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

INSTRUMENT APPROACH PROCEDURE CHARTS

IFR TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

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

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

Some ODPs, which are established solely for obstacle avoidance, require a climb in visual conditions to cross the airport, a fix, or a 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 (APV)

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

DEPARTURE PROCEDURE:

Rwys 4, 22, climb straight ahead to 2300 then proceed on course.
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 546' 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, 10' AGL/478' MSL.
Catenary 2540' from DER, 482' right of centerline, 111' AGL/482' MSL.
Rwy 34, trees beginning 604' from DER, 341' right of centerline, up to 15' AGL/399' MSL.
Hanger 372' from DER, 545' left of centerline, 20' AGL/404' MSL.

MEADOWS FIELD (BFL)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 26MAY16 (16147) (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.
Fence 14' from DER, 215' right of centerline, 4' AGL/466' MSL.
Rwy 30R, 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, 259' 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:
Rwys 8, 17, 35, turn right.
Rwy 26, turn left, 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.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

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 PROCEDURES:
Rwy 8, climbing right turn heading 120° to intercept IPL VORTAC R-009 to 3000 and climb on course.
Trees, beginning 81' from DER, 314' left of centerline, up to -106' MSL.
Trees, beginning 274' from DER, 44' right of centerline, up to -124' MSL.
Vehicles on road, beginning 380' from DER, 384' right of centerline, up to -116' MSL.
Trees, beginning 457' from DER, 362' left of centerline, up to -96' 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:
Rwy 8s 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/737' 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.

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

**CLIFF HATFIELD MEMORIAL (CLR)**

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 12OCT17 (17285) (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' AGL/-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 FIELD) (KNFG)**

**OCEANSIDE, CA**

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 03JAN19 (19003)

DEPARTURE PROCEDURE:

**Rwys 3, 21**, diverse departures not authorized.

TAKEOFF OBSTACLE NOTES:

**Rwy 3**, palm tree 2186' from DER, 670' right of cntrln, 73' AGL/155' MSL.

Palm tree 2108' from DER, 783' right of cntrln, 61' AGL/149' MSL.

Palm tree 2088' from DER, 675' right of cntrln, 64' AGL/147' MSL.

Palm tree 2192' from DER, 572' right of cntrln, 67' AGL/150' MSL.

Palm tree 2117' from DER, 770' right of cntrln, 59' AGL/143' MSL.

Palm tree 2186' from DER, 650' right of cntrln, 73' AGL/155' MSL.

Palm tree 2157' from DER, 729' right of cntrln, 46' AGL/132' MSL.

Palm tree 2186' from DER, 619' right of cntrln, 63' AGL/155' MSL.

Palm tree 2185' from DER, 640' right of cntrln, 66' AGL/148' MSL.

Palm tree 2143' from DER, 746' right of cntrln, 46' AGL/132' MSL.

Terrain 3976' from DER, 1566' left of cntrln, 181' MSL.

Terrain 4256' from DER, 1298' left of cntrln, 177' MSL.

Cellphone twr 1.5 NM from DER, 2669' right of cntrln, 100' AGL/672' MSL.

Pylon 2.3 NM from DER, 538' left of cntrln, 0' AGL/518' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

CARLSBAD, CA
MC CLELLAN-Palomar (CQ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 5  21JUL16  (16203)  (FAA)
TAKEOFF MINIMUMS:
Rwy 6, std. w/min. climb of 255' per NM to 1700 or 2700-3 for climb in visual conditions.
DEPARTURE PROCEDURE:
Rwy 6, climbing left turn heading 245° to 3000 before proceeding on course. Do not exceed 210 Kias until established on heading 245°.
Rwy 24, climb heading 245° to 2400 before proceeding on course.
VCOA:
Obtain ATC approval for climb in visual conditions 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 426' MSL.
Trees beginning 4032' from DER, 489' left of centerline, up to 439' MSL.
Trees, light poles beginning 4040' from DER, 318' right of centerline, up to 445' MSL.
Light poles beginning 4706' 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 5493' from DER, 753' right of centerline, 480' 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.
Rwy 24, terrain beginning 25' from DER, 287' right of centerline, up to 339' MSL.
Bush 36' from DER, 276' right of centerline, 340' MSL.
Tree 106' from DER, 520' left of centerline, 342' MSL.

CHINA LAKE NAWS (ARMITAGE FLD)(KNID)
RIDGE CREST, CA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
24MAY18  (18144)
Diverse departures not authorized, 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 3126' 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, 264' left of centerline, 49' AGL/2295' MSL.
Pylon 3133' from DER, 52' right of centerline, 49' AGL/2289' MSL.
Pylon 3133' 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 410' 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.
CON’T

16 JUL 2020 to 13 AUG 2020
CHINO, CA (CON’T)
CHINO (CNO) (CON’T)
DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 1  15OCT15  (15288)  (FAA)
   Rw 3, heading as assigned by ATC; requires minimum climb of 250’ per NM to 4300.
   Rwys 8L, 8R, heading as assigned by ATC; requires minimum climb of 370’ per NM to 4100.
   Rw 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 3  26MAY94  (94146)  (FAA)
TAKEOFF MINIMUMS:
   Rw 7, 1000-2 or std. with a min. climb of 310’ per NM to 1700.
   Rw 25, 600-2 or std. with a min. climb of 280’ per NM to 1200.
DEPARTURE PROCEDURE:
   Rw 7, climbing left turn.
   Rw 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 NE, 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:
   Rw 32, 400-1 or std. with a min. climb rate of 390’ per NM to 400.
DEPARTURE PROCEDURE:
   Rw 14, Climb via heading 140° and EHF VORTAC R-324 to 3000 before proceeding on course.
   Rw 32, climb via heading 320° 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
Rw 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
10OCT19  (19283)
   Rwys 5L/R, RADAR required, climb 340’ per NM to 5500, track inbound on EDW R-223 to EDW VORTAC, then out EDW R-043. Climb as instructed, expect RADAR vectors after passing 4500 or climb on course, cross 15 NM from ARP at or above 4500.
   Rwys 23L/R, RADAR and DME required. CAT A/B/C track outbound EDW R-223. At 12 DME turn right heading 020°, intercept EDW R-247 to EDW VORTAC. Climb as instructed, expect RADAR vectors after passing 4500 or climb on course, cross 15 NM from ARP at or above 4500. CAT D/E track outbound EDW R-223. At 12 DME turn right, intercept EDW R-247 to EDW VORTAC. Climb as instructed, expect RADAR vectors after passing 4500 or climb on course, cross 15 NM from ARP at or above 4500.
**EL CENTRO NAF (VRACIU FIELD) (KNJK)**

**EL CENTRO, CA**

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 18JUN20 (20170)

TAKEOFF MINIMUMS:

Rwys 8, 12, 26, 30, 2000-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

Rwys 8, 12, 26, for climb in visual conditions, cross El Centro airport at or above 1800 before proceeding on course. When executing VCOA, notify ATC prior to departure.

TAKEOFF OBSTACLE NOTES:

**Rwy 8**, road 182' from DER, 99' left of cntrln, 10' AGL/-37' MSL.

Road 183' from DER, 3' right of cntrln, 10' AGL/-37' MSL.

Road 183' from DER, 100' right of cntrln, 10' AGL/-37' MSL.

**Rwy 12**, terrain 0' from DER, 500' left of cntrln, -39' MSL.

Terrain 0' from DER, 500' right of cntrln, -36' MSL.

Fence 199' from DER, 305' left of cntrln, 8' AGL/-34' MSL.

Fence 289' from DER, 213' left of cntrln, 8' AGL/-34' MSL.

Road 278' from DER, 100' left of cntrln, 10' AGL/-35' MSL.

Road 372' from DER, 95' right of cntrln, 10' AGL/-35' MSL.

Road 338' from DER, 8' left of cntrln, 10' AGL/-35' MSL.

Fence 504' from DER, 3' right of cntrln, 8' AGL/-34' MSL.

**Rwy 26**, terrain 0' from DER, 500' left of cntrln, -45' MSL.

Road 278' from DER, 95' left of cntrln, 10' AGL/-35' MSL.

Road 372' from DER, 100' right of cntrln, 10' AGL/-35' MSL.

Road 338' from DER, 8' right of cntrln, 10' AGL/-35' MSL.

Pole 153' from DER, 884' right of cntrln, -3' 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 526' from DER, 267' 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.

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.

Tower 1661' from DER, 548' left of centerline, 357' MSL.

Tower 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)

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.

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.
Hopper 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/128' 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.

HAWTHORNE, CA
JACK NORTHROP FIELD/HAWTHORNE MUNI (HHR)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 5 20JUN19 (19171) (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 76' 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.
Buildings, 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, trees beginning 3192' from DER, 172' right of centerline, 62' AGL/160' MSL.
Poles, 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 FIELD/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.

**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.
HEMET, CA
HEMET-RYAN (HMT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 10NOV16 (16315) (FAA)
TAKEOFF MINIMUMS:
  Rwy 5, Std. w/min. climb of 440’ per NM to 3500, or 1700-3 for climb in visual conditions. Aircraft shall advise ATC prior to executing the VCOA.
  Rwy 23, std. w/min. climb of 495’ per NM to 3000, or 1700-3 for climb in visual conditions.
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:
  Rwy 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/-11’ 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.
  Rwy 26, multiple obstruction lights on poles beginning 1509’ from DER, 15’ left of centerline, up to 60’ AGL/3’ MSL.
  Obstruction light on pole 1511’ from DER, 59’ right of centerline, 59’ AGL/-2’ MSL.
  Rwy 32, obstruction light on tank, 823’ from DER, 574’ right of centerline 110’ AGL/53’ 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.
IMPERIAL BEACH NOLF (REAM FIELD) (KNRS)
IMPERIAL BEACH, CA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
20AUG15 (15232)
Rwy 8, 9, 26, departures not authorized.
Rwy 27, diverse departure not authorized. Departures authorized for military rotorcraft only. Climb to 2000 via heading 274° to intercept NRS TACAN R-273. Cross NRS 1.5 DME at or above 800. Minimum ATC climb rate of 600'NM till 800 with takeoff occurring NLT 3038' prior to DER or cross DER at or above 320.
TAKEOFF OBSTACLE NOTES:
Rwy 27, pylon 186' inward of DER, 30' AGL/43' MSL.
Pylon 79' inward of DER, 30' AGL/42' MSL.
Pylon 61' inward of DER, 30' AGL/51' MSL.
Pylon 30' inward of DER, 39' AGL/50' MSL.
Pylon 2' from DER, 32' AGL/43' MSL.
Pylon 2' from DER, 32' AGL/42' MSL.
Light pole 12' from DER, 40' MSL.
Terrain 50' from DER, 11' MSL.
Terrain 63' from DER, 11' MSL.
Fence 96' from DER, 9' AGL/10' MSL.
Tree 141' from DER, 34' AGL/44' MSL.
Pylon 228' from DER, 30' AGL/42' MSL.
Pylon 305' from DER, 39' AGL/48' MSL.

INYOKERN, CA
INYOKERN (IYK)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 04SEP03 (03247) (FAA)
TAKEOFF MINIMUMS:
Rwys 2, 10, 15, 28, 33, NA.
DEPARTURE PROCEDURE:
Rwy 20, use LAKE HUGHES RNAV DEPARTURE.

LA VERNE, CA
BRACKETT FIELD (POC)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6 03JAN19 (19003) (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, sign beginning 187' from DER, 462' left of centerline, up to 1030' MSL.
Vehicles on road, sign 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
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

LA VERNE, CA (CON’T)
BRACKETT FIELD (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.
Tree, transmission line beginning 3447’ from DER, 982’ left of centerline, up to 1100’ 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.

Tree 1495’ 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 1026’ 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 1066’ 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
ORIG-A 24SEP09 (09267) (FAA)

DEPARTURE PROCEDURE:
Climb southeast bound on R-299 to PMD VORTAC. Depart PMD at published MCA for direction of flight.
TAKEOFF OBSTACLE NOTES:
Rwy 6, trees beginning 1170’ from DER, 590’ right of centerline, up to 44’ AGL/2374’ MSL.
LOMPOC, CA
LOMPOC (LPC)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2A 04FEB16 (16035) (FAA)
TAKEOFF MINIMUMS:
Rwy 7, std. w/min. climb of 425’ per NM to 1400, or 1300-3 for climb in visual conditions.
DEPARTURE PROCEDURE:
Rwy 7, climbing right turn. For climb in visual conditions: cross Lompoc Airport eastbound at or above 1200 MSL.
Rwy 25, turn right heading 130°.
All aircraft climb to 6000 via GVO R-278 to GVO VORTAC. Aircraft departing GVO R-120 CW R-020 climb on course, all others climb in GVO holding pattern (NW, right turns, 127° inbound) to depart GVO VORTAC at or above MEA for route of flight.
TAKEOFF OBSTACLE NOTES:
Rwy 7, trees 3583’ from DER, 2.3 NM right of centerline, 50’ AGL/889’ MSL.
Trees 1.2 NM from DER, 2.2 NM right of centerline, 50’ AGL/791’ MSL.
Trees 1.6 NM from DER, 1.9 NM right of centerline, 50’ AGL/743’ MSL.

LONG BEACH, CA
LONG BEACH/DAUGHERTY FIELD (LGB)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6A 19JUL18 (18200) (FAA)
TAKEOFF MINIMUMS:
Rwy 26L, std. w/min. climb to 225’ per NM to 2300.
Rwy 26R, std. w/min. climb to 230’ per NM to 2300.
DEPARTURE PROCEDURE:
Rwys 8L, 8R, climb heading 076° to 800, then climbing right turn direct SLI VORTAC then on SLI VORTAC R-210 to PADDR INT.
Rwy 12, climb heading 121° to intercept SLI VORTAC R-210 to PADDR INT.
Rwys 26L, 26R, climb heading 256° to 800, then climbing left turn on heading 200 and LAX VORTAC R-145 to PADDR INT.
Rwy 30, climb 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 50’ AGL/99’ 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’ right 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.
Tower 746’ from DER, 566’ right of centerline, 26’ AGL/58’ 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, 890’ 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.
Tree 3004’ from DER, 1205’ left of centerline, 109’ MSL.
Spires 3095’ from DER, 1181’ right of centerline, 98’ AGL/118’ MSL.
Tree 3394’ from DER, 1063’ left of centerline, 95’ AGL/121’ MSL.
CON’T
LONG BEACH, CA (CON’T)
LONG BEACH/DAUGHERTY FIELD (CON’T)

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.
Building and sign beginning 1040’ from DER, 235’ left of centerline, up to 118’ MSL.
Building 1112’ from DER, 745’ left 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 3909’ 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.
Trees and poles 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.
Poles and vehicles on road beginning 475’ from DER, 15’ left of centerline, up to 96’ MSL.
Tree, poles, vehicles 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 1308’ 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 2604’ 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, 134’ 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, 69’ 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.
Trees and poles beginning 1308’ from DER, 52’ right of centerline, up to 35’ AGL/103’ 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, 802’ right of centerline, 66’ AGL/139’ MSL.
Trees beginning 2738’ from DER, 417’ left of centerline, up to 142’ MSL.
Poles beginning 2902’ 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)

Rwy 8L, 8R, 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), CA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
22JUN17  (17173)
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.
Rsws 4L/R, climbing right turn.
Rsws 22L/R, 300-1 or std with a min climb of 230 ft/NM to 400, climbing left turn.
TAKEOFF OBSTACLE NOTES:
Rwy 4R, trees 1062' from DER, 615' left of cntrln, 66' AGL/100' 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...
Rwys 25L/R, turbojet climb to 2000 heading 251°, at the SMO R-154 turn left heading 200°, 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.
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.
Approach light and light pole beginning 797' from DER, 305' left of centerline, up to 39' AGL/148' MSL.
Vehicles on road beginning 12' from DER, 170' left of centerline, up to 131' MSL.
Vehicles on road, fence, tower, railroad, 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.
Runway light, pole, and building beginning 700' from DER, 53' left of centerline, up to 58' AGL/152' 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.

**Rwy 30**, pole 29’ from DER, 277’ left of centerline, 20’ AGL/1024’ 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, 1118’ right of centerline, 54’ AGL/1098’ MSL.

MARCH ARB (KRIV)

RIVERSIDE, CA

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6 24MAY18 (18144)

TAKEOFF MINIMUMS:

**Rwys 12, 30**, not authorized.

**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 se 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 within 4.5 NM of March ARB, 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.

Aircraft shall advise ATC prior to executing VCOA. 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.

**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.

**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 3312’ from DER, 1197’ left of cntrln, 40’ AGL/525’ MSL.

Landfill 3388’ from DER, 1023’ left of cntrln, 40’ AGL/525’ MSL.

Pylon 3879’ from DER, 1225’ left of cntrln, 40’ AGL/525’ MSL.

Pylon 3087’ from DER, 1363’ left of cntrln, 50’ AGL/505’ MSL.
MOJAVE, CA
MOJAVE AIR AND SPACE PORT (MHV)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2A 26JUN14 (14177) (FAA)
TAKEOFF MINIMUMS:
Rwys 4, 8, 12, NA - restricted airspace.
Rwys 22, 26, std. w/min. climb of 415' per NM to 6600 or 4100-3 for climb in visual conditions.
Rwy 30, std. w/min. climb of 510' per NM to 5600 or 4100-3 for climb in visual conditions.
DEPARTURE PROCEDURE:
Rwy 22, climb to 8000 heading 218° and LHS R-023 to LHS VORTAC.
Rwy 26, climbing left turn to 8000 heading 218° and LHS R-023 to LHS VORTAC.
Rwy 30, climbing left turn to 8000 heading 200° and LHS R-023 to LHS VORTAC.
VCOA:
Rwy 22, obtain ATC approval for climb in visual conditions when requesting IFR clearance. Climb in visual conditions cross Mojave airport southwest bound at or above 6800, then climb to 8000 on LHS R-023 to LHS VORTAC.
Rwy 26, obtain ATC approval for climb in visual conditions when requesting IFR clearance. Climb in visual conditions cross Mojave airport at or above 6800, then climb to 8000 on LHS R-023 to LHS VORTAC.
Rwy 30, obtain ATC approval for climb in visual conditions when requesting IFR clearance. Climb in visual conditions cross Mojave airport at or above 6800, then climb to 8000 on LHS R-023 to LHS VORTAC.
TAKEOFF OBSTACLE NOTES:
Rwy 22, antenna on tower 2260' from DER, 812' right of centerline, 60' AGL/2838' MSL.
Sign 283' from DER, 466' right of centerline, 10' AGL/2788' MSL.
Rwy 26, antenna on tower 1797' from DER, 615' left of centerline, 58' AGL/2838' MSL.
Sign 32' from DER, 341' right of centerline, 8' AGL/2788' MSL.
Tree 258' from DER, 120' left of centerline, 8' AGL/2788' MSL.
Rwy 30, multiple poles beginning 3083' from DER, 306' right of centerline, up to 91' AGL/2892' MSL.
Road and railroad beginning 1241' from DER, right and left of centerline, up to 44' AGL/2845' MSL.
Bush 305' from DER, 457' right of centerline, 16' AGL/2817' 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° inbound) 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 2800-3 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.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

NORTH ISLAND NAS (HALSEY FIELD) (KNZY)
SAN DIEGO, CA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
15SEP16 (16259)

DEPARTURE PROCEDURE:
Rwy 11, diverse departures authorized 131° CW 184°. Cross DER at or above 25' AGL (51' MSL). 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 DP.

TAKEOFF OBSTACLE NOTES:
Rwy 11, Numerous trees left and right of runway centerline from 9' prior to DER to 2018', 33' MSL to 95' MSL.
Golf ball fencing 74' AGL/88' MSL, 2226' from DER, 1215' left of centerline. Tree 8' inward of DER, 429' right of centerline, 48' AGL/74' MSL.
Tree 11' from DER, 525' right of centerline, 46' AGL/73' MSL.
Multiple trees 159' from DER, 433' right of centerline, 43' AGL/71' MSL.
Tree 91' from DER, 460' right of centerline, 28' AGL/55' MSL.
Palm 90' from DER, 468' right of centerline, 27' AGL/54' MSL.
Rwy 18, top of light pole 491' from DER, 627' right of centerline, 39' MSL.
Top of light pole 669' from DER, 625' right of centerline, 38' MSL.
Top of light pole 1209' from DER, 625' right of centerline, 41' MSL.
Top of light pole 1031' from DER, 626' right of centerline, 40' MSL.
Top of light pole 850' from DER, 627' right of centerline, 40' MSL.
Rwy 29, Shipping Channel accommodating vessels up to 200' AGL (206' MSL with tidal range), starting 2577' from DER on centerline.
Twin Towers 145' AGL/534' MSL, 1.4 NM from DER, 2645' left of centerline.
Tower 479' MSL, 1.5 NM from DER, 1969' left of centerline.
Tower 100' AGL/455' MSL, 1.5 NM from DER, 2054' left of centerline.
Tower 120' AGL/544' MSL, 1139' from DER, 2.1 NM left of centerline.

OCEANSIDE, CA
BOB MAXWELL MEMORIAL AIRFIELD (OKB)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4A 28APR16 (16119) FAA

TAKEOFF MINIMUMS:
Rwy 6, 400-1 or std. with a min. climb of 320' per NM to 500.
Rwy 24, 300-1 or std. with a 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 9 26MAY16 (16147) (FAA)

TAKEOFF MINIMUMS:
Rwy 8L, 8R, std. w/ min. climb of 285' per NM to 3000.

DEPARTURE PROCEDURE:
Rwy 8L, 8R, climb heading 078° to 2600 then climbing right turn direct PDZ VORTAC, thence...
Rwys 26L, 26R, climb heading 258° to 2600 then climbing left turn direct PDZ VORTAC, thence...
...climb in PDZ holding pattern (hold NE, right turns, 210° inbound) to cross PDZ VORTAC at or above MEA for route of flight before proceeding on course.

TAKEOFF OBSTACLE NOTES:
Rwy 8L, grd 81' from DER, 443' left of centerline, 936' MSL.
Building 1605' from DER, 846' left of centerline, 975' MSL.
Lt poles beginning 2042' from DER, 684' left of centerline, up to 990' MSL.
Rwy 26L, pole 754' from DER, 670' left of centerline, 964' MSL.
Trees beginning 1050' from DER, 708' left of centerline, up to 985' MSL.
Tree 1987' from DER, 329' left of centerline, 986' MSL.
OL on GS, 125' from DER, 339' right of centerline, 982' MSL.
Rwy 26R, grd, antenna on building, beginning 30' from DER, 396' left of centerline, up to 951' MSL.
Lt pole 483' from DER, 263' left of centerline, 973' MSL.
Pole, RR, LT pole beginning 580' from DER, 371' left of centerline, up to 978' MSL.
OL on DME, OL on LOC, beginning 369' from DER, 1' right of centerline, up to 962' MSL.
Lt poles beginning 1144' from DER, 211' right of centerline, up to 981' MSL.
Pole, LT pole beginning 1244' from DER, 543' right of centerline, up to 986' MSL.
Tree 1672' from DER, 698' right of centerline, 996' MSL.
Trees, beginning 2882' from DER, 673' right of centerline, up to 1030' MSL.

CON'T
ONTARIO, CA (CON’T)
ONTARIO INTL (ONT) (CON’T)
DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 2 26MAY16 (16147) (FAA)
  Rwys 8L, headings as assigned by ATC; requires minimum climb of 280’ per NM to 2900.
  Rwys 8R, headings as assigned by ATC; requires minimum climb of 285’ per NM to 2900.
  Rwys 26L, 26R, headings as assigned by ATC.

OXNARD, CA
OXNARD (OXR)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6 15JUN00 (00167) (FAA)
TAKEOFF MINIMUMS:
  Rwys 7, 2100-5 or std. with a min. climb of 290’ per NM to 2600.
DEPARTURE PROCEDURE:
  Rw 7, climbing left turn.
  Rw 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:
  Rw 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.

JACQUELINE COCHRAN RGNL (TRM)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 15SEP16 (16259) (FAA)
TAKEOFF MINIMUMS:
  Rw 12, std. w/min. climb of 364’ per NM to 3400.
  Rw 17, std. w/min. climb of 374’ per NM to 3400.
  Rw 30, std. w/min. climb of 404’ per NM to 3400.
  Rw 35, std. w/min. climb of 402’ per NM to 3400.
DEPARTURE PROCEDURE:
  Rw 12, climbing right turn to intercept TRM VORTAC R-136 to MECCA, thence…
  Rw 17, Climbing left turn heading 100° to intercept TRM VORTAC R-136 to MECCA, thence…
  Rwys 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 e, right turns, 289° inbound) until reaching MEA/MCA for route of flight. DME required.
TAKEOFF OBSTACLE NOTES:
  Rw 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.
  Windsoc 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, 814’ left of centerline, 60’ AGL/-71’ MSL.
  Rw 17, tree 58’ from DER, 491’ right of centerline, 6’ AGL/-129’ MSL.
  Tree 82’ from DER, 188’ right of centerline, 34’ AGL/-101’ MSL.
  Tree 168’ from DER, 432’ left of centerline, 18’ AGL/-117’ MSL.
  Tree 235’ from DER, 429’ left of centerline, 16’ AGL/-119’ MSL.
  Rw 30, bush 11’ from DER, 150’ left of centerline, 4’ AGL/-112’ MSL.
  Tree 104’ from DER, 496’ right of centerline, 26’ AGL/-112’ MSL.
  Tree 145’ from DER, 458’ left of centerline, 9’ AGL/-107’ MSL.
  Tree 258’ from DER, 281’ left of centerline, 19’ AGL/-97’ MSL.
  Tree 701’ from DER, 278’ right of centerline, 22’ AGL/-94’ MSL.
  Tree 896’ from DER, 223’ left of centerline, 26’ AGL/-90’ MSL.
  Rw 35, windsoc 54’ from DER, 190’ right of centerline, 8’ AGL/-107’ MSL.
  Tree 102’ from DER, 258’ right of centerline, 19’ AGL/-96’ MSL.
  Tree 196’ from DER, 295’ right of centerline, 18’ AGL/-97’ MSL.
  Tree 318’ from DER, 372’ right of centerline, 31’ AGL/-84’ MSL.
  Tree 446’ from DER, 418’ left of centerline, 18’ AGL/-97’ MSL.
  Tree 464’ from DER, 337’ left of centerline, 14’ AGL/-101’ MSL.
  Tree 697’ from DER, 265’ right of centerline, 22’ AGL/-93’ MSL.
  Tree 1778’ from DER, 964’ left of centerline, 93’ AGL/-22’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

PALM SPRINGS, CA (CON’T)

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:
- Rwy 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 Rwys if 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.
- Rwy 13R, trees beginning 1170’ from DER, 239’ right of centerline, up to 100’ AGL/599’ MSL. 
  Poles beginning 815’ from DER, 209’ right of centerline, up to 44’ AGL/433’ MSL.
  Light 843’ from DER, 441’ right of centerline, 38’ AGL/427’ MSL.
  Antenna 1642’ from DER, 286’ right of centerline, 53’ AGL/442’ MSL.
- Rwy 31L, poles beginning 1641’ from DER, 125’ right of centerline, up to 31’ AGL/550’ MSL. 
  Towers beginning 2418’ from DER, 402’ left of centerline, up to 59’ AGL/560’ MSL.
  Tree 3016’ from DER, 66’ right of centerline, up to 48’ AGL/507’ MSL. 
  ... via PSP R-298 and TRM R-304 to TRM VORTAC.
- Rwy 31R, multiple trees and bushes beginning 305’ from DER, 233’ right of centerline, up to 48’ AGL/507’ MSL.

PALM SPRINGS INTL (PSP)

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.
- Rwy 31R, heading as assigned by ATC; requires minimum climb of 490’ 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 R-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 R-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 R-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.

TAKEOFF OBSTACLE NOTES:
- Rwy 25, tree 2395’ from DER 986’ left of centerline, 100’ AGL/2659’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

PASO ROBLES, CA
PASO ROBLES MUNI (PRB)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 21MAY20 (20142) (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.
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 910’ 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 21, diverse departures authorized 220° to 270° CW. Right turns on departure NA. Turn left to assigned heading within 3 DME of NTD TACAN. Do not exceed 300 KIAS until established on assigned heading.
Rwy 27, diverse departures authorized 140° to 290°.
Rwy 27, diverse departures authorized 140° to 290° CW. Right turns on departure NA. Turn left to assigned heading.
Do not exceed 310 KIAS until established on assigned heading.
CAUTION: Mountainous terrain NW thru SE.
TAKEOFF OBSTACLE NOTES:
Rwy 3, trees 2920’ from DER, 1197’ left of cntrln, 9’ MSL.
Terrain 0’ from DER, 500’ right of cntrln, 14’ MSL.
Terrain 0’ from DER, 500’ left of cntrln, 14’ MSL.
Tower 3005’ from DER, 1235’ left of cntrln, 90’ MSL.
Rwy 21, none.
Rwy 27, DASR antenna 960’ from DER, 985’ right of cntrln, 56’ AGL/66’ MSL.
Terrain 0’ from DER, 500’ right of cntrln, 11’ MSL.
Pole 1319’ from DER, 584’ right of cntrln, 44’ MSL.

POINT MUGU NAS (NAVAL BASE VENTURA CO) (KNTD), CA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
27APR17 (17117)
DEPARTURE PROCEDURE:
Rwy 3, diverse departures authorized 220° to 270° CW. Right turns on departure NA. Turn left to assigned heading within 3 DME of NTD TACAN. Do not exceed 300 KIAS until established on assigned heading.
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 heading.
Do not exceed 310 KIAS until established on assigned heading.
CAUTION: Mountainous terrain NW thru SE.
TAKEOFF OBSTACLE NOTES:
Rwy 3, trees 2920’ from DER, 1197’ left of cntrln, 90’ MSL.
Terrain 0’ from DER, 500’ right of cntrln, 14’ MSL.
Terrain 0’ from DER, 500’ left of cntrln, 14’ MSL.
Tower 3005’ from DER, 1235’ left of cntrln, 90’ MSL.
Rwy 21, none.
Rwy 27, DASR antenna 960’ from DER, 985’ right of cntrln, 56’ AGL/66’ MSL.
Terrain 0’ from DER, 500’ right of cntrln, 11’ MSL.
Pole 1319’ from DER, 584’ 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.
Trees beginning 2637’ from DER, 305’ left of centerline, up to 100’ AGL/1487’ MSL.
Rwy 27, tree 65’ 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.

16 JUL 2020 to 13 AUG 2020
REDLANDS, CA
REDLANDS MUNI (REI)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 02MAY13 (13122) (FAA)
TAKEOFF MINIMUMS:
Rwy 8, NA.
Rwy 26, 1700-2 or std. with a min. climb of 300' per NM to 4000.
DEPARTURE PROCEDURE: 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 in PDZ VORTAC 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.
TAKEOFF OBSTACLE NOTES:
Rwy 26, trees beginning 17' from DER, 82' left of centerline, up to 34' AGL/1506' MSL.

RIVERSIDE, CA
RIVERSIDE MUNI (RAL)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 11 30JAN20 (20030) (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, 497' left of centerline, 800' MSL.
Fence, tree, terrain beginning 77' from DER, 496' left of centerline, up to 843' MSL.
Tree 604' from DER, 590' right of centerline, 856' MSL.
Trees beginning 989' from DER, 594' right of centerline, up to 867' MSL.
Rwy 27, tree 600' from DER, 548' right of centerline, 796' MSL.
Tree 829' from DER, 650' right of centerline, 1369' MSL.
Tree 1.7 NM from DER, 1237' right of centerline, 1369' 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 4000 or 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 4600 or 2100-3 for climb in visual conditions.
DEPARTURE PROCEDURE:
Rwy 6, climb via heading 064° to 4000 then right turn direct PDZ VORTAC, or for climb in visual conditions cross Flabob Airport Southwest bound at or above 2700 then via PDZ R-039 to PDZ VORTAC.
Rwy 24, climb via heading 244° and PDZ R-031 to PDZ VORTAC, or for climb in visual conditions cross Flabob airport Southwest bound at or above 2700 then via PDZ R-039 to PDZ VORTAC.
All aircraft climb in PDZ VORTAC holding pattern (hold East, right turns, 258° inbound) to cross PDZ VORTAC at or above MEA for direction of flight before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 6, trees beginning 3783' from DER, 1152' right of centerline, up to 40' AGL/1119' MSL.
Rwy 24, antenna on tank 6193' from DER, 2057' right of centerline, 38' AGL/1237' MSL.
Trees beginning 2494' from DER, 434' right of centerline, up to 40' AGL/1519' MSL.
Pole 6281' from DER, 1950' right of centerline, 30' AGL/1230' MSL.
Building 1.52 NM from DER, 1154' right of centerline, up to 29' AGL/1369' MSL.
Antenna on tank 1.26 NM from DER, 2047' right of centerline, 54' AGL/1254' MSL.
Tank 4043' from DER, 794' right of centerline, 66' AGL/361' MSL.
Tree 1.79 NM from DER, 434' right of centerline, 58' AGL/1138' MSL.
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.

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 centerline, 199’ MSL.

SAN DIEGO, CA
BROWN FIELD MUNI (SDM)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4 03JUN10 (10154) (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 EXECUTIVE (MYF)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4A 08NOV18 (18312)
TAKEOFF MINIMUMS:
Rwy 5, NA - environmental.
DEPARTURE PROCEDURE:
Rwys 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 others 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 1955’ 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 2996’ 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 68’ 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.
CON’T
DEPARTURE PROCEDURES

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

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

Rwy 10L (CON’T), trees beginning 1063’ from DER, 578’ right of centerline, up to 55’ AGL/472’ MSL.
Rwy 10L, climb heading 095° to 900, then climbing left turn direct MZB VORTAC. Thence...

Rwy 10R, lightining 39’ from DER, 69’ left of centerline, 3’ AGL/423’ MSL.

Electronic 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, 465’ MSL.

Tree 1183’ from DER, 805’ right of centerline, 476’ MSL.

These beginning 1247’ from DER, 582’ right of centerline, up to 479’ MSL.

These beginning 1536’ from DER, 342’ right of centerline, up to 482’ MSL.

These beginning 1925’ from DER, 86’ right of centerline, up to 88’ AGL/497’ MSL.

These beginning 2808’ from DER, 1185’ left of centerline, up to 69’ AGL/498’ MSL.

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

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

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

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

These, 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.

Tree, 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.

These 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 584’ 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 988’ 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 1276’ 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, 400-1/4 w/min. climb of 290’ per NM to 900.
Rwy 27, 400-2/1 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, building, beginning 781’ from DER, 265’ right of centerline, up to 91’ MSL.

Building, terrain, building, 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’ right of centerline, 45’ AGL/144’ MSL.

Tree, 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-I 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.

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

Rwy 9 (CON’T), 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.

Antenna 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.

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

Antenna building 4460’ from DER, 1482’ left of centerline, 403’ MSL.

Tree, building, 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.

Rwy 27, pole 192’ from DER, 347’ right of centerline, 17’ AGL/29’ MSL.

NAV AID 284’ from DER, 19’ AGL/28’ MSL.

Building 754’ 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 4248’ from DER, 403’ right 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.

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 It, 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 FIELD (SEE)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6  07DEC17 (17341) (FAA)

DEPARTURE PROCEDURE:
Use MISSION BAY departure.

DIVERSE VECTOR AREA (RADAR VECTORS)
ORIG  16OCT14 (14289) (FAA)

Rwy 27L, heading as assigned by ATC; requires minimum climb of 320’ per NM to 1200.

Rwy 27R, heading as assigned by ATC; requires minimum climb of 420’ per NM to 1200.

Rwy 35, heading as assigned by ATC; requires minimum climb of 400’ per NM to 1600.

SAN LUIS OBISPO, CA
SAN LUIS COUNTY RGNL(SBP)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 7  08NOV18 (18312) (FAA)

TAKEOFF MINIMUMS:
Rwys 7, 25, NA - obstacles.

Rwy 11, std. w/min. climb of 243’ per NM to 2100 or 1500-3 for VCOA.

Rwy 29, std. w/min. climb of 460’ per NM to 2000 or 1500-3 for VCOA.

DEPARTURE PROCEDURE:
Rwy 11, climb 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 heading 290° to intercept MQO VORTAC R-082 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 2100 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.

CON’T
SAN LUIS OBISPO, CA (CON'T)
SAN LUIS COUNTY RGNL(SBP) (CON'T)

Rwy 11 (CON'T), 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, 289' right of centerline, up to 247' MSL.
Trees, terrain beginning 994' from DER, 596' right of centerline, up to 262' MSL.
Tree 1061' from DER, 751' right of centerline, 54' AGL/311' MSL.
Tree 1072' from DER, 80' left of centerline, 26' AGL/242' MSL.
Lighting 1090' from DER, 22' left of centerline, 34' AGL/252' MSL.
Pole, lighting, beginning 1101' from DER, on centerline, up to 253' MSL.
Trees, poles, lighting, terrain, buildings, vehicle on road beginning 1107' from DER, 2' right of centerline, up to 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 284' MSL.
Trees, terrain, buildings, poles, vehicle on road beginning 2099' from DER, 3' left of centerline, up to 290' MSL.
Buildings, 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 44' AGL/284' 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 centerline, 515' MSL.
Rwy 30, localizer antenna 51' from DER, 3' right of centerline, 8' AGL/491' MSL.

SANTA ANA, CA
JOHN WAYNE AIRPORT-ORANGE COUNTY (SNA)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6  18SEP14  (14261)  (FAA)

DEPARTURE PROCEDURE:
Rwys 2L, 2R, climbing left turn direct SLI VORTAC.
Rwys 20L, 20R, 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.
Navaid 497' from DER, 625' right of centerline, 19' AGL/65' 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/65' MSL.
Pole 1104' from DER, 307' right of centerline, 33' AGL/68' 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

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 . . .

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 . . .

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.
Rwy 25, heading as assigned by ATC; requires minimum climb of 500' per NM to 4600.
SANTA MARIA, CA
SANTA MARIA PUB/CAPT G ALLAN HANCOCK FLD (SMX)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6 03MAY12 (12124) (FAA)
TAKEOFF MINIMUMS:
Rwy 20, NA-obstacles.
Rwy 12, 400-2° 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 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 7 02MAR17 (17061) (FAA)
TAKEOFF MINIMUMS:
Use TOPANGA DEPARTURE.

DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 2 01FEB18 (18032) (FAA)
Rwy 3, heading as assigned by ATC; requires min. climb of 320’ 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 (IZA)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 04FEB16 (16035) (FAA)
TAKEOFF MINIMUMS:
Rwy 8, 500-2° 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, climbing 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’ right 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.
Building 353’ from DER, 277’ right of centerline, 20’ AGL/684’ 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.
Fence 749’ from DER, 273’ left of centerline, 7’ AGL/678’ MSL.
Tree 1271’ from DER, 296’ left of centerline, 47’ AGL/687’ MSL.

SHAFTER, CA
SHAFTER-MINTER FIELD (MIT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 02MAY13 (13122) (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 682’ from DER, 378’ right of centerline, up to 31’ AGL/441’ MSL.
CON’T
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

SHAFTER, CA (CON’T)

SHAFTER-MINTER FIELD (MIT) (CON’T)

- **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 FIELD (TOA)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1A  29JUL10  (10210)  (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 11L, 11R**, 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**, 300-1½ or std. w/min. climb of 332’ per NM to 1900.

DEPARTURE PROCEDURE:

- **Rwy 6**, climbing right turn.
- **Rwys 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:

- **Rwys 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.
- Pole, traverse way, tree, building beginning 87’ 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 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 351’ from DER, 410’ left of centerline, 40’ AGL/1498’ MSL.
- Pole, vertical point, fence, traverse way, vegetation, tree beginning 411’ from DER, 193’ left of centerline, up to 36’ AGL/1499’ MSL.
- Pole, building, fence, traverse way, vegetation, tree beginning 628’ from DER, 34’ left of centerline, up to 32’ AGL/1500’ MSL.
- Pole, building, fence, 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.

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

UPLAND, CA (CONT’)

CABLE (CCB) (CONT’)

Rwy 6 (CONT’), 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, 568’ left of centerline, up to 1610’ MSL.

Tree, pole, 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 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.

VANDENBERG AFB (KVBG)

LOMPOC, CA

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 28FEB19 (19059)

TAKEOFF MINIMUMS:

Rwy 12, 300-1¼ w/min. climb of 310' per NM to 3300 or std. w/min. climb of 330’ per NM to 3200.

Rwy 30, NA.

TAKEOFF OBSTACLE NOTES:

Rwy 12, terrain 5875’ from DER, 2074’ left of cntrln, 200’ AGL/615’ MSL.

VCOA:

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

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.
  Rwy 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.
  Tree 2.1 NM from DER, 3735' right of centerline, 50' AGL/3269' MSL.
  Rwy 17, sign 248' from DER, 377' left of centerline, 14' AGL/2896' MSL.
  Antenna on building 701' from DER, 203' left of centerline, 20' AGL/2902' MSL.