

**FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP)  
TITLE 14 CFR PART 97.37**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.  
Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
GRAND MARAIS, MN	GRAND MARIAS/COOK COUNTY	2 MARCH 2017	1

**TAKEOFF MINIMUMS:**

RWY 10, 28: STANDARD.

**TEXTUAL DEPARTURE PROCEDURES:**

**VISUAL CLIMB OVER AIRPORT:**

**TAKEOFF OBSTACLE NOTES:**

**NOTE: RWY 10,** RUNWAY LIGHTS BEGINNING 9 FT FROM DER, 16 FT RIGHT OF CENTERLINE, UP TO 2 FT AGL/1796 FT MSL.  
TREES, REIL, RUNWAY LIGHTS, AND TERRAIN BEGINNING 39 FT FROM DER, 77 FT RIGHT OF CENTERLINE, UP TO 1818 FT MSL.  
REIL 40 FT FROM DER, 76 FT LEFT OF CENTERLINE, 3 FT AGL/1797 FT MSL.  
TREES BEGINNING 147 FT FROM DER, 35 FT LEFT OF CENTERLINE, UP TO 1819 FT MSL.  
TREES BEGINNING 536 FT FROM DER, 249 FT RIGHT OF CENTERLINE, UP TO 1820 FT MSL.  
TREES BEGINNING 739 FT FROM DER, 82 FT RIGHT OF CENTERLINE, UP TO 1835 FT MSL.

**NOTE: RWY 28,** TREE AND TERRAIN BEGINNING 8 FT FROM DER, 202 FT LEFT OF CENTERLINE, UP TO 1838 FT MSL.  
TREE AND TERRAIN BEGINNING 43 FT FROM DER, 58 FT RIGHT OF CENTERLINE, UP TO 1824 FT MSL.  
TREE AND TERRAIN BEGINNING 177 FT FROM DER, 41 FT RIGHT OF CENTERLINE, UP TO 38 FT AGL/1837 FT MSL.  
TREES BEGINNING 359 FT FROM DER, 201 FT LEFT OF CENTERLINE, UP TO 1849 FT MSL.  
TREES BEGINNING 388 FT FROM DER, 223 FT RIGHT OF CENTERLINE, UP TO 1847 FT MSL.  
TREES BEGINNING 552 FT FROM DER, 222 FT RIGHT OF CENTERLINE, UP TO 1856 FT MSL.  
TREES BEGINNING 844 FT FROM DER, 236 FT RIGHT OF CENTERLINE, UP TO 1865 FT MSL.  
TREES AND TERRAIN BEGINNING 1061 FT FROM DER, 320 FT RIGHT OF CENTERLINE, UP TO 1867 FT MSL.  
TREES BEGINNING 1355 FT FROM DER, 536 FT RIGHT OF CENTERLINE, UP TO 20 FT AGL/1880 FT MSL.  
TREES BEGINNING 1540 FT FROM DER, 123 FT RIGHT OF CENTERLINE, UP TO 1896 FT MSL.  
TREES BEGINNING 1542 FT FROM DER, 5 FT LEFT OF CENTERLINE, UP TO 1867 FT MSL.  
TREES BEGINNING 2953 FT FROM DER, 92 FT RIGHT OF CENTERLINE, UP TO 1900 FT MSL.  
TREES BEGINNING 3035 FT FROM DER, 32 FT LEFT OF CENTERLINE, UP TO 1890 FT MSL.  
TREES BEGINNING 4461 FT FROM DER, 344 FT RIGHT OF CENTERLINE, UP TO 1924 FT MSL.

**CONTROLLING OBSTACLES:**



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GRAND MARAIS, MN	GRAND MARIAS/COOK COUNTY	2 MARCH 2017	1

**REMARKS:**

REFERENCE MAG VAR: KCKC 1W EPOCH YEAR: 1995

**FLIGHT INSPECTED BY:**

TODD D HAIFLEY

*Digitally signed by*

**DANIEL D OLSON**

Jan 20, 2017

**OFFICE SYMBOL:**

FICO

**DATE:**

01/18/2017

**DEVELOPED BY:**

JOHN THORNTON

*Digitally signed by*

**JOHN R THORNTON**

Nov 15, 2016

**OFFICE SYMBOL:**

AJV-3422

**DATE:**

10/06/2016

**APPROVED BY:**

JULIE MORGAN

*Digitally signed by*

**DANIEL D OLSON**

Jan 20, 2017

**OFFICE SYMBOL:**

AJV-3422

**DATE:**

**REQUIRED EFFECTIVE DATE:**

ROUTINE

**COORDINATED WITH:**

A4A

ALPA

AOPA

APA

HAI

NBAA

☐☒☒☐☐☒

**OTHER:**

ZMP, AMGR

**CHANGES - REASONS:**

1. TAKEOFF MINIMUMS AND TAKEOFF OBSTACLE NOTES: CHANGED RWY 9 AND RWY 27 TO RWY 10 AND RWY 28; MAG VAR WAS PREVIOUSLY UPDATED AND AIRPORT DIDN'T HAVE FUNDING FOR PAINTING; NEW RUNWAY NUMBERS PAINTED IN CONJUNCTION WITH THE RUNWAY CONSTRUCTION THAT EXTENDED THE RWY 10 THRESHOLD.
2. TAKEOFF OBSTACLE NOTES: UPDATED DUE TO NEW OBSTACLE DATA FROM THIRD PARTY VG OIS SURVEY DATED 06/23/2015.
3. REMARKS: ADDED "REFERENCE MAG VAR: KCKC 1W EPOCH YEAR: 1995".