

**FEDERAL AVIATION ADMINISTRATION (FAA)
MISSION SUPPORT SERVICES
AERONAUTICAL INFORMATION SERVICES**

DAILY DIGITAL OBSTACLE FILE (DDOF)

September 8, 2019

DOF CONTACT INFORMATION

**FOR CONCERNS WITH EITHER THE PROGRAM OR THE DATA
INCLUDED WITH THE DOF, PLEASE CONTACT:**

Federal Aviation Administration (FAA)
Aeronautical Information Services
Obstacle Data Team
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Silver Spring, MD 20910-3281
9-AJV-532-OBSTData-REQ@faa.gov

CAUTION

The Daily Digital Obstacle File contains only obstruction data for those man-made objects that affect domestic aeronautical charting products and does not purport to indicate the presence of all obstructions that may be encountered.

NOTE

In the interest of air safety, the Daily Digital Obstacle File depicts both "verified" and "unverified" obstruction data. A verified obstruction is indicated by an "O" in the Verification Status field. This data has either been reviewed by the FAA's Aeronautical Information Services (AIS), Obstacle Data Team (ODT) or has been taken from airport survey data. Verified obstacles have been assigned an accuracy code, indicating the reliability of its vertical height and horizontal position. An unverified obstruction is indicated by a "U" in the Verification Status field. This data is considered unreliable because its position and height have not been verified by the ODT.

Be cautious when using unverified data.

DAILY DIGITAL OBSTACLE FILE

FOREWORD

The Daily Digital Obstacle File (DDOF) is a listing of verified and unverified obstacles in the U.S. with limited coverage of the Pacific, the Caribbean, Canada, Mexico, and the Bahamas. The obstacles are assigned unique alphanumeric identifiers and are listed in order by ascending latitude within each state or country.

The Daily Change File is a listing of all DOF changes and is also updated daily. This file is ordered

by ascending file number. The file formats are included on the following pages.

When opening this file, please use Wordpad, Internet Explorer, or Mozilla Firefox. You may also use Notepad, but the lack of column formatting is harder to read.

SPECIAL NOTICE

Important Information on the Horizontal Datum

The World Geodetic System 1984 (WGS 84) is used as the horizontal datum for all DDOF data. All obstacle data has been converted to WGS 84 as of November 19, 2007.

OAS NUMBER

All obstacles are assigned a unique number based on state or country. The OAS_NUMBER consists of a two-digit code, a dash, and a six-character number.

FORMAT FOR DATA IN THE DAILY DIGITAL OBSTACLE FILE

The following pages describe the format for headers and data in the Daily Digital Obstacle File.

THE DDOF FORMAT

The currency date header appears on line 1, in columns 3-26. Lines 2 and 3 are column headers for the obstacle detail lines. Line 4 contains 127 "-" characters.

The data for each obstacle is in the following format:

Column	Data Element	Description
----- 1-2	----- OAS Code	----- State 01 - Alabama 02 - Alaska 04 - Arizona 05 - Arkansas 06 - California 08 - Colorado 09 - Connecticut 10 - Delaware 11 - DC 12 - Florida 13 - Georgia 15 - Hawaii 16 - Idaho 17 - Illinois 18 - Indiana 19 - Iowa

20 - Kansas
21 - Kentucky
22 - Louisiana
23 - Maine
24 - Maryland
25 - Massachusetts
26 - Michigan
27 - Minnesota
28 - Mississippi
29 - Missouri
30 - Montana
31 - Nebraska
32 - Nevada
33 - New Hampshire
34 - New Jersey
35 - New Mexico
36 - New York
37 - North Carolina
38 - North Dakota
39 - Ohio
40 - Oklahoma
41 - Oregon
42 - Pennsylvania
44 - Rhode Island
45 - South Carolina
46 - South Dakota
47 - Tennessee
48 - Texas
49 - Utah
50 - Vermont
51 - Virginia
53 - Washington
54 - West Virginia
55 - Wisconsin
56 - Wyoming

North America

CA - Canada
MX - Mexico
PR - Puerto Rico
BS - Bahamas

Caribbean Area

AG - Antigua and Barbuda
AI - Anguilla
NL - Netherlands Antilles (formerly AN)
AW - Aruba
CU - Cuba
DM - Dominica
DO - Dominican Republic

GP - Guadeloupe
 HN - Honduras
 HT - Haiti
 JM - Jamaica
 KN - St. Kitts and Nevis
 KY - Cayman Islands
 LC - Saint Lucia
 MQ - Martinique
 MS - Montserrat
 TC - Turks and Caicos Islands
 VG - British Virgin Islands
 VI - Virgin Islands

Pacific Area

AS - American Samoa
 FM - Federated States of Micronesia
 GU - Guam
 KI - Kiribati
 MH - Marshall Islands
 QM - Midway Islands (formerly MI)
 MP - Northern Mariana Islands
 PW - Palau
 RU - Russia
 TK - Tokelau
 QW - Wake Island (formerly WQ)
 WS - Samoa

Column	Data Element	Description
3	"_"	
4-9	Obstacle Number	Identifier of obstacle
10	Blank	
11	"O" or "U"	Verification Status "O": verified "U": unverified
12	Blank	
13-14	Country Identifier	
15	Blank	
16-17	State Identifier	State

18	Blank	
19-34	City Name	City
35	Blank	
36-37	Latitude Degrees	Geographical Coordinates
38	Blank	
39-40	Latitude Minutes	"
41	Blank	
42-46	Latitude Seconds	"
47	Latitude Hemisphere	"
48	Blank	
49-51	Longitude Degrees	"
52	Blank	
53-54	Longitude Minutes	"
55	Blank	
56-60	Longitude Seconds	"
61	Longitude Hemisphere	"
62	Blank	
63-80	Obstacle Type	
81	Blank	
82	Quantity	
83	Blank	
84-88	AGL HT	Above Ground Level Height (Feet)
89	Blank	
90-94	AMSL HT	Above Mean Sea Level Height (Feet)
95	Blank	

96 Lighting Type of Lighting

- "R": Red
- "D": Medium intensity White Strobe & Red
- "H": High Intensity White Strobe & Red
- "M": Medium Intensity White Strobe
- "S" : High Intensity White Strobe
- "F": Flood
- "C": Dual Medium Catenary
- "W": Synchronized Red Lighting
- "L": Lighted (Type Unknown)
- "N": None
- "U": Unknown

97 Blank

98 Horizontal Accuracy

99 Blank

100 Vertical Accuracy

HORIZONTAL		VERTICAL	
Code	Tolerance	Code	Tolerance
1	+20'	A	+3'
2	+50'	B	+10'
3	+100'	C	+20'
4	+250'	D	+50'
5	+500'	E	+125'
6	+1000'	F	+250'
7	+1/2 NM	G	+500'
8	+1 NM	H	+1000'
9	Unknown	I	Unknown

101 Blank

102 Mark Indicator Type of Marking

- "P": Orange or Orange and White Paint
- "W": White Paint Only
- "M": Marked
- "F": Flag Marker
- "S": Spherical Marker
- "N": None
- "U": Unknown

103 Blank

104-117 FAA Study Number

118 Blank

119 Action: A, C Add, Change

120 Blank

121-127 Julian Date Date of Action

THE DAILY CHANGE FILE FORMAT

Lines 1 – 3 are header lines.

Line 4 and 5 are column headers for the detail lines. Line 6 contains 142 “-“ characters.

The data for each change is in the following format:

Column	Data Element	Description
-----	-----	-----
1-9	Action	DISMANTLE, OLD, NEW, ADD, REMOVE
10	Blank	
11-12	ORS Code	(See DOF Format)
13	"-"	
14-19	Obstacle Number	"
20	Blank	
21	"O" or "U"	"
22	Blank	
23-24	Country Identifier	
25	Blank	
26-27	State Identifier	
28	Blank	
29-44	City Name	"
45	Blank	
46-47	Latitude Degrees	"
48	Blank	
49-50	Latitude Minutes	"
51	Blank	
52-56	Latitude Seconds	"
57	Latitude Hemisphere	"

58	Blank	
59-61	Longitude Degrees	"
62	Blank	
63-64	Longitude Minutes	"
65	Blank	
66-70	Longitude Seconds	"
71	Longitude Hemisphere	"
72	Blank	
73-90	Obstacle Type	"
91	Blank	
92	Quantity	"
93	Blank	
94-98	AGL HT	"
99	Blank	
100-104	AMSL HT	"
105	Blank	
106	Lighting	"
107	Blank	
108	Horizontal Accuracy	"
109	Blank	
110	Vertical Accuracy	"
111	Blank	
112	Mark Indicator	"
113	Blank	
114-127	FAA Study Number	"

128 Blank

129 Action: A, C, D, R Add, Change, Dismantle, Remove

130-136 Julian Date Date of Action