HOLDING INSTRUCTIONS IS REQUIRED.
READBACK OF ALL RUNWAY CROSSING CLEARANCES.
CAUTION: BE ALERT TO V A R 13° E

FIELD ELEV 4415

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
NOTE:  Chart not to scale.

NOTE:  DME required.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAYS 34L/R:** Climb to 10000 or assigned altitude via I-AGY localizer north course to HNGRY INT/I-AGY 10 DME, and intercept FMG R-314 to REMTY/FMG 20 DME, and right turn heading 060° to intercept FMG R-332 to FMG VORTAC. Climb in FMG holding pattern to depart FMG VORTAC at or above MEA/MCA for route of flight. Expect clearance to requested altitude five minutes after departure.

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

DEPARTURE ROUTE DESCRIPTION

TAKEOFF MINIMUMS
Rwy 7: NA- obstacles
Rwys 25, 34L/34R: NA- ATC.
Rwy 16L: Standard with minimum climb of 740’ per NM to 8000 or,
600-1/4 with minimum climb of 525’ per NM to 8000.
Rwy 16R: Standard with minimum climb of 740’ per NM to 8000 or,
600-1/4 with minimum climb of 525’ per NM to 8000.

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

TAKEOFF RUNWAYS 16L/R: Climb to 10000 or assigned altitude, via I-RNO south course to RIJTU/3 DME, then left turn direct FMG VORTAC. Climb in FMG holding pattern to depart FMG VORTAC at or above MEA/MCA for direction of flight. Expect clearance to requested altitude five minutes after departure.
**PVINE THREE DEPARTURE (RNAV)**

**NOTE:** Chart not to scale.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAYS 34L/R:** Climb heading 344° to 4920, then direct PVINE, thence. . . .

. . . .Maintain FL190 or assigned altitude. Expect filed altitude 5 minutes after departure.

**CRDDZ TRANSITION (PVINE3.CRDDZ)**

**HALLE TRANSITION (PVINE3.HALLE)**

**PYGOW TRANSITION (PVINE3.PYGOW)**

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

**NOTE:** RNAV 1.

**NOTE:** RADAR required for non-GPS equipped aircraft.

**NOTE:** For non-GPS equipped aircraft, FMG and SWR must be operational for HALLE transition.

**NOTE:** For non-GPS equipped aircraft, FMG and HZN must be operational for PYGOW transition.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 16L/R: Climb on heading 164° and I-RNO localizer south course. Thence. . . .

TAKEOFF RUNWAY 25: Climb heading 254° to 5000 then climbing right turn heading 340°. Thence. . . .

TAKEOFF RUNWAYS 34L/R: Climb heading 330° CW 360° as assigned by ATC. Thence. . . .

. . . . . All aircraft maintain FL190 or assigned altitude. Expect clearance to requested altitude 5 minutes after departure. Expect RADAR vectors to assigned route/fix.

LOST COMMUNICATIONS: If not in contact with departure control within one minute after takeoff, maintain assigned heading until passing 10000, thence. . . .

. . . . . RUNWAYS 16L/R DEPARTURES: Turn left direct FMG VORTAC, then via assigned route.

. . . . . RUNWAYS 25 and 34L/R DEPARTURES: Turn right direct FMG VORTAC, then via assigned route.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 34L/R: Climb heading 344° to 4920, then climbing right turn direct SPLTM to cross at or above 7700/at or below 9000, then on track 124° to cross RYANN at or above 15000, thence . . . .

. . . . maintain FL190 or assigned altitude. Expect filed altitude 5 minutes after departure.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 25: Climb to 5000, then climbing right turn to 10000 or assigned altitude direct FMG VORTAC, cross FMG VORTAC at or above 8000. Climb in FMG holding pattern to depart FMG VORTAC at or above MEA/MCA for direction of flight. Expect clearance to requested altitude five minutes after departure.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16R: Climb on I-RNO south course to WAGGE INT, thence via (transition) or assigned route.

TAKEOFF RUNWAY 16L: Climbing right turn heading 174° to intercept I-RNO south course to WAGGE INT, thence via (transition) or assigned route.

All aircraft maintain FL190 or assigned altitude. Expect clearance to requested altitude 5 minutes after departure.

LOVELOCK TRANSITION (WAGGE6, LLC): From over WAGGE INT via HZN R-230 to JERGA INT then via LLC R-206 to LLC VORTAC.

MUSTANG TRANSITION (WAGGE6, FMG): From over WAGGE INT via FMG R-182 to FMG VORTAC.
ZEFFR SIX DEPARTURE (RNAV)

TAKEOFF MINIMUMS
Rwy 7, 25, 34L/R: NA-ATC.
Rwy 16L: 700-1½ with minimum climb of 440' per NM to 9400, then minimum climb of 400' per NM to 13000.
Rwy 16R: 500-2 ½ or standard with minimum climb of 440' per NM to 9400, then minimum climb of 400' per NM to 13000.

DEPARTURE ROUTE DESCRIPTION
TAKEOFF RUNWAYS 16L/R: Climb heading 164° to 4920, then direct ZEFFR, then on depicted route, thence . . . .
. . . . maintain FL190 or assigned altitude. Expect filed altitude 5 minutes after departure.

BLKJK TRANSITION (ZEFFR6.BLKJK)
DARBI TRANSITION (ZEFFR6.DARBI)
MRLET TRANSITION (ZEFFR6.MRLET)
PESKE TRANSITION (ZEFFR6.PESKE)
**HOT SPOTS**

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

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

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<th>CITY/AIRPORT</th>
<th>HOT SPOT</th>
<th>DESCRIPTION*</th>
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<tr>
<td>CHANDLER, AZ</td>
<td>CHANDLER MUNI (CHD)</td>
<td>HS 1 Rwy 22R may be used as an alternate taxi route.</td>
</tr>
<tr>
<td>GLENDALE, AZ</td>
<td>GLENDALE MUNI (GEU)</td>
<td>HS 1 Aircraft exiting rwy will enter Twy A to the ramp.</td>
</tr>
<tr>
<td>GRAND CANYON, AZ</td>
<td>GRAND CANYON NTL PARK (GCN)</td>
<td>HS 1 Twy A and Twy B at the Rwy 21 end.</td>
</tr>
</tbody>
</table>
| LAS VEGAS, NV | HENDERSON EXEC (HND) | HS 1 Twy H, Twy G, and Rwy 17R.  
HS 2 Twy E and ramp area. High volume of traffic. |
| LAS VEGAS, NV | HARRY REID INTL (LAS) | HS 1 Rwy 01R-19L and Rwy 01L-19R, Twy U.  
HS 2 Rwy 01R-19L and Rwy 01L-19R, Twy Y.  
HS 3 Wrong rwy departure risk. Aircraft departing Rwy 08L are sometime confused with Rwy 01L. Verify rwy heading and alignment with proper rwy prior to departure. |
| LAS VEGAS, NV | NORTH LAS VEGAS (VGT) | HS 1 Rwy hold lines at Twy G and Twy F in close proximity to edge of large paved area.  
HS 2 Rwy 12R, Twy G.  
HS 3 Rwy 12R, Twy A and Twy B.  
HS 4 Rwy 12L, Twy A. |
| MINDEN, NV | MINDEN-TAHOE (MEV) | HS 1 Complex int.  
HS 2 Frequent crossings for sailplane operations. |
| OGDEN, UT | OGDEN-HINCKLEY (OGD) | HS 1 Confusing twy int in close proximity to rwy. |
| PHOENIX, AZ | PHOENIX DEER VALLEY (DVT) | HS 1 Inadvertent Rwy 07R-25L crossings from Twy B5.  
HS 2 Inadvertent Rwy 07R-25L crossings from Twy B9. |
| PHOENIX, AZ | PHOENIX SKY HARBOR INTL (PHX) | HS 1 Pilots sometimes mistake Twy F for Rwy 07L or Rwy 07R.  
HS 2 Pilots sometimes cross Rwy 07L-25R at Twy F8, Twy F9, or Twy F10, without authorization.  
HS 3 Aircraft taxiing from southern ramps have turned onto Rwy 25L when given instructions to cross Rwy 25L at Twy H3. |
| PRESCOTT, AZ | PRESCOTT RGNL - ERNEST A LOVE FLD (PRC) | HS 1 Not visible from the twr.  
HS 2 Complex int.  
HS 3 Frequent rwy crossings. |

*(SEE CONTINUATION PAGE FOR MORE LISTINGS)*
<table>
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<th>CITY/AIRPORT</th>
<th>HOT SPOT</th>
<th>DESCRIPTION*</th>
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<tr>
<td><strong>PROVO, UT</strong></td>
<td>HS 1</td>
<td>Twy A and Twy A4 close proximity to ramp and rwys.</td>
</tr>
<tr>
<td><strong>PROVO MUNI (PVU)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RENO, NV</strong></td>
<td>HS 1</td>
<td>Pilots confuse Rwy 16L and Rwy 16R on apch and Rwy 34L mistaken for Rwy 34R. Rwy 34R thr is 2,000 feet offset to the North.</td>
</tr>
<tr>
<td><strong>RENO/TAHOE INTL (RNO)</strong></td>
<td>HS 2</td>
<td>Twy C, ramp twy, and Rwy 16L-34R.</td>
</tr>
<tr>
<td><strong>SALT LAKE CITY, UT</strong></td>
<td>HS 1</td>
<td>Wrong Rwy Departure Risk. Hold lines for Rwy 32 and Rwy 35 are at the same location at Twy K1 and Twy M with short taxi distance to either rwy.</td>
</tr>
<tr>
<td><strong>SALT LAKE CITY INTL (SLC)</strong></td>
<td>HS 2</td>
<td>High risk of Rwy incursion at Rwy 14-32 on Twy Q due to short taxi distance between rwys.</td>
</tr>
<tr>
<td><strong>SALT LAKE CITY INTL (SLC)</strong></td>
<td>HS 3</td>
<td>Twy A4 or Twy A5 at Twy A or Twy B mistakenly enter Rwy 16R-34L.</td>
</tr>
<tr>
<td><strong>TUCSON, AZ</strong></td>
<td>HS 1</td>
<td>Rwy 33 and Rwy 06R, Twy B.</td>
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<tr>
<td><strong>RYAN FLD (RYN)</strong></td>
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<tr>
<td><strong>TUCSON, AZ</strong></td>
<td>HS 1</td>
<td>Rwy 29R and Rwy 29L.</td>
</tr>
<tr>
<td><strong>TUCSON INTL (TUS)</strong></td>
<td>HS 2</td>
<td>Rwy 11L and Rwy 11R apch areas.</td>
</tr>
</tbody>
</table>

*See appropriate Chart Supplement HOT SPOT table for additional information.
MISSING APPROACH: Climb to 6300 then climbing left turn to 11000 direct FMG VORTAC and on FMG VORTAC R-017 to NICER INT/FMG 13.5 DME and hold.

*Missed approach requires a minimum climb of 350 feet per NM to 8000.

**Missed approach requires a minimum climb of 275 feet per NM to 8000.
RNAV (RNP) Y RWY 16R
RENO/TAHOE INTL (RNO)

Authorization required

For uncompensated Baro-VNAV systems, procedure NA below -1.4°C (7°F) or above 36°C (98°F). For inoperative MALSR, increase RNP 0.17 all Crafts visibility to 1/2 and RNP 0.30 all Crafts visibility to 2 1/2. RF required. GPS required. Missed approach requires a minimum climb of 250 feet per NM to 7000.

MISSED APPROACH: Climb to 13000 on track 164° to ZAKBI and on track 180° to USINE and on track 124° to YARKU and hold, continue climb in hold to 15000.

For uncompensated Baro-VNAV systems, procedure NA below -14°C (7°F) or above 36°C (98°F). For inoperative MALSR, increase RNP 0.17 all Crafts visibility to 1/2 and RNP 0.30 all Crafts visibility to 2 1/2. RF required. GPS required. Missed approach requires a minimum climb of 260 feet per NM to 7000.

Cats visibility to 2 1/2 RF required. GPS required. Missed approach requires a minimum climb of 260 feet per NM to 7000.

For uncompensated Baro-VNAV systems, procedure NA below -1.4°C (7°F) or above 36°C (98°F). For inoperative MALSR, increase RNP 0.17 all Crafts visibility to 1/2 and RNP 0.30 all Crafts visibility to 2 1/2. RF required. GPS required. Missed approach requires a minimum climb of 250 feet per NM to 7000.

For uncompensated Baro-VNAV systems, procedure NA below -1.4°C (7°F) or above 36°C (98°F). For inoperative MALSR, increase RNP 0.17 all Crafts visibility to 1/2 and RNP 0.30 all Crafts visibility to 2 1/2. RF required. GPS required. Missed approach requires a minimum climb of 250 feet per NM to 7000.

For uncompensated Baro-VNAV systems, procedure NA below -1.4°C (7°F) or above 36°C (98°F). For inoperative MALSR, increase RNP 0.17 all Crafts visibility to 1/2 and RNP 0.30 all Crafts visibility to 2 1/2. RF required. GPS required. Missed approach requires a minimum climb of 250 feet per NM to 7000.
RNAV (RNP) Z RWY 16L
RENO/TAHOE INTL (RNO)

For uncompensated Baro-VNAV systems, procedure NA below
-1.6°C (4°F) or above 54°C (130°F). When VGSI inop, procedure
NA at night. GPS required. *Missed approach requires a minimum
climb of 259 feet per NM to 7000.

MISSED APPROACH: Climb to 13000 on track 164° to ZIDGO and on track 181° to
USINE and on track 124° to YARKU and hold, continue climb-in-hold to 13000.

Procedure NA for arrivals at LIBGE
on V165 northwest bound.

Procedure NA for arrivals at TRUCK on V200-392
and T331 southwest bound.

Procedure NA for arrivals at LIBGE
on V165 northwest bound.

Program NA for arrivals at TRUCK on V200-392
and T331 southwest bound.

See planview for multiple IF locations.
RNAV (RNP) Z RWY 16R
RENO/TAHOE INTL (RNO)

For uncompensated Baro-VNAV systems, procedure NA below -16°C (4°F) or above 54°C (130°F). For inoperative MALSR, increase RNP 0.17 all Cats visibility to 1/2 and RNP 0.30 all Cats visibility to 2/3. GPS required. *Missed approach requires a minimum climb of 260 feet per NM to 7000.

MISSED APPROACH: Climb to 13000 on track 164° to ZAKBI and on track 180° to USINE and on track 124° to YARKU and hold, continue climb-in-hold to 13000.

Procedure NA for arrivals at TRUCK on V200-392 and T331 southwest bound.

Procedure NA for arrivals at TRUCK on V165 northwest bound.

See planview for multiple IF locations.
RNAV (RNP) Z RWY 34L
RENO/TAHOE INTL (RNO)

**Category**

<table>
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<tr>
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<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>RNP 0.12 DA</td>
<td>4771-1</td>
<td>361 (400-1)</td>
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<tr>
<td>RNP 0.30 DA</td>
<td>5342-2 ⅞</td>
<td>932 (1000-2¾)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Missed Approach:** Climb to 10000 via 344° track to TAKLE and hold, continue climb-in-hold to 10000.

**Procedure NA:** for arrivals at COLOM via V6 southwest bound and V332 northwest bound.

Procedure NA for arrivals on FMG approach radials 167 CW 241.

**Missed Approach Requires Minimum Climb:**

- Climb 243 feet per NM to 7200.
- Increase visibility RNP 0.12 to 1 mile and RNP 0.30 to 4 miles.

**NA Below -13°C (8°F) or Above 40°C (104°F).** For inoperative MALSR GPS required. For uncompensated Baro-VNAV systems, procedure NA below 13°C (55°F) or above 40°C (104°F). For inoperative MALSR increase visibility RNP 0.12 to 1½ mile and RNP 0.30 to 4 miles.

**For inoperative MALSR GPS Required.**

**For uncompensated Baro-VNAV Systems, Procedure NA Below 13°C (55°F) or Above 40°C (104°F).**
RNAV (RNP) Z RWY 34R
RENO/TAHOE INTL (RNO)

MISSED APPROACH: Climb to 10000 via 344° track to HOGBO and 342° track to TAKLE and hold, continue climb-in-hold to 10000.

Procedure NA for arrivals at COLOM via V6 southwest bound and V332 northwest bound.

VAPEX 9100 via 344° tr

MASUE

TAKLE

HOGBO

6997

(REO)

RENO TOWER

GND CON 121.9 348.6

CLNC DEL 124.9 370.85

NORCAL APP CON 119.2 279.55

D-ATIS

353.9

135.8 363.0

APP CRS

344°

TDZE

4408

344° tr

RENO/TAHOE INTL (RNO)

10000

SW-4, 11 AUG 2022 to 08 SEP 2022

119°46'W

39°30'N
RNAV (GPS) X RWY 16L
RENO/TAHOE INTL (RNO)

**RNAV APCH.**
- **Circling Rwy 7 NA at night. Rwy 16L helicopter visibility reduction below ½ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -5°C or above 54°C.**
- **MIssed Approach:** Climb to 3100 direct WEDMO and on track 158° to MARRI and hold.

**D-ATIS**
- 135.8 363.0

**NORCAL APP CON**
- 119.2 279.55
- 126.3 353.9

**RENO TOWER**
- 118.7 257.8

**GND CON**
- 121.9 348.6

**CLNC DEL**
- 124.9 370.85

**CPDLC**

**TRAFFIC CONFLICTS:**
- Procedure NA for arrivals on FMG VORTAC airway radials 314 CW 075.

**RNAV (GPS) X RWY 16L**
- **RNAV (GPS) X RWY 16L**

**RNAV APPROACH:**
- **RNAV (GPS) X RWY 16L**
- **RNAV (GPS) X RWY 16L**

**WAAS CH 72909**
- **WAAS CH 72909**

**APP CRS**
- 164°

**TDZE**
- 4415

**Apt Elev**
- 4415

**Amdt 2 26MAR20**

**RENO, NEVADA**
- **RENO, NEVADA**

**AL-346 (FAA)**
- **AL-346 (FAA)**

**SW-4, 11 AUG 2022 to 08 SEP 2022**
- **SW-4, 11 AUG 2022 to 08 SEP 2022**
Procedure NA for arrivals at SWR VOR/DME on V6 and T331 southwest bound.

Procedure NA for arrivals at SWR VOR/DME on V6 and T331 southwest bound.

For inoperative MALSR increase LPV all Cats visibility ½ mile.

Procedure NA for arrivals at RICHY on V28-113 southwest bound.

Procedure NA for arrivals at RAMRE on V165 sailbound.

Procedure NA for arrivals at SWR VOR/DME on V6 and T331 southwest bound.

Procedure NA for arrivals at SWR VOR/DME on V6 and T331 southwest bound.
**RNAV (GPS) Y RWY 34R**

**RENO/TAHOE INTL (RNO)**

**Missed Approach:** Climb to 10000 and direct FOBAX via 343° track to TAKLE and hold, continue climb-in-hold to 10000.

**Procedure NA for arrivals at SWR VOR/DME on V6 and T331 southwest bound.**

**Procedure NA for arrivals at RICHY on V28-113 southwest bound.**

**Category**

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<tbody>
<tr>
<td>LPV DA</td>
<td>5043-2</td>
<td>635 (700-2)</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>
Circling NA for Cat E south of Rwy 7 and west of 34L. Circling Rwy 7 NA at night. Approaches RADAR monitored by NORCAL APP CON. Arrivals from east and aircraft on missed approach may be vectored to final. Circling NA for Cat E to Rwy 7 and 25.

MISSING APPROACH: Climbing right turn to 13000 on heading 090° and FMG R-059 to OKUGE/13 DME and hold, continue climb-in-hold to 13000.
Circling Rwy 7 NA at night.

MIssed Approach: Climbing right turn to 10000 direct FMG VORTAC and hold, continue climb-in-hold to 10000.

FMG VORTAC

SW-4, 11 AUG 2022 to 08 SEP 2022
Pilots must review the IFR Alternate Minimums Notes to determine alternate airport suitability. A designation on the approach chart means that pilots may not use that approach as an alternate due to unmonitored facility, absence of weather reporting service, or lack of adequate navigation coverage. Approaches with the A designation are not listed in this section. A designation on the approach chart indicates that the approach procedure has non-standard minimums (for aircraft other than helicopters) or restrictions (for all users) for its use as an alternate.

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

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<td><strong>ALTERNATE MINIMUMS</strong></td>
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<td>BATTLE MOUNTAIN (BAM)</td>
<td>RNAV (GPS) Rwy 22¹</td>
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<tr>
<td>Category D, 1000-3.</td>
<td><strong>Category D, 1000-3.</strong></td>
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<td><strong>BEAVER, UT</strong></td>
<td><strong>BEAVER</strong></td>
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<tr>
<td>MUNI (U52)</td>
<td>RNAV (GPS)-A</td>
</tr>
<tr>
<td>Categories A, B, 1300-2; Category C, 1800-3.</td>
<td><strong>Categories A, B, 1300-2; Category C, 1800-3.</strong></td>
</tr>
<tr>
<td><strong>BLANDING, UT</strong></td>
<td><strong>BLANDING MUNI (BDG)</strong>*</td>
</tr>
<tr>
<td>RNAV (GPS) Rwy 35</td>
<td>NA when local weather not available.</td>
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<tr>
<td>Category C, 900-2¼.</td>
<td><strong>Category C, 900-2¼.</strong></td>
</tr>
<tr>
<td><strong>BOULDER CITY, NV</strong></td>
<td><strong>BOULDER CITY</strong></td>
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<tr>
<td>BOULDER MUNI (BVU)</td>
<td>RNAV (GPS) Rwy 27</td>
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<tr>
<td>Category B, 1200-2; Category C, 1800-3.</td>
<td><strong>Category B, 1200-2; Category C, 1800-3.</strong></td>
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<td><strong>CASA GRANDE, AZ</strong></td>
<td><strong>CASA GRANDE</strong></td>
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<td>CASA GRANDE MUNI (CGZ)</td>
<td>RNAV (GPS) Rwy 5</td>
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<tr>
<td>RNAV (GPS) Rwy 23¹</td>
<td><strong>RNAV (GPS) Rwy 23¹</strong></td>
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<td>Category D, 800-2½.</td>
<td><strong>Category D, 800-2½.</strong></td>
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<tr>
<td><strong>CEDAR CITY, UT</strong></td>
<td><strong>CEDAR CITY</strong></td>
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<tr>
<td>RGNL (CDC)</td>
<td>RNAV (GPS) Rwy 2¹</td>
</tr>
<tr>
<td>RNAV (GPS) Rwy 20</td>
<td><strong>RNAV (GPS) Rwy 20</strong></td>
</tr>
<tr>
<td>NA when local weather not available.</td>
<td><strong>NA when local weather not available.</strong></td>
</tr>
<tr>
<td>¹Categories A, B, C, D, 900-2½.</td>
<td><strong>1Categories A, B, C, D, 900-2½.</strong></td>
</tr>
<tr>
<td>²Category D, 800-2¼.</td>
<td><strong>2Category D, 800-2¼.</strong></td>
</tr>
</tbody>
</table>

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

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<td>MUNI (AZC).........</td>
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<tr>
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<td>RNAV (GPS) Rwy 11</td>
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<td>RNAV (GPS) Rwy 29</td>
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<td>Categories C, D, 2100-3.</td>
</tr>
<tr>
<td>COOLIDGE, AZ</td>
<td>MUNI (P08).........</td>
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<tr>
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<td>RNAV (GPS) Rwy 23</td>
</tr>
<tr>
<td></td>
<td>VOR Rwy 5</td>
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<tr>
<td></td>
<td>NA when local weather not available.</td>
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<tr>
<td>DOUGLAS BISBEE, AZ</td>
<td>BISBEE DOUGLAS INTL (DUG).......</td>
</tr>
<tr>
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**RENO, NV**

**RENO/TAHOE INTL (RNO)**

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**SAFFORD, AZ**

**SAFFORD RGNL (SAD)**

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<td>&lt;sup&gt;2&lt;/sup&gt;Categories A, B, 900-2; Category C, 1000-2½; Category D, 1800-3.</td>
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<tr>
<td>SHOW LOW, AZ</td>
<td>RNAV (GPS) Rwy 25</td>
</tr>
<tr>
<td>SHOW LOW RGNL (SOW)</td>
<td>Category C, 800-2¼; Category D, 1000-3.</td>
</tr>
<tr>
<td>TONOPAH, NV</td>
<td>VOR or GPS-A</td>
</tr>
<tr>
<td>TONOPAH (TPH)</td>
<td>Category C, 900-2½; Category D, 900-3.</td>
</tr>
<tr>
<td>TUCSON, AZ</td>
<td>VOR or GPS-A</td>
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<tr>
<td>TUCSON RYN</td>
<td>Category D, 1000-3.</td>
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<tr>
<td>TUCSON INTL</td>
<td>RNAV (GPS) Rwy 6R</td>
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<td>RNAV (GPS) Z Rwy 11L&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>RNAV (GPS) Z Rwy 29R&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>VOR or TACAN Rwy 11L&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>VOR or TACAN Rwy 29R&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>&lt;sup&gt;1&lt;/sup&gt;ILS, Category C, 800-2; Category D, 1100-3; LOC, Category D, 1100-3.</td>
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<td>&lt;sup&gt;2&lt;/sup&gt;Category D, 1100-3.</td>
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<td>&lt;sup&gt;3&lt;/sup&gt;Category D, 1100-3; Category E, 1300-3.</td>
</tr>
<tr>
<td>VERNAL, UT</td>
<td>RNAV (GPS) Rwy 11</td>
</tr>
<tr>
<td>VERNAL RGNL (VEL)</td>
<td>RNAV (GPS) Y Rwy 35&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>RNAV (GPS) Z Rwy 35&lt;sup&gt;2&lt;/sup&gt;</td>
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<td>VOR Rwy 35&lt;sup&gt;3&lt;/sup&gt;</td>
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<td></td>
<td>NA when local weather not available.</td>
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<tr>
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<td>&lt;sup&gt;1&lt;/sup&gt;Categories A, B, 1100-2; Category C, 1100-3; Category D, 1200-3.</td>
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<tr>
<td></td>
<td>&lt;sup&gt;2&lt;/sup&gt;Categories A, B, C, D, 1000-2½.</td>
</tr>
<tr>
<td></td>
<td>&lt;sup&gt;3&lt;/sup&gt;Categories A, B, 900-2; Category C, 900-2½; Category D, 1200-3.</td>
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<tr>
<td>WENDOVER, UT</td>
<td>RNAV (GPS)-A&lt;sup&gt;34&lt;/sup&gt;</td>
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<tr>
<td>WENDOVER (ENV)</td>
<td>RNAV (GPS)-C&lt;sup&gt;45&lt;/sup&gt;</td>
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<td>VOR/DME-B&lt;sup&gt;1&lt;/sup&gt;</td>
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<td></td>
<td>VOR/DME or TACAN Rwy 26&lt;sup&gt;2&lt;/sup&gt;</td>
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<td>&lt;sup&gt;1&lt;/sup&gt;Categories A, B, 1300-2; Category C, 1300-3; Category D, E 1500-3.</td>
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<tr>
<td></td>
<td>&lt;sup&gt;2&lt;/sup&gt;Category D, 900-2½; Category E, 1500-3.</td>
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<tr>
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<td>&lt;sup&gt;3&lt;/sup&gt;Categories A, B, 1900-2; Categories C, D, E, 1900-3.</td>
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<tr>
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<td>&lt;sup&gt;4&lt;/sup&gt;NA when local weather not available.</td>
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<tr>
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<td>&lt;sup&gt;5&lt;/sup&gt;Categories A, B, 1800-2; Categories C, D, E, 1800-3.</td>
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<tr>
<td>WINDOW ROCK, AZ</td>
<td>RNAV (GPS) Rwy 3</td>
</tr>
<tr>
<td>WINDOW ROCK (RQE)</td>
<td>RNAV (GPS)-B&lt;sup&gt;2&lt;/sup&gt;</td>
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<td>VOR-A&lt;sup&gt;4&lt;/sup&gt;</td>
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<tr>
<td></td>
<td>NA when local weather not available.</td>
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<tr>
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<td>&lt;sup&gt;1&lt;/sup&gt;Categories A, B, 1000-2; Category C, 1100-3.</td>
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<tr>
<td></td>
<td>&lt;sup&gt;2&lt;/sup&gt;Categories A, B, 1000-2½; Category D, 1100-3; Category E, 1400-3.</td>
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<tr>
<td>WINNEMUCCA, NV</td>
<td>RNAV (GPS) Rwy 14</td>
</tr>
<tr>
<td>WINNEMUCCA MUNI (WMC)</td>
<td>RNAV (GPS) Rwy 32&lt;sup&gt;1&lt;/sup&gt;</td>
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<tr>
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<td>VOR Rwy 14&lt;sup&gt;3&lt;/sup&gt;</td>
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<tr>
<td></td>
<td>&lt;sup&gt;1&lt;/sup&gt;NA when local weather not available.</td>
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<tr>
<td></td>
<td>&lt;sup&gt;2&lt;/sup&gt;Category C, 800-2½; Category D, 800-2½.</td>
</tr>
<tr>
<td></td>
<td>&lt;sup&gt;3&lt;/sup&gt;Category C, 1000-3.</td>
</tr>
<tr>
<td>WINSLOW, AZ</td>
<td>RNAV (GPS) Rwy 11</td>
</tr>
<tr>
<td>WINSLOW-LINDBERGH RGNL (INW)</td>
<td>VOR or GPS Rwy 11</td>
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<td>Category D, 800-2½.</td>
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</tbody>
</table>
To ensure safe and efficient operations, the pilot must verbally request approval from ATC to fly the VCOA when requesting their 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.

**BATTLE MOUNTAIN, NV**
**BATTLE MOUNTAIN (BAM)**
**TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES**

**TAKEOFF MINIMUMS:**
- **Rwy 4**, std. w/min. climb of 335’ per NM to 6300 or 4800-3 for VCOA.
- **Rwy 13**, std. w/min. climb of 350’ per NM to 6500 or 4800-3 for VCOA.

**DEPARTURE PROCEDURE:**

- **Rwy 4**, climb on heading 036° and BAM VORTAC R-036 outbound to 8200 before proceeding on course.
- **Rwy 13**, climbing right turn heading 240° and BAM VORTAC R-210 outbound to 10000 before proceeding on course.
- **Rwy 22**, climb direct BAM VORTAC and proceed on BAM R-210 outbound to 10100 before proceeding on course.
- **Rwy 31**, climb on heading 306° and BAM VORTAC R-329 outbound to 9100 before proceeding on course.

**VCOA:**
- **Rwy 4**, 13, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Battle Mountain airport at or above 9200 before proceeding on course.

**TAKEOFF OBSTACLE NOTES:**
- **Rwy 4**, trees beginning 129’ from DER, 18’ right of centerline, up to 45’ AGL/4570’ MSL. Trees beginning 153’ from DER, 55’ left of centerline, up to 45’ AGL/4570’ MSL.
- **Rwy 13**, vehicle on road 15’ from DER, 171’ right of centerline, 4558’ MSL. Sign 19’ from DER, 250’ left of centerline, 4’ AGL/4537’ MSL.
- **Rwy 13**, tree, vehicle on road beginning 42’ from DER, 23’ right of centerline, up to 55’ AGL/4566’ MSL. Trees beginning 116’ from DER, 151’ left of centerline, up to 45’ AGL/4566’ MSL. Trees beginning 120’ from DER, 47’ right of centerline, up to 45’ AGL/4570’ MSL. Trees beginning 497’ from DER, 127’ left of centerline, up to 45’ AGL/4570’ MSL. Trees beginning 731’ from DER, 71’ right of centerline, up to 45’ AGL/4573’ MSL. Trees beginning 966’ from DER, 79’ left of centerline, up to 45’ AGL/4573’ MSL. Tree 1493’ from DER, 667’ right of centerline, 45’ AGL/4576’ MSL. Trees beginning 1270’ from DER, 215’ left of centerline, up to 45’ AGL/4576’ MSL.
- **Rwy 22**, tree, NAVAID, wind indicator beginning 101’ from DER, 13’ right of centerline, up to 45’ AGL/4570’ MSL. Trees beginning 125’ from DER, 133’ left of centerline, up to 45’ AGL/4570’ MSL. Trees beginning 499’ from DER, 60’ left of centerline, up to 45’ AGL/4573’ MSL. Trees beginning 1270’ from DER, 215’ left of centerline, up to 45’ AGL/4576’ MSL.
- **Rwy 31**, vegetation 33’ from DER, 487’ left of centerline, 4540’ MSL. Trees beginning 50’ from DER, 80’ right of centerline, up to 45’ AGL/4573’ MSL. Trees beginning 124’ from DER, 46’ left of centerline, up to 45’ AGL/4573’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

BEAVER, UT
BEAVER MUNI (U52)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 03JAN19 (19003) (FAA)
TAKEOFF MINIMUMS:
Rwys 7, 25 - NA - Obstacles
Rwys 13, 31 - 2600-2% for VCOA.
VCOA:
Rwys 13, 31, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Beaver Muni at or above 8300, then climb to 10100 on MLF VORTAC R-102 to MLF VORTAC. Do not exceed 210K until established on MLF VORTAC R-102.

TAKEOFF OBSTACLE NOTES:
Rwy 13, vegetation 429' from DER, 46' right of centerline, 5877' MSL.
Tree 642' from DER, 49' right of centerline, 5886' MSL.
Terrain 1344' from DER, 802' right of centerline, 5899' MSL.
Terrain 1725' from DER, 938' left of centerline, 5909' MSL.
Terrain 1729' from DER, 762' right of centerline, 5913' MSL.
Terrain beginning 1854' from DER, 7' left of centerline, up to 5913' MSL.
Terrain beginning 1981' from DER, 209' left of centerline, up to 5922' MSL.
Terrain beginning 1984' from DER, 357' right of centerline, up to 5919' MSL.
Terrain beginning 2109' from DER, 412' left of centerline, up to 5929' MSL.
Terrain beginning 2112' from DER, 154' right of centerline, up to 5926' MSL.
Terrain 2240' from DER, 47' left of centerline, 5932' MSL.
Terrain 2366' from DER, 817' left of centerline, 5936' MSL.
Terrain 2367' from DER, 250' left of centerline, 5939' MSL.
Terrain beginning 2369' from DER, 316' right of centerline, up to 5932' MSL.
Terrain beginning 2494' from DER, 452' left of centerline, up to 5942' MSL.
Terrain beginning 2496' from DER, 114' right of centerline, up to 5939' MSL.
Terrain beginning 2623' from DER, 88' left of centerline, up to 5949' MSL.
Terrain beginning 2750' from DER, 291' left of centerline, up to 5955' MSL.
Terrain beginning 2753' from DER, 275' right of centerline, up to 5942' MSL.
Terrain beginning 2879' from DER, 493' left of centerline, up to 5962' MSL.
Terrain beginning 2881' from DER, 73' right of centerline, up to 5949' MSL.
Terrain beginning 3007' from DER, 129' left of centerline, up to 5965' MSL.
Terrain beginning 3135' from DER, 169' left of centerline, up to 5968' MSL.
Terrain beginning 3137' from DER, 235' right of centerline, up to 5952' MSL.
Terrain beginning 3265' from DER, 32' right of centerline, up to 5955' MSL.
Terrain beginning 3268' from DER, 1166' right of centerline, 5959' MSL.
Terrain beginning 3394' from DER, 396' right of centerline, up to 5962' MSL.
Terrain beginning 3522' from DER, 194' right of centerline, up to 5965' MSL.
Terrain beginning 3650' from DER, 8' left of centerline, up to 5972' MSL.
Terrain beginning 3651' from DER, 558' right of centerline, up to 5968' MSL.
Terrain beginning 3779' from DER, 356' right of centerline, up to 5975' MSL.
Terrain beginning 3905' from DER, 413' left of centerline, up to 5975' MSL.
Terrain beginning 3906' from DER, 153' right of centerline, up to 5978' MSL.
Terrain 4033' from DER, 615' left of centerline, 5978' MSL.
Terrain beginning 4034' from DER, 48' left of centerline, up to 5981' MSL.
Terrain beginning 4035' from DER, 518' right of centerline, up to 5981' MSL.
Terrain beginning 4162' from DER, 251' left of centerline, up to 5985' MSL.
Terrain 4163' from DER, 315' right of centerline, 5985' MSL.
Terrain 4164' from DER, 882' right of centerline, 5988' MSL.
Terrain 4166' from DER, 1449' right of centerline, 6001' MSL.
Tree, terrain beginning 4272' from DER, 113' right of centerline, up to 6024' MSL.
Terrain 4417' from DER, 656' left of centerline, 5986' MSL.
Terrain beginning 4418' from DER, 89' left of centerline, up to 5991' MSL.
Terrain 4422' from DER, 1611' right of centerline, 6037' MSL.
Terrain beginning 4454' from DER, 274' right of centerline, up to 6039' MSL.
Terrain, tree beginning 4550' from DER, 72' right of centerline, up to 6050' MSL.
Tree, terrain beginning 4554' from DER, 130' left of centerline, up to 6016' MSL.
Terrain beginning 4675' from DER, 436' right of centerline, up to 6057' MSL.
Terrain 4806' from DER, 1003' right of centerline, 6060' MSL.
CON'T
BEAVER, UT (CON’T)

BEAVER MUNI (U52) (CON’T)

Rwy 13 (CON’T), terrain beginning 4807’ from DER, 234’ right of centerline, up to 6083’ MSL.

Tree, terrain beginning 4892’ from DER, 332’ left of centerline, up to 6024’ MSL.

Terrain, tree beginning 4935’ from DER, 31’ right of centerline, up to 6093’ MSL.

Tree, terrain beginning 5122’ from DER, 170’ left of centerline, up to 6026’ MSL.

Terrain, tree beginning 5191’ from DER, 152’ right of centerline, up to 6100’ MSL.

Terrain, tree beginning 5444’ from DER, 9’ left of centerline, up to 6037’ MSL.

Terrain beginning 5828’ from DER, 49’ left of centerline, up to 6050’ MSL.

Terrain beginning 5981’ from DER, 111’ right of centerline, up to 6109’ MSL.

Terrain beginning 1 NM from DER, 273’ right of centerline, up to 6115’ MSL.

Terrain beginning 1 NM from DER, 71’ right of centerline, up to 6116’ MSL.

Tree, terrain beginning 1 NM from DER, 435’ right of centerline, up to 6117’ MSL.

Terrain beginning 1 NM from DER, 232’ right of centerline, up to 6126’ MSL.

Tree, terrain beginning 1.1 NM from DER, 30’ right of centerline, up to 6142’ MSL.

Terrain beginning 1.1 NM from DER, 192’ right of centerline, up to 6146’ MSL.

Terrain beginning 1.1 NM from DER, 10’ left of centerline, up to 6070’ MSL.

Terrain beginning 1.1 NM from DER, 151’ right of centerline, up to 6159’ MSL.

Terrain, tree beginning 1.2 NM from DER, 110’ right of centerline, up to 6182’ MSL.

Terrain beginning 1.2 NM from DER, 51’ left of centerline, up to 6090’ MSL.

Terrain beginning 1.3 NM from DER, 272’ right of centerline, up to 6201’ MSL.

Terrain beginning 1.3 NM from DER, 91’ left of centerline, up to 6109’ MSL.

Terrain beginning 1.3 NM from DER, 69’ right of centerline, up to 6214’ MSL.

Terrain beginning 1.3 NM from DER, 132’ left of centerline, up to 6119’ MSL.

Terrain, tree beginning 1.3 NM from DER, 29’ right of centerline, up to 6237’ MSL.

Terrain beginning 1.4 NM from DER, 190’ right of centerline, up to 6257’ MSL.

Terrain beginning 1.4 NM from DER, 11’ left of centerline, up to 6128’ MSL.

Terrain beginning 1.4 NM from DER, 109’ right of centerline, up to 6267’ MSL.

Terrain beginning 1.5 NM from DER, 52’ left of centerline, up to 6139’ MSL.

Terrain beginning 1.5 NM from DER, 271’ right of centerline, up to 6277’ MSL.

Terrain beginning 1.6 NM from DER, 93’ left of centerline, up to 6159’ MSL.

Terrain beginning 1.6 NM from DER, 295’ left of centerline, up to 6195’ MSL.

Terrain beginning 1.6 NM from DER, 27’ right of centerline, up to 6280’ MSL.

Terrain beginning 1.6 NM from DER, 134’ left of centerline, up to 6211’ MSL.

Terrain beginning 1.6 NM from DER, 2037’ left of centerline, up to 6254’ MSL.

Terrain beginning 1.7 NM from DER, 174’ left of centerline, up to 6270’ MSL.

Terrain beginning 1.7 NM from DER, 13’ left of centerline, up to 6296’ MSL.

Terrain beginning 1.7 NM from DER, 148’ right of centerline, up to 6296’ MSL.

Terrain beginning 1.8 NM from DER, 215’ left of centerline, up to 6313’ MSL.

Terrain beginning 1.8 NM from DER, 1552’ left of centerline, up to 6336’ MSL.

Terrain beginning 1.8 NM from DER, 1754’ left of centerline, up to 6359’ MSL.

Terrain beginning 1.8 NM from DER, 310’ right of centerline, up to 6333’ MSL.

Terrain beginning 1.8 NM from DER, 1390’ left of centerline, up to 6375’ MSL.

Terrain beginning 1.8 NM from DER, 1593’ left of centerline, up to 6395’ MSL.

Terrain beginning 1.8 NM from DER, 835’ right of centerline, up to 6359’ MSL.

Terrain beginning 1.9 NM from DER, 1795’ left of centerline, up to 6408’ MSL.

Terrain beginning 1.9 NM from DER, 1269’ left of centerline, up to 6421’ MSL.

Terrain beginning 2 NM from DER, 1310’ left of centerline, up to 6441’ MSL.

Terrain beginning 2 NM from DER, 664’ left of centerline, up to 6447’ MSL.

BLANDING, UT

BLANDING MUNI (BDG)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1A 06FEB14 (14037) (FAA)

TAKEOFF MINIMUMS:

Rwy 35, 800-1 or std. with a min. climb of 350 feet per NM to 6700.

DEPARTURE PROCEDURE:

Rwy 17, turn left, thence...

Rwy 21, turn right, thence...

...climb to 9000 on heading 090° and DVC R-223 to DVC VORTAC, then continue climb on course to MEA.

Rwy 35, turn right climb to 9000 via heading 090° and DVC R-223 to DVC VORTAC, then continue climb on course to MEA.

11 AUG 2022 to 08 SEP 2022
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

BOULDER CITY, NV

BOULDER CITY MUNI (BVU)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 05DEC19 (19339) (FAA)
TAKEOFF MINIMUMS:
Rwy 33, NA – Obstacles.
Rwy 9, std. w/min. climb of 280’ per NM to 3700 or 2000-3 for VCOA.
Rwy 15, std. w/min. climb of 285’ per NM to 3900 or 2000-3 for VCOA.
Rwy 27, std. w/min. climb of 450’ per NM to 3000 or 2000-3 for VCOA.

DEPARTURE PROCEDURE:
Rwy 9, climbing right turn on heading 180° thence...
Rwy 15, climbing left turn on heading 140° thence...
Rwy 27, climbing left turn on heading 140°. Do not exceed 200 KIAS until turn completion, thence...
... intercept BLD VORTAC R-150, continue climb to 7600 on BLD VORTAC R-150 to LYNSY INT/BLD 21 DME.

VCOA:
Rwys 9, 15, 27, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross BLD VORTAC southeast bound at or above 4100 then on BLD VORTAC R-150 to LYNSY INT/BLD 21 DME.

TAKEOFF OBSTACLE NOTES:
Rwy 9, sign 124’ from DER, 351’ left of centerline, 4’ AGL/2151’ MSL.
Terrain, vegetation beginning 164’ from DER, 198’ left of centerline, up to 2155’ MSL.
Vegetation, terrain beginning 401’ from DER, 396’ left of centerline, up to 3’ AGL/2160’ MSL.
Buildings, tanks beginning 776’ from DER, 561’ left of centerline, up to 25’ AGL/2188’ MSL.
Tree 1235’ from DER, 593’ left of centerline, 33’ AGL/2198’ MSL.
Trees beginning 1319’ from DER, 348’ left of centerline, up to 32’ AGL/2200’ MSL.
Trees, buildings, pole beginning 1523’ from DER, 360’ left of centerline, up to 38’ AGL/2211’ MSL.
Trees beginning 1791’ from DER, 751’ left of centerline, up to 46’ AGL/2220’ MSL.
Trees beginning 1966’ from DER, 294’ left of centerline, up to 48’ AGL/2221’ MSL.
Catenaries beginning 2205’ from DER, 1083’ left of centerline, up to 79’ AGL/2259’ MSL.

Catenaries, transmission lines beginning 3391’ from DER, 208’ left of centerline, up to 76’ AGL/2267’ MSL.
Transmission line, catenary beginning 3730’ from DER, 3’ right of centerline, up to 98’ AGL/2254’ MSL.
Tower 3984’ from DER, 227’ right of centerline, 118’ AGL/2275’ MSL.
Transmission line 3989’ from DER, 228’ right of centerline, 119’ AGL/2276’ MSL.
Tower 5076’ from DER, 1016’ left of centerline, 112’ AGL/2301’ MSL.
Tower 5545’ from DER, 1916’ left of centerline, 110’ AGL/2330’ MSL.

Rwy 15, terrain 3’ from DER, 395’ left of centerline, 2103’ MSL.
Terrain, vertical point beginning 3’ from DER, 112’ left of centerline, up to 2105’ MSL.
Rwy 27, terrain 5’ from DER, 395’ right of centerline, 2119’ MSL.
Terrain, sign, buildings beginning 15’ from DER, 187’ right of centerline, up to 2121’ MSL.
Fence, tree beginning 206’ from DER, 170’ right of centerline, up to 2’ AGL/2123’ MSL.

BRYCE CANYON, UT

BRYCE CANYON (BCE)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 10MAR11 (11069) (FAA)
DEPARTURE PROCEDURE:
use BRYCE DEPARTURE.

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

BULLHEAD CITY, AZ
LAUGHLIN/BULLHEAD INTL (IFP)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 02MAR17 (17061) (FAA)

TAKEOFF MINIMUMS:
Rwy 16, standard w/min. climb of 285’ per NM to 1700, or 1700-3 for VCOA.

Rwy 34, standard w/min. climb of 500’ per NM to 5500, or 1700-3 for VCOA.

DEPARTURE PROCEDURE:
Rwy 16, climb on heading 164° and EED VORTAC R-331 to EED VORTAC.

Rwy 34, climb on heading 344° to 2200, then climbing right turn direct EED VORTAC. All aircraft climb in EED VORTAC holding pattern (E, right turns, 257° inbound) to cross EED VORTAC at or above MEA for direction of flight before proceeding on course.

VCOA:

Rwy 16, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Laughlin/Bullhead Intl airport at or above 2300, then continue climbing on heading 155 and EED VORTAC R-335 to EED VORTAC.

Rwy 34, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Laughlin/Bullhead Intl airport at or above 2300, then continue climbing on heading 155 and EED VORTAC R-335 to EED VORTAC.

TAKEOFF OBSTACLE NOTES:

Rwy 16, grd 188’ from DER, 83’ left of centerline, 715’ MSL.
Bush 349’ from DER, 516’ right of centerline, 722’ MSL.

Grd 596’ from DER, 528’ left of centerline, 719’ MSL.
Grd beginning 484’ from DER, 481’ left of centerline, up to 723’ MSL.
Bush 532’ from DER, 642’ right of centerline, 727’ MSL.

Grd beginning 568’ from DER, 490’ left of centerline, up to 727’ MSL.
Bush 700’ from DER, 663’ right of centerline, 728’ MSL.

Grd 798’ from DER, 466’ left of centerline, 729’ MSL.

Bush, grd beginning 801’ from DER, 541’ left of centerline, up to 734’ MSL.
Tree, bush, grd beginning 910’ from DER, 557’ left of centerline, up to 745’ MSL.

Bush, grd beginning 1103’ from DER, from 204’ right to 1008’ left of centerline, up to 777’ MSL.

Grd, bush beginning 2134’ from DER, 731’ left of centerline, up to 778’ MSL.

Grd, bush beginning 2214’ from DER, 870’ left of centerline, up to 786’ MSL.

Grd beginning 2288’ from DER, 801’ left of centerline, up to 792’ MSL.

Grd, tree beginning 2328’ from DER, 724’ left of centerline, up to 797’ MSL.

Grd beginning 2811’ from DER, 1128’ left of centerline, up to 798’ MSL.

Grd beginning 2915’ from DER, 1166’ left of centerline, up to 800’ MSL.

Grd beginning 3022’ from DER, 1185’ left of centerline, up to 804’ MSL.

Grd beginning 3123’ from DER, 1221’ left of centerline, up to 808’ MSL.

Grd beginning 3219’ from DER, 1257’ left of centerline, up to 814’ MSL.

Grd beginning 3325’ from DER, 1284’ left of centerline, up to 818’ MSL.

Grd beginning 3428’ from DER, 1210’ left of centerline, up to 821’ MSL.

Grd beginning 3528’ from DER, 1241’ left of centerline, up to 824’ MSL.

Grd, bush, tank beginning 3632’ from DER, 1157’ left of centerline, up to 825’ MSL.

Grd, bush beginning 3929’ from DER, 1103’ left of centerline, up to 827’ MSL.

Tank 4810’ from DER, 1528’ left of centerline, 848’ MSL.

Grd 5412’ from DER, 1872’ left of centerline, 852’ MSL.

Grd, bushes beginning 5511’ from DER, 926’ left of centerline, up to 865’ MSL.

Bushes beginning 5742’ from DER, 1483’ left of centerline, up to 883’ MSL.

Grd, bushes beginning 5774’ from DER, 793’ left of centerline, up to 891’ MSL.

Bush 5852’ from DER, 1933’ left of centerline, 904’ MSL.

Grd, pole, bushes beginning 5856’ from DER, 24’ left of centerline, up to 920’ MSL.

Trees, bushes, grd, tank beginning 1.2 NM from DER, left and right of centerline, up to 962’ MSL.

Trees, bushes, grd beginning 1.3 NM from DER, 1’ left of centerline, up to 985’ MSL.

Bush 1.4 NM from DER, 191’ left of centerline, 993’ MSL.

Bushes, grd, tank, pole beginning 1.5 NM from DER, 1919’ left of centerline, up to 1036’ MSL.

Bushes, vehicles on road, trees, pole beginning 1.9 NM from DER, 2218’ left of centerline, up to 1086’ MSL.

Tanks, bushes, pole beginning 2.2 NM from DER, 3103’ left of centerline, up to 1121’ MSL.

Rwy 34, airfield light 40’ from DER, 148’ right of centerline, 627’ MSL.

T-l twr, tree beginning 1818’ from DER, 620’ right of centerline, up to 65’ AGL/687’ MSL.

Pole, tree beginning 2214’ from DER, 628’ right of centerline, up to 708’ MSL.

Pole, tree beginning 2638’ from DER, 646’ right of centerline, up to 719’ MSL.

Pole, bushes, grd beginning 3054’ from DER, 663’ right of centerline, up to 741’ MSL.

Pole, bush, bldg, grd, vehicles on road beginning 3661’ from DER, 691’ right of centerline, up to 773’ MSL.

Poles, bushes, grd, vehicles on road, trees, bldgs, flagpole beginning 4024’ from DER, 705’ right of centerline, up to 796’ MSL.

Comm twr 5197’ from DER, 1015’ right of centerline, 816’ MSL.

Comm twr 5278’ from DER, 1149’ right of centerline, 821’ MSL.

T-l twr 1.6 NM from DER, 719’ left of centerline, 894’ MSL.

Grd beginning 1.8 NM from DER, 3419’ right of centerline, up to 963’ MSL.

Grd 2.1 NM from DER, 3212’ right of centerline, 1018’ MSL.

Grd, tree beginning 2.2 NM from DER, 1351’ right of centerline, up to 1079’ MSL.

Grd 2.6 NM from DER 3025’ right of centerline, 2010’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

CARSON CITY, NV
CARSON CITY (CXP)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 20NOV08 (21112) (FAA)
TAKEOFF MINIMUMS:
Rwy 27, NA - Obstacles.
DEPARTURE PROCEDURE:
Rwy 9, use JIMPA DEPARTURE.

CASA GRANDE, AZ
CASA GRANDE MUNI (CGZ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1B 06FEB14 (14037) (FAA)
TAKEOFF MINIMUMS:
Rwy 5, 300-1 or std. w/ min. climb of 354' per NM to 1700.
DEPARTURE PROCEDURE:
Rwy 5, climbing right turn direct TFD VORTAC, thence...
Rwy 23, climb direct TFD VORTAC, thence...
...continue climb in holding pattern (SW, right turns, 048° inbound) to MEA for direction of flight.
TAKEOFF OBSTACLE NOTES:
Rwy 5, pole 4034' from DER, 805' left of centerline, 109' AGL/1593' MSL.

CEDAR CITY, UT
CEDAR CITY RGNL (CDC)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3A 17AUG17 (17229) (FAA)
TAKEOFF MINIMUMS:
Rwy 8, 4200-3 for VCOA.
Rwy 20, std. w/min. climb of 290' per NM to 7300 or 4200-3 for VCOA.
Rwy 26, std. w/min. climb of 255' per NM to 7000 or 4200-3 for VCOA.
DEPARTURE PROCEDURE:
Rwys 2, 8, climbing left turn direct EHK VOR/DME, thence...
Rwys 20, 26, climbing right turn direct EHK VOR/DME, thence...
...continue climb on EHK VOR/DME R-278 until reaching the MEA/MCA for direction of flight.
VCOA:
Rwys 8, 20, 26, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Cedar City Rgnl airport at or above 9700, then proceed on EHK VOR/DME R-180 direct EHK VOR/DME, then on EHK VOR/ DME R-278 until reaching the MEA/MCA for direction of flight.
TAKEOFF OBSTACLE NOTES:
Rwy 2, sign abeam DER, 313' right of centerline, 3' AGL/5604' MSL.
Terrain and bush beginning 145' from DER, 420' right of centerline, up to 5608' MSL.
Rwy 8, terrain 3' from DER, 112' right of centerline, 5622' MSL.
Terrain 18' from DER, 221' right of centerline, 5623' MSL.
Terrain beginning 30' from DER, 178' right of centerline, up to 5624' MSL.
Terrain 122' from DER, 473' right of centerline, 5626' MSL.
Bush 125' from DER, 234' left of centerline, 5628' MSL.
Terrain 193' from DER, 491' right of centerline, 5627' MSL.
Fence and vehicles on road beginning 638' from DER, 33' right of centerline, up to 10' AGL/5639' MSL.
Vehicles on road 686' from DER, 136' right of centerline, 5640' MSL.
Vehicles on road 701' from DER, 242' right of centerline, 5641' MSL.
Transmission tower 2865' from DER, 369' right of centerline, 5707' MSL.
Transmission tower 2902' from DER, 260' right of centerline, 5710' MSL.
Pole and transmission towers beginning 2918' from DER, 70' right of centerline, up to 62' AGL/5719' MSL.
Transmission towers beginning 3004' from DER, 39' left of centerline, up to 49' AGL/5705' MSL.
Pole 3175' from DER, 564' left of centerline, 5628' MSL.
Terrain 12' from DER, 98' right of centerline, 5579' MSL.
Runway light and sign beginning 31' from DER, 275' left of centerline, up to 3' AGL/5583' MSL.
Pole 941' from DER, 446' right of centerline, 34' AGL/5604' MSL.
Pole 1066' from DER, 363' right of centerline, 38' AGL/5608' MSL.
Elevator and tank beginning 2081' from DER, 1051' left of centerline, up to 105' AGL/5690' MSL.
Tree 3789' from DER, 1512' left of centerline, 5692' MSL.
Tree 4004' from DER, 1526' left of centerline, 5693' MSL.
Tree 4265' from DER, 1530' left of centerline, 5718' MSL.
Trees beginning 4278' from DER, 1546' left of centerline, up to 5721' MSL.
Trees beginning 4526' from DER, 1533' left of centerline, up to 5733' MSL.
Trees beginning 4858' from DER, 1520' left of centerline, up to 5737' MSL.
Tree 5456' from DER, 1835' left of centerline, 5748' MSL.
Building and tree beginning 5497' from DER, 1518' left of centerline, up to 5497' AGL/5759' MSL.
Tree and pole beginning 5737' from DER, 1543' left of centerline, up to 20' AGL/5769' MSL.

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

CEDAR CITY, UT (CON’T)
CEDAR CITY RGNL (CDC) (CON’T)

**Rwy 20 (CON’T)**, Pole and tree beginning 5964’ from DER, 1545’ left of centerline, up to 20’ AGL/5779’ MSL.
Trees beginning 1 NM from DER, 1665’ left of centerline, up to 5783’ MSL.
Tree 1.2 NM from DER, 2080’ left of centerline, 5800’ MSL.
Trees beginning 1.2 NM from DER, 2049’ left of centerline, up to 5814’ MSL.
Trees beginning 1.3 NM from DER, 2107’ left of centerline, up to 5836’ MSL.
Trees beginning 1.3 NM from DER, 2244’ left of centerline, up to 5840’ MSL.
Trees beginning 1.3 NM from DER, 2048’ left of centerline, up to 5849’ MSL.
Trees beginning 1.3 NM from DER, 2283’ left of centerline, up to 5852’ MSL.
Trees beginning 1.4 NM from DER, 2301’ left of centerline, up to 5871’ MSL.
Tree 1.4 NM from DER, 2599’ left of centerline, 5874’ MSL.
Trees beginning 1.4 NM from DER, 2436’ left of centerline, up to 5895’ MSL.
Pole and tree beginning 1.6 NM from DER, 2822’ left of centerline, up to 50’ AGL/5944’ MSL.

**CHANDLER, AZ**

CHANDLER MUNI (CHD)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 18SEP14 (14261) (FAA)

**DEPARTURE PROCEDURE:**

**Rwys 4L/R**, climbing left turn heading 220° to intercept TFD VORTAC R-350 southbound to TFD VORTAC.

**Rwys 22L/R**, climbing left turn heading 190° to intercept TFD VORTAC R-350 southbound to TFD VORTAC.

**TAKEOFF OBSTACLE NOTES:**

**Rwy 4L**, antenna on building 69’ from DER, 515’ left of centerline, 25’ AGL/1281’ MSL.
Tower 981’ from DER, 615’ left of centerline, 80’ AGL/1319’ MSL.
Trees and poles beginning 1100’ from DER, 458’ left of centerline, up to 30’ AGL/1272’ MSL.

**Rwy 4R**, poles beginning 1298’ from DER, 56’ left of centerline, up to 36’ AGL/1283’ MSL.

**Rwy 22L**, tree 336’ from DER, 511’ right of centerline, 15’ AGL/1250’ MSL.
Tree 988’ from DER, 756’ left of centerline, 30’ AGL/1266’ MSL.

**Rwy 22R**, building 30’ from DER, 441’ right of centerline, 24’ AGL/1254’ MSL.
Vehicles beginning 199’ from DER, 271’ right of centerline, up to 15’ AGL/1246’ MSL.
Poles and trees beginning 471’ from DER, 45’ left of centerline, up to 36’ AGL/1290’ MSL.
Trees and poles beginning 1088’ from DER, 50’ right of centerline, up to 36’ AGL/1274’ MSL.

**DIVERSE VECTOR AREA (RADAR VECTORS)**
AMDT 1 20AUG15 (15232) (FAA)

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

**STELLAR AIRPARK (P19)**

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 06DEC18 (18340) (FAA)

**DEPARTURE PROCEDURE:**

**Rwy 17**, climbing left turn heading 150° thence...

**Rwy 35**, climbing right turn heading 190° thence...

...Intercept TFD VORTAC R-350 southbound to TFD VORTAC.

**TAKEOFF OBSTACLE NOTES:**

**Rwy 17**, pole 648’ from DER, 482’ left of centerline, 52’ AGL/1212’ MSL.
Pole 656’ from DER, 190’ left of centerline, 52’ AGL/1213’ MSL.
Poles beginning 661’ from DER, 39’ right of centerline, up to 34’ AGL/1196’ MSL.
Poles beginning 671’ from DER, 420’ right of centerline, up to 52’ AGL/1216’ MSL.
Transmission line, sign beginning 869’ from DER, 288’ right of centerline, up to 50’ AGL/1224’ MSL.
Sign 906’ from DER, 260’ left of centerline, 42’ AGL/1214’ MSL.

**Rwy 35**, pole 72’ from DER, 357’ left of centerline, 30’ AGL/1208’ MSL.
Building 777’ from DER, 300’ right of centerline, 30’ AGL/1218’ MSL.
Building 1282’ from DER, 767’ right of centerline, 45’ AGL/1233’ MSL.

**CLIFTON/MORENCI, AZ**

GREENLEE COUNTY (CFT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 29JUL10 (10210) (FAA)

**DEPARTURE PROCEDURE:**

Use SAN SIMON DEPARTURE.
COLORADO CITY, AZ
COLORADO CITY MUNI (AZC)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 03JAN19 (19003) (FAA)
TAKEOFF MINIMUMS:
Rwy 2, NA-Terrain.
Rwy 20, 300-2½ or std. w/min. climb of 203' per NM to 5300, or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1200' prior to DER.
DEPARTURE PROCEDURE:
Rwy 11, climbing right turn, thence...
Rwy 20, climbing left turn, thence...
Rwy 29, climbing left turn, thence...
...Intercept bearing 165° from AZC NDB to 7400 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 11, vegetation beginning 16' from DER, 213' left of centerline, up to 4861' MSL.
Rwy 20, tree 27' from DER, 275' left of centerline, 4843' MSL.
Vegetation 45' from DER, 26' right of centerline, 4843' MSL.
Vehicles on road beginning 67' from DER, 389' left of centerline, up to 4853' MSL.
Tree 1.8 NM from DER, 2971' right of centerline, 5118' MSL.
Rwy 29, sign and tree beginning 15' from DER, 123' right of centerline, up to 5' AGL/4850' MSL.
Vegetation 60' from DER, 46' left of centerline, 4849' MSL.

COOLIDGE, AZ
COOLIDGE MUNI (P08)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 10OCT96 (96284) (FAA)
DEPARTURE PROCEDURE:
Rwys 5, 35, climbing left turn heading 280° to intercept TFD R-063, then via R-063 to TFD VORTAC before proceeding on course.
Rwy 17, climbing right turn heading 240° to intercept TFD R-090, then via R-090 to TFD VORTAC before proceeding on course.
Rwy 23, climb runway heading to intercept TFD R-090, then via R-090 to TFD VORTAC before proceeding on course.

COTTONWOOD, AZ
COTTONWOOD (P52)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 26MAY16 (16147) (FAA)
DEPARTURE PROCEDURE:
Use MINGY DEPARTURE.

DAVIS-MONTHAN AFB (KDMA)
TUCSON, AZ
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 20MAY21 (21140) (USAF)
TAKEOFF MINIMUMS:
Rwy 12, 5300-3, or std. w/min. climb of 240'/NM to 3200.
DEPARTURE PROCEDURE:
Rwy 12, climb to 10000 on track 125°, intercept DMA R-120 for RADAR vectors.
Rwy 30, climb to 6500 on track 305°, intercept DMA R-312 for RADAR vectors.
TAKEOFF OBSTACLE NOTES:
Rwy 12, terrain 8' from DER, 424' left of cntrln, 2707' MSL.
Terrain 0' from DER, 500' left of cntrln, 2707' MSL.
Aircraft tail 81' from DER, 572' left of cntrln, 39' AGL/2748' MSL.
Pole 3511' from DER, 1052' left of cntrln, 45' AGL/2776' MSL.
Vehicle 1710' from DER, 195' right of cntrln, 10' AGL/2727' MSL.
Vehicle 1468' from DER, 787' left of cntrln, 10' AGL/2727' MSL.
Terrain 1.1 NM from DER, 1409' left of cntrln, 130' AGL/2892' MSL.
Terrain 5880' from DER, 2034' left of cntrln, 130' AGL/2886' MSL.
Rwy 30, terrain 0' from DER, 500' left of cntrln, 2591' MSL.
Terrain 0' from DER, 500' right of cntrln, 2592' MSL.
Terrain 13' from DER, 494' right of cntrln, 2592' MSL.
Aircraft tail 34' inward of DER, 510' right of cntrln, 39' AGL/2630' MSL.
Pylon 3296' from DER, 1373' left of cntrln, 69' AGL/2642' MSL.
Pylon 3415' from DER, 1170' left of cntrln, 98' AGL/2665' MSL.
Pylon 3771' from DER, 882' left of cntrln, 98' AGL/2665' MSL.
Pylon 4112' from DER, 607' left of cntrln, 98' AGL/2664' MSL.
Pylon 4455' from DER, 333' left of cntrln, 98' AGL/2672' MSL.
DELTA, UT
DELTA MUNI (DTA)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 02DEC21 (21336) (FAA)
DEPARTURE PROCEDURE:
Use DELTA DEPARTURE.
TAKEOFF OBSTACLE NOTES:
Rwy 17, lighting beginning 41’ from DER, 76’ right of centerline, 3’ AGL/4754’ MSL.
Tree 609’ from DER, 596’ right of centerline, 4780’ MSL.
Rwy 35, vegetation, lighting beginning 9’ from DER, 77’ right of centerline, up to 4763’ MSL.
Vegetation 47’ from DER, 349’ left of centerline, 4763’ MSL.
Fence 76’ from DER, 390’ right of centerline, 10’ AGL/4769’ MSL.
Vehicles on road 177’ from DER, 477’ right of centerline, 4770’ MSL.
Vehicles on road 227’ from DER, 458’ right of centerline, 4771’ MSL.

DOUGLAS BISBEE, AZ
BISBEE- DOUGLAS INTL (DUG)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 09FEB12 (12040) (FAA)
DEPARTURE PROCEDURE:
Rwys 8, 17, climbing right turn on heading 330° to intercept DUG VORTAC R-286 to 9500.
Rwy 26, climbing right turn to intercept DUG VORTAC R-286 to 9500.
Rwy 35, climbing left turn to intercept DUG VORTAC R-286 to 9600.
TAKEOFF OBSTACLE NOTES:
Rwy 8, trees and terrain beginning 145’ from DER, 51’ left of centerline, up to 8’ AGL/4220’ MSL.
Trees and terrain beginning 22’ from DER, 247’ right of centerline, up to 13’ AGL/4197’ MSL.
Rwy 17, trees and terrain beginning 91’ from DER, 76’ left of centerline, up to 5’ AGL/4118’ MSL.
Trees and terrain beginning 12’ from DER, 146’ right of centerline, up to 5’ AGL/4115’ MSL.
Rwy 26, tree and terrain beginning 16’ from DER, 233’ left of centerline, up to 5’ AGL/4167’ MSL.
Trees and terrain beginning 17’ from DER, 32’ right of centerline, up to 7’ AGL/4167’ MSL.
Rwy 35, trees and terrain beginning 118’ from DER, 15’ left of centerline, up to 6’ AGL/4190’ MSL.
Tree and terrain beginning 75’ from DER, 100’ right of centerline, up to 11’ AGL/4200’ MSL.

DUCHESENE, UT
DUCHESENE MUNI (U69)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 10OCT19 (19283) (FAA)
TAKEOFF MINIMUMS:
Rwys 8, 26, NA - Environmental.
Rwy 35, std. w/min. climb of 235’ per NM to 6900 or 1100-3 for VCOA.
DEPARTURE PROCEDURE:
Rwy 17, climbing left turn direct MTU VOR/DME, thence...
Rwy 35, climbing right turn direct MTU VOR/DME, thence...
...continue climb in MTU VOR/DME holding pattern (hold northeast, right turns, 213° inbound) to cross MTU VOR/DME at or above MEA for route of flight.
VCOA:
Rwy 35, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Duchesne Muni Airport at or above 6800 then on MTU VOR/DME R-269 to MTU VOR/DME. Continue climb in MTU VOR/ DME holding pattern (hold Northeast, right turns, 213° inbound) to cross MTU VOR/DME at or above MEA for route of flight.
TAKEOFF OBSTACLE NOTES:
Rwy 35, vehicles on road beginning 315’ from DER, 95’ right of centerline, up to 15’ AGL/5844’ MSL.
Vehicles on road beginning 327’ from DER, 29’ left of centerline, up to 15’ AGL/5854’ MSL.
Equipment 415’ from DER, 515’ left of centerline, 17’ AGL/5856’ MSL.
Building 876’ from DER, 617’ left of centerline, 30’ AGL/5869’ MSL.
Pole 1048’ from DER, 682’ left of centerline, 40’ AGL/5889’ MSL.
ELKO, NV
ELKO RGNL (EKO)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6 26MAY16 (16147) (FAA)
TAKEOFF MINIMUMS:
Rwys 12, 30, NA-ATC.
Rwy 6, std. w/min. climb of 500’ per NM to 7200, or 2000-3 for climb in visual conditions.
Rwy 24, std. w/min. climb of 390’ per NM to 8400, or 2000-3 for climb in visual conditions.
DEPARTURE PROCEDURE:
Rwy 6, climb heading 057° to 6500, then climbing right turn direct BQU VOR/DME, thence . . . .
Rwy 24, climb heading 237° to 6100, then climbing left turn turn direct BQU VOR/DME, thence . . . .
. . . .Continue climb in BQU VOR/DME holding pattern (hold south, left turns, 340° inbound) to cross BQU VOR/DME at or above MEA/MCA for route of flight.
VCOA:
Rwy 6, 24, obtain ATC approval for climb in visual conditions when requesting IFR clearance. Climb in visual conditions to cross Elko Rgnl airport at or above 7000, then proceed to BQU VOR/DME and continue climb in BQU VOR/ DME holding pattern (hold south, left turns, 340° inbound) to cross BQU VOR/DME at or above MEA/MCA for route of flight.
TAKEOFF OBSTACLE NOTES:
Rwy 6, OL on ltd wsk 253’ from DER, 155’ right of centerline, 5095’ MSL.
Lt poles, beginning 277’ from DER, 332’ right of centerline, up to 5097’ MSL.
Trees, buildings, and ants on ol buildings, beginning 676’ from DER, 209’ right of centerline, up to 5111’ MSL.
Pole 765’ from DER, 422’ left of centerline, 5110’ MSL.
Ols on poles, beginning 903’ from DER, 435’ left of centerline, up to 5130’ MSL.
Trees, poles, and ols on poles, beginning 961’ from DER, 130’ left of centerline, up to 5207’ MSL.
Ant 3007’ from DER, 84’ right of centerline, 5165’ MSL.
Tree 3676’ from DER, 251’ right of centerline, 5191’ MSL.
Rwy 24, vehicles on road, beginning 672’ from DER, 315’ right of centerline, up to 5075’ MSL.
Poles, trees beginning 1179’ from DER, 171’ right of centerline, up to 36’ AGL/5100’ MSL.
Poles, beginning 1243’ from DER, 663’ left of centerline, up to 39’ AGL/5085’ MSL.
Signs, beginning 1566’ from DER, 84’ right of centerline, up to 5168’ MSL.
Signs, elevators, silos beginning 2155’ from DER, 437’ right of centerline, up to 44’ AGL/5132’ MSL.

ELY, NV
ELY/YELELAND FLD (ELY)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 30JUN11 (21168) (FAA)
DEPARTURE PROCEDURE:
Use ELY DEPARTURE.

EUREKA, NV
EUREKA (05U)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 22AUG13 (13234) (FAA)
TAKEOFF MINIMUMS:
Rwy 18, NA-Terrain.
DEPARTURE PROCEDURE:
use MINES (RNAV) DEPARTURE.

FALLON, NV
FALLON MUNI (FLX)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A 20JUN19 (19171) (FAA)
TAKEOFF MINIMUMS:
Rwys 13, 31, NA - Environmental
DEPARTURE PROCEDURE:
Rwy 3, climbing left turn, thence...
Rwy 21, climbing right turn, thence...
. . . .to 9300 direct HZN VORTAC. continue climb in HZN VORTAC holding pattern (hold west, left turn 075° inbound) cross HZN VORTAC at or above 9300 before proceeding on course, continue climb to MEA or assigned altitude.
TAKEOFF OBSTACLE NOTES:
Rwy 3, sign, trees beginning 9’ from DER, 37’ left of centerline, up to 5’ AGL/3966’ MSL.
Tree 121’ from DER, 173’ right of centerline, 3966’ MSL.
Traverse way beginning 134’ from DER, 357’ right of centerline, up to 3972’ MSL.
Trees beginning 146’ from DER, 469’ left of centerline, up to 6’ AGL/3969’ MSL.
Traverse way, tree beginning 315’ from DER, 232’ right of centerline, up to 3974’ MSL.
Tree 1068’ from DER, 199’ left of centerline, 37’ AGL/3995’ MSL.
Trees beginning 1086’ from DER, 208’ left of centerline, up to 4002’ MSL.
Tree 1083’ from DER, 193’ right of centerline, 38’ AGL/3992’ MSL.
Trees, pole beginning 1214’ from DER, 306’ left of centerline, up to 61’ AGL/4018’ MSL.
Trees beginning 2148’ from DER, 819’ left of centerline, up to 4023’ MSL.
CON’T
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

FALLON, NV (CON’T)
FALLON MUNI (FLX) (CON’T)

**Rwy 3 (CON’T),** tree 2319’ from DER, 763’ left of centerline, 58’ AGL/4024’ MSL.
Trees beginning 2960’ from DER, 663’ left of centerline, up to 97’ AGL/4054’ MSL.
Rwy 21, trees, terrain beginning 31’ from DER, 150’ left of centerline, up to 3969’ MSL.
Traverse way 32’ from DER, 497’ right of centerline, 3981’ MSL.
Pole 112’ from DER, 397’ right of centerline, 26’ AGL/3991’ MSL.
Tree 139’ from DER, 401’ left of centerline, 4’ AGL/3970’ MSL.
Poles, traverse way, vegetation, building beginning 149’ from DER, 19’ right of centerline, up to 36’ AGL/4002’ MSL.
Traverse way beginning 380’ from DER, 908’ left of centerline, up to 3984’ MSL.
Trees beginning 525’ from DER, 22’ left of centerline, up to 3985’ MSL.
Tree 1286’ from DER, 785’ right of centerline, 48’ AGL/4016’ MSL.
Tree 1407’ from DER, 840’ right of centerline, 57’ AGL/4025’ MSL.
Pole 1813’ from DER, 798’ left of centerline, 39’ AGL/4013’ MSL.
Tree 1896’ from DER, 869’ right of centerline, 76’ AGL/4040’ MSL.

FALLON NAS (VAN VOORHIS FLD) (KNFL)
FALLON, NV

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

**AMDT 2  21APR22  (22111)  (USN)**

**TAKEOFF MINIMUMS:**
**Rwy 7,** std. w/min. climb rate of 291’ per NM to 9700.
**Rwys 13L/R,** std. w/min. climb rate of 235’ per NM to 7200.

**DEPARTURE PROCEDURE:**
**Rwys 13L/R,** climb on hdg between 110° CW to 310° from DER.
**Rwy 25,** climb on hdg between 216° CW to 028° from DER.
**Rwys 31L/R,** climb on hdg between 110° CW to 310° from DER.

**FILLMORE, UT**
FILLMORE MUNI (FOM)

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

**ORIG  18NOV10  (10322)  (FAA)**

**TAKEOFF MINIMUMS:**
**Rwy 4,** std. w/min. climb of 250’ per NM to 6200, or 1800-3 for climb in visual conditions.

**DEPARTURE PROCEDURE:**
**Rwy 4,** climbing left turn to 9600 on DTA R-141 to DTA VORTAC, climb in DTA VORTAC holding pattern (South, left turns, 004° inbound) to cross DTA VORTAC at or above MEA for route of flight or for climb in visual conditions cross Fillmore Muni airport Northwest bound at or above 6600, then climb to 9600 on DTA R-146 to DTA VORTAC. Continue climb in DTA VORTAC holding pattern (South, left turns, 004° inbound) to cross DTA VORTAC at or above MEA for route of flight.
**Rwy 22,** climbing right turn to 9600 on DTA R-152 to DTA VORTAC, climb in DTA VORTAC holding pattern (South, left turns, 004° inbound) to cross DTA VORTAC at or above MEA for route of flight.

**TAKEOFF OBSTACLE NOTES:**
**Rwy 4,** light 60’ from DER, 393’ left of centerline, 8’ AGL/4987’ MSL.
Windsock 129’ from DER, 301’ left of centerline, 21’ AGL/5000’ MSL.
Rising terrain 132’ from DER, 385’ right of centerline, 4989’ MSL.
Fence beginning 138’ from DER, 174’ right of centerline, up to 15’ AGL/4996’ MSL.
Buildings beginning 259’ from DER, 455’ right of centerline, up to 13’ AGL/5012’ MSL.
Beacon 311’ from DER, 505’ left of centerline, 52’ AGL/5031’ MSL.
Trees beginning 333’ from DER, 242’ left of centerline, up to 37’ AGL/5034’ MSL.
Vehicle on road beginning 472’ from DER, 608’ left of centerline, up to 1093’ right of centerline, up to 35’ AGL/5073’ MSL.
Pole 488’ from DER, 620’ left of centerline, 38’ AGL/5037’ MSL.
Windmeter, 623’ from DER, 342’ left of centerline, 9’ AGL/5008’ MSL.
Building 873’ from DER, 196’ left of centerline, 17’ AGL/5016’ MSL.
**Rwy 22,** fence 97’ from DER, 302’ left of centerline, 15’ AGL/4916’ MSL.
Vehicle on road beginning 228’ from DER, 398’ left of centerline, up to 9’ AGL/4928’ MSL.

**FLAGSTAFF, AZ**

**FLAGSTAFF PULLIAM (FLG)**

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

**AMDT 2A  06FEB14  (14037)  (FAA)**

**DEPARTURE PROCEDURE:**
**Rwy 3,** turn right.
**Rwy 21,** turn left. Aircraft departing FLG R-160 CW R-175 climb on course. All others climb southbound on FLG R-172 to 9000, then climbing left turn direct FLG VOR/DME.

**TAKEOFF OBSTACLE NOTES:**
**Rwy 21,** trees beginning 73’ from DER, left and right of centerline, up to 85’ AGL/7065’ MSL.

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)
FORT HUACHUCA SIERRA VISTA, AZ
SIERRA VISTA MUNI-LIBBY AAF (FHU)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4 13SEP18 (18256) (FAA)
TAKEOFF MINIMUMS:
Rwy 21, NA-terrain.
Rwy 26, std. w/min. climb of 335' per NM to 7300', or 2800-3 for VCOA
DEPARTURE PROCEDURE:
Rwys 3, 8, 12, climbing left turn... thence.
Rwys 26, 30, climbing right turn... thence.
...all aircraft, intercept FHU VOR/DME R-021 to TOMBS INT/FHU 12.76 DME, continue climb in TOMBS holding pattern
(hold north, left turns, 201° inbound) to 9500 before proceeding on course.
VCOA:
Rwy 26, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Sierra
Vista Muni-Libby AAF airport at or above 7400' MSL then intercept and proceed on FHU VOR/DME R-021 to TOMBS INT/
FHU 12.76 DME. Continue climb in TOMBS holding pattern (hold north, left turns, 201° inbound) to 9500 before proceeding
on course.
TAKEOFF OBSTACLE NOTES:
Rwy 3, trees 253' from DER, 130' left of centerline, 10' AGL/4595' MSL.
Tree 199' from DER, 271' right of centerline, 10' AGL/4595' MSL.
Rwy 8, reflector, 121' from DER, 174' right of centerline, 4' AGL/4603' MSL.
Rwy 12, terrain beginning 22' from DER, 93' right of centerline, up to 4639' MSL.
Rwy 26, general utility 100' from DER, 173' right of centerline, 20' AGL/4723' MSL.
General utility 101' from DER, 175' left of centerline, 26' AGL/4730' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)
ORIG 13NOV14 (14317) (FAA)
Rwys 3, 12, heading as assigned by ATC.
Rwy 8, heading as assigned by ATC. Requires minimum climb of 300' per NM to 8600.
Rwy 26, heading as assigned by ATC. Requires minimum climb of 330' per NM to 8100.
Rwy 30, heading as assigned by ATC. Requires minimum climb of 330' per NM to 8700.

GLENDALE, AZ
GLENDALE MUNI (GEU)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 24MAY18 (18144) (FAA)
DEPARTURE PROCEDURE:
Use DRAKE (RNAV) DEPARTURE.
TAKEOFF OBSTACLE NOTES:
Rwy 1, light on blast fence 4' from DER, 130' left of centerline, up to 10' AGL/1,088' MSL.
Trees beginning 124' from DER, left and right of centerline, up to 30' AGL/1,104' MSL.
Vehicles beginning 299' from DER, 80' right of centerline, up to 15' AGL/1,091' MSL.
Poles and trees beginning 400' from DER, 197' right of centerline, up to 75' AGL/1,144' MSL.
Rwy 19, trees beginning 281' from DER, 331' left of centerline, up to 33' AGL/1,060' MSL.

GLOBE, AZ
SAN CARLOS APACHE (P13)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 10APR08 (08101) (FAA)
DEPARTURE PROCEDURE: Use IZTIR DEPARTURE.

GOODYEAR, AZ
PHOENIX GOODYEAR (GYR)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 24MAY18 (18144) (FAA)
DEPARTURE PROCEDURE:
Use POTER (RNAV) DEPARTURE.
TAKEOFF OBSTACLE NOTES:
Rwy 3, poles beginning 159' from DER, 267' right of centerline, up to 47' AGL/1,015' MSL.
Building 1512' from DER, 828' right of centerline, 48' AGL/1,014' MSL.
Tree 1,957' from DER, 551' right of centerline, up to 49' AGL/1,019' MSL.
Poles and trees beginning 400' from DER, 197' right of centerline, up to 75' AGL/1,144' MSL.
Pole 3,193' from DER, 308' left of centerline, 112' AGL/1,030' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 1 21JUL16 (16203) (FAA)
Rwy 3, 21, heading as assigned by ATC.
GRAND CANYON, AZ
GRAND CANYON NTL PARK (GCN)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 30AUG07 (21168) (FAA)
TAKEOFF MINIMUMS:
Rwy 3, NA-Environmental.
DEPARTURE PROCEDURE:
Rwy 21, use GRAND DEPARTURE.

VALLE (40G)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 18SEP14 (14261) (FAA)
DEPARTURE PROCEDURE:
Rwy 1, Climb on a heading between 188° CW to 091° from DER.
Rwy 19, climb on a heading between 170° CW to 008° from DER.

HAWTHORNE, NV
HAWTHORNE INDUSTRIAL (HTH)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 14SEP17 (17257)
TAKEOFF MINIMUMS:
Rwy 15, 33, NA – ATC.
Rwy 10, 28, 4200 - 3 for VCOA.
VCOA:
Rwy 10, 28, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Hawthorne Industrial airport at or above 8300 then climb to 11500 on MVA R-251 to MVA VORTAC before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 10, ground beginning at DER, 53' right of centerline, up to 4232' MSL.
Ground 139' from DER, 39' right of centerline, 4234' MSL.
Ground 145' from DER, 387' right of centerline, 4236' MSL.
Bush 193' from DER, 480' right of centerline, 2' AGL/4238' MSL.
Bush 363' from DER, 576' right of centerline, 3' AGL/4242' MSL.
Bush 557' from DER, 555' right of centerline, 1' AGL/4245' MSL.
Rwy 28, ground 1' from DER, 388' left of centerline, 4183' MSL.
Bush 10' from DER, 488' left of centerline, 2' AGL/4185' MSL.

HEBER, UT
HEBER VALLEY (HCR)
TAKEOFF MINIMUMS AND (OBSTACLE)DEPARTURE PROCEDURES
AMDT 4A 15AUG19 (19227) (FAA)
TAKEOFF MINIMUMS:
Rwys 4, 22, 5800-5 for VCOA. VCOA NA at night.
VCOA:
Rwys 4, 22, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Heber Valley airport at or above 11300 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 4, fence abeam DER, 301' left of centerline, 16' AGL/5647' MSL.
Pole 24' from DER, 404' left of centerline, up to 33' AGL/5659' MSL.
Bush 23' from DER, 61' left of centerline, up to 5639' MSL.
Terrain 109' from DER, 428' right of centerline, 5642' MSL.
Multiple poles, tree, beginning 200' from DER, 269' left of centerline, up to 36' AGL/5666' MSL.
Tree, fence beginning 252' from DER, 249' right of centerline, up to 5659' MSL.
Pole 319' from DER, 404' left of centerline, up to 5670' MSL.
Tree, pole beginning 662' from DER, 404' left of centerline, up to 5681' MSL.
Tree, sign, pole beginning 710' from DER, 281' left of centerline, up to 5682' MSL.
Building beginning 1066' from DER, 428' right of centerline, up to 5674' MSL.
Tree, pole beginning 1120' from DER, 181' right of centerline, up to 5689' MSL.
Tree, pole beginning 1281' from DER, 278' right of centerline, up to 5690' MSL.
Trees beginning 1773' from DER, 238' left of centerline, up to 5689' MSL.
Tree, pole beginning 1901' from DER, 399' right of centerline, up to 5708' MSL.
Tree 1909' from DER, 489' left of centerline, 5692' MSL.
Rwy 22, pole abeam DER, 292' right of centerline, 16' AGL/5592' MSL.
Fence, vegetation, terrain 13' from DER, 225' left of centerline, up to 9' AGL/5597' MSL.
Trees beginning 608' from DER, 384' right of centerline, up to 5611' MSL.
Pole 823' from DER, 474' left of centerline, 22' AGL/5605' MSL.
Pole 988' from DER, 634' left of centerline, up to 33' AGL/5617' MSL.
Tree 1672' from DER, 777' left of centerline, 5628' MSL.
Terrain beginning 1.1 NM from DER, 1752' left of centerline, up to 5964' MSL.
Tree 1.3 NM from DER, 2420' left of centerline, 5821' MSL.
Terrain, trees beginning 1.4 NM from DER, 1124' left of centerline, up to 6128' MSL.
Terrain, trees beginning 1.5 NM from DER, 372' left of centerline, up to 6411' MSL.
HILL AFB (KHIF)
OGDEN, UT
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
Diverse departures NA, use RADAR vectors or published Departure Procedures (DP) for obstacle avoidance.

HUNTINGTON, UT
HUNTINGTON MUNI (69V)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2B 19JUL18 (18200) (FAA)
TAKEOFF MINIMUMS:
Rwy 12, 18, 26, 30, 36, NA-Environmental.
DEPARTURE PROCEDURE:
Rwy 8, climbing left turn direct PUC VOR/DME...
...continue climb in PUC VOR/DME holding pattern (hold south, RT, 009° inbound) to MEA for direction of flight.
TAKEOFF OBSTACLE NOTES:
Rwy 1, tree 2683' from DER, 922' left of centerline, 40' AGL/5979' MSL.

KANAB, UT
KANAB MUNI (KNB)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 11FEB10 (10042) (FAA)
TAKEOFF MINIMUMS:
Rwy 1, std. with min. climb of 742’ per NM to 6600, or 1100-3 with min. climb of 535’ per NM to 6900, or 2400-3 for climb in visual conditions.
DEPARTURE PROCEDURE:
Rwy 19, climb heading 171° to 6800 before turning.
Rwy 1, climb heading 006° to 6100 before turning, or for climb in visual conditions, cross Kanab Muni airport at or above 7100 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 1, vent on building 554' from DER, 370' left of centerline, 16' AGL/4884' MSL.
Rising terrain and trees beginning 1138' from DER, 302' left of centerline, up to 100' AGL/5599' MSL.
Rising terrain beginning 3.5 NM from DER, left and right of centerline, up to 6359' MSL.
Rwy 19, trees beginning 271' from DER, 506' right of centerline, up to 100' AGL/4699' MSL.

KINGMAN, AZ
KINGMAN (IGM)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A 16JUL20 (21168) (FAA)
TAKEOFF MINIMUMS:
Rwys 3, 35, 2000-2 or std. w/min. climb of 275' per NM to 5500.
Rwys 17, 21, NA.
DEPARTURE PROCEDURE:
Climb northbound on IGM R-010 until reaching 6000; reverse course to the left and continue climb to 9000 direct to IGM. If unable to cross IGM at 9000 continue climb in IGM holding pattern (SW, left turns, 027° inbound).
TAKEOFF OBSTACLE NOTES:
Rwy 3, terrain and vegetation beginning 171' from DER, 264' right of centerline, up to 3402' MSL.
Rwy 35, terrain beginning 32' from DER, 172' right of centerline, up to 3363' MSL.
Fence 306' from DER, 392' right of centerline, 6' AGL/3368' MSL.
Traverse way 441' from DER, 274' right of centerline, up to 15' AGL/3372' MSL.

LAGUNA AAF (LGF)
YUMA PROVING GROUND, AZ
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
04SEP03 (03247)
TAKEOFF MINIMUMS:
Rwys 6, 18, 36, turn right, climb to 3600 direct BZA VORTAC.
Rwy 24, climb to 3600 direct to BZA VORTAC.
TAKEOFF OBSTACLE NOTES:
Rwy 18, 386' (6' AGL) windsock, 818' from DER, 194' left of centerline.
LAKE HAVASU CITY, AZ
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 31MAY12 (12152) (FAA)
TAKEOFF MINIMUMS:
Rwy 14, std. w/min. climb of 465' per NM to 4800, or 1500-3 for climb in visual conditions.
Rwy 32, 600-1¾ w/min. climb of 492' per NM to 1100, or 1500-3 for climb in visual conditions.

DEPARTURE PROCEDURE:
Rwy 14, climbing right turn heading 300° to intercept EED VORTAC R-155 to EED VORTAC, continue climb in EED VORTAC holding pattern (East, right turns, 257° inbound) to cross EED VORTAC at or above 6100 before proceeding on course or...
Rwy 32, climbing left turn heading 290° to intercept EED VORTAC R-155 to EED VORTAC, continue climb in EED VORTAC holding pattern (East, right turns, 257° inbound) to cross EED VORTAC at or above 6100 before proceeding on course or...
Rwy 14, 32, ... For climb in visual conditions: cross Lake Havasu City airport northwest bound at or above 2300, then Intercept EED VORTAC R-138 to EED VORTAC, continue climb in EED VORTAC holding pattern (East, right turns, 257° inbound) to cross EED VORTAC at or above 6100 before proceeding on course or...

TAKEOFF OBSTACLE NOTES:
Rwy 14, pole 3327' from DER, 46' right of centerline, 107' AGL/868' MSL.
Poles 3468' from DER, 195' left of centerline, up to 107' AGL/890' MSL.
Trees/bushes 976' from DER, 380' left of centerline, up to 46' AGL/829' MSL.
Terrain 143' from DER, 346' left of centerline, up to 804' MSL.

LAS VEGAS, NV
HARRY REID INTL (LAS)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 8 17AUG17 (21168) (FAA)
TAKEOFF MINIMUMS:
Rwy 1L, 300-1 or std. w/min. climb of 269' per NM to 2300.
Rwy 19L, std. w/min. climb of 256' per NM to 3400.
Rwy 19R, std. w/min. climb of 242' per NM to 3400.
Rwy 26L, 300-2¼ or std. w/min. climb of 214' per NM to 2400.
Rwy 26R, 400-2½ or std. w/min. climb of 270' per NM to 2400.

DEPARTURE PROCEDURE:
Rwys 1L/R, climbing right turn direct BLD VORTAC before proceeding on course.
Rwys 8L/R, climb heading 079° to 3700, then climbing right turn direct BLD VORTAC before proceeding on course.
Rwys 19L/R, climb heading 194° to 2800, then climbing left turn heading 120° and BLD R-257 to BLD VORTAC before proceeding on course.
Rwys 26L/R, climb heading 259° to 2800, then climbing right turn direct BLD VORTAC before proceeding on course.

TAKEOFF OBSTACLE NOTES:
Rwy 1L, REIL 23' from DER, 153' left of centerline, 3' AGL/2090' MSL.
Sign 1037' from DER, 695' left of centerline, 41' AGL/2125' MSL.
Building 1556' from DER, 552' left of centerline, 2129' MSL.
Building 1779' from DER, 649' left of centerline, 2147' MSL.
Buildings beginning 1907' from DER, 186' left of centerline, up to 2150' MSL.
Buildings beginning 1977' from DER, 214' left of centerline, up to 2150' MSL.
Buildings beginning 2095' from DER, 275' left of centerline, up to 83' AGL/2153' MSL.
Buildings beginning 3893' from DER, 1397' left of centerline, up to 162' AGL/2226' MSL.
Building 4126' from DER, 1090' left of centerline, 2229' MSL.
Building 4542' from DER, 1460' left of centerline, 183' AGL/2240' MSL.
Building 4604' from DER, 1367' left of centerline, 186' AGL/2243' MSL.
Rwy 1R, building 609' from DER, 538' right of centerline, 28' AGL/2095' MSL.
Sign 1336' from DER, 447' right of centerline, 60' AGL/2122' MSL.
Rwy 8L, pole 744' from DER, 442' right of centerline, 30' AGL/2057' MSL.
Tree 758' from DER, 168' right of centerline, 2068' MSL.
Tree 767' from DER, 589' left of centerline, 2060' MSL.
Tree 850' from DER, 164' left of centerline, 2067' MSL.
Trees beginning 886' from DER, 371' right of centerline, up to 2074' MSL.
Rwy 8R, tower 1457' from DER, 848' right of centerline, 64' AGL/2097' MSL.
Rwy 19L, railroad, pole beginning 952' from DER, 322' left of centerline, up to 2215' MSL.
Railroad 1043' from DER, 178' left of centerline, 2218' MSL.
Railroad, pole beginning 1122' from DER, 19' left of centerline, up to 2219' MSL.
Railroad 1166' from DER, 75' right of centerline, 2220' MSL.
Railroad 1219' from DER, 236' right of centerline, 2222' MSL.
Railroad 1230' from DER, 281' right of centerline, 2223' MSL.
Pole 1234' from DER, 178' left of centerline, 2221' MSL.
Railroad 1241' from DER, 351' right of centerline, 2224' MSL.
Railroad 1246' from DER, 489' right of centerline, 2225' MSL.
Railroad, pole beginning 1247' from DER, 11' right of centerline, up to 2226' MSL.
Poles, tree, vehicles on road, sign, parking lot beginning 1392' from DER, 115' right of centerline, up to 36' AGL/2238' MSL.
Tree, pole beginning 1410' from DER, 9' left of centerline, up to 2232' MSL.
Tree 1819' from DER, 124' left of centerline, 2236' MSL.

CON'T
LAS VEGAS, NV (CON’T)
HARRY REID INTL (LAS) (CON’T)

**Rwy 19L (CON’T)**, pole, tree, vehicles on road beginning 1824’ from DER, 9’ right of centerline, up to 34’ AGL/2242’ MSL.

Pole 1933’ from DER, 623’ right of centerline, 34’ AGL/2243’ MSL.

Pole, tree beginning 1936’ from DER, 55’ right of centerline, up to 36’ AGL/2245’ MSL.

Pole, tree, vehicles on road beginning 2036’ from DER, 386’ right of centerline, up to 35’ AGL/2246’ MSL.

Pole, parking lot beginning 2036’ from DER, pole, building beginning 1729’ from DER, 27’ right of centerline, up to 2256’ MSL.

Pole 2229’ from DER, 578’ left of centerline, 2238’ MSL.

Pole beginning 2322’ from DER, 583’ left of centerline, up to 2240’ MSL.

Pole, sign, pole, parking lot beginning 2381’ from DER, 53’ right of centerline, up to 41’ AGL/2257’ MSL.

Building, tree, pole beginning 2466’ from DER, 591’ right of centerline, up to 38’ AGL/2258’ MSL.

Building, tree, poles, utility box beginning 2505’ from DER, 157’ right of centerline, up to 38’ AGL/2259’ MSL.

Pole, building beginning 2738’ from DER, 20’ left of centerline, up to 2251’ MSL.

Pole, buildings beginning 1134’ from DER, 57’ right of centerline, up to 57’ AGL/2279’ MSL.

Building, pole beginning 2766’ from DER, 869’ right of centerline, up to 57’ AGL/2280’ MSL.

Building, building beginning 2822’ from DER, 1006’ right of centerline, up to 58’ AGL/2281’ MSL.

Buildings, pole, buildings beginning 2861’ from DER, 665’ right of centerline, up to 59’ AGL/2282’ MSL.

Buildings, pole beginning 3418’ from DER, 884’ right of centerline, up to 61’ AGL/2284’ MSL.

Building, pole beginning 3515’ from DER, 424’ right of centerline, up to 59’ AGL/2287’ MSL.

Sign 5292’ from DER, 1688’ right of centerline, 55’ AGL/2309’ MSL.

Building, pole beginning 5596’ from DER, 1758’ left of centerline, up to 110’ AGL/2334’ MSL.

Communication tower 5717’ from DER, 781’ right of centerline, 80’ AGL/2327’ MSL.

Building 2 NM from DER, 2897’ left of centerline, 236’ AGL/2491’ MSL.

Buildings beginning 2 NM from DER, 2936’ left of centerline, up to 241’ AGL/2494’ MSL.

Rwy 19R, ground 60’ from DER, 475’ right of centerline, 2186’ MSL.

Ground 151’ from DER, 529’ right of centerline, 2190’ MSL.

Building 194’ from DER, 444’ right of centerline, 9’ AGL/2199’ MSL.

NAVAID 262’ from DER, 408’ right of centerline, 14’ AGL/2206’ MSL.

Vehicles on road, ground, control box beginning 348’ from DER, 42’ right of centerline, up to 2208’ MSL.

Pole, vehicles on road beginning 503’ from DER, 434’ right of centerline, up to 2218’ MSL.

Pole, sign, vehicles on road, flag pole, fence beginning 592’ from DER, 277’ right of centerline, up to 74’ AGL/2302’ MSL.

Signs, parking lot, vehicles on road, building, pole, pole beginning 844’ from DER, 266’ right of centerline, up to 41’ AGL/2240’ MSL.

Tower, fence, vehicles on road, sign beginning 961’ from DER, 175’ right of centerline, up to 41’ AGL/2243’ MSL.

TOWER, vehicles on road, railroad, pole, railroad crossing signal control box, parking lot beginning 1132’ from DER, 8’ right of centerline, up to 47’ AGL/2249’ MSL.

Railroad 1219’ from DER, 701’ left of centerline, 2222’ MSL.

Railroad 1230’ from DER, 656’ left of centerline, 2223’ MSL.

Railroad 1240’ from DER, 585’ left of centerline, 2224’ MSL.

Railroad 1246’ from DER, 448’ left of centerline, 2225’ MSL.

Railroad, pole beginning 1247’ from DER, 76’ left of centerline, up to 2226’ MSL.

Poles, trees, vehicles on road, sign beginning 1392’ from DER, 15’ left of centerline, up to 36’ AGL/2238’ MSL.

Poles, trees, parking lot, building beginning 1726’ from DER, 11’ right of centerline, up to 2254’ MSL.

Pole, tree beginning 1823’ from DER, 78’ left of centerline, up to 34’ AGL/2242’ MSL.

Pole 1933’ from DER, 313’ left of centerline, 34’ AGL/2243’ MSL.

Pole, trees, vehicles on road, railroad, pole, railroad crossing signal control box, parking lot beginning 1132’ from DER, 8’ right of centerline, up to 36’ AGL/2245’ MSL.

Pole, tree beginning 2036’ from DER, 5’ left of centerline, up to 35’ AGL/2246’ MSL.

Poles, buildings, tree beginning 2043’ from DER, 221’ right of centerline, up to 2255’ MSL.

Pole, tree beginning 2133’ from DER, 19’ left of centerline, up to 36’ AGL/2247’ MSL.

Trees, poles, sign, building beginning 2146’ from DER, 14’ right of centerline, up to 2259’ MSL.

Pole, building, building beginning 2246’ from DER, 12’ left of centerline, up to 36’ AGL/2248’ MSL.

Pole, trees, vehicles on road, sign beginning 2381’ from DER, 37’ left of centerline, up to 41’ AGL/2257’ MSL.

Pole, buildings, tree beginning 2496’ from DER, 5’ right of centerline, up to 2274’ MSL.

Building beginning 2739’ from DER, 196’ right of centerline, up to 57’ AGL/2279’ MSL.

Building, tree beginning 2766’ from DER, 73’ right of centerline, up to 57’ AGL/2280’ MSL.

Building beginning 2776’ from DER, 44’ left of centerline, up to 36’ AGL/2286’ MSL.

Building, tree beginning 2822’ from DER, 68’ right of centerline, up to 58’ AGL/2281’ MSL.

Building, tree beginning 2861’ from DER, 126’ right of centerline, up to 59’ AGL/2282’ MSL.

Buildings, tree beginning 2893’ from DER, 6’ right of centerline, up to 2288’ MSL.

Building beginning 2985’ from DER, 2’ left of centerline, up to 39’ AGL/2262’ MSL.

Building, pole beginning 3032’ from DER, 301’ right of centerline, up to 61’ AGL/2290’ MSL.

Buildings, pole, buildings beginning 3076’ from DER, 58’ right of centerline, up to 61’ AGL/2291’ MSL.

Buildings, pole, buildings beginning 3459’ from DER, 287’ right of centerline, up to 74’ AGL/2302’ MSL.

Building 3495’ from DER, 53’ left of centerline, 52’ AGL/2278’ MSL.

Communication tower 5717’ from DER, 156’ left of centerline, 80’ AGL/2327’ MSL.

**Rwy 26L (CON’T)**, building 1002’ from DER, 250’ left of centerline, 8’ AGL/2183’ MSL.

Railroad, pole beginning 1857’ from DER, 793’ left of centerline, up to 2219’ MSL.

Railroad 2068’ from DER, 796’ left of centerline, 2218’ MSL.

Pole, railroad beginning 2148’ from DER, 800’ left of centerline, up to 2221’ MSL.

Tree, railroad beginning 2376’ from DER, 780’ left of centerline, up to 2232’ MSL.

Tree, railroad beginning 2528’ from DER, 751’ left of centerline, up to 2233’ MSL.

Pole 2881’ from DER, 811’ left of centerline, 36’ AGL/2238’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

LAS VEGAS, NV (CON’T)

HARRY REID INTL (LAS) (CON’T)

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

Rwy 26L (CON’T), pole 3167’ from DER, 1144’ left of centerline, 34’ AGL/2242’ MSL.

Pole 3171’ from DER, 1091’ left of centerline, 34’ AGL/2243’ MSL.

Pole 3313’ from DER, 1200’ left of centerline, 35’ AGL/2246’ MSL.

Sign, T-L tower beginning 3672’ from DER, 145’ left of centerline, up to 2256’ MSL.

Pole, building beginning 4223’ from DER, 1389’ left of centerline, up to 2274’ MSL.

Building 4554’ from DER, 1593’ left of centerline, 2277’ MSL.

Building 4687’ from DER, 1685’ left of centerline, 53’ AGL/2279’ MSL.

Building 4719’ from DER, 1754’ left of centerline, 61’ AGL/2290’ MSL.

Building 4954’ from DER, 1894’ left of centerline, 61’ AGL/2291’ MSL.

Transmission tower 5469’ from DER, 1056’ left of centerline, 2297’ MSL.

Pole 5879’ from DER, 1519’ left of centerline, 2309’ MSL.

Pole 6019’ from DER, 2022’ right of centerline, 101’ AGL/2309’ MSL.

Pole 1 NM from DER, 1722’ left of centerline, 46’ AGL/2311’ MSL.

Pole 1 NM from DER, 1922’ left of centerline, 45’ AGL/2311’ MSL.

Tower 1.1 NM from DER, 1843’ left of centerline, 80’ AGL/2332’ MSL.

Pole 1.8 NM from DER, 1817’ left of centerline, 131’ AGL/2435’ MSL.

NAVAIDs, building beginning 533’ from DER, 367’ left of centerline, up to 14’ AGL/2206’ MSL.

NAVAIDs beginning 533’ from DER, on centerline, up to 5’ AGL/2195’ MSL.

Vehicles on road beginning 866’ from DER, crossing left and right of centerline, up to 2208’ MSL.

Pole 785’ from DER, 592’ left of centerline, 2218’ MSL.

Pole, tree beginning 786’ from DER, 8’ left of centerline, up to 2220’ MSL.

Trees beginning 821’ from DER, 49’ right of centerline, up to 25’ AGL/2214’ MSL.

Pole, sign, tree, building beginning 873’ from DER, 347’ left of centerline, up to 37’ AGL/2234’ MSL.

Trees beginning 952’ from DER, 48’ right of centerline, up to 2233’ MSL.

Tree, building, railroad beginning 1093’ from DER, 1593’ left of centerline, 2277’ MSL.

Pole, communication tower beginning 1.3 NM from DER, 2649’ left of centerline, 80’ AGL/2384’ MSL.

Pole 1.5 NM from DER, 2801’ left of centerline, 100’ AGL/2444’ MSL.

Pole 1.8 NM from DER, 2832’ left of centerline, up to 100’ AGL/2455’ MSL.

Pole, communication tower beginning 1.7 NM from DER, 2068’ left of centerline, up to 100’ AGL/2463’ MSL.

Pole 1.7 NM from DER, 2845’ left of centerline, 135’ AGL/2469’ MSL.

Transmission tower 2.1 NM from DER, 3453’ left of centerline, 134’ AGL/2490’ MSL.

HENDERSON EXEC (HND)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 22JUN17 (21112) (FAA)

TAKEOFF MINIMUMS:

Rwys 17L/R, std. w/min. climb of 491’ per NM to 6000 or 2800-2¾ for VCOA.

Rwys 35L/R, std. w/min. climb of 312’ per NM to 4700 or 2800-2¾ for VCOA.

DEPARTURE PROCEDURE:

Rwys 17L/R, climbing right turn on LAS R-157 to LAS VORTAC before proceeding on course.

Rwys 35 L/R, climbing right turn on BLD R-249 TO BLD VORTAC before proceeding on course.

VCOA:

All Rwys, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Henderson Exec airport eastbound at or above 5100, then proceed on BLD R-249 TO BLD VORTAC before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 17L, terrain beginning 2427’ from DER, 18’ left of centerline, 2552’ MSL.

Poles beginning 4256’ from DER, 678’ right of centerline, up to 2598’ MSL.

Rwy 17R, bush 134’ from DER, 314’ right of centerline, 2498’ MSL.

Fence 629’ from DER, 75’ right of centerline, 2510’ MSL.

Terrain 926’ from DER, 717’ left of centerline, 2552’ MSL.

Tank 1096’ from DER, 311’ right of centerline, 2533’ MSL.

Vehicles on road beginning 1149’ from DER, crossing centerline, up to 1159’ MSL.

Poles beginning 2756’ from DER, 400’ left to 698’ right of centerline, up to 2764’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

LAS VEGAS, NV (CON’T)
NORTH LAS VEGAS (VGT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3A 08NOV18 (18312) (FAA)

DEPARTURE PROCEDURE: Use BOULDER CITY DEPARTURE.
TAKEOFF OBSTACLE NOTES:
- Rwy 7, tower 1.1 NM from DER, 1044’ right of centerline, 252’ AGL/2348’ MSL.
- Rwy 12R, multiple towers 1.0 NM from DER, 850’ right of centerline, up to 267’ AGL/2368’ MSL.
  - Tower 1.2 NM from DER, 1355’ right of centerline, 270’ AGL/2367’ MSL.
  - Power lines 1122’ from DER, 764’ right of centerline, traversing to the southeast out to 2345’ from DER, 510’ right of centerline, 106’ AGL/2344’ MSL.
- Rwy 12L, light pole 254’ from DER, 462’ right of centerline, 36’ AGL/2159’ MSL.
  - Trucks on road 255’ from DER, 502’ right of centerline, up to 129’ AGL/2226’ MSL.
  - Multiple towers 5045’ from DER, 1551’ right of centerline, 267’ AGL/2368’ MSL.
- Rwy 25, light pole, 1447’ from DER, 21’ right of centerline, 35’ AGL/2255’ MSL.
- Rwy 30L, signs, building, light pole beginning 1692’ from DER, 236’ left of centerline, up to 49’ AGL/2271’ MSL.

LOGAN, UT
LOGAN-CACHE (LGU)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 8 17DEC09 (09351) (FAA)

TAKEOFF MINIMUMS:
- Rwys 10, 28, NA-obstacles.

DEPARTURE PROCEDURE:
- Rwys 17, 35, use ORNEY DEPARTURE.

LOVELOCK, NV
DERBY FLD (LOL)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 03JAN19 (21280) (FAA)

TAKEOFF MINIMUMS:
- Rwy 2, std. w/min. climb of 415’ per NM to 8200 or 3200-3 for climb in visual conditions.
- Rwys 8, 20, std. w/min. climb of 340’ per NM to 8200 or 3200-3 for climb in visual conditions.
- Rwy 26, std. w/min. climb of 400’ per NM to 8200 or 3200-3 for climb in visual conditions.

DEPARTURE PROCEDURE:
- Rwy 2, climb to 6500 then climbing left turn direct LLC VORTAC, thence...
- Rwys 8, 20, 26, climb to 5700 then climbing left turn direct LLC VORTAC, thence...

VCOA:
- Obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Derby Fld airport at or above 7000 before proceeding on course.

TAKEOFF OBSTACLE NOTES:
- Rwy 2, vegetation 13’ from DER, 141’ right of centerline, 3908’ MSL.
- Rwy 7, vegetation 17’ from DER, 199’ left of centerline, 2’ AGL/3909’ MSL.
- Vegetation 54’ from DER, 155’ right of centerline, 3909’ MSL.
- Tree 80’ from DER, 347’ right of centerline, 3912’ MSL.
- Rwy 8, vegetation beginning 56’ from DER, 172’ left of centerline, up to 3910’ MSL.
- Vegetation 147’ from DER, 376’ left of centerline, 3911’ MSL.
- Rwy 20, vegetation beginning 47’ from DER, 112’ left of centerline, up to 3910’ MSL.
- Rwy 26, terrain 15’ from DER, 170’ right of centerline, 3905’ MSL.
- Vegetation 67’ from DER, 239’ left of centerline, 3906’ MSL.
- Tree 258’ from DER, 531’ left of centerline, 3917’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

LUKE AFB (KLUF)
GLENDALE, AZ
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 5  14JUL22 (22195) (USAF)

DEPARTURE PROCEDURE:
Rwy 3L/R, climb hdg 033° to LUF 4 DME, then climbing left turn on a hdg between 320° CW to 360° from DER. Expect RADAR vectors on course from Luke RAPCON.

Rwy 21L/R, climb hdg 213° to LUF 8 DME, then climb on a hdg between 183° CW to 225° from DER. Expect RADAR vectors on course from Luke RAPCON.

TAKEOFF OBSTACLE NOTES:
Rwy 3L, taxiing aircraft, 1421' from DER, 609' left of centerline, 19' AGL/1123' MSL.
Taxiing aircraft, 1235' from DER, 782' left of centerline, 19' AGL/1123' MSL.

Rwy 21L, taxiing aircraft, 1422' from DER, 775' left of centerline, 38' AGL/1117' MSL.

MANTI, UT
MANTI-EFFRAIM (41U)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG  22JUN17 (17173) (FAA)

DEPARTURE PROCEDURE:
Rwy 3, Use YMONT DEPARTURE.

Rwy 21, Use WUXOT DEPARTURE.

MARANA, AZ
MARANA RGNL(AVQ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A  22AUG13 (13234) (FAA)

TAKEOFF MINIMUMS:
Rwys 3, 12, N/A-Obstacles

DEPARTURE PROCEDURE:
Rwy 21, climb to 6500 via heading 360° and TUS R-308 to TOTEC INT/TUS 57 DME, then as filed.

Rwy 30, climb to 6500 via heading 303° intercept TUS R-308 above 3500, to TOTEC INT/TUS 57 DME, then as filed.

TAKEOFF OBSTACLE NOTES:
Rwy 21, road 53' from DER, 413' left of centerline, 15' AGL/2035' MSL.
Tree 800' from DER, 695' left of centerline, 32' AGL/2043' MSL.
Multiple trees and poles beginning 518' from DER, 190' right of centerline, up to 19' AGL/2049' MSL.

Rwy 30, multiple trees beginning 148' from DER, 275' right of centerline, up to 19' AGL/2020' MSL.

MESA, AZ
FALCON FLD (FFZ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4  29JUL10 (21112) (FAA)

DEPARTURE PROCEDURE:
Use MESA DEPARTURE.

DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 1  07JAN16 (16007) (FAA)

Rwy 4L, heading as assigned by ATC; requires minimum climb of 480' per NM to 3800.

Rwy 4R, heading as assigned by ATC; requires minimum climb of 500' per NM to 3700.

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

MESQUITE, NV
MESQUITE (67L)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG  13SEP18 (18256) (FAA)

TAKEOFF MINIMUMS:
Rwy 2, 300-2¼ or std. w/min. climb of 455' per NM to 2300.

DEPARTURE PROCEDURE:
Rwy 2, climb heading 018° to 2400 then climbing left turn direct MMM VORTAC, continue climb-in hold (hold S, left turn, 015° inbound) to 11000 before proceeding on course.

Rwy 20, climbing right turn direct MMM VORTAC, continue climb-in hold (hold S, left turn 015° inbound) to 11000 before proceeding on course.

TAKEOFF OBSTACLE NOTES:
Rwy 2, terrain beginning 41' from DER, 227' left of centerline, up to 1992' MSL.
Terrain beginning 83' from DER, 456' right of centerline, up to 2000' MSL.
Fence, terrain beginning 190' from DER, 211' right of centerline, up to 3' AGL/2005' MSL.
Terrain beginning 197' from DER, 213' left of centerline, up to 2006' MSL.
Terrain beginning 295' from DER, 222' right of centerline, up to 2006' MSL.
Terrain beginning 365' from DER, 225' left of centerline, up to 2019' MSL.
Fence beginning 491' from DER, 238' right of centerline, up to 3' AGL/2014' MSL.
Terrain 783' from DER, 496' left of centerline, 2026' MSL.

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

MESQUITE, NV (CON’T)

MESQUITE (67L) (CON’T)

Rwy 2 (CON’T), terrain beginning 3846' from DER, 254' left of centerline, up to 2031' MSL.
Terrain, fence beginning 971' from DER, 272' left of centerline, up to 2036' MSL.
Terrain, fence beginning 1176' from DER, 269' left of centerline, up to 2038' MSL.
Terrain beginning 1289' from DER, 411' left of centerline, up to 2043' MSL.
Terrain beginning 1426' from DER, 647' left of centerline, up to 2048' MSL.
Terrain beginning 2059' from DER, 909' left of centerline, up to 2059' MSL.
Terrain 2960' from DER, 1201' left of centerline, 2065' MSL.
Terrain beginning 3160' from DER, 139' right of centerline, up to 2098' MSL.
Terrain beginning 3286' from DER, 73' right of centerline, up to 2119' MSL.
Terrain beginning 3317' from DER, 334' left of centerline, up to 2084' MSL.
Terrain beginning 3424' from DER, 674' right of centerline, up to 2139' MSL.
Terrain 3429' from DER, 459' right of centerline, 2149' MSL.
Terrain beginning 3434' from DER, 109' left of centerline, up to 2102' MSL.
Terrain, vegetation beginning 3734' from DER, 367' right of centerline, 2152' MSL.
Terrain, vegetation beginning 3484' from DER, 10' right of centerline, up to 2156' MSL.
Terrain 3794' from DER, 751' left of centerline, 2110' MSL.
Terrain beginning 3794' from DER, 163' left of centerline, up to 2118' MSL.
Terrain beginning 3903' from DER, 952' left of centerline, up to 2122' MSL.
Terrain, vegetation beginning 3911' from DER, 119' left of centerline, up to 2199' MSL.
Terrain, vegetation beginning 4387' from DER, 10' left of centerline, up to 2204' MSL.
Terrain 1.5 NM from DER, 2409' left of centerline, 2216' MSL.
Vegetation 1.5 NM from DER, 2758' left of centerline, 2231' MSL.
Terrain beginning 1.5 NM from DER, 2618' left of centerline, up to 2257' MSL.
Terrain beginning 1.5 NM from DER, 2769' left of centerline, up to 2259' MSL.
Terrain 1.7 NM from DER, 3138' left of centerline, 2244' MSL.

Rwy 20, lighting 1' from DER, 46' left of centerline, 2' AGL/1876' MSL.
Lighting 3' from DER, 89' right of centerline, 2' AGL/1876' MSL.
Traverse way 4' from DER, 355' right of centerline, 1878' MSL.
Transmission line 453' from DER, 308' left of centerline, 70' AGL/1888' MSL.

MICHAEL AAF (KDPG),
DUGWAY PROVING GROUND, UT

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2  23AUG12  (12236)

DEPARTURE PROCEDURES:

Rwy 12, climb heading 122° to 5700, then climbing right turn on a heading between 202° C W to 302° to 10,000 before proceeding on course.

Rwy 30, climbing left turn on a heading between 267° CW to 300° to 10,000 before proceeding on course.

MILFORD, UT

MILFORD MUNI/BEN AND JUDY BRISCOE FLD (MLF)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2  05APR12  (21112)  (FAA)

TAKEOFF MINIMUMS:

Rwy 34, std. w/min, climb of 487' per NM to 6500 or 1500-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

Rwy 16, climb direct MLF VORTAC, thence...
...aircraft departing on V235 or V21 southbound proceed on course.
...all other aircraft climb to 11000 on MLF VORTAC R-168, then right turn direct MLF VORTAC. Continue climb-in-hold, right turns, 348° inbound to cross MLF VORTAC at or above MEA/MCA for route of flight.
Rwy 34, climbing left turn to intercept MLF VORTAC R-310 to MLF VORTAC, thence...
...aircraft departing on V235 or V21 southbound; proceed on course .
...all other aircraft, climb-in-hold, MLF VORTAC, right turns, 348° inbound to cross MLF VORTAC at or above MEA/MCA for route of flight.
...or climb in visual conditions to cross Milford Muni/Ben and Judy Briscoe Fld airport southbound at or above 6400, then climb on MLF VORTAC R-345 to MLF VORTAC. Aircraft departing on V235 and V21 southbound; proceed on course. All other aircraft climb to 11000 on MLF VORTAC R-168, then, right turn direct MLF VORTAC. Continue climb in- hold, right turns, 348° inbound to cross MLF VORTAC at or above MEA/MCA for route of flight.

TAKEOFF OBSTACLE NOTES:

Rwy 16, trees beginning 440’ from DER, 332’ right of centerline, up to 100’ AGL/5159’ MSL.
Trees beginning 4912’ from DER, 1451’ right of centerline, up to 100’ AGL/5179’ MSL.
Rwy 34, vehicles on roadway 231’ from DER, across centerline, up to 15’ AGL/5054’ MSL.
Trees beginning 3177’ from DER, 508’ left of centerline, up to 100’ AGL/5119’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

MINDEN, NV
MINDEN-TAHOE (MEV)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 15DEC11 (11349) (FAA)
TAKEOFF MINIMUMS:
Rwys 12, 16, 30, NA - Obstacles.
DEPARTURE PROCEDURE:
Rwy 34, use MINDEN (RNAV) DEPARTURE.

MOAB, UT
CANYONLANDS RGNL (CNY)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4 03JAN19 (21056) (FAA)
TAKEOFF MINIMUMS:
Rwys 15, 33, NA - Runway Surface.
Rwy 3, std. w/min. climb of 405' per NM to 6100 or 5000-3 for VCOA.
Rwy 21, std. w/min. climb of 456' per NM to 6100 or 5000-3 for VCOA.
DEPARTURE PROCEDURE:
Rwy 3, climbing left turn to 6700 on OAB R-298, thence...
Rwy 21, climbing right turn to 6700 on OAB R-298, thence...
...Climbing right turn to 10000 direct OAB VOR/DME. Continue climbing in holding to 10000 at OAB VOR/DME (northwest, left turn, 118° inbound) before proceeding on course.
VCOA:
Rwys 3, 21, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Canyonlands Field at or above 9400 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 3, terrain 46' from DER, 484' right of centerline, 4559' MSL.
Tree 63' from DER, 481' left of centerline, 4564' MSL.
Tree 86' from DER, 509' left of centerline, 4565' MSL.
Electrical system 135' from DER, 529' right of centerline, 34' AGL/4595' MSL.
Transmission line 1108' from DER, 589' right of centerline, 51' AGL/4596' MSL.
Terrain 1.5 NM from DER, 1600' right of centerline, 4827' MSL.
Terrain 2.5 NM from DER, 1185' left of centerline, 4990' MSL.
Rwy 21, bush beginning 60' from DER, 79' left of centerline, up to 10' AGL/4581' MSL.
Bush beginning 132' from DER, 65' right of centerline, up to 10' AGL/4597' MSL.
Pole 1658' from DER, 128' left of centerline, 4562' MSL.
Pole 1710' from DER, 319' right of centerline, 4602' MSL.
Pole 1827' from DER, 831' right of centerline, 4623' MSL.
Bush 1.5 NM from DER, 2256' left of centerline, 10' AGL/4797' MSL.
Bush beginning 1.9 NM from DER, 3289' right of centerline, up to 4868' MSL.
Terrain 1.9 NM from DER, 2742' right of centerline, 4899' MSL.
Traverse way beginning 2 NM from DER, 297' left of centerline, up to 10' AGL/4994' MSL.
Trees beginning 2.1 NM from DER, 91' left of centerline, up to 10' AGL/5014' MSL.

NELLIS AFB (KLSV)
LAS VEGAS, NV
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 5 24MAR22 (22111) (USAF)
TAKEOFF MINIMUMS:
Rwy 3L, 2500-3 SR-SS or std. w/min. climb of 270' per NM to 3700.
Rwy 3R, 2700-3 SR-SS or std. w/min. climb of 245' per NM to 4700.
Rwys 21L/R, 10100-3 SR-SS or std. w/min. climb of 373' per NM (mil)/402' per NM (civ) to 13300.
DEPARTURE PROCEDURE:
Rwys 3L/R, climb hdg 040°, expect RADAR vectors passing 5400' MSL from RAPCON.
Rwys 21L/R, climb on hdg between 210° CW to 285° from DER.
TAKEOFF OBSTACLE NOTES:
Rwy 21L, trees 1387' from DER, 744' left of centerline, 49' AGL/1871' MSL.
DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 2 22APR21 (21112) (USAF)
Rwys 3L/R, NA-Terrain.
Rwys 21L/R, hdg as assigned by ATC; requires min. climb of 285' (Mil)/297' (Civ)/NM until 12,000.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

NEPHI, UT
NEPHI MUNI (U14)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 20OCT11 (11293) (FAA)
DEPARTURE PROCEDURE:
Use NEPHI DEPARTURE.

NOGALES, AZ
NOGALES INTL (OLS)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 08NOV18 (18312) (FAA)
TAKEOFF MINIMUMS:
Use NOGALES DEPARTURE.
TAKEOFF OBSTACLE NOTES:
Rwy 3, tree 58' from DER, 3963' MSL.
Tree 80' from DER, 136' left of centerline, up to 3987' MSL.
Trees beginning 97' from DER, 446' left of centerline, up to 15' AGL/3964' MSL.
Tree 252' from DER, 43' right of centerline, 5' AGL/3962' MSL.
Tree 261' from DER, 463' left of centerline, 3971' MSL.
Trees beginning 308' from DER, 37' right of centerline, up to 9' AGL/3964' MSL.
Trees, fence beginning 334' from DER, 136' left of centerline, up to 3987' MSL.
Trees beginning 603' from DER, 546' right of centerline, up to 3993' MSL.
Trees, fence, terrain beginning 659' from DER, 13' left of centerline, up to 3995' MSL.
Trees, terrain beginning 1179' from DER, 118' left of centerline, up to 5' AGL/3996' MSL.
Trees, terrain beginning 1198' from DER, 16' right of centerline, up to 4036' MSL.
Trees, terrain beginning 1241' from DER, 66' left of centerline, up to 4018' MSL.
Trees, terrain beginning 1412' from DER, 90' right of centerline, up to 4043' MSL.
Traverse way, terrain beginning 1624' from DER, 642' left of centerline, up to 4028' MSL.
Terrain beginning 1637' from DER, 2' right of centerline, up to 4052' MSL.
Trees, traverse way, terrain beginning 1688' from DER, 45' left of centerline, up to 4035' MSL.
Terrain beginning 1825' from DER, 38' right of centerline, up to 4067' MSL.
Pole, traverse way, trees beginning 1853' from DER, 475' left of centerline, up to 21' AGL/4043' MSL.
Terrain 2033' from DER, 186' left of centerline, 4047' MSL.
Trees, traverse way, terrain beginning 2041' from DER, 74' left of centerline, up to 7' AGL/4052' MSL.
Terrain 2221' from DER, 269' left of centerline, 4055' MSL.
Tree, traverse way, terrain beginning 2253' from DER, 170' left of centerline, up to 18' AGL/4080' MSL.
Terrain beginning 2354' from DER, 20' right of centerline, up to 4068' MSL.
Trees, traverse way, pole, terrain beginning 2491' from DER, 55' left of centerline, up to 14' AGL/4093' MSL.
Terrain beginning 2539' from DER, 125' right of centerline, up to 4087' MSL.
Traverse way 2857' from DER, 32' left of centerline, 15' AGL/4095' MSL.
Trees, traverse way, terrain beginning 2872' from DER, 8' right of centerline, up to 15' AGL/4096' MSL.
Terrain, traverse way beginning 2888' from DER, 2' right of centerline, up to 15' AGL/4096' MSL.
Terrain, traverse way beginning 2768' from DER, 98' right of centerline, up to 4112' MSL.
Trees, traverse way beginning 2897' from DER, 530' right of centerline, 4117' MSL.
Trees, traverse way beginning 2995' from DER, 635' right of centerline, 4121' MSL.
Trees, traverse way, terrain beginning 3009' from DER, 489' right of centerline, up to 4123' MSL.
Trees, traverse way, terrain beginning 3351' from DER, 12' right of centerline, up to 4130' MSL.
Terrain, traverse way, terrain beginning 3449' from DER, 633' right of centerline, up to 4143' MSL.
Trees, traverse way beginning 3499' from DER, 1364' right of centerline, 4149' MSL.
Trees, traverse way, terrain, vegetation beginning 3570' from DER, 101' right of centerline, up to 4155' MSL.
Tree, terrain beginning 3581' from DER, 42' left of centerline, up to 4112' MSL.
Terrain beginning 4174' from DER, 627' right of centerline, up to 4156' MSL.
Tree, terrain beginning 4143' from DER, 768' right of centerline, up to 4180' MSL.
Trees, terrain beginning 4262' from DER, 426' right of centerline, up to 4184' MSL.
Tree, terrain beginning 4499' from DER, 709' right of centerline, up to 4210' MSL.
Terrain beginning 4627' from DER, 1171' right of centerline, up to 4217' MSL.
Tree, terrain beginning 4737' from DER, 216' right of centerline, up to 4223' MSL.
Terrain, tree beginning 5806' from DER, 409' right of centerline, up to 4241' MSL.
Trees, terrain beginning 5953' from DER, 420' right of centerline, up to 4254' MSL.
Trees, terrain beginning 1 NM from DER, 58' right of centerline, up to 4256' MSL.
Trees, terrain beginning 1 NM from DER, 1260' left of centerline, up to 4136' MSL.
Trees, terrain beginning 1.1 NM from DER, 442' left of centerline, up to 4151' MSL.
Pole, trees, terrain beginning 1.2 NM from DER, 164' left of centerline, up to 11' AGL/4221' MSL.
Trees, terrain beginning 1.3 NM from DER, 84' left of centerline, up to 4254' MSL.
Trees, terrain beginning 1.4 NM from DER, 58' right of centerline, up to 11' AGL/4326' MSL.
Trees, terrain beginning 1.4 NM from DER, 25' left of centerline, up to 11' AGL/4283' MSL.
Trees, terrain beginning 1.5 NM from DER, 79' right of centerline, up to 11' AGL/4372' MSL.
CON'T
NOGALES, AZ (CON’T)

NOGALES INTL (OLS) (CON’T)

Rwy 3 (CON’T), trees, terrain beginning 1.7 NM from DER, 639’ right of centerline, up to 4345’ MSL.

Trees, terrain beginning 1.8 NM from DER, 172’ right of centerline, up to 4367’ MSL.

Terrain, traverse way, trees beginning 2 NM from DER, 935’ right of centerline, up to 4406’ MSL.

Terrain 2.1 NM from DER, 616’ left of centerline, 4299’ MSL.

Trees, terrain, traverse way beginning 2.2 NM from DER, 1859’ right of centerline, up to 4451’ MSL.

Trees, traverse way, terrain beginning 2.2 NM from DER, 234’ left of centerline, up to 4359’ MSL.

Trees, terrain, traverse way beginning 2.3 NM from DER, 835’ right of centerline, up to 14’ AGL/4535’ MSL.

Rwy 21, tree 3’ from DER, 445’ left of centerline, 3847’ MSL.

Tree 19’ from DER, 141’ left of centerline, 10’ AGL/3848’ MSL.

Tree 29’ from DER, 339’ left of centerline, 3849’ MSL.

Tree, vegetation beginning 45’ from DER, 201’ left of centerline, up to 17’ AGL/3851’ MSL.

Tree 48’ from DER, 504’ right of centerline, 3845’ MSL.

Trees, vegetation beginning 112’ from DER, 49’ right of centerline, up to 24’ AGL/3854’ MSL.

OGDEN, UT

OGDEN-HINCKLEY (OGD)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2B 28FEB19 (19059) (FAA)

DEPARTURE PROCEDURE:
Use EMONT DEPARTURE.

TAKEOFF MINIMUMS:

Rwy 3, NAVAID, vehicle on road beginning 195’ from DER, 267’ right of centerline, up to 17’ AGL/4426’ MSL.

Pole 241’ from DER, 535’ left of centerline, 39’ AGL/4447’ MSL.

Pole 348’ from DER, 582’ right of centerline, 41’ AGL/4451’ MSL.

Trees, building beginning 375’ from DER, 62’ left of centerline, up to 4451’ MSL.

Tree, pole beginning 430’ from DER, 502’ right of centerline, up to 4455’ MSL.

Rwy 21, tree 702’ from DER, 649’ left of centerline, 4492’ MSL.

Tree 1133’ from DER, 701’ left of centerline, 4513’ MSL.

Trees, building, pole beginning 2074’ from DER, 792’ left of centerline, up to 4570’ MSL.

Tree 3429’ from DER, 421’ right of centerline, 4561’ MSL.

Rwy 35, tree 209’ from DER, 185’ left of centerline, 4446’ MSL.

Tree 243’ from DER, 233’ left of centerline, 4447’ MSL.

Trees beginning 292’ from DER, 87’ right of centerline, up to 4454’ MSL.

Tree 686’ from DER, 397’ right of centerline, 4479’ MSL.

OWYHEE, NV

OWYHEE (10U)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 17JUN21 (21168) (FAA)

TAKEOFF MINIMUMS:

Rwy 5, std. w/min. climb of 495’ per NM to 9000, or 3200-3 for VCOA.

Rwy 23, std. w/min. climb of 395’ per NM to 10100, or 3200-3 for VCOA.

VCOA:
All runways, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Owyhee airport at or above 8400 before proceeding on course.

TAKEOFF MINIMUMS:

Rwy 5, fence 11’ from DER, 440’ right of centerline, 4’ AGL/5367’ MSL.

Fence beginning 94’ from DER, 319’ left of centerline, up to 7’ AGL/5372’ MSL.

Rwy 23, fence 17’ from DER, 319’ right of centerline, 7’ AGL/5380’ MSL.

Fence beginning 91’ from DER, 399’ left of centerline, up to 6’ AGL/5382’ MSL.

Fence 119’ from DER, 319’ right of centerline, 5381’ MSL.

PAGE, AZ

PAGE MUNI (PGA)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2A 21JUL16 (16203) (FAA)

TAKEOFF MINIMUMS:

Rwys 7, 25, NA – obstacles.

Rwy 15, std. w/min. climb of 285’ per NM to 6500, or 3100-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

Rwy 33, Climb heading 336° to 6000, then climbing left turn direct PGA VOR/DME, thence…

Rwy 15, Climb heading 156° to 6200, then climbing right turn direct PGA VOR/DME, thence…

…cross PGA VOR/DME at or above 7700. Continue climb in PGA VOR/DME holding pattern (hold nw, right turns 147° Inbound) to cross PGA VOR/DME at or above MEA/MCA for direction of flight.

VCOA:

Rwy 15, obtain ATC approval for climb in visual conditions when requesting IFR clearance. Climb in visual conditions to cross Page Muni airport at or above 7300 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 15, rising terrain 192’ from DER, 272’ right of centerline, 4323’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

PANGUITCH, UT
PANGUITCH MUNI (U55)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 02JUN11 (11153) (FAA)
TAKEOFF MINIMUMS:
  Rw 18, std. w/min. climb of 350' per NM to 9200 or 2200-3 for climb in visual conditions.
  Rw 36, std. w/min. climb of 450' per NM to 9500 or 2200-3 for climb in visual conditions.
DEPARTURE PROCEDURE:
  Rw 18, climb heading 185° to 9200 then left turn to intercept BCE VORTAC R-274, continue climb to 12000 to BCE VORTAC, or for climb in visual conditions: cross Panguitch Muni Airport southeast bound at or above 8800' MSL then via BCE R-320 to BCE VORTAC thence...
  Rw 36, climb heading 005° to 9500 then left turn to intercept BCE VORTAC R-323 (V257), continue climb to 12000 to BCE VORTAC, or for climb in visual conditions: cross Panguitch Muni Airport southeast bound at or above 8800' MSL then via BCE R-320 to BCE VORTAC thence...
  …continue climb in BCE VORTAC holding pattern (hold southwest, right turn, 045° inbound) to cross BCE VORTAC at or above MEA for route of flight.
TAKEOFF OBSTACLE NOTES:
  Rw 36, terrain 64' from DER, 426' right of centerline, 6775' MSL.
  Terrain 426' from DER, 565' right of centerline, 6779' MSL.
  Rw 18, terrain beginning 114' from DER, 306' left of centerline, 6758' MSL.
  Terrain 26' from DER, 229' left of centerline 6756' MSL.
  Terrain 388' from DER, 91' left of centerline 6766' MSL.
  Terrain 316' from DER, 321' left of centerline 6766' MSL.

PARKER, AZ
AVI SUQUILLA (P20)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 18SEP14 (22083) (FAA)
TAKEOFF MINIMUMS:
  Rw 1, std. w/min. climb of 275' per NM to 2700 or 1800-2½ for VCOA.
DEPARTURE PROCEDURE:
  Rw 1, climb heading 012° to 1400 then climbing right turn to intercept PKE VORTAC R-067 to PKE VORTAC.
  Rw 19, climbing right turn to intercept PKE VORTAC R-067 to PKE VORTAC.
VCOA:
  Rw 1, obtain ATC approval for climb in visual conditions when requesting IFR clearance. Climb in visual conditions to cross Avi Suquilla airport at or above 2100 then proceed on PKE R-067 to PKE VORTAC.

PAYSON, AZ
PAYSON (PAN)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A 15NOV12 (12320) (FAA)
TAKEOFF MINIMUMS:
  Rw 6, std. w/min. climb of 360' per NM to 9300, or 2500-3 for climb in visual conditions.
  Rw 24, std. w/min. climb of 375' per NM to 9300, or 2500-3 for climb in visual conditions.
DEPARTURE PROCEDURE:
  Rwys 6, 24, for climb in visual conditions: Cross Payson Airport at or above 7500 MSL before proceeding on course. When executing VCOA, notify ATC prior to departure.
TAKEOFF OBSTACLE NOTES:
  Rw 6, tree 197' from DER, 118' right of centerline, up to 12' AGL/5170' MSL.
  Bush 83' from DER, 99' right of centerline, up to 3' AGL/5161' MSL.
  Rw 24, bush 15' from DER, 133' right of centerline, 6' AGL/5148' MSL.
  Tree 320' from DER, 183' right of centerline, 12' AGL/5154' MSL.
  Fence 85' from DER, 84' left of centerline, 4' AGL/5141' MSL.
  Tree 164' from DER, 126' left of centerline, 9' AGL/5147' MSL.
PHOENIX, AZ

PHOENIX DEER VALLEY (DVT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6 24MAY18 (18144) (FAA)
DEPARTURE PROCEDURE:
Use DEER VALLEY DEPARTURE.
TAKEOFF OBSTACLE NOTES:
Rwy 7L, multiple poles and vegetation beginning 912' from DER, 125' left of centerline, up to 30' AGL/2,423' MSL.
Cactus 3,824' from DER, 96' right of centerline, 16' AGL/1,596' MSL.
Windssock 340' from DER, 354' right of centerline, 9' AGL/1,488' MSL.
Rwy 7R, multiple antennas and vegetation beginning 546' from DER, 267' left of centerline up to 52' AGL/1,952' MSL.
Multiple antennas and vegetation beginning 976' from DER, 451' right of centerline up to 40' AGL/1,609' MSL.
Rwy 25R, multiple antennas beginning 1.4 NM from DER, 1,847' right of centerline, up to 96' AGL/1,806' MSL.
Rwy 25L, pole 1,127' from DER, 498' right of centerline, 36' AGL/1,475' MSL.
Pole, 1,184' from DER, 495' left of centerline, 32' AGL/1,471' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)
ORIG 13NOV14 (14317) (FAA)
Rwys 25L, 25R, heading as assigned by ATC; requires minimum climb of 370' per NM to 4600.

PHOENIX SKY HARBOR INTL (PHX)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6 18SEP14 (14261) (FAA)
TAKEOFF MINIMUMS:
Rwy 26, 600-2½ or std. w/min. climb of 326' per NM to 1900.
DEPARTURE PROCEDURE:
Rwys 7L, 7R, 8, climb heading 078° to 3000, then climbing right turn direct PXR VORTAC.
Rwys 25L, 25R, climb heading 258° to 1900 then climbing right turn to join PXR R-260 (V16) westbound, climb to 5000.
Rwy 26, climb heading 258° to 1550, then join PXR R-260 (V16) westbound, climb to 5000. Westbound departures continue climb on PXR R-260. All others, climbing right turn direct PXR VORTAC.
TAKEOFF OBSTACLE NOTES:
Rwy 7R, transmission towers and power lines, 3201' from DER, 1122' right of centerline, up to 131' AGL/1260' MSL.
Rwy 8, multiple light poles, beginning 2539' from DER, 900' left of centerline, up to 82' AGL/1234' MSL.
Light pole, 1639' from DER, 793' right of centerline, 46' AGL/1177' MSL.
Rwy 25L, multiple light poles, beginning 681' from DER, 533' left of centerline, up to 99' AGL/1201' MSL.
Multiple light poles, beginning 1519' from DER, 533' left of centerline, up to 99' AGL/1201' MSL.
Sign, 902' from DER, 711' left of centerline, 64' AGL/1170' MSL.
Rwy 26, pole, 42' from DER, 440' left of centerline, 26' AGL/1135' MSL.
Pole, 315' from DER, 499' left of centerline, 11' AGL/1120' MSL.
Pole, 1959' from DER, 923' left of centerline, 59' AGL/1163' MSL.
Pole, 2312' from DER, 318' left of centerline, 66' AGL/1169' MSL.
Pole, 2336' from DER, 578' left of centerline, 67' AGL/1170' MSL.
Pole, 78' from DER, 456' right of centerline, 32' AGL/1142' MSL.
Pole, 82' from DER, 64' right of centerline, 18' AGL/1127' MSL.
Tree, 118' from DER, 294' right of centerline, 22' AGL/1133' MSL.
Tree, 239' from DER, 214' right of centerline, 22' AGL/1133' MSL.
Tree, 414' from DER, 522' right of centerline, 24' AGL/1135' MSL.
Sign, 520' from DER, 567' right of centerline, 16' AGL/1125' MSL.
Pole, 2301' from DER, 193' right of centerline, 69' AGL/1171' MSL.
Pole, 2302' from DER, 661' right of centerline, 68' AGL/1171' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 2 13NOV14 (14317) (FAA)
Rwys 7L, 7R, 8, heading as assigned by ATC.
Rwy 25L, heading as assigned by ATC; requires minimum climb of 305' per NM to 6000.
Rwy 25R, heading as assigned by ATC; requires minimum climb of 325' per NM to 6000.
Rwy 26, heading as assigned by ATC; requires minimum climb of 300' per NM to 6000.
PHOENIX, AZ (CON’T)

PHOENIX-MESA GATEWAY (IWA)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 24MAY18 (18144) (FAA)
DEPARTURE PROCEDURE:
Use PHOENIX DEPARTURE.
TAKEOFF OBSTACLE NOTES:
Rwy 30L/C/R, trees beginning 351' from DER, 351' left of centerline, up to 20' AGL/1,359' MSL.
Trees beginning 689' from DER, 398' right of centerline, up to 20' AGL/1,359' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 1 20AUG15 (15232) (FAA)

Rwys 12L, 12C, 12R, as assigned by ATC; requires minimum climb of 250' per NM to 3100.

Rwys 30L, 30C, 30R, heading as assigned by ATC.

PRESCOTT, AZ

PRESCOTT RGNL - ERNEST A LOVE FLD (PRC)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 5A 20JUN19 (21224) (FAA)
DEPARTURE PROCEDURE:
Use PRESCOTT DEPARTURE.
TAKEOFF OBSTACLE NOTES:
Rwy 3L, lighting 8' from DER, 19' right of centerline, 1' AGL/4939' MSL.
Sign 15' from DER, 127' left of centerline, 3' AGL/4939' MSL.
Tree 20' from DER, 408' left of centerline, 4949' MSL.
Tree 184' from DER, 404' left of centerline, 4951' MSL.

Rwy 12, tree 4' from DER, 323' right of centerline, 5066' MSL.
Buildings, lighting, sign beginning 9' from DER, 122' left of centerline, up to 31' AGL/5057' MSL.
Tree, utility pole, sign, terrain beginning 13' from DER, 65' right of centerline, up to 28' AGL/5086' MSL.
Terrain, trees, building, lighting beginning 24' from DER, 111' left of centerline, up to 46' AGL/5062' MSL.
Terrain, road beginning 196' from DER, 317' left of centerline, up to 5069' MSL.
Trees beginning 302' from DER, 361' left of centerline, up to 45' AGL/5083' MSL.
Tower, road, trees, pole beginning 426' from DER, 267' left of centerline, up to 46' AGL/5092' MSL.

Rwy 21R, sign, terrain beginning 11' from DER, 82' left of centerline, up to 2' AGL/4977' MSL.
Sign, trees, road, building, electrical system, pole, tank beginning 11' from DER, 19' right of centerline, up to 50' AGL/5024' MSL.

Rwys 3L/R, heading as assigned by ATC.

Rwys 21L/R, heading as assigned by ATC; requires minimum climb of 370' per NM to 7700.

Rwys 30L/R, heading as assigned by ATC; requires minimum climb of 390' per NM to 8300.

Rwy 30, heading as assigned by ATC.

DIVERSE VECTOR AREA (RADAR VECTORS)

ORIG-A 20JUN19 (19171) (FAA)

Rwys 3L/R, heading as assigned by ATC.
Rwy 12, heading as assigned by ATC; requires minimum climb of 370' per NM to 7700.
Rwys 21L/R, heading as assigned by ATC; requires minimum climb of 390' per NM to 8300.
Rwy 30, heading as assigned by ATC.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

PRICE, UT
CARBON COUNTY RGNL/BUCK DAVIS FLD (PUC)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 5 05MAR15 (21280) (FAA)
TAKEOFF MINIMUMS:
Rwy 1, std. w/min. climb of 400' per NM to 6800 or 3300-3 for climb in visual conditions.
Rwy 8, NA-Obstacles.
Rwy 33, std. w/min. climb of 370' per NM to 6700 or 3300-3 for climb in visual conditions.

DEPARTURE PROCEDURE:
Rwy 1, climb to 6400 then climbing right turn on a heading between 144° CW to 187°, maintain 210 KIAS until completion of turn, thence . . .
Rwy 19, climb on a heading between 195° CCW to 128°, thence . . .
Rwy 26, climb on a heading between 179° CCW to 127°, thence . . .
Rwy 33, climb to 6300 then climbing left turn on a heading between 178° CCW to 148°, thence . . .
. . . continue climb to assigned altitude for direction of flight.

VCOA:
Rwsys 1, 33, obtain ATC approval for climb in visual conditions when requesting IFR clearance. Climb in visual conditions to cross Carbon County Rgnl/Buck Davis Fld airport at or above 9100 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 1, multiple trees and poles beginning 164' from DER, left and right of centerline, up to 64' AGL/6207' MSL.

PROVO, UT
PROVO MUNI (PVU)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6 30SEP04 (04274) (FAA)
DEPARTURE PROCEDURE:
Use PROVO DEPARTURE.

RENO, NV
RENO/STEAD (RTS)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3A 02JUL09 (09183) (FAA)
TAKEOFF MINIMUMS:
CAT A, B only, CAT C, D NA.
Rwy 8, 14, 1300-2 or std. with a min. climb of 400' per NM to 6500.
Rwy 26, 1900-2 or std. with a min. climb of 410' per NM to 7200.
Rwy 32, 2300-2 or std. with a min. climb of 420' per NM to 7200.

DEPARTURE PROCEDURE:
Rwys 8, 32, climbing right turn heading 100° and FMG VORTAC R-314 to FMG VORTAC.
Rwy 14, left turn climb direct FMG VORTAC.
Rwy 26, climbing right turn heading 050° and FMG VORTAC R-314 to FMG VORTAC.
All aircraft climb in FMG VORTAC holding pattern (NE, right turns, 221° inbound) to depart FMG VORTAC; R-260 CW R-170 at or above 10000; R-171 CW R-195 at or above 10500; R-196 CW R-259 at or above 12000.

RENO/TAHOE INTL (RNO)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4 20DEC07 (07354) (FAA)
TAKEOFF MINIMUMS:
Rwy 7, NA-terrain.
Rwy 16L, std. w/ min. climb of 730' per NM to 8000, or 600-1¼ w/ min. climb of 480' per NM to 8000, or 2700-3 for climb in visual conditions.
Rwy 16R, std. w/ the following minimum climb requirements: 210 knots or less, 385' per NM to 8000; more than 210 knots, 420' per NM to 8900, or 2700-3 for climb in visual conditions. Resume normal speed after passing FMG VORTAC.
Rwy 25, std. w/ min. climb of 470' per NM to 7800, or 2700-3 for climb in visual conditions.
Rwy 34L, std. w/ min. climb of 320' per NM to 7000, or 2700-3 for climb in visual conditions.
Rwy 34R, std. w/ min. climb of 480' per NM to 7000, or 500-1¼ w/ min. climb of 320' per NM to 7000, or 2700-3 for climb in visual conditions.

DEPARTURE PROCEDURE:
Rwys 16L/R, climb heading 164° to 6600 then climbing left turn direct FMG VORTAC, thence . . . or for climb in visual conditions: cross Reno/Tahoe Intl Airport at or above 7000 via heading 054° and FMG R-234 to FMG VORTAC, thence . . .
Rwy 25, climb heading 254° to 5000 then climbing right turn direct FMG VORTAC, thence . . . or for climb in visual conditions: cross Reno/Tahoe Intl Airport at or above 7000 via heading 054° and FMG R-234 to FMG VORTAC, thence . . .
Rwys 34L/R, climbing right turn heading 050° and FMG VORTAC R-314 to FMG VORTAC.
All aircraft climb in FMG VORTAC holding pattern (NE, right turns, 221° inbound) to depart FMG VORTAC; R-260 CW R-170 at or above 10000; R-171 CW R-195 at or above 10500; R-196 CW R-259 at or above 12000.

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

RENO, NV (CON’T)
RENO/TAHOE INTL (RNO) (CON’T)

TAKEOFF OBSTACLE NOTES:
- **Rwy 16L**, multiple poles, trees, bushes and terrain beginning 618’ from DER, 133’ left of centerline, up to 20’ AGL/4961’ MSL.
- **Rwy 16R**, multiple trees 2784’ from DER, 171’ right of centerline, up to 20’ AGL/4510’ MSL.
- **Rwy 25**, multiple trees and terrain beginning 746’ from DER, 380’ left of centerline, up to 20’ AGL/4703’ MSL.
- **Building**, 6023’ from DER, 456’ right of centerline, 152’ AGL/4608’ MSL.
- **Fence**, 222’ from DER, 270’ right of centerline, up to 5’ AGL/4415’ MSL.
- **Multiple trees and poles**, beginning 500’ from DER, 31’ left of centerline, up to 20’ AGL/4506’ MSL.
- **Rwy 34L**, multiple trees and poles beginning 1229’ from DER, 180’ right of centerline, up to 20’ AGL/4498’ MSL.
- **Rwy 34R**, multiple trees and poles beginning 1067’ from DER, 172’ right of centerline, up to 20’ AGL/4497’ MSL.
- **Multiple trees beginning 1193’ from DER, 331’ left of centerline, up to 20’ AGL/4489’ MSL.
- **Building**, 1.2 NM from DER, 1730’ right of centerline, 363’ AGL/4780’ MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

**ORIG 08JAN15 (15008) (FAA)**
- **Rwy 25**, heading as assigned by ATC; requires minimum climb of 500’ per NM to 8100.
- **Rwy 34L**, heading as assigned by ATC; requires minimum climb of 460’ per NM to 7700.
- **Rwy 34R**, heading as assigned by ATC; requires minimum climb of 410’ per NM to 8100.

RICHFIELD, UT
RICHFIELD MUNI (RIF)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

**AMDT 1 05JUN08 (08157) (FAA)**

DEPARTURE PROCEDURE:
- **Rwy 1**, use RICHFIELD (RNAV) DEPARTURE.
- **Rwy 19**, use HAMET (RNAV) DEPARTURE.

ROOSEVELT, UT
ROOSEVELT MUNI (74V)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

**AMDT 2 10NOV16 (16315) (FAA)**

TAKEOFF MINIMUMS:
- **Rwy 7**, standard.
- **Rwy 25**, standard w/min. climb of 300’ per NM to 6100 or 1300-3 for VCOA.

DEPARTURE PROCEDURE:
- **Rwy 7**, turn right.
- **Rwy 25**, turn left.

All aircraft; climb direct MTU VOR/DME. Aircraft departing MTU VOR/DME R-040 CW 015° Climb on course. All others continue climb in MTU holding pattern (NE, right turns, 213° inbound) to cross MTU VOR/DME; R-151 CW 290° at or above 8000; R-291 CW 039° at or above 10000. Then climb on course.

VCOA:
- **Rwy 25**, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Roosevelt Muni airport southbound at or above 6300 on MTU R-010 to MTU VOR/DME, continue climb in hold (NE, right turns, 213° inbound) to MEA for direction of flight.

TAKEOFF OBSTACLE NOTES:
- **Rwy 7**, NAVID 38’ from DER, 110’ left of centerline, 5’ AGL/5111’ MSL.
- Vehicles on road beginning 76’ from DER, 250’ left of centerline, up to 15’ AGL/5122’ MSL.
- **Rwy 25**, NAVID 39’ from DER, 112’ left of centerline, 9’ AGL/5179’ MSL.
- Trees beginning 180’ from DER, 403’ right of centerline, up to 22’ AGL/5192’ MSL.
- Tree, vehicle on road, pole beginning 5668’ from DER, 1461’ right of centerline, up to 45’ AGL/5345’ MSL.
- Trees, poles, buildings, vehicle on road beginning 1 NM from DER, 1031’ right of centerline, up to 100’ AGL/5410’ MSL.
- Tree, vehicle on road, terrain beginning 1.2 NM from DER, 1904’ right of centerline, up to 16’ AGL/5416’ MSL.
- Poles, tree, vehicle on road beginning 1.3 NM from DER, 1918’ right of centerline, up to 56’ AGL/5426’ MSL.
- Trees, poles, buildings, vehicle on road, terrain beginning 1.5 NM from DER, 1553’ right of centerline, up to 55’ AGL/5485’ MSL.
- Trees, poles, vehicle on road, building beginning 1.8 NM from DER, 1871’ right of centerline, up to 53’ AGL/5493’ MSL.
- Tree, 1.9 NM from DER, 1987’ right of centerline, 20’ AGL/5483’ MSL.

SAFFORD, AZ
SAFFORD RGNL (SAD)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

**AMDT 1 29JUL10 (10210) (FAA)**

TAKEOFF MINIMUMS:
- **Rwys 8, 26**, NA - Airspace.

DEPARTURE PROCEDURE:
- **Rwys 12, 30**, use SAFFORD RNAV DEPARTURE.
ST. GEORGE, UT  
ST GEORGE RGNL (SGU)  
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES  
ORIG-A 26MAY16 (16147) (FAA)  
DEPARTURE PROCEDURE:  
Use JITKA DEPARTURE.  

ST. JOHNS, AZ  
ST JOHNS INDUSTRIAL AIR PARK (SJN)  
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES  
AMDT 1B 10NOV16 (16315) (FAA)  
TAKEOFF MINIMUMS:  
Rwys 3, 32, 14, std.  
Rwy 21, 700-2½ or standard w/min. climb of 378' per NM to 6600.  
DEPARTURE PROCEDURE:  
Rwys 3, 32, climbing right turn.  
Rwys 14, 21, climbing left turn.  
All aircraft, climb direct SJN VORTAC. Aircraft departing SJN VORTAC R-240 CW to R-080 Climb on course. All others continue climb in SIN VORTAC holding pattern (hold NE, right turns, 239° inbound) to cross SJN VORTAC at or above 9000.  
TAKEOFF OBSTACLE NOTES:  
Rwy 3, sign 15' from DER, 125' left of centerline, 3' AGL/5736' MSL.  
Rwy 14, vehicle on road '1' from DER, 113' right of centerline, up to 15' AGL/5750' MSL.  
Vehicle on road 67' from DER, crossing centerline, 15' AGL/5752' MSL.  
Trees and poles beginning 515' from DER, 73' left of centerline, up to 5878' MSL.  
Generator utility 40' from DER, 79' left of centerline, 10' AGL/5736' MSL.  
Vehicle on road 102' from DER, crossing centerline, 15' AGL/5741' MSL.  
Trees and buildings beginning 23' from DER, 276' right of centerline, up to 5798' MSL.  
Pole 307' from DER, 570' left of centerline, up to 5757' MSL.  
Rwy 21, tree and fence 15' from DER, 248' left of centerline, 5767' MSL.  
Trees and buildings beginning 23' from DER, 276' right of centerline, up to 5798' MSL.  
Treess beginning 32' from DER, 27' left of centerline, up to 5778' MSL.  
Fence beginning 208' from DER, crossing centerline, up to 5738' MSL.  
Vehicles on road 265' from DER, crossing centerline, 15' AGL/5756' MSL.  
Trees, buildings, signs and poles beginning 285' from DER, 2' right of centerline, up to 5781' MSL.  
Trees, buildings and poles beginning 597' from DER, 3' left of centerline, up to 5780' MSL.  
Trees, buildings and poles beginning 908' from DER, 10' right of centerline, up to 5833' MSL.  
Trees, buildings and poles beginning 967' from DER, 3' left of centerline, up to 5788' MSL.  
Trees beginning 1257' from DER, 20' left of centerline, up to 5816' MSL.  
Buildings, poles and trees beginning 3704' from DER, 662' right of centerline, up to 5914' MSL.  
Poles beginning 3491' from DER, 1293' left of centerline, up to 5872' MSL.  
Communications tower 2.2 NM from DER, 1415' left of centerline, 199' AGL/6356' MSL.  
Pole 2.2 NM from DER, 1467' left of centerline, 31' AGL/6133' MSL.  

SALT LAKE CITY, UT  
SALT LAKE CITY INTL (SLC)  
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES  
AMDT 11A 17AUG17 (17229) (FAA)  
TAKEOFF MINIMUMS:  
Rwy 32, 400-1 or std. w/min. climb of 498' per NM to 4700.  
DEPARTURE PROCEDURE:  
Rwy 14, climb to 10000 on heading 192° and FFU R-341 to FFU VORTAC before proceeding on course.  
Rwy 16R, climb to 10000 on heading 164° and FFU R-341 to FFU VORTAC before proceeding on course.  
Rwy 16L, climb to 10000 on heading 164° and FFU R-341 to FFU VORTAC before proceeding on course.  
Rwy 17, climb to 10000 on heading 169° and FFU R-341 to FFU VORTAC before proceeding on course.  
Rwy 32, climb to 9000 on heading 002° and OGD R-153 to OGD VORTAC before proceeding on course.  
Rwy 34L, climb to 9000 on heading 344° and OGD R-153 to OGD VORTAC before proceeding on course.  
Rwy 34R, climb to 9000 on heading 344° and OGD R-153 to OGD VORTAC before proceeding on course.  
Rwy 35, climb to 9000 on heading 339° and OGD R-153 to OGD VORTAC before proceeding on course.  
CON'T
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

SALT LAKE CITY, UT (CON’T)

SALT LAKE CITY INTL (SLC) (CON’T)

TAKEOFF OBSTACLE NOTES:

Rwy 14, antenna 1349’ from DER, 42’ AGL/4263’ MSL.

Rwy 16, vehicle on road 124’ from DER, 15’ AGL/4239’ MSL.

Light pole 988’ from DER, 726’ right of centerline, 34’ AGL/4254’ MSL.

Pole 1024’ from DER, 689’ right of centerline, 34’ AGL/4254’ MSL.

Rwy 17, vehicles on road beginning 335’ from DER, on centerline, up to 17’ AGL/4241’ MSL.

Rwy 32, ATC tower 5,266’ from DER, 1767 left of centerline, 335’ AGL/4549’ MSL.

Cranes 5196’ from DER, 1619’ left of centerline, 249’ AGL/4463’ MSL.

Aircraft beginning 969’ from DER, 722’ left of centerline, up to 79’ AGL/4463’ MSL.

Rwy 34R, post 56’ from DER, 249’ left of centerline, 2’ AGL/4220’ MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 1  14SEP17  (17257)

Rwys 14, 16L/R, 17, 34L/R, 35, heading as assigned by ATC.

SOUTH VALLEY RGNL (U42)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6  01FEB18  (18032)  (FAA)

TAKEOFF MINIMUMS:

Rwy 16, std. w/ min. climb of 300’ per NM to 10700.

Rwy 34, std. w/ min. climb of 330’ per NM to 9000.

DEPARTURE PROCEDURE:

Rwy 16, climbing left turn to 10700 on FFU VORTAC R-341 to FFU VORTAC, continue climb in FFU VORTAC holding pattern (hold S, right turn, 008° inbound) to cross FFU VORTAC at or above MEA/MCA for route of flight.

Rwy 34, climbing right turn to 9000 on TCH VORTAC R-161 to TCH VORTAC, continue climb in TCH VORTAC holding pattern (hold NW, right turn, 120° inbound) to cross TCH VORTAC at or above MEA/MCA for route of flight.

TAKEOFF OBSTACLE NOTES:

Rwy 16, NAVIAD abeam DER, 99’ right of centerline, 4602’ MSL.

Terrain, sign beginning 34’ from DER, 207’ right of centerline, up to 4606’ MSL.

Vehicle on road 83’ from DER, 252’ left of centerline, 4611’ MSL.

Vehicle on road 171’ from DER, 132’ left of centerline, 4614’ MSL.

Pole 551’ from DER, 638’ right of centerline, 4638’ MSL.

Pole 1008’ from DER, 94’ right of centerline, 4604’ MSL.

Pole 1008’ from DER, 94’ right of centerline, 31’ AGL/4640’ MSL.

Pole beginning 1092’ from DER, 687’ right of centerline, up to 31’ AGL/4644’ MSL.

Rwy 34, NAVIAD 10’ from DER, 94’ left of centerline, 4606’ MSL.

Pole 1008’ from DER, 494’ left of centerline, up to 4606’ MSL.

Rwy 21, trees 1,072’ from DER, 426’ right of centerline, 53’ AGL/1,497’ MSL.

Building 316’ from DER, 537’ right of centerline, 23’ AGL/1,467’ MSL.

Tree 2,087’ from DER, 418’ left of centerline, 61’ AGL/1,509’ MSL.

Tree 1,432’ from DER, 438’ right of centerline, 38’ AGL/1,482’ MSL.

Tree 2,234’ from DER, 559’ left of centerline, 58’ AGL/1,502’ MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 1  13NOV14  (14317)  (FAA)

Rwy 3, heading as assigned by ATC; requires minimum climb of 445’ per NM to 4600.

Rwy 21, heading as assigned by ATC; do not exceed 210 KTS until established on assigned heading.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

SEDONA, AZ
SEDONA (SEZ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 10APR08 (08101) (FAA)
TAKEOFF MINIMUMS:
Rwy 3, NA- Obstacles.
DEPARTURE PROCEDURE:
Rwy 21, Use OATES RNAV DEPARTURE.

SHOW LOW, AZ
SHOW LOW RGNL (SOW)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 19JUL18 (22139) (FAA)
DEPARTURE PROCEDURE:
Rwy 4, climbing left turn heading 360° to 7800 before proceeding on course.
Rwy 7, climbing left turn heading 360° to 8100 before proceeding on course.
Rwy 22, climbing right turn heading 255° to 7700 before proceeding on course.
Rwy 25, climb on heading 246° to 7600 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 4, sign, building, fence, pole beginning 44' from DER, 183' right of centerline, up to 6' AGL/6406' MSL.
Tree 88' from DER, 488' left of centerline, 6411' MSL.
Trees beginning 185' from DER, 428' left of centerline, up to 6417' MSL.
Pole 240' from DER, 222' right of centerline, 16' AGL/6411' MSL.
Rwy 7, general utility 39' from DER, 92' right of centerline, 19' AGL/6402' MSL.
General utility 40' from DER, 88' left of centerline, 20' AGL/6402' MSL.
Rwy 22, tree 94' from DER, 197' left of centerline, 6424' MSL.
Trees beginning 133' from DER, 87' right of centerline, up to 6420' MSL.
Pole 397' from DER, 141' left of centerline, 23' AGL/6426' MSL.
Pole 469' from DER, 166' left of centerline, 27' AGL/6430' MSL.
Building 677' from DER, 423' left of centerline, 24' AGL/6433' MSL.
Elevator, tank, pole beginning 1191' from DER, 5' left of centerline, up to 63' AGL/6496' MSL.
Rwy 25, pole 10' from DER, 29' right of centerline, 18' AGL/6401' MSL.
Tree 88' from DER, 488' left of centerline, 6411' MSL.
Pole 640' from DER, 310' right of centerline, 6418' MSL.
Pole 644' from DER, 307' right of centerline, 37' AGL/6419' MSL.
Pole beginning 704' from DER, 677' right of centerline, up to 53' AGL/6437' MSL.
Pole, catenary beginning 726' from DER, 3' left of centerline, up to 54' AGL/6438' MSL.
Pole 760' from DER, 158' right of centerline, 47' AGL/6430' MSL.
Pole 763' from DER, 159' right of centerline, 48' AGL/6432' MSL.
Pole, catenary beginning 764' from DER, 77' right of centerline, up to 54' AGL/6437' MSL.
Pole beginning 842' from DER, 317' right of centerline, up to 57' AGL/6438' MSL.

SILVER SPRINGS, NV
SILVER SPRINGS (SPZ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 04NOV21 (21308) (FAA)
TAKEOFF MINIMUMS:
Rwy 24, 2900-3 for VCOA.
DEPARTURE PROCEDURE:
Rwy 6, climb heading 056° to intercept HZN R-220 to 8000. Continue climb in HZN VORTAC holding pattern (hold northeast, rt, 211° inbound) to cross HZN VORTAC at or above MEA for route of flight.
VCOA:
Rwy 24, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Silver Springs airport at or above 7000, then proceed on HZN VORTAC R-220 to 8000 to HZN VORTAC.
TAKEOFF OBSTACLE NOTES:
Rwy 6, windsock, sign beginning 29' from DER, 204' left of centerline, up to 23' AGL/4235' MSL.
Rwy 24, terrain 52' from DER, 495' right of centerline, 4267' MSL.
Pole, transmission line beginning 2258' from DER, 938' right of centerline, up to 33' AGL/4324' MSL.
Transmission line, pole beginning 2277' from DER, 883' right of centerline, up to 38' AGL/4328' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

SPANISH FORK, UT
SPANISH FORK MUNI/WOODHOUSE FLD (SPK)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 03JAN19 (211112)  (FAA)
DEPARTURE PROCEDURE:
Use SPANISH FORK DEPARTURE.
TAKEOFF OBSTACLE NOTES:
Rwy 12, lighting 10' from DER, 29' left of centerline, 2' AGL/4530' MSL.
Fence 60' from DER, 481' right of centerline, 4535' MSL.
Building 198' from DER, 449' right of centerline, 12' AGL/4541' MSL.
Sign, building beginning 297' from DER, 461' right of centerline, up to 4552' MSL.
Tree 1031' from DER, 651' left of centerline, 4563' MSL.
Tree, building beginning 1140' from DER, 503' left of centerline, up to 4565' MSL.
Building 1173' from DER, 560' right of centerline, 4559' MSL.
Building 1434' from DER, 855' right of centerline, 4572' MSL.
Tree 1514' from DER, 749' left of centerline, 4568' MSL.
Pole 1818' from DER, 352' right of centerline, 4576' MSL.
Pole beginning 3232' from DER, 1134' right of centerline, up to 4621' MSL.
Pole, sign beginning 3499' from DER, 801' left of centerline, up to 106' AGL/4673' MSL.

SPRINGERVILLE, AZ
SPRINGERVILLE MUNI (JTC)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 02DEC21 (21336)  (FAA)
TAKEOFF MINIMUMS:
Rwy 3, std. w/min. climb of 240' per NM to 7800 or 3300-5 for VCOA.
Rwy 11, std. w/min. climb of 440' per NM to 8200 or 3300-5 for VCOA.
Rwy 21, std. w/min. climb of 365' per NM to 8600 or 3300-5 for VCOA.
Rwy 29, 400-2½ or std. w/min. climb of 280' per NM to 7300.
DEPARTURE PROCEDURE:
Rwy 3, climbing left turn to 9100 on heading 360° before proceeding on course.
Rwy 11, climbing left turn to 10500 on heading 360° before proceeding on course.
Rwy 21, climbing right turn to 10300 on heading 360° before proceeding on course.
Rwy 29, climbing right turn to 9100 on heading 360° before proceeding on course.
VCOA:
Rwys 3, 11, 21, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Springerville Muni airport at or above 10400 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 11, trees beginning 9' from DER, 12' left of centerline, up to 100' AGL/7121' MSL.
Trees beginning 162' from DER, 8' right of centerline, up to 100' AGL/7125' MSL.
Trees beginning 3240' from DER, 48' right of centerline, up to 100' AGL/7135' MSL.
Trees beginning 3440' from DER, 289' right of centerline, up to 100' AGL/7138' MSL.
Trees beginning 3625' from DER, 135' right of centerline, up to 100' AGL/7148' MSL.
Trees beginning 3825' from DER, 376' right of centerline, up to 100' AGL/7151' MSL.
Trees beginning 4010' from DER, 222' right of centerline, up to 100' AGL/7158' MSL.
Trees beginning 4210' from DER, 463' right of centerline, up to 100' AGL/7161' MSL.
Trees beginning 4395' from DER, 703' right of centerline, up to 100' AGL/7167' MSL.
Trees beginning 4779' from DER, 790' right of centerline, up to 100' AGL/7174' MSL.
Trees beginning 4964' from DER, 1031' right of centerline, up to 100' AGL/7177' MSL.
Trees beginning 5349' from DER, 1512' right of centerline, up to 100' AGL/7178' MSL.
Tree 5734' from DER, 1993' right of centerline, 100' AGL/190' MSL.
Rwy 21, fence beginning 163' from DER, 300' left of centerline, up to 7065' MSL.
Terrain beginning 211' from DER, 391' left of centerline, up to 7066' MSL.
Tree 4771' from DER, 1744' right of centerline, 100' AGL/7184' MSL.
Tree beginning 4776' from DER, 1755' left of centerline, up to 100' AGL/7190' MSL.
Tree 5339' from DER, 1899' right of centerline, 100' AGL/7194' MSL.
Tree 5732' from DER, 1871' right of centerline, 100' AGL/7204' MSL.
Rwy 29, trees beginning 52' from DER, 1' right of centerline, up to 100' AGL/7121' MSL.
Tree 67' from DER, 39' left of centerline, 100' AGL/7121' MSL.
Trees beginning 82' from DER, 18' left of centerline, up to 100' AGL/7125' MSL.
Tree 2822' from DER, 1066' left of centerline, 100' AGL/7128' MSL.
Trees beginning 2942' from DER, 130' left of centerline, up to 7139' MSL.

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

SPRINGERVILLE, AZ (CON’T)

TAYLOR, AZ

TAYLOR (TYL)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2  02DEC21  (21336)  (FAA)

TAKEOFF MINIMUMS:

Rwy 29 (CON’T), tree 4191' from DER, 1292' left of centerline, 100' AGL/7141' MSL. 
Trees beginning 4299' from DER, 524' right of centerline, up to 100' AGL/7141' MSL.

Rwy 21, tree 4195' from DER, 1052' left of centerline, 100' AGL/7154' MSL.

Trees beginning 4391' from DER, 23' left of centerline, up to 100' AGL/7158' MSL.

Trees beginning 4499' from DER, 370' right of centerline, up to 100' AGL/7151' MSL.

Tree 4560' from DER, 811' left of centerline, 100' AGL/7164' MSL.

Trees beginning 4576' from DER, 176' left of centerline, up to 100' AGL/7181' MSL.

Tree 4683' from DER, 100' right of centerline, 100' AGL/7158' MSL.

Trees beginning 4899' from DER, 217' right of centerline, up to 100' AGL/7176' MSL.

Tree 4883' from DER, 852' right of centerline, 100' AGL/7181' MSL.

Trees beginning 4899' from DER, 63' right of centerline, up to 100' AGL/7187' MSL.

Tree 5299' from DER, 151' right of centerline, up to 100' AGL/7190' MSL.

Trees beginning 5361' from DER, 2' left of centerline, up to 100' AGL/7200' MSL.

Tree 5684' from DER, 238' right of centerline, up to 100' AGL/7194' MSL.

Tree 5884' from DER, 84' right of centerline, 100' AGL/7197' MSL.

Trees beginning 5918' from DER, 325' right of centerline, up to 7199' MSL.

Trees beginning 5930' from DER, 68' left of centerline, up to 100' AGL/7207' MSL.

Trees beginning 1 NM from DER, 171' right of centerline, up to 100' AGL/7200' MSL.

Trees beginning 1 NM from DER, 375' left of centerline, up to 100' AGL/7213' MSL.

Trees beginning 1 NM from DER, 18' right of centerline, up to 100' AGL/7204' MSL.

Trees beginning 1 NM from DER, 135' left of centerline, up to 100' AGL/7217' MSL.

Trees beginning 1.1 NM from DER, 288' left of centerline, up to 100' AGL/7220' MSL.

Trees beginning 1.1 NM from DER, 156' left of centerline, up to 100' AGL/7224' MSL.

Trees beginning 1.1 NM from DER, 989' left of centerline, up to 100' AGL/7230' MSL.

Trees beginning 1.1 NM from DER, 442' left of centerline, up to 100' AGL/7223' MSL.

Trees beginning 1.1 NM from DER, 222' left of centerline, up to 100' AGL/7210' MSL.

Tree 5884' from DER, 84' right of centerline, 100' AGL/7197' MSL.

Trees beginning 5918' from DER, 325' right of centerline, up to 7199' MSL.

Trees beginning 5930' from DER, 68' left of centerline, up to 100' AGL/7207' MSL.

Trees beginning 1 NM from DER, 171' right of centerline, up to 100' AGL/7200' MSL.

Trees beginning 1 NM from DER, 375' left of centerline, up to 100' AGL/7213' MSL.

Trees beginning 1 NM from DER, 18' right of centerline, up to 100' AGL/7204' MSL.

Trees beginning 1 NM from DER, 135' left of centerline, up to 100' AGL/7217' MSL.

Trees beginning 1.1 NM from DER, 288' left of centerline, up to 100' AGL/7220' MSL.

Trees beginning 1.1 NM from DER, 156' left of centerline, up to 100' AGL/7224' MSL.

Trees beginning 1.1 NM from DER, 989' left of centerline, up to 100' AGL/7230' MSL.

Tree 1.2 NM from DER, 2479' left of centerline, 100' AGL/7233' MSL.

Tree 2 NM from DER, 1412' right of centerline, 100' AGL/7361' MSL.

Power lines crossing departure course 1000' from DER, pole 1309' from DER, 465' left of centerline, 15' AGL/5758' MSL.

Pole 852' from DER, 705' left of centerline, 24' AGL/5741' MSL.

Building 745' from DER, 694' left of centerline, 23' AGL/5739' MSL.

Tree 44' from DER, 113' left of centerline, 5723' MSL.

Power lines crossing departure course 1000' from DER, pole 1309' from DER, 465' left of centerline, 15' AGL/5758' MSL.

Pole 1460' from DER, 597' left of centerline, 42' AGL/5764' MSL.

Rwy 21, utility lights, fence beginning 40' from DER, 113' right of centerline, up to 5' AGL/5828' MSL.

Trees beginning 86 from DER, 318' right of centerline, up to 5835' MSL.

Trees beginning 247' from DER, 268' right of centerline, up to 5836' MSL.

Tree 447' from DER, 248' right of centerline, 5838' MSL.

Trees beginning 552' from DER, 269' right of centerline, up to 5839' MSL.

Pole 1055' from DER, 659' left of centerline, 58' AGL/5874' MSL.

Pole 1170' from DER, 602' right of centerline, 31' AGL/5860' MSL.

Pole 1388' from DER, 475' right of centerline, 31' AGL/5873' MSL.

Pole, trees beginning 1468' from DER, 239' right of centerline, up to 43' AGL/5855' MSL.

Pole 1479' from DER, 544' left of centerline, 55' AGL/5883' MSL.

Poles beginning 1633' from DER, 228' left of centerline, up to 51' AGL/5884' MSL.

Tree 2369' from DER, 974' right of centerline, 5886' MSL.

Trees beginning 2406' from DER, 903' right of centerline, up to 5888' MSL.

Tree 2606' from DER, 1009' right of centerline, 5892' MSL.

Tree 2702' from DER, 983' right of centerline, 5893' MSL.

Terrain, tree beginning 2827' from DER, 1025' right of centerline, up to 5897' MSL.

Trees beginning 3013' from DER, 1028' right of centerline, up to 5904' MSL.

Tree 3120' from DER, 1254' left of centerline, 5910' MSL.

Terrain 3131' from DER, 1291' right of centerline, 5906' MSL.

Vehicles on road, tree beginning 3235' from DER, 607' right of centerline, up to 5923' MSL.

Trees beginning 3653' from DER, 672' right of centerline, up to 5924' MSL.

Tree 3795' from DER, 1387' left of centerline, 5923' MSL.

Vehicles on road, tree, beginning 3820' from DER, 972' right of centerline, up to 5941' MSL.

Trees beginning 3894' from DER, 1148' left of centerline, up to 5928' MSL.

Vehicles on road, trees, terrain beginning 3901' from DER, 621' right of centerline, up to 5945' MSL.

Trees beginning 4009' from DER, 1161' left of centerline, up to 5929' MSL.

Vehicles on road, tree, beginning 4039' from DER, 516' right of centerline, up to 5952' MSL.

Trees, terrain beginning 4124' from DER, 1262' left of centerline, up to 5934' MSL.

Vehicles on road, trees, terrain beginning 4126' from DER, 678' right of centerline, up to 5956' MSL.

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

TAYLOR, AZ (CON’T)

TAYLOR (TYL) (CON’T)

Rwy 21 (CON’T), vehicles on road, terrain, trees beginning 4222’ from DER, 635’ right of centerline, up to 5959’ MSL.
Trees beginning 4358’ from DER, 1396’ left of centerline, up to 5942’ MSL.
Vehicles on road 4447’ from DER, 959’ right of centerline, 5960’ MSL.
Trees beginning 4494’ from DER, 1296’ left of centerline, up to 5950’ MSL.
Vehicles on road, trees beginning 4523’ from DER, 488’ right of centerline, up to 15’ AGL/5973’ MSL.
Vehicle on road 4837’ from DER, 809’ right of center line up to 5975’ MSL.

TONOPAH, NV

TONOPAH (TPH)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2  17AUG17  (17229)  (FAA)

TAKEOFF MINIMUMS:

Rwys 11, 29, NA - ATC.

Rwy 15, std. with a min. climb of 320’ per NM to 9100 or 2500-3 for VCOA.

Rwy 33, std. with a min. climb of 352’ per NM to 9100 or 2500-3 for VCOA.

DEPARTURE PROCEDURE:

Rwy 15, climbing left turn direct TONOPAH (TPH) VORTAC thence...

Rwy 33, climbing right turn direct TONOPAH (TPH) VORTAC thence...

...continue climb in TPH holding pattern (NE, RT, 246° inbound) to cross TPH VORTAC at or above 9300 before proceeding on course.

VCOA:

Rwy 15, 33, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Tonopah airport at or above 7800 direct TONOPAH VORTAC, continue climb in TPH holding pattern (NE, RT, 246° inbound) to cross TPH VORTAC at or above 9300 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 15, transmission line tower 515’ from DER, 473’ left of centerline, 23’ AGL/5418’ MSL.

Rwy 33, fence beginning 173’ from DER, 401’ right of centerline, 6’ AGL/5438’ MSL.

TONOPAH TEST RANGE (KTNX)

TONOPAH, NV

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1  19JUL18  (18200)

DEPARTURE PROCEDURE:

Rwy 14, 1000-3 with min. climb of 320 ft/NM to 10,700 or 2700-3 for Climb in Visual Conditions. Climb on a heading between 325º CW to 155º from DER or Climb in Visual Conditions to cross KZ - KTNX airport at or above 8100 MSL before proceeding on course.

Rwy 32, 1000-3 with min. climb of 260 ft/NM to 5900 or 2700-3 for Climb in Visual Conditions. Climb on a heading between 295º CW to 005º from DER or Climb in Visual Conditions to cross KZ-KTNX airport at or above 8100 MSL before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 14, terrain 1204’ from DER, 823’ right of cntrln, 5582’ MSL.
Terrain 63’ from DER, 517’ right of cntrln, 5565’ MSL.
Terrain 46’ from DER, 480’ right of cntrln, 5564’ MSL.
Terrain 0’ from DER, 353’ right of cntrln, 5561’ MSL.
Terrain 62’ from DER, 200’ right of cntrln, 5558’ MSL.
Terrain 14’ from DER, 292’ right of cntrln, 5561’ MSL.
Terrain 0’ from DER, 287’ right of cntrln, 5561’ MSL.
Terrain 0’ from DER, 222’ right of cntrln, 5559’ MSL.
Surveyed terrain 215’ from DER, 427’ right of cntrln, 5560’ MSL.

Rwy 32, terrain 0’ from DER, 500’ left of cntrln, 5476’ MSL.
Terrain 19’ from DER, 465’ left of cntrln, 5476’ MSL.
Terrain 110’ from DER, 529’ left of cntrln, 5476’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

TOOELE, UT
BOLINDER FIELD-TOOELE VALLEY (TVY)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 22AUG13 (13234) (FAA)
TAKEOFF MINIMUMS:
Rwy 17, std. w/min. climb of 348' per NM to 9000 or 5600-3 for climb in visual conditions.
Rwy 35, std. w/min. climb of 380' per NM to 9000 or 5600-3 for climb in visual conditions.

DEPARTURE PROCEDURE:
Rwy 17, climbing right turn to 9000 on heading 337° and OGD VORTAC R-197 to STACO INT, or for climb in visual conditions: cross Bolinder Field-Tooele Valley airport at or above 9800' MSL before proceeding on course. When executing VCOA, notify ATC prior to departure.
Rwy 35, climbing left turn to 9000 on heading 300° and OGD VORTAC R-197 to STACO INT, or for climb in visual conditions: cross Bolinder Field-Tooele Valley airport at or above 9800' MSL before proceeding on course. When executing VCOA, notify ATC prior to departure.

TAKEOFF OBSTACLE NOTES:
Rwy 17,
- tree 230' from DER, 255' right of centerline, 35' AGL/4335' MSL.
- tree 342' from DER, 363' right of centerline, 35' AGL/4360' MSL.
- trees beginning 601' from DER, 486' right of centerline, up to 35' AGL/4399' MSL.
- Pole 1000' from DER, 409' left of centerline, 42' AGL/4363' MSL.
- Pole 1092' from DER, 118' right of centerline, 42' AGL/4363' MSL.
- Tree 1369' from DER, 393' right of centerline, 35' AGL/4381' MSL.
- Tree 2018' from DER, 257' right of centerline, 35' AGL/4384' MSL.

TUCSON, AZ
RYAN FLD (RYN)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 29JUL10 (21168) (FAA)
TAKEOFF MINIMUMS:
Rwys 6L, 15, 24R, 33, NA, ATC.

DEPARTURE PROCEDURE:
Rwys 6R, 24L, use ALMON DEPARTURE.

TUCSON INTL (TUS)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 5 26JUL12 (12208) (FAA)
TAKEOFF MINIMUMS:
Rwy 3, 300-2 or std. w/min. climb of 228' per NM to 3000.

DEPARTURE PROCEDURE:
Rwys 3, 29L/R, climbing right turn direct to TUS VORTAC.
Rwy 21, climbing left turn direct to TUS VORTAC.
Rwys 11L/R, climb heading 123° to 4000 then climbing left turn direct TUS VORTAC.
... Climb in TUS VORTAC holding pattern (hold NW, right turns, 128° inbound) to 9000 before proceeding on course.

TAKEOFF OBSTACLE NOTES:
Rwy 3,
- multiple trees and sign beginning 1385' from DER, 127' left of centerline, up to 41' AGL/2611' MSL.
- Tree 2062' from DER, 332' right of centerline, 46' AGL/2626' MSL.
- Rwy 11L, vents 115' from DER, 147' left and right of centerline, 6' AGL/2646' MSL.
- Multiple bushes beginning 449' from DER, 395' left of centerline, up to 24' AGL/2674' MSL.
- Multiple bushes beginning 188' from DER, 328' right of centerline, up to 13' AGL/2663' MSL.
- Rwy 11R, tree 584' from DER, 176' right of centerline, 25' AGL/2654' MSL.
- Rwy 21, bush 104' from DER, 256' left of centerline, 12' AGL/2572' MSL.
- RR 248' from DER, right to left of centerline, 23' AGL/2582' MSL.
- Bush 549' from DER, 384' left of centerline, 33' AGL/2583' MSL.
- Tree 701' from DER, 144' left of centerline, 37' AGL/2587' MSL.
- Pole 950' from DER, 166' left of centerline, 38' AGL/2588' MSL.
- Pole 1028' from DER, 89' left of centerline, 46' AGL/2599' MSL.
- Pole 1288' from DER, 594' left of centerline, 66' AGL/2616' MSL.
- Electrical system 1445' from DER, 319' left of centerline, 55' AGL/2605' MSL.
- Bush 141' from DER, 330' right of centerline, 24' AGL/2574' MSL.
- Bush 454' from DER, 138' right of centerline, 26' AGL/2576' MSL.
- Electrical system 1176' from DER, 37' right of centerline, 48' AGL/2598' MSL.
- Rwy 29L, aircraft on ramp 2723' from DER, 348' left of centerline, up to 30' AGL/2680' MSL.
- Rwy 29R, aircraft on ramp 2779' from DER, 1056' left of centerline, up to 30' AGL/2680' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)
ORIG 28FEB19 (19059) (FAA)
Rwy 3, heading as assigned by ATC; requires minimum climb of 228' per NM to 3000.
Rwys 11L/R, 21, heading as assigned by ATC.
Rwy 29L, heading as assigned by ATC; requires minimum climb of 300' per NM to 4500.
Rwy 29R, heading as assigned by ATC; requires minimum climb of 300' per NM to 4400.
VERNAL, UT

VERNAL RGNL (VEL)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 07DEC17 (17341) (FAA)
TAKEOFF MINIMUMS:

Rwy 17, std. w/min. climb of 210' per NM to 6000, or alternatively w/std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1800' prior to DER or 2200-3 for VCOA.

Rwy 35, std. w/min. climb of 410' per NM to 7700 or 2200-3 for VCOA.

DEPARTURE PROCEDURE:

Rwy 17, climbing left turn direct VEL VOR/DME, thence . . .

Rwy 35, climbing right turn direct VEL VOR/DME, thence . . .

. . . on VEL VOR/DME R-142 to ENSEN INT/VEL 9.7 DME and hold (hold SE, right turn, 322° inbound). Continue Climb-in-hold to the MEA/MCA for route of flight.

VCOA:

Rwys 17, 35, obtain ATC approval for VCOA when requesting IFR clearance: Climb in visual conditions to cross Vernal RGNL Airport at or above 7300, then continue climb on VEL VOR/DME R-142 until reaching the MEA/MCA for route of flight.

TAKEOFF OBSTACLE NOTES:

Rwy 17, terrain beginning 19' from DER, 140' right of centerline, up to 5290' MSL.

Terrain and agricultural equipment beginning 118' from DER, 15' left of centerline, up to 6' AGL/5284' MSL.

Tree 1333' from DER, 295' left of centerline, 5315' MSL.

Tree 1378' from DER, 221' left of centerline, 5317' MSL.

Tree 1456' from DER, 112' left of centerline, 5318' MSL.

Tree 1498' from DER, 32' left of centerline, 5320' MSL.

Poles beginning 1948' from DER, 46' right of centerline, up to 35' AGL/5334' MSL.

Trees beginning 2411' from DER, 19' left of centerline, up to 5370' MSL.

Tree 2439' from DER, 296' right of centerline, 5339' MSL.

Tree 2468' from DER, 288' right of centerline, 5341' MSL.

Trees beginning 2497' from DER, 290' right of centerline, up to 5344' MSL.

Trees beginning 2511' from DER, 105' left of centerline, up to 5374' MSL.

Tree 2534' from DER, 361' right of centerline, 5355' MSL.

Tree 2553' from DER, 355' right of centerline, 5362' MSL.

Trees beginning 2573' from DER, 323' right of centerline, up to 5370' MSL.

Trees beginning 4620' from DER, 71' left of centerline, up to 5397' MSL.

Tree 4749' from DER, 184' right of centerline, 5401' MSL.

Tree 4895' from DER, 65' left of centerline, 5403' MSL.

Rwy 35, pole 178' from DER, 153' left of centerline, 5290' MSL.

Tree and pole beginning 934' from DER, 625' right of centerline, up to 5302' MSL.

WENDOVER, UT

WENDOVER (ENV)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 7 31MAR16 (16091) (FAA)
TAKEOFF MINIMUMS:

Rwy 26, std. w/min. climb of 300' per NM to 5900.

Rwy 30, NA-ATC.

DEPARTURE PROCEDURE:

Rwys 8, 12, 26, climbing left turn direct BVL VORTAC, thence...

...continue climb in holding pattern (hold NE, right turns, 253° inbound) to cross BVL VORTAC at/above MEA for route of flight.

TAKEOFF OBSTACLE NOTES:

Rwy 12, bush 92' from DER, 258' left of centerline, 4' AGL/4227' MSL.

Rwy 26, tree 100' from DER, 500' right of centerline, 11' AGL/4240' MSL.

Bush 90' from DER, 278' left of centerline, 4' AGL/4233' MSL.

WILLCOX, AZ

COCHISE COUNTY (P33)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 02MAY13 (13122) (FAA)
TAKEOFF MINIMUMS:

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

WINDOW ROCK, AZ

WINDEMUCCA, NV

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 05DEC19 (19339) (FAA)

TAKEOFF MINIMUMS:

Rwy 3, 800-3 w/min. climb of 385' per NM to 8100 or std. w/min. climb of 565' per NM to 7700 or 1600-3 for VCOA.

Rwy 21, std. w/min. climb of 285' per NM to 7700 or 1600-3 for VCOA.

DEPARTURE PROCEDURE:

Rwy 3, climb on heading 025° to 7500, then right turn to intercept GUP VORTAC R-321 to GUP VORTAC before proceeding on course.

Rwy 21, climb on heading 205° to 7400 then left turn direct GUP VORTAC before proceeding on course.

VCOA:

Rwys 3, 21, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Window Rock Airport at or above 8200 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 3, vegetation beginning 32' from DER, 73' left of centerline, up to 6745' MSL.

Building 16' from DER, 2609' right of centerline, 19' AGL/6766' MSL.

Poles beginning 477' from DER, 344' right of centerline, up to 33' AGL/6772' MSL.

Tree, pole beginning 1336' from DER, 114' left of centerline, up to 6796' MSL.

Sign 1380' from DER, 109' right of centerline, 29' AGL/6777' MSL.

Pole 1448' from DER, 291' right of centerline, 39' AGL/6788' MSL.

Tree 1586' from DER, 392' left of centerline, 6808' MSL.

Tree, pole beginning 1774' from DER, 225' right of centerline, up to 52' AGL/6805' MSL.

Pole 1868' from DER, 746' left of centerline, 38' AGL/6823' MSL.

Pole 3038' from DER, 91' right of centerline, 40' AGL/6824' MSL.

Pole 3356' from DER, 457' left of centerline, 31' AGL/6840' MSL.

Tree 3532' from DER, 613' left of centerline, 6850' MSL.

Tree 3801' from DER, 682' left of centerline, 6871' MSL.

Vertical structure, poles beginning 3832' from DER, 57' right of centerline, up to 6926' MSL.

Pole 4044' from DER, 310' left of centerline, 44' AGL/6874' MSL.

Tree 4616' from DER, 625' left of centerline, 6888' MSL.

Vertical structure 5938' from DER, 147' right of centerline, 7024' MSL.

Tree, pole, NAVAID, beginning 1' from DER, 59' left of centerline, up to 6' AGL/7083' MSL.

Tower, tree beginning 1.1 NM from DER, 102' right of centerline, up to 103' AGL/7096' MSL.

Trees beginning 1.3 NM from DER, 2063' right of centerline, up to 50' AGL/7309' MSL.

Vertical structure beginning 1.4 NM from DER, 1852' left of centerline, up to 7127' MSL.

Trees beginning 1.4 NM from DER, 121' right of centerline, up to 50' AGL/7369' MSL.

Vertical structure, tree beginning 1.5 NM from DER, 628' left of centerline, up to 50' AGL/7375' MSL.

Tree 1.6 NM from DER, 767' left of centerline, 50' AGL/7379' MSL.

Tree 1.8 NM from DER, 357' left of centerline, 50' AGL/7351' MSL.

Tree 1.9 NM from DER, 77' left of centerline, 50' AGL/7369' MSL.

Tree 2.1 NM from DER, 26' left of centerline, 50' AGL/7429' MSL.

Tree 2.4 NM from DER, 292' right of centerline, 50' AGL/7449' MSL.

Rwy 21, tree 955' from DER, 382' left of centerline, 6736' MSL.

Tree 1018' from DER, 620' left of centerline, 6768' MSL.

WINDEMUCCA, NV

WINDEMUCCA MUNI (WMC)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 30JAN20 (20030) (FAA)

DEPARTURE PROCEDURE:

Use WINDEMUCCA departure.

TAKEOFF OBSTACLE NOTES:

Rwy 2, tree, NAVAID, beginning 3' from DER, 113' right of centerline, up to 4356' MSL.

NAVAID 39' from DER, 118' left of centerline, 8' AGL/4311' MSL.

Tree 81' from DER, 402' right of centerline, 4357' MSL.

Tree, vehicles on traverse way beginning 98' from DER, 230' right of centerline, up to 4373' MSL.

Tree 1177' from DER, 576' left of centerline, 4346' MSL.

Tree 1265' from DER, 763' left of centerline, 4349' MSL.

Tree 1404' from DER, 647' left of centerline, 4360' MSL.

Rwy 14, pole 1' from DER, 24' left of centerline, 4304' MSL.

NAVAID 40' from DER, 126' left of centerline, 4305' MSL.

Tree 81' from DER, 183' left of centerline, up to 40' AGL/4322' MSL.

Trees beginning 1.6 NM from DER, 875' right of centerline, up to 50' AGL/4325' MSL.

Tree 1.8 NM from DER, 357' right of centerline, 50' AGL/4351' MSL.

Tree 1.9 NM from DER, 77' left of centerline, 50' AGL/4369' MSL.

Tree 2.1 NM from DER, 26' left of centerline, 50' AGL/4329' MSL.

Tree 2.4 NM from DER, 292' right of centerline, 50' AGL/4449' MSL.

Rwy 20, tree 26' from DER, 406' right of centerline, 4306' MSL.

Tree 65' from DER, 385' left of centerline, 8' AGL/4311' MSL.

Rwy 32, NAVAID 39' from DER, 123' left of centerline, 3' AGL/4303' MSL.

Vegetation 77' from DER, 351' left of centerline, 4304' MSL.

Tree 168' from DER, 478' right of centerline, 4306' MSL.

Trees beginning 184' from DER, 405' left of centerline, up to 4314' MSL.

Vegetation on traverse way, 273' from DER, 267' right of centerline, up to 4316' MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

WINLOW, AZ
WINLOW-LINDBERGH RGNL (INW)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 11DEC14 (14345) (FAA)

DEPARTURE PROCEDURE:

Rwy 22, climb to 6000, then right turn direct INW VORTAC and hold, thence . . .

Rwy 4, climb to 6000, then left turn direct INW VORTAC and hold, thence . . .

Rwy 11, 29, climb to 6000, then direct INW VORTAC and hold, thence . . .

. . . continue climb-in-hold (hold West, right turns, 068° inbound) to 8900 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 11, vehicle on road beginning 389’ from DER, 329’ right of centerline, 15’ AGL/4894’ MSL.
Trees beginning 120’ from DER, 396’ right of centerline, 100’ AGL/4901’ MSL.
Tank 3681’ from DER, 1304’ right of centerline, 129’ AGL/5014’ MSL.
Grain silo 2901’ from DER, 25’ right of centerline, up to 4957’ MSL.
Obstruction light on hopper 2906’ from DER, 27’ right of centerline, up to 4955’ MSL.
Chimney 2898’ from DER, 28’ right of centerline, up to 4953’ MSL.
Light support structure 13’ from DER, 55’ left of centerline, up to 4871’ MSL.
Vertical point 234’ from DER, 14’ left of centerline, up to 4876’ MSL.

Rwy 29, tree 332’ from DER, 589’ left of centerline 100’ AGL/4915’ MSL.
Trees beginning 385’ from DER, 124’ right of centerline, 100’ AGL/4923’ MSL.
Vehicle on road beginning 31’ from DER, 389’ right of centerline 15’ AGL/4920’ MSL.
REIL abeam DER, 139’ left of centerline, up to 4904’ MSL.
Bush 38’ from DER, 179’ right of centerline, up to 4903’ MSL.
Pole 2132’ from DER, 1052’ right of centerline, up to 4956’ MSL.
Vertical point 241’ from DER, 318’ right of centerline, up to 4907’ MSL.
Ground 71’ from DER, 456’ right of centerline, up to 4902’ MSL.

Rwy 4, light 4’ from DER, 425’ left of centerline, up to 4920’ MSL.
Obstruction light on lighted windsock 12’ from DER, 424’ left of centerline, up to 4918’ MSL.
Tree 34’ from DER, 263’ left of centerline, 100’ AGL/4901’ MSL.
Tower 2740’ from DER, 1086’ left of centerline, up to 4968’ MSL.
Ground 42’ from DER, 455’ left of centerline, up to 4892’ MSL.

Rwy 22, poles beginning 1575’ from DER, 360’ right of centerline, up to 5010’ MSL.
Antenna 1867’ from DER 380’ right of centerline up to 5019’ MSL.
Vehicle on road beginning 198’ from DER, 12’ right of centerline, 15’ AGL/4994’ MSL.
Vehicle on road beginning 499’ from DER, 93’ left of centerline, 15’ AGL/4962’ MSL.
Tree 1746’ from DER, 581’ right of centerline, 100’ AGL/4993’ MSL.
Vertical point 31’ from DER, 479’ left of centerline, up to 4946’ MSL.
Building 525’ from DER, 528’ right of centerline, up to 4956’ MSL.
Light support structures 10’ from DER, 54’ right of centerline, up to 4942’ MSL.
TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

YUMA MCAS/YUMA INTL (KNYL)
YUMA, AZ

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 22APR21 (21112) (USN)

DEPARTURE PROCEDURE:
- Rw 8, diverse departures authorized between 258° CW 058°.

TAKEOFF OBSTACLE NOTES:
- Rw 3L, terrain 0’ from DER, 500’ left of cntrln, 194’ MSL.
  Terrain 0’ from DER, 500’ right of cntrln, 197’ MSL.
  Sisoo tree 4274’ from DER, 927’ left of cntrln, 86’ AGL/300’ MSL.
  Sisoo tree 4185’ from DER, 1016’ left of cntrln, 91’ AGL/304’ MSL.
  Twr N of airfield 5273’ from DER, 1538’ left of cntrln, 335’ MSL.
  Twr 2688’ from DER, 1232’ left of cntrln, 62’ AGL/299’ MSL.
- Rw 3R, terrain 0’ from DER, 500’ right of cntrln, 208’ MSL.
  Palm 1184’ from DER, 742’ left of cntrln, 41’ AGL/255’ MSL.
  Palm 1134’ from DER, 792’ left of cntrln, 36’ AGL/250’ MSL.
- Rw 8, security antenna 1135’ from DER, 806’ right of cntrln, 32’ AGL/242’ MSL.
  Rw 17, twr 4362’ from DER, 1180’ right of cntrln, 65’ AGL/285’ MSL.
  Rw 4506’ from DER, 1284’ right of cntrln, 50’ AGL/250’ MSL.
  Rw 4510’ from DER, 1343’ right cntrln, 50’ AGL/250’ MSL.
  Terrain 0’ from DER, 500’ right of cntrln, 184’ MSL.
  Antenna 303’ from DER, 403’ right of cntrln, 190’ MSL.
- Rw 21L, TACAN antenna 705’ from DER, 286’ left of cntrln, 220’ MSL.
  PAR antenna 661’ from DER, 295’ right of cntrln, 214’ MSL.
- Rw 26, palm 577’ from DER, 604’ right of cntrln, 44’ AGL/239’ MSL.
  Metal pole 74’ from DER, 244’ right of cntrln, 199’ MSL.
- Rw 35, terrain 0’ from DER, 500’ right of cntrln, 197’ MSL.
  Billboard 747’ from DER, 562’ right of cntrln, 225’ MSL.
  Lgt pole 679’ from DER, 344’ left of cntrln, 25’ AGL/220’ MSL.
  Metal lgt pole N of afld 714’ from DER, 544’ left of cntrln, 119’ AGL/231’ MSL.
  Palm 1075’ from DER, 721’ left of cntrln, 57’ AGL/253’ MSL.
  Pylon 711’ from DER, 476’ left of cntrln, 32’ AGL/228’ MSL.
  Pylon power 711’ from DER, 520’ left of cntrln, 37’ AGL/232’ MSL.
  Pylon 712’ from DER, 540’ left of cntrln, 38’ AGL/233’ MSL.
GASSI TRANSITION (GASSI.ANAHO2): From over GASSI via FMG R-007 to ANAHO INT/DME. Thence....
LOVELOCK TRANSITION (LLC.ANAHO2): From over LLC VORTAC via LLC R-240 to ANAHO INT/DME. Thence....

....Depart ANAHO INT/DME heading 240° for vectors to final approach course.
CAUTION: Intense Glider Activity to FL180.

ARRIVAL ROUTE DESCRIPTION

From HARTT on track 150° to JAGOM, then on track 150° to EELZA, then on track 136° to BEETH, then on track 163° to HIWAA, then on track 160° to BACRT, then on track 160° to FMG VORTAC, then on track 165° to cross HHOPE at or above 10000, then on heading 165°. Rwy 34L/34R expect RADAR vectors to final approach course.

LOST COMMUNICATIONS
At HHOPE, climbing left turn to 12000 direct VIKES and hold.
CAUTION: Intense Glider Activity to FL180.

NOTE: GPS required.
NOTE: RNAV 1.
NOTE: Cross EELZA at or above 13000.
NOTE: Cross LIBGE at or above 12000 at 230 KTS.

ARRIVAL ROUTE DESCRIPTION

From HARTT on track 150° to JAGOM, then on track 150° to cross EELZA at or above 13000, then on track 164° to cross LIBGE at or above 12000 at 230 KTS. Then on heading 160° expect ILS RWY 16R or RADAR vectors.

LOST COMMUNICATIONS

At LIBGE, proceed inbound via RWY 16R ILS approach. If unable, climbing left turn to 12000 direct FMG VORTAC and hold.
NOTE: For non-GPS equipped aircraft TPH, MVA, OAL, FMG and RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: RADAR required.
NOTE: For non-GPS equipped aircraft TPH, MVA, OAL, FMG and HZN DME must be operational.

NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

From KENNO on track 304° to RUSME, then as depicted to cross KLOCK at 10000' at 210K, then on heading 330°. Rwy 16L/16R expect RADAR vectors to final approach course.

LOST COMMUNICATIONS:
At KLOCK, turn right direct to WINRZ and hold, maintain 10000'.
NOTE: Chart not to scale.

CAUTION: Intense Glider Activity to FL180.

NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: For non-GPS equipped aircraft, HZN final approach course.

ARRIVAL ROUTE DESCRIPTION

From MYBAD on track 223° to WHATZ, then as depicted to cross WINRZ at or above 11000 at 230 KTS, then on heading 220°. Rwy 16R/16L expect RADAR vectors to final approach course.

LOST COMMUNICATIONS

At WINRZ, proceed inbound via RWY 16R ILS approach. If unable, climbing left turn to 12000 direct to FMG VORTAC and hold. Continue climb in hold to 12000.
ARRIVAL ROUTE DESCRIPTION

From KENNO via 304° track to RUSME, then via 292° track to PEONS, then via 287° track to SNKIS, then via 288° track to TARVR, then via 344° track to SPOON.

RWY 34R: On heading 344° expect RADAR vectors to final approach course.

LOST COMMUNICATIONS: At SPOON, intercept and execute Rwy 34L ILS approach. If unable, turn right direct to FMG and hold, maintain 12000.

NOTE: Chart not to scale.

NOTE: RADAR required for non-GPS aircraft.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: For Turbojet and Turboprop aircraft only.
NOTE: For non-GPS equipped aircraft TPH, MVA, OAL, and SWR DMEs must be operational.
ARRIVAL ROUTE DESCRIPTION

RUNWAY 16: From over MVA VORTAC via MVA R-283 to YERIN INT. Thence via FMG R-119 to FMG VORTAC. Expect RADAR vectors to Runway 16.

NOTE: For Runway 16 only.

NOTE: RADAR Required.

NOTE: Chart not to scale.
SIERRA THREE ARRIVAL

**ARRIVAL ROUTE DESCRIPTION**

From over SAC VORTAC via SAC R-028 to HOBOA INT/SAC 82 DME. Depart HOBOA heading 030° for vectors to final approach.

**CAUTION:** Intense Glider Activity up to FL180.

**NOTE:** RADAR required.
**NOTE:** DME required.
**NOTE:** Chart not to scale.
ARRIVAL ROUTE DESCRIPTION

COALDALE TRANSITION (OAL.TARVR1): From over OAL VORTAC via the OAL R-300 and the MVA R-264 to TARVR INT/DME. Thence . . . .

MINA TRANSITION (MVA.TARVR1): From over the MVA VORTAC via MVA R-264 to TARVR INT/DME. Thence . . . .

SACRAMENTO TRANSITION (SAC.TARVR1): From over SAC VORTAC via SAC R-058 to TARVR INT/DME. Thence . . . .

TILTS TRANSITION (TILTS.TARVR1): From over TILTS INT/DME via SWR R-117 to TARVR INT/DME. Thence . . . .

. . . .From over TARVR INT/DME via I-RNO back course to SPOON I-RNO 22.3 DME.

CAUTION: Intense Glider Activity up to FL180.
ARRIVAL ROUTE DESCRIPTION

From MYBAD on track 223° to WHATZ, then as depicted to cross HHOPE at or above 10000, then on heading 165°. Rwy 34L/34R expect RADAR vectors to final approach course.

LOST COMMUNICATIONS
At HHOPE, climbing left turn to 12000 direct to VIKES and hold.

NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: For non-GPS equipped aircraft HZN DME must be operational.