

# TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

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## INSTRUMENT APPROACH PROCEDURE CHARTS

### IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude, and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP 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 a departure procedure (i.e., 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.

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 take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

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

#### NAME TAKE-OFF MINIMUMS

##### ABERDEEN, SD

ABERDEEN RGNL (ABR)  
ORIG 09239 (FAA)

NOTE: **Rwy 17**, trees 1138' from DER, 432' right of centerline, 41' AGL/1336' MSL. **Rwy 31**, multiple trees beginning 1391' from DER, 326' left of centerline, up to 65' AGL/1360' MSL.

##### ADA/TWIN VALLEY, MN

NORMAN COUNTY ADA/TWIN VALLEY (D00)  
ORIG 11013 (FAA)

TAKE-OFF MINIMUMS: Rwy 15, 300-2 or std. w/min climb of 205' per NM to 1300, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1300' prior to DER.

NOTE: **Rwy 15**, tree 176' from DER 383' left of centerline, 50' AGL/999' MSL. Tree 178' from DER 307' right of centerline, 50' AGL/999' MSL. Tree 1,305' from DER 493' right of centerline, 50' AGL/1,004' MSL. Tree 176' from DER 383' left of centerline, 50' AGL/999' MSL. **Rwy 33**, tree 85' from DER 282' left of centerline, 50' AGL/989' MSL. Multiple buildings beginning 2' from DER 468' right of centerline, up to 50' AGL/954' MSL.

#### NAME TAKE-OFF MINIMUMS

##### AITKIN, MN

AITKIN MUNI-STEVE KURTZ FIELD (AIT)  
AMDT 2 96172 (FAA)

TAKE-OFF MINIMUMS: **Rwys 8, 26**, 300-1. **Rwy 16**, 300-1 or std. with a min climb of 400' per NM to 1500.  
DEPARTURE PROCEDURE: **Rwys 16, 26**, climb runway heading to 1700 before turning.

##### ALBERT LEA, MN

ALBERT LEA MUNI (AEL)  
AMDT 1 11293 (FAA)

NOTE: **Rwy 5**, sign 2074' from DER, 952' right of centerline, 47' AGL/1316' MSL. **Rwy 17**, tree 9' from DER, 349' right of centerline, 14' AGL/1263' MSL. Trees beginning 711' from DER, 121' left of centerline, up to 71' AGL/1330' MSL. **Rwy 23**, trees beginning 77' from DER, 259' left of centerline, up to 75' AGL/1324' MSL. Trees beginning 127' from DER, 326' right of centerline, up to 36' AGL/1285' MSL. **Rwy 35**, trees beginning 8' from DER, 397' right of centerline, up to 51' AGL/1290' MSL.

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**ALEXANDRIA, MN**

CHANDLER FIELD (AXN)

DEPARTURE PROCEDURE: **Rwys 4, 13, 22**, when weather is below 200-1, climb runway heading to 1800 before turning.

**APPLETON, MN**

APPLETON MUNI (AQP)

ORIG-A 10126 (FAA)

DEPARTURE PROCEDURE: **Rwy 4**, climb heading 039° to 2000 before turning right. **Rwy 13**, climb heading 130° to 2500 before turning right. **Rwy 22**, climb heading 219° to 2400 before turning left. **Rwy 31**, climb heading 300° to 2000 before turning left.

NOTE: **Rwy 13**, trees beginning 91' from DER, 464' left of centerline, up to 100' AGL/1134' MSL. Trees beginning 576' from DER, 388' right of centerline, up to 100' AGL/1120' MSL. Tower 2.3 NM from DER, 2.4 right of centerline, 1283' AGL/2318' MSL.

**AUSTIN, MN**

AUSTIN MUNI (AUM)

ORIG 08045 (FAA)

NOTE: **Rwy 17**, Multiple trees beginning 809' from departure end of runway, 663' right of centerline, up to 61' AGL/1285' MSL. **Rwy 35**, Tree 1380' from departure end of runway, 484' right of centerline, 100' AGL/1314' MSL.

**BAUDETTE, MN**

BAUDETTE INTL (BDE)

AMDT 1 10154 (FAA)

DEPARTURE PROCEDURE: **Rwy 12**, climb heading 117° to 1700 before turning northbound.

NOTE: **Rwy 12**, trees, pipes, and markers beginning 61' from DER, 354' right of centerline, up to 100' AGL/1184' MSL. Trees beginning 593' from DER, 138' left of centerline, up to 21' AGL/1100' MSL. Rod on OL tank 4132' from DER, 1233' right of centerline, 120' AGL/1204' MSL. **Rwy 30**, trees beginning 15' from DER, 348' right of centerline, 12' AGL/1096' MSL. Trees beginning 2036' from DER, 532' left of centerline, 64' AGL/1143' MSL.

**BELLEFOURCHE, SD**

BELLE FOURCHE MUNI (EFC)

AMDT 2 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwys 18, 36**, NA. **Rwy 14**, std. w/ min. climb of 240' per NM to 9000 or 1400-3 for climb in visual conditions. **Rwy 32**, std. w/ min. climb of 413' per NM to 3900.

DEPARTURE PROCEDURE: **Rwy 14**, for climb in visual conditions: cross Belle Fourche Muni airport at or above 4400 MSL before proceeding on course. **Rwy 32**, climb heading 321° to 3900 before proceeding southbound.

NOTE: **Rwy 14**, trees 651' from departure end of runway, 547' left of centerline, up to 20' AGL/3299' MSL. **Rwy 32**, trees 857' from departure end of runway, 150' left of centerline, up to 20' AGL/3199' MSL. Trees 3880' from departure end of runway, 966' right of centerline, up to 20' AGL/3289' MSL.

**BEMIDJI, MN**

BEMIDJI RGNL (BJI)

AMDT 3 08213 (FAA)

NOTE: **Rwy 7**, vegetation beginning 859' from departure end of runway, 544' right of centerline, up to 62' AGL/1442' MSL. Vegetation beginning 1404' from departure end of runway, 683' left of centerline, up to 44' AGL/1424' MSL. **Rwy 13**, vehicle on road, 541' from departure end of runway, 525' right of centerline, 15' AGL/1398' MSL. **Rwy 25**, poles beginning 1337' from departure end of runway, 205' right of centerline up to 61' AGL/1445' MSL. Trees beginning 1414' from departure end of runway, 254' left of centerline, up to 57' AGL/1441' MSL. Tree 1406' from departure end of runway, 233' right of centerline, 53' AGL/1437' MSL.

**BENSON, MN**

BENSON MUNI (BBB)

AMDT 1 09127 (FAA)

NOTE: **Rwy 14**, numerous trees beginning 838' from DER, 246' right of centerline, up to 33' AGL/1087' MSL. Numerous trees beginning 1232' from DER, 64' left of centerline, up to 69' AGL/1108' MSL. Sign 206' from DER, 198' left of centerline, 19' AGL/1044' MSL. Tower 4884' from DER, 274' right of centerline, 126' AGL/1161' MSL. **Rwy 32**, Tree 2380' from DER, 646' left of centerline, 68' AGL/1107' MSL. Multiple fences beginning 13' from DER, 361' left of centerline, up to 8' AGL/1043' MSL.

**BIGFORK, MN**

BIGFORK MUNI (FOZ)

ORIG -A 10126 (FAA)

TAKE-OFF MINIMUMS: **Rwy 15**, 400-1 or std. with a min. climb of 332' per NM to 1900.

**BISMARCK, ND**

BISMARCK MUNI (BIS)

AMDT 8 11069 (FAA)

DEPARTURE PROCEDURE: **Rwy 13**, climb heading 131° to 2400 before turning right. **Rwy 21**, climb heading 212° to 3700 before turning left. **Rwy 31**, climb heading 311° to 2200 before turning right.

NOTE: **Rwy 13**, trees and pole beginning 864' from DER, 721' left of centerline, up to 56' AGL/1696' MSL. **Rwy 31**, light pole 1424' from DER, 872' right of centerline, 43' AGL/1702' MSL.

**BOTTINEAU, ND**

BOTTINEAU MUNI (D09)

AMDT 1 10154 (FAA)

TAKE-OFF MINIMUMS: **Rwys 3, 21**, NA. DEPARTURE PROCEDURE: **Rwy 13**, climb heading 127° to 2200 before turning left. **Rwy 31**, climb heading 307° to 2600 before turning right.

NOTE: **Rwy 31**, street light 116' from DER, 474' left of centerline, 16' AGL/1700' MSL.

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**BOWMAN, ND**

BOWMAN MUNI (BPP)

ORIG 11293 (FAA)

TAKE-OFF MINIMUMS: **Rwy 11**, 300-1 or std. w/min. climb of 310' per NM to 3300. **Rwy 29**, 300-1½ or std. w/min. climb of 290' per NM to 3400.

DEPARTURE PROCEDURE: **Rwy 11**, Climb heading 115° to 3400 before turning left.

NOTE: **Rwy 11**, building abeam DER, 424' left of centerline, 35' AGL/2993' MSL. Tree 1338' from DER, 97' left of centerline, 40' AGL/2996' MSL. Tree 5176' from DER, 1592' left of centerline, 100' AGL/3159' MSL. **Rwy 29**, train on tracks beginning abeam DER, 361' right of centerline, 23' AGL/2982' MSL. Tree 1.2 NM from DER, 798' right of centerline, 100' AGL/3219' MSL.

**BRAINERD, MN**

BRAINERD LAKES RGNL (BRD)

AMDT 5A 10126 (FAA)

NOTE: **Rwy 12**, multiple trees beginning 165' from DER, 417' left of centerline, up to 78' AGL/1279' MSL.

Multiple trees and vehicle on road beginning 304' from DER, 206' right of centerline, up to 66' AGL/1277' MSL.

**Rwy 16**, multiple trees beginning 1830' from DER, 749' left of centerline, up to 74' AGL/1314' MSL. **Rwy 23**, multiple trees beginning 1495' from DER, 179' left of centerline, up to 48' AGL/1285' MSL. Tree 2437' from DER, 716' right of centerline, 50' AGL/1279' MSL. **Rwy 30**, multiple trees beginning 243' from DER, 131' left of centerline, up to 61' AGL/1287' MSL. Multiple trees 48' from DER, 328' right of centerline, up to 59' AGL/1329' MSL. **Rwy 34**, trees beginning 2341' from DER, left and right of centerline, up to 93' AGL/1293' MSL.

**BRITTON, SD**

BRITTON MUNI (BTN)

AMDT 2 96060 (FAA)

TAKE-OFF MINIMUMS: **Rwy 13**, 300-1 or std. with a min. climb of 450' per NM to 1600. **Rwy 19**, 300-1.

DEPARTURE PROCEDURE: **Rwy 19**, climb runway heading to 2000 before turning.

**BROOKINGS, SD**

BROOKINGS RGNL (BKX)

ORIG 09015 (FAA)

NOTE: **Rwy 12**, pole and trees beginning 1041' from departure end of runway, 207' left of centerline, up to 65' AGL/1705' MSL. Building 1277' from departure end of runway, 825' right of centerline, 38' AGL/1618' MSL.

**Rwy 17**, vehicle on road 799' from departure end of runway, on centerline, up to 15' AGL/1687' MSL. Trees beginning 906' from departure end of runway, 464' left of centerline, up to 100' AGL/1749' MSL. **Rwy 30**, railroad beginning 547' from departure end of runway, 502' right of centerline, 23' AGL/1626' MSL. Tree 132' from departure end of runway, 433' left of centerline, 20' AGL/1615' MSL. **Rwy 35**, trees 2892' from departure end of runway, 944' right of centerline, up to 100' AGL/1709' MSL.

**BUFFALO, MN**

BUFFALO MUNI (CFE)

ORIG 11013 (FAA)

TAKE-OFF MINIMUMS: **Rwy 17**, 300-1½ or std. w/min. climb of 403' per NM to 1200.

NOTE: **Rwy 17**, building 613' from DER, 608' right of centerline, up to 25' AGL/984' MSL. Vehicle on road 710' from DER, 641' right of centerline, up to 17' AGL/986' MSL. Trees beginning 1000' from DER, 615' left of centerline, up to 100' AGL/1059' MSL. **Rwy 35**, building 361' from DER, 262' left of centerline, up to 25' AGL/994' MSL. Vehicle on road 845' from DER, 701' left of centerline, up to 15' AGL/994' MSL. Trees beginning 1506' from DER, 350' right of centerline, up to 100' AGL/1089' MSL. Trees beginning 1508' from DER, 129' left of centerline, up to 100' AGL/1109' MSL.

**CANBY, MN**

MYERS FIELD (CNB)

AMDT 1 10210 (FAA)

NOTE: **Rwy 12**, numerous poles beginning 40' from DER, 421' left and right of centerline, up to 36' AGL/1216' MSL. Truck on roads beginning 134' from DER, 37' left and right of centerline, up to 22' AGL/1202' MSL. Tree 3' from DER, 159' right of centerline, 7' AGL/1187' MSL. **Rwy 30**, numerous trees beginning 726' from DER, 176' left of centerline, up to 70' AGL/1278' MSL. Tree 1338' from DER, 716' right of centerline, 68' AGL/1268' MSL.

**CASSELTON, ND**

CASSELTON ROBERT MILLER RGNL (5N8)

ORIG 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 31**, 400-2½ or std. w/a min. climb of 212' per NM to 1400 or alternatively, with standard takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1700' prior to departure end of runway.

NOTE: **Rwy 13**, railroad 30' from departure end of runway, 505' right of centerline, 23' AGL/945' MSL. Vehicle on road 449' from departure end of runway, 300' left of centerline, 15' AGL/949' MSL. **Rwy 31**, trees 2251' from departure end of runway, 456' left of centerline, up to 100' AGL/1052' MSL.

**CAVALIER, ND**

CAVALIER MUNI (2C8)

ORIG 03191 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, 300-1 or std. with a min. climb of 430' per NM to 1200.

NOTE: **Rwy 16**, grain elevator 3731' from departure end of runway, 284' left of centerline, 168' AGL/1060' MSL.

**CHAMBERLAIN, SD**

CHAMBERLAIN MUNI (9V9)

ORIG 10154 (FAA)

TAKE-OFF MINIMUMS: **Rwys 18, 36**, NA-Environmental.

NOTE: **Rwy 31**, fence 457' from DER, 376' left of centerline, 10' AGL/1705' MSL. Fence 1294' from DER, 424' right of centerline, 10' AGL/1722' MSL. Trees beginning 1763' from DER, 892' left of centerline, up to 100' AGL/1819' MSL. Trees beginning 189' from DER, 41' right of centerline, up to 100' AGL/1819' MSL.

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**CLOQUET, MN**

CLOQUET CARLTON COUNTY (COQ)

AMDT 1 80248 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7**, 300-1 or std. with a min. climb of 400' per NM to 1400.**COOK, MN**

COOK MUNI (CQM)

ORIG 11069 (FAA)

TAKE-OFF MINIMUMS: **Rwy 13**, 400-3 or std. w/min. climb of 206' per NM to 1800.NOTE: **Rwy 13**, trees and terrain beginning 11' from DER, left and right of centerline, up to 100' AGL/1419' MSL. **Rwy 31**, trees and terrain beginning 67' from DER, left and right of centerline, up to 100' AGL/1439' MSL.**COOPERSTOWN, ND**

COOPERSTOWN MUNI (S32)

ORIG 10322 (FAA)

NOTE: **Rwy 13**, power lines 4085' from DER, 1585' right to 1588' left of centerline, up to 80' AGL/1526' MSL.**Rwy 31**, building 12' from DER, 369' left of centerline, 14' AGL/1443' MSL. Vehicles 312' from DER, 550' left of centerline, 15' AGL/1444' MSL. Vehicles 353' from DER, 585' right of centerline, 15' AGL/1434' MSL.**CROOKSTON, MN**

CROOKSTON MUNI-KIRKWOOD FIELD (CKN)

AMDT 2 07298 (FAA)

TAKE-OFF MINIMUMS: **Rwys 6, 17, 24, 35**, NA-turf runways.NOTE: **Rwy 13**, tree 1998' from departure end of runway, 587' left of centerline, 94' AGL/970' MSL. Pole 1127' from departure end of runway, 662' left of centerline, 46' AGL/926' MSL.**CROSBY, ND**

CROSBY MUNI (D50)

ORIG 10154 (FAA)

TAKE-OFF MINIMUMS: **Rwys 3, 21**, NA-Environmental.NOTE: **Rwy 12**, hangars and poles beginning 133' from DER, 263' right of centerline, up to 35' AGL/1983' MSL. Vehicle on road 800' from DER, 200' right of centerline, 22' AGL/1967' MSL. **Rwy 30**, power line, 2100' from DER, on centerline, 60' AGL/2011' MSL.**DETROIT LAKES, MN**

DETROIT LAKES-WETHING FIELD (DTL)

ORIG 05132 (FAA)

TAKE-OFF MINIMUMS: **Rwys 17, 35**, NA.NOTE: **Rwy 31**, highway 243' from departure end of runway, 267' right of centerline, 15' AGL/1404' MSL. Railroad 534' from departure end of runway, 298' right of centerline, 23' AGL/1411' MSL.**DEVILS LAKE, ND**

DEVILS LAKE RGNL (DVL)

AMDT 1A 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 31**, 300-1 or std. with a min. climb of 350' per NM to 1600.NOTE: **Rwy 3**, tree 1528' from DER, 319' left of centerline, 100' AGL/1490' MSL. Tree 1520' from DER, 136' right of centerline, 100' AGL/1489' MSL. **Rwy 13**, bush 266' from DER, 523' left of centerline, 17' AGL/1451' MSL. Road, light pole and antenna on building beginning 95' from DER, 414' right of centerline, up to 17' AGL/1484' MSL. **Rwy 21**, roads beginning 335' from DER, 2' right of centerline, 15' AGL/1447' MSL, multiple poles, trees and towers beginning 552' from DER 355' left of centerline, up to 123' AGL/1548' MSL. **Rwy 31**, road 470' from DER, 424' right of centerline, 15' AGL/1472' MSL. Multiple poles and trees beginning 1180' from DER, 354' left of centerline, up to 49' AGL/1545' MSL.**DICKINSON, ND**

DICKINSON-THEODORE ROOSEVELT RGNL (DIK)

AMDT 1 05244 (FAA)

DEPARTURE PROCEDURE: **Rwy 25**, climb via heading 250° to 3100 before turning left.NOTE: **Rwy 7**, road 887' from departure end of runway, on rwy centerline, 15' AGL/2631' MSL.**DODGE CENTER, MN**

DODGE CENTER (TOB)

ORIG 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwy 22**, NA-Environmental.NOTE: **Rwy 16**, trees 3945' from departure end of runway, 1542' left of centerline, 100' AGL/1409' MSL.**DULUTH, MN**

DULUTH INTL (DLH)

ORIG 06327 (FAA)

NOTE: **Rwy 3**, multiple trees beginning 21' from departure end of runway, 226' right of centerline, up to 68' AGL/1477' MSL. Multiple trees beginning 246' from departure end of runway, 26' left of centerline, up to 64' AGL/1473' MSL. **Rwy 9**, electrical equipment 207' from departure end of runway, 408' left of centerline, 6' AGL/1425' MSL. **Rwy 21**, tower 3762' from departure end of runway, 410' left of centerline, 92' AGL/1522' MSL. **Rwy 27**, tree 2426' from departure end of runway, 1127' right of centerline, 53' AGL/1522' MSL. Bush and multiple trees beginning 347' from departure end of runway, 484' left of centerline, up to 44' AGL/1533' MSL.**EAGLE BUTTE, SD**

CHEYENNE EAGLE BUTTE (84D)

ORIG 96228 (FAA)

TAKE-OFF MINIMUMS: **Rwys 13, 31**, 300-1.**ELY, MN**

ELY MUNI (ELO)

AMDT 2 97086 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12**, 300-1 or std. with a min. climb of 200' per NM to 1600.DEPARTURE PROCEDURE: **Rwy 30**, northbound departures climb runway heading to 2000 before turning.

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## EVELETH, MN

EVELETH-VIRGINIA MUNI (EVM)

AMDT 2 94118 (FAA)

TAKE-OFF MINIMUMS: **Rwy 32**, 800-2 or std. with a min. climb to 330' per NM to 2300.DEPARTURE PROCEDURE: **Rwy 27**, northwest departures (270°-050°) climb runway heading to 2200 before turning.

## FAIRMONT, MN

FAIRMONT MUNI (FRM)

AMDT 3 09127 (FAA)

NOTE: **Rwy 2**, trees beginning 2466' from DER, 1105' right of centerline, up to 100' AGL/1269' MSL. **Rwy 13**, tree 2340' from DER, 1039' left of centerline, 100' AGL/1269' MSL. **Rwy 20**, trees beginning 1640' from DER, 914' right of centerline, up to 100' AGL/1289' MSL. Trees beginning 913' from DER, 449' left of centerline, up to 100' AGL/1299' MSL. **Rwy 31**, trees beginning 954' from DER, 161' left of centerline, up to 100' AGL/1299' MSL. Trees and road beginning 791' from DER, 339' right of centerline, up to 57' AGL/1226' MSL.

## FARGO, ND

HECTOR INTL (FAR)

AMDT 4A 11349 (FAA)

TAKE-OFF MINIMUMS: **Rwys 13, 31, NA**.NOTE: **Rwy 9**, tree 1876' from DER 686' left of centerline, 53' AGL/952' MSL. Tree 2620' from DER, 1100' right of centerline, 66' AGL/965' MSL. Road and vehicle beginning 420' from DER, 601' right of centerline, up to 15' AGL/913' MSL. Road and vehicle beginning 543' from DER, 619' left of centerline, up to 15' AGL/912' MSL. Runway end lights beginning 41' from DER, left and right of centerline, up to 3' AGL/901' MSL. Sign 39' from DER, 201' left of centerline, 2' AGL/900' MSL. Multiple light poles beginning 1082' from DER, left and right of centerline, up to 27' AGL/927' MSL. **Rwy 18**, road and vehicle 536' from DER, 19' right of centerline, 15' AGL/914' MSL. **Rwy 27**, road and vehicle beginning 451' from DER, 479' right of centerline, up to 15' AGL/910' MSL. Tree 2912' from DER, 944' left of centerline, 72' AGL/971' MSL. Runway end lights 42' from DER, 126' right of centerline, 2' AGL/898' MSL. **Rwy 36**, light support structure 11' from DER, 55' right of centerline, 1' AGL/901' MSL.

## FARIBAULT, MN

FARIBAULT MUNI (FBL)

ORIG 10266 (FAA)

NOTE: **Rwy 12**, numerous trees beginning 73' from DER, 51' right and left of centerline, up to 100' AGL/1169' MSL. **Rwy 30**, numerous trees beginning 24' from DER, 266' right and left of centerline, up to 100' AGL/1189' MSL.

## FERGUS FALLS, MN

FERGUS FALLS MUNI-EINAR MICKELSON FIELD (FFM)

ORIG 09239 (FAA)

NOTE: **Rwy 13**, trees beginning 2612' from DER, 128' right of centerline, up to 100' AGL/1269' MSL. Trees beginning 2514' from DER, 42' left of centerline, up to 100' AGL/1259' MSL. **Rwy 17**, trees beginning 1100' from DER 663' right of centerline, up to 100' AGL/1269' MSL. Road 222' from DER, 469' right of centerline, 15' AGL/1173' MSL. **Rwy 35**, trees beginning 2156' from DER, 176' right of centerline, up to 100' AGL/1289' MSL.

## FOSSTON, MN

FOSSTON MUNI (FSE)

AMDT 1A 10182 (FAA)

DEPARTURE PROCEDURE: **Rwy 16**, climb runway heading to 2000 before turning.

## GARRISON, ND

GARRISON MUNI (D05)

ORIG 11013 (FAA)

TAKE-OFF MINIMUMS: **Rwys 3, 21, NA** - Environmental. NOTE: **Rwy 13**, trees 849' from DER, 190' left of centerline, up to 100' AGL/1989' MSL. Grain silos 1588' from DER, 895' left of centerline, 100' AGL/1989' MSL. **Rwy 31**, vehicles on roadway beginning 424' from DER, left and right of centerline, up to 15' AGL/1974' MSL. Trees 538' from DER, 425' left of centerline, up to 100' AGL/2059' MSL.

## GETTYSBURG, SD

GETTYSBURG MUNI (0D8)

AMDT 1 07018 (FAA)

NOTE: **Rwy 4**, multiple trees beginning 1011' from departure end of runway, 420' left of centerline, up to 60' AGL/2119' MSL. **Rwy 13**, multiple trees beginning 1897' from departure end of runway, 975' left of centerline, 60' AGL/2119' MSL. **Rwy 22**, multiple trees beginning 679' from departure end of runway, 117' left of centerline, up to 60' AGL/2109' MSL.

## GLENCOE, MN

GLENCOE MUNI (GYL)

ORIG 09071 (FAA)

NOTE: **Rwy 13**, trees beginning 349' from DER, 257' right of centerline, up to 100' AGL/1099' MSL. Trees beginning 1211' from DER, 314' left of centerline, up to 100' AGL/1109' MSL. Terrain beginning 53' from DER, 166' left of centerline, up to 998' MSL. Terrain beginning 286' from DER, 435' right of centerline, up to 1001' MSL. **Rwy 31**, trees beginning 501' from DER, 530' right of centerline, up to 100' AGL/1099' MSL. Tree 2577' from DER, 129' left of centerline, 100' AGL/1109' MSL.

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# TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES



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**GLENWOOD, MN**

GLENWOOD MUNI (GHW)  
AMDT 3 10233 (FAA)

TAKE-OFF MINIMUMS: **Rwys 5, 23** N/A Environmental.  
NOTE: **Rwy 15**, road beginning 278' from DER, 521' left of centerline, 15' AGL/1414' MSL. Trees beginning 3257' from DER, 1239' right of centerline, up to 100' AGL/1489' MSL. Terrain beginning 42' from DER, 448' left of centerline, 1378' MSL. **Rwy 33**, trees beginning 1266' from DER, 174' left of centerline, up to 100' AGL/1499' MSL. Power lines beginning 1259' from DER, 793' left of centerline, up to 50' AGL/1439' MSL.

**GRAFTON, ND**

HUTSON FIELD (GAF)  
AMDT 1 10210 (FAA)

TAKE-OFF MINIMUMS: **Rwys 8, 26**, NA-Environmental.  
NOTE: **Rwy 17**, vehicle on roads beginning 23' from DER, 300' left of centerline, up to 15' AGL/837' MSL. Tree 2612' from DER, 857' left of centerline, 100' AGL/929' MSL. **Rwy 35**, building 107' from DER, 344' left of centerline, 17' AGL/836' MSL. Electrical system 153' from DER, 398' left of centerline, 21' AGL/840' MSL. Vehicle on roads beginning 260' from DER, 74' left of centerline, up to 15' AGL/841' MSL. Obstruction light on airport beacon 471' from DER, 601' left of centerline, 54' AGL/873' MSL.

**GRAND FORKS, ND**

GRAND FORKS INTL (GFK)  
AMDT 2 09071 (FAA)

NOTE: **Rwy 9L**, tree 127' from DER, 451' left of centerline, 12' AGL/853' MSL. **Rwy 27R**, bush 38' from DER, 474' right of centerline, 5' AGL/844' MSL. **Rwy 35L**, obstruction light on DME 645' from DER, 198' left of centerline, 21' AGL/860' MSL. **Rwy 35R**, tree 1259' from DER, 521' right of centerline, 41' AGL/880' MSL. Tree 1655' from DER, 271' left of centerline, 45' AGL/884' MSL.

**GRAND MARAIS, MN**

GRAND MARAIS/COOK COUNTY (CKC)  
ORIG 09015 (FAA)

NOTE: **Rwy 9**, trees beginning 58' from departure end of runway, 168' right of centerline up to 54' AGL/1833' MSL. Bushes 112' from departure end of runway, 142' left of centerline, 11' AGL/1805' MSL. Tree 464' from departure end of runway, 75' left of centerline, 14' AGL/1813' MSL. **Rwy 27**, trees beginning 85' from departure end of runway, 187' left of centerline, up to 59' AGL/1858' MSL. Trees beginning 282' from departure end of runway, 115' right of centerline, up to 42' AGL/1861' MSL.

**GRAND RAPIDS, MN**

GRAND RAPIDS/ITASCA COUNTY-GORDON  
NEWSTROM FIELD (GPZ)  
AMDT 4 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwys 5, 10, 23, 28**, NA-Environmental.  
NOTE: **Rwy 16**, tree 1655' from DER, 899' left of centerline, 51' AGL/1410' MSL. Tree 3236' from DER, 1130' right of centerline, 82' AGL/1441' MSL. **Rwy 34**, tree 3416' from DER, 1253' right of centerline, 100' AGL/1399' MSL.

**GRANITE FALLS, MN**

GRANITE FALLS MUNI/LENZEN-ROE MEML  
FLD (GDB)  
ORIG 10126 (FAA)

NOTE: **Rwy 15**, trees beginning 1780' from DER, 94' left of centerline, up to 100' AGL/1149' MSL. **Rwy 33**, trees beginning 1196' from DER, right and left of centerline, up to 100' AGL/1149' MSL. Powerline 1242' from DER, 762' left of centerline, 80' AGL/1129' MSL. Train 1390' from DER, 149' left of centerline, 23' AGL/1162' MSL. Vehicle on road 1389' from DER, 156' left of centerline, up to 15' AGL/1154' MSL.

**GREGORY, SD**

GREGORY MUNI, FLYNN FIELD (9D1)  
ORIG-A 10182 (FAA)

TAKE-OFF MINIMUMS: **Rwy 31**, 400-2½ or std. with a min. climb of 228' per NM to 2600.  
NOTE: **Rwy 31**, tower 11377' from DER, 816' right of centerline, 210' AGL/2491' MSL.

**GWINNER, ND**

GWINNER-ROGER MELROE FIELD (GWR)  
ORIG 09183 (FAA)

TAKE-OFF MINIMUMS: **Rwys 6, 24**, NA-Environmental.  
**Rwy 34**, Std. w/ min. climb of 216' per NM to 2000, or 900-2½ for climb in visual conditions.  
DEPARTURE PROCEDURE: **Rwy 34**, for climb in visual conditions, cross Gwinner-Roger Melroe Field at or above 2000, before proceeding on course.  
NOTE: **Rwy 16**, terrain beginning 15' from DER, 73' right of centerline, 1257' MSL. **Rwy 34**, road and vehicle 436' from DER, on centerline, 15' AGL/1286' MSL.

**HALLOCK, MN**

HALLOCK MUNI (HCO)  
ORIG 11125 (FAA)

NOTE: **Rwy 13**, tree 1076' from DER, 620' right of centerline, 100' AGL/919' MSL. Trees beginning 81' from DER, from 472' left of centerline, up to 100' AGL/919' MSL. **Rwy 31**, tree 1668' from DER, 560' right of centerline, 100' AGL/919' MSL.

**HARVEY, ND**

HARVEY MUNI (5H4)  
ORIG 10266 (FAA)

NOTE: **Rwy 11**, vehicle on road beginning 50' from DER, 318' left of centerline, up to 15' AGL/1654' MSL. Tree 300' from DER, 329' right of centerline, 20' AGL/1621' MSL. Tree 350' from DER, 444' right of centerline, 20' AGL/1619' MSL. **Rwy 29**, vehicle on road beginning 4' from DER, left and right of centerline, up to 15' AGL/1654' MSL. Rising terrain beginning 7' from DER, 311' left of centerline, up to 1608' MSL.

**HAWLEY, MN**

HAWLEY MUNI (04Y)  
ORIG 07074 (FAA)

NOTE: **Rwy 34**, road 15' from departure end of runway, 421' left of centerline, 15' AGL/1224' MSL.

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## HAZEN, ND

MERCER COUNTY RGNL (HZE)  
ORIG 10210 (FAA)

TAKE-OFF MINIMUMS: **Rwy 32**, std. w/ min. climb of 215' per NM to 2700, or 900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 32**, for climb in visual conditions: cross Mercer County Rgnl airport at or above 2600 MSL before proceeding on course.

NOTE: **Rwy 14**, numerous fences beginning 196' from DER, 108' left of centerline, up to 12' AGL/1843' MSL. Terrain beginning 501' from DER, 271' left of centerline, up to 1837' MSL. **Rwy 32**, tree 1291' from DER, 592' right of centerline, 25' AGL/1833' MSL. Terrain 495' from DER, 360' left of centerline, 1803' MSL. Fence 5' from DER, 298' left of centerline, 8' AGL/1790' MSL. Tree 1444' from DER, 520' right of centerline, 25' AGL/1823' MSL.

## HETTINGER, ND

HETTINGER MUNI (HEI)  
AMDT 2 10154 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12**, 300-1 or std. with a min. climb of 324' per NM to 3000. **Rwys 17, 35**, NA-Environmental.

NOTE: **Rwy 30**, road plus vehicles beginning 63' from DER, crossing left to right, 15' AGL/2744' MSL. Trees beginning 4306' from DER, 17' right of centerline, 100' AGL/2819' MSL.

## HIBBING, MN

RANGE RGNL (HIB)  
AMDT 6 04218 (FAA)

DEPARTURE PROCEDURE: **Rwy 22**, climb via heading 227° to 2200 before turning right. **Rwy 31**, climb via heading 310° to 2200 before turning left.  
NOTE: **Rwy 4**, antenna on pole, 361' from departure end of runway, 409' right of centerline, 1377' MSL. **Rwy 13**, obstacle light on pole, 1184' from departure end of runway, 636' left of centerline. Numerous trees beginning 1291' from departure end of runway, 745' left of centerline up to 1419' MSL. Trees 1497' from departure end of runway, 563' right of centerline, 1388' MSL. **Rwy 22**, multiple trees beginning 368' from departure end of runway, 170' right of centerline, up to 1416' MSL. Multiple trees beginning 413' from departure end of runway, 117' left of centerline, up to 1400' MSL. **Rwy 31**, light standard, 865' from departure end of runway, 595' right of centerline, 1381' MSL.

## HILLSBORO, ND

HILLSBORO MUNI (3H4)  
ORIG 97198 (FAA)

DEPARTURE PROCEDURE: **Rwys 16, 34**, climb runway heading to 2000 prior to turning westbound.

## HINCKLEY, MN

FIELD OF DREAMS (04W)  
ORIG 08045 (FAA)

NOTE: **Rwy 6**, Tree 82' from departure end of runway, 480' right of centerline, 100' AGL/1114' MSL. Tree 143' from departure end of runway, 161' left of centerline, 100' AGL/1114' MSL. **Rwy 24**, Tree 48' from departure end of runway, 165' left of centerline, 100' AGL/1124' MSL.

## HOT SPRINGS, SD

HOT SPRINGS MUNI (HSR)  
ORIG 97142 (FAA)

TAKE-OFF MINIMUMS: **Rwy 1**, 300-1 or std. with a min. climb of 360' per NM to 5000. **Rwy 19**, 300-2 or std. with a min. climb of 250' per NM to 5000.  
DEPARTURE PROCEDURE: **Rwys 1, 19**, climb runway heading to 5000 before proceeding westbound.

## HURON, SD

HURON RGNL (HON)  
AMDT 5 09239 (FAA)

NOTE: **Rwy 12**, trees and pole beginning 918' from DER, 525' left of centerline, up to 62' AGL/1341' MSL. Trees beginning 291' from DER, 234' right of centerline, up to 100' AGL/1389' MSL. **Rwy 17**, trees beginning 236' from DER, 307' left of centerline, up to 67' AGL/1346' MSL. Trees beginning 264' from DER, 262' right of centerline, 73' AGL/1352' MSL. **Rwy 30**, trees beginning 3428' from DER, 1378' left of centerline, up to 100' AGL/1394' MSL. **Rwy 35**, trees beginning 60' from DER, 104' left of centerline, up to 49' AGL/1328' MSL. Trees beginning 251' from DER, 97' right of centerline, 52' AGL/1331' MSL.

## HUTCHINSON, MN

HUTCHINSON MUNI-BUTLER FIELD (HCD)  
ORIG 11181 (FAA)

NOTE: **Rwy 15**, tree 3342' from DER, 425' right of centerline, 89' AGL/1148' MSL. Trees beginning 545' from DER, 394' left of centerline, up to 64' AGL/1113' MSL. **Rwy 33**, tree 994' from DER, 561' right of centerline, 40' AGL/1099' MSL.

## INTERNATIONAL FALLS, MN

FALLS INTL (INL)  
AMDT 3 08101 (FAA)

NOTE: **Rwy 4**, Tree 392' from departure end of runway 311' left of centerline, 51' AGL/1231' MSL. **Rwy 13**, multiple trees beginning 1999' from departure end of runway, 773' left of centerline, up to 63' AGL/1233' MSL. Pole 1091, from departure end of runway, 703' right of centerline, 37' AGL/1207' MSL. Road 1005' from departure end of runway, 766' left of centerline, 15' AGL/1195' MSL. **Rwy 22**, Multiple trees beginning 433' from departure end of runway 273' left of centerline, up to 33' AGL/1213' MSL. Trees 1144' from departure end of runway 136' right of centerline, 28' AGL/1208' MSL. **Rwy 31**, Trees 968' from departure end of runway, 752' left of centerline, 56' AGL/1236' MSL.

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**JACKSON, MN**

JACKSON MUNI (MJQ)  
ORIG 08045 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4,22**, NA-TURF.  
DEPARTURE PROCEDURE: **Rwy 13**, Climb heading 134° to 1900 before turning right.

NOTES: **Rwy 13**, Trees beginning 1474' from departure end of runway, 556' left of centerline, up to 80' AGL/1539' MSL. Vehicle on road 258' from departure end of runway, 559' from centerline, 15' AGL/1459' MSL.

**Rwy 31**, Vehicle on road 465' from departure end of runway, 618' left of centerline, 15' AGL/1446' MSL. Trees beginning 1616' from departure end of runway, 580' right of centerline, up to 80' AGL/1519' MSL. Trees beginning 1110' from departure end of runway, 429' left of centerline, up to 80' AGL/1509' MSL.

**JAMESTOWN, ND**

JAMESTOWN RGNL (JMS)  
AMDT 1 07242 (FAA)

NOTE: **Rwy 22**, antenna and tank beginning 2960' from departure end of runway, 1007' left of centerline, up to 150' AGL/1631' MSL. **Rwy 31**, multiple trees beginning 2129' from departure end of runway 47' right of centerline, up to 60' AGL/1560' MSL.

**KENMARE, ND**

KENMARE MUNI (7K5)  
ORIG 11125 (FAA)

NOTE: **Rwy 8**, vehicles on roadway 359' from DER, left and right of centerline, up to 15' AGL/1980' MSL. Trees 374' from DER, 359' right of centerline, 50' AGL/2004' MSL. **Rwy 26**, aircraft on taxiway beginning abeam DER, 385' right of centerline, up to 17' AGL/1981' MSL. Hangars beginning 147' from DER, 506' right of centerline, up to 30' AGL/1994' MSL. Pole 1259' from DER, 49' right of centerline, 40' AGL/2002' MSL. Trees beginning 1342' from DER, 85' right of centerline, up to 50' AGL/2014' MSL.

**KINDRED, ND**

HAMRY FIELD (K74)  
ORIG 10042 (FAA)

NOTE: **Rwy 29**, tree 991' from DER, 367' left of centerline, 38' AGL/982' MSL. Tree 1073' from DER, 221' left of centerline, 38' AGL/982' MSL.

**LANGDON, ND**

ROBERTSON FIELD (D55)  
ORIG 10154 (FAA)

TAKE-OFF MINIMUMS: **Rwys 8, 26**, NA-Environmental.

NOTE: **Rwy 14**, vehicles on road beginning 479' to 684' from DER, from 238' to 413' left of centerline, up to 15' AGL/1627' MSL. **Rwy 32**, windsock 13' from DER, 416' right of centerline, 16' AGL/1619' MSL. Fence 24' from DER, 301' left of centerline, 5' AGL/1608' MSL. Fence 199' from DER, 293' left of centerline, 5' AGL/1608' MSL. Trees beginning 485' from DER 203' right of centerline, up to 30' AGL/1628' MSL. Trees beginning 1912' from DER, from 241' to 418' left of centerline, up to 78' AGL/1677' MSL.

**LITCHFIELD, MN**

LITCHFIELD MUNI (LJF)  
AMDT 1 10266 (FAA)

DEPARTURE PROCEDURE: **Rwy 31**, climb heading 316° to 1700 before turning left.

NOTE: **Rwy 13**, trees beginning 11' from DER, 417' left and right of centerline, up to 90' AGL/1234' MSL. Trees beginning 1251' from DER, 830' left of centerline, up to 89' AGL/1288' MSL. **Rwy 31**, trees beginning 958' from DER, 73' left of centerline, up to 46' AGL/1185' MSL. Trees beginning 13' from DER, 370' right of centerline, up to 95' AGL/1234' MSL.

**LITTLE FALLS, MN**

LITTLE FALLS/MORRISON COUNTY CHARLES A. LINDBERGH FIELD (LXL)  
AMDT 4 11125 (FAA)

TAKE-OFF MINIMUMS: **Rwy 13**, 300-1½ or std. with a min. climb of 301' per NM to 1500. **Rwy 36**, 600-2¼ or std. with a min. climb of 398' per NM to 1900.

DEPARTURE PROCEDURE: **Rwy 31**, climb heading 308° to 1600 before turning right.

NOTE: **Rwy 13**, numerous trees beginning 76' from DER, right and left of centerline, up to 100' AGL/1389' MSL. **Rwy 18**, numerous trees beginning 1525' from DER, right and left of centerline, up to 100' AGL/1224' MSL. **Rwy 31**, numerous trees beginning 1986' from DER, right and left of centerline, up to 100' AGL/1214' MSL. **Rwy 36**, numerous trees beginning 1194' from DER, 302' right of centerline, up to 100' AGL/1259' MSL. Multiple towers beginning 1.9 NM from DER, 1999' right of centerline, up to 512' AGL/1692' MSL. Trees 3047' from DER, 1149' left of centerline, up to 100' AGL/1219' MSL.

**LONG PRAIRIE, MN**

TODD FIELD (14Y)  
ORIG 08157 (FAA)

NOTE: **Rwy 16**, tree 273' from departure end of runway, 310' right of centerline, 100' AGL/1436' MSL. **Rwy 34**, tree 70' from departure end of runway, 100' right of centerline, 100' AGL/1439' MSL. Tree 122' from departure end of runway, 105' left of centerline, 100' AGL/1436' MSL. Tree 18' from departure end of runway, 106' right of centerline, 100' AGL/1433' MSL.

**LONGVILLE, MN**

LONGVILLE MUNI (XVG)  
ORIG 11349 (FAA)

TAKE-OFF MINIMUMS: **Rwy 31**, 300-1½ or std. w/min. climb of 330' per NM to 1600.

NOTE: **Rwy 13**, trees beginning 237' from DER, 497' right of centerline, up to 100' AGL/1449' MSL. Trees beginning 286' from DER, 533' left of centerline, up to 100' AGL/1429' MSL. Trees beginning 1122' from DER, 4' left of centerline, up to 100' AGL/1429' MSL. **Rwy 31**, vehicles on roadway beginning 58' from DER. 59' left of centerline, up to 17' AGL/1366' MSL. Trees beginning 281' from DER, 559' right of centerline, up to 100' AGL/1519' MSL. Trees beginning 327' from DER, 115' left of centerline, up to 100' AGL/1479' MSL.

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**LIVERNE, MN**

QUENTIN AANENSON FIELD (LYV)  
ORIG 10154 (FAA)

NOTE: **Rwy 18**, tree 813' from DER, 578' left of centerline, 50' AGL/1469' MSL. Road plus vehicle 685' from DER, 574' right of centerline, 15' AGL/1454' MSL. Terrain 20' from DER, on centerline, 1429' MSL. **Rwy 36**, transmission tower, 5752' from DER, 1036' right of centerline, 139' AGL/1581' MSL.

**MADISON, SD**

MADISON MUNI (MDS)  
ORIG 11181 (FAA)

TAKE-OFF MINIMUMS: **Rwys 3,21**, NA - environmental. NOTE: **Rwy 15**, trees beginning 764' from DER, 284' left of centerline, up to 76' AGL/1766' MSL. Plant and fence beginning 65' from DER, 384' right of centerline, up to 24' AGL/1733' MSL. **Rwy 33**, road 82' from DER, 399' left of centerline, 23' AGL/1723' MSL. Road and trees beginning 131' from DER, 9' right of centerline, up to 100' AGL/1859' MSL.

**MANDAN, ND**

MANDAN MUNI (Y19)  
ORIG 11013 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4,22**, NA-Environmental. NOTE: **Rwy 13**, rising terrain, fence, and trees beginning 10' from DER, 89' left of centerline, up to 48' AGL/1988' MSL. Transmission lines and poles beginning 1604' from DER, from left to right of centerline, up to 64' AGL/1984' MSL. **Rwy 31**, trees beginning 1256' from DER, from left to right of centerline, up to 65' AGL/1995' MSL.

**MANKATO, MN**

MANKATO RGNL (MKT)  
ORIG 09267 (FAA)

NOTE: **Rwy 4**, trees beginning 447' from DER, 408' right of centerline, up to 100' AGL/1078' MSL. Trees beginning 1996' from DER, 17' left of centerline, up to 100' AGL/1084' MSL. **Rwy 15**, trees beginning 1552' from DER, 719' left of centerline, up to 100' AGL/1088' MSL. **Rwy 22**, trees beginning 2370' from DER, 989' right of centerline, up to 100' AGL/1069' MSL. **Rwy 33**, trees beginning 2085' from DER, 780' right of centerline, up to 100' AGL/1077' MSL. Rising terrain 9' from DER, 65' right of centerline, up to 1029' MSL. Terrain beginning 82' from DER, 60' left of centerline, up to 1029' MSL.

**MARSHALL, MN**

SOUTHWEST MINNESOTA RGNL MARSHALL/  
RYAN FIELD (MML)  
AMDT 2 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwy 20**, Std. w/ min. climb of 270' per NM to 2000, or 1000-3 for climb in visual conditions. DEPARTURE PROCEDURE: **Rwy 20**, for climb in visual conditions, cross Marshall Airport at or above 2000 MSL before proceeding on course.

NOTE: **Rwy 12**, Pole 706' from departure end of runway, 671' right of centerline, 60' AGL/1212' MSL, pole 1580' from departure end of runway, 732' left of centerline, 70' AGL/1225' MSL, antenna 1496' from departure end of runway, 620' right of centerline, 64' AGL/1219' MSL, pole 1185' from departure end of runway, 540' right of centerline, 55' AGL/1210' MSL, tree 3564' from departure end of runway, 400' right of centerline, 110' AGL/1269' MSL, tree 2135' from departure end of runway, 113' left of centerline, 77' AGL/1232' MSL. **Rwy 30**, Vehicle on road 1' from departure end of runway, 435' left of centerline, 24' AGL/1200' MSL.

**MC GREGOR, MN**

ISEDOR IVERSON (HZX)  
ORIG 11349 (FAA)

DEPARTURE PROCEDURE: **Rwy 14**, climb heading 139° to 1900 before turning left.

NOTE: **Rwy 14**, trees beginning 72' from DER, 440' left of centerline, up to 100' AGL/1324' MSL. Trees beginning 1158' from DER, 724' right of centerline, up to 100' AGL/1324' MSL. Trees beginning 2888' from DER, 589' left of centerline, up to 100' AGL/1334' MSL. **Rwy 32**, vehicles on roadway beginning 499' from DER, 577' left of centerline, up to 17' AGL/1246' MSL. Trees beginning 2919' from DER, left and right of centerline, up to 100' AGL/1329' MSL.

**MILBANK, SD**

MILBANK MUNI (1D1)  
ORIG 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwy 25**, Std. w/ a min. climb of 207' per NM to 1900, or 900-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 25**, For climb in visual conditions cross Milbank Muni airport at or above 1900 before proceeding on course.

NOTE: **Rwy 7**, trees beginning 1207' from departure end of runway, 387' left of centerline, up to 100' AGL/1219' MSL. Vehicle on road 829' from departure end of runway, 373' right of centerline, 15' AGL/1134' MSL. Building 322' from departure end of runway, 582' right of centerline, 25' AGL/1134' MSL. **Rwy 13**, trees beginning 1448' from departure end of runway, 394' right of centerline, up to 100' AGL/1219' MSL. Vehicle on road 218' from departure end of runway, 490' left of centerline, 15' AGL/1134' MSL. Building 78' from departure end of runway, 397' left of centerline, 25' AGL/1134' MSL. **Rwy 25**, tree 3584' from departure end of runway, 477' left of centerline, 100' AGL/1249' MSL. **Rwy 31**, tree 2992' from departure end of runway, 715' left of centerline, 100' AGL/1239' MSL.

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**MILLER, SD**

MILLER MUNI (MKA)  
ORIG 08269 (FAA)

NOTE: **Rwy 15**, vehicle on road 769' from departure end of runway, 642' right of centerline, 15' AGL/1599' MSL. Snow removal equipment 206' from departure end of runway, 475' right of centerline, 21' AGL/1594' MSL. Tree 3903' from departure end of runway, 998' left of centerline, 100' AGL/1684' MSL. **Rwy 33**, vehicle on road 450' from departure end of runway, 560' left of centerline, 15' AGL/1584' MSL. Tree 762' from departure end of runway, 628' left of centerline, 100' AGL/1669' MSL.

**MINNEAPOLIS, MN**

AIRLAKE (LVN)  
ORIG 10154 (FAA)

NOTE: **Rwy 12**, ground 198' from DER, 533' right of centerline, 0' AGL/963' MSL. Tree and vehicle on road, beginning 422' from DER, 379' right of centerline, up to 15' AGL/978' MSL. Tree 1291' from DER, 506' left of centerline, 62' AGL/1002' MSL. **Rwy 30**, ground 104' from DER, 479' left of centerline, 0' AGL/965' MSL. Tree, pole, and antenna on building beginning 171' from DER, 259' right of centerline, up to 50' AGL/1000' MSL. Tree, railroad, and antenna on building 486' from DER, 268' left of centerline, up to 41' AGL/1001' MSL. Trees and a building beginning 821' from DER, 30' right of centerline, up to 49' AGL/1009' MSL.

ANOKA COUNTY-BLAINE AIRPORT  
(JANES FIELD) (ANE)  
AMDT 5A 10126 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9**, 300-1½ or std. w/min. climb of 204' per NM to 1200, or alternatively, with standard takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1200' prior to DER. **Rwy 18**, 300-1 or std. w/min. climb of 367' per NM to 1200.

DEPARTURE PROCEDURE: **Rwy 9**, climb heading 089° to 2200 before turning right. **Rwy 18**, climb heading 179° to 2600 before turning left. **Rwy 27**, climb heading 269° to 1700 before proceeding southeast bound. **Rwy 36**, climb heading 359° to 1700 before proceeding southeast bound.

NOTE: **Rwy 9**, tank and multiple trees beginning 822' from DER, 619' right of centerline, up to 170' AGL/1082' MSL. Trees 2248' from DER, 966' left of centerline, 100' AGL/1009' MSL. **Rwy 18**, aircraft on taxiway 36' from DER, 481' right of centerline, up to 21' AGL/928' MSL. Multiple trees beginning 406' from DER, 287' left of centerline, up to 49' AGL/959' MSL. Tower 5016' from DER, 201' left of centerline, 120' AGL/1078' MSL.

**Rwy 27**, multiple trees beginning 7' from DER, 235' right of centerline, up to 83' AGL/983' MSL. Multiple trees beginning 558' from DER, 406' left of centerline, up to 57' AGL/957' MSL. **Rwy 36**, multiple trees beginning 86' from DER, 10' right of centerline, up to 87' AGL/987' MSL. Multiple trees beginning 1282' from DER, 53' left of centerline, up to 70' AGL/970' MSL.

**MINNEAPOLIS, MN (CON'T)**

CRYSTAL (MIC)  
AMDT 3 11041 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6R, 24L, NA - Environmental.**

DEPARTURE PROCEDURE: **Rwy 6L**, Climb heading 051° to 2400 before turning right. **Rwys 14L, 14R** Climb heading 140° to 1900 before turning left.

NOTE: **Rwy 6L**, multiple trees beginning 514' from DER, 35' left of centerline, up to 66' AGL/945' MSL. Multiple trees beginning 836' from DER, 18' right of centerline, up to 76' AGL/945' MSL. **Rwy 14L**, multiple trees, sign and pole beginning 46' from DER, 125' left of centerline, up to 61' AGL/940' MSL. Multiple trees beginning 153' from DER, 4' right of centerline, up to 57' AGL/946' MSL. **Rwy 14R**, multiple trees, pole, and sign beginning 51' from DER, 295' left of centerline, up to 61' AGL/940' MSL. Multiple trees beginning 5' from DER, 121' right of centerline, up to 67' AGL/946' MSL. **Rwy 24R**, multiple trees beginning 1179' from DER, 110' left of centerline, up to 60' AGL/939' MSL. Multiple trees, sign and hangar beginning 41' from DER, 132' right of centerline, up to 62' AGL/941' MSL. Vehicles on road 903' from DER, 8' right of centerline, up to 17' AGL/896' MSL. **Rwy 32L**, multiple trees beginning 562' from DER, 70' left of centerline, up to 79' AGL/958' MSL. Multiple trees and sign beginning 70' from DER, 26' right of centerline, up to 81' AGL/960' MSL. Vehicles on road beginning 390' from DER, 11' left of centerline, up to 15' AGL/984' MSL. Powerline 272' from DER, 443' left of centerline, 40' AGL/909' MSL. Multiple hangars beginning 88' from DER, 326' left of centerline, up to 20' AGL/889' MSL. **Rwy 32R**, multiple trees beginning 899' from DER, 50' left of centerline, up to 81' AGL/960' MSL. Tree and sign beginning 77' from DER, 149' right of centerline, up to 70' AGL/950' MSL. Vehicles on road beginning 537' from DER, 311' left of centerline, up to 15' AGL/894' MSL. Multiple hangars beginning 355' from DER, 490' right of centerline, up to 30' AGL/899' MSL.

**FLYING CLOUD (FCM)**

AMDT 5 11069 (FAA)

NOTE: **Rwy 10L**, poles, buildings, trees, terrain, antenna on building beginning 28' from DER, 269' left of centerline, up to 46' AGL/945' MSL. Trees, sign, road, terrain beginning 86' from DER, 28' right of centerline, up to 28' AGL/937' MSL. **Rwy 10R**, trees, poles, buildings, utility poles, obstruction light on poles, beginning 15' from DER, 91' right of centerline, up to 34' AGL/943' MSL. **Rwy 28L**, trees beginning 2154' from DER, 1021' right of centerline, up to 70' AGL/953' MSL. **Rwy 28R**, trees, buildings, utility poles, beginning 7' from DER, 82' right of centerline, up to 39' AGL/938' MSL. **Rwy 18**, obstruction lights on fence, trees, road beginning 176' from DER, 127' left of centerline, up to 52' AGL/961' MSL. Floodlight, obstruction light on hangar, beginning 148' from DER, 316' right of centerline, up to 29' AGL/938' MSL. **Rwy 36**, poles, buildings, vent on building, utility poles, terrain beginning 45' from DER, 40' right of centerline, up to 67' AGL/966' MSL. Wind vane, trees, wind mill, sign, pole, fence, terrain, beginning 68' from DER, 206' left of centerline, up to 51' AGL/960' MSL.

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## TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES



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**MINNEAPOLIS, MN (CON'T)**MINNEAPOLIS-ST. PAUL INTL  
(WOLD CHAMBERLAIN) (MSP)

AMDT 11 07130 (FAA)

TAKEOFF MINIMUMS: **Rwy 35**, std. with a min. climb of 219' per NM to 2100.DEPARTURE PROCEDURE: **Rwy 4**, climb heading 043° to 2100 before turning left. **Rwy 30L**, climb heading 299° to 2100 before turning right. **Rwy 30R**, climb heading 299° to 2100 before turning right.**Rwy 35**, climb via heading 348° to 2100 before turning left.

NOTE: **Rwy 4**, multiple trees beginning 800' from departure end of runway, 264' left of centerline, up to 75' AGL/921' MSL. Rod on building 2528' from departure end of runway, 1175' left of centerline, 78' AGL/922' MSL. Fence 803' from departure end of runway, 585' left of centerline, 15' AGL/860' MSL. Antenna on OL building 456' from departure end of runway, 319' left of centerline, 13' AGL/850' MSL. Light poles 1932' from departure end of runway, 45' AGL/885' MSL. Stack 4535' from departure end of runway, 481' left of centerline, 139' AGL/949' MSL. **Rwy 12R**, multiple trees beginning 1477' from departure end of runway, 407' left of centerline, up to 86' AGL/851' MSL. Multiple trees beginning 1426' from departure end of runway, 124' right of centerline, up to 111' AGL/847' MSL. Light pole 1408' from departure end of runway, 746' right of centerline, 85' AGL/843' MSL. Radar FLTR 983' from departure end of runway, 32' left of centerline, 15' AGL/829' MSL. Pipe on building, 826' from departure end of runway, 576' left of centerline, 10' AGL/825' MSL. Obstruction light on localizer 766' from departure end of runway, on centerline, 7' AGL/821' MSL. **Rwy 17**, antenna 1272' from departure end of runway, 562' right of centerline, 57' AGL/891' MSL. Pole 409' from departure end of runway, 530' right of centerline, 29' AGL/866' MSL. WDI on building 2619' from departure end of runway, 881' left of centerline, 97' AGL/918' MSL. Building 2619' from departure end of runway, 859' left of centerline, 84' AGL/905' MSL. Light 1176' from departure end of runway, 291' right of centerline, 11' AGL/875' MSL. Tree 2619' from departure end of runway, on centerline, 79' AGL/900' MSL. **Rwy 22**, tree 2906' from departure end of runway, 833' right of centerline, 94' AGL/934' MSL. Hopper 1717' from departure end of runway, 456' left of centerline, 48' AGL/888' MSL. **Rwy 30L**, multiple trees beginning 1113' from departure end of runway, 701' left of centerline, up to 80' AGL/919' MSL. Tree 1230' from departure end of runway, 633' right of centerline, 30' AGL/877' MSL. Ground 28' from departure end of runway, 490' right of centerline, 0' AGL/844' MSL. **Rwy 30R**, building 1056' from departure end of runway, 198' left of centerline, 13' AGL/853' MSL. Multiple trees beginning 3010' from departure end of runway, 334' left of centerline, up to 94' AGL/940' MSL. Light pole 1849' from departure end of runway, 698' right of centerline, 17' AGL/871' MSL. Fence 1327' from departure end of runway, 667' right of centerline, 8' AGL/857' MSL. Tree 3703' from departure end of runway, 350' right of centerline, 67' AGL/914' MSL. Rod on pole 3143' from departure end of runway, 47' right of centerline, 38' AGL/898' MSL. **Rwy 35**, tree 175' from departure end of runway, 398' right of centerline, 73' AGL/883' MSL. Multiple trees beginning 1989' from departure end of runway, 351' left of centerline, up to 65' AGL/902' MSL. Multiple buildings beginning 5.45 NM from departure end of runway, 1787' left of centerline, up to 811' AGL/1743' MSL.

**MINOT, ND**

MINOT INTL (MOT)

AMDT 3A 11097 (FAA)

TAKE-OFF MINIMUMS: **Rwy 26**, 300-1½ or std. with a min. climb of 219' per NM to 2000.DEPARTURE PROCEDURE: **Rwy 13**, climb via heading 128° to 2200 before turning right. **Rwy 26**, climb via heading 260° to 2300 before turning left. NOTE: **Rwy 8**, fence 261' from DER, 415' right of centerline, 9' AGL/1669' MSL. **Rwy 26**, poles beginning 952' from DER, 523' left of centerline, up to 42' AGL/1761' MSL. Tower 1297' from DER, 405' right of centerline, 29' AGL/1751' MSL. Sign 1372' from DER, 323' left of centerline, 31' AGL/1750' MSL. Sign 1377' from DER, 832' right of centerline, 59' AGL/1778' MSL. Light pole 1419' from DER, 24' right of centerline, 36' AGL/1752' MSL. Trees beginning 1463' from DER, 73' right of centerline, up to 76' AGL/1795' MSL. Building 1432' from DER, 303' right of centerline, 33' AGL/1753' MSL. Tree 2071' from DER, 60' left of centerline, 53' AGL/1772' MSL. Tank 1.1 NM from DER, 1812' right of centerline, 140' AGL/1900' MSL. **Rwy 31**, trees beginning 2908' from DER, 560' left of centerline, up to 64' AGL/1778' MSL.**MITCHELL, SD**

MITCHELL MUNI (MHE)

AMDT 1 86240 (FAA)

DEPARTURE PROCEDURE: **Rwys 12, 17**, climb to 1800 before turning.**MOBRIDGE, SD**

MOBRIDGE MUNI (MBG)

AMDT 1 11181 (FAA)

TAKE-OFF MINIMUMS: **Rwys 17,35,NA**-environmentalDEPARTURE PROCEDURE: **Rwy 12**, climb heading 118° to 2600 before turning left.NOTE: **Rwy 12**, tower 2587' from DER, 651' right of centerline, 40' AGL/1810' MSL. Pole 3567' from DER, 12' right of centerline, 11' AGL/1790' MSL. Tree 1495' from DER, 230' right of centerline, 29' AGL/1738' MSL. Trees and poles beginning 1698' from DER, 160' left of centerline, up to 75' AGL/1811' MSL. Terrain and road beginning 153' from DER, 307' left of centerline, up to 17' AGL/1749' MSL. **Rwy 30**, terrain and road beginning 36' from DER, left to right across centerline, up to 17' AGL/1710' MSL.**MOHALL, ND**

HOHALL MUNI (HBC)

ORIG 11293 (FAA)

NOTE: **Rwy 13**, vehicles on roadway, 361' from DER, left and right of centerline, up to 15' AGL/1664' MSL.**MONTEVIDEO, MN**

MONTEVIDEO-CHIPPEWA COUNTY (MVE)

TAKE-OFF MINIMUMS: **Rwy 21**, 400-1½.DEPARTURE PROCEDURE: **Rwy 14**, climb runway heading to 1500 before turning.

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## TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES





**MOORHEAD, MN**

MOORHEAD MUNI (JKJ)  
ORIG 11293 (FAA)

NOTE: **Rwy 12**, building 263' from DER, 495' left of centerline, 15' AGL/932' MSL. Tree 657' from DER, 449' left of centerline, 114' AGL/1031' MSL. Trees 1463' from DER, 711' left of centerline, up to 69' AGL/986' MSL. Poles beginning 868' from DER, left and right of centerline, up to 48' AGL/965' MSL.

**Rwy 30**, tree 119' from DER, 104' left of centerline, 4' AGL/918' MSL. Poles beginning 1342' from DER, 855' right of centerline, up to 55' AGL/969' MSL.

**MOOSE LAKE, MN**

MOOSE LAKE CARLTON COUNTY (MZH)  
ORIG 94006 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 22**, 300-1.

**MORRIS, MN**

MORRIS MUNI-CHARLIE SCHMIDT FLD (MOX)

ORIG 08045 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 22**, NA-Environmental.

NOTE: **Rwy 32**, Trees 2888' from departure end of runway, 1125' left of centerline, 100' AGL/1209' MSL.

**OAKES, ND**

OAKES MUNI (2D5)

AMDT 1 11125 (FAA)

NOTE: **Rwy 12**, trees beginning 2071' from DER, left and right of centerline, up to 100' AGL/1459' MSL. **Rwy 30**, trees beginning 2509' from DER, 744' left of centerline, up to 100' AGL/1454' MSL.

**OLIVIA, MN**

OLIVIA RGNL (OVL)

AMDT 1 86044 (FAA)

TAKE-OFF MINIMUMS: **Rwy 11**, 300-1.

**ORR, MN**

ORR RGNL (ORB)

AMDT 1 80136 (FAA)

TAKE-OFF MINIMUMS: **Rwy 13**, 500-2 or std. with a min. climb of 260' per NM to 1900.

**ORTONVILLE, MN**

ORTONVILLE MUNI-MARTINSON FIELD (VVV)

ORIG 81274 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, 300-1 or std. with a min. climb of 210' per NM to 1300.

**OWATONNA, MN**

OWATONNA DEGNER RGNL (OWA)

AMDT 2 97030 (FAA)

DEPARTURE PROCEDURE: **Rwy 12**, climb runway heading to 1500 before turning on course.

**PARK RAPIDS, MN**

PARK RAPIDS MUNI-KONSHOK FIELD (PKD)

ORIG 11349 (FAA)

TAKE-OFF MINIMUMS: **Rwys 17, 35**, NA-Environmental.

NOTE: **Rwy 13**, terrain abeam DER, right and left of centerline, up to 1449' MSL. Pole 881' from DER, 712' left of centerline, 25' AGL/1467' MSL. Trees beginning 1144' from DER, 640' left of centerline, up to 60' AGL/1509' MSL. **Rwy 31**, terrain abeam DER, right and left of centerline, up to 1459' MSL. Vehicles on road beginning 67' from DER, right and left of centerline, up to 17' AGL/1462' MSL. Trees beginning 359' from DER, 296' right of centerline, up to 100' AGL/1476' MSL. Trees beginning 799' from DER, 236' left of centerline, up to 100' AGL/1479' MSL.

**PAYNESVILLE, MN**

PAYNESVILLE MUNI (PEX)

ORIG 11013 (FAA)

TAKE-OFF MINIMUMS: **Rwy 11**, 300-2 or std. w/min climb of 239' per NM to 1800. NA at night. **Rwy 29**, 300-1 3/4 or std. w/min climb of 210' per NM to 1500. NA at night.

NOTE: **Rwy 11**, trees 3507' from DER, 1179' right of centerline, 60' AGL/1329' MSL. Antenna 1.6 NM from DER, 1705' left of centerline, 200' AGL/1470' MSL. Vehicle on road beginning 2216' from DER, left and right of centerline, 15' AGL/1244' MSL. Terrain 51' from DER, left and right of centerline 1188' MSL.

**Rwy 29**, trees 1328' from DER, 533' right of centerline, 60' AGL/1249' MSL. Trees 2062' from DER, 940' right of centerline, 60' AGL/1249' MSL. Buildings 619' from DER, 601' right of centerline, 20' AGL/1209' MSL. Power lines 1.3 NM from DER, 2625' left of centerline, 200' AGL/1399' MSL.

**PEMBINA, ND**

PEMBINA MUNI (PMB)

ORIG 85325 (FAA)

DEPARTURE PROCEDURE: **Rwy 33**, climb runway heading 3200 before turning left.

**PERHAM, MN**

PERHAM MUNI (16D)

ORIG 98113 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12**, 500-2 or std. with a min. climb of 210' per NM to 2000. **Rwy 30**, 400-1 or std. with a min. climb of 270' per NM to 1800.

DEPARTURE PROCEDURE: **Rwy 12**, climb runway heading to 2000 before proceeding on course.

**Rwy 30**, climb runway heading to 1800 before proceeding on course.

**PIERRE, SD**

PIERRE RGNL (PIR)

AMDT 2 85115 (FAA)

TAKE-OFF MINIMUMS: **Rwy 25**, 300-1.

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## PINE RIDGE, SD

PINE RIDGE (IEN)

ORIG 97226 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12**, 300-1 or std. with a min. climb of 350' per NM to 3600. **Rwy 24**, 300-1 or std. with a min. climb of 220' per NM to 3500. **Rwy 30**, 300-1 or std. with a min. climb of 300' per NM to 3600.

## PIPESTONE, MN

PIPESTONE MUNI (PQN)

ORIG 08045 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9,27**, NA-Environmental.  
NOTE: **Rwy 18**, Trees beginning 3811' from departure end of runway, 854' right of centerline, up to 100' AGL/1859' MSL.

## PRESTON, MN

FILLMORE COUNTY (FKA)

ORIG 98113 (FAA)

TAKE-OFF MINIMUMS: **Rwys 11,29**, 300-1.

## PRINCETON, MN

PRINCETON MUNI (PNM)

AMDT 1 05132 (FAA)

NOTE: **Rwy 15**, trees 982' from departure end of runway, 335' right of centerline, 50' AGL/1029' MSL. Trees 1449' from departure end of runway, 387' left of centerline, 50' AGL/1029' MSL. **Rwy 33**, barn 1159' from departure end of runway, 780' right of centerline, 50' AGL/1139' MSL, multiple trees, terrain, and road beginning 36' from departure end of runway, 84' right of centerline, up to 50' AGL/1045' MSL.

## RAPID CITY, SD

RAPID CITY RGNL (RAP)

AMDT 7 11069 (FAA)

DEPARTURE PROCEDURE: **Rwy 5**, climb on heading between 255° CW to 210° from DER, or min. climb of 240' per NM to 8800 for all other courses. **Rwy 14**, climb on heading between 325° CW to 210° from DER, or min. climb of 245' per NM to 8900 for all other courses. **Rwy 23**, climb on heading between 210° CCW to 055° from DER, or min. climb of 245' per NM to 8900 for all other courses. **Rwy 32**, climb on heading 324° to 3700 for courses between 255° CW to 140° from DER, or min. climb of 244' per NM to 8800 for all other courses.

NOTE: **Rwy 5**, fence 132' from DER, 249' left of centerline, up to 13' AGL/3215' MSL. Trees beginning 16' from DER, 188' right of centerline, up to 25' AGL/3234' MSL. Trees beginning 11' from DER, 111' left of centerline, up to 25' AGL/3234' MSL. **Rwy 14**, trees beginning 136' from DER, 123' right of centerline, up to 25' AGL/3174' MSL. Trees beginning 33' from DER, 229' left of centerline, up to 25' AGL/3164' MSL. **Rwy 23**, vehicle on road 36' from DER, 121' left of centerline, up to 15' AGL/3175' MSL. Hanger 201' from DER, 298' left of centerline, up to 30' AGL/3193' MSL. Fence 333' from DER, 255' right of centerline, up to 14' AGL/3184' MSL. Trees beginning 199' from DER, 175' right of centerline, up to 25' AGL/3194' MSL. Trees beginning 158' from DER, 159' left of centerline, up to 25' AGL/3194' MSL. **Rwy 32**, fence 1001' from DER, 750' right of centerline, up to 13' AGL/3233' MSL. Obstruction light 661' from DER, 242' left of centerline, up to 43' AGL/3213' MSL. Trees beginning 31' from DER, 262' right of centerline, up to 25' AGL/3254' MSL. Trees beginning 61' from DER, 146' left of centerline, up to 25' AGL/3204' MSL.

## RAY S. MILLER AAF (KRYM)

CAMP RIPLEY, MN . . . . . AMDT 2, 09155

TAKE-OFF OBSTACLES: **Rwy 13**, Terrain 1270' MSL, 73' from DER, 8' left and right of centerline. Vehicle 15' AGL/1180' MSL, 765' from DER, 638' left of centerline. **Rwy 31**, Terrain 1273' MSL, 54' from DER, 9' left and right of centerline. Trees 64' AGL/1282' MSL, 798' from DER, 325' left and right of centerline.

## RED WING, MN

RED WING RGNL (RGK)

AMDT 2 11013 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9**, std. w/ min. climb of 299' per NM to 1700

NOTE: **Rwy 9**, pole 1080' from DER, 554' left of centerline, 35' AGL/812' MSL. Trees beginning 1375' from DER, 387' left of centerline, up to 75' AGL/1114' MSL. Trees beginning 1231' from DER, 397' right of centerline, up to 49' AGL/1108' MSL. **Rwy 27**, trees beginning 3451' from DER, 584' left of centerline, up to 100' AGL/879' MSL. Trees beginning 406' from DER, 439' right of centerline, up to 100' AGL/879' MSL.

## REDWOOD FALLS, MN

REDWOOD FALLS MUNI (RWF)

ORIG 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwys 5,23**, NA-Environmental.

NOTE: **Rwy 12**, numerous buildings beginning 388' from DER, 376' right of centerline, up to 13' AGL/1052' MSL. Numerous fences beginning 6' from DER, 329' right of centerline, up to 13' AGL/1052' MSL. Tree 62' from DER, 444' left of centerline, 11' AGL/1040' MSL. **Rwy 30**, multiple trees beginning 865' from DER, 401' right of centerline, up to 100' AGL/1119' MSL. Vehicle on road 128' from DER, 306' right of centerline, 15' AGL/1027' MSL.

## ROCHESTER, MN

ROCHESTER INTL (RST)

ORIG 09015 (FAA)

NOTE: **Rwy 2**, road 73' from departure end of runway, 385' right of centerline, 10' AGL/1292' MSL. Tree 4377' from departure end of runway, 1132' right of centerline, 100' AGL/1399' MSL. Road 268' from departure end of runway, 366' right of centerline, 10' AGL/1290' MSL. **Rwy 13**, tree 1498' from departure end of runway, 840' right of centerline, 44' AGL/1348' MSL. **Rwy 20**, pole 259' from departure end of runway, 407' right of centerline, 23' AGL/1338' MSL. Roads beginning 1' from departure end of runway, 231' right of centerline, up to 10' AGL/1327' MSL. **Rwy 31**, tree 4760' from departure end of runway, 1103' left of centerline, 100' AGL/1389' MSL.

## ROLLA, ND

ROLLA MUNI (06D)

ORIG 11013 (FAA)

TAKE-OFF MINIMUMS: **Rwys 7,25**, NA-Environmental.

NOTE: **Rwy 14**, vehicle on road 49' from DER, 23' left of centerline, 15' AGL/1830' MSL. Trees beginning 1232' from DER, 209' left of centerline, up to 80' AGL/1867' MSL. **Rwy 32**, trees beginning 2207' from DER, 59' left of centerline, up to 80' AGL/1929' MSL. Trees beginning 651' from DER, 80' right of centerline, up to 80' AGL/1939' MSL.

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# TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

# TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

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## ROSEAU, MN

ROSEAU MUNI-RUDY BILLBERG FIELD (ROX)  
ORIG 07242 (FAA)

NOTE: **Rwy 16**, building 258' from departure end of runway, 505' right of centerline, 24' AGL/1078' MSL. Tree 1582' from departure end of runway, 337' left of centerline, 47' AGL/1101' MSL. **Rwy 34**, truck on road 41' from departure end of runway, 511' left of centerline, 15' AGL/1069' MSL.

## RUGBY, ND

RUGBY MUNI (RUG)  
ORIG 11237 (FAA)

NOTE: **Rwy 12**, trees and terrain beginning 13' from DER, 28' right of centerline, up to 100' AGL/1565' MSL. Trees and terrain beginning 140' from DER, 97' left of centerline, up to 100' AGL/1669' MSL. **Rwy 30**, trees and terrain beginning 84' from DER, 35' left of centerline, up to 100' AGL/1630' MSL. Trees and terrain beginning 146' from DER, 91' right of centerline, up to 100' AGL/1549' MSL.

## RUSH CITY, MN

RUSH CITY RGNL (ROS)  
ORIG 11041 (FAA)

NOTE: **Rwy 16**, multiple trees beginning 27' from DER, 315' left of centerline, up to 100' AGL/969' MSL. Multiple trees beginning 838' from DER, 226' right of centerline, up to 100' AGL/997' MSL. Pole 1712' from DER, 811' left of centerline, 50' AGL/970' MSL. **Rwy 34**, trees 91' from DER, 472' left of centerline, 100' AGL/939' MSL. Trees 1173' from DER, 375' right of centerline, 100' AGL/1029' MSL. Trees 2250' from DER, 928' left of centerline, 100' AGL/1009' MSL.

## RUSHFORD, MN

RUSHFORD MUNI (55Y)  
AMDT 1 96228 (FAA)

TAKE-OFF MINIMUMS: **Rwy 34**, 300-1 or std. with a min. climb of 300' per NM to 1500.  
DEPARTURE PROCEDURE: **Rwy 16**, climb runway heading to 1700 before turning eastbound.

## ST. CLOUD, MN

ST. CLOUD RGNL (STC)  
ORIG 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwy 5**, 300-1¼ or std. w/ min. climb of 201' per NM to 1300 or alternatively, with standard take-off minimums and a normal 200'/NM climb gradient, take-off must occur no later than 1100' prior to DER.

NOTE: **Rwy 5**, tower 6201' from DER, 1416' left of centerline, 149' AGL/1179' MSL. Multiple trees beginning 17' from DER, 373' right of centerline, up to 59' AGL/1081' MSL. Multiple trees beginning 1752' from DER, 56' left of centerline, up to 80' AGL/1102' MSL. **Rwy 13**, tree 1654' from DER, 884' right of centerline, 61' AGL/1078' MSL. Tree 1265' from DER, 794' left of centerline, 42' AGL/1059' MSL. **Rwy 23**, trees 2109' from DER, 29' right of centerline, up to 61' AGL/1082' MSL. Trees 1725' from DER, 93' left of centerline, up to 55' AGL/1076' MSL. Fence 74' from DER, 216' left of centerline, 2' AGL, 1023' MSL. **Rwy 31**, terrain beginning 29' from DER, 50' right of centerline, up to 1083' MSL. Terrain beginning 107' from DER, 7' left of centerline, up to 1060' MSL.

## ST. JAMES, MN

ST. JAMES MUNI (JYG)  
ORIG 94342 (FAA)

DEPARTURE PROCEDURE: **Rwy 15**, climb to 1900 before turning eastbound.

## ST. PAUL MN

LAKE ELMO (21D)  
AMDT 1 11069 (FAA)

TAKE-OFF MINIMUMS: **Rwy 14**, 400-2¼ or std. w/min. climb of 233' per NM to 1400.  
DEPARTURE PROCEDURE: **Rwy 4**, climb heading 038° to 1600 before turning right.

NOTE: **Rwy 4**, trees beginning at DER, 458' right of centerline, up to 100' AGL/1039' MSL. Trees and buildings beginning 94' from DER, 377' left of centerline up to 100' AGL/1049' MSL. **Rwy 14**, trees and vehicles on road beginning 252' from DER, 25' right of centerline, up to 100' AGL/1129' MSL. Trees beginning 857' from DER, 50' left of centerline, up to 100' AGL/1239' MSL. **Rwy 22**, trees, vehicles on road and building beginning 118' from DER, 89' right of centerline, up to 100' AGL/1039' MSL. Trees beginning 1519' from DER, 73' left of centerline, up to 84' AGL/1003' MSL. **Rwy 32**, trees beginning 943' from DER, 579' right of centerline, up to 100' AGL/1029' MSL. Trees and vehicles on road beginning 176' from DER, 515' left of centerline, up to 100' AGL/1029' MSL.

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**ST. PAUL MN (CON'T)**

ST. PAUL DOWNTOWN HOLMAN FIELD (STP)  
AMDT 8 11349 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9**, std. w/min. climb of 340' per NM to 1300. **Rwy 13**, std. w/min. climb of 230' per NM to 1500. **Rwy 27**, 600-2 or std. w/min. climb of 442' per NM to 1500. **Rwy 31**, NA-obstacles. **Rwy 32**, std. w/min. climb of 340' per NM to 3000.  
DEPARTURE PROCEDURE: **Rwy 9**, climb heading 088° to 1400 before proceeding on course. **Rwy 13**, climb heading 125° to 1300 before proceeding on course. **Rwy 14**, climb heading 143° to 1400 before proceeding on course. **Rwy 27**, climb heading 268° to 1700 before proceeding on course. **Rwy 32**, climb heading 323° to 1400 before proceeding on course.

NOTE: **Rwy 9**, mobile crane 1362' from DER, 124' left of centerline, 68' AGL/758' MSL. Trees and silo 1464' from DER, 178' right of centerline, up to 116' AGL/816' MSL. Trees and pole beginning 1.1 NM from DER, left and right of centerline, up to 100' AGL/1099' MSL. **Rwy 13**, tree and tower beginning 1125' from DER, 609' left of centerline, up to 67' AGL/767' MSL. Tree, pole, vent on building, stacks, and obstruction light on stack beginning 1672' from DER, 55' right of centerline, up to 120' AGL/820' MSL. Trees beginning 1.9 NM from DER, 2938' left of centerline, up to 100' AGL/1020' MSL. **Rwy 14**, trees, obstruction light on DME antenna, and pole beginning 290' from DER, 1' right of centerline, up to 129' AGL/819' MSL. Trees and pole beginning 1099' from DER, 6' left of centerline, up to 87' AGL/777' MSL. **Rwy 27**, trees, light pole, and flagpole beginning 617' from DER, 198' left of centerline, up to 119' AGL/829' MSL. Obstruction light on antenna, buildings, tower, and tree beginning 810' from DER, 26' right of centerline, up to 165' AGL/955' MSL. Trees and building beginning 3886' from DER, 120' left of centerline, up to 84' AGL/1014' MSL. Tower 1.7 NM from DER, 633' left of centerline, 569' AGL/1279' MSL. **Rwy 32**, vehicle on road, trees, railroad, poles, and navaid beginning 179' from DER, 267' right of centerline, up to 58' AGL/758' MSL. Vehicle on road, railroad, and trees beginning 192' from DER, up to 59' AGL/759' MSL. Navaid 257' from DER, on centerline, 26' AGL/726' MSL. Trees, poles, buildings, and tower beginning 3674' from DER, 616' right of centerline, up to 157' AGL/973' MSL. Trees, buildings, tower, sign, and stack beginning 1924' from DER, 378' left of centerline, up to 143' AGL/969' MSL.

**SAUK CENTRE, MN**

SAUK CENTRE MUNI (D39)  
ORIG 11237 (FAA)

TAKE-OFF MINIMUMS: **Rwys 8, 26**, NA - Environmental.  
NOTE: **Rwy 14**, tree 1269' from DER, 39' right of centerline, 80' AGL/1319' MSL. **Rwy 32**, tree 1105' from DER, 136' left of centerline, 80' AGL/1299' MSL.

**SILVER BAY, MN**

SILVER BAY MUNI (BFW)  
AMDT1 10322 (FAA)

TAKE-OFF MINIMUMS: **Rwy 7**, 500-3 or std. w/min. climb of 240' per NM to 1700. **Rwy 25**, 400-2½ or std. w/min. climb of 215' per NM to 1600 or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1600' prior to DER.

DEPARTURE PROCEDURE: **Rwy 7**, Climb heading 087° to 1700 before turning left.

NOTE: **Rwy 7**, vehicles on roadway 4' from DER, 257' right of centerline, up to 16' AGL/1155' MSL. Trees beginning 7' from DER, 104' right of centerline, up to 100' AGL/1509' MSL. Hangar 268' from DER, 268' left of centerline, 30' AGL/1149' MSL. Trees beginning 1088' from DER, 774' left of centerline, up to 100' AGL/1549' MSL. **Rwy 25**, trees beginning 170' from DER, 152' right of centerline, up to 100' AGL/1419' MSL. Trees beginning 4' from DER, 164' left of centerline, up to 100' AGL/1229' MSL.

**SIOUX FALLS, SD**

JOE FOSS FIELD (FSD)  
AMDT 7 07242 (FAA)

TAKE-OFF MINIMUMS: **Rwy 15**, 200-1 or std. w/min. climb of 404' per NM to 1700. **Rwy 33**, 200-1¼ or std. w/min. climb of 343' per NM to 1700.

DEPARTURE PROCEDURE: **Rwy 3**, climb heading 030° to 2300 before turning eastbound. **Rwy 9**, climb heading 098° to 2000, then left turn direct FSD VORTAC. **Rwy 15**, climb heading 150° to 2000, then right turn direct FSD VORTAC. **Rwy 21**, climb heading 210° to 2200 before turning eastbound. **Rwy 27**, climb heading 278° to 2100 before turning eastbound. **Rwy 33**, climb heading 330° to 2200 before turning eastbound.

NOTE: **Rwy 9**, antenna 2238' from departure end of runway, 919' right of centerline, 87' AGL/1506' MSL. Pole 1256' from departure end of runway, 23' left of centerline, 43' AGL/1464' MSL. Windssock 331' from departure end of runway, 582' right of centerline, 14' AGL/1433' MSL. **Rwy 15**, antenna 3056' from departure end of runway, 983' left of centerline 117' AGL/1576' MSL. Multiple trees beginning 1211' from departure end of runway, 471' left of centerline, up to 38' AGL/1477' MSL. Tower 3102' from departure end of runway, 972' left of centerline, 61' AGL/1520' MSL. Trees and pole beginning 1746' from departure end of runway, 316' right of centerline, up to 87' AGL/1516' MSL. **Rwy 21**, multiple trees beginning 428' from departure end of runway, 522' right of centerline, up to 75' AGL/1497' MSL. **Rwy 27**, multiple trees beginning 2528' from departure end of runway, 1027' left of centerline, up to 100' AGL/1509' MSL. **Rwy 33**, 2 lighted radio towers 3639' from departure end of runway, 894' left of centerline, 88' AGL/1585' MSL, multiple trees beginning 5370' from departure end of runway, 891' left of centerline, up to 175' AGL/1603' MSL, pole 5724' from departure end of runway, 1701' left of centerline, 45' AGL/1594' MSL.

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## SLAYTON, MN

SLAYTON MUNI (DVP)

ORIG 11265 (FAA)

NOTE: **Rwy 17**, trees beginning 951' from DER, 345' right of centerline, up to 100' AGL/1723' MSL. Power lines beginning 1531' from DER, left and right of centerline, 40' AGL/1663' MSL. Vehicle on road beginning at DER, 234' right of centerline, 15' AGL/1638' MSL. Terrain beginning 65' from DER, left and right of centerline up to 1657' MSL. **Rwy 35**, trees beginning 1034' from DER, left and right of centerline, up to 100' AGL/1715' MSL. Power lines beginning 892' from DER, 206' left of centerline, 40' AGL/1655' MSL. Vehicle on roads beginning at DER, 230' left and right of centerline, 15' AGL/1630' MSL. Terrain beginning 271' from DER, left and right of centerline up to 1650' MSL.

## SPEARFISH, SD

BLACK HILLS-CLYDE ICE FIELD (SPF)

AMDT 1 11153 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 8, 22, 26**, NA-Environmental. **Rwy 13**, std. w/min. climb of 334' per NM to 6300. **Rwy 31**, 400-1¼ or std. w/min. climb of 329' per NM to 4400.

DEPARTURE PROCEDURE: **Rwy 13**, climbing heading 109° to 6300, then climbing left turn to intercept SPF NDB 090° bearing inbound, thence ... **Rwy 31**, climb to 6000 then climbing right turn to intercept SPF NDB 330° bearing inbound, thence ... enter SPF holding pattern (Northeast, right turn, 226° inbound), continue climb in hold to enroute MEA before proceeding on course.

NOTE: **Rwy 13**, terrain 175' from DER, 478' right of centerline, 3903' MSL. **Rwy 31**, structure 127' from DER, on centerline, 8' AGL/3888' MSL. Terrain 52' from DER, 497' left of centerline, 3918' MSL. Pole 734' from DER, 572' left of centerline, 9' AGL/3986' MSL. Terrain 195' from DER, 499' right of centerline, 3916' MSL. Pole 285' from DER, 311' right of centerline, 9' AGL/3978' MSL. Trees 1.3 NM from DER, 2481' right of centerline, up to 100' AGL/4225' MSL.

## STANLEY, ND

STANLEY MUNI (08D)

ORIG 11013 (FAA)

NOTE: **Rwy 27**, Power line beginning 23' from DER, right to left of centerline, up to 40' AGL/2299' MSL.

## STAPLES, MN

STAPLES MUNI (SAZ)

AMDT 2 87211 (FAA)

TAKE-OFF MINIMUMS: **Rwy 14**, 400-2.

## STURGIS, SD

STURGIS MUNI (49B)

AMDT 1 11181 (FAA)

DEPARTURE PROCEDURE: **Rwy 11**, climb heading 096° to 5200, then climbing right turn to 7000 direct RAP VORTAC. **Rwy 29**, climb heading 291° to 5000, then climbing right turn to 7000 direct RAP VORTAC.

NOTE: **Rwy 29**, trees 63' from DER, 271' right of centerline, up to 20' AGL/3265' MSL. Ground 134' from DER, 443' left of centerline, 3248' MSL.

## THIEF RIVER FALLS, MN

THIEF RIVER FALLS RGNL (TVF)

ORIG 09071 (FAA)

NOTE: **Rwy 3**, trees beginning 3058' from DER, 678' right of centerline, up to 100' AGL/1229' MSL. **Rwy 13**, trees beginning 565' from DER, 372' left of centerline, up to 100' AGL/1214' MSL. Trees beginning 1337' from DER, 531' right of centerline, up to 100' AGL/1209' MSL. **Rwy 21**, trees beginning 214' from DER, 544' right of centerline, up to 100' AGL/1204' MSL. Trees beginning 2185' from DER, 33' left of centerline, up to 100' AGL/1209' MSL. **Rwy 31**, trees beginning 126' from DER, 410' right of centerline, up to 100' AGL/1214' MSL. Trees beginning 199' from DER, 413' left of centerline, up to 100' AGL/1209' MSL. Trees beginning 1204' from DER, 449' right of centerline, up to 100' AGL/1199' MSL. Trees beginning 1579' from DER, 495' left of centerline, up to 100' AGL/1214' MSL.

## TIOGA, ND

TIOGA MUNI (D60)

ORIG 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwys 3, 21**, NA-Environmental.

NOTE: **Rwy 12**, vehicle on road 1243' from DER, 78' left of centerline, 15' AGL/2304' MSL. Vehicle on road, tree and pole beginning 618' from DER, 50' right of centerline, up to 100' AGL/2419' MSL. Ground 21' from DER, 481' right of centerline, 2272' MSL. **Rwy 30**, vehicle on road 1' from DER, 144' left of centerline, 15' AGL/2256' MSL.

## TOWER, MN

TOWER MUNI (12D)

ORIG 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 8**, NA - Obstacles.

NOTE: **Rwy 26**, tree 2315' from DER, 700' right of centerline, 100' AGL/1479' MSL.

## TRACY, MN

TRACY MUNI (TKC)

ORIG 11013 (FAA)

TAKE-OFF MINIMUMS: **Rwys 6, 17, 24, 35**, NA-Environmental. **Rwy 29**, 300-2¼ or std. w/min. climb of 250' per NM to 1800.

NOTE: **Rwy 11**, tree 56' from DER, 174' right of centerline, 20' AGL/1342' MSL. Numerous trees and bushes beginning 137' from DER, 86' left of centerline, up to 100' AGL/1410' MSL. **Rwy 29**, tower 1.9 NM from DER, 1951' left of centerline, 265' AGL/1625' MSL.

## TWO HARBORS, MN

RICHARD B. HE'GESON (TWM)

ORIG 11181 (FAA)

TAKE-OFF MINIMUMS: **Rwys 15, 33**, NA-environmental.

NOTE: **Rwy 6**, multiple trees, beginning 20' from DER, 44' right of centerline, up to 40' AGL/1122' MSL. Multiple trees, beginning 46' from DER, 201' left of centerline, up to 40' AGL/1126' MSL. **Rwy 24**, multiple trees, beginning 13' from DER, 61' right of centerline, up to 40' AGL/1156' MSL. Multiple trees, beginning 56' from DER, 97' left of centerline, up to 40' AGL/1138' MSL.

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**VALLEY CITY, ND**

BARNES COUNTY MUNI (BAC)  
ORIG 10098 (FAA)

NOTE: **Rwy 13**, vehicle on road, 111' from DER, 356' right of centerline, 15' AGL/1396' MSL. Trees beginning 644' from DER, 242' right of centerline, up to 40' AGL/1421' MSL. **Rwy 31**, terrain beginning 32' from DER, 20' right of centerline, up to 1424' MSL. Vehicle on road 38' from DER, 285' right of centerline, 15' AGL/1418' MSL. Fence 71' from DER, 292' left of centerline, 4' AGL/1407' MSL. Terrain beginning 120' from DER, 125' left of centerline, up to 1447' MSL. Fence 198' from DER, 299' right of centerline, 4' AGL/1408' MSL. Trees beginning 365' from DER, 10' left of centerline, up to 40' AGL/1457' MSL. Tree 545' from DER, 607' right of centerline, 16' AGL/1436' MSL.

**VERMILLION, SD**

HAROLD DAVIDSON FIELD (VMR)  
AMDT 1 09239 (FAA)

NOTE: **Rwy 12**, road 1' from DER, 200' right of centerline, up to 15' AGL/1156' MSL. Multiple trees beginning 541' from DER, 366' right of centerline, up to 62' AGL/1202' MSL. **Rwy 30**, road 79' from DER 342' left of centerline 15' AGL/1155' MSL. Road 200' from DER, 450' right of centerline, 15' AGL/1160' MSL. Fence 199' from DER, 347' left of centerline, 6' AGL/1150' MSL.

**WADENA, MN**

WADENA MUNI (ADC)  
ORIG 11125 (FAA)

NOTE: **Rwy 16**, terrain 28' from DER, 73' left of centerline, 1359' MSL. **Rwy 34**, trees beginning 1657' from DER, 323' right of centerline, up to 100' AGL/1479' MSL.

**WAHPETON, ND**

HARRY STERN (BWP)  
AMDT 1 11181 (FAA)

TAKE-OFF MINIMUMS: **Rwys 3, 21**, NA - environmental.

NOTE: **Rwy 15**, trees beginning 1020' from DER, 114' left of centerline, up to 74' AGL/1033' MSL. Trees beginning 2753' from DER, 457' right of centerline, up to 86' AGL/1045' MSL. **Rwy 33**, electrical system 657' from DER, 632' right of centerline, 71' AGL/1010' MSL. Trees beginning 714' from DER, 33' right of centerline, up to 70' AGL/1039' MSL. Electrical system 1570' from DER, 258' right of centerline, 68' AGL/1032' MSL. Trees beginning 1326' from DER, 15' left of centerline, up to 75' AGL/1039' MSL.

**WALHALLA, ND**

WALHALLA MUNI (96D)  
ORIG 11125 (FAA)

TAKE-OFF MINIMUMS: **Rwy 15**, 400-2¼ or std. w/min. climb gradient of 260' per NM to 1500.

DEPARTURE PROCEDURE: **Rwy 15**, Climb heading 164° to 1500 before turning right.

NOTE: **Rwy 15**, vehicles on roadway beginning 478' from DER, 583' right of centerline, 15' AGL/969' MSL. Trees beginning 734' from DER, 623' right to 708' left of centerline, up to 100' AGL/1054' MSL. **Rwy 33**, trees beginning 53' from DER, 12' left to 654' right of centerline, up to 100' AGL/1049' MSL. Power lines beginning 81' from DER, 266' left of centerline, up to 70' AGL/1019' MSL. Vehicles on roadway beginning 113' from DER, 490' left of centerline, 15' AGL/964' MSL.

**WARREN, MN**

WARREN MUNI (D37)  
ORIG 02108 (FAA)

DEPARTURE PROCEDURE: **Rwy 30**, climb runway heading to 1400 before turning on course.

**WARROAD, MN**

WARROAD INTL MEMORIAL (RRT)  
ORIG 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 22**, NA-Environmental.

**WASECA, MN**

WASECA MUNI (ACQ)  
ORIG 09015 (FAA)

NOTE: **Rwy 15**, tree 560' from departure end of runway, 560' right of centerline, 100' AGL/1239' MSL. Terrain beginning 172' from departure end of runway, on centerline, up to 1149' MSL. **Rwy 33**, tree 5042' from departure end of runway, 1533' right of centerline, 100' AGL/1259' MSL.

**WATERTOWN, SD**

WATERTOWN RGNL (ATY)  
ORIG 07242 (FAA)

NOTE: **Rwy 12**, tree 2015' from departure end of runway, 328' right of centerline, 100' AGL/1783' MSL. **Rwy 30**, trees 2149' from departure end of runway, 10' right of centerline, 51' AGL/1810' MSL. Tree 2200' from departure end of runway, 441' left of centerline, 70' AGL/1810' MSL. Tree 2082' from departure end of runway, 121' right of centerline, 55' AGL/1806' MSL.

**WATFORD CITY, ND**

WATFORD CITY MUNI (S25)  
AMDT 1 10154 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12**, 400-1¼ or std. with a min. climb of 462' per NM to 2600. **Rwys 18, 36**, NA-Environmental.

NOTE: **Rwy 12**, tree 5528' from DER, 1819' right of centerline, up to 100' AGL/2439' MSL. Vehicle on road, trees, and terrain beginning 186' from DER, 62' right of centerline, up to 100' AGL/2258' MSL. Vehicle on road, fence, and terrain beginning 90' from DER, 43' left of centerline, up to 27' AGL/2167' MSL.

**Rwy 30**, trees and buildings beginning 672' from DER, 119' right of centerline, up to 41' AGL/2101' MSL. Vehicle on road, light and trees beginning 199' from DER, 128' left of centerline, up to 59' AGL/2119' MSL.

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## WHEATON, MN

WHEATON MUNI (ETH)

AMDT 1 92177 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16**, 300-1. **Rwys 4, 22**, NA.

## WILLISTON, ND

SLOULIN FIELD INTL (ISN)

AMDT 4 10210 (FAA)

TAKE-OFF MINIMUMS: **Rwy 29**, 400-2¼ or std. with a min. climb of 359' per NM to 2200.DEPARTURE PROCEDURE: **Rwy 11**, climb heading 115° to 2400 before turning left.

NOTE: **Rwy 2**, trees 1212' from DER, 398' left of centerline, up to 100' AGL/2019' MSL. **Rwy 11**, trees 831' from DER, 686' right of centerline, up to 100' AGL/1999' MSL. **Rwy 20**, trees 610' from DER, 450' right of centerline, up to 100' AGL/2019' MSL. Trees 1204' from DER, 128' left of centerline, up to 100' AGL/2019' MSL. Poles beginning from DER, 61' right of centerline, up to 44' AGL/1954' MSL. Building 1811' from DER, 371' right of centerline, 65' AGL/1980' MSL. **Rwy 29**, terrain beginning 639' from DER, 179' left of centerline, up to 2150' MSL. Terrain beginning 645' from DER, 305' right of centerline, up to 2103' MSL. Fence 1341' from DER, 210' right of centerline, 10' AGL/2021' MSL. Fence beginning 966' from DER, 250' left of centerline, up to 10' AGL/2029' MSL. Obstruction light on LOC 999' from DER, on centerline, 5' AGL/2014' MSL. Antenna on building 1000' from DER, 270' right of centerline, 29' AGL/2018' MSL. CHY on building 1165' from DER, 791' right of centerline, 29' AGL/2040' MSL. Building 2345' from DER, 519' left of centerline, 29' AGL/2066' MSL. T-L tower 3480' from DER, 237' right of centerline, 77' AGL/2137' MSL. Obstruction light pole 3478' from DER, 247' right of centerline, 82' AGL/2137' MSL. Rod on obstruction light pole 3692' from DER, 392' left of centerline, 68' AGL/2147' MSL. T-L tower 3700' from DER, 403' left of centerline, 82' AGL/2147' MSL. Tree 1.2 NM from DER, 1557' right of centerline, 27' AGL/2186' MSL. Tree 1.9 NM from DER, 2091' right of centerline, 100' AGL/2309' MSL.

## WINDOM, MN

WINDOM MUNI (MWM)

ORIG 10322 (FAA)

TAKE-OFF MINIMUMS: **Rwy 35**, 200-1½ or std. w/ min. climb of 225' per NM to 1700, or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1700' prior to DER.NOTE: **Rwy 17**, trees beginning 1074' from DER, 461' right of centerline, up to 100' AGL/1409' MSL.**Rwy 35**, trees beginning 1.1 NM from DER, 2057' right of centerline, up to 100' AGL/1599' MSL.

## WILLMAR, MN

WILLMAR MUNI-JOHN L. RICE FIELD (BDH)

ORIG 06327 (FAA)

NOTE: **Rwy 31**, tree 1338' from departure end of runway, 740' left of centerline, 67' AGL/1193' MSL.

## WINNER, SD

WINNER RGNL (ICR)

AMDT 3 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwys 3, 21**, NA-Environmental.

## WINONA, MN

WINONA MUNI-MAX CONRAD FIELD (ONA)

AMDT 3 96228 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12**, 300-1 or std. with a min. climb of 320' per NM to 800. **Rwy 17**, 600-1 or std. with a min. climb of 500' per NM to 1300. **Rwy 30**, 500-1 or std. with a min. climb of 500' per NM to 1200.**Rwy 35**, 700-1 or std. with a min. climb of 390' per NM to 1500.DEPARTURE PROCEDURE: **Rwy 12**, climb to 1900 via ONA R-110 before turning. **Rwys 17, 30, 35**, climb runway heading to 1900 before turning.

## WORTHINGTON, MN

WORTHINGTON MUNI (OTG)

AMDT 2 88154 (FAA)

TAKE-OFF MINIMUMS: **Rwy 17**, 300-1.DEPARTURE PROCEDURE: **Rwys 11, 17, 29, 35**, when weather is below 800-1 climb runway heading to 2400 before turning.

## YANKTON, SD

CHAN GURNEY MUNI (YKN)

AMDT 2 85003 (FAA)

TAKE-OFF MINIMUMS: **Rwy 31**, 300-1.DEPARTURE PROCEDURE: **Rwys 1, 13, 19, 31**, climb runway heading to 2400 before turning.

12 JAN 2012 to 09 FEB 2012

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# TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES