

Advisory Circular

Subject: Airport Data and Information Program

Date: 9/30/2015 **Initiated By:** AAS-100 AC No: 150/5300-19 Change:

1. Purpose.

This Advisory Circular (AC) provides general guidance and information for airport owners and operators in the collection and management of data describing the physical infrastructure, characteristics, and services of their airport. This data is source material for the Federal Aviation Administration (FAA)'s aeronautical information databases, for use in the dissemination of aviation information to the public, preparation of government and private industry aeronautical charts, and related flight information publications as required by 49 U.S.C. 44721, 49 U.S.C. 47130, and the planning and programming of various programs within the FAA. This AC also describes the schedule, frequency, and standards for airport inspections. These inspections ensure conformance with standards including the applicability and currency of the published information.

2. Audience.

This AC is distributed to FAA Washington DC headquarters, director level, and the regional offices and field offices of Airports, Air Traffic Organization (ATO), Office of Aviation Safety (AVS) and airports.

3. Cancellation.

This AC cancels AC 150/5200-35A, *Submitting the Airport Master Record in Order to Activate a New Airport*, dated May 2, 2004, after full implementation of the Federal Aviation Administration's Navigation Procedures Project (NAV Lean) solution.

4. **Effective Date.**

The effective date of this AC is September 30, 2015. The FAA is moving toward an electronic data submission system with the implementation of the Federal Administration's Navigation Procedures Project (NAV Lean) solution. Sections of this AC maybe utilized as those portions of the system become available. In the interim, please refer to the current guidance provided in AC 150/5200-35A, *Airport Master Record*, for paper-based data submissions.

5. **Principal Changes.**

This AC provides new standards, recommended practices, and automation capabilities for airport owners and operators to manage their data within the Airports Geographic Information System (Airports GIS) application to communicate changes to the FAA's authoritative source, the designated repository for authoritative data describing the physical infrastructure, characteristics, services, and operational environment of the nation's airports. These new standards and capabilities allow airport operators to easily manage their airport data and share it with the FAA and the aviation community. The implementation of this program provides a new direction for the airport community toward computer-based, airport-centric data management and sharing. These standards also provide new capabilities and tools supporting the inspection of airports at all levels. This AC also implements new standards and tools for airport inspection personnel to use in completing, documenting, and following up on identified airport inspection data discrepancies. All information for completing the Airport Master Record is maintained within the authoritative source. The printing of the forms for use is still an option however, maintaining the data is now accomplished using automation within Airports GIS.

6. **Objectives.**

The goals and objectives of the FAA's Airport Data and Information Program are as follows:

- Promote and encourage airport safety through direct contact with airport management and application of methods and techniques to improve safety conditions at airports
- Provide a means of visualizing conditions at airports in an accurate and timely manner, bringing attention to unsafe conditions and motivating airport management to correct deficiencies
- Collect and maintain a comprehensive, single-agency airport data repository
- Ensure data is promulgated with a degree of accuracy and frequency consistent with the exercise of FAA responsibilities, (See <u>Appendix A</u>)
- Eliminate redundant collection and dissemination processes
- Provide an efficient means for producing both recurring and one-time reports needed for management direction, program planning, and statistical analysis
- Provide airport information to the public
- Provide standards-based, independently validated and verified data meeting the data quality and integrity requirements of the FAA and the public

7. **Comments or Suggestions.**

If you have suggestions for improving this AC, you may use the <u>Advisory Circular</u> <u>Feedback form</u> at the end of this AC.

8. **Copies of This AC.**

This and other FAA ACs are available online at http://www.faa.gov/airports/resources/advisory_circulars/.

FOR

Michael J. O'Donnell Director of Airport Safety and Standards

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CHAPTER 1. AIRPORT DATA

Part 157 of Title 14 Code of Federal Regulations (14 CFR), Notice of Construction, Alteration, Activation, and Deactivation of Airports, requires you, the owner or operator of a public or private airport to notify us, the FAA, when you plan to construct, alter, activate, or deactivate a civil or joint-use (civil/military) airport or to alter the status or use of the airport. When used within this AC, the term Airport means any area of land or water that is used or intended to be used for the landing and takeoff of aircraft, and includes its building and facilities, if any, see 14 CFR 157.2. We provide a secure internet-based application called Airports GIS for your use in notifying the FAA about changes involving your airport. Using this system, you can identify changes to your airport and maintain the data describing the physical infrastructure, characteristics, and services of your airport. In addition to meeting the requirements of part 157, the FAA uses this data to perform other studies or analyses necessary to ensure the safety and efficiency of the National Airspace System (NAS), including studying proposals for construction of objects on or surrounding airports (14 CFR part 77, Safe, Efficient Use, and Preservation of the Navigable Airspace), developing instrument procedures, and disseminating the data to NAS users through flight information publications and aircraft navigation databases. Please note that certain block grant states share airport data responsibilities with the FAA.

1.1 The Airport Data and Information Program.

The primary purpose of the Airport Data and Information Program is to provide you with guidance regarding the collection, submission, and management of airport data and information and a means to perform the necessary data management functions. This system allows you to manage and update your information through the internet ensuring we and users of the NAS have the most current information available. This allows us to meet our primary objective of providing standards based digital, independently validated and verified data ensuring the airport, aircraft, and air traffic control are using the same information regarding the airport. It is also the intent of the program to have an Airport Master Record for all airports and heliports within the U.S. and its territories necessary for us to provide regulatory and support services.

1.2 The Airport Master Record.

The Airport Master Record describes the basic operational and services data of the airport. The primary purpose of the Airport Master Record is to identify the minimum data and information about the physical infrastructure, characteristics, services, operations, and status of all airports (public and private) comprising the NAS. We use Airport Master Record data in flight information publications, navigation databases, and to complete analyses. We provide Airport Master Record data and information internally and externally for dissemination to pilots and other interested parties as part our aeronautical information solution and services. Not all airports have submitted or completed an Airport Master Record.

1.3 What Data am I Required to Report to the FAA?

1.3.1 <u>What Data Management Criteria Apply To My Airport?</u>

The basis for determining your airport's data management criteria is the type of Instrument Flight Rules (IFR) approaches serving your airport. The data management criterion applying to the collection and management of data describing the physical infrastructure, characteristics, services, and status of the airport, has three levels:

	IFR Servi	ce Availability	Criteria to	
Type of IFR Service	Currently	Planned (0 – 5 years)	Apply	
Vertically guided instrument approaches (ILS, LPV, RNP, TLS, PAR etc.)	~	\checkmark	AC 150/5300-18	
Non-Precision, Non-vertically guided, instrument approaches (VOR, VOR/DME, GPS, NDB, TACAN, LOC etc.)	~	\checkmark	AC 150/5300-19	
All other airports	\checkmark	\checkmark	AC 150/5300-19	

Table 1-1. Determining IFR Service Criteria.

1.3.1.1 How much information am I required to submit?

The amount of information we require you to submit and maintain differs by airport and current or planned instrument approaches. In general, to perform our regulatory and support activities such as performing aeronautical studies, we require all airports to provide certain data; comprising the Airport Master Record. At airports with non-precision nonvertically guided instrument approaches, the data necessary to support the development and maintenance of the approaches and to ensure the safety, efficiency, and utilization of these airports is essential. At airports with vertically guided instrument approaches, the most comprehensive data set you can provide is essential. Refer to <u>Appendix A</u> for a complete listing of those data elements.

1.3.2 <u>Airport Administrative and Logistical Data.</u>

Airport Administrative and Logistical data describes the information about the airport such as the city and state, the airport owner and operator, the airport attendance schedule, the contact information for the airport manager, and other general information. A change to this type of data is accepted by us after you certify the changes as being current. However, at Public Use airports with federal obligations the acceptance requires review by us for compliance with your federal obligations.

1.3.3 <u>Changes Requiring Validation or Approval of the Airports Regional or Local Airports</u> <u>District Office.</u>

In some cases, the data about the airport requires our review to determine the effect of the changes on the safety, utilization, or efficiency of a public use airport (or private use airport with a published instrument approach) or compliance with your federal obligations. In these cases, once you request a change, we initiate a study to determine the effect of the change on the airport and issue a determination. After completing the study, we will advise you (airport owner, operator, or sponsor) of our determination and publish the change.

1.3.4 <u>Changes Requiring an Aeronautical Study by the FAA Prior to Publication.</u>

When a change has the potential to affect the NAS or neighboring airports, we will perform an aeronautical study. If the proposed change could affect the NAS, the regional or local Airports District Office will address these changes through their respective Regional Airspace Procedures Team (RAPT) for coordination and analysis. The coordination of these changes through this cross functional team allows all of our respective staff offices and functions the opportunity to address the change appropriately and determine the potential effect the change could have on the NAS and plan or initiate any necessary adjustments.

1.4 Is There a Timetable for My Data Submission?

A critical element in keeping your data current is ensuring you publish the change in the right timeframe. Provide change requests early enough to ensure adequate time is available for the completion of any studies, analysis, or coordination before their acceptance into the NAS. Depending on the type of change, you should allow for a considerable amount of time when the change affects an instrument flight procedure (about 180 days) or requires contracting for engineering and surveying services. Planning is important to ensure the collection, validation, and verification of the data is complete prior to the publication effective date. This publication interval is based on the international standard Aeronautical Information Regulation and Control (AIRAC) cycle. The effective date for commissioning, decommissioning, or altering a component of the NAS (in this case an airport) the Instrument Flight Rules (IFR) system must coincide with one of the pre-established international AIRAC charting dates. Generally, the cutoff for all airport data is 43 working days prior to the publication effective date.

For more information on publication cycles, refer to the inside cover of any Airport/Facility Directory. This information may also be found at http://www.faa.gov/air_traffic/flight_info/aeronav/. Through appropriate planning and close coordination with your Regional Airports Office or Airports District Office, you can ensure the completion of the necessary studies and coordination ensuring your data is correct, complete, and ready for operational use in the appropriate timeframe.

1.5 What Supporting Document Am I Required to Provide to the FAA?

In order for us to study and coordinate the proposed change to your airport's data, certain supporting documentation is necessary. The level of this documentation varies according to the type of change but generally falls within one of the following classifications:

- Aside from this AC, the collection and submission of the data in the correct format according to the following standards:
 - AC 150/5300-16, <u>General Guidance and Specifications for Aeronautical</u> <u>Surveys: Establishment of Geodetic Control and Submission to the National</u> <u>Geodetic Survey</u>,
 - AC 150/5300-17, <u>Standards for Using Remote Sensing Technologies in Airport</u> <u>Surveys</u>,
 - AC 150/5300-18, <u>Survey and Data Standards for Submission of Aeronautical</u> <u>Data using Airports GIS</u>
- An airport official responsible for the data reads, understands, and certifies a system-generated certification statement. In these cases the certification is electronically signed by the airport official submitting the change using their individual password.
- A scanned, signed, certified letter provided by the airport owner or operator indicating their agreement with the proposed change.

These supporting documentation levels are the minimum requirements. We encourage the submission of as much supporting documentation as possible to support the change. This assists us in making an appropriate decision in a timely manner.

1.6 How do I Activate or Deactivate an Airport?

1.6.1 Activation of New Public Use Landing Areas.

If you are proposing a new public-use airport, you may provide the necessary information through Airports GIS for us to complete any required study, analysis, or coordination to supplement FAA Form 7480-1: *Notice for Construction, Alteration and Deactivation of Airports*, required under 14 CFR part 157. For information about the data elements submitted through Airports GIS, see <u>Appendix A</u>. This may be the first information available to us regarding proposals for new general aviation public-use airports. Airports GIS will provide the information and supporting documentation to the appropriate Regional Airports Division or Airports District Office for review, coordination, and study of the proposal. After this aeronautical study is completed, an airspace determination letter will be issued to you as either:

- No objection
- No objection with conditions
- Objectionable

If the aeronautical study results are "no objection with conditions" or "objectionable," the letter sent to you will identify the next actions you must complete. When the airport becomes operational, the airport is inspected and we will advise you of any additional information or corrections to the original data submission is necessary. With the inspection complete and any new information provided to Airports GIS, the system validates the data, assigns the airport a Site Number, and advises our other organizations of the availability of data for a new airport. If a Regional Airports Division, Airports District Office, State, or contractor personnel are unable to physically inspect a new public-use airport they will review the data and advise you of any additional information necessary to enter into Airports GIS. You should contact the State Aviation Agency for guidance regarding individual State aviation requirements.

1.6.2 <u>Activation of New Private Use Landing Areas.</u>

If you are proposing a new private-use airport, you may submit the information regarding the airport to Airports GIS to supplement FAA Form 7480-1: *Notice for Construction, Alteration and Deactivation of Airports*, required under 14 CFR part 157. For information about the data elements submitted through Airports GIS, see <u>Appendix</u> <u>A</u>. This is usually the first information available to us regarding proposals for new private-use airports. Airports GIS will provide the information and supporting documentation to the appropriate Regional Airports Division or Airports District Office for review, coordination, and study of the proposal. After this aeronautical study is completed, an airspace determination letter will be issued to you as either:

- No objection
- No objection with conditions
- Objectionable

This letter notifies you of the results of our aeronautical study and includes instructions for providing any additional information we may request through Airports GIS. The letter also instructs you to advise us when the airport becomes operational. When notified the airport became operational, Airports GIS validates the data, assigns the airport a Site Number, and provides the information about the airport to our other organizations. You should contact the State Aviation Agency for guidance regarding individual State aviation requirements.

1.7 What are Airport Site Numbers and How Are They Assigned?

The Site Number is an eight-digit sequential number we assign to the airport according to the state and associated city. We use the site number primarily to perform computer searches, such as identifying all heliports. The site number has a one-letter suffix identifying the primary use of the airport. The suffixes identifying the primary use of the airport are:

- A = Airport
- B = Balloonport
- C = Seaplane Base

- G = Gliderport
- H = Heliport
- U = Ultralight Flightpark

Because of the number of airports in the system, we reuse site numbers when the number is not assigned to an airport. When a new or proposed location is recommended for inclusion in the National Plan of Integrated Airport System (NPIAS), Airports GIS will assign a site number for the airport as long as the airport proposal is included in the subsequent NPIAS or until the selection of a site for the construction of a new airport is complete. When a proposed public use airport receives a favorable airspace determination, Airports GIS will assign the site number to the airport. If we receive notice of a new airport or notice of one not previously reported, we gather information about the new airport and Airports GIS assigns a site number. When a previously abandoned airport is "reactivated," Airports GIS will attempt to reassign the same site number to the airport. If the previously assigned number is currently assigned to another airport, Airports GIS will assign the airport a new site number. Airports GIS assigns site number to all military airports that do not have one when the appropriate information regarding the military airport is input into Airports GIS.

1.7.1 <u>Change in the Associated City.</u>

Since Airports GIS uses the associated city to make site number assignments, any change in the airport's associated city usually requires a new site number. Requesting changes to the associated city in Airports GIS will generate a new site number for the airport once you request the change and provide the appropriate documentation.

1.7.2 <u>How are Site Numbers Cancelled?</u>

Due to the ever-increasing number of airports in the nation, it is not feasible to retain site numbers for locations indefinitely. Airports GIS will without notice or intervention by a user cancel site numbers meeting any of the following criteria:

- Except for airports with Federal agreements, when an airport is abandoned for three years or more
- When a proposed airport location recommended in the NPIAS is deleted
- When a "reserved" site number assigned for development is cancelled
- At an airport where there is a change in associated city
- When a site number is erroneously assigned to a duplicate record

1.8 Data Reporting Matrix.

<u>Appendix A</u> identifies the data requirements for different data elements according to the type of airport (public, private, etc.), specific data element change, and supporting documentation.

1.9 What are Some References I Can Use to Help Me Understand Data Submission to the FAA?

The following publications are available from the FAA at <u>http://www.faa.gov/airports/resources/advisory_circulars/</u>, <u>http://www.faa.gov/airports_airtraffic/airports/</u> or <u>http://www.faa.gov/atpubs</u>.

 AC 150/5300-18, General Guidance and Specifications for Submission of Aeronautical Surveys to NGS: Field Data Collection and Geographic Information System (GIS) Standards <u>http://www.faa.gov/airports/resources/advisory_circulars/index.cfm/go/document.cu</u> rrent/documentNumber/150 5300-18

This AC provides the standards for the collection of airport and aeronautical data through field and office methodologies in support of the FAA. It also explains how to submit data to the FAA, who will forward the safety critical data for independent verification and validation. The primary purpose of these standards is to inform industry on the requirements for data collection efforts conducted at airports in support of the FAA Airport Surveying – Geographic Information System (GIS) Program.

• AC 150/5370-2, *Operational Safety on Airports during Construction* <u>http://www.faa.gov/airports/resources/advisory_circulars/index.cfm/go/document.cu</u> <u>rrent/documentNumber/150_5370-2</u>

This AC sets forth guidelines for operational safety on airports during construction.

- Obstruction Evaluation Airport Airspace Analysis (OE/AAA) website, <u>http://oeaaa.faa.gov</u>.
- Title 14 CFR Part 157, <u>http://www.ecfr.gov/cgi-bin/text-</u> idx?SID=534623173a9c8a2d128a6caa401b245e&node=pt14.3.157&rgn=div5

This CFR provides regulations on how to give notice of construction, alteration, activation, and deactivation of airports.

- FAA Form 7480-1, *Notice of Landing Area Proposal*, <u>https://www.faa.gov/forms/index.cfm/go/document.information/documentID/18533</u> <u>4</u>
- Integrated Distance Learning Environment (IDLE), available within Airports GIS. <u>https://airports-gis.faa.gov/airportsgis</u>
- Pilot Controller Glossary (PCG), <u>https://www.faa.gov/air_traffic/publications/media</u> /PCG_4-03-14.pdf
- Title 14 CFR Part 77, <u>http://www.ecfr.gov/cgi-bin/text-</u> idx?SID=c957224f6e2b4fb1f2fc236f5da09558&node=pt14.2.77&rgn=div5
- AC 150/5335-5 Standardized Method of Reporting Airport Pavement Strength PCN, <u>http://www.faa.gov/airports/resources/advisory_circulars/index.cfm/go/docum</u> ent.information/documentNumber/150_5335-5C

- FAA-Form 5100-1, *Airport Pavement Design*, <u>https://www.faa.gov/forms/index.cfm</u>/go/document.information/documentID/180703
- FAA Form 7460-1, *Notice of Proposed Construction or Alteration*, <u>https://www.faa.gov/forms/index.cfm/go/document.information/documentID/18627</u> <u>3</u>
- Aeronautical Information Services (AIS) website, http://www.faa.gov/air_traffic/flight_info/aeronav/
- National Flight Data Center, <u>http://nfdc.faa.gov/index.jsp</u>

CHAPTER 2. AIRPORT DATA COLLECTION METHODS

2.1 Methodologies.

We recommend the submission of all changes describing the physical infrastructure, characteristics, status, or services of an airport through the Airports GIS web application at <u>https://airports-gis.faa.gov/public/</u>. This internet application provides you the necessary tools to submit and manage data while ensuring the completion of any necessary coordination processes. There are three basic methods of submitting data:

- Completing an online web form
- Identifying features using a map or aerial imagery of the area
- Submitting data files with the necessary information in the appropriate format.

2.2 How Do You Handle Changes Made Using a Web Form?

Airports GIS uses an intuitive web form interface for managing your data. Once you log in to the system using your Airports GIS username and password, the system checks your credentials against its role-based access control database to ensure you have the appropriate level of authority to make changes to the airport's data. Once the user authentication is complete, the system provides you with a series of web pages containing the data about the airport. After you select the data element you want to change, you can enter the new information or upload geospatial vector files of the data in the file format outlined in AC 150/5300-18. In some cases, the system prompts you to select a set of values. Once you change the value or upload a file, the system validates the data and then prompts you to provide the necessary supporting documentation (if necessary).

Some changes require you to digitally sign (using your system password) an online certification statement while others require you to submit supporting documentation as a file in portable document format (PDF). If the change does not require action by anyone other than the authorized airport official submitting the change, the system makes the change within Airports GIS and notifies other FAA systems of the change. If the change requires us to take action, the system holds the change in a pending status, notifies our appropriate staff offices and/or lines of business who must act on the change. After the completion of necessary reviews, studies, or coordination, Airports GIS makes the change and advises our other systems.

2.3 How Do You Handle Changes Using Maps or Aerial Imagery?

In some cases, the system may require or allow you to identify changes using geographically referenced maps or aerial imagery. In these cases, the system will display the map or imagery for the area around the airport. The National Map is a service of the U.S. Geological Survey providing high-resolution orthoimagery combining the visual attributes of aerial photography with the spatial accuracy and reliability of a planimetric map. The resolution of these products may vary from 6 inches to 3 feet ensuring enough precision to provide quality, consistent data. Usually,

the system identifies the appropriate area using the airport location identifier tied to your account. If you have multiple airports assigned, or the system does not have the information, you will be prompted to identify the area through another means, generally by the physical airport location zip code or other geographical items such as the City. Once the system identifies the appropriate area, it displays the map or imagery you will need to provide the information. The system will then allow you to point to locations on the map to identify changes or submit new data about the airport. The definition of features using this method results in an estimated value for the geographic position of features at the airport. The ground elevation is also estimated according to the underlying digital terrain model the system uses. Though the accuracy of the image, map, and digital terrain model are known, your ability to pinpoint exact features on your screen is less accurate. This data collection process supports our low-resolution accuracy requirements, so estimated values are acceptable.

2.4 How Do I Upload the Required Documentation?

When the change requires the submission of a file (submitted in PDF format) the system provides a standard WindowsTM interface allowing you to upload the necessary file(s). To upload a file, select the "Browse" button to navigate to the file to upload (See <u>Figure 2-1</u>).

Figure 2-1. Illustrates a Typical File Upload Dialog Box.

Action: Upload Final Report

Add required d	ocumentation:
Category:	Final Report
• File:	Browse
Description:	
	Submit Cancel

Select the file (see <u>Figure 2-2</u>), and click the Submit button. The file is uploaded and the system provides upload confirmation (<u>Figure 2-3</u>).

Figure 2-2. Illustrates the Upload Dialog Box after Selection of the Appropriate File.

Action: Upload Final Report									
Add required documentation:									
Category:	Final Report								
• File:	C:\Users\Desktop\FAA SOftware Standards\FAA-ST	Browse							
Description:	The file selected to upload								
	Submit Cancel								

The upload confirmation page allows you to submit additional documents using the "+ Add Document" link or to add further clarifying comments and information. The file size limit is 500 megabytes. To enter these additional documents and comments you must click the Submit button.

Figure 2-3. Illustrates the Upload Confirmation Page.

Action: Upload Final Report									
Add required documentation:									
Date Added By Category File Name Action Description									
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2.5 Changes Requiring Submission of Data Files.

2.5.1 <u>Overview.</u>

The collection of geospatial data describing certain airport features is necessary for us to facilitate the safe operation of the NAS. Capture or identify the following features for all airports:

- Runway ends (Thresholds)
- Displaced thresholds
- Stopway ends
- Heliport data

- Navigation aids (NAVAIDS)
- All objects exceeding 15 feet above ground level, within the boundaries of the airport property

You can collect certain points on the airport using various methods as we outline in the following paragraphs. In general, a Differential grade or better Global Positioning System (GPS) receiver is necessary to achieve the accuracies necessary to support the development and maintenance of non-precision, non-vertically guided instrument flight procedures. Before beginning data collection using one of these methods, users should successfully complete the online Airports GIS Integrated Distance Learning Environment (IDLE) training describing the appropriate methods and techniques to collect the information. Airports GIS processes the data and posts the final data to the spatial database. A portable document format (PDF) file with the data dictionary definitions is available at <u>https://airports-gis.faa.gov/public/</u>.

The online training and User Guide available at the Airports GIS website provides more detailed information regarding data collection at these airports.

2.5.2 <u>How Do You Collect the Data?</u>

Depending on the IFR instrument approaches at the airport (see paragraph 1.1 and Table 1-1), the collection of safety critical data requires specialized tools and training. For airports with non-precision non-vertically guided instrument approaches we allow the use of hand held GPS receivers meeting certain standards (see paragraph 2.5.3.2) and following defined processes outlined in this AC and in the online training. Data collection at airports with any type of vertically guided instrument approach requires professional engineering and surveying services to collect and format the data (See AC 150/5300-18 for the Standards and AC 150/5100-14, Architectural, Engineering, and Planning Consultant Services for Airport Grant Projects).

2.5.3 <u>Safety Critical Data.</u>

Some data elements require submitting a geospatial data file to support the change. The type of data required varies according to the requested change. The system evaluates the request and prompts you to submit data based on your request. Generally, the geospatial data is data we deem as safety critical, (See AC 150/5300-18). We identify but do not limit safety critical data to the following:

- NAVAIDs
- Representative and penetrating object within the defining surface areas (Part 77, Airport Design Surfaces, Terminal Instrument Procedures (TERPS) surfaces, or surfaces as defined by AC 150/5300-18).
- Runways and their associated Runway Directions
- Final Approach and Take Off (FATO) and Touchdown Lift Off (TLOF) areas of heliports or helipads

- Significant points on the airport (modeled using the feature Position) such as Airport Elevation, Touchdown Zone Elevation, Displaced Threshold, point of intersection of runways, and Stopway End.
- Stopway
- Taxiways
- Visual Aids
- the runway or FATO length, width or TLOF dimensions
- the Stopway length
- the declared distances for the airport such as landing distance available, takeoff run available, takeoff distance available, or accelerate stop distance available
- Other data or categories of data when they are part of a published procedure or chart, such as a Low Visibility Operations/Surface Movement Guidance and Control System (LVO/SMGCS) chart or procedure.

For a complete listing of safety critical data, requirements, and associated accuracies see AC 150/5300-18.

When requesting changes to safety critical data, we request the submission in a geospatial data format, and the collection of the data is generally from an airport survey or other approved collection method as outlined in the following paragraphs.

- 2.5.3.1 Data Collection at Airports With Vertically Guided Instrument Approaches. Airports with vertically guided instrument approaches require the strictest level of geospatial data collection. The accuracy required will vary depending on the specific item or facility surveyed. Refer to AC 150/5300-18 for information, accuracy requirements, data formats, and other requirements for surveying these airports.
- 2.5.3.2 Data Collection at Airports With Non-Precision Non-Vertically Guided Instrument Approaches.

The data defining the physical airport infrastructure supporting an airport's non-precision non-vertically guided instrument procedures requires a more rigorous data collection process than airports with no instrument approaches. The Airport Data and Information Program provides two acceptable methods for you to use in collecting this data.

2.5.3.2.1 Commercial Grade GPS Receivers.

Commercial grade receivers provide a reasonable level of accuracy supporting data collection efforts at airports. These receivers generally cost less than \$600 and are capable of providing horizontal accuracies of ± 3 meters (10 feet) if the unit is capable of receiving and incorporating signals from the FAA Wide Area Augmentation (WAAS) satellites. Without this capability, the accuracy of this type of receivers is approximately 10 meters (30 feet) horizontally. The vertical accuracy of these receivers is poor and should be used with caution, though the results are acceptable for very coarse geographic location collection.

2.5.3.2.2 Differential Grade GPS Receivers.

Differential receivers provide higher accuracy, but have an additional cost for the equipment and any post processing software. Better differential receivers can use secondary positioning information sources like WAAS, European Geostationary Navigation Overlay Service (EGNOS), or the United States Coast Guard (USCG) Differential GPS signal. If the airport sponsor wants to collect their own data using a differential GPS, the FAA recommends post processing using the National Geodetic Survey's (NGS) Continuously Operating Reference Station (CORS) system. There are some commercial services providing differential corrections as well as some States and localities providing independent networks for differential corrections. In general, units in this category range from \$500 to \$10,000 with software.

When using these systems, most achieve their improved accuracy through either post processing of the data using a system such as the National Geodetic Survey's Continuously Operating Reference System (CORS) or by using a differential correction system, such as those offered by commercially available systems. In some areas of the United States, users may also be able to use Differential GPS beacons available from the United States Coast Guard. Users can determine the availability of coverage of these beacons at the following internet site:

http://www.navcen.uscg.gov/dgps/coverage/Default.htm.

The accuracy of this type of receivers can vary based on the type of differential correction used. We recommend you post process the data using the NGS CORS system rather than using a real time or near real-time correction service to achieve high quality and consistent results. Post-processing data using the NGS CORS requires the use of a dual channel receiver. Airports GIS application provides a link to the NGS CORS site to post-process your data. When properly collected and post processed differential grade receivers are capable of achieving the medium level accuracies necessary to support the development of instrument procedures.

2.5.4 Data Collection at All Other Airports.

For these airports, Airports GIS provides online tools and processes to capture the location and enter the necessary attribution describing the characteristics of the features. Airports GIS provides users the ability to identify, select, and characterize information using maps and imagery. With these tools, the user selects locations for features (such as a runway end) on the screen and completes the information by typing information into a dialog box. Users can identify features using a point, line, or polygon as required by the specific feature. For instance defining the runway end would be a point feature while defining the runway would require collection as a polygon. In all cases, the geographic information for the feature using this method will be indicated as an

estimated value. Though the values are estimated, they do support general location identification for airports without instrument approaches or with only Circling Approaches. The design of the application walks you through the steps to complete the data capture. Before beginning data collection at these airports, users should successfully complete the online training describing the appropriate methods and techniques you need to collect the information.

2.5.5 Data Accuracy.

The accuracy of features collected using Airports GIS capabilities is a function of the positional accuracy of the base data set (imagery or map) and associated processes. Accuracy information using this method will always be an estimated value. Accuracy of features at airports with non-precision non-vertically guided instrument approaches is a combination of the Airports GIS automation and a function of the post processing of the data to achieve a horizontal position accuracy of 5 feet relative to the North American Datum of 1983 (NAD 83). Data providers must use latitude and longitude as the unit of measurement. The vertical position (elevation) requirement is 10 feet relative to the North American Vertical Datum of 1988 (NAVD 88) with a unit of measurement of feet. AC 150/5300-18 contains the accuracy requirements for airports with vertically guided instrument approaches.

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CHAPTER 3. AIRPORT INSPECTIONS

It is the responsibility of the airport operator to manage the information describing the physical infrastructure and services of its airport. The FAA, State, or contractor personnel perform standardization inspections of all public use airports and heliports in the United States and its territories as part of the Airport Data and Information Program.

3.1 Purpose of These Inspections.

The purpose of these inspections is to ensure data on public use landing facilities is current and provides the information necessary for flight planning and operations.

3.1.1 <u>Who Will Inspect My Airport?</u>

The regional Airports Certification Safety Inspectors conduct airport inspections for all commercial service airports. Authorized regional Airports, State, or contractor personnel accomplish inspections on other public use and certain private use airports. It is the responsibility of the local Flight Standards District Office (FSDO) to inspect heliports upon activation only.

3.1.2 How Will I Know When I Am About To Be Inspected?

If possible, before conducting an airport inspection, the airport inspector will contact airport management or a local person(s) closely associated with the airport (i.e., the chairperson of the airport board, city official, etc.) to schedule the inspection. Inspectors generally request someone familiar with the operations of the airport be available to discuss inspection findings. This contact can be either in person or by email, letter, or telephone.

- 3.1.2.1 Inspected PERIODICALLY by FAA Personnel.
 - Air carrier airports certificated under part 139
 - All other commuter-served airports and obligated NPIAS commuter, reliever, and satellite airports
 - Non-obligated NPIAS commuter, reliever, and satellite airports
- 3.1.2.2 Inspected ANNUALLY to TRIENNIALLY by FAA, State, or Contractor Personnel.
 - General aviation obligated airports
 - General aviation NPIAS airports
 - All other general aviation airports

Unique situations may dictate inspection of certain civil private use airports, such as those airports served exclusively by a commuter operator. The regional Airports Division is responsible for assigning an appropriate inspection priority based on the individual airport's use.

3.1.3 What Will Happen At My Airport Inspection?

During the inspection of an airport, inspectors use the latest information in Airports GIS to validate or identify data describing the physical infrastructure and services of the airport requiring a change. If the inspector finds a discrepancy or difference between the published information and inspector observations, the inspector will discuss the item with the responsible airport official or designated representative. The physical inspection of an airport affords us an opportunity to foster aviation safety and development; thus, the inspector must use a cooperative and thorough approach in the discussion of items with local contacts. Upon completion of the inspection, the inspector will enter inspection findings into the airport inspection module of Airports GIS. This module provides the inspector tools to note necessary changes to the airport's data, note the physical inspection of the airport, and note whether the results of the inspection of the airport represents actual conditions at the airport on the date of inspection. Once the inspector identifies the necessary changes, the system will require you to certify the change. If the inspection results in changes to your airport's data, sign into Airports GIS to make the necessary changes and provide any supporting documentation within 45 days of the inspection. Airports GIS will tie these changes to the inspection module and annotate completion of the necessary changes.

3.1.4 <u>What Kind of Unsafe Conditions Will the Inspector Report?</u>

Inspectors look for and report all conditions on the airport with the potential to present a hazard to safe operations. Examples of these conditions include, but are not limited to, the following:

- Unmarked obstructions
- Deteriorating or cracked runways or taxiways
- Stored materials
- Parked aircraft near runways or taxiways
- Landfills and unlicensed garbage dumps with the potential to attract wildlife
- Objects in the safety areas
- Other potential safety hazards on or near the runway(s)
- Uneven or soft grounds and areas of ponding or inadequate drainage

The inspector must identify and discuss these unsafe airport conditions with the airport operator; these conditions must be reported and included in the Airport/Facility Directory for use by the flying public until rectified. In addition, the inspector must discuss your responsibility in promptly notifying airmen about any condition affecting future aeronautical use of the airport by issuing a Notice to Airmen (NOTAM) through the local Flight Service Station (FSS).

3.1.5 Besides Annual Inspections, When Else Can I Be Inspected?

Between Annual Inspections, regional Airports personnel may conduct a special inspection, such as at the completion of a construction project. The inspector may decide to complete a full inspection for the airport. If a full inspection is not

accomplished and only certain items are validated, the inspector should not change the date of last inspection. The inspector should submit the date of the additional inspection as "additional information" within the Airports GIS inspection module. State Aviation Agencies may also conduct inspections either coincident with the Airport Data and Information Program inspection or at other times for individual state aviation requirements.

3.2 Instructions for Location Sketch and Layout Drawing.

Using the drawing tools available within Airports GIS, airport owners and operators subject to inspection may develop and submit a location sketch and layout drawing. Airports not subject to inspection may develop and provide location sketches and layout drawings at their discretion.

The standard layout size before reduction is 8.5 by 11 inches. The drawing comprises a location sketch, which serves to locate the airport relative to its associated city, and a layout drawing portraying the essential features of the airport. In order to ensure uniform sketches nationally, all of the items in this section should be, if possible, included on all sketches. Optional items are so indicated. You may include additional items, if appropriate, but these should be kept to a minimum to avoid needless detail, clutter, or advertisement for a specific company or service.

3.2.1 <u>Items to Include on Location Sketch and Layout:</u>

- Runways, complete with magnetic headings (including the magnetic variation and epoch year, if available), and identifiers; runway end coordinates; elevations; and runways under construction.
- Operational Data:
 - Runway dimensions -- length and width, threshold to threshold
 - Displaced threshold(s), including coordinates and elevations when available
 - o Runway surface composition
 - Runway magnetic heading
 - o Runway identifiers
 - Runways under construction
 - Weight-bearing capacity (landing gear configuration or PCN number when available)
 - Runway end elevations
 - o Land and Hold Short (LAHSO) lines
 - Instrument Landing System (ILS) hold lines
 - Localizer/Glideslope Critical Areas
 - Dimensions of turnaround areas adjacent to runway thresholds where operational taxiways do not exist

- o Dimensions of overruns and blast pads
- Location of Hotspot(s) on movement areas with a description of the potential safety problem(s) that exist
- Taxiways, with identifiers
- Taxiways under construction
- Parking areas, run-up mats, alert areas, landing pads, ramps and hold pads
- Turnarounds
- Large tanks
- Control towers (including tower height)
- Airport beacons
- Helicopter pads/alighting areas
- Highest obstruction within diagram area
- Fueling area
- Terminal/administration building and base operations
- Other unique structures or features, clearly labeled
- Engineered Materials Arrestor System (EMAS) and dimensions

3.2.2 Optional Location Sketch and Layout Items Include:

- Radar reflectors
- Fire station
- Military/government hangars (numbered). Identify the branch of service or agency to which it belongs when other than airport operator. Acronyms or abbreviations may be used, e.g., ANG (Air National Guard), USCG (United States Coast Guard), and FAA.
- Parking areas and ramps, e.g., south, ANG, and USN.
- Hot cargo ramps
- Automated Flight Service Station (AFSS), National Weather Service (NWS)
- U.S. Customs
- Flight Standards District Office (FSDO)
- Security Identification Display Area



Figure 3-1. An Example of the Airport Location Sketch and Layout Drawing.

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APPENDIX A. DATA ELEMENT REQUIREMENTS

Use the tables in this appendix to identify the data requirements for different data elements according to the type of airport (public, private, etc.), specific data element change, and supporting documentation.

Regional Office (RO) or local Airports District Office (ADO) approval is a change requiring review at this level to determine the effect of the changes on safety, utilization, or efficiency of a public use airport (or private use airport with a published instrument approach) or compliance with federal obligations.

FAA Aeronautical Study is a change requiring analysis from the regional or local Airport District Office, in coordination with the respective Regional Airspace Procedures Team (RAPT), to study potential impacts.

Collect data to AC standards is a change requiring adherence to data collection standards outlined in ACs 150/5300-16, 150/5300-17, 150/5300-18, and 150/5300-19.

Complete and sign web-based certification is a change requiring an airport sponsor's digital signature on a web-based form.

Submit board or airport authority certified letter is a change requiring a notarized letter from the airport sponsor or airport authority.

A.1 Public Airports with Federal Agreements.

 Table A-1. Public Airports with Federal Agreements: General Airport Information.

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The status of your airport from IFR (Instrument Flight Rules) to VFR (Visual Flight Rules) or VFR to IFR		✓		~	
Your Airport Reference Point		✓	~		
The status of airport from private use to public use or from public use to private use.		✓			~
The Airport Elevation for your airport		\checkmark	~		

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web-based certification	Submit board or airport authority certified letter
The Traffic Pattern for your airport		~		~	
The FAA assigned Airport Magnetic Variation for your airport	~			~	
The information regarding the VOR Receiver Checkpoint at your airport	~			~	
The information regarding the Rotating Beacon (geographic coordinates, elevation, schedule, or color) at your airport	~		~		
The Airport Acreage of your airport	~			~	
The information regarding IFR Procedure availability at your airport		~		~	
The information regarding the Lighting system (control or frequency) of your airport		~		~	
The Communication frequencies in use for your airport		\checkmark		~	
The Airport Rescue Firefighting (ARFF) Index for your airport	~			~	
If you are requesting to establish your airport as part of the NPIAS program	~			~	
The Non-Commercial Landing Fee for your airport				~	
The information regarding Airport of Entry, Landing Rights, or User fee for your airport				~	

Table A-2. Public Airports with Federal Agreements: General Airport Information (continued).

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The Airport Name				\checkmark	\checkmark
The Airport Attendance Schedule for your airport	~			~	
The Contact Information (name, mailing address, phone, e-mail) for the Airport Manager of your airport				✓	
The Contact Information (name, mailing address, phone, e-mail) for the Airport Authority for your airport	~				\checkmark
The Physical address for your airport	~			~	
The Airport Ownership (private, public, Air Force, Army, Navy, other) for your airport	~				\checkmark
The Airport Licensing of your airport	~			✓	
The distance and direction to the Center Business District for your airport				~	
Non-commercial usage	\checkmark				\checkmark

Table A-3. Public Airports with Federal Agreements: Airport Administration and Logistical Data.

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The number of Air Carrier operations for your airport				\checkmark	
The number of Air Taxi operations for your airport				~	
The number of Commercial operations for your airport				~	
The number of local General Aviation operations for your airport				~	
The number of itinerant General Aviation operations for your airport				~	
The number of Military operation for your airport				\checkmark	
The number of Based Aircraft ¹ for your airport				~	

Table A-4. Public Airports with Federal Agreements: Airport Operations (12 Month Count of Take-Off or Landing).

¹ The airport official should provide any additional supporting documentation they feel is required to support this data element (such as the number of single engines, multi engines, jets, helicopters, gliders, ultra-lights, commuters, air taxis, etc.)

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The Type(s) of Fuel available at your airport				\checkmark	
The type of Airframe Repair service available at your airport				~	
The type of Power Plant Repair services available at your airport				~	
The availability of Bottle Oxygen at your airport				~	
The availability of Bulk Oxygen at your airport				\checkmark	

Table A-5. Public Airports with Federal Agreements: Airport Services.

Table A-6. Public Airports with Federal Agreements: Apron/Parking Services.

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The information regarding Aircraft Parking Positions (standpoints) for your airport			~		
The information regarding Inertial Navigation System Checkpoints at your airport	~		~		
The information regarding the Weight Bearing Capacity of Aprons and Parking Areas at your airport	~			~	
The Pavement Classification Number (PCN) for Aprons or Parking Areas at your airport	~			~	

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The information regarding the Final Approach Takeoff Area (FATO) including length, width, type (ingress or egress), bearing, or geometric center coordinates, or elevation for your heliport/helipad		✓	~		
The Touchdown Liftoff Area (TLOF) including length, width and geometric center coordinates and elevation information for your heliport/helipad		✓	~		
The type of Lighting available at your heliport/helipad	~			~	
The information regarding the Marking of your heliport/helipad	~			~	

Table A-7. Public	Airports with	Federal Agreements:	Heliport/Helipads.
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Table A-8. Public Airports with Federal Agreements: Navigational Aids.

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The information regarding Electronic Navigational Aids at your airport		\checkmark	~		
The information regarding the Visual Navigational Aids (threshold crossing height, glideslope angle, distance from serviced runway end, runway reference point elevation, or identified runway side) for your airport		✓	✓		

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The information regarding an Obstacle on or surrounding your airport		✓	~		
The information regarding the Obstacle Free Zones or Areas associated with your airport	\checkmark		~		

Table A-9	. Public	Airports with	Federal	Agreements:	Obstacles.
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Table A-10. Public Airports with Federal Agreements: Runway.

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The Runway Identifier(s) (Number) for your airport	~			✓	
The Runway Length of any runway at your airport	~	\checkmark	✓		
The Runway Width of any runway at your airport	~	✓	✓		
The Declared Distances information for your airport	~	\checkmark		~	
The type of Runway Surface information for your airport	~			~	
The Pavement Classification Number for any runway at your airport	~			~	
The Weight Bearing Capacity information for any runway at your airport	~			~	
The information regarding the Markings (type or condition) at your airport	~			~	

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The information about the Lighting (including approach lighting, REILs, edge lights) at your airport		✓		~	
The information regarding the availability of Centerline lighting at your airport	~		~		
The availability of Touchdown Zone lighting at your airport	~		~		
The information regarding the Approach light plane at your airport	~			~	
Engineered Arresting Material System (length, width, geographic position, elevation, or material)	~		~		
Runway threshold (geographic position or elevation)		✓	✓		
The information regarding any Displaced threshold(s) (geographic position, elevation or distance to runway end) at your airport		~	~		
The information regarding Land and Hold Short Operations (LASHO) including distance to runway end at your airport	~		~		
Runway Design Code (RDC)	✓				
Approach Reference Code (APRC)	✓				
Departure Reference Code (DPRC)	~				

Table A-11. Public Airports with Federal Agreements: Runway (continued).

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The information regarding Runway Visual Range (RVR) ² at your airport	\checkmark			✓	
The information regarding the Runway Visual Value (RVV) ³ at your airport	~			~	
The information regarding the availability of a Stopway or its dimensions at your airport	~		~		
The information regarding Clearway (length or width) at your airport	~		~		
The information regarding arresting systems available at your airport		~	~		
The Pavement Classification Number for any runway at your airport	\checkmark			~	

Table A-12. Public Airports with Federal Agreements: Runway (continued).

² Runway Visual Range (RVR) - An instrumentally derived value, based on standard calibrations, that represents the horizontal distance a pilot will see down the runway from the approach end. This value is based on the sighting of either high intensity runway lights or on the visual contrast of other targets, whichever yields the greater visual range. RVR, in contrast to prevailing or runway visibility, is based on what a pilot in a moving aircraft should see looking down the runway. RVR is horizontal visual range, not slant visual range. It is based on the measurement of a transmissometer made near the touchdown point of the instrument runway and is reported in hundreds of feet. RVR is used in lieu of RVV and/or prevailing visibility in determining minimums for a particular runway.

^{1. &}lt;u>Touchdown RVR</u>- The RVR visibility readout values obtained from RVR equipment serving the runway touchdown zone.

^{2. &}lt;u>Mid-RVR</u>- The RVR readout values obtained from RVR equipment located midfield of the runway.

^{3.} <u>Rollout RVR</u>- The RVR readout values obtained from RVR equipment located nearest the rollout end of the runway.

³ Runway Visibility Value (RVV) - The visibility determined for a particular runway by a transmissometer. A meter provides a continuous indication of the visibility (reported in miles or fractions of miles) for the runway. RVV is used in lieu of prevailing visibility in determining minimums for a particular runway.

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The information regarding taxiway identifiers at your airport	~			~	
The width of any taxiway at your airport	✓		✓		
The information regarding the Centerline Points (including geographic coordinates) for taxiways at your airport	~		~		
The Pavement Classification Number for any taxiway at your airport	~			~	

Public Airports without Federal Agreements.

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The status of your airport from IFR (Instrument Flight Rules) to VFR (Visual Flight Rules) or VFR to IFR		\checkmark		~	
Your Airport Reference Point		\checkmark	✓		
The status of airport from private use to public use or from public use to private use.		\checkmark			~
The Airport Elevation for your airport		✓		~	
The Traffic Pattern for your airport		\checkmark		\checkmark	
The FAA assigned Airport Magnetic Variation for your airport	~			~	
The information regarding the VOR Receiver Checkpoint at your airport	~			~	
The information regarding the Rotating Beacon (geographic coordinates, elevation, schedule, or color) at your airport	~		~		
The Airport Acreage of your airport	~			\checkmark	
The information regarding IFR Procedure availability at your airport		\checkmark		~	
The information regarding the Lighting system (control or frequency) of your airport		~		~	
The Communication frequencies in use for your airport		\checkmark		~	
The Airport Rescue Firefighting (ARFF) Index for your airport	~			~	

Table A-14. Public Airports without Federal Agreements: General Airport Information.

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
If you are requesting to establish your airport as part of the NPIAS program	~			✓	
The Non-Commercial Landing Fee for your airport				✓	
The information regarding Airport of Entry, Landing Rights, or User fee for your airport				~	

Table A-15. Public Airports without Federal Agreements: General Airport Information (continued).

Table A-16. Public Airports without Federal Agreements: Airport Administration and Logistical Data.

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The Airport Name				✓	✓
The Airport Attendance Schedule for your airport				✓	
The Contact Information (name, mailing address, phone, e-mail) for the Airport Manager of your airport				\checkmark	
The Contact Information (name, mailing address, phone, e-mail) for the Airport Authority for your airport				~	
The Physical address for your airport				\checkmark	

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The Airport Ownership (private, public, Air Force, Army, Navy, other) for your airport				~	
The Airport Licensing of your airport	✓			~	
The distance and direction to the Center Business District for your airport				~	
Non-Commercial usage	\checkmark			\checkmark	

Table A-17. Public Airports without Federal Agreements: Airport Administration and
Logistical Data (continued).

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The number of Air Carrier operations for your airport				\checkmark	
The number of Air Taxi operations for your airport				~	
The number of Commercial operations for your airport				~	
The number of local General Aviation operations for your airport				~	
The number of itinerant General Aviation operations for your airport				~	
The number of Military operation for your airport				~	
The number of Based Aircraft ⁴ for your airport				✓	

Table A-18. Public Airports without Federal Agreements: Airport Operations(12 Month Count of Take-Off or Landing).

⁴ The airport official should provide any additional supporting documentation they feel is required to support this data element (such as the number of single engines, multi engines, jets, helicopters, gliders, ultra-lights, commuters, air taxis, etc.).

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The Type(s) of Fuel available at your airport				~	
The type of Airframe Repair service available at your airport				~	
The type of Power Plant Repair services available at your airport				~	
The availability of Bottle Oxygen at your airport				~	
The availability of Bulk Oxygen at your airport				\checkmark	

Table A-19. Public Airports without Federal Agreements: Airport Services.

Table A-20. Public Airports without Federal Agreements: Apron/Parking Services.

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The information regarding Aircraft Parking Positions (standpoints) for your airport			~		
The information regarding Inertial Navigation System Checkpoints at your airport	~		~		
The information regarding the Weight Bearing Capacity of Aprons or Parking areas of your airport	~			~	
The Pavement Classification Number (PCN) for Aprons or Parking areas at your airport	~			~	

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The information regarding the Final Approach Takeoff Area (FATO) including length, width, type (ingress or egress), bearing, or geometric center coordinates, or elevation for your heliport/helipad		✓		~	
The Touchdown Liftoff Area (TLOF) including length, width and geometric center coordinates and elevation information for your heliport/helipad		✓		~	
The type of Lighting available at your heliport/helipad	\checkmark			\checkmark	
The information regarding the Marking of your heliport/helipad	~			~	

Table A-21. Public A	Airports without	Federal Agreements:	Heliport/Helipads.
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 Table A-22. Public Airports without Federal Agreements: Navigational Aids.

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The information regarding Electronic Navigational Aids at your airport		\checkmark	~		
The information regarding the Visual Navigational Aids (threshold crossing height, glideslope angle, distance from serviced runway end, runway reference point elevation, or identified runway side) for your airport		✓	V		

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The information regarding an Obstacle on or surrounding your airport		~	~		
The information regarding the Obstacle Free Zones or Areas associated with your airport	~		~		
Runway Design Code (RDC)	~				
Approach Reference Code (APRC)	✓				
Departure Reference Code (DPRC)	\checkmark				

 Table A-24. Public Airports without Federal Agreements: Runway.

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The Runway Identifier(s) (Number) for your airport	✓			✓	
The Runway Length of any runway at your airport		✓	✓		
The Runway Width of any runway at your airport		✓	✓		
The Declared Distances information for your airport		✓		✓	
The type of Runway Surface information for your airport	✓	✓		✓	
The Pavement Classification Number for any runway at your airport	~			~	

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The Weight Bearing Capacity information for any runway at your airport	~			~	
The information regarding the Markings (type or condition) at your airport	\checkmark			~	
The information about the Lighting (including approach lighting, REILs, edge lights) at your airport		~		~	
The information regarding the availability of Centerline lighting at your airport	~		~		
The availability of Touchdown zone lighting at your airport	~		~		
The information regarding the Approach light plane at your airport	~			~	
Engineered Arresting Material System (length, width, geographic position, elevation, or material)	~		~		
Runway threshold (geographic position or elevation)		\checkmark	✓		
The information regarding any Displaced threshold(s) (geographic position, elevation or distance to runway end) at your airport		✓	~		
The information regarding Land and Hold Short Operations (LASHO) including distance to runway end at your airport	~		~		

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The information regarding Runway Visual Range (RVR) ⁵ at your airport	\checkmark			✓	
The information regarding the Runway Visual Value (RVV) ⁶ at your airport	~			~	
The information regarding the availability of a Stopway or its dimensions at your airport	~		~		
The information regarding Clearway (length or width) at your airport	~		~		
The information regarding arresting systems available at your airport		~	~		
The Pavement Classification Number for any runway at your airport	\checkmark			~	

Table A-26. Public Airports without Federal Agreements: Runway (continued).

⁵ Runway Visual Range (RVR) - An instrumentally derived value, based on standard calibrations, that represents the horizontal distance a pilot will see down the runway from the approach end. This value is based on the sighting of either high intensity runway lights or on the visual contrast of other targets, whichever yields the greater visual range. RVR, in contrast to prevailing or runway visibility, is based on what a pilot in a moving aircraft should see looking down the runway. RVR is horizontal visual range, not slant visual range. It is based on the measurement of a transmissometer made near the touchdown point of the instrument runway and is reported in hundreds of feet. RVR is used in lieu of RVV and/or prevailing visibility in determining minimums for a particular runway.

^{1. &}lt;u>Touchdown RVR</u>- The RVR visibility readout values obtained from RVR equipment serving the runway touchdown zone.

^{2. &}lt;u>Mid-RVR</u>- The RVR readout values obtained from RVR equipment located midfield of the runway.

^{3.} <u>Rollout RVR</u>- The RVR readout values obtained from RVR equipment located nearest the rollout end of the runway.

⁶ Runway Visibility Value (RVV) - The visibility determined for a particular runway by a transmissometer. A meter provides a continuous indication of the visibility (reported in miles or fractions of miles) for the runway. RVV is used in lieu of prevailing visibility in determining minimums for a particular runway.

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The information regarding taxiway identifiers at your airport	~			~	
The width of any taxiway at your airport	✓		✓		
The information regarding the Centerline Points (including geographic coordinates) for taxiways at your airport	~		~		
The Pavement Classification Number for any taxiway at your airport	~			~	

Table A-27. Public Air	ports without Federal	Agreements: Taxiways.

Private-Use Airports.

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The status of your airport from IFR (Instrument Flight Rules) to VFR (Visual Flight Rules) or VFR to IFR		\checkmark		~	
Your Airport Reference Point		\checkmark		\checkmark	
The status of airport from private use to public use or from public use to private use.		\checkmark			~
The Airport Elevation for your airport		~		\checkmark	
The Traffic Pattern for your airport		~		\checkmark	
The FAA assigned Airport Magnetic Variation for your airport				>	
The information regarding the VOR Receiver Checkpoint at your airport				~	
The information regarding the Rotating Beacon (geographic coordinates, elevation, schedule, or color) at your airport				~	
The Airport Acreage of your airport				\checkmark	
The information regarding IFR Procedure availability at your airport		\checkmark		~	
The information regarding the Lighting system (control or frequency) of your airport				~	
The Communication frequencies in use for your airport		\checkmark		\checkmark	
The Airport Rescue Firefighting (ARFF) Index for your airport				~	

Table A-28. Private-Use Airports: General Airport Information.

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The Non-Commercial Landing Fee for your airport				\checkmark	
The information regarding Airport of Entry, Landing Rights, or User fee for your airport				~	

Table A-29. Private-Use Airports: General Airport Information (continued).

Table A-30. Private-Use Airports: Airport Administration and Logistical Data.

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The Airport Name				✓	✓
The Airport Attendance Schedule for your airport				✓	
The Contact Information (name, mailing address, phone, e-mail) for the Airport Manager of your airport				~	
The Contact Information (name, mailing address, phone, e-mail) for the Airport Authority for your airport				~	
The Physical address for your airport				✓	
The Airport Ownership (private, public, Air Force, Army, Navy, other) for your airport				~	
The Airport Licensing of your airport				\checkmark	
The distance and direction to the Center Business District for your airport				~	

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
Non-Commercial usage				✓	

 Table A-32. Private-Use Airports: Heliport/Helipads.

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The information regarding the Final Approach Takeoff Area (FATO) including length, width, type (ingress or egress), bearing, or geometric center coordinates, or elevation for your heliport/helipad		✓		~	
The Touchdown Liftoff Area (TLOF) including length, width and geometric center coordinates and elevation information for your heliport/helipad		✓		~	
The type of Lighting available at your heliport/helipad				✓	
The information regarding the Marking of your heliport/helipad				~	

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The information regarding Electronic Navigational Aids at your airport				~	
The information regarding the Visual Navigational Aids (threshold crossing height, glideslope angle, distance from serviced runway end, runway reference point elevation, or identified runway side) for your airport				~	

Table A-33. Private-Use Airports: Navigational aids.

Table A-34. Private-Use Airports: Obstacles.

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The information regarding an Obstacle on or surrounding your airport				\checkmark	

Data Element to change or establish	RO or local ADO approval	FAA aeronautical study	Collect data to AC standards	Complete and sign web- based certification	Submit board or airport authority certified letter
The Runway Identifier(s) (Number) for your airport				\checkmark	
The Runway Length of any runway at your airport		\checkmark		\checkmark	
The Runway Width of any runway at your airport		\checkmark		✓	
The type of Runway Surface information for your airport		\checkmark		✓	
The information regarding the Markings (type or condition) at your airport				~	
Runway threshold (geographic position or elevation)		✓	✓		
The information regarding any Displaced threshold(s) (geographic position, elevation or distance to runway end) at your airport		~	~		
The information regarding arresting systems available at your airport		~	~		
The Pavement Classification Number for any runway at your airport	~			~	

Table A-35. Private-Use Airports: Runway.

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APPENDIX B. GLOSSARY OF TERMS

Abandoned airport is an airport that is permanently closed.

Accuracy is the degree of conformity with a standard, or a value accepted as correct. Precision is the degree of uniformity of repeated measurements or events. For example, repeat measurements of the distance between two points may exhibit a high degree of precision by virtue of the relative uniformity of the measurements. However, if a "short" tape were used in the measurements, accuracy would be poor in that the measured distance would not conform to the true distance between the points. Surveying and mapping accuracy standards should include three elements: (1) a stated variation from a true value or a value accepted as correct, (2) the point to which the new value is relative, and (3) the probability that the new value will be within the stated variation. For example, "Horizontal accuracy will be 10 cm relative to the nearest Continuously Operating Reference Station (CORS) at the 95 percent confidence level."

Aeronautical Information Regulation and Control (AIRAC) is a series of common dates for the publication of airport and aeronautical data.

Aeronautical Information Services (AJV-5) is an office within the FAA Headquarters Air Traffic Organization (ATO). It is the FAA's official stewards for aeronautical information.

Airport is an area of land or water that is used or intended to be used for the landing and takeoff of aircraft and includes its buildings and facilities, if any.

Airport closed indefinitely is an airport where all flying activities have ceased indefinitely; however, the intent remains to reopen the airport at an unspecified time.

Airport closed temporarily is an airport closed to aircraft operations for a short duration due to maintenance, construction, weather, or some other purpose while the operator is still in business.

Airport Data Information Program Administrator is the office in the FAA with primary responsibility for collecting, administrating, and disseminating non-safety of flight critical data for the Airport Safety Data Program via an electronic medium acceptable to the FAA.

Airport Authority is the person or organization responsible for the operation of the airport. The airport authority could be a private or government organization. The term airport sponsor relates only to NPIAS airports and includes certain statutory and legal requirements.

Airport Elevation is the highest point of an airport's usable runways measured in feet from mean sea level (technically, from the vertical datum).

Airport Engineering Division (AAS-100) is a headquarters division within the Office of Airport Safety and Standards.

Airport Lighting. Various lighting aids that may be installed on an airport. Types of airport lighting include:

• Airport Rotating Beacon (APBN) is a visual navigational aid operated at many airports. At civil airports, alternating white and green flashes indicate the location of the airport. At military airports, the beacons flash alternately white and green,

but are differentiated from civil beacons by dual-peaked (two quick) white flashes between the green flashes.

- Approach Light System (ALS) is an airport lighting facility which provides visual guidance to landing aircraft by radiating light beams in a directional pattern by which the pilot aligns the aircraft with the extended centerline of the runway on his final approach for landing. Condenser-Discharge Sequential Flashing Lights/Sequenced Flashing Lights may be installed in conjunction with the ALS at some airports.
- Omnidirectional Approach Light System (ODALS) are seven omnidirectional flashing lights located in the approach area of a nonprecision approach. Five lights are located on the runway centerline extended with the first light located 300 feet from the threshold and extending at equal intervals up to 1,500 feet from the threshold. The other two lights are located, one on each side of the runway threshold, at a lateral distance of 40 feet from the runway edge or 75 feet from the runway edge when installed on a runway equipped with a VASI.
- Precision Approach Path Indicator (PAPI) is a visual approach slope indicator normally consisting of light units similar to the VASI but in a single row of either two or four light units set perpendicular to the runway centerline. The row of light units is normally installed on the left side of the runway. Indications are as follows: Below glide path all lights red; Slightly below glide path three lights closest to runway red, other light white; On glide path two lights closest to runway red, other two lights white; Slightly above glide path light closest to runway red, other three lights white; Above glide path all lights white.
- **Pulsating Visual Approach Slope Indicator** (PVASI) is a pulsating visual approach slope indicator normally consists of a single light unit projecting a two-color visual approach path into the final approach area of the runway upon which the indicator is installed. The on glide path indication is a steady white light. The slightly below glide path indication is a steady red light. If the aircraft descends further below the glide path, the red light starts to pulsate. The above glide path indication is a pulsating white light. The pulsating rate increases as the aircraft gets further above or below the desired glide slope.
- **Runway Alignment Indicator Lights** (RAIL) are sequenced Flashing Lights (SFLs) which are installed only in combination with other light systems.
- **Runway End Identifier Lights** (REIL) are two synchronized flashing lights, one on each side of the runway threshold, which provide rapid and positive identification of the approach end of a particular runway.
- Threshold Lights are fixed green lights arranged symmetrically left and right of the runway centerline identifying the runway end. When all light units are located outside the runway edge or runway edge extended, the runway end lights are considered to be "outboard." If any light unit is located inside the runway edge or runway edge extended, the lights are considered to be "inboard."

- **Tri-Color Visual Approach Slope Indicator** (TRVC) is a visual approach slope indicator normally consisting of a single light unit projecting a three-color visual approach path into the final approach area of the runway upon which the indicator is installed. The below glide path indication is red; the above glide path indication is amber; and the on glide path indication is green.
- Visual Approach Slope Indicator (VASI) is an airport lighting facility providing vertical visual approach slope guidance to aircraft during approach to landing by radiating a directional pattern of high intensity red and white focused light beams which indicate to the pilot is "on path" if he sees red/white, "above path" if white/white, and "below path" if red/red. Some airports serving large aircraft have three-bar VASIs which provide two visual glide paths to the same runway.

Airport Management includes the airport owner, operator, manager, or sponsor (for NPIAS airports) unless a distinction is made in the text.

Airport Master Record (FAA Form 5010) describes the basic operational and services data of the airport.

Airport Reference Point (ARP) is the approximate geometric center of all usable runways. ARP is not monumented, therefore not recoverable on the ground.

Airport Safety and Operations Division (AAS-300) is a headquarters division within the Office of Airport Safety and Standards.

Airport Sketch is a sketch of the movement areas, facilities, and equipment on the airport and contains a small location diagram showing the airport in relation to its associated city.

Airports District Office (ADO) is a subdivision of a regional Airports Division's geographic boundaries.

Approach Reference Code (APRC) is a code signifying the current operational capabilities of a runway and associated parallel taxiway with regard to landing operations.

Apron is a defined area on an airport or heliport intended to accommodate aircraft for purposes of loading or unloading passengers or cargo, refueling, parking, or maintenance. With regard to seaplanes, a ramp is used for access to the apron from the water.

Attributes or Attribute Data is alphabetical and/or numeric information that describes particular characteristics of a geospatial feature, such as type, dimensions, usage, occupancy, etc.

Authoritative Source is the designated repository for authoritative data or information provided by the steward.

- The application used to populate the authoritative source for airport data describing the physical infrastructure, characteristics, services, and operational environment of the nation's airports is the Airports Geographic Information System (Airports GIS).
- The application used to populate the authoritative source for planning data and information, including financial information relating to grants or the Passenger Facility Charge (PFC) program is the System of Airports Reporting II (SOAR II).

Azimuth:

- Astronomic Azimuth At the point of observation, the angle measured from the vertical plane through the celestial pole and the vertical plane through the observed object. The astronomic azimuth is established directly from observations on a celestial body and is measured in the plane of the horizon. Astronomic azimuths differ from geodetic azimuths because of the deflection of the vertical which can be greater than one minute of arc in extreme cases. Astronomic azimuths may be reckoned clockwise or counter-clockwise, from either north or south, as established by convention.
- **Geodetic** The angle at point A between the tangent to the meridian at A and the tangent to the geodesic from A to B whose geodetic azimuth is wanted. It may be reckoned clockwise from either geodetic north or south as established by convention. Because of earth curvature, the geodetic azimuth from A to B (forward azimuth) differs from the geodetic azimuth from B to A (back azimuth) by other than 180 degrees, except where A and B have the same geodetic longitude or where the geodetic latitude of both points is zero. The "geodesic line "is the shortest surface distance between two points on the reference ellipsoid. A "geodetic meridian" is a line on the reference ellipsoid defined by the intersection of the reference ellipsoid and a plane containing the minor axis of that ellipsoid.
- **Grid** The angle in the plane of projection between a straight line and the central meridian of a plane-rectangular coordinate system. Grid azimuths may be reckoned clockwise from either geodetic north or south as established by convention.
- **Magnetic** At the point of observation, the angle between the vertical plane through the observed object and the vertical plane in which a freely suspended symmetrically magnetized needle, influenced by no transient artificial magnetic disturbance, will come to rest. Magnetic azimuths are reckoned clockwise from magnetic north.

Blast Pad is a specially prepared surface placed adjacent to the ends of runways to eliminate the erosive effect of the high wind forces produced by airplanes at the beginning of their takeoff rolls.

Clearway is an area beyond the takeoff runway under the control of airport authorities within which terrain or fixed obstacles may not extend above specified limits. These areas may be required for certain turbine-powered operations and the size and upward slope of the clearway will differ depending on when the aircraft was certificated.

Collection is any combination of data submitted by a provider at a given time.

Data integrity is the degree of assurance that aeronautical data and its value has not been lost nor altered since the data's origination or authorized amendment.

Data quality is the degree or level of confidence that the data provided meets the requirements of the data user in terms of accuracy, resolution, and integrity.

Datum is, in general, a point, line, surface, or set of values used as a reference. A "geodetic datum" is a set of constants specifying the coordinate system and reference used for geodetic control (refer to Control Station), i.e. for calculating coordinates of points on the earth. At

least eight constants are needed to form a complete datum: three to specify the location of the origin of the coordinate system; three to specify the orientation of the coordinate system; and two to specify the dimensions of the reference ellipsoid. Any point has a unique X, Y, Z datum coordinate which can be transformed into latitude, longitude, and ellipsoid height (height relative to the ellipsoid). A "horizontal control datum" is a geodetic datum specified by two coordinates (latitude and longitude) on the ellipsoid surface, to which horizontal control points are referenced. A "vertical datum" is a theoretical equipotential surface with an assigned value of zero to which elevations are referenced. (Refer to **GEOID**.)

Departure Reference Code (DPRC) is a code signifying the current operational capabilities of a runway with regard to takeoff operations.

Displaced Threshold (DTHLD) is a threshold that is located at a point on the runway other than the designated runway end. The displaced area is available for takeoff or rollout of aircraft, but not for landing. A displaced threshold does not mark the end of a runway.

Distance Measuring Equipment (DME) is equipment (airborne and ground) used to measure the slant range distance of an aircraft from the DME navigational aid in nautical miles. DME is usually frequency paired with other navigational aids such as a VOR or localizer.

Feature is a manmade or natural object that appears in the real world such as a building, runway, navigational aid or river.

Feature Type is a collection of all features of a given type such as all runways or all buildings. Feature Types are analogous to layers in many GIS applications and are also referred to as Entity Types and Feature Classes in other standards.

Flight Path is a line, course, or track along which an aircraft is flying or intended to be flown.

Flight Service Station (FSS) is an Air Traffic field facility.

Geospatial Data, Geospatially-Referenced Data or Geospatial Vector Data is data that identifies the geographic location (2D or 3D coordinates) and characteristics (feature attributes) of natural or constructed features and boundaries on the earth. This information may be derived from remote sensing and surveying technologies. The features are represented by a point, line, or polygon. The position of a point feature is described by a single coordinate pair (or triplet for three dimensional data). The spatial extent of a line feature is described by a string of coordinates of points lying along the line, while the extent of a polygon feature is described by treating its boundary as a line feature. Vector data may be stored in a sequential, a chain node, or a topological data structure.

Global Positioning System (GPS) is space-based radio-positioning, navigation, and timetransfer system. The system provides highly accurate position and velocity information and precise time on a continuous global basis, to an unlimited number of properly equipped users.

Heliport is the area of land, water or a structure used or intended to be used for the landing and takeoff of helicopters or other rotary wing type aircraft capable of vertical takeoff and landing profiles.

Instrument Flight Rules (IFR) is a set of rules governing the conduct of flight under instrument meteorological conditions.

Instrument Landing System (ILS) is a precision instrument approach system which normally consists of the following electronic components and visual aids: Localizer, Middle Marker, Glide Slope, Approach Lighting, and Outer Marker.

Landing Area is any locality used or intended to be used for the landing and takeoff of aircraft. The locality may be on land, water, or structure including airports/heliports, and intermediate landing fields whether or not facilities are provided for shelter, servicing, or for receiving or discharging passengers or cargo.

Localizer (LOC) is the component of an ILS which provides course guidance to the runway.

Minimums are weather condition requirements established for a particular operation or type of operation; e.g., IFR takeoff or landing, alternate airport for IFR flight plans, VFR flight etc.

Movement Area are the runways, taxiways, and other areas of an airport/heliport which are utilized for taxiing/hover taxiing, air taxiing, takeoff, and landing of aircraft, exclusive of loading ramps and parking areas. At those airports/heliports with a tower, specific approval for entry onto the movement area must be obtained from ATC.

National Airspace System (NAS) is the common network of U.S. airspace air navigation facilities, equipment and services, airports or landing areas; aeronautical charts, information and services; rules, regulations, and procedures, technical information, and manpower and material. Included are system components shared jointly with the military.

National Airspace System Resources (NASR) **Database** contains the official FAA record of aeronautical information for each of the Nation's public use airports.

National Flight Data Digest (NFDD) is a daily (except weekends and Federal holidays) publication of flight information related to aeronautical charts, aeronautical publications, Notices to Airmen, or other media serving the purpose of providing operational flight data essential to safe and efficient aircraft operations.

National Plan of Integrated Airport System (NPIAS) identifies nearly 3,400 existing and proposed airports that are significant to national air transportation and thus eligible to receive Federal grants under the <u>Airport Improvement Program (AIP)</u>. It also includes estimates of the amount of AIP money needed to fund infrastructure development projects that will bring these airports up to current design standards and add capacity to congested airports.

Navigational Aid (NAVAID) is any visual or electronic device airborne or on the surface which provides point-to-point guidance information or position data to aircraft in flight. (Refer to Air Navigation Facility).

Nondirectional Beacon (NDB) is a Low or Medium Frequency (L/MF) or Ultra High Frequency (UHF) radio beacon transmitting nondirectional signals whereby the pilot of an aircraft equipped with direction finding equipment can determine his bearing to or from the radio beacon and "home" or track to or from the station. When the NDB is installed in conjunction with an Instrument Landing System marker, it is normally called a Compass Locator.

Non-Safety of Flight Critical Data is routine data (integrity level 1×10^{-3}), where there is a very low probability that when using corrupted routine data the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe.

Notice to Airmen (NOTAM) is a notice containing information (not known sufficiently in advance to publicize by other means) concerning the establishment, condition, or change in any component (facility, service, or procedure of, or hazard in the National Airspace System) the timely knowledge of which is essential to personnel concerned with flight operations.

Obstacle is any object that has a vertical element to it and may or may not penetrate an obstruction identification surface.

Obstruction is any object that penetrates an obstruction identification surface.

Obstruction Identification Surface (OIS) is any imaginary surface authorized by the FAA to identify obstructions. Any object that penetrates an OIS is an obstruction, by definition.

- **Specified OIS** Any OIS other than a supplemental OIS.
- **Supplemental OIS** An OIS designated by appropriate FAA authorities as a supplemental OIS. A supplemental OIS, when implemented, will normally lie below a specified OIS and is intended to provide additional obstruction information. An object that penetrates a supplemental OIS only is a supplemental obstruction.

Office of Airport Safety and Standards (AAS) is a headquarters office that reports to the Associate Administrator for Airports.

Overrun Area is that area, in military aviation exclusively, beyond the end of the designated runway with a stabilized surface of the same width as the runway and centered on the extended runway centerline. This is not included in the runway length and is considered unusable.

Positional Accuracy is the difference between a geospatial feature's displayed position and its actual position. Absolute positional accuracy is the difference between a geospatial feature's displayed position and its actual position on the face of the earth. Relative positional accuracy is the difference between a geospatial feature's displayed position and that of other geospatial features in the same data set.

Precision is the smallest separation that can be represented by the method employed to make the positional statement which is the number of units or digits to which a measured or calculated value is expressed and used.

Private Use: Available for use by the owner only or by the owner and other persons authorized by the owner.

Private Use of Public Lands: The landing and takeoff area of the proposed airport is publicly owned and the proponent is a non-government entity, regardless of whether that landing and takeoff area is on land or on water and whether the controlling entity be local, State, or Federal Government.

Public Use: Available for use by the general public without a requirement for prior approval of the owner or operator.

Regional Airports Division oversees airport development, certification, and safety within defined geographic boundaries.

Regional Airports personnel are personnel of a regional Airports Division and may include personnel located in an Airport District Office and Airport Field Office.

Resolution is the smallest spacing between two display elements expressed as dots per inch, pixels per line, or lines per millimeter.

Runway is a defined rectangular area prepared for the landing and takeoff run of aircraft along its length in a land airport. Being exactly rectangular, it excludes narrow, rounded, deteriorated, and irregular ends that are not as wide as the general or overall width of the runway. The runway width is the physical width that extends over the entire length of the rectangle. The runway length does not include blast pad, clearway, or stopway surfaces. Displaced thresholds are included in the physical length. Runways are normally numbered in relation to their magnetic direction rounded off to the nearest 10 degrees: e.g., Runway 10, Runway 25.

Runway Centerline is a line connecting the two opposite runway end points. The line may be physically marked on the surface of the runway.

Runway Design Code consist of aircraft approach category (AAC), aircraft design group (ADG) and approach visibility minimum for a runway.

Runway End Point is the point at the runway end halfway between the edges of the runway.

Runway Length is the straight line distance between runway end points. This line does not account for surface undulations between points. Official runway lengths are normally computed from runway end coordinates and elevations.

Runway Safety Area is a defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway. In addition, it provides greater accessibility for firefighting and rescue equipment during such an incident.

Safety of Flight Critical Data has an integrity level of 1×10^{-8} where there is a high probability that when using corrupted critical data, the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe; or essential data, (integrity level 1×10^{-5}): there is a low probability when using corrupted essential data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe.

Satellite airport is any other airport within the Class C or D airspace area.

Simplified Directional Facility (SDF) is a navigational aid used for nonprecision instrument approaches. The final approach course is similar to that of an ILS localizer except that the SDF course may be offset from the runway, generally not more than 3 degrees, and the course may be wider than the localizer, resulting in a lower degree of accuracy.

Spatial Data is data that depicts a real world feature such as a road, building or runway on a map. The most basic types of spatial data are points, lines and polygons but spatial data can also include orthophotos and other more complex forms of locational information.

Steward is the designated organization that originates and is accountable for quality and timeliness of data and information.

• AAS-1 is the steward for airport data describing the physical infrastructure, characteristics, services, and operational environment of the nation's airports.

Because the true steward of an airport's data is external to the FAA, AAS-1 assumes the role of steward of this data for the FAA.

• APP-1 is the steward for the management of an airport's planning, environmental and financial data with respect to the Airport Improvement Program (AIP) or PFC program.

Stopway is an area beyond the takeoff runway which is able to support the airplane during an aborted takeoff without causing structural damage to the airplane. It is centered upon the extended centerline of the runway, not narrower than the runway, and designated by the airport authorities for use in decelerating the airplane during an aborted takeoff.

Tactical Air Navigation (TACAN) is an ultra-high frequency electronic rho-theta air navigational aid which provides suitably equipped aircraft a continuous indication of bearing and distance to the TACAN station.

Taxiway is a defined path established for the taxiing of aircraft from one part of an airport to another.

Threshold (THLD) is the beginning of that portion of the runway available for landing. A displaced threshold (DTHLD) is a threshold that is located at a point on the runway other than the designated beginning of the runway.

Traffic pattern is the traffic flow that is prescribed for aircraft landing at, taxiing on, or taking off from an airport. The components of a typical traffic pattern are upwind leg, crosswind leg, downwind leg, base leg, and final approach.

Very High Frequency Omnidirectional Range Station (VOR) is a ground-based electronic navigation aid transmitting very high frequency navigation signals, 360 degrees in azimuth, referenced from magnetic north.

Very High Frequency Omnidirectional Range/Tactical Air Navigation (VORTAC) – A navigation aid providing VOR azimuth, TACAN azimuth, and TACAN distance measuring equipment (DME) at one site.

Visual Approach is an approach conducted on an instrument flight rules (IFR) flight plan which authorizes the pilot to proceed visually to the airport. The pilot must have either the airport or preceding aircraft in sight at all times.

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Advisory Circular Feedback

If you find an error in this AC, have recommendations for improving it, or have suggestions for new items/subjects to be added, you may let us know by (1) mailing this form to:

Federal Aviation Administration Airport Engineering Division (AAS-100) 800 Independence Avenue SW Washington, DC 20591

or (2) faxing it to the attention of Manager, Airport Engineering Division (AAS-100), (202) 267-3688.

Subject: AC 150/5300-19, Airport Data and Information **Date:** Program

Please check all appropriate line items:

An error (procedural or typographical) has been noted in paragraph	on
page	

□ Recommend paragraph ______ on page ______ be changed as follows:

□ In a future change to this AC, please cover the following subject: (Briefly describe what you want added.)

 \Box Other comments:

 \Box I would like to discuss the above. Please contact me at (phone number, email address).

Submitted by:

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