

# FAA DATA OPTIMIZATION SUMMIT

## FAA Aeronautical Information Services (AIS) Digital Data

Pre-Summit Content

October 16, 2019



Federal Aviation  
Administration

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## Introduction to FAA's AIS Digital Data

The FAA provides public access to the following Aeronautical Information Services (AIS) digital data. Prior to participating in the FAA Data Optimization Summit in November, please review these data sets with data quality, format, and access in mind. We will look forward to your feedback during the Summit.

## Digital Data Sets

**[28 Day NASR Subscriber Files](#)** – Files containing data as reflected in the National Airspace Resources Database (NASR) per the pertinent effective date. Distributed on the AIRIC 28-day cycle. Includes “flat” text files of 24 different data types (Airports, Airways, Communications, Fixes, Instrument Landing Systems (ILS), Navigation Aids, Towers, etc.); AIXM 5.1 files and schema definitions for Navigation Aids, Airports, ASOS/AWOS, and Airways; AIXM 5.0 file and schema definitions for Special Activity Airspace; and Class Airspace Shape Files (Class B, C, D, and E).

**[8260-2 Radio Fix and Holding Data Records](#)** – All 8260-2 forms received by the Aeronautical Data team. Includes information on Fix and Holding Pattern Name, Type, Latitude/Longitude, Facility Makeups (Radial/Course/Bearings), MRA, MAA, Pattern Number, Direction, Turn Direction, Leg Length, and Use.

**[Aeronautical Chart Bulletins](#)** – Provides the following data during a charts current cycle: Added Obstructions, Airports, NAVAIDs, Airspace, Special Use Airspace, Military Training Routes, and Miscellaneous data. Available in PDF format.

**[Aeronautical Chart User's Guide](#)** – An introduction to the Federal Aviation Administration's (FAA) aeronautical charts and publications. It is useful to new pilots as a learning aid and to experienced pilots as a quick reference guide. Available in PDF format.

**[Airport Construction Notices](#)** – Graphic representations of runway, taxiway, and apron closures or restrictions due to active construction-related NOTAMs at major airports around the country in PDF format.





**[Center Surface Boundaries File](#)** – Air Traffic Control Center (ARTCC) ground level boundary data created to support the FAA's En Route Automation Modernization (ERAM) system. Facility ID, Lower Alt, Upper Alt, Latitude, Longitude, Lat Lon Neighbor. Available in CSV format.

**[Coded Instrument Flight Procedures \(CIFP\)](#)** – ARINC 424 Version 18 International Standard. Data elements included are: Airports and Heliports, Runways, VHF, NDB and ILS Navigation Aids, Waypoints (Terminal and Enroute), Airways, Off Route Obstruction Clearance Altitude (OROCA) records, Departure Procedures (DPs), Standard Terminal Arrival Procedures (STARs), Special Use Airspace (SUAs) and Class B, C, and D Airspace. Also included are GPS, RNAV (GPS), RNAV (RNP), VOR, NDB, ILS, LOC, LDA, and SDF Standard Instrument Approach Procedures (SIAPs) with their associated Minimum Safe Altitude (MSA) data.

**[Critical DME List](#)** – Airport Identifier, Procedure Name, Number, Type, Region, ICAO Airport Identifier, Transition, Runway. Available in XLSX format.

**[Daily Change File](#)** – Provides all DDOF changes. Available in DAT format.

**[Digital Chart Supplement \(d-CS\)](#)** – Public and Joint use airports, Seaplane bases, Heliports, VFR airport sketches, NAVAIDs, Communications data, Weather data, Airspace, Special Notices, and Operational Procedures, Airport hours of operation, Types of fuel available, Runway data, Lighting codes, etc. and General Information provided in PDF. XML database provides the Effective Date Range and following fields: State, Airport/NAVAID Name, Associated City Name, Airport Identifier, PDF Name.

**[Daily Digital Obstacle File \(DOF\)](#)** – Obstacles are assigned unique numerical identifiers, accuracy codes, and listed in order by state. Available in DAT and CSV format.

**[Digital Obstacle File \(DOF\)](#)** – Obstacles are assigned unique numerical identifiers, accuracy codes, and listed in order by state. Available in DAT format.

**[Digital Terminal Procedures Publication \(d-TPP\)](#)** – Arrival, Departure, Terminal Procedures, Airport Diagrams provided in PDF. XML metafile is included and provides the following data fields: State Code, State Full Name, City Name, Volume, Airport Name, Military, Airport Identifier, ICAO Identifier, Chart Sequence Number, Chart Code, Chart Name, User Action Code, PDF Name and Civil Code.

**[IFP Enroute Charts](#)** – Air Traffic Services, Airports that have an Instrument Approach Procedure or a minimum 3000' hard surface runway, Airways/Route Data, Cruising Altitudes, Fixes/ATC Reporting Points, Limits of controlled airspace, Military Training Routes, Off Route Obstruction



Clearance Altitudes (OROCA), Radio aids to navigation, RNAV Routes, Special Use Airspace Areas, Tabulations (MTRs, SUAs, MOAs, Airport data). Charts are provided in compressed (ZIP) format and contain a Geo-TIF and PDF, geospatial files.

**ILS Procedures & Components List** – Airport Site No., State, NFDC Apt Ident, ICAO Apt Ident, Apt City, Clt Tower, Procedure Name, Rwy ID, Available Landing Distance, Landing Strip Width, NAVAID ID, Class Code, Dual Freq, Equip Type, Crossing Height, GP Slope Angle, Edge Lights, VSGI Type, Approach Light System, RIL, RCLS, TDZL, Touch Down, Mid, Roll-Out, CAT A HAT/HAA, CAT A Visibility, CAT A Vis UOM, CAT B HAT/HAA, CAT B Visibility, CAT B Vis UOM, CAT C HAT/HAA, CAT C Visibility, CAT C Vis UOM, CAT D HAT/HAA, CAT D Visibility, CAT D Vis UOM, CAT E HAT/HAA, CAT E Visibility, CAT E Vis UOM, SA CAT I RVR, CAT II RVR, SA CAT II RVR, CAT III RVR.

**Minimum Vectoring Altitude (MVA) and Minimum IFR Altitude (MIA) Charts** – To identify the sector designs and minimum altitudes on charts used by Air Traffic Control used as a visual reference. Available in PDF and XML format.

**National Flight Data Digest (NFDD)** – Daily publication showing changes to the NASR database in .pdf format, including, but not limited to: Navaids, Instrument Landing Systems, Flight Service Stations, Airports, Airspace Fixes, Holding Patterns, Preferred Routes, Military Training Routes, Parachute Jumping Areas, Special Use Airspace, Departure Procedures (8260 series forms) and Standard Terminal Arrival (8260 series) forms.

**Obstacle Construction Notices** – State, City, Latitude, Longitude, Type, Marked, Lighted, AGL, AMSL, FAA Study Number, OAS#, Status, Action. Available in HTM format.

**Part 95 Amendment** – Updates to the Part 95 Consolidation titled “Revisions to IFR Altitudes & Changeover Point Amendment”. Released every 56 days in PDF format.

**Part 95 Consolidation** – Annual Consolidation of Part 95 Subchapter F titled “Minimum Enroute IFR Altitudes Over Particular Routes and Intersections” in PDF format. Contains altitude data on Colored Federal Airways, Direct Routes, Low Altitude RNAV Airways, High Altitude RNAV Airways, Ground Based High Altitude RNAV Airways, VOR Federal Airways, Alaska VOR Federal Airways, Hawaii VOR Federal Airways, Jet Routes, VOR Federal Airway Changeover Points, and Jet Route Changeover Points.

**Periodic Review Forecast** – Service Area, State, Country, Airport ID, Procedure, Last Reviewed Date, Current Due Date, Review Type.



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**Special Instrument Flight Procedures Files** – Listing of current active Special Instrument Procedures. Released every 28-days in both .pdf and xls format. Includes City, State, Region, Airport, Procedure Name, Amendment Number, and TERPS Maintainer.

**Survey Data** – Airport Survey data in UDDF format generated by the National Geodetic Survey (NGS) or by third-party surveyors. Provided “as-is” without additional processing or validation. Includes both runway and obstacle data.

**Transmittal Letters** – A listing of Standard Instrument Approach Procedures, Departure Procedures/Takeoff Minimums and Fix Actions distributed every 14 days in PDF format. Includes pertinent 8260 series forms; relevant NOTAMs as of the publication date; and a copy of the Standard Instrument Approach Procedures, and Takeoff Minimums and Obstacle Departure Procedures; Miscellaneous Amendments as published in the Federal Register.

**VFR Class B Enhancement Graphics** – Provides Class B design without any underlying topographic features. Primary airport, primary NAVAID and ceilings and floors are shown. Also included is: Geographic coordinates at each Class B boundary intersection, Magnetic fix radial/DME to NAVAIDs, Distance of each straight-line Class B boundary segment. Available in PDF format.

**VFR Raster Charts** – Data includes visual and radio aids to navigation, airports, controlled airspace, restricted areas, obstructions, and related data. Topographic information featured consists of the relief and a judicious selection of visual checkpoints used for flight under visual flight rules. The checkpoints include populated places, drainage patterns, roads, railroads, and other distinctive landmarks. Charts are provided in compressed (ZIP) format and contain a TIF, geospatial and metadata files. Charts are also provided as PDF.

