

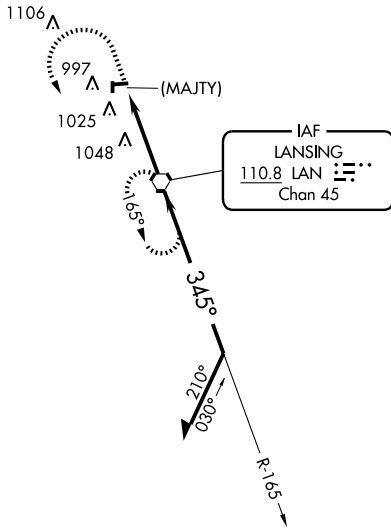


|  |                        |                             |  |
|--|------------------------|-----------------------------|--|
| VORTAC LAN<br><b>110.8</b><br>Chan <b>45</b> | APP CRS<br><b>345°</b> | Rwy Idg<br>TDZE<br>Apt Elev | <b>N/A</b><br><b>N/A</b><br><b>842</b> |
|--|------------------------|-----------------------------|--|

**VOR or GPS-A**  
GRAND LEDGE / ABRAMS MUNI (4DØ)

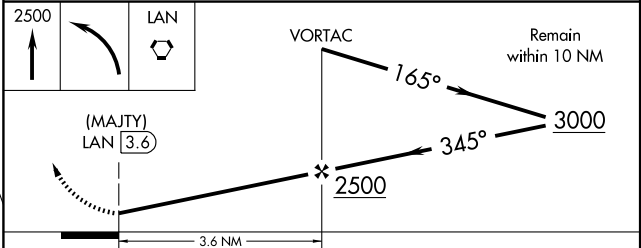
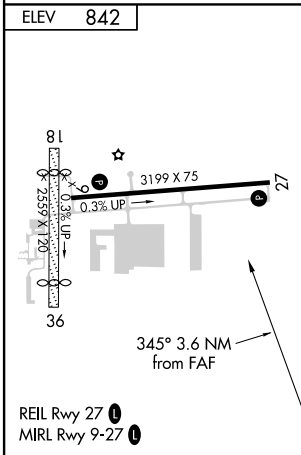
|                         |                                |  |
|-------------------------|--------------------------------|--|
| <b>▽</b><br><b>▲</b> NA | Use Lansing altimeter setting. | MISSED APPROACH: Climb to 2500, then turn left direct LAN VORTAC and hold. |
|-------------------------|--------------------------------|--|

|  |                                 |
|--|---------------------------------|
| LANSING APP CON<br><b>118.65 226.4</b> | UNICOM<br><b>122.7 (CTAF) 0</b> |
|--|---------------------------------|



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|                   |        |      |             |      |                         |    |
|-------------------|--------|------|-------------|------|-------------------------|----|
| FAF to MAP 3.6 NM |        |      |             |      |                         |    |
| Knots             | 60     | 90   | 120         | 150  | 180                     |    |
| Min:Sec           | 3:36   | 2:24 | 1:48        | 1:26 | 1:12                    |    |
| CATEGORY          | A      |      | B           |      | C                       | D  |
| CIRCLING          | 1400-1 |      | 558 (600-1) |      | 1400-1½<br>558 (600-1½) | NA |

# TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

12152

## INSTRUMENT APPROACH PROCEDURE CHARTS

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

#### Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude, and/or airports that have civil IFR 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

##### ADRIAN, MI

LENAWEE COUNTY (ADG)

ORIG 07130 (FAA)

TAKE-OFF MINIMUMS: **Rwy 11, 29**, NA-ATC.

NOTE: **Rwy 5**, multiple trees beginning 1837' from departure end of runway, 149' left of centerline, up to 75' AGL/873' MSL. Multiple trees beginning 953' from departure end of runway, 146' right of centerline, up to 74' AGL/872' MSL. **Rwy 23**, tree 1231' from departure end of runway, 633' left of centerline, 55' AGL/849' MSL.

##### ALLEGAN, MI

PADGHAM FIELD (35D)

AMDT 2 10042 (FAA)

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

DEPARTURE PROCEDURE: **Rwy 11**, climb heading 103° to 1200 before turning right.

NOTE: **Rwy 11**, multiple trees beginning 46' from DER, 10' left of centerline, up to 97' AGL/806' MSL. Multiple trees beginning 1' from DER, 2' right of centerline, up to 100' AGL/794' MSL. **Rwy 29**, multiple trees beginning 37' from DER, 4' left of centerline, up to 83' AGL/802' MSL. Multiple trees beginning 22' from DER, 20' right of centerline, up to 84' AGL/803' MSL.

#### NAME TAKE-OFF MINIMUMS

##### ALMA, MI

GRATIOT COMMUNITY (AMN)

ORIG 10042 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9**, 400-3 or std. w/ min. climb of 251' per NM to 1400.

NOTE: **Rwy 9**, multiple trees beginning 841' from DER, 438' right of centerline, up to 58' AGL/817' MSL. Multiple trees beginning 1383' from DER, 380' left of centerline, up to 71' AGL/820' MSL. **Rwy 18**, multiple trees beginning 1067' from DER, 152' right of centerline, up to 70' AGL/829' MSL. Multiple trees beginning 923' from DER, 374' left of centerline, up to 70' AGL/824' MSL. **Rwy 27**, multiple trees beginning 306' from DER, 272' right of centerline, up to 81' AGL/840' MSL. Multiple trees beginning 1168' from DER, 593' left of centerline, up to 93' AGL/852' MSL. **Rwy 36**, multiple trees beginning 239' from DER, 3' right of centerline, up to 86' AGL/845' MSL. Multiple trees beginning 143' from DER, 38' left of centerline, up to 103' AGL/852' MSL.

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**ALPENA, MI**ALPENA COUNTY RGNL (APN)  
ORIG 09015 (FAA)

NOTE: **Rwy 1**, tree 2293' from departure end of runway, 525' left of centerline, 100' AGL/749' MSL. **Rwy 7**, trees beginning 858' from departure end of runway, 567' right of centerline up to 100' AGL/774' MSL. Trees beginning 1059' from departure end of runway, 166' left of centerline up to 100' AGL/769' MSL. **Rwy 19**, trees beginning 1789' from departure end of runway, 270' left of centerline up to 100' AGL/779' MSL. Trees beginning 1049' from departure end of runway, 777' right of centerline up to 100' AGL/789' MSL. Vent on cable 44' from departure end of runway, 147' left of centerline up to 25' AGL/685' MSL. **Rwy 25**, trees beginning 652' from departure end of runway, 53' left of centerline up to 100' AGL/755' MSL. Trees beginning 1021' from departure end of runway, 275' right of centerline up to 100' AGL/751' MSL.

**ANN ARBOR, MI**ANN ARBOR MUNI (ARB)  
AMDT 9 10322 (FAA)TAKE-OFF MINIMUMS: **Rwys 12, 30**, NA-  
Environmental.

NOTE: **Rwy 6**, building and multiple poles beginning 312' from DER, 385' right of centerline, up to 24' AGL/853' MSL. Multiple trees beginning 538' from DER, 47' right of centerline, up to 100' AGL/929' MSL. Building 99' from DER, 351' left of centerline, 22' AGL/849' MSL. Multiple trees beginning 634' from DER, 182' left of centerline, up to 58' AGL/887' MSL. **Rwy 24**, terrain 138' from DER, 475' right of centerline, 837' MSL. Multiple trees beginning 462' from DER, 486' right of centerline, 50' AGL/885' MSL. Multiple trees beginning 479' from DER, 473' left of centerline, up to 100' AGL/926' MSL.

**BAD AXE, MI**HURON COUNTY MEMORIAL (BAX)  
AMDT 4 07354 (FAA)

NOTE: **Rwy 4**, vehicle on road 244' from departure end of runway, 531' left of centerline, 15' AGL/774' MSL. Tree 810' from departure end of runway, 43' left of centerline, 100' AGL/859' MSL. Vehicle on road 223' from departure end of runway, 470' right of centerline, 15' AGL/774' MSL. **Rwy 17**, vehicle on road 164' from departure end of runway, on centerline, 15' AGL/784' MSL. Bush 81' from departure end of runway, 497' right of centerline, 4' AGL/757' MSL. Railroad 695' from departure end of runway, 684' right of centerline, 23' AGL/792' MSL. Terrain beginning 222' from departure end of runway, 70' right of centerline, 0' AGL/757' MSL. Trees beginning 855' from departure end of runway, 392' right of centerline, up to 100' AGL/879' MSL. Pole 1135' from departure end of runway, 755' left of centerline, 35' AGL/798' MSL. Terrain beginning 44' from departure end of runway, 9' left of centerline, 0' AGL/765' MSL. Trees beginning 1693' from departure end of runway, 372' left of centerline, up to 100' AGL/859' MSL. **Rwy 22**, terrain beginning 3' from departure end of runway, 172' left of centerline, 0' AGL/765' MSL. Tree 2334' from departure end of runway, 422' left of centerline, 100' AGL/869' MSL. Terrain beginning 49' from departure end of runway, 165' right of centerline, 0' AGL/762' MSL. Railroad 41' from departure end of runway, 390' right of centerline, 23' AGL/782' MSL. **Rwy 35**, antenna on tower 355' from departure end of runway, 478' right of centerline, 34' AGL/793' MSL. Antenna 359' from departure end of runway, 477' right of centerline, 30' AGL/793' MSL. Vehicle on road 575' from departure end of runway, 412' right of centerline, 15' AGL/778' MSL. Trees beginning 1259' from departure end of runway, 53' right of centerline, up to 100' AGL/842' MSL. Trees beginning 1509' from departure end of runway, 375' left of centerline, up to 100' AGL/859' MSL. Tower 1085' from departure end of runway, 698' left of centerline, 63' AGL/822' MSL.

**BALDWIN, MI**BALDWIN MUNI (7D3)  
ORIG 84075 (FAA)TAKE-OFF MINIMUMS: **Rwys 5, 9, 23, 27**, 300.-1.**BATTLE CREEK, MI**W. K. KELLOGG (BTL)  
AMDT 3 11125 (FAA)TAKE-OFF MINIMUMS: **Rwys 5R, 23L**, NA-  
Environmental.

NOTE: **Rwy 5L**, trees beginning 1590' from DER, 484' right of centerline, up to 80' AGL/999' MSL. Vehicle on road 896' from DER, left and right of centerline, 17' AGL/956' MSL. **Rwy 13**, vehicles on road 480' from DER, on centerline, 15' AGL/945' MSL. Trees beginning 800' from DER, 3' right of centerline, up to 102' AGL/1021' MSL. Trees and fence beginning 193' from DER, 31' left of centerline, up to 101' AGL/1030' MSL. **Rwy 23R**, trees beginning 1995' from DER, 3' right of centerline, up to 103' AGL/1072' MSL. Trees beginning 2065' from DER, 25' left of centerline, up to 80' AGL/1049' MSL. **Rwy 31**, trees and tower beginning 1797' from DER, 2' right of centerline, up to 166' AGL/1 058' MSL. Trees and railroad beginning 14' from DER, 116' left of centerline, up to 68' AGL/977' MSL.

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


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**BAY CITY, MI**

JAMES CLEMENTS MUNI (3CM)

AMDT 5 86128 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9, 18, 23, 27, 36**, 300-1. **Rwy 5**, 900-2.DEPARTURE PROCEDURE: **Rwys 23, 27, 36**, climb runway heading to 2100 before turning. **Rwy 9**, left turn climb heading 070° to 2100 before turning. **Rwy 5**, right turn climb heading 070° to 2100 before turning. **Rwy 18**, right turn climb heading 230° to 2100 before turning.**BEAVER ISLAND, MI**

BEAVER ISLAND (SJX)

ORIG 98001 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9, 27**, 300-1.**Rwys 5, 14, 23, 32**, NA.**BELLAIRE, MI**

ANTRIM COUNTY (ACB)

AMDT 6 06215 (FAA)

TAKE-OFF MINIMUMS: **Rwy 2**, 700-3 or std. w/a min. climb of 417' per NM to 1500.DEPARTURE PROCEDURE: **Rwy 2**, climb heading 022° to 1200 before turning right. **Rwy 20**, climb heading 202° to 1300 before turning left.NOTE: **Rwy 2**, road 385' from departure end of runway, 528' right of centerline, 15' AGL/646' MSL. Multiple trees beginning 2535' from departure end of runway, 96' left of centerline, up to 100' AGL/884' MSL. Multiple trees beginning 406' from departure end of runway, 235' right of centerline, up to 100' AGL/1147' MSL. Tower 2.57 NM from departure end of runway, 3271' right of centerline, 168' AGL/1198' MSL.**Rwy 20**, multiple trees beginning 64' from departure end of runway, 204' right of centerline up to 100' AGL/693' MSL. Multiple buildings and antenna on tower beginning 2641' from departure end of runway, 909' right of centerline, up to 121' AGL/721' MSL. Multiple trees beginning 125' from departure end of runway, 220' left of centerline, up to 100' AGL/720' MSL.**BENTON HARBOR, MI**

SOUTHWEST MICHIGAN RGNL (BEH)

AMDT 7 11237 (FAA)

TAKE-OFF MINIMUMS: **Rwy 32**, 200-1½ or std. w/min. climb of 283' per NM to 900.NOTE: **Rwy 10**, trees beginning 39' from DER, right and left of centerline, up to 100' AGL/760' MSL. Pole 1036' from DER, 551' right of centerline, 25' AGL/676' MSL. Towers 4217' from DER, 221' left of centerline, 100' AGL/755' MSL. **Rwy 14**, trees, buildings, poles, and vehicles on road beginning 550' from DER, right and left of centerline, up to 100' AGL/748' MSL. Tower 1979' from DER, 528' left of centerline, 65' AGL/713' MSL. Stack 2200' from DER, 373' left of centerline, 40' AGL/689' MSL. **Rwy 18**, vehicles on road, trees, buildings, and poles beginning 15' from DER, right and left of centerline, up to 100' AGL/732' MSL. Fence 190' from DER, 263' left of centerline, 8' AGL/632' MSL. **Rwy 28**, trees beginning 583' from DER, 590' right of centerline, up to 100' AGL/662' MSL. Pole and rod 956' from DER, 312' left of centerline, up to 50' AGL/663' MSL. Trees beginning 1150' from DER, 634' left of centerline, up to 100' AGL/698' MSL.**Rwy 32**, trees and towers beginning 77' from DER, right and left of centerline, up to 100' AGL/819' MSL.**Rwy 36**, trees beginning 20' from DER, right and left of centerline, up to 100' AGL/732' MSL. Bush 107' from DER. 54' right of centerline, 15' AGL/634' MSL. Pole 1626' from DER, 817' right of centerline, 115' AGL/725' MSL. Pole and tower 2661' from DER, 92' left of centerline, 170' AGL/711' MSL.**BERRIEN SPRINGS, MI**

ANDREW UNIVERSITY AIRPARK (C20)

ORIG 03023 (FAA)

TAKE-OFF MINIMUMS: **Rwys 3, 13, 21**, NA. **Rwy 31**, 700-1½ or std. with a min. climb of 260' per NM to 1500. NA at night.NOTE: **Rwy 31**, tower 6789' northeast of departure end of runway, 565' AGL/1224' MSL.**BIG RAPIDS, MI**

ROBEN-HOOD (RQB)

AMDT 5 96116 (FAA)

TAKE-OFF MINIMUMS: **Rwys 14, 27**, 300-1.

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**BOYNE CITY, MI**

BOYNE CITY MUNI (N98)  
ORIG 12152 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9**, 600-3 w/min. climb of 207' per NM to 1400, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1600' prior to DER, or std. w/min. climb of 500' per NM to 1400.

**Rwy 27**, 300-½ w/min. climb of 230' per NM to 1800.  
DEPARTURE PROCEDURE: **Rwy 27**, climb heading 278° to 1900 before turning left.

NOTE: **Rwy 9**, trees beginning 9' from DER, 23' right of centerline, up to 100' AGL/1167' MSL. Trees beginning 38' from DER, 299' left of centerline; up to 100' AGL/1167' MSL. Navaid 13' from DER, 112' left of centerline, 24' AGL/661' MSL. Vehicles on roads beginning 102' from DER, crossing left to right of centerline, up to 15' AGL/680' MSL. T-L towers beginning 730' from DER, 177' right of centerline, up to 75' AGL/732' MSL. Poles beginning 735' from DER, 180' right of centerline, up to 98' AGL/1109' MSL. Sign 218' from DER, 146' right of centerline, 22' AGL/669' MSL. Ground beginning 5490' from DER, 1064' left of centerline, up to 1070' MSL. Catenary 1.3 NM from DER, 6' right of centerline, 936' MSL. **Rwy 27**, trees beginning 30' from DER, 437' right of centerline, up to 100' AGL/743' MSL. Trees beginning 65' from DER, 203' left of centerline, up to 100' AGL/743' MSL. Buildings beginning 30' from DER, 437' right of centerline, up to 47' AGL/691' MSL. Vehicles on roads beginning 65' from DER, 203' left of centerline, up to 15' AGL/676' MSL. Poles beginning 113' from DER, 515' left of centerline, up to 36' AGL/693' MSL. Antenna on building 118' from DER, 374' left of centerline, 37' AGL/694' MSL. Fence beginning 172' from DER, 67' left of centerline, up to 12' AGL/662' MSL. Antenna 765' from DER, 226' right of centerline, 36' AGL/683' MSL.

**BOYNE FALLS, MI**

BOYNE MOUNTAIN (BFA)  
AMDT 3 96340 (FAA)

TAKE-OFF MINIMUMS: **Rwy 17**, 1000-1. **Rwy 35**, 500-1.  
DEPARTURE PROCEDURE: **Rwys 17,35**, climb runway heading to 2000 before turning.

**CADILLAC, MI**

WEXFORD COUNTY (CAD)  
AMDT 7 09183 (FAA)

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

DEPARTURE PROCEDURE: **Rwy 25**, climb heading 250° to 1800 before turning left.

NOTE: **Rwy 7**, trees beginning 783' from DER, 129' right of centerline, up to 53' AGL/1348' MSL. Trees beginning 849' from DER, 348' left of centerline, up to 74' AGL/1378' MSL. Poles beginning 1221' from DER, 596' left of centerline, up to 30' AGL/1336' MSL. Poles beginning 1228' from DER, 366' right of centerline, up to 38' AGL/1333' MSL. Train and tracks 1386' from DER, 819' left of centerline, 23' AGL/1335' MSL. **Rwy 25**, bush 14' from DER, 275' right of centerline, 10' AGL/1317' MSL. Vehicle and road 660' from DER, 623' left of centerline, 15' AGL/1327' MSL.

**CARO, MI**

TUSCOLA AREA (CFS)  
AMDT 1 08325 (FAA)

TAKE-OFF MINIMUMS: **Rwys 12, 30**, NA-  
Environmental.

NOTE: **Rwy 5**, vehicle on highway 2163' from departure end of runway, 648' left of centerline, 17' AGL/786' MSL. Trees beginning 865' from departure end of runway, 248' right of centerline, up to 100' AGL/809' MSL. **Rwy 23**, trees beginning 990' from departure end of runway, 581' right of centerline, up to 100' AGL/789' MSL.

**CHARLEVOIX, MI**

CHARLEVOIX MUNI (CVX)  
AMDT 4 05020 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 22**, N/A.

NOTES: **Rwy 9**, terrain beginning at departure end of runway, left and right of centerline up to 660' MSL. **Rwy 27**, terrain beginning at departure end of runway, left and right of centerline up to 693' MSL.

**CHARLOTTE, MI**

FITCH H BEACH (FPK)  
AMDT 2 92065 (FAA)

TAKE-OFF MINIMUMS: **Rwys 2, 14, 20, 32**, 300-1.

DEPARTURE PROCEDURE: **Rwy 20**, climb runway heading to 1500 before turning.

**CHEBOYGAN, MI**

CHEBOYGAN COUNTY (SLH)  
AMDT 3 86156 (FAA)

TAKE-OFF MINIMUMS: **Rwys 10, 16**, 300-1.

**CLARE, MI**

CLARE MUNI (48D)

TAKE-OFF MINIMUMS: **Rwys 8, 13, 26, 31**, 300-1.

**COLDWATER, MI**

BRANCH COUNTY MEMORIAL (OEB)  
AMDT 4 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwys 16, 34**, NA-  
Environmental.

NOTE: **Rwy 4**, vehicles on road and trees beginning 5' from departure end of runway, 92' right of centerline, up to 100' AGL/1059' MSL. Vehicles on road and trees beginning 347' from departure end of runway, 317' left of centerline, up to 100' AGL/1,059' MSL. **Rwy 7**, trees beginning 1246' from departure end of runway, 430' left of centerline, up to 100' AGL/1059' MSL. Vehicles on road and trees beginning 154' from departure end of runway, 315' right of centerline, up to 100' AGL/1039' MSL. Pole 336' from departure end of runway, 274' right of centerline, 18' AGL/977' MSL. **Rwy 22**, trains on railroad and trees beginning 769' from departure end of runway, 986' left to 945' right of centerline, up to 100' AGL/1099' MSL. **Rwy 25**, vehicles on road and trees beginning 1171' from departure end of runway, 394' left of centerline, up to 100' AGL/1,059' MSL. Trees beginning 732' from departure end of runway, 95' right of centerline, up to 100' AGL/1034' MSL.

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## DAVISON, MI

ATHELONE WILLIAMS MEMORIAL (6G0)  
AMDT 2 97338 (FAA)  
TAKE-OFF MINIMUMS: **Rwys 8, 26**, 300-1.

## DETROIT, MI

COLEMAN A. YOUNG MUNI (DET)  
AMDT 7 10322 (FAA)

TAKE-OFF MINIMUMS: **Rwy 25**, std. with a minimum climb of 215' per NM to 1400, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1300' prior to DER.

DEPARTURE PROCEDURE: **Rwy 33**, climb heading 328° to 1800 before turning left.

NOTE: **Rwy 7**, multiple poles, lights and trees, stack and antenna beginning 132' from DER, from 405' left to 314' right of centerline, up to 60' AGL/687' MSL. **Rwy 15**, trees, antenna on building, and OB light on building beginning 299' from DER, 289' right of centerline, up to 68' AGL/692' MSL. Trees and rod, antenna, pipe and floodlight on buildings beginning 450' from DER, 221' left of centerline, up to 78' AGL/692' MSL. Tower 3375' from DER, 1117' right of centerline, 103' AGL/723' MSL. building 3748' from DER, 569' left of centerline, 114' AGL/723' MSL. **Rwy 25**, railroad, construction lights on buildings and stacks, trees and stack beginning 1' from DER, 12' left of centerline, up to 76' AGL/703' MSL. Trees and light beginning 334' from DER, 132' right of centerline, up to 58' AGL/685' MSL. Tower 2827' from DER, 1225' left of centerline, 141' AGL/770' MSL. Stack 1.5 NM from DER, 2414' left of centerline, 241' AGL/872' MSL. **Rwy 33**, trees beginning 113' from DER, 118' left of centerline, up to 73' AGL/694' MSL. Trees beginning 572' from DER, 84' right of centerline, up to 92' AGL/709' MSL. Flag pole 963' from DER, 379' left of centerline, 28' AGL/658' MSL.

## DETROIT, MI (CON'T)

DETROIT METROPOLITAN/WAYNE COUNTY  
(DTW)  
AMDT1 10322 (FAA)

NOTE: **Rwy 3R**, headwall 399' from DER, 566' right of centerline, 17' AGL/647' MSL. **Rwy 3L**, tree 3794' from DER, 1441' left of centerline, 100' AGL/734' MSL. **Rwy 4R**, trees beginning 2850' from DER, 1058' left of centerline, up to 100' AGL/744' MSL. Antenna on building 3348' from DER, 1301' left of centerline, 100' AGL/736' MSL. **Rwy 4L**, transmission towers beginning 1516' from DER, 827' left of centerline, up to 60' AGL/690' MSL. Rods on towers beginning 2751' from DER, 762' right of centerline, up to 41' AGL/714' MSL. **Rwy 9R**, trees beginning 1172' from DER, 686' right of centerline, up to 100' AGL/729' MSL. **Rwy 9L**, trees beginning 968' from DER, 461' left of centerline, up to 15' AGL/682' MSL. Trees beginning 987' from DER, 607' right of centerline, up to 45' AGL/715' MSL. **Rwy 21R**, tree 1963' from DER, 554' left of centerline, 100' AGL/739' MSL. Trees beginning 2468' from DER, 721' right of centerline, up to 100' AGL/739' MSL. **Rwy 21L**, trees beginning 1079' from DER, 586' left of centerline, up to 100' AGL/739' MSL. Tree 3910' from DER, 1188' right of centerline, 101' AGL/733' MSL. **Rwy 22R**, trees beginning 1014' from DER, 729' left of centerline, up to 100' AGL/749' MSL. Trees beginning 1039' from DER, 680' right of centerline, up to 100' AGL/749' MSL. **Rwy 22L**, bush 514' from DER, 619' right of centerline, 17' AGL/652' MSL. Trees beginning 794' from DER, 611' right of centerline, up to 100' AGL/739' MSL. Trees beginning 1726' from DER, 921' left of centerline, up to 100' AGL/744' MSL. **Rwy 27R**, trees beginning 2998' from DER, 949' left of centerline, up to 100' AGL/754' MSL. Rod on OLASR 4461' from DER, 464' left of centerline, 106' AGL/756' MSL. Multiple trees beginning 3289' from DER, 1239' right of centerline, up to 100' AGL/744' MSL. **Rwy 27L**, trees beginning 2623' from DER, 693' left of centerline, up to 100' AGL/744' MSL. Tree 3589' from DER, 777' right of centerline, 100' AGL/739' MSL.

## WILLOW RUN (YIP)

AMDT 10 10322 (FAA)

TAKE-OFF MINIMUMS: **Rwy 14**, N/A. **Rwy 27**, 300-1½ or std. w/ min. climb of 206' per NM to 1000, 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 5R**, trees beginning 1877' from DER, 803' right of centerline, up to 78' AGL/763' MSL. Trees beginning 2028' from DER, 134' left of centerline, up to 80' AGL/777' MSL.

**Rwy 5L**, trees beginning 2091' from DER, 224' left of centerline, up to 100' AGL/809' MSL. **Rwy 23R**, sign 73' from DER, 255' left of centerline, 10' AGL/718' MSL. Vehicle on road 587' from DER, 294' right of centerline, 15' AGL/732' MSL. Trees beginning 1020' from DER, 281' right of centerline, up to 60' AGL/793' MSL. Tree 1333' from DER, 316' left of centerline, 55' AGL/757' MSL. **Rwy 23L**, sign 44' from DER, 499' right of centerline, 8' AGL/718' MSL. Tree 1304' from DER, 438' right of centerline, 42' AGL/757' MSL. Tree 2457' from DER, 720' left of centerline, 66' AGL/781' MSL. **Rwy 27**, tree and poles beginning 102' from DER. 353' right of centerline, up to 56' AGL/771' MSL. Railroad and lights beginning 564' from DER, 4' left of centerline, up to 55' AGL/770' MSL. Light on building 724' from DER, 333' left of centerline, 35' AGL/746' MSL. Tower 7161' from DER, 502' left of centerline, 162' AGL/900' MSL. **Rwy 32**, poles and trees beginning 1302' from DER 79' left of centerline, up to 84' AGL/798' MSL. Tree 1758' from DER, 125' right of centerline, 70' AGL/780' MSL.

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## DETROIT/GROSSE ILE, MI

GROSSE ILE MUNI (ONZ)

AMDT 4 97198 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 17, 22, 300-1.****Rwy 35**, 800-2 or 300-1 with a min. climb of 210' per NM to 1400.

## DOWAGIAC, MI

DOWAGIAC MUNI (C91)

AMDT 5 10210 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 21, NA-**  
Environmental.

NOTE: **Rwy 9**, building, 258' from DER, 549' right of centerline, 26' AGL/778' MSL. Multiple poles beginning 372' from DER, 432' right of centerline, up to 42' AGL/795' MSL. Antenna, 459' from DER, 367' right of centerline, 35' AGL/787' MSL. Antenna, 615' from DER, 341' right of centerline, 35' AGL/775' MSL. Multiple poles beginning 654' from DER, 341' left of centerline, up to 48' AGL/779' MSL. Trees beginning 667' from DER, 21' left of centerline, up to 77' AGL/ 839' MSL. Trees beginning 864' from DER, 7' right of centerline, up to 121' AGL/879' MSL. **Rwy 27**, trees beginning 21' from DER, 33' right of centerline, up to 93' AGL/828' MSL. Trees beginning 154' from DER, 112' left of centerline, up to 111' AGL/837' MSL.

## DRUMMOND ISLAND, MI

DRUMMOND ISLAND (DRM)

AMDT 1 12152 (FAA)

TAKE-OFF MINIMUMS: **Rwys 1, 19, NA-**  
environmental. **Rwy 8**, 300-1 or std. w/min. climb of 449 per NM to 1000.

NOTE: **Rwy 8**, fence beginning 72' from DER, left and right of centerline, up to 5' AGL/664' MSL. Vehicle on road beginning 199' from DER, left and right of centerline, up to 15' AGL/675' MSL. Buildings beginning 11' from DER, left and right of centerline, up to 20' AGL/679' MSL. Poles 123' from DER, 182' left of centerline, up to 30' AGL/689' MSL. Trees beginning 91' from DER, left and right of centerline, up to 100' AGL/860' MSL. **Rwy 26**, trees beginning 42' from DER, left and right of centerline, up to 100' AGL/ 809' MSL. Buildings beginning 102' from DER, 87' left of centerline, up to 20' AGL/669' MSL.

## EAST TAWAS, MI

IOSCO COUNTY (6D9)

ORIG 81106 (FAA)

DEPARTURE PROCEDURE: **Rwys 8, 26**, climb runway heading to 1100 before turning.

## ESCANABA, MI

DELTA COUNTY (ESC)

ORIG 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 36**, 400-2¼ or std. w/min. climb of 261' per NM to 1100.

NOTE: **Rwy 9**, vehicles on roadway at DER, 272' right of centerline, 15' AGL/607' MSL. Trees beginning 1013' from DER, 444' left of centerline, up to 100' AGL/690' MSL. Trees beginning 1185' from DER, 55' right of centerline, up to 100' AGL/690' MSL. **Rwy 18**, buildings 1' from DER, 480' right of centerline, up to 26' AGL/616' MSL. Fences 139' from DER, 402' right of centerline, up to 9' AGL/599' MSL. Pole 255' from DER, 563' right of centerline, 20' AGL/618' MSL. Trees beginning 329' from DER, 18' left of centerline, up to 100' AGL/664' MSL. Trees beginning 375' from DER, 19' right of centerline, up to 100' AGL/673' MSL. **Rwy 36**, tower 1.87 NM from DER, 2362' left of centerline, 293' AGL/915' MSL. Vehicles on roadway beginning 41' from DER, 40' right of centerline, 15' AGL/621' MSL. Trees beginning 349' from DER, 555' right of centerline, up to 100' AGL/697' MSL. Trees beginning 366' from DER, 2' left of centerline, up to 100' AGL/700' MSL.

## FLINT, MI

BISHOP INTL (FNT)

AMDT 5 02052 (FAA)

NOTE: **Rwy 18**, trees 1200' from departure end of runway, 500' right of centerline, 65' AGL/863' MSL.

## FRANKFORT, MI

FRANKFORT DOW MEMORIAL FIELD (FKS)

AMDT 3 11069 (FAA)

TAKE-OFF MINIMUMS: **Rwy 15**, 400-2¼ or std. w/min. climb of 300' per NM to 1100. **Rwy 33**, 500-2¼ or 300-1 w/min. climb of 600' per NM to 1200.DEPARTURE PROCEDURE: **Rwy 15**, climb heading 143° to 1500 before turning left. **Rwy 33**, climb heading 323° to 1200 before turning.

NOTE: **Rwy 15**, vehicles on roadway, beginning 13' from DER, right and left of centerline, up to 15' AGL/654' MSL. Trees beginning 33' from DER, 507' right of centerline, 100' AGL/706' MSL. Trees beginning 345' from DER, 293' left of centerline, 100' AGL/756' MSL. Trees beginning 1.2 NM from DER, 1030' left of centerline, 100' AGL/969' MSL. Tree 1.9 NM from DER, 903' right of centerline, 100' AGL/936' MSL. Tree 2.2 NM from DER, 15' left of centerline, 100' AGL/953' MSL. **Rwy 33**, vehicles on roadway, beginning 6' from DER, right and left of centerline, up to 15' AGL/687' MSL. Trees beginning 316' from DER, 323' right of centerline, 100' AGL/805' MSL. Trees beginning 470' from DER, 256' left of centerline, 100' AGL/838' MSL. Trees beginning 2759' from DER, 1219' right of centerline, 100' AGL/1035' MSL. Tree 1.3 NM from DER, 379' left of centerline, 100' AGL/1002' MSL.

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## FREMONT, MI

### FREMONT MUNI (FFX)

ORIG 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 27**, 300-1½ or std. w/ a min climb of 211' per NM to 1100, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, take-off must occur no later than 1400' prior to DER.

NOTE: **Rwy 9**, trees beginning 947' from DER, on centerline, up to 100' AGL/866' MSL. **Rwy 18**, trees beginning 1055' from DER, 763' right of centerline, up to 100' AGL/859' MSL. Pole 1140' from DER, 617' right of centerline, 27' AGL/784' MSL. Trees beginning 2276' from DER, 1029' left of centerline, up to 100' AGL/847' MSL. **Rwy 27**, trees beginning 816' from DER, 635' right of centerline, up to 100' AGL/876' MSL. Trees beginning 2640' from DER on centerline, up to 100' AGL/876' MSL. Trees beginning 1.18 NM from DER, 1830' right of centerline, up to 100' AGL/960' MSL. **Rwy 36**, terrain 81' from DER, 484' left of centerline, 774' MSL. Transmission poles beginning 1157' from DER, 728' left to 497' right of centerline, up to 40' AGL/817' MSL. Catenary 1564' from DER, 41' right of centerline, 37' AGL/814' MSL. Trees beginning 1584' from DER, 577' left to 412' right of centerline, up to 67' AGL/844' MSL.

## GAYLORD, MI

### GAYLORD RGNL (GLR)

ORIG 09127 (FAA)

NOTE: **Rwy 9**, trees beginning 917' from DER, 318' right of centerline, up to 57' AGL/1387' MSL. Trees beginning 918' from DER, 357' left of centerline, up to 79' AGL/1407' MSL. Ceilometer 166' from DER, 258' left of centerline, 4' AGL/1334' MSL. **Rwy 18**, powerline pylon 2125' from DER, 917' right of centerline, 79' AGL/1398' MSL. Bushes beginning 18' from DER, 255' left of centerline, up to 21' AGL/1338' MSL. **Rwy 27**, trees beginning 2870' from DER, 345' right of centerline, up to 83' AGL/1403' MSL. Tree 2906' from DER, 234' left of centerline, 75' AGL/1395' MSL. **Rwy 36**, trees and bush beginning 79' from DER, 191' left of centerline, up to 54' AGL/1374' MSL.

## GLADWIN, MI

### CHARLES ZETTEL MEMORIAL (GDW)

AMDT 3 11293 (FAA)

TAKE-OFF MINIMUMS: **Rwy 27**, 400-2 or std. with min. climb of 341' per NM to 1300.

**Rwys 15, 33**, NA - Environmental.

DEPARTURE PROCEDURE: **Rwy 27**, climb heading 272° to 1500 before turning left.

NOTE: **Rwy 9**, trees beginning 42' from DER left and right of centerline, up to 82' AGL/850' MSL. **Rwy 27**, vehicle on road 108' from DER, across centerline, 15' AGL/789' MSL. Trees beginning 736' from DER, left and right of centerline, up to 111' AGL/991' MSL. Tank 5787' from DER, 1118' right of centerline, 170' AGL/996' MSL. Tower 1.5 NM from DER, 1250' right of centerline, 187' AGL/1080' MSL. Tower 1.6 NM from DER, 1390' right of centerline, 199' AGL/1118' MSL.

## GRAND HAVEN, MI

### GRAND HAVEN MEMORIAL AIRPARK (3GM)

AMDT 5 12040 (FAA)

TAKE-OFF MINIMUMS: **Rwy 27**, 300-1½ or std w/min. climb of 231' per NM to 900.

NOTE: **Rwy 9**, trees beginning 23' from DER, left and right of centerline, up to 96' AGL/705' MSL. Terrain beginning 47' from DER, 322' left of centerline, up to 594' MSL. Wire 22' from DER, 1064' left of centerline, 22' AGL/620' MSL. **Rwy 18**, tree 204' from DER, 553' right of centerline, 69' AGL/678' MSL. **Rwy 27**, building 7' from DER, 472' left of centerline, 18' AGL/619' MSL. Trees beginning 25' from DER, 604' right and left of centerline, up to 112' AGL/746' MSL. **Rwy 36**, stack 2732' from DER, 430' left of centerline, 128' AGL/735' MSL.

## GRAND LEDGE, MI

### ABRAMS MUNI (4D0)

AMDT 3 12096 (FAA)

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

**Rwy 27**, 300-1 or std. w/min. climb of 306' per NM to 1100.

NOTE: **Rwy 9**, trees beginning 75' from DER, left and right of centerline, up to 114' AGL/954' MSL. Terrain beginning 82' from DER, 242' right of centerline, up to 852' MSL. Pole 1433' from DER, 61' left of centerline, 45' AGL/877' MSL. Navoids beginning 30' from DER, left and right of centerline, up to 2' AGL/841' MSL. **Rwy 27**, vehicle on road 59' from DER, 359' right of centerline, 15' AGL/846' MSL. Fence 70' from DER, 405' left of centerline, 4' AGL/836' MSL. Navaid 587' from DER, 490' left of centerline, 15' AGL/852' MSL. Buildings beginning 740' from DER, 326' right of centerline, up to 34' AGL/878' MSL. Buildings beginning 771' from DER, 555' left of centerline, up to 21' AGL/859' MSL. Flagpole 819' from DER, 601' right of centerline, 25' AGL/869' MSL. Trees beginning 827' from DER, left and right of centerline, up to 88' AGL/932' MSL. Power poles beginning 868' from DER, left and right of centerline, up to 24' AGL/871' MSL. Tank 4595' from DER, 478' left of centerline, 169' AGL/1004' MSL. Vertical structure, 4597' from DER, 470' left of centerline, 171' AGL/1006' MSL. Elevator 4646' from DER, 555' left of centerline, 162' AGL/997' MSL.

## GRAND RAPIDS, MI

### GERALD R. FORD INTL (GRR)

AMDT 2 09183 (FAA)

NOTE: **Rwy 8L**, vehicle on road 20' from DER, 156' left of centerline, 15' AGL/794' MSL. Trees beginning 1419' from DER, 740' left of centerline, up to 100' AGL/859' MSL. **Rwy 17**, trees beginning 1382' from DER, 134' left of centerline, up to 100' AGL/929' MSL. Trees beginning 1389' from DER, 819' right of centerline, up to 100' AGL/899' MSL. **Rwy 26R**, terrain beginning 102' from DER, 381' right of centerline, up to 808' MSL. **Rwy 35**, vehicle on road 742' from DER, 675' left of centerline, up to 15' AGL/804' MSL. Trees beginning 2002' from DER, 715' left of centerline, up to 100' AGL/869' MSL. Trees beginning 1339' from DER, 7' right of centerline, up to 100' AGL/879' MSL.

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**GRAYLING, MI**

GRAYLING AAF (GOV)  
AMDT 3 10154 (FAA)

NOTE: **Rwy 5**, tree 1192' from DER, 275' right of centerline, 56' AGL/1215' MSL. Tree 1684' from DER, 600' left of centerline, 56' AGL/1225' MSL. **Rwy 14**, tree 435' from DER, 402' right of centerline, 57' AGL/1216' MSL. Antenna 3937' from DER, 1179' right of centerline, 136' AGL/1279' MSL. **Rwy 23**, trees beginning 1438' from DER, 29' right of centerline, up to 100' AGL/1269' MSL. **Rwy 32**, trees beginning 1611' from DER, 50' left of centerline, up to 66' AGL/1216' MSL.

**GREENVILLE, MI**

GREENVILLE MUNI (6D6)  
AMDT 2A 11153 (FAA)

TAKE-OFF MINIMUMS: **Rwys 1,19**, NA, environmental.  
NOTE: **Rwy 10**, trees and poles beginning 128' from DER, 25' left of centerline, up to 100' AGL/925' MSL. Trees and poles beginning 5' from DER, 5' right of centerline, up to 84' AGL/923' MSL. **Rwy 28**, trees and building beginning 34' from DER, 26' right of centerline, up to 87' AGL/942' MSL. Trees beginning 87' from DER, 6' left of centerline, up to 79' AGL/958' MSL.

**HANCOCK, MI**

HOUGHTON COUNTY MEMORIAL (CMX)  
AMDT 3 11349 (FAA)

TAKE-OFF MINIMUMS: **Rwy 25**, 400-2½ or std. w/min. climb of 205' per NM to 1600 or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1300' prior to DER. **Rwy 31**, 300-1½ or std. w/min. climb of 245' per NM to 1400 or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 2200' prior to DER.

NOTE: **Rwy 7**, vehicles on roadway beginning 27' from DER, left and right of centerline, up to 15' AGL/1094' MSL. Trees beginning 445' from DER, 236' left of centerline, up to 59' AGL/1120' MSL. Trees beginning 1491' from DER, 240' right of centerline, up to 61' AGL/1122' MSL. **Rwy 13**, trees beginning 133' from DER, 513' left of centerline, up to 80' AGL/1139' MSL. **Rwy 25**, vehicles on roadway beginning 27' from DER, left and right of centerline, up to 15' AGL/1094' MSL. Trees beginning 386' from DER, 397' left of centerline, up to 84' AGL/1145' MSL. Trees beginning 1769' from DER, 405' right of centerline, up to 77' AGL/1178' MSL. **Rwy 31**, trees beginning 1625' from DER, 77' right of centerline, up to 100' AGL/1299' MSL. Trees beginning 1814' from DER, 496' left of centerline, up to 81' AGL/1202' MSL.

**HARBOR SPRINGS, MI**

HARBOR SPRINGS (MGN)  
AMDT 2 08073 (FAA)

TAKE-OFF MINIMUMS: **Rwy 28**, 300-1½ or std. w/min. climb of 295' per NM to 2000.

DEPARTURE PROCEDURE: **Rwy 10**, Climb heading 101° to 1400 before proceeding on course. **Rwy 28**, Climb heading 281° to 2000 before turning right.

NOTE: **Rwy 10**, trees beginning abeam departure end of runway, 350' right of centerline, up to 100' AGL/788' MSL. Vehicle and road beginning 188' from departure end of runway, left to right of centerline, up to 15' AGL/736' MSL. Trees beginning 1671' from departure end of runway, 720' left of centerline, up to 100' AGL/821' MSL. **Rwy 28**, trees beginning abeam departure end of runway, 398' left of centerline, up to 100' AGL/723' MSL. Trees beginning abeam departure end of runway, 313' right of centerline, up to 100' AGL/936' MSL. Vehicle and road beginning abeam departure end of runway, left to right of centerline, up to 15' AGL/720' MSL.

**HASTINGS, MI**

HASTINGS (9D9)  
ADMT 4 95117 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9,12,18,27**, 300-1.

**HILLSDALE, MI**

HILLSDALE MUNI (JYM)  
ORIG 97310 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10**, 300-1.

**HOLLAND, MI**

WEST MICHIGAN RGNL (BIV)  
AMDT 1 09183 (FAA)

NOTE: **Rwy 8**, vehicles on road beginning 48' from DER, 500' right of centerline, up to 15' AGL/694' MSL. Trees beginning 1828' from DER, 829' left of centerline, up to 72' AGL/741' MSL. **Rwy 26**, vehicles on road beginning 86' from DER, 517' left of centerline, up to 15' AGL/714' MSL, pole 805' from DER, 475' left of centerline, 35' AGL/734' MSL, trees 1056' from DER, 468' left of centerline, up to 41' AGL/740' MSL.

**HOUGHTON LAKE, MI**

ROSCOMMON COUNTY-BLODGETT MEMORIAL (HTL)  
AMDT 1 07298 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9**, 200-1¼, or std. w/min. climb of 237' per NM to 1400. **Rwys 18, 36**, NA-ATC. DEPARTURE PROCEDURE: **Rwy 27**, climb heading 274° to 2600 before turning south.

NOTE: **Rwy 9**, multiple trees beginning 2330' from departure end of runway, on centerline, up to 71' AGL/1216' MSL. Multiple trees beginning 5927' from departure end of runway 275' left of centerline, up to 100' AGL/1299' MSL. Terrain beginning 31' from departure end of runway, 215' right of centerline, up to 0' AGL/1165' MSL. Terrain beginning 43' from departure end of runway, 84' left of centerline, up to 0' AGL/1162' MSL.

**Rwy 27**, multiple trees beginning 791' from departure end of runway, on centerline, up to 90' AGL/1239' MSL. Fence and road beginning 323' from departure end of runway, on centerline, up to 15' AGL/1164' MSL. Terrain beginning 100' from departure end of runway, 171' right of centerline, up to 0' AGL/1165' MSL. Terrain beginning 112' from departure end of runway, 128' left of centerline, up to 0' AGL/1162' MSL.



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## HOWELL, MI

LIVINGSTON COUNTY SPENCER J. HARDY  
(OZW)

AMDT3 06215 (FAA)

NOTE: **Rwy 31**, multiple trees and light pole beginning 138' from departure end of runway, 334' right of centerline, up to 88' AGL/1030' MSL. Multiple trees beginning 914' from departure end of runway, 483' left of centerline, up to 83' AGL/1012' MSL. **Rwy 13**, tree 1776' from departure end of runway, 696' right of centerline, 70' AGL/1009' MSL.

## IONIA, MI

IONIA COUNTY (Y70)

ORIG 83230 (FAA)

DEPARTURE PROCEDURE: **Rwys 9, 18, 27, 36**, climb runway heading to 1400 before turning.

## IRON MOUNTAIN-KINGSFORD, MI

FORD (IMT)

AMDT 5 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 13**, 300-1 or std. w/ min. climb of 590' per NM to 1400. **Rwy 31**, 300-1¼ or std. w/ min. climb of 260' per NM to 1400.

DEPARTURE PROCEDURE: **Rwy 1**, climb heading 010° to 1700 before turning right. **Rwy 13**, climb heading 134° to 1900 before turning left.

NOTE: **Rwy 1**, trees and bushes beginning 526' from DER, 292' right of centerline, up to 79' AGL/1259' MSL. Antenna, trees and bushes beginning 378' from DER, 192' left of centerline, up to 76' AGL/1276' MSL. **Rwy 13**, tree 1276' from DER, 312' right of centerline, 88' AGL/1188' MSL. Trees and poles beginning 547' from DER, 100' left of centerline, up to 86' AGL/1306' MSL. **Rwy 19**, trees beginning 992' from DER, 245' right of centerline, up to 56' AGL/1192' MSL. Trees beginning 1229' from DER, 376' left of centerline, up to 48' AGL/1183' MSL. **Rwy 31**, trees 1711' from DER, 113' right of centerline, 66' AGL/1186' MSL. Bush 165' from DER, 161' right of centerline, 11' AGL/1131' MSL. Trees beginning 66' from DER, 182' left of centerline, up to 95' AGL/1315' MSL.

## IRONWOOD, MI

GOGEBIC-IRON COUNTY (IWD)

AMDT 6 09127 (FAA)

DEPARTURE PROCEDURE: **Rwy 9**, climb heading 090° to 2300 before turning right. **Rwy 27**, climb heading 270° to 1700 before turning left.

NOTE: **Rwy 9**, trees beginning 61' from DER, 544' left of centerline, up to 31' AGL/1244' MSL. Tree 1853' from DER, 972' left of centerline, 100' AGL/1346' MSL.

**Rwy 27**, vehicle on road 287' from DER, 2' right of centerline, 15' AGL/1237' MSL. Tree 1946' from DER, 952' right of centerline, 69' AGL/1283' MSL. Tree 2817' from DER, 588' left of centerline, 74' AGL/1304' MSL.

## JACKSON, MI

JACKSON COUNTY-REYNOLDS FIELD (JXN)

AMDT 5 09295 (FAA)

NOTE: **Rwy 6**, antenna 3131' from DER, 1331' left of centerline, 75' AGL/1075' MSL. **Rwy 14**, tank 2617' from DER, 373' left of centerline, 107' AGL/1107' MSL. Antenna 3102' from DER, 597' left of centerline, 111' AGL/1111' MSL. Trees beginning 1137' from DER, 8' left of centerline, up to 84' AGL/1083' MSL. Trees and poles beginning 518' from DER, 13' right of centerline, up to 114' AGL/1113' MSL. Road plus vehicle 541' from DER, 245' right of centerline, 15' AGL/1015' MSL. **Rwy 24**, trees and poles beginning 367' from DER, 48' left of centerline, up to 80' AGL/1079' MSL. Buildings beginning 125' from DER, 372' left of centerline, 23' AGL/1022' MSL. Fence beginning 88' from DER, 247' right of centerline, 10' AGL/1002' MSL. Road plus vehicle 306' from DER, 3' right of centerline, 15' AGL/1007' MSL. Trees beginning 1231' from DER, 232' right of centerline, up to 62' AGL/1051' MSL. Localizer obstruction light 140' from DER, on centerline, 10' AGL/999' MSL. **Rwy 32**, trees and poles beginning 169' from DER, 69' left of centerline, up to 104' AGL/1093' MSL. Fence beginning 475' from DER, 148' left of centerline, up to 10' AGL/985' MSL. Trees beginning 94' from DER, 5' right of centerline, up to 103' AGL/1092' MSL. Fence beginning 278' from DER, 367' right of centerline, up to 10' AGL/999' MSL.

## KALAMAZOO, MI

KALAMAZOO/BATTLE CREEK INTL (AZO)

AMDT 9 07242 (FAA)

NOTE: **Rwy 5**, light pole 906' from departure end of runway, 511' left of centerline, 25' AGL/879' MSL. Multiple trees beginning 1433' from departure end of runway, 90' left of centerline, up to 65' AGL/914' MSL. Multiple towers beginning 2399' from departure end of runway, 331' right of centerline, up to 119' AGL/970' MSL. Multiple trees beginning 156' from departure end of runway, 163' right of centerline, up to 78' AGL/917' MSL. **Rwy 9**, multiple trees beginning 588' from departure end of runway, on centerline, up to 104' AGL/958' MSL. Antenna 2187' from departure end of runway, 222' right of centerline, 69' AGL/928' MSL. Tree 677' from departure end of runway, 214' right of centerline, 45' AGL/899' MSL. **Rwy 17**, railroad 587' from departure end of runway, 613' left of centerline, 17' AGL/885' MSL. Tree 691' from departure end of runway, 583' right of centerline, 57' AGL/894' MSL. **Rwy 23**, multiple trees beginning 937' from departure end of runway, 50' left of centerline, up to 72' AGL/956' MSL. Multiple poles and hangar beginning 22' from departure end of runway, 331' right of centerline, up to 24' AGL/905' MSL. Multiple trees beginning 943' from departure end of runway, 144' right of centerline, up to 107' AGL/986' MSL. **Rwy 27**, road 543' from departure end of runway, on centerline, 15' AGL/890' MSL. Multiple trees beginning 414' from departure end of runway, 292' left of centerline, up to 23' AGL/972' MSL. Multiple light poles and towers beginning 521' from departure end of runway, 18' right of centerline, up to 180' AGL/1015' MSL. Multiple trees beginning 1012' from departure end of runway, 23' right of centerline, up to 75' AGL/969' MSL. **Rwy 35**, multiple trees beginning 2319' from departure end of runway, 163' left of centerline, up to 75' AGL/934' MSL. Multiple trees beginning 1961' from departure end of runway, 753' right of centerline, up to 77' AGL/936' MSL.

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# TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

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## LAKEVIEW, MI

LAKEVIEW-GRIFFITH FIELD (13C)

ORIG 98281 (FAA)

TAKE-OFF MINIMUMS: **Rwy 27**, 300-1 or std. with min. climb of 400' per NM to 1200.NOTE: **Rwy 9**, 1018' tree 50' from departure end of runway, 490' right of centerline.

## LAMBERTVILLE, MI

TOLEDO SUBURBAN (DUH)

AMDT 1 80360 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9, 27**, 300-1.

## LANSING, MI

CAPITAL REGION INTL (LAN)

AMDT 13 93147 (FAA)

TAKE-OFF MINIMUMS: **Rwys 6, 10L, 24, 28R**, 300-1.DEPARTURE PROCEDURE: **Rwys 10L, 10R**, climb runway heading to 2000 before turning south.**Rwys 6, 24, 28L, 28R**, climb runway heading to 1500 before turning southeast.

## LAPEER, MI

DUPONT-LAPEER (D95)

AMDT 3 86156 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9, 27**, 300-1.

## LINDEN, MI

PRICE'S (9G2)

AMDT 4 98085 (FAA)

TAKE-OFF MINIMUMS: **Rwy 36**, NA.

## LOUDINGTON, MI

MASON COUNTY (LDM)

AMDT 6 92233 (FAA)

TAKE-OFF MINIMUMS: **Rwys 1, 19, 26**, 300-1.

## MACKINAC ISLAND, MI

MACKINAC ISLAND (MCD)

AMDT 1 80164 (FAA)

DEPARTURE PROCEDURE: **Rwy 8**, climb runway heading to 1100 before turning right.

## MANISTEE, MI

MANISTEE COUNTY-BLACKER (MBL)

AMDT 6 11265 (FAA)

TAKE-OFF MINIMUMS: **Rwy 36**, 200-1½ or std. w/ min. climb of 336' per NM to 900.DEPARTURE PROCEDURE: **Rwy 36**, climb heading 002° to 1400 before turning right.NOTE: **Rwy 9**, trees beginning 2701' from DER, on centerline, 100' AGL/727' MSL. Vehicle on road 101' from DER, 393' left of centerline, 15' AGL/636' MSL. **Rwy 18**, trees beginning 79' from DER, 105' left of centerline, up to 100' AGL/678' MSL. Trees beginning 1005' from DER, 366' right of centerline, up to 81' AGL/675' MSL. **Rwy 27**, trees beginning 21' from DER, 86' left of centerline, up to 93' AGL/687' MSL. Trees beginning 2197' from DER, 57' right of centerline, up to 84' AGL/678' MSL. **Rwy 36**, vehicle on road 484' from DER, 158' right of centerline, 15' AGL/632' MSL. Building 3301' from DER, 1095' right of centerline, 33' AGL/727' MSL. Trees beginning 1170' from DER, 127' left of centerline, 110' AGL/806' MSL.

## MANISTIQUE, MI

SCHOOLCRAFT COUNTY (ISQ)

ORIG 11349 (FAA)

NOTE: **Rwy 1**, trees beginning 511' from DER, 54' left of centerline, up to 100' AGL/779' MSL. Trees beginning 753' from DER, 372' right of centerline, up to 100' AGL/779' MSL. Vehicle on road beginning 360' from DER, 587' right of centerline, up to 15' AGL/694' MSL. Power line beginning 446' from DER, 611' right of centerline, up to 30' AGL/709' MSL. Transmission lines beginning 4758' from DER, left and right of centerline, up to 114' AGL/803' MSL. **Rwy 10**, trees beginning 92' from DER, 263' right of centerline, up to 100' AGL/769' MSL. Trees beginning 30' from DER, 165' left of centerline, up to 100' AGL/769' MSL. Trees beginning 1131' from DER, left and right of centerline, up to 100' AGL/769' MSL. **Rwy 19**, trees beginning 50' from DER, left and right of centerline, up to 100' AGL/779' MSL. Vehicle on road beginning abeam DER, 506' left of centerline, up to 15' AGL/694' MSL. Aircraft tail on taxiway abeam DER, 127' right of centerline, up to 19' AGL/698' MSL. Hangar 380' from DER, 540' right of centerline, 20' AGL/699' MSL. Buildings beginning 474' from DER, 220' left of centerline, up to 20' AGL/699' MSL. Vehicle on road 658' from DER, left and right of centerline, up to 15' AGL/694' MSL. Power lines 707' from DER, left and right of centerline, up to 30' AGL/709' MSL. Billboards and buildings beginning 744' from DER, left and right of centerline, up to 20' AGL/699' MSL. Drive-in theater beginning 857' from DER, 510' right of centerline, up to 100' AGL/779' MSL. **Rwy 28**, trees beginning 41' from DER, 376' right of centerline, up to 100' AGL/784' MSL. Poles beginning 1174' from DER, 488' left of centerline, up to 82' AGL/761' MSL. Trees beginning 1254' from DER, 159' left of centerline, up to 100' AGL/779' MSL. Transmission lines beginning 4321' from DER, left and right of centerline, up to 112' AGL/796' MSL.

## MARLETTE, MI

MARLETTE (77G)

ORIG 11125 (FAA)

NOTE: **Rwy 1**, trees beginning 21' from DER, right and left of centerline, up to 100' AGL/950' MSL. Rising terrain beginning 112' from DER, 432' left of centerline, up to 907' MSL. **Rwy 9**, trees beginning 10' from DER, 149' left of centerline, up to 100' AGL/979' MSL. Vehicle on road 882' from DER, right and left of centerline, up to 17' AGL/906' MSL. Building 1035' from DER, 588' right of centerline, 30' AGL/919' MSL. **Rwy 19**, trees beginning abeam DER, 149' left of centerline, up to 100' AGL/979' MSL. Vehicles on road 882' from DER, 730' right of centerline, up to 17' AGL/906' MSL. Building 1035' from DER, 588' right of centerline, 30' AGL/919' MSL. **Rwy 27**, vehicles on road 559' from DER, right and left of centerline. Trees beginning 660' from DER, right and left of centerline, up to 100' AGL/984' MSL.

## MARQUETTE, MI

SAWYER INTL (SAW)

ORIG 10098 (FAA)

NOTE: **Rwy 19**, trees beginning 2582' from DER, left and right of centerline, up to 100' AGL/1269' MSL.

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## MASON, MI

MASON JEWETT FIELD (TEW)

AMDT 2A 10154 (FAA)

NOTE: **Rwy 10**, trees, pole, and vehicle on road beginning 109' from DER, 57' right of centerline, up to 100' AGL/1023' MSL. Poles and vehicles on road 276' from DER, 245' left of centerline, up to 35' AGL/944' MSL.

## MENOMINEE, MI

MENOMINEE-MARINETTE TWIN COUNTY

(MNM)

AMDT 3 09239 (FAA)

NOTE: **Rwy 3**, trees and bush beginning 196' from DER, 340' left of centerline, up to 100' AGL/719' MSL. Multiple trees beginning 1568' from DER, 702' right of centerline, up to 100' AGL/759' MSL. **Rwy 14**, multiple trees, poles, and building beginning 451' from DER, 85' left of centerline, up to 135' AGL/735' MSL. Multiple trees and pole beginning 651' from DER, 171' right of centerline, up to 100' AGL/704' MSL. **Rwy 21**, multiple trees beginning 932' from DER, 469' left of centerline, up to 77' AGL/677' MSL. Multiple trees beginning 1808' from DER, 701' right of centerline, up to 65' AGL/685' MSL. **Rwy 32**, multiple trees beginning 64' from DER, 71' left of centerline, up to 100' AGL/739' MSL. Multiple trees beginning 875' from DER, 15' right of centerline, up to 100' AGL/759' MSL.

## MIDLAND, MI

JACK BARSTOW (IKW)

ORIG 09183 (FAA)

NOTE: **Rwy 6**, trees beginning 56' from DER, 493' right of centerline, up to 25' AGL/655' MSL. Trees beginning 920' from DER, 47' left of centerline, up to 20' AGL/660' MSL. Trees beginning 1144' from DER, from right to left of centerline, up to 100' AGL/754' MSL. Pole 1495' from DER, 331' right of centerline, 37' AGL/672' MSL. **Rwy 18**, trees beginning 339' from DER, 279' left of centerline, up to 100' AGL/729' MSL. Trees beginning 358' from DER, 306' right of centerline, up to 100' AGL/724' MSL. **Rwy 24**, vehicles on road beginning 225' from DER, from right to left of centerline, up to 15' AGL/634' MSL. Trees beginning 510' from DER, 103' right of centerline, up to 100' AGL/710' MSL. Trees beginning 787' from DER, 152' left of centerline, up to 100' AGL/709' MSL. **Rwy 36**, trees beginning 105' from DER, 200' right of centerline, up to 100' AGL/744' MSL. Trees beginning 147' from DER, 242' left of centerline, up to 100' AGL/729' MSL.

## MONROE, MI

CUSTER (TTF)

AMDT 6 08213

NOTE: **Rwy 21**, Trees and light poles beginning 81' from departure end of runway, 9' right of centerline, up to 122' AGL/736' MSL. Trees and light poles beginning 243' from departure end of runway, 218' left of centerline, up to 98' AGL/707' MSL. Road and vehicle beginning 1954' from departure end of runway, on centerline, 15' AGL/626' MSL.

## MOUNT PLEASANT, MI

MOUNT PLEASANT MUNI (MOP)

AMDT 5 09239 (FAA)

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

NOTE: **Rwy 9**, trees beginning 420' from DER, 512' right of centerline, up to 86' AGL/845' MSL. Trees beginning 420' from DER, 266' left of centerline, up to 23' AGL/836' MSL. **Rwy 27**, trees beginning 1115' from DER, 39' right of centerline, up to 99' AGL/858' MSL. Trees beginning 1025' from DER, 3' left of centerline, up to 108' AGL/867' MSL.

## MUSKEGON, MI

MUSKEGON COUNTY (MKG)

AMDT 10 09015 (FAA)

NOTE: **Rwy 6**, tree 1700' from departure end of runway, 600' right of centerline, 25' AGL/672' MSL. Multiple trees beginning 1980' from departure end of runway, 300' left of centerline, up to 75' AGL/709' MSL. **Rwy 14**, pole 1040' from departure end of runway, 700' left of centerline, 25' AGL/655' MSL. Multiple poles beginning 1500' from departure end of runway, 880' right of centerline, up to 50' AGL/677' MSL. Tree 1900' from departure end of runway, 940' left of centerline, 79' AGL/709' MSL. **Rwy 24**, bush 124' from departure end of runway, 480' left of centerline, 19' AGL/630' MSL. Tree 500' from departure end of runway, 300' right of centerline, 42' AGL/649' MSL. Tree 1210' from departure end of runway, 450' left of centerline, 42' AGL/653' MSL. Antenna 1220' from departure end of runway, 500' right of centerline, 43' AGL/654' MSL. Multiple trees beginning 2200' from departure end of runway, 50' left of centerline, up to 86' AGL/697' MSL. **Rwy 32**, tree 1040' from departure end of runway, 740' right of centerline, 65' AGL/659' MSL. Tree 1190' from departure end of runway, 500' left of centerline, 65' AGL/663' MSL. Tree 1270' from departure end of runway, 800' left of centerline, 89' AGL/690' MSL.

## NEWHUDSON, MI

OAKLAND SOUTHWEST (Y47)

AMDT 2 88350 (FAA)

TAKE-OFF MINIMUMS: **Rwys 7, 25**, 300-1.

## NEWBERRY, MI

LUCE COUNTY (ERY)

ORIG 10210 (FAA)

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

NOTE: **Rwy 11**, trees beginning 15' from DER, 112' right of centerline, up to 79' AGL/919' MSL. Trees beginning 1207' from DER, 10' left of centerline, up to 119' AGL, 969' MSL. **Rwy 29**, ground 1' from DER, 221' right of centerline, 0' AGL/872' MSL. Tree 1' from DER, 431' right of centerline, 12' AGL/872' MSL. Trees and antenna on building beginning 88' from DER, 13' left of centerline, up to 84' AGL/954' MSL. Trees, vehicle on road, and antenna on building beginning 561' from DER, 28' right of centerline, up to 89' AGL/959' MSL.

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**NILES, MI**

JERRY TYLER MEMORIAL (3TR)  
AMDT 6 11125 (FAA)

TAKE-OFF MINIMUMS: **Rwy 22**, NA-obstacles.  
NOTE: **Rwy 4**, vehicles on road beginning 192' from DER, crossing left to right of centerline, up to 15' AGL/754' MSL. Trees beginning 360' from DER, 276' right of centerline, up to 100' AGL/849' MSL. Building 410' from DER, 225' left of centerline, 30' AGL/759' MSL. **Rwy 15**, trees beginning 470' from DER, 461' left of centerline, up to 100' AGL/869' MSL. Trees beginning 568' from DER, 187' right of centerline, up to 100' AGL/869' MSL. **Rwy 33**, vehicles on road beginning 198' from DER, crossing right to left of centerline, up to 15' AGL/764' MSL. Building 705' from DER, 604' left of centerline, 30' AGL/779' MSL.

**ONTONAGON, MI**

ONTONAGON COUNTY-SCHUSTER FIELD (OGM)  
AMDT 2 12152 (FAA)

TAKE-OFF MINIMUMS: **Rwy 17**, 300-1¼ or std. w/ a climb gradient of 390' per NM to 1000.  
NOTE: **Rwy 35**, hanger 70' from DER, 467' right of centerline up to 50' AGL/689' MSL. Vehicle on road 225' from DER, 367' right of centerline up to 17' AGL/664' MSL. Trees beginning abeam DER, 537' right of centerline, up to 100' AGL/756' MSL. Trees 80' from DER, 179' left of centerline, up to 100' AGL/756' MSL. Sailing boat 3128' from DER, on centerline, up to 100' AGL/719' MSL. **Rwy 17**, trees beginning 439' from DER, 423' left of centerline up to 100' AGL/901' MSL. Trees beginning 354' from DER, 243' right of centerline, up to 100' AGL/851' MSL.

**OSCODA, MI**

OSCODA-WURTHSMITH (OSC)  
ORIG 08157 (FAA)

NOTE: **Rwy 6**, Trees beginning 3096' from departure end of runway, 967' left of centerline up to 100' AGL/719' MSL. **Rwy 24**, Trees beginning 2192' from departure end of runway, 578' right of centerline up to 100' AGL/739' MSL. Trees beginning 1415' from departure end of runway, 559' left of centerline, up to 100' AGL/739' MSL.

**OWOSSO, MI**

OWOSSO COMMUNITY (RNP)  
AMDT 4 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 6, 18, 24, 36**, NA-Environmental.  
NOTE: **Rwy 11**, bush 187' from departure end of runway, 158' right of centerline, 3' AGL/742' MSL. Trees beginning 1136' from departure end of runway, 630' left of centerline, up to 75' AGL/814' MSL. Trees and pole beginning 1111' from departure end of runway, 596' right of centerline, up to 90' AGL/829' MSL. Powerline with towers beginning 2029' from departure end of runway, left and right of centerline, 90' AGL/829' MSL. **Rwy 29**, bush 212' from departure end of runway, 436' right of centerline, 11' AGL/741' MSL. Vent, trees, and a building beginning 266' from departure end of runway, 46' left of centerline, up to 100' AGL/836' MSL. Trees and a pole beginning 1184' from departure end of runway, 244' right of centerline, up to 60' AGL/815' MSL.

**PELLSTON, MI**

PELLSTON RGNL AIRPORT OF EMMET COUNTY (PLN)  
AMDT 4 09183 (FAA)

TAKE-OFF MINIMUMS: **Rwy 23**, std. w/ a min. climb of 260' per NM to 1800, or 1000-2½ for climb in visual conditions. **Rwy 32**, std. w/ a min. climb of 290' per NM to 1100, or 1000-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 23, 32**, for climb in visual conditions: cross Pellston Rgnl airport of Emmet County at or above 1600.

NOTE: **Rwy 5**, vehicle on road 411' from DER, 588' left of centerline, 15' AGL/738' MSL. Trees beginning 1070' from DER, 12' left of centerline, up to 100' AGL/838' MSL. Railroad 810' from DER, 672' right of centerline, 23' AGL/744' MSL. Trees beginning 1001' from DER, 288' right of centerline, up to 100' AGL/821' MSL.

**Rwy 14**, trees beginning 1290' from DER, 814' left of centerline, up to 100' AGL/805' MSL. **Rwy 23**, vehicle on road 14' from DER, 463' left of centerline, 15' AGL/720' MSL. Trees beginning 476' from DER, 53' left of centerline, up to 100' AGL/805' MSL. Trees beginning 953' from DER, 240' right of centerline, up to 100' AGL/820' MSL. Tree 2.97 NM from DER, 2771' right of centerline, 100' AGL/1297' MSL. **Rwy 32**, bush 107' from DER, 309' right of centerline, 4' AGL/722' MSL. Vehicle on road 1213' from DER, 809' right of centerline, 15' AGL/752' MSL. Terrain 2127' from DER, 715' right of centerline, 775' MSL. Trees beginning 4336' from DER, 315' right of centerline, up to 100' AGL/872' MSL. Trees beginning 1932' from DER, 20' left of centerline, up to 100' AGL/996' MSL.

**PLYMOUTH, MI**

CANTON-PLYMOUTH-METTETAL (1D2)  
TAKE-OFF MINIMUMS: **Rwys 18, 36**, 300-1.

**PONTIAC, MI**

OAKLAND COUNTY INTL (PTK)  
AMDT 6 10322 (FAA)

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

NOTE: **Rwy 9R**, antenna on hanger 870' from DER, 732' right of centerline, 36' AGL/1006' MSL. Trees beginning 1136' from DER, 480' right of centerline, up to 100' AGL/1079' MSL. Trees beginning 1383' from DER, 646' left of centerline, up to 41' AGL/1011' MSL. **Rwy 9L**, hangars beginning 203' from DER, 510' left of centerline, 30' AGL/1000' MSL. Trees beginning 3347' from DER, 1252' left of centerline, up to 100' AGL/1089' MSL.

**Rwy 27R**, vehicle on road 416' from DER, 24' right of centerline, 15' AGL/992' MSL. Trees beginning 451' from DER, 2' right of centerline, up to 62' AGL/1041' MSL. Trees beginning 1234' from DER, 19' left of centerline, up to 36' AGL/1015' MSL. **Rwy 27L**, vehicle on road 401' from DER, 539' left of centerline, 15' AGL/991' MSL. Vehicle on road 417' from DER, 574 right of centerline, 15' AGL/992' MSL. Trees beginning 452' from DER, 552' right of centerline, 23' AGL/1002' MSL. Trees beginning 565' from DER, 521' left of centerline, up to 76' AGL/1046' MSL.

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## PORT HURON, MI

ST. CLAIR COUNTY INTL (PHN)

AMDT 6 11237 (FAA)

NOTE: **Rwy 4**, trees beginning 1196' from DER, 140' right of centerline, up to 115' AGL/764' MSL. Trees and bush beginning 13' from DER, 80' left of centerline, up to 115' AGL/779' MSL. **Rwy 10**, trees and building beginning 150' from DER, 2' right of centerline, up to 115' AGL/769' MSL. Trees beginning 329' from DER, 161' left of centerline, up to 115' AGL/769' MSL. **Rwy 22**, trees beginning 2376' from DER, 171' right of centerline, up to 103' AGL/738' MSL. Trees beginning 2138' from DER, 612' left of centerline, up to 101' AGL/737' MSL.

**Rwy 28**, trees beginning 192' from DER, 361' right of centerline, up to 115' AGL/759' MSL. Trees beginning 667' from DER, 112' left of centerline, up to 114' AGL/749' MSL.

## ROGERS CITY, MI

PRESQUE ISLE COUNTY (PZQ)

AMDT 2 12124 (FAA)

NOTE: **Rwy 9**, trees beginning 348' from DER, 378' left of centerline, up to 100' AGL/759' MSL. Pole 730' from DER, 620' right of centerline, 43' AGL/723' MSL. Trees beginning 899' from DER, 708' right of centerline, up to 100' AGL/789' MSL. Tower 1021' from DER, 68' right of centerline, 44' AGL/716' MSL. **Rwy 27**, trees beginning 940' from DER, 289' left of centerline, up to 100' AGL/799' MSL. Trees beginning 977' from DER, 11' right of centerline, up to 56' AGL/739' MSL.

## ROMEO, MI

ROMEO STATE (D98)

AMDT 4 08101 (FAA)

NOTE: **Rwy 18**, Vehicle on roadway 364' from departure end of runway, on centerline, 15' AGL/744' MSL. Trees beginning 1360' from departure end of runway, 854' left of centerline, up to 100' AGL/825' MSL. **Rwy 36**, Vehicle on roadway 579' from departure end of runway, on centerline, 15' AGL/759' MSL. Trees beginning 955' from departure end of runway, left and right of centerline, up to 100' AGL/845' MSL.

## SAGINAW, MI

MBS INTL (MBS)

ORIG 86240 (FAA)

DEPARTURE PROCEDURE: **Rwys 5, 23**, climb runway heading to 1100 before turning.

SAGINAW COUNTY H.W. BROWNE (HYX)

AMDT 7 86128 (FAA)

TAKE-OFF MINIMUMS: **Rwys 5, 9, 23, 27**, 400-1. DEPARTURE PROCEDURE: **Rwy 9**, climb runway heading to 2100 before turning North. **Rwys 23, 27**, climb runway heading to 2100 before turning Northeast. **Rwy 5**, right turn climb heading 090° to 2100 before turning North.

## ST IGNACE

MACKINAC COUNTY (83D)

ORIG 11125 (FAA)

TAKE-OFF MINIMUMS: **Rwy 25**, 300-1 or std. w/min. climb of 430' per NM to 900.

NOTE: **Rwy 7**, vehicles on road beginning 10' from DER, 322' right of centerline, up to 15' AGL/627' MSL. Trees beginning 70' from DER, 363' right of centerline, up to 85' AGL/686' MSL. Poles beginning 117' from DER, 381' left of centerline, up to 54' AGL/629' MSL. Vehicles on road beginning 310' from DER, left and right of centerline, up to 15' AGL/631' MSL. Poles beginning 602' from DER, 328' right of centerline, up to 54' AGL/644' MSL. Ships beginning 3099' from DER, left and right of centerline, up to 155' AGL/735' MSL. **Rwy 25**, trees beginning 20' from DER, left and right of centerline, up to 85' AGL/809' MSL. Vehicles on road 366' from DER, left and right of centerline, up to 17' AGL/663' MSL. Poles beginning 919' from DER, left and right of centerline, up to 62' AGL/682' MSL.

## SAULT STE MARIE, MI

CHIPPEWA COUNTY INTL (CIU)

ORIG 09295 (FAA)

NOTE: **Rwy 9**, buildings beginning 453' from DER, 519' right of centerline, up to 30' AGL/829' MSL. Building 723' from DER, 461' left of centerline, up to 30' AGL/829' MSL. Trees beginning 1838' from DER, 23' right of centerline, up to 100' AGL/899' MSL.

**Rwy 16**, trees beginning 3645' from DER, extending from 1018' right of centerline to 1221' left of centerline, up to 100' AGL/899' MSL. **Rwy 27**, vehicle on road, 412' from DER, 510' left of centerline, up to 15' AGL/804' MSL. Trees beginning 520' from DER, extending from 581' left of centerline to 827' right of centerline, up to 100' AGL/879' MSL.

SAULT STE MARIE MUNI/SANDERSON FIELD (ANJ)

ORIG 11237 (FAA)

NOTE: **Rwy 14**, trees, poles, and road beginning 25' from DER, 56' left of centerline, up to 54' AGL/763' MSL. Trees and poles beginning 5' from DER, 49' right of centerline, up to 65' AGL/774' MSL. **Rwy 32**, tree 200' from DER, 330' left of centerline, 24' AGL/723' MSL. Trees beginning 91' from DER, 300' right of centerline, up to 24' AGL/723' MSL.

## SELFRIDGE ANGB (KMTC)

MT. CLEMENS, MI . . . . .AMDT 1, 09015

**Rwy 19\***

**Rwy 1, 300-1¼\*\***

\* Standard with a CG of 260'/NM to 1600.

\*\* Or standard with CG of 280'/NM to 1000.

DEPARTURE PROCEDURE: **Rwy 19**, For climb in visual conditions: Ceiling 1300'/Visibility 2½ SM, remain within 5.6 NM of KMTC airport, cross KMTC airport at or above 1700 before proceeding on course. Max airspeed 250 KIAS. **Rwy 1**, Standard with minimum climb of 280'/NM to 1000 or 300-1¼.

TAKE-OFF OBSTACLES: **Rwy 19**: Power poles 2274' from DER 38' right of centerline, 36' AGL/616' MSL. Trees 3310' from DER 929' right of centerline, 80' AGL/660' MSL. **Rwy 1**: Rising terrain 6' out to 237' from DER beginning 500' out to 563' left of centerline, up to 585' MSL (up to 6' above Thr). Fence from 68' out to 220' from DER beginning 341' to 523' right of centerline, 10' AGL/595' MSL. Trees starting 3043' out to 3099' from DER beginning 451' to 927' right of centerline, 80' AGL/660' MSL. Trees starting 2334' out to 3059' from DER beginning 1057' to 1105' left of centerline, 80' AGL/660' MSL. Vehicle 1560' from DER 427' left of centerline, 15' AGL/600' MSL. West bracket reflector 997' from DER 226' left of centerline, 15' AGL/592' MSL.

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# TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

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## SOUTH HAVEN, MI

SOUTH HAVEN AREA RGNL (LWA)  
AMDT 3 11069 (FAA)

TAKE-OFF MINIMUMS: **Rwy 14, 32**, NA-  
Environmental.

NOTE: **Rwy 4**, trees beginning 1440' from DER, 94' left of centerline, up to 93' AGL/773' MSL. Poles beginning 1272' from DER, 122' right of centerline, up to 43' AGL/713' MSL. Trees beginning 1812' from DER, 137' right of centerline, up to 81' AGL/771' MSL. **Rwy 22**, pole 520' from DER, 582' left of centerline, up to 53' AGL/703' MSL. Building 185' from DER, 334' left of centerline, up to 20' AGL/670' MSL. Trees beginning 436' from DER, 428' left of centerline, up to 81' AGL/731' MSL. Trees beginning 1172' from DER, 133' right of centerline, up to 89' AGL/739' MSL.

## SPARTA, MI

PAUL C. MILLER-SPARTA (8D4)  
AMDT 2 10126 (FAA)

NOTE: **Rwy 7**, multiple trees beginning 564' from DER, 105' right of centerline, up to 97' AGL/827' MSL. Tree 782' from DER, 379' left of centerline, 47' AGL/784' MSL.

**Rwy 25**, multiple trees beginning 507' from DER, 47' right of centerline, up to 81' AGL/841' MSL. Tree 117' from DER, 218' left of centerline, 47' AGL/817' MSL. Tree 656' from DER, 464' left of centerline, 67' AGL/822' MSL.

## STURGIS, MI

KIRSCH MUNI (IRS)  
AMDT 3 10294 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6**, 300-2 or std. w/min. climb of 243' per NM to 1200.

DEPARTURE PROCEDURE: **Rwy 18**, climb heading 184° to 1400 before turning left.

NOTE: **Rwy 6**, trees beginning 1476' from DER, 137' left of centerline, up to 60' AGL/1102' MSL. Trees beginning 1945' from DER, 155' right of centerline, up to 60' AGL/984' MSL. Obstruction light on pole 1120' from DER, 401' right of centerline, 50' AGL/957' MSL. Obstruction light on pole 1193' from DER, 236' right of centerline, 50' AGL/957' MSL. Vehicle on road 504' from DER, 289' right of centerline, up to 15' AGL/953' MSL. **Rwy 18**, trees beginning 1687' from DER, 149' right of centerline, up to 60' AGL/971' MSL. Pole 1495' from DER, 842' left of centerline, 70' AGL/979' MSL. **Rwy 24**, trees beginning 1050' from DER, 292' right of centerline, up to 60' AGL/985' MSL. **Rwy 36**, trees beginning 99' from DER, left and right of centerline, up to 60' AGL/1014' MSL.

## TECUMSEH, MI

MEYERS-DIVER'S (3TE)  
AMDT 2 96004 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9**, 300-1.

## TRAVERSE CITY, MI

CHERRY CAPITAL (TVC)  
AMDT 10 11209 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10**, std. w/min. climb of 277' per NM to 1400 or 1400-2½ for climb in visual conditions. **Rwy 18**, std. w/min. climb of 215' per NM to 1400, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1800' prior to DER, or 1400-2½ for climb in visual conditions. **Rwy 28**, std. w/min. climb of 342' per NM to 2100, or 1400-2½ for climb in visual conditions. **Rwy 36**, 400-2½ or std. w/min. climb of 202' per NM to 1100, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1800' prior to DER.

DEPARTURE PROCEDURE: **Rwy 10**, for climb in visual conditions, cross Cherry Capital airport at or above 1900 before proceeding on course. **Rwy 18**, climb heading 185° to 1200 before turning, or for climb in visual conditions, cross Cherry Capital airport at or above 1900 before proceeding on course. **Rwy 28**, for climb in visual conditions, Cross Cherry Capital airport at or above 1900 before proceeding on course. **Rwy 36**, climb heading 005° to 1400 before turning left.

NOTE: **Rwy 10**, trees beginning 1510' from DER, 741' left and 868' right of centerline, up to 100' AGL/696' MSL. Trees beginning 1.4 NM from DER, 1822' right of centerline, up to 100' AGL/941' MSL. **Rwy 18**, trees beginning 321' from DER, across centerline, up to 100' AGL/1009' MSL. Pole 858' from DER, 553' right of centerline, 24' AGL/664' MSL. Pole 1085' from DER, 694' right of centerline, 23' AGL/667' MSL. Transmission line tower 1.9 NM from DER, 3319' left of centerline, 121' AGL/920' MSL. **Rwy 28**, trees beginning 1272' from DER, 9' left and 16' right of centerline, up to 100' AGL/707' MSL. Poles beginning 1274' from DER, 726' left of centerline, up to 25' AGL/665' MSL. Poles beginning 1078' from DER, 620' right of centerline, up to 27' AGL/657' MSL. **Rwy 36**, trees beginning 757' from DER, 4' left and right of centerline, up to 100' AGL/938' MSL. Poles beginning 734' from DER, 1186' left of centerline, up to 72' AGL/683' MSL. Poles beginning 868' from DER, 20' right of centerline, up to 41' AGL/655' MSL.

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# TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

### THREE RIVERS, MI

THREE RIVERS MUNI DR. HAINES (HAI)

ORIG 11349 (FAA)

NOTE: **Rwy 5**, vehicles on road beginning 1' from DER, 221' left of centerline, up to 15' AGL/839' MSL. Trees beginning 1' from DER, left and right of centerline, up to 100' AGL/929' MSL. Airplane on tarmac 2' from DER, 394' right of centerline, 40' AGL/864' MSL. Building 1094' from DER, 537' right of centerline, 25' AGL/849' MSL. **Rwy 9**, vehicles on road 484' from DER, 624' left of centerline, up to 15' AGL/839' MSL. Trees beginning 104' from DER, left and right of centerline, up to 100' AGL/934' MSL. Buildings beginning 1258' from DER, left and right of centerline, up to 25' AGL/859' MSL.

**Rwy 23**, rising terrain beginning 25' from DER, 497' left of centerline, 826' MSL. Vehicles on roads beginning 258' from DER, right and left of centerline, up to 15' AGL/844' MSL. Trees beginning 128' from DER, 125' right of centerline, up to 100' AGL/924' MSL. Buildings beginning 256' from DER, 144' right of centerline, up to 25' AGL/849' MSL. **Rwy 27**, vehicles on road 369' from DER, 595' right of centerline, up to 15' AGL/834' MSL. Building 892' from DER, 678' right of centerline, 25' AGL/844' MSL. Trees beginning 544' from DER, left and right of centerline, up to 100' AGL/924' MSL.

### TROY, MI

OAKLAND/TROY (VLL)

AMDT 4 11069 (FAA)

TAKE-OFF MINIMUMS: **Rwy 27**, 300-1½ or std. w/min. climb of 226' per NM to 1500.

DEPARTURE PROCEDURE: **Rwy 9**, climb heading 096° to 1400 before turning right. **Rwy 27**, climb heading 276° to 1500 before turning left.

NOTE: **Rwy 9**, building 78' from DER, 370' left of centerline, 30' AGL/729' MSL. Buildings and air con on building beginning 314' from DER, 64' right of centerline, up to 47' AGL/745' MSL. Trees beginning 1495' from DER, left and right of centerline, up to 100' AGL/799' MSL. **Rwy 27**, trees, buildings, poles, and a road beginning 2' from DER, 157' left of centerline, up to 53' AGL/773' MSL. Trees beginning 21' from DER, 157' right of centerline, up to 97' AGL/823' MSL. Trees, road, railroad, poles, powerline with catenary balls, and a tower beginning 390' from DER, left and right of centerline, up to 130' AGL/873' MSL.

### WEST BRANCH, MI

WEST BRANCH COMMUNITY (Y31)

AMDT 3 11069 (FAA)

TAKE-OFF MINIMUMS: **Rwy 27**, std. w/min. climb of 313' per NM to 1600 or 1000-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 27**, for climb in visual conditions cross West Branch Community Airport at or above 1700 before proceeding on course.

NOTE: **Rwy 27**, trees beginning 42' from DER, 7' right of centerline, up to 100' AGL/984' MSL. Trees beginning 538' from DER, 194' left of centerline, up to 100' AGL/1094' MSL. **Rwy 9**, trees beginning 24' from DER, 181' left of centerline, up to 100' AGL/959' MSL. Trees beginning 30' from DER, 208' right of centerline, up to 100' AGL/959' MSL.