

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

**DAILY DIGITAL OBSTACLE FILE (DDOF)**

**November 21, 2017**

**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  
1305 East-West Highway  
Silver Spring, MD 20910-3281  
[9-AJV-532-OBSTData-REQ@faa.gov](mailto: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 alphanumerical 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, D, Add, Change, Dismantle

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