to scale.
MISSION BAY TWO DEPARTURE (OBSTACLE)  
SAN DIEGO/EL CAJON, CALIFORNIA  
GILLESPIE FLD (SEE)  
(SEE)  

TAKEOFF OBSTACLE NOTES

Rwy 9L: Terrain 11' from DER, 202' left of centerline, 395' MSL. Terrain 189' from DER, 236' left of centerline, 398' MSL. Vehicle on road beginning 604' from DER, 12' right of centerline, 428' MSL. Sign, bridge, vehicle on road, pole beginning 739' from DER, on centerline, up to 42' AGL/448' MSL. Building 916' from DER, 354' left of centerline, 24' AGL/448' MSL. Tree, pole beginning 940' from DER, 314' left of centerline, up to 468' MSL. Tree 1259' from DER, 676' right of centerline, 451' MSL. Tree, pole, building, vehicle on road beginning 1287' from DER, 4' right of centerline, up to 480' MSL. Tree, building, pole beginning 1413' from DER, 420' left of centerline, up to 486' MSL. Tree, poles beginning 1423' from DER, 176' left of centerline, up to 499' MSL. Tree 1630' from DER, 620' left of centerline, 519' MSL. Tree, poles beginning 1634' from DER, 8' left of centerline, up to 522' MSL. Poles beginning 2125' from DER, 39' right of centerline, up to 42' AGL/485' MSL. Pole 2226' from DER, 19' right of centerline, 43' AGL/488' MSL. Trees, poles beginning 2333' from DER, 55' right of centerline, up to 509' MSL. Tree, poles, transmission line beginning 2601' from DER, 1' left of centerline, up to 530' MSL. Trees, transmission line, poles, building beginning 2949' from DER, 88' left of centerline, up to 566' MSL. Tree, poles beginning 3042' from DER, 26' right of centerline, up to 532' MSL. Poles beginning 3611' from DER, 246' left of centerline, up to 44' AGL/575' MSL. Poles, transmission line beginning 3802' from DER, 119' left of centerline, up to 43' AGL/583' MSL. Poles, transmission line beginning 3920' from DER, 38' left of centerline, up to 43' AGL/589' MSL. Transmission line, poles beginning 4371' from DER, 362' left of centerline, up to 62' AGL/594' MSL. Poles beginning 4389' from DER, 131' right of centerline, up to 45' AGL/533' MSL. Tree, poles beginning 4443' from DER, 14' left of centerline, up to 624' MSL. Pole 4576' from DER, 53' right of centerline, 45' AGL/541' MSL. Poles beginning 4720' from DER, 102' right of centerline, up to 50' AGL/545' MSL. Transmission line, pole beginning 5111' from DER, 246' right of centerline, up to 55' AGL/548' MSL. Poles beginning 5145' from DER, 340' left of centerline, up to 39' AGL/641' MSL. Tree, poles beginning 5412' from DER, 5' left of centerline, up to 654' MSL. Transmission line 5476' from DER, 374' right of centerline, 55' AGL/552' MSL. Tree, poles beginning 5712' from DER, 23' left of centerline, up to 672' MSL. Trees, poles, transmission line beginning 5782' from DER, 67' right of centerline, up to 628' MSL. Pole 1.1 NM from DER, 2123' left of centerline, 40' AGL/1219' MSL. Tower 1.1 NM from DER, 2086' left of centerline, 60' AGL/1236' MSL. Tower, poles, trees, terrain, fence, vegetation, transmission lines beginning 1.1 NM from DER, 51' left of centerline, up to 63' AGL/1242' MSL. Tree 1.1 NM from DER, 523' right of centerline, 672' MSL. Pole 1.1 NM from DER, 2249' right of centerline, 37' AGL/689' MSL. Transmission line 1.2 NM from DER, 1980' right of centerline, 38' AGL/771' MSL. Poles beginning 1.2 NM from DER, 1962' right of centerline, up to 57' AGL/774' MSL. Building, pole beginning 1.2 NM from DER, 517' right of centerline, up to 29' AGL/813' MSL. Trees, poles, transmission lines beginning 1.2 NM from DER, 52' right of centerline, up to 824' MSL.

Rwy 9R: Pole 921' from DER, 521' right of centerline, 42' AGL/432' MSL. Vehicle on road 1544' from DER, 404' left of centerline, 428' MSL. Transmission line, sign beginning 1669' from DER, 24' right of centerline, up to 51' AGL/452' MSL. Vehicle on road 1827' from DER, 409' left of centerline, 430' MSL. Building 1855' from DER, 772' left of centerline, 24' AGL/448' MSL. Trees, poles beginning 1879' from DER, 732' left of centerline, up to 468' MSL. Poles beginning 1960' from DER, 67' right of centerline, up to 60' AGL/455' MSL. Tower, tree beginning 2042' from DER, 258' right of centerline, up to 65' AGL/459' MSL. Tree 2226' from DER, 173' left of centerline, 480' MSL. Tree, pole, building beginning 2352' from DER, 264' left of centerline, up to 486' MSL. Tree, pole beginning 2363' from DER, 594' left of centerline, up to 499' MSL. Tree, poles beginning 2490' from DER, 41' right of centerline, up to 480' MSL. Tree 2569' from DER, 1038' left of centerline, 519' MSL. Trees, pole, vehicle on road beginning 2573' from DER, 92' left of centerline, up to 522' MSL. Trees, poles, transmission line beginning 3540' from DER, 4' left of centerline, up to 530' MSL. Tree, pole beginning 3633' from DER, 82' right of centerline, up to 505' MSL. Trees, poles, transmission line beginning 3888' from DER, 45' left of centerline, up to 566' MSL. Poles, transmission line beginning 4572' from DER, 259' left of centerline, up to 38' AGL/567' MSL. Poles, transmission line beginning 4885' from DER, 116' left of centerline, up to 43' AGL/584' MSL. Transmission line, poles beginning 5310' from DER, 288' left of centerline, up to 62' AGL/594' MSL. Tree, poles, transmission line beginning 5382' from DER, 173' left of centerline, up to 624' MSL. Poles beginning 1 NM from DER, 118' left of centerline, up to 39' AGL/641' MSL. Tree, poles, transmission line beginning 1 NM from DER, 44' left of centerline, up to 654' MSL. Trees, poles beginning 1 NM from DER, 51' left of centerline, up to 672' MSL. Trees, poles, transmission line beginning 1 NM from DER, 16' right of centerline, up to 428' MSL. Pole 1.2 NM from DER, 2543' left of centerline, 40' AGL/1219' MSL. Tower 1.2 NM from DER, 2507' left of centerline, 60' AGL/1236' MSL. Tower, trees, pole, terrain, fence, vegetation, transmission lines beginning 1.2 NM from DER, 11' left of centerline, up to 63' AGL/1242' MSL. Tree 1.3 NM from DER, 103' right of centerline, 672' MSL. Pole 1.3 NM from DER, 1829' right of centerline, 37' AGL/689' MSL. Transmission line 1.3 NM from DER, 1559' right of centerline, 38' AGL/771' MSL. Poles beginning 1.3 NM from DER, 1541' right of centerline, up to 57' AGL/774' MSL. Building, pole beginning 1.3 NM from DER, 97' right of centerline, up to 29' AGL/813' MSL. Trees, poles, beginning 1.3 NM from DER, 193' right of centerline, up to 824' MSL.

(Continued on following page)
(NOTES CONTINUED)

TAKEOFF OBSTACLE NOTES

Rwy 17: Fence 14' from DER, 43' right of centerline, 9' AGL/393' MSL.
Pole 36' from DER, 456' right of centerline, 40' AGL/424' MSL.
Poles, building beginning 50' from DER, 123' right of centerline, up to 45' AGL/428' MSL.
Poles, buildings beginning 266' from DER, 149' left of centerline, up to 42' AGL/429' MSL.
Trees, pole, building beginning 390' from DER, 33' right of centerline, up to 457' MSL.
Trees, pole, building beginning 970' from DER, 57' left of centerline, up to 470' MSL.
Tree, building beginning 1145' from DER, 377' right of centerline, up to 473' MSL.
Trees, building, poles beginning 1618' from DER, 54' left of centerline, up to 472' MSL.
Pole 1.4 NM from DER, 2367' right of centerline, 43' AGL/614' MSL.
Pole 1.5 NM from DER, 2346' right of centerline, 43' AGL/658' MSL.
Poles beginning 1.6 NM from DER, 2319' right of centerline, up to 38' AGL/746' MSL.

Rwy 27L: Tree 1548' from DER, 765' right of centerline, 428' MSL.
Trees beginning 2189' from DER, 700' right of centerline, up to 453' MSL.
Tree 2943' from DER, 655' left of centerline, 441' MSL.
Tree, building beginning 3732' from DER, 464' left of centerline, up to 470' MSL.
Tree, pole beginning 5745' from DER, 827' left of centerline, up to 572' MSL.
Vegetation 1.4 NM from DER, 1507' left of centerline, 722' MSL.

Rwy 27R: Tree, poles beginning 178' from DER, 235' right of centerline, up to 411' MSL.
Vehicle on road 510' from DER, 412' left of centerline, 379' MSL.
Trees, poles beginning 525' from DER, 38' right of centerline, up to 453' MSL.
Pole 799' from DER, 83' left of centerline, 41' AGL/390' MSL.
Trees, poles beginning 2068' from DER, 19' left of centerline, up to 470' MSL.
Tree, tower beginning 4080' from DER, 978' left of centerline, 572' MSL.
Vegetation 1.2 NM from DER, 1924' left of centerline, 722' MSL.

Rwy 35: Pole 34' from DER, 202' right of centerline, 21' AGL/388' MSL.
Pole, building beginning 51' from DER, 248' right of centerline, up to 29' AGL/399' MSL.
Trees, building, poles beginning 231' from DER, 29' right of centerline, up to 447' MSL.
Poles beginning 381' from DER, 336' left of centerline, up to 42' AGL/405' MSL.
Tree 1107' from DER, 118' left of centerline, 408' MSL.
Tree 1145' from DER, 581' left of centerline, 427' MSL.
Tree 1486' from DER, 293' left of centerline, 438' MSL.
Trees beginning 1487' from DER, 344' left of centerline, up to 439' MSL.
NOTE:  Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 9L/R: Climbing right turn heading 165° and on MZB R-076 to MZB VORTAC to 3000, expect vectors to cross GYWNN at or above 6000, then on track 308° to PADRZ, then on track 337° to cross CWARD at or below 12000, thence . . .

TAKEOFF RUNWAY 17: Climb heading 165° and MZB R-076 to MZB VORTAC to 2800, expect vectors to cross GYWNN at or above 6000, then on track 308° to PADRZ, then on track 337° to cross CWARD at or below 12000, thence . . .

TAKEOFF RUNWAYS 27L/R: Climbing right turn heading 320° to 3000, expect vectors to cross GYWNN at or above 6000, then on track 308° to PADRZ, then on track 337° to cross CWARD at or below 12000, thence . . .

TAKEOFF RUNWAY 35: Climbing left turn heading 320° to 3000, expect vectors to cross GYWNN at or above 6000, then on track 308° to PADRZ, then on track 337° to cross CWARD at or below 12000, thence . . .

. . . . on transition. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

LOS ANGELES TRANSITION (CWARD2.LAX)

SEAL BEACH TRANSITION (CWARD2.SLI)
NOTE: Chart not to scale.

PADRZ TWO DEPARTURE (RNAV) (PADRZ2.PADRZ) 07DEC17

TOP ALTITUDE: 15000

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 9L/9R: Climbing right turn heading 165° and on MZB R-076 to MZB VORTAC to 3000, expect vectors to cross GYWNN at or above 8000, then on track 308° to PADRZ, thence. . . .

TAKEOFF RUNWAY 17: Climb heading 165° and on MZB R-076 to MZB VORTAC to 2800, expect vectors to cross GYWNN at or above 8000, then on track 308° to PADRZ, thence. . . .

TAKEOFF RUNWAYS 27L/27R: Climbing right turn heading 320° to 3000, expect vectors to cross GYWNN at or above 8000, then on track 308° to PADRZ, thence. . . .

TAKEOFF RUNWAY 35: Climbing left turn heading 320° to 3000, expect vectors to cross GYWNN at or above 8000, then on track 308° to PADRZ, thence. . . .

. . . .on (transition). Maintain 15000. Expect higher altitude 10 minutes after departure.

CHKNN TRANSITION (PADRZ2.CHKNN)
IKAYE TRANSITION (PADRZ2.IKAYE)
OROSZ TRANSITION (PADRZ2.OROSZ)
SHAFTER TRANSITION (PADRZ2.EHF)

TAKEOFF MINIMUMS

Rwy 9L: 900-2 3/4 with minimum climb of 400' per NM to 3600.
Rwy 9R: 900-2 3/4 with minimum climb of 405' per NM to 3600.
Rwy 17: Standard with minimum climb of 480' per NM to 2200.
Rwy 27L: Standard with minimum climb of 320' per NM to 1200
Rwy 27R: Standard with minimum climb of 420' per NM to 1200
Rwy 35: Standard with minimum climb of 400' per NM to 1600.

NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Turbojets and turboprops only.
NOTE: CHKNN, SHAFTER, IKAYE, OROSZ TRANSITIONS: DME/DME/IRU or GPS required.
NOTE: DINTY, MALIT TRANSITIONS: GPS only.
NOTE: For non-GPS equipped aircraft, Oceanside (OCN) must be operational.
NOTE: DINTY TRANSITION ATC assigned only.
NOTE: DINTY and MALIT TRANSITIONS NA from SEE, SDM and RNM airports.

NOTE: Chart not to scale.
SAN LUIS OBISPO, CALIFORNIA
LOC 1-SBP
APP CRS
109.7
110°
Rwy Idg
5300
TDZE
198
Apt Elev
212
TWR
0.8%
UP
1.1% UP
A
5
V
120.6
SANTA BARBARA APP CON
127.725
244.575
SAN LUIS TOWER
124.0 (CTAF)
GND CON
121.6
UNICOM
122.95

PASO ROBLES
14.3 PRB
Chan 90
4000 NoPT
196° (2.2)
048° hdg (2.2) and
110° (2.1)

307°

4000 NoPT to CREPE
110° (2.1)

290°

(IAP)

MORRO BAY
112.4 MQO
Chan 71

When GS not used, use LOC RWY 11 procedure.

SAN LUIS COUNTY RGNL (SBP)

ILS RWY 11
AL-989 (FAA)
23334

SW-3, 30 NOV 2023 to 25 JAN 2024

GS 3.00°

CREPE INT
MQO 8.5

One Minute
Holding Pattern

REIL Rwy 29
HIRL Rwy 11-29

SAN LUIS COUNTY RGNL (SBP)

ILS RWY 11

35°14'N-120°39'W

407
Circling to Rwy 25 NA at night. Circling NA north of Rwy 11-29. Rwy 29 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 0° C or above 52° C.

Procedure NA for arrivals at FABEG on V27, T261 southeast bound.

MISSED APCH FIX

San Luis Obispo, California

Amdt 1 30JAN20
Circling NA north of Rwy 11-29.

MISSED APPROACH: Climbing right turn to 3100 via heading 175° and MQO R-126 to MQO VORTAC and hold. (TACAN Aircraft continue climb to 4000 via MQO R-292 to FRAMS 11.2 DME and hold east, right turns, 292° inbound.)
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 11: Climb on heading 110° to 900, then climbing right turn heading 180° to intercept the FLW VOR/DME R-259 to AVILA INT, then on assigned transition or assigned route. Maintain ATC assigned altitude.

GAVIOTA TRANSITION (AVILA4.GVO): From over AVILA on MQO R-126 to ORCUT, then on MQO R-126 and GVO R-307 to GVO VORTAC.

MORRO BAY TRANSITION (AVILA4.MQO): From over AVILA on MQO R-126 to MQO VORTAC.

WINCH TRANSITION (AVILA4.WINCH): From over AVILA on heading 204° to SAKWE, then on MQO R-140 to WINCH.
NOTE: This SID requires take off minimums of
1300-2 or standard with a minimum climb
of 275’ per NM to 1700.

NOTE: During VFR conditions watch for
opposing traffic on localizer course.

NOTE: This procedure applicable to Runway
29 departures only.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 29: Climb via San Luis Obispo localizer I-SBP west course
to CREPE INT; thence via (transition) or (assigned route).

FRAMS TRANSITION (CREPE3.FRAMS): From over CREPE INT via I-SBP LOC
west course and PRB R-204 to FRAMS INT.

MORRO BAY TRANSITION (CREPE3.MQO): From over CREPE INT via PRB R-196
and MQO R-270 to MQO VORTAC.

PASO ROBLES TRANSITION (CREPE3.PRB): From over CREPE INT via PRB R-196
to PRB VORTAC.

CREPE THREE DEPARTURE
(CREPE3.CREPE) 30JUL87
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 11: Turn right heading 130° to intercept and proceed on MQO R-100 to MISHI INT, then on FLW R-259 to WYNNR INT; thence on (transition) or (assigned route.)

FELLOWS TRANSITION (WYNNR4.FLW): From over WYNNR INT on FLW R-259 to FLW VOR/DME.

PASO ROBLES TRANSITION (WYNNR4.PRB): From over WYNNR INT on PRB R-133 to PRB VORTAC.

SAN MARCUS TRANSITION (WYNNR4.RZS): From over WYNNR INT on RZS R-315 to RZS VORTAC.

NOTE: PRB transition expect restriction to cross 18 NM southeast of PRB VORTAC at or above 7000.

TOP ALTITUDE:
8000

SW-3, 30 NOV 2023 to 25 JAN 2024
**MISSED APPROACH:** Climb to 1000 via heading 301°, then climbing right turn to 3000 to intercept NSI TACAN R-003 to FOBDA, then arc E of NSI 12 mile arc to TAMAY and hold.

**LOCALIZER 109.7**

**LOC I-NSI**

**APCH CRS**

**SW-3**

**Rwy Idg 10,002**

**TDZE 506**

**Arpl Elev 506**

**AL-5162 [USN]**

**SAN NICOLAS ISLAND NOLF (KNSI)**

**EMERG SAFE ALT 100 NM 10,900**

**ELEV 506**

**TDZE 506**

**HRL Rwy 12-30**

**FDR TO MAP 4 NM**

**Knots**

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**CATEGORY**

**A**

**B**

**C**

**D**

**E**

**S-ILS 30**

**S-LOC 30**

**SAN NICOLAS ISLAND, CALIFORNIA**

**SAN NICOLAS ISLAND, CALIFORNIA**

**Amdt 6 18MAY23**

**ILS or LOC Rwy 30**
SAN NICOLAS ISLAND, CALIFORNIA

EMERG SAFE ALT 100 NM 10,900

2100
HILER
DEYAF

TOWER
126.85 379.3

SW-3, 30 NOV 2023 to 25 JAN 2024

MISSING APPROACH. Climb to 3000 direct FEGAV, track 031° to TMOLL, track 099° to CAROM and hold.

RNP APCH

* Circling not authorized W of Rwy 12-30

Rwy Ldg 10,002
TDZE 506
Arpl Elev 506

AL-5162 [USN]

RNAV (GPS) RWY 30
SAN NICOLAS ISLAND NOLF (KNSI)

SAN NICOLAS ISLAND, CALIFORNIA
Orig 18MAY23
CAUTION:
FAC 258° from RCL at 3000 from thld.

Missed approach turn not 400ft above THLD elevation.
RNAV (RNP) Z RWY 2L
JOHN WAYNE/ORANGE COUNTY (SNA)

For uncompensated Baro-VNAV systems, procedure NA below 5°C (41°F) or above 54°C (130°F). GPS required.

MISSED APPROACH: Climb to 800 then climbing left turn to 2600 direct SLI VORTAC and hold.

D-ATIS
126.0
SOCAL APP CON
121.3 263.1
JOHN WAYNE TOWER
126.8 (CTAF) 343.625
GND CON
120.8
CLNC DEL
118.0
CPDLC
122.95
UNICOM
122.95

NEWPO
016°
4 NM

Procedure NA for arrivals at MINOE on V25 southeast bound.

VGSI and RNAV glidespath not coincident (VGSI Angle 3.00°/TCH 75).

GP 3.00°/TCH 55

See planview for multiple IF locations.

CATEGORY
A
B
C
D
RNP 0.30 DA
403-1 1/8
347 (400-1 1/8)

AUTHORIZATION REQUIRED
**RNAV (RNP) Z RWY 20R**

**JOHN WAYNE/ORANGE COUNTY (SNA)**

**MALSR**

**For uncompensated Baro-VNAV systems, procedure NA below 5°C (41°F) or above 54°C (130°F). GPS required.**

**For uncompensated Baro-VNAV systems, procedure NA below 5°C (41°F) or above 54°C (130°F). GPS required.**

**AUTHORIZATION REQUIRED**

**MISSED APPROACH: Climb to 3000 on track 196° to MINOE.**

**See planview for multiple IF locations.**

**VGSI and RNAV glidepath not coincident (VGSI Angle 3.00°/TCH 68).**

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**APP CRS**

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**RNAV (RNP) Z RWY 20R**

**JOHN WAYNE/ORANGE COUNTY (SNA)**

**MALSR**

**For uncompensated Baro-VNAV systems, procedure NA below 5°C (41°F) or above 54°C (130°F). GPS required.**

**For uncompensated Baro-VNAV systems, procedure NA below 5°C (41°F) or above 54°C (130°F). GPS required.**

**AUTHORIZATION REQUIRED**

**MISSED APPROACH: Climb to 3000 on track 196° to MINOE.**

**See planview for multiple IF locations.**

**VGSI and RNAV glidepath not coincident (VGSI Angle 3.00°/TCH 68).**

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**RNAV (RNP) Z RWY 20R**

**JOHN WAYNE/ORANGE COUNTY (SNA)**

**MALSR**

**For uncompensated Baro-VNAV systems, procedure NA below 5°C (41°F) or above 54°C (130°F). GPS required.**

**For uncompensated Baro-VNAV systems, procedure NA below 5°C (41°F) or above 54°C (130°F). GPS required.**

**AUTHORIZATION REQUIRED**

**MISSED APPROACH: Climb to 3000 on track 196° to MINOE.**

**See planview for multiple IF locations.**

**VGSI and RNAV glidepath not coincident (VGSI Angle 3.00°/TCH 68).**

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**RNAV (RNP) Z RWY 20R**

**JOHN WAYNE/ORANGE COUNTY (SNA)**

**MALSR**

**For uncompensated Baro-VNAV systems, procedure NA below 5°C (41°F) or above 54°C (130°F). GPS required.**

**For uncompensated Baro-VNAV systems, procedure NA below 5°C (41°F) or above 54°C (130°F). GPS required.**

**AUTHORIZATION REQUIRED**

**MISSED APPROACH: Climb to 3000 on track 196° to MINOE.**

**See planview for multiple IF locations.**

**VGSI and RNAV glidepath not coincident (VGSI Angle 3.00°/TCH 68).**

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**APP CRS**

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</table>
RNP APCH - GPS. RADAR required.

- **Circling Rwy 20L NA at night.** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 5°C or above 54°C. For inop ALS increase LNAV/VNAV visibility to 1 ½ SM.
- **RVR 1800 authorized with use of FD or AP or HUD to DA.**

**MISSED APPROACH:** Climb to 3000 direct MINOE.

**Language:** English

**Category:** GP 3.00°

**TCH:** 68°

**RNAV (GPS) Y RWY 20R**

**JOHN WAYNE/ORANGE COUNTY (SNA)**

**UNICOM**

**SANTA ANA, CALIFORNIA**

**SANTA ANA, CALIFORNIA**

**MALSR**

**Rwy Idg**

**Apt Elev**

**TDZE**

**D-ATIS**

**SOCAL APP CON**

**JOHN WAYNE TOWER**

**GND CON**

**CLNC DEL**

**CPDLC**

**UNICOM**

**WAAS**

**CH 99502**

**W20A**

**196°**

**Rwy Idg**

**Apt Elev**

**TDZE**

**D-ATIS**

**SOCAL APP CON**

**JOHN WAYNE TOWER**

**GND CON**

**CLNC DEL**

**CPDLC**

**UNICOM**

**Rwy 20L NA at night.** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 5°C or above 54°C. For inop ALS increase LNAV/VNAV visibility to 1 ½ SM.

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

**MISSED APPROACH:** Climb to 3000 direct MINOE.
LOC BC RWY 2L
JOHN WAYNE/ORANGE COUNTY (SNA)

Circling Rwy 20L NA at night.

MISSED APPROACH: Climb to 800 then climbing left turn to 2600 direct SI VORTAC and hold.

DISREGARD GS INDICATIONS.

LOC/ DME I-SNA
111.75
Chan 54 (Y)

APP CRS
016°

Rwy Idg
5700

TDZE
56

Apt Elev
56

D-ATIS
126.0

SOCAL APP CON
121.3 263.1

JOHN WAYNE TOWER
126.8 (CTAF) 343.625

GND CON
120.8

CLNC DEL
118.0

CPDLC
122.95

UNICOM
122.95

SEAL BEACH
115.7 SLI
Chan 104

SANTA ANA, CALIFORNIA
AL-377 (FAA)
23334

BACK COURSE

VGSI and descent angles not coincident
(VGSI Angle 3.00/TCH 75).

800

SU

Disregard GS indications.

560

I-SNA DME ANTENNA

ZUSED
I-SNA
0.5

WUNAD INT
I-SNA
1.8

NEWPO INT
I-SNA
4.5

MINOE
I-SNA
10.9

LOCIZER
111.75
Chan 54 (Y)

MINOE
I-SNA
10.9

CIRCLING
640-1
584 (600-1)

WUNAD FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)

S-LOC 2L
480-1
424 (500-1)

CIRCLING
640-1
584 (600-1)

MISSED APPROACH: Climb to 800 then climbing left turn to 2600 direct SI VORTAC and hold.

115.7 SLI
Chan 104

111.75

SANTA ANA, CALIFORNIA
Amdt 13A 03NOV22

ZUSED ANTENNA
I-SNA DME

33°41′N-117°52′W

JOHN WAYNE/ORANGE COUNTY (SNA)

ELEV 56

TDZE 56

800

2600

Loc BC RWY 2L
JOHN WAYNE/ ORANGE COUNTY (SNA)

SW-3, 30 NOV 2023 to 25 JAN 2024

S-LOC 2L
560-1
504 (600-1)

560-1/3
504 (600-1/3)

560

1.3 NM

2.7 NM

6.4 NM

Category
A
B
C
D

560-1/3
504 (600-1/3)

840-2/1
784 (800-2/1)

1160-3
1104 (1200-3)

560

1.3 NM

2.7 NM

6.4 NM

CATEGORY
A
B
C
D

560-1/3
504 (600-1/3)

840-2/1
784 (800-2/1)

1160-3
1104 (1200-3)

560

1.3 NM

2.7 NM

6.4 NM

504 (600-1)

840-2/1
784 (800-2/1)

1160-3
1104 (1200-3)
Circling Rwy 20L NA at night. For inop ALS, increase S-LDA 20R Cat C/D visibility to RVR 6000.

CIRCLING

REM IN S-LDA-20R CAT C/D VISIBILITY TO RVR 6000.

MISSED APPROACH: Climb to 1000 then climbing right turn to 3000 direct SLI VORTAC and hold.

MISSED APPROACH: Climb to 1000 then climbing right turn to 3000 direct SLI VORTAC and hold.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

ASDE-X in use. Operate transponders with altitude reporting mode and ADS-B (if equipped) enabled on all airport surfaces.

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
NOTE: This departure procedure not authorized for turbo-prop or turbo-jet aircraft.

NOTE: RADAR required.

NOTE: Chart not to scale.

SW-3, 30 Nov 2023 to 25 Jan 2024
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 20R: Turn right heading 222° for vectors to SLI VORTAC, thence.

TAKEOFF RUNWAYS 2L/R (HECTOR or LAKE HUGHES TRANSITION): Turn left heading 332° for vectors to SLI VORTAC, thence.

TAKEOFF RUNWAYS 2L/R (VENTURA TRANSITION): Turn left heading 242° for vectors to LAX VORTAC, thence.

...on (transition) or (assigned route). Maintain 2000 and expect filed altitude 10 minutes after departure.

HECTOR TRANSITION (ANAHM1.HEC): From over SLI VORTAC on SLI R-058 and PDZ R-238 to PDZ VORTAC, then on PDZ R-012 to APLES, then on HEC R-232 to HEC VORTAC.

LAKE HUGHES TRANSITION (ANAHM1.LHS): From over SLI VORTAC on SLI R-058 and PDZ R-238 to POXKU, then on POM R-164 to BAYJY, then on VNY R-095 to DARTS, then on LHS R-139 to LHS VORTAC.

VENTURA TRANSITION (ANAHM1.VTU): From over SLI VORTAC on SLI R-251 to WILMA, then on LAX R-123 to LAX VORTAC, then on LAX R-276 to SADDE, then on VTU R-093 to VTU VOR/DME.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 20R: Climb heading 196° or I-SNA localizer south course to I-SNA 1 DME fix or SLI R-118, turn left heading 177°, cross SLI R-132 then turn right heading 202°, intercept and proceed via SXC R-084 to SXC VORTAC, thence . . . .

. . . . via (transition) or (assigned route). Expect filed altitude ten minutes after departure.

GORMAN TRANSITION (CHANL3.GMN): From over SXC VORTAC on SXC R-344 to LAX VORTAC, then on LAX R-323 to GMN VORTAC.

SAN MARCUS TRANSITION (CHANL3.RZS): From over SXC VORTAC on SXC R-310 and VTU R-129 to VTU VOR/DME, then on VTU R-289 and RZS R-109 to RZS VORTAC.

SHAFTER TRANSITION (CHANL3.EHF): From over SXC VORTAC on SXC R-344 to LAX VORTAC, then on LAX R-337 to LANDO INT, then on EHF R-126 to EHF VORTAC.
NOTE: Restricted to turbojet and turboprop aircraft only.
NOTE: RADAR required.
NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 2L: Climb heading 016° for vectors to ELB VOR/DME, thence . . . . (transition) or (assigned route). Expect filed altitude ten minutes after departure.

LOST COMMUNICATIONS: If not in contact with departure control by ELB R-332, turn right direct ELB VOR/DME, climb to 7000 and proceed on assigned transition or route. Climb to filed altitude ten minutes after departure.

IMPERIAL TRANSITION (ELB4.IPL): From over ELB VOR/DME on ELB R-095 to JARDO, then on PDZ R-135 to WODON, then on MZB R-076 and IPL R-258 to GWIRE, then on IPL R-258 to IPL VORTAC.

OCEANSIDE TRANSITION (ELB4.OCN): From over ELB VOR/DME on ELB R-165 to SUBMR, then on OCN R-282 to OCN VORTAC.

THERMAL TRANSITION (ELB4.TRM): From over ELB VOR/DME on ELB R-095 to ZENAP, then on SXC R-061 to TEYKI, then on TRM R-263 to TRM VORTAC.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 20R: Climb on heading 196° to intercept course 175° to cross STREL at or below 5000, then on track 211° to cross DOLLF at or below 8000, then on track 301° to cross FINZZ at or above 10000, thence . . .

. . . (transition). Maintain 17000. Expect filed altitude 10 minutes after departure.

BEALE TRANSITION (FINZZ3.BEALE)
HAILO TRANSITION (FINZZ3.HAILO)
LAS VEGAS TRANSITION (FINZZ3.LAS)
MISEN TRANSITION (FINZZ3.MISEN)
NNAVY TRANSITION (FINZZ3.NNAVY)

NOTE: Chart not to scale.

TAKEOFF MINIMUMS

Rwy 20R: Standard with a minimum climb of 320' per NM to 560.

NOTE: Chart not to scale.
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 2L:** Climb heading 014° to 560, then left turn on heading 240° or as assigned by ATC for vectors to PIJIN, cross PIJIN at or above 4000, then on track 290° to cross HAWWC at or above 5000, thence . . . .

**TAKEOFF RUNWAY 20R:** Climb heading 194° to 557, then on heading 210° or as assigned by ATC for vectors to PIJIN, cross PIJIN at or above 4000, then on track 290° to cross HAWWC at or above 5000, thence . . . . on (transition). Maintain 6000. Expect higher altitude 10 minutes after departure.

**IKAYE TRANSITION (HAWWC3.IKAYE)**

---

**NOTE:** Radar required.
**NOTE:** RNAV 1.
**NOTE:** DME/DME/IRU or GPS required.
**NOTE:** This procedure not authorized for turbojet aircraft.

---

**TOP ALTITUDE:** 6000

---

**NOTE:** Chart not to scale.
**HHERO THREE DEPARTURE (RNAV)**

**NOTE:** Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 20R:** Climb heading 196° to intercept course 175° to cross STREL at or below 5000, then on track 211° to cross DOLLF at or below 8000, then on depicted route to HHERO, thence . . .

. . .(transition). Maintain altitude assigned by ATC. Expect filed altitude 10 minutes after departure.

**IKAYE TRANSITION (HHERO3.IKAYE)**
**OROSZ TRANSITION (HHERO3.OROSZ)**
**SHAFTER TRANSITION (HHERO3.EHF)**

**TAKEOFF MINIMUMS**

Rwy 20R: Standard with a minimum climb of 500’ per NM to 560.

**TOP ALTITUDE: ASSIGNED BY ATC**

**NOTE:** RNAV-1.
**NOTE:** RADAR required.
**NOTE:** DME/DME/IRU or GPS required.
**NOTE:** OROSZ and SHAFTER TRANSITIONS: turbojet only.
**NOTE:** IKAYE TRANSITION: turbojet and turboprops only.
NOTE: RNAV 1.
NOTE: RADAR required for non-GPS equipped aircraft.
NOTE: DME/DME/IRU or GPS required.
NOTE: MISEN transition restricted to aircraft landing LAS terminal area.
NOTE: Turbojets only.
NOTE: HAILO, LAS and NNAVY transitions: ATC assigned only.

DEPARTURE ROUTE DESCRIPTION
TAKEOFF RUNWAY 2L: Climb to heading 016° to 560, then climb direct LION, then on track 058° to CHOAK, then on depicted route to HOBO, thence . . .
. . . .(transition). Turbojets maintain 17000. Expect filed altitude 10 minutes after departure.

BEALE TRANSITION (HOBO3.BEALE)
HAILO TRANSITION (HOBO3.HAILO)
LAS VEGAS TRANSITION (HOBO3.LAS)
MISEN TRANSITION (HOBO3.MISEN)
NNAVY TRANSITION (HOBO3.NNAVY)

TAKEOFF MINIMUMS
Rwy 2L: Standard with a minimum climb of 500' per NM to 1500.
NOTE: Chart not to scale.

**NOTE:** Restricted to jet and turboprop aircraft only. SHAFTER and GORMAN transitions restricted to jet aircraft only.

**NOTE:** RADAR required.

**TOP ALTITUDE:**
**ASSIGNED BY ATC**

**SW-3, 30 NOV 2023 to 25 JAN 2024**
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 2L: Climb heading 016° to 3000, continue climb to assigned altitude on assigned heading for RADAR vectors to ELB VOR/DME R-215.
Thence . . . .

. . . on (transition) or assigned route. Maintain ATC assigned altitude, expect filed altitude ten minutes after departure.

LOST COMMUNICATIONS: If not in contact with departure control by ELB R-332, turn right direct ELB VOR/DME, climb to 7000 and proceed via assigned transition or route. Climb to filed altitude ten minutes after departure.

DAGGETT TRANSITION (IRV5.DAG): From over ELB VOR/DME on ELB R-215 and SLI R-148 to SLI VORTAC, then on SLI R-022 to POM VORTAC, then on POM R-033 and DAG R-214 to DAG VORTAC.

GORMAN TRANSITION (IRV5.GMN): From over ELB VOR/DME on ELB R-215 and SXC R-055 to SXC VORTAC, then on SXC R-344 to LAX VORTAC, then on LAX R-323 to GMN VORTAC.

SAN MARCUS TRANSITION (IRV5.RZS): From over ELB VOR/DME on ELB R-215 and SXC R-055 to SXC VORTAC, then on SXC R-310 and VTU R-129 to VTU VOR/DME, then on VTU R-289 and RZS R-109 to RZS VORTAC.

SEAL BEACH TRANSITION (IRV5.SLI): From over ELB VOR/DME on ELB R-215 and on SLI R-148 to SLI VORTAC.

SHAFTER TRANSITION (IRV5.EHF): From over ELB VOR/DME on ELB R-215 and SXC R-055 to SXC VORTAC, then on SXC R-344 to LAX VORTAC, then on LAX R-337 and EHF R-126 to EHF VORTAC.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 2L: Climb heading 016° to 560, then direct
LIION, then on track 058° to CHOAK, then on depicted route to
MIKAA thence. . . .

. . . . (transition). Maintain 14000, expect filed altitude within
10 minutes of departure.

HHERO TRANSITION (MIKAA1.HHERO)

NOTE: Turbojets and turboprops only.
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required for non-GPS equipped aircraft.
NOTE: Turbojets and turboprops only.

TAKEOFF MINIMUMS
Rwy 2L: Standard with a minimum climb of 500’ per NM to 1500.

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 20R: Climb heading 196° or I-SNA localizer south course to I-SNA 1 DME fix or SLI R-118, turn left heading 177° for vectors to MUSEL INT. Thence . . . .

. . . . on (transition) or (assigned route). Expect filed altitude ten minutes after departure.

DAGGETT TRANSITION [MUSEL8.DAG]: From over MUSEL INT on SLI R-150 to SLI VORTAC, then on SLI R-022 to POM VORTAC, then on POM R-033 to GARDY INT and on DAG R-214 to DAG VORTAC.

OCEANSIDE TRANSITION [MUSEL8.OCN]: From over MUSEL INT on OCN R-282 to OCN VORTAC.

SEAL BEACH TRANSITION [MUSEL8.SLI]: From over MUSEL INT on SLI R-150 to SLI VORTAC.

THERMAL TRANSITION [MUSEL8.TRM]: From over MUSEL INT on SXC R-061 to TEYKI INT and TRM R-263 to TRM VORTAC.
NOTE: RADAR required.
NOTE: RNAV-1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet and turboprop only.
NOTE: Parachute jumping all hours, 14000' and below, north of route between PIGGN and FNCHH.
NOTE: Aircraft may be RADAR vectored to DANAH or PIGGN.

TAKEOFF MINIMUMS
Rwy 2L: Standard with minimum climb of 500 feet per NM to 1300.
Rwy 20R: Standard.

TOP ALTITUDE:
13000
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 2L: Climb on heading 016° to 560, then direct LLON, then on track 058° to CHOAK, then on track 133° to cross JAABB at or above 4100 and at or below 210K, then on track 120° to cross MANBY at or above 7000, then on track 105° to cross PIGGN at or above 9000, thence. . . .

TAKEOFF RUNWAY 20R: Climb on heading 196° to intercept course 175° to cross STREL at or below 5000, then on track 140° to TANGL, then on track 103° to cross SHIRR at or above 7000, then on track 073° to DANAH, then on track 048° to cross PIGGN at or above 9000, thence. . . .

. . . . on (transition) maintain 13000. Expect filed altitude 10 minutes after departure.

AVRRY TRANSITION (PIGGN3.AVRRY)
CNERY TRANSITION (PIGGN3.CNERY)
OTAYY TRANSITION (PIGGN3.OTAYY)
TCATE TRANSITION (PIGGN3.TCATE)
NOTE: RNP 1.
NOTE: RF required.
NOTE: GPS required.
NOTE: RADAR required.
NOTE: Turboprop only.
NOTE: Parachute jumping all hours, 14000 and below, north of route between STAYY and FNCHH.
NOTE: Do not file-To be assigned by ATC.

TOP ALTITUDE: 13000

SW-3, 30 NOV 2023 to 25 JAN 2024
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 20R: Climb on course 196° to cross BIKKL at or above 556, then left turn to HEFAY, then right turn to cross PAPAU at or below 5000 and at or below 220K, then left turn to cross LRREN at or below 5000, then left turn to HTCHR, then on track 140° to TANGL, then on track 103° to cross SHIRR at or above 7000, then on track 073° to DANAH, then on track 048° to cross STAYY at or above 9000, thence. . . .

. . . .on (transition). Maintain 13000. Expect filed altitude 10 minutes after departure.

AVRRY TRANSITION (STAYY4.AVRRY)
CNERY TRANSITION (STAYY4.CNERY)
OTAYY TRANSITION (STAYY4.OTAYY)
TCATE TRANSITION (STAYY4.TCATE)
Circling Rwy 15R NA at night. VDP NA when using Oxnard altimeter setting. When local altimeter setting not received, use Oxnard altimeter setting and increase all DA/MDA 100 feet, and S-LOC Cat C visibility to RVR 5000, Cat D visibility to RVR 6000. Increase Circling Cat A visibility ½ mile, Cat C visibility ½ mile. For inop ALS when using Oxnard altimeter setting, increase S-ILS 7 all Cats visibility to RVR 5000. Circling NA for Cats C and D north of Rwy 7-25.

# RVR 1800 authorized with use of FD or AP or HUD to DA (NA when using Oxnard altimeter setting).

**ATIS**  
Santa Barbara App Con  
120.55 319.15  
(151°-329°) Cat C visibility to RVR 5000, Cat D visibility to RVR 6000. Increase Circling Cat A visibility ½ mile, Cat C visibility ½ mile. For inop ALS when using Oxnard altimeter setting, increase S-ILS 7 all Cats visibility to RVR 5000. Circling NA for Cats C and D north of Rwy 7-25.

**LAT **  
132.65  
Santa Barbara TWR  
119.7 (CTAF)  
254.35

**GND CON**  
121.7

**CNC DEL**  
132.9

**UNICOM**  
122.95

**CLIMB TO 700 THEN CLIMBING RALLY TO 4000 AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4000.**
**RNAV (GPS) RWY 7**

**SANTA BARBARA MUNI (SBA)**

For LNAV/VNAV fly visual to airport 074°-2.5 NM, when using Oxnard altimeter setting 2.9 NM.
**VOR or GPS RWY 25**

**SANTA BARBARA MUNI (SBA)**

**Amdt 6E 03NOV22**

**34°26'N-119°50'W**

**Helicopter visibility reduction below 1/4 SM NA.** When local altimeter not received, use Oxnard altimeter setting and increase all MDA 100 feet and all Cats B and C visibility 1/4 mile. Circling Rwy 15R NA at night. Circling NA for Cats C and D north of Rwy 7-25.

<table>
<thead>
<tr>
<th>ATIS</th>
<th>SANTA BARBARA APP CON</th>
<th>SANTA BARBARA TOWER*</th>
</tr>
</thead>
<tbody>
<tr>
<td>132.65</td>
<td>120.55 319.15</td>
<td>119.7 (CTAF) 254.35</td>
</tr>
</tbody>
</table>

**MISSING APPROACH:** Climbing left turn to 4000 via heading 205° and GVO R-127 to GVO R-185.

**FAF to MAP 6 NM**

**Category**

<table>
<thead>
<tr>
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<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tr>
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<td>920-1¼</td>
<td>910 (1000-1¼)</td>
<td>920-3</td>
<td>920-2¾</td>
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<tr>
<td></td>
<td></td>
<td>910 (1000-2¾)</td>
<td>910 (1000-2¾)</td>
<td>960-3</td>
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**CIRCLING**

<table>
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<th>920-1¼</th>
<th>910 (1000-1¼)</th>
<th>920-2¾</th>
<th>920-3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>910 (1000-2¾)</td>
<td>910 (1000-2¾)</td>
<td>950 (1000-3)</td>
<td></td>
</tr>
</tbody>
</table>
**FLOUT FIVE DEPARTURE**

**CHART NOT TO SCALE.**

**NOTE:** IFR departure Rwys 33L/R not authorized.

**SANTA BARBARA DEP CON**

**120.55**

**CLNC DEL**

**132.65**

**GND CON**

**132.9**

**SAN MARCUS TOWER**

**119.7 (CTAF)**

**GAVIOTA DEP CON**

**113.8 GVO**

**CHAN 85**

**114.9 RZS**

**CHAN 96**

**450**

**VENTURA DEP CON**

**116.55 VTU**

**CHAN 112(Y)**

---

**TAKEOFF RUNWAYS 7 and 15L/R:** Turn right, thence...

**TAKEOFF RUNWAY 25:** Turn left, thence...

...intercept and proceed via RZS R-197 to FLOUT INT. Thence via (transition or assigned route.)

**GAVIOTA TRANSITION (FLOUT5.GVO):** From over FLOUT INT via GVO R-141 to GVO VORTAC. Cross RZS R-251 at or above 6000’.

**SAN MARCUS TRANSITION (FLOUT5.RZS):** From over FLOUT INT via RZS R-197 to RZS VORTAC. Cross GVO R-092 at or above 6000’.

**VENTURA TRANSITION (FLOUT5.VTU):** From over FLOUT INT via VTU R-266 to VTU VOR/DME.

---

**FLOUT FIVE DEPARTURE**

(SFLOUT5.FLOUT) 17JUL97
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 7: Climb on heading 075° to 520, then right turn direct OHSHN, then right turn direct CORRK, then on track 254° to KNNZI, then on track 331° to cross GAUCH at or above 6000, thence . . . .

TAKEOFF RUNWAYS 15L/R: Climb on heading 152° to 520, then right turn direct CORRK, then on track 254° to KNNZI, then on track 331° to cross GAUCH at or above 6000, thence . . . .

TAKEOFF RUNWAY 25: Climb on heading 255° to 520, then direct GRPES, then on track 255° to GRRRR, then on track 320° to cross GAUCH at or above 6000, thence . . . .

. . . .on (transition). Maintain ATC assigned altitude. Expect final altitude 10 minutes after departure.

MORRO BAY TRANSITION (GAUCH2.MQO)

NOTE: Chart not to scale.
NOTE: IFR departure Rwys 33L/R not authorized.

NOTE: Minimum (ATC) climb of 385' per NM to 6000.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 7 and 15L/R: Turn right, intercept I-SBA west course to HABUT INT, thence via GVO R-163 to GVO VORTAC. Cross RZS R-251 at or above 6000'.

TAKEOFF RUNWAY 25: Intercept I-SBA west course to HABUT INT, thence via GVO R-163 to GVO VORTAC. Cross RZS R-251 at or above 6000'.
NOTE: IFR departure Rwys 33L/R not authorized.

NOTE: Chart not to scale.

KWANG FIVE DEPARTURE

SANTA BARBARA, CALIFORNIA
(SBA)

KWANG FIVE DEPARTURE

SANTA BARBARA MUNI

070° 5000 (14)

V

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 7: Climbing right turn to intercept GVO VORTAC R-099 to KWANG INT thence . . .

TAKEOFF RUNWAYS 15L/R and 25: Climbing left turn to intercept GVO VORTAC R-099 to KWANG INT thence . . .

. . . via (transition) or (assigned route).

HENER TRANSITION (KWANG5.HENER): From over KWANG INT via FIM R-250 to HENER INT.

SAN MARCUS TRANSITION (KWANG5.RZS): From over KWANG INT via RZS R-119 to RZS VORTAC. Cross GVO R-092 at or above 6000'.

GINNA TRANSITION (KWANG5.GINNA): From over KWANG INT via CMA R-271 to CMA VOR/DME then via CMA R-072 to GINNA.

NOTE: IFR departure Rwys 33L/R not authorized.

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

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 7: Climb on heading 075° to 520, then turn right direct MISHN, thence . . . .

TAKEOFF RUNWAYS 15L/R: Climb on heading 152° to 520, then direct EDDEN, then on track 079° to MISHN, thence . . . .

TAKEOFF RUNWAY 25: Climb on heading 255° to intercept course 175° to SRRRA, then on track 121° to EDDEN, then on track 079° to MISHN, thence . . . .

. . . on (transition). Maintain 8000. Expect final altitude 10 minutes after departure.

BOILE TRANSITION (MISHN3.BOILE)
KPTIN TRANSITION (MISHN3.KPTIN)
NNAVY TRANSITION (MISHN3.NNAVY)
SOUTHERN OR EAST ROUTE OF FLIGHT:
TAKEOFF RUNWAY 7: Climb heading 075° to 500, then climbing right turn on heading 120°. Thence.
TAKEOFF RUNWAYS 15L/15R: Climb heading 152°. Thence.
TAKEOFF RUNWAY 25: Climb heading 255°. Thence.
. . . . . On RADAR vectors, maintain 3000. Expect further clearance to filed altitude 5 minutes after departure.

NORTHERN OR WEST ROUTE OF FLIGHT:
TAKEOFF RUNWAY 7: Climb heading 075° to 500, then climbing right turn on heading 200°. Thence.
TAKEOFF RUNWAYS 15L/R: Climb heading 152° to 500, then climbing right turn on heading 200°. Thence.
TAKEOFF RUNWAY 25: Climb heading 255°. Thence.
. . . . . On RADAR vectors, maintain 3000. Expect further clearance to filed altitude 5 minutes after departure.
ATIS 121.15
SANTA BARBARA APP CON* 124.15 327.8
SANTA MARIA TOWER* 118.3 (CTAF) 239.25
GND CON 121.9
UNICOM 122.95

SANTA MARIA, CALIFORNIA
Amdt 10B 24FEB22
SW-3, 30 NOV 2023 to 25 JAN 2024

ILS or LOC RWY 12
SANTA MARIA PUB/CAPT G ALLAN HANCOCK FLD (SMX)
34°54'N-120°27'W

FAF to MAP 5 NM

CIRCLING
860-1 1000-1 1420-3 1520-3
599 (600-1) 739 (800-1) 1159 (1200-3) 1259 (1300-3)

GS 3.00°
TCH 55

HILDY OM
113.05 GLJ

WINCH INT
MQO

LOCALIZER
108.9
112.4

I-SMX 6.5

One Minute
Holding Pattern

ELEV 261
TDZE 230

MISSING APCH FIX

I-SMX 15.4

Rwy Idg 8004
TDZE 230
Apt Elev 261

Rwy Idg 8004
TDZE 230
Apt Elev 261

ATIS 121.15
SANTA BARBARA APP CON* 124.15 327.8
SANTA MARIA TOWER* 118.3 (CTAF) 239.25
GND CON 121.9
UNICOM 122.95

SANTA MARIA, CALIFORNIA
Amdt 10B 24FEB22
SW-3, 30 NOV 2023 to 25 JAN 2024

ILS or LOC RWY 12
SANTA MARIA PUB/CAPT G ALLAN HANCOCK FLD (SMX)
34°54'N-120°27'W

FAF to MAP 5 NM

CIRCLING
860-1 1000-1 1420-3 1520-3
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GS 3.00°
TCH 55

HILDY OM
113.05 GLJ

WINCH INT
MQO

LOCALIZER
108.9
112.4

I-SMX 6.5

One Minute
Holding Pattern

ELEV 261
TDZE 230

MISSING APCH FIX

I-SMX 15.4

Rwy Idg 8004
TDZE 230
Apt Elev 261

Rwy Idg 8004
TDZE 230
Apt Elev 261

ATIS 121.15
SANTA BARBARA APP CON* 124.15 327.8
SANTA MARIA TOWER* 118.3 (CTAF) 239.25
GND CON 121.9
UNICOM 122.95

SANTA MARIA, CALIFORNIA
Amdt 10B 24FEB22
SW-3, 30 NOV 2023 to 25 JAN 2024

ILS or LOC RWY 12
SANTA MARIA PUB/CAPT G ALLAN HANCOCK FLD (SMX)
34°54'N-120°27'W

FAF to MAP 5 NM

CIRCLING
860-1 1000-1 1420-3 1520-3
599 (600-1) 739 (800-1) 1159 (1200-3) 1259 (1300-3)
Circling Rwy 2 NA at night. Baro-VNAV and VDP NA when using San Luis Obispo altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 42°C (107°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use San Luis Obispo altimeter setting and increase LPV DA to 489 feet; increase LNAV/VNAV DA to 622 feet and all visibilities to RVR 3500; increase all MDAs 60 feet and LNAV visibility Cat C/D to RVR 5500. For inop MALSR, increase LNAV Cat C/D visibility to 1 1/2 mile. # RVR 1800 authorized with use of FD or AP or HUD to DA, NA when using Vandenberg altimeter setting.

ATIS 121.15  SANTA BARBARA APP CON* 124.15 327.8  SANTA MARIA TOWER* 118.3 (CTAF) 239.25  GND CON 121.9  UNICOM 122.95

MISSED APCH FIX

5 NM

MORRO BAY

MORRO BAY

MQO

MISSED APPROACH:
Climb to 800 then climbing left turn to 5000 direct MQO VORTAC and hold.

SAN LUIS OBISPO ALTMETER SETTING AND INCREASE LNAV/VNAV DA TO 622 FEET AND ALL VISIBILITIES TO RVR 3500; INCREASE ALL MDAS 60 FEET AND LNAV VISIBILITY CAT C/D TO RVR 5500. FOR INOP MALSR, INCREASE LNAV CAT C/D VISIBILITY TO 1 1/2 MILE. # RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA, NA WHEN USING VANDENBERG ALTIMETER SETTING.

ATIS 121.15  SANTA BARBARA APP CON* 124.15 327.8  SANTA MARIA TOWER* 118.3 (CTAF) 239.25  GND CON 121.9  UNICOM 122.95

MISSED APCH FIX

5 NM

MORRO BAY

MORRO BAY

MQO

MISSED APPROACH:
Climb to 800 then climbing left turn to 5000 direct MQO VORTAC and hold.

SAN LUIS OBISPO ALTMETER SETTING AND INCREASE LNAV/VNAV DA TO 622 FEET AND ALL VISIBILITIES TO RVR 3500; INCREASE ALL MDAS 60 FEET AND LNAV VISIBILITY CAT C/D TO RVR 5500. FOR INOP MALSR, INCREASE LNAV CAT C/D VISIBILITY TO 1 1/2 MILE. # RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA, NA WHEN USING VANDENBERG ALTIMETER SETTING.

ATIS 121.15  SANTA BARBARA APP CON* 124.15 327.8  SANTA MARIA TOWER* 118.3 (CTAF) 239.25  GND CON 121.9  UNICOM 122.95

MISSED APCH FIX

5 NM

MORRO BAY

MORRO BAY

MQO

MISSED APPROACH:
Climb to 800 then climbing left turn to 5000 direct MQO VORTAC and hold.

SAN LUIS OBISPO ALTMETER SETTING AND INCREASE LNAV/VNAV DA TO 622 FEET AND ALL VISIBILITIES TO RVR 3500; INCREASE ALL MDAS 60 FEET AND LNAV VISIBILITY CAT C/D TO RVR 5500. FOR INOP MALSR, INCREASE LNAV CAT C/D VISIBILITY TO 1 1/2 MILE. # RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA, NA WHEN USING VANDENBERG ALTIMETER SETTING.
RNAV (GPS) RWY 30
SANTA MARIA PUB/CAPT G ALLAN HANCOCK FLD (SMX)

ATIS 121.15  SANTA BARBARA APP CON* 124.15 327.8
SANTA MARIA TOWER* 118.3 (CTAF) 239.25
GND CON 121.9  UNICOM 122.95

MISSED APPROACH: Climb to 4000 direct
HANNU and on track 294° to WINCH
and hold.

DME/DME RNP-0.3 NA. When local altimeter setting not received, use
San Luis County Rgnl altimeter setting and increase all MDA 60 feet.
Rwy 30 helicopter visibility reduction below 1 SM NA. Straight-in
Rwy 30 NA at night, Circling Rwy 2, 30 NA at night.

Final approach course offset 15.00°.

Procedure NA for arrivals at GVO
VORTAC on V27 southeast bound.

Category

<table>
<thead>
<tr>
<th>LNAV MDA</th>
<th>CIRCLING</th>
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<tbody>
<tr>
<td>A</td>
<td>B</td>
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<tr>
<td>1600-1½</td>
<td>1600-1½</td>
</tr>
<tr>
<td>1339 (1400-1½)</td>
<td>1339 (1400-1½)</td>
</tr>
</tbody>
</table>

* Rwys 30-16 NA at night, Circling Rwys 2, 30 NA at night.
* Rwy 30 helicopter visibility reduction below 1 SM NA.

SW-3, 30 NOV 2023 to 25 JAN 2024

Orig E 07DEC17

34°54’40.7"N 120°27’51"W

SW-3, 30 NOV 2023 to 25 JAN 2024

Orig E 07DEC17

34°54’40.7"N 120°27’51"W
Circling to Rwy 2 NA at night. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use San Luis Obispo altimeter setting and increase all MDA 60 feet.

**LOC/DME BC-A**

**SANTA MARIA PUB/CAPT G ALLAN HANCOCK FLD (SMX)**

**ATIS**
- 121.15

**SANTA BARBARA APP CON***
- 124.15

**SANTA MARIA TOWER***
- 118.3 (CTAF)
- 239.25

**GND CON**
- 121.9

**UNICOM**
- 122.95

**MISSED APPROACH:** Climb to 2100 direct GLJ VOR and hold.

- Use I-SMX DME when on LOC course.
- Disregard glide slope indications.

**CATEGORY**
- A
  - 1100-1¼
  - 839 (900-1¼)
- B
  - 1420-3
  - 1159 (1200-3)
- C
  - 1540-3
  - 1279 (1300-3)
- D
  - 0.7
  - 1.5
  - 3.8 NM
  - 5.8 NM

**AL-379 (FAA) 23334**

**SANTA MARIA, CALIFORNIA**

**AMDT 10F 24FEB22**

**34°54'N-120°27'W**
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
**BUELT FOUR DEPARTURE**

**BUELT FOUR DEPARTURE**

**NOTE:** Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAYS 2, 12, 30:** Climbing right turn heading 190° to intercept GLJ R-130 to BUELT.

**FELLOWS TRANSITION (BUELT4.FLW):** From over BUELT INT on FLW R-202 to FLW VOR/DME.

**FRAMS TRANSITION (BUELT4.FRAMS):** Left turn heading 280° at BUELT INT to intercept GLJ R-130 to GLJ VOR, then on GLJ R-290 to PISMO INT, then on PRB R-204 to FRAMS INT.

**GAVIOTA TRANSITION (BUELT4.GVO):** From over BUELT INT on GVO R-292 to GVO VORTAC.

**SAN MARCUS TRANSITION (BUELT4.RZS):** From over BUELT INT on RZS R-275 to RZS VORTAC.

**BUELT FELLOWS TRANSITION**

Rwy 2: Standard with minimum climb of 342' per NM to 1900.
Rwy 12: Standard with minimum climb of 410' per NM to 1900.
Rwy 20: NA - Restricted airspace (R-2516).
Rwy 30: Standard with minimum climb of 317' per NM to 1900.
Procedure NA for arrivals at DARTS on V186-597 eastbound, V459-597 northwest bound and on V459 southeast bound.

MISSED APPROACH: Climb to 600 then climbing right turn to 5000 direct CAPOB and on track 283° to SADDE and hold, continue climb-in-hold to 5000.

* LNAV only

** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 5°C (41°F) or above 14°C (58°F). Rwy 21 helicopter visibility reduction below 1 SM NA.
Missed Approach: Climb to 600 then climbing left turn to 5500 direct NATJU and track 311° to JAASK and track 266° to SESPE and hold.

*Missed approach requires minimum climb of 300 feet per NM to 2400.

Final approach course offset 18.53°.
RNAV (GPS) Z RWY 3
SANTA MONICA MUNI (SMO)

ATIS 119.15
SOCAL APP CON 135.05 317.5
SANTA MONICA TOWER* 120.1 (CTAF) 257.8
GND CON 121.9
UNICOM 122.95

Final approach course offset 29.95°.

SW-3, 30 NOV 2023 to 25 JAN 2024

MISSED APPROACH: Climb to 600 then climbing left turn to 5000 direct DARTS and hold, do not exceed 175K when continuing climb-in-hold to 5000.

*Missed approach requires minimum climb of 290 feet per NM to 3800.

DME/DME RNP-0.3 NA.

Rwy 3 helicopter visibility reduction below 1 SM NA.

DME/DMR RNSTO-0.3 NA.

Category

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<th>C</th>
<th>D</th>
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<td>MDA* 460-1</td>
<td>296 (300-1)</td>
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<td>LP</td>
<td>MDA 1260-1</td>
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<td>1096 (1100-1½)</td>
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<td>1216 (1300-1½)</td>
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SANTA MONICA, CALIFORNIA
Amdt 1 01FEB18

34°01'N-118°27"W
Circling NA northwest of Rwy 3-21.

Procedure NA for arrivals at ELMOO on V186 southeast bound.
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
TOPANGA THREE DEPARTURE (OBSIDACLE)

TAKEOFF MINIMUMS
Rwy 3: Standard with a minimum climb of 330' per NM to 1100, or 1400-3 for VCOA.
Rwy 21: Standard.

TAKEOFF OBSTACLE NOTES
Rwy 3: Wall 8' from DER, 352' right of centerline, 188' MSL.
Wall 15' from DER, 337' left of centerline, 191' MSL.
Fence, light poles, vertical structures beginning 15' from DER, 290' right of centerline, up to 189' MSL.
Walls beginning 45' from DER, 337' left of centerline, up to 192' MSL.
Fence, light pole beginning 112' from DER, 308' left of centerline, up to 194' MSL.
Trees beginning 764' from DER, 478' right of centerline, up to 213' MSL.
Tree 995' from DER, 619' right of centerline, 217' MSL.
Tree 1063' from DER, 236' left of centerline, 206' MSL.
Tree 1102' from DER, 289' left of centerline, 207' MSL.
Trees beginning 1126' from DER, 402' left of centerline, up to 214' MSL.
Rwy 21: Pole, tree beginning 39' from DER, 358' right of centerline, up to 13' AGL/154' MSL.
Pole 213' from DER, 437' right of centerline, 30' AGL/174' MSL.
Trees, pole beginning 409' from DER, 390' right of centerline, up to 191' MSL.
Trees, poles, transmission line beginning 1328' from DER, 507' right of centerline, up to 215' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 3: Climbing right turn to 5000 on SMO R-210 and on LAX R-276 to SADDE INT.

TAKEOFF RUNWAY 21: Climb to 5000 on SMO R-210 and on LAX R-276 to SADDE INT.

VCOA RUNWAY 3: Obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross SMO VOR/DME at or above 1400, then continue climb to 5000 on SMO R-210 and LAX R-276 to SADDE INT.
NOTE: Chart not to scale.

SW-3, 30 NOV 2023 to 25 JAN 2024
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 3: Climb on heading 033° to 680, then direct to cross TREKK at or above 4000, then on track 036° to DARTS, then on track 329° to cross CHOII at or above 7100, thence . . .

. . . .on assigned transition, maintain FL230. Expect filed altitude 10 minutes after departure.

BLYTHE TRANSITION (CHOII3.BLH)
COREZ TRANSITION (CHOII3.COREZ)
CSTRO TRANSITION (CHOII3.CSTRO)
FILLMORE TRANSITION (CHOII3.FIM)
HAILO TRANSITION (CHOII3.HAILO)
HECTOR TRANSITION (CHOII3.HEC)
LAS VEGAS TRANSITION (CHOII3.LAS)
MISEN TRANSITION (CHOII3.MISEN)
NOTE: Chart not to scale.

NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required.
NOTE: Turbojet and turboprop aircraft only.
NOTE: Turbojets only on HEC, MISEN, and LAS transitions.
NOTE: HAILO transition ATC assigned only.
NOTE: CSTRO, COREZ transitions: Maintain at or below 250K unless otherwise directed by ATC.
NOTE: Turboprop only on IKAYE transition. (CTRUS-WOPPR-IKAYE).
NOTE: Turbojet only on STOKD and SCTRR transitions. (CTRUS-DARRK-FIXIT-IKAYE...)
NOTE: MISEN TRANSITION restricted to aircraft landing Las Vegas terminal area.

TOP ALTITUDE:
IKAYE TRANSITION: AS ASSIGNED BY ATC;
ALL OTHER TRANSITIONS: FL230

TAKEOFF MINIMUMS
Rwy 3: NA-ATC.
Rwy 21: Standard with a minimum climb of 500' per NM to 680,
then 310' per NM to 3800

NOTE: Chart not to scale.

NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required.
NOTE: Turbojet and turboprop aircraft only.
NOTE: Turbojets only on HEC, MISEN, and LAS transitions.
NOTE: HAILO transition ATC assigned only.
NOTE: CSTRO, COREZ transitions: Maintain at or below 250K unless otherwise directed by ATC.
NOTE: Turboprop only on IKAYE transition. (CTRUS-WOPPR-IKAYE).
NOTE: Turbojet only on STOKD and SCTRR transitions. (CTRUS-DARRK-FIXIT-IKAYE...)
NOTE: MISEN TRANSITION restricted to aircraft landing Las Vegas terminal area.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 21: Climb on heading 213° to intercept course 260° to WRASH, then on track 262° to cross CTRUS at or above 5000, thence . . . .

. . . . on assigned transition, IKAYE transition maintain altitude as assigned by ATC, all other transitions maintain FL230. Expect filed altitude 10 minutes after departure.

COREZ TRANSITION (CTRUS4.COREZ)
CSTRO TRANSITION (CTRUS4.CSTRO)
HAILO TRANSITION (CTRUS4.HAILO)
HECTOR TRANSITION (CTRUS4.HEC)
IKAYE TRANSITION (CTRUS4.IKAYE)
LAS VEGAS TRANSITION (CTRUS4.LAS)
MISEN TRANSITION (CTRUS4.MISEN)
SCTRR TRANSITION (CTRUS4.SCTRR)
STOKD TRANSITION (CTRUS4.STOKD)
NOTE: Chart not to scale.

PEVEE SIX DEPARTURE (RNAV)

NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required.
NOTE: Turbojet aircraft only.
NOTE: All aircraft expect RADAR vectors to PEVEE prior to PEEER.

TAKEOFF MINIMUMS
Rwy 3: NA - ATC.
Rwy 21: Standard with a minimum climb of 500' per NM to 680.

TOP ALTITUDE:
CLEEE and CNERY TRANSITIONS: 17000;
OTAYY and TCATE TRANSITIONS: FL200

NOTE: All aircraft expect RADAR vectors to PEVEE prior to PEEER.

PEVEE SIX DEPARTURE (RNAV)

SW-3, 30 NOV 2023 to 25 JAN 2024
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 21: Climb on heading 213° to intercept course 260° to WRASH, then on track 255° to PEEER, then on track 181° to SPRRW, then on track 130° to PEVEE, thence . . .

. . . on assigned transitions CLEE and CNERY maintain 17000, OTAYY and TCATE transitions maintain FL200, expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: In the event of lost communications, proceed via assigned transition.

CLEEE TRANSITION (PEVEE6.CLEE)
CNERY TRANSITION (PEVEE6.CNER)
OTAYY TRANSITION (PEVEE6.OTAY)
TCATE TRANSITION (PEVEE6.TCATE)
NOTE: Chart not to scale.

TAKEOFF MINIMUMS
Rwy 3: Standard with a minimum climb of 500' per NM to 680, then 275' per NM to 4300.
Rwy 21: Standard with a minimum climb of 500' per NM to 680, then 310' per NM to 3800.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 3: Climb heading 033° to 680, then direct to cross TREKK at or above 4000, then on track 036° to DARTS, then on track 329° to cross CHOII at or above 7100, thence . . . .

TAKEOFF RUNWAY 21: Climb heading 213° to intercept course 260° to WRASH, then on track 262° to cross CTRUS at or above 5000, then on track 350° to cross DZINE at or above 6000, then on track 042° to SEAEM, then on track 008° to cross CHOII at or above 7100, thence . . . .

. . . . on assigned transition maintain altitude assigned by ATC, expect filed altitude 10 minutes after departure.

DAGGETT TRANSITION (SMO3.DAG)
HECTOR TRANSITION (SMO3.HEC)
RNAV (GPS) RWY 8
SANTA YNEZ/KUNKLE FLD (IZA)

Misplaced Approach: Climbing left turn to 5000 direct ORCUT and hold.

- Rwy 8 helicopter visibility reduction below 3/4 SM NA.
- Circling Rwy 8 NA at night.

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<tr>
<th>Category</th>
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<th>B</th>
<th>C</th>
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<tbody>
<tr>
<td>LNAV MDA</td>
<td>1180-1</td>
<td>506 (600-1)</td>
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<td>CIRCLING</td>
<td>1220-1</td>
<td>1340-1</td>
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</table>

RNAV (GPS) RWY 8
Circling Rwy 8 NA at night.
Rwy 8 helicopter visibility reduction below 3/4 SM NA.

Holding Pattern

- 5100 3600
- 2800 084°
- 1400 084°
- 3600 090° (8.2)
- 3600 NoPT

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<tr>
<th>Holding Pattern</th>
<th>4 NM</th>
<th>3.00° TCH 31</th>
<th>1.6 NM to RW08</th>
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<tr>
<th>Rwys 8 and 26</th>
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<td>REIL Rwy 8-26</td>
<td>477</td>
<td>34°36'N-120°05'W</td>
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</table>
**RNAV (GPS)-A**

**SANTA YNEZ/KUNKLE FLD (IZA)**

**Misssed Approach:** Climb to 5000 direct YEWRU and track 309° to ORCUT and hold.

- **AWOS-3PT**
  - 118.075

- **Santa Barbara APP CON**
  - 124.15 327.8

- **Unicom**
  - 122.8 (CTAF)

- **Procedure NA for arrivals at EMUXY on V12 eastbound.**

- **Procedure NA for arrivals at ZIQOR on V25-186 and T257 southeast bound.**

- **RNAV (GPS)-A**

**Category:** A

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<th>Category</th>
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<td>1380-1</td>
<td>706 (800-1)</td>
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**Santa Ynez/Kunkle Fld (IZA)**

Amdt 1 24MAR22

SW-3, 30 Nov 2023 to 25 Jan 2024

34°36'N-120°05'W
Baro-VNAV NA when using Bakersfield altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.5°C (5°F) or above 54°C (130°F). When local altimeter setting not received, use Bakersfield altimeter setting and increase LPV and LNAV/VNAV DA to 694 feet and LNAV/VNAV visibility to ¾ all Cats; increase all MDA 40 feet. DME/DME RNP.0.3 NA.

Night Landing Rwy 17, 35, 8, 26 NA.

MISSED APPROACH: Climb to 3000 direct TIPVE and on track 199° to MARIC and hold.
Circling to Rwy 17, 35, 8 and 26 NA at night. When
local altimeter setting not received, use Bakersfield
altimeter setting and increase all MDAS 40 feet and
increase Cat C visibility to 1½.

MISSED APPROACH: Climb to 4000 on EHF VORTAC
R-269 to SCRAP INT/EHF 14.7 DME and hold, continue
climb-in-hold to 4000.

AWOS-3
121.125

BAKERSFIELD APP CON *
126.45 270.3

CTAF
122.9

*1040 when using Bakersfield
altimeter setting.
Circling NA SW of Rwy 11R-29L. When local altimeter setting not received, except for operators with approved weather reporting service, use Los Angeles Intl altimeter setting and increase all DA to 405 feet and increase all MDA 40 feet; increase S-LOC 29R and Circling Cat C visibility ½ SM. For inop ALS, increase S-ILS 29R all Cat visibility to ½ SM. For inop ALS when using Los Angeles Intl altimeter setting increase S-ILS 29R all Cat visibility to ½ SM. VDP NA when using Los Angeles Intl altimeter setting.

Procedure NA for arrivals at SU VORTAC on VB-64 eastbound.

Procedure NA for arrivals at SU VORTAC on VB-64 eastbound.
RNAV (GPS) RWY 11L
ZAMPERINI FLD (TOA)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 3°C (38°F) or above 54°C (130°F). Circling NA southwest of Rwy 11R-29L. Baro-VNAV and VDP NA when using Los Angeles Intl altimeter setting. DME/DME RNP-0.3 NA. When local altimeter setting not received, except for operators with approved weather reporting service, use Los Angeles Intl altimeter setting: increase LPV DA to 390 feet and LNAV/VNAV DA to 714 feet and all MDA 40 feet; increase LNAV/VNAV all Cats visibility, LNAV Cat C visibility and Circling Cat C visibility ¼ SM. Rwy 11L helicopter visibility reduction below ¾ SM NA.

Procedure NA for arrivals at INISH on V8-V64 westbound.

**RNAV only.**

<table>
<thead>
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<th>D</th>
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<td>LPV DA</td>
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<td>594 (600-1¾)</td>
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**TSO:**

- RNAV (GPS) RWY 11L
- RNAV (GPS) RWY 11L
- RNAV (GPS) RWY 11L
- RNAV (GPS) RWY 11L

**AWT:**

- RNAV (GPS) RWY 11L
- RNAV (GPS) RWY 11L
- RNAV (GPS) RWY 11L
- RNAV (GPS) RWY 11L

**AVC:**

- RNAV (GPS) RWY 11L
- RNAV (GPS) RWY 11L
- RNAV (GPS) RWY 11L
- RNAV (GPS) RWY 11L

**AVC:**

- RNAV (GPS) RWY 11L
- RNAV (GPS) RWY 11L
- RNAV (GPS) RWY 11L
- RNAV (GPS) RWY 11L

**AVC:**

- RNAV (GPS) RWY 11L
- RNAV (GPS) RWY 11L
- RNAV (GPS) RWY 11L
- RNAV (GPS) RWY 11L
Circling NA southwest of Rwy 11R-29L. When local altimeter setting not received, except for operators with approved weather reporting service, use Los Angeles Intl altimeter setting and increase all MDA 40 feet and increase S-11L Cat A visibility and Circling Cat C visibility 1/2 SM. Rwy 111 helicopter visibility reduction below 1/2 SM NA.

MISSED APPROACH: Climbing left turn to 3000 on heading 075° and on LAX VORTAC R-123 to WILMA INT/LAX 13 DME and hold, continue climb-in-hold to 3000.

Procedure NA for arrivals at SMO VORTAC on T245-247-249 northwest bound.
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 11L/R: Climb heading 114° to 2700 for vectors to PIJIN, cross PIJIN at or above 4000, then on track 290° to cross HAWWC at or above 5000, thence . . . .

. . . . on (transition). Maintain 6000. Expect higher altitude 10 minutes after departure.

IKAYE TRANSITION (HAWWC3.IKAYE)

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: This procedure not authorized for turbojet aircraft.

NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Chart not to scale.
RNAV (GPS) RWY 26
TWENTYNINE PALMS (TNP)

Use Palm Springs Intl altimeter setting; when not received, procedure NA.
Circling NA south of Rwy 8-26. DME/DME RNP 0.3 NA. Circling Rwy 8
NA at night. * Missed approach requires minimum climb of 425 feet per
NM to 3900.

**MISSING APPROACH:** Climbing right
turn to 6000 direct WISIR and hold.

**FINAL APPROACH COURSE**
offset 7.1°.

**4800**

**265°**

**5 NM**

**6000**

**WISIR**

**265°**

**085°**

Procedure NA for arrivals at TNP VORTAC
airway radials 028 CW 043.

MISSED APPROACH: Climbing right
turn to 6000 direct WISIR and hold.
TWENTYNINE PALMS, CALIFORNIA

VOR RWY 26
TWENTYNINE PALMS (TNP)

When Palm Springs Intl altimeter setting not received, procedure NA. Circling NA south of Rwy 8-26. Use Palm Springs Intl altimeter setting. Circling Rwy 8 NA at night.

MISSED APPROACH: Climbing right turn to 5900 direct TNP VORTAC and hold, continue climb-in-hold to 5900.

TWENTYNINE PALMS, CALIFORNIA

Amdt 2C 24MAR22

34°08’N-115°57’W
RPN APCH

\[ \text{Circling NA} \text{ northwest of Rwy 6-24. Rwy 6 helicopter visibility reduction below 3/4 SM NA. Circling Rwy 24 NA at night. When local altimeter setting not received, use Ontario altimeter setting and increase all MDA 100 feet.} \]

\[ \text{MISSED APPROACH: Climb to 1900 then climbing right turn to 5500 direct ADAMM and hold, continue climb-in-hold to 5500.} \]

\[ \text{Procedure NA for arrivals at ELMOO on V186 westbound.} \]

\[ \text{VGSI and descent angles not coincident (VGSI Angle 4.00/TCH 34).} \]
<table>
<thead>
<tr>
<th>VOR/TAC POM</th>
<th>APP CRS</th>
<th>TDZE</th>
<th>Apt Elev</th>
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**Circling NA northwest of Rwy 6-24.** Procedure NA at night. When local altimeter setting is not received, use Ontario altimeter setting and increase all MDA 100 feet and all visibilities ½ SM. Rwy 24 helicopter visibility reduction below 1 SM NA.

**MISSED APPROACH:** Climbing right turn to 4000 via heading 105° and PDZ R-315 to PDZ VORTAC and hold.

---

### Holding Pattern

**One Minute Holding Pattern**

- **3700 ft NoPT**
- **1 min 074° (6.3)**
- **R-233**
- **233° 1 min**
- **R-233**
- **258° 078°**
- **R-078**

**VGSI and descent angles not coincident (VGSI Angle 4.00/TCH 34).**

---

### Category A

<table>
<thead>
<tr>
<th>CATEGORY</th>
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<th>B</th>
<th>C</th>
<th>D</th>
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<td>796 (800-1)</td>
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---

### FAA Information

- **AWOS-3P**
  - 119.525
- **SOCAL APP CON**
  - 125.5
  - 349.0
- **UNICOM**
  - 123.0 (CTAF)

---

**UPLAND, CALIFORNIA**

Orig-C: 26MAR20

**492**
MISSED APPROACH: Climb to 1700 then climbing right turn to 4600 on heading 210° and on SMO VOR/DME R-267 and on VTU VOR/DME R-087 to VTU VOR/DME and hold.

For inop MALSR, increase S-ILS all Cats visibility to 2 SM. When local altimeter setting not received, use Burbank altimeter setting and increase DA to 1480 feet and all Cats visibility to 1¾ SM.

GS 3.50° TCH 49

SANTA MONICA 110.8 SMO Chan 45

VENTURA VTU 116.55 Chan 112(Y)

FILLMORE 112.6 FIM Chan 72

AL-552 (FAA)
Circling Rwy 16L NA at night.

MISSED APPROACH: Climbing right turn to 4000 on VNY VOR/DME R-101 to AMTRA INT/20.2 DME and hold.

ATIS 127.55
SOCAL APP CON 120.4 360.6 (NORTH) 134.2 338.2 (WEST)

VOR-AMTRA

PROCEED PROCEDURE NA for arrivals at FIM VORTAC on V518 westbound.

One Minute Holding Pattern

CATEGORY A B C D
CIRCLING 1500-1 698 (700-1) 1500-2 698 (700-2) 2060-3 1258 (1300-3)

Procedure NA for arrivals at FIM VORTAC on V518 westbound.
AIRPORT DIAGRAM

ANNUAL RATE OF CHANGE
JANUARY 2020

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
TAKEOFF MINIMUMS
Rwy 16L: Standard with minimum climb of 380’ per NM to 2600.
Rwy 16R: Standard with minimum climb of 450’ per NM to 2600.
Rwys 34L/R: Standard with minimum climb of 480’ per NM to 4200.

DEPARTURE ROUTE DESCRIPTION
TAKEOFF RUNWAYS 16L/R: Climb on heading 163° until VNY 2.2 DME, then climbing left turn heading 113°, FOR RADAR VECTORS to VNY R-095 to ADAMM, thence. . . .
TAKEOFF RUNWAYS 34L/R: Climbing left turn heading 253°, FOR RADAR VECTORS to VNY R-095 to ADAMM, thence. . . .
. . . .on (transition) or (assigned route). Maintain ATC assigned altitude, expect filed altitude/flight level 10 minutes after departure.

LOST COMMUNICATIONS: If not in contact with departure control within 3 NM, turn left heading 093° to intercept VNY R-095 to ADAMM INT maintain 5500’ or as assigned.

NOTE: Chart not to scale.

NOTE: RADAR required.
NOTE: DME required.
NOTE: Cross VNY DME 1.5 DME south at or below 1750.

NOTE:  Chart not to scale.

V
**CANOGA THREE DEPARTURE**

**TOP ALTITUDE: ASSIGNED BY ATC**

**NOTE:** RADAR required.

**NOTE:** For all Rwys: Do not intercept any departure radial until advised by ATC.

**NOTE:** DME required.

**NOTE:** Cross VNY DME 1.5 DME south at or below 1750.

**TAKEOFF MINIMUMS**

- **Rwy 16L:** Standard with minimum climb of 380' per NM to 8300. Fillmore Transition standard with minimum climb of 380' per NM to 5000.
- **Rwy 16R:** Standard with minimum climb of 450' per NM to 8300. Fillmore Transition standard with minimum climb of 450' per NM to 5000.
- **Rwy 34L/R:** Standard with minimum climb of 370' per NM to 8300. Fillmore Transition standard with minimum climb of 370' per NM to 5000.

**NOTE:** Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 16L/R: Climb on heading 163° until VNY 2.2 DME, then climbing right turn heading 213°, FOR RADAR VECTORS to IPIHO, thence . . .

TAKEOFF RUNWAYS 34L/R: Climbing left turn heading 253°, FOR RADAR VECTORS to IPIHO, thence . . .

. . . on (transition) or (assigned route). Maintain ATC assigned altitude, expect filed altitude/flight level 10 minutes after departure.

LOST COMMUNICATIONS: If not in contact with departure control within 3 NM:
Rwys 16L/R intercept the LAX R-323 and GMN R-142. Then as assigned.
Rwys 34L/R intercept VNY R-255. Then as assigned.

AVENAL TRANSITION (CANOG3.AVE): From over IPIHO on LAX R-323 and GMN R-142 to CASTA, then on GMN R-142 to GMN VORTAC, then on GMN R-310 to COREZ, then on AVE R-086 to AVE VOR/DME.

FILLMORE TRANSITION (CANOG3.FIM): From over IPIHO on VNY R-255 to SUANA, then on FIM VORTAC R-120 to FIM VORTAC.

GORMAN TRANSITION (CANOG3.GMN): From over IPIHO on LAX R-323 and GMN R-142 to CASTA, then on GMN R-142 to GMN VORTAC.
NOTE: Chart not to scale.

TOP ALTITUDE: FL230

NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: Turbojet and high performance turboprop aircraft only.
NOTE: HAILO transition ATC only.
NOTE: Cross DER/VNY VOR/DME 1.5 DME south at or below 1750.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16R: Climb on heading 164° to 1303, then direct PPRRY, then on heading 110° or as assigned by ATC, then on vectors to cross BSHOW at or above 6000, then on track 337° to HARYS, thence . . . .

. . . . on (transition) maintain FL230. Expect filed altitude 10 minutes after departure.

BLYTHE TRANSITION (HARYS4.BLH)
HAILO TRANSITION (HARYS4.HAILO)
HECTOR TRANSITION (HARYS4.HEC)
LAS VEGAS TRANSITION (HARYS4.LAS)
MISEN TRANSITION (HARYS4.MISEN)
**HAYEZ NINE DEPARTURE (RNAV)**

**HAYEZ NINE DEPARTURE (RNAV)**

**TOP ALTITUDE:**
FL230

**TAKEOFF MINIMUMS**
Rwy 34L: Standard with minimum climb of 500’ per NM to 3900.

**NOTE:** RNAV 1.
**NOTE:** DME/DME/IRU or GPS required.
**NOTE:** RADAR required for non-GPS equipped aircraft.
**NOTE:** MISEN transition restricted to aircraft landing LAS terminal area.
**NOTE:** HAILO transition ATC assigned only.
**NOTE:** COREZ and CSTRO transitions maintain at or below 250K unless otherwise directed by ATC.
**NOTE:** BLH, HAILO, HEC, LAS transitions turbojet, and high performance turboprops only.
**NOTE:** MISEN, CSTRO, COREZ transitions turbojet only.

(NARRATIVE ON FOLLOWING PAGE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 34L: Climb on heading 344° to 1303, then climb direct to cross CONDS at or above 2400, then on track 337° to cross TRAFF at or above 3500, then on track 338° to cross LYDEY at or above 5000, then on track 338° to cross HAYEZ at or above 6100 and at or below 250K, thence . . . .

. . . on (transition) maintain FL230. Expect filed altitude ten minutes after departure.

BLYTHE TRANSITION (HAYEZ9.BLH)
COREZ TRANSITION (HAYEZ9.COREZ)
CSTRO TRANSITION (HAYEZ9.CSTRO)
FILLMORE TRANSITION (HAYEZ9.FIM)
HAILO TRANSITION (HAYEZ9.HAILO)
HECTOR TRANSITION (HAYEZ9.HEC)
LAS VEGAS TRANSITION (HAYEZ9.LAS)
MISEN TRANSITION (HAYEZ9.MISEN)
SW-3, 30 NOV 2023 to 25 JAN 2024
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 16L/R: Climb on heading 163° until VNY 2.2 DME, then climbing left turn heading 113°, FOR RADAR VECTORS to IPIHO, thence. . . .

TAKEOFF RUNWAYS 34L/R: Climbing left turn heading 253°, FOR RADAR VECTORS to IPIHO thence. . . .

. . . on (transition) or (assigned route). Maintain ATC assigned altitude, expect filed altitude/flight level 10 minutes after departure.

LOST COMMUNICATIONS: If not in contact with departure control within 5 DME from VNY VOR/DME, Rwys 16L/R; turn left heading 313° to intercept the LAX R-342; and continue the published procedure.

DAGGETT TRANSITION (NUAL1.DAG): From over IPIHO on LAX R-323 to TWINE, then on VTU R-046 to LANGE, then on PMD R-218 to PMD VORTAC, then on PMD R-067 to ETHER, then on DAG R-238 to DAG VORTAC.

PALMDALE TRANSITION (NUAL1.PMD): From over IPIHO on LAX R-323 to TWINE, then on VTU R-046 to LANGE, then on PMD R-218 to PMD VORTAC.
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 16R:** Climb on heading 164° to 1303, then climb direct PPRRY, then on heading 110° or as assigned by ATC, then on vectors to cross BSHOW at or above 5300, then on track 343° to cross CCHUM at or above 6800, then on track 003° to cross KIMMO at or above 7100, then on track 041° to SLAPP, then on track 055° to JARZO, then on track 065° to VVERA, thence . . .

. . . on (transition) maintain 13000. Expect filed altitude 10 minutes after departure.

**DAGGETT TRANSITION (RSCO3.DAG)**

**HECTOR TRANSITION (RSCO3.HEC)**
NOTE: Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 34L**: Climbing left turn heading 250° to 4000, expect vectors to cross CCHUM at or above 6800, then on track 003° to cross KIMMO at or above 7000, then on depicted route to VVERA, thence . . . .

. . . . on (transition). Maintain 13000. Expect filed altitude 10 minutes after departure.

**DAGGETT TRANSITION (VVERA2.DAG)**

**HECTOR TRANSITION (VVERA2.HEC)**
WLKKR FOUR DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16R: Climb on heading 164° to 1303, then climb direct PPRRY, then on heading 210°, or as assigned by ATC, then on vectors to cross LUVVY at or above 6000 then on track 331° to cross WLKKR at or above 8000 thence. . . .

. . . .on (transition) maintain FL230. Expect filed altitude 10 minutes after departure.

COREZ TRANSITION (WLKKR4.COREZ)
CSTRO TRANSITION (WLKKR4.CSTRO)
OROSZ TRANSITION (WLKKR4.OROSZ)

NOTE: Chart not to scale.
Use extreme caution for extensive UAS ops in the vicinity.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 12: Climb on track 120° to 2000. Then climbing left turn to intercept the GVO VORTAC R-274 inbound to GVO. Cross GVO at or above 6000. Expect vectors to first filed fix/route prior to GVO.
VANDENBERG THREE DEPARTURE (VBG3 • MQO)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 30: Climb on track 305° to intercept MQO VORTAC R-154 at or above 1300 direct to MQO. Cross MQO at or above 4000. Expect vectors to first filed fix/route prior to MQO.

Use extreme caution for extensive UAS ops in the vicinity.
RNAV (GPS) RWY 17
SOUTHERN CALIFORNIA LOGISTICS (VCV)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C [-4°F] or above 43°C (109°F). DME/DME RNP-0.3 NA. When local altitude setting not received, use Edwards AFB altitude setting and increase all DA and MDA 160 feet. Increase all visibilities ¾ mile. VDP and Baro-VNAV NA when using Edwards AFB altitude setting. Circling NA for Cats C and D southeast of Rwy 35 and 21.

MISSED APPROACH: Climb to 6000 direct SPERG and via 257° track to RLONG and via 294° track to ETHER and hold.

ATIS * 135.475
JOSHUA APP CON 124.55 363.0
VICTORVILLE TOWER * 118.35 (CTAF) 282.225
GND CON 124.45

Procedure NA for arrivals at BASAL via V12 northeast bound.

AIRPORTS

ELEV 2885 D TDZE 2825

SOUTHERN CALIFORNIA LOGISTICS (VCV)

RNAV (GPS) RWY 17

SW-3, 30 Nov 2023 to 25 Jan 2024

WAAS CH 77523 W17A
APP CRS 166°
Rwy Idg 13052
TDZE 2825
Apt Elev 2885

23194

518
INSTRUMENT TAKEOFF OR APPROACH PROCEDURE CHARTS

RATE OF CLIMB/DESCENT TABLE

(ft per min)

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 exists upon breakout. Care should always be exercised so that minimum descent altitude and missed approach point are not exceeded.

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