Alaska Aviation System Plan

FACT SHEET

May 2024

5010 Airport Master Record Program

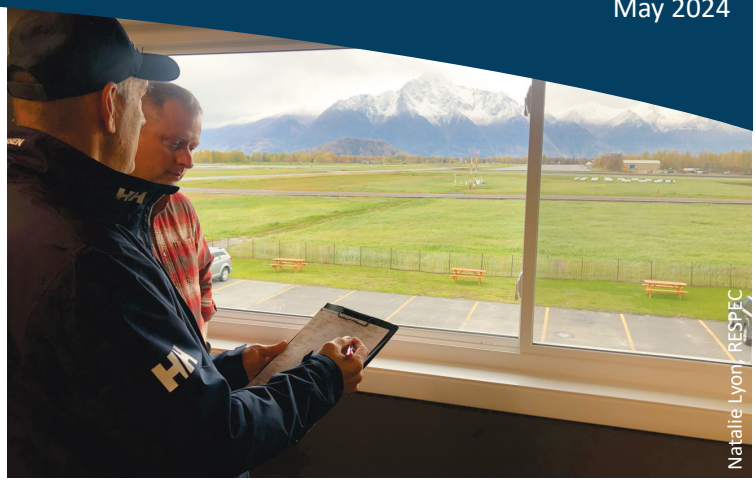
Unlocking the Vital Role 5010 Inspections Play for Public-Use Airports in Alaska

What is a 5010 inspection?

The 5010 inspection program is how the Federal Aviation Administration (FAA) gathers data and documents the physical infrastructure, operating environment, characteristics, and services in place at public-use airports. The purpose of the program is to ensure consistency in the collection, validation, and management of airport data used internally by the FAA and published for external use in flight planning and navigation. The program name comes from FAA Order 5010.4A,[1] which details the requirements for collecting and managing airport data. The order complements the FAA Advisory Circular No. 150/5300-19[2] Airport Data and Information Program, which provides additional information on inspection methodologies.

The inspectors and timing of the inspections vary based on the category of the airport, current and planned instrument approaches, and airport ownership. Airports served by larger passenger aircraft are also regulated by 14 CFR Part 139, Certification of Airports.[3] These airports are commonly referred to as Part 139 airports and the 5010 inspection is conducted by the FAA regional Airports Certification Safety Inspector, during the mandated annual certification inspection. At smaller airports, the inspections are conducted by authorized (trained) FAA, airport, state, or contractor personnel.

The 5010 inspection covers every aspect of the airport operational environment to verify or document data, with identifying safety issues being the highest priority. Data from these inspections are used for aeronautical charts, flight information publications, and navigation databases. Identifying obstructions in the airspace surrounding the airport is of the utmost importance. Other safety related issues include aircraft parked near runways or taxiways, deteriorating runway or taxiway surfaces, lighting or navigation aid outages, uneven or soft aircraft movement surfaces, ponding, inadequate drainage, wildlife attractants, and objects in the safety areas. The inspection is comprehensive and requires considerable training and time.



DOT&PF's contracted 5010 Inspector interviews the Palmer Airport Manager in fall 2023.

Are Alaska 5010 inspections unique?

Unlike in the contiguous United States, where 5010 inspections are conducted annually, public use airports in Alaska are inspected on a 3-year rotation, except for the Part 139 airports, which are inspected annually as they are in other states. The Alaska DOT&PF Division of Statewide Aviation (SWA) manages the 5010 inspection program under the FAA guidelines, awarding a new contract for each 3-year inspection cycle. All public use airports are inspected, even those where DOT&PF has no management oversight. Land airstrips, helipads, and seaplane bases are all covered by the program, as well as privately owned airports registered for public use. Inspections for airports under construction are typically deferred until improvements are complete.

DOT&PF's 5010 Program Manager works with the selected contractor to schedule inspections regionally to more efficiently cover the large number (391, according to the FAA's 2022 data) of airports spread across a state 1/5 the size of the Lower 48. On average, close to 120 airports are inspected through the program each year, more than any state nationwide. After inspections are completed, the inspector uploads the data to the FAA Airport Data and Information Portal (ADIP), and the FAA reimburses the program.

These airport inspections are especially important in the Last Frontier for several reasons. Many registered airports are on public-use land without designated ownership or management. Sometimes referred to as backcountry airstrips, these airports play a critical role in providing access to remote areas and serve as an alternate in bad weather or as an option for emergency landing. The 5010 inspector gathers critical GIS-referenced data on obstructions and their locations, which is

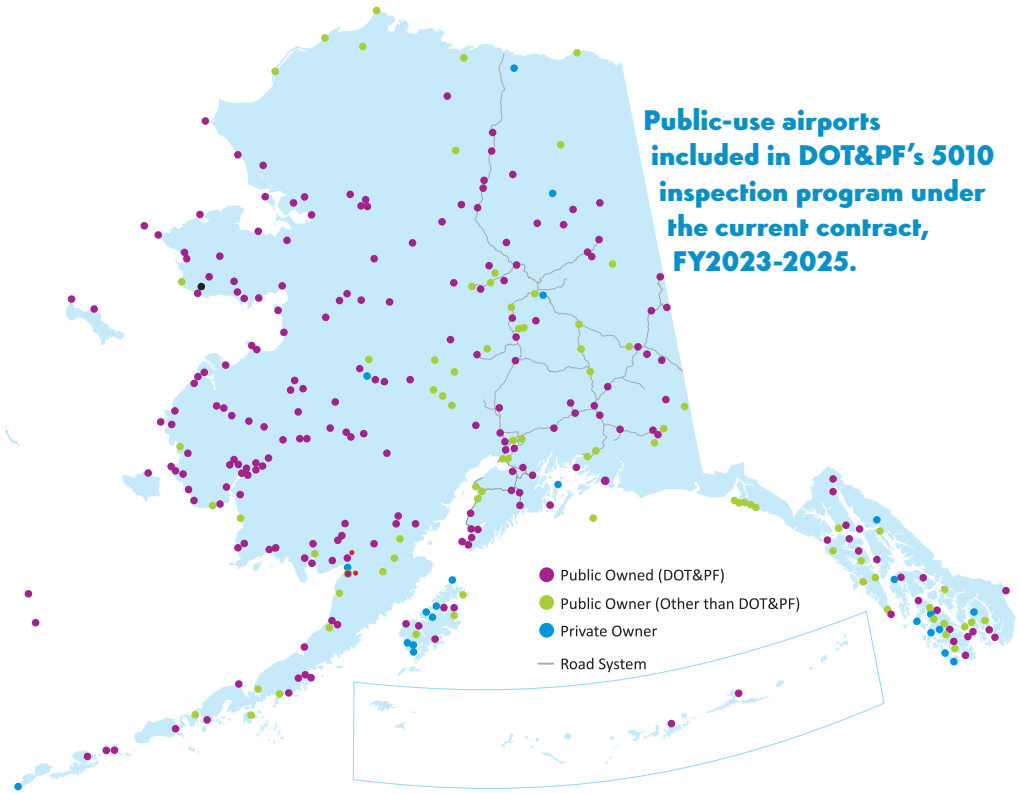
then input into the national database. The 5010 inspections help keep this information current, increasing safety for private and commercial pilots and their passengers.

In Alaska, numerous challenges hinder 5010 inspections that are not factors in the Lower 48. These challenges include a lack of road access, requiring inspectors to fly to over half (approximately 205) of the airports on the list. In addition to great distances, rugged terrain, and remoteness, inspections only occur when no snow covers the ground, making the schedule particularly demanding during the summer.

Diving into 5010 Inspections: What's Included?

Each inspection gathers data across four broad categories: General Information, Services and Facilities, Based Aircraft and Operations, and Runway Information. A 5010 inspection typically begins by interviewing the airport manager or owner to identify any known changes to conditions since the last visit. The inspector and airport representative may also discuss changes in the airport's level of operations or based aircraft. Many locations under the Alaska program do not have an airport manager on site and are maintained by a local contractor or have no staffing at all (such as at a remote airstrip on public land).

Inspection duration varies depending on the size and complexity of the airport. According to DOT&PF's current contractor, a typical 5010 time onsite takes approximately 45 minutes to an hour, which may not sound like a very long time; however, reaching the site can take more than a day or require multiple attempts because of weather or forest fire smoke that reduces visibility.



The inspector verifies data, including the owner or manager's contact information, fuel types, available aircraft services, and the airport's radio frequencies. The inspector notes the condition and composition of runway surfaces; and records geotagged photographs of each navigational aid, such as the rotating beacon, wind indicators, segmented circle, and approach aids. The inspection also includes a detailed evaluation of obstruction data and declared distances and updates controlling obstruction information on all runway ends, when needed. For example, trees may have grown over time and impact the approach surface more that they did three years ago. Most importantly, the inspector identifies any safety-critical issues anywhere at the airport that should be addressed (e.g., embankment slumping, ponding, rutting, inadequate drainage, or erosion). Airport owners who aren't on site can use this information to determine necessary repairs.

Where can I access 5010 data for Alaskan airports?

Each airport's Master Record, which informs several internal and external FAA documents, contains accurate and current data from 5010 inspections. Public-use airport users can access this data in several places, including the FAA's Airport Data and Information Portal[4] and the Alaska Chart Supplement.[5] Annual inspection reports and photographs are posted on the Alaska Aviation System Plan website and on several other applications frequently used by pilots, such as AirportIQ 5010, Garmin Pilot, and ForeFlight.

Project Contacts

Becca Douglas, CM, Project Manager
Alaska Dept. of Transportation & Public Facilities
907.269.0728 l rebecca.douglas@alaska.gov

Becky Cronkhite, CM, RESPEC Project Manager
RESPEC Inc.
907.206.6996 l Rebecca.Cronkhite@respec.com

Natalie Lyon, AICP, Public Involvement Lead
RESPEC Inc.
907.931.6820 | Natalie.lyon@respec.com

Annette Lapkowski, PE, Panther International Project Manager
Panther International, LLC
727.556.0990 x1025 l annette.lapkowski@b2gnow.com

[1]https://www.faa.gov/documentLibrary/media/Order/order-5010-4a-airport-data.pdf

[2]https://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.information/documentID/1019199

[3]https://www.faa.gov/airports/airport_safety/part139_cert

[4]https://adip.faa.gov/agis/public/#/public

[5]https://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/dafd/

The AASP project is managed by the State of Alaska Department of Transportation and Public Facilities (DOT&PF), Division of Statewide Aviation. Additional assistance is provided by the Aviation Advisory Board, private aviation organizations, local airport sponsors, air carriers, aviation related businesses and pilots.

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