



The Critical Role Airports Play in Alaska Wildland Firefighting

Introduction

Aviation is an essential part of life across Alaska’s vast and varied landscape. From delivering essential goods and services to communities, to supporting recreation, subsistence, and everyday travel, aviation plays a central role. This role extends to protecting people and property from wildfires. The Alaska Aviation System is as vast as the state itself, with 700+ airports and airfields dispersed across Alaska’s 665,400 square miles. The Public Use Airports and Wildfires map shows the expanse of the state’s public use airports, compared with 2022 and historical fires in the state.

Wildland firefighting is a collaborative effort in Alaska. Fire protection and suppression responsibilities are divided among the Bureau of Land Management Alaska Fire Service (BLM AFS), the State of Alaska Department of Forestry and Fire Protection (DOF), and the U.S. Forest Service (USFS). Through its system of 237 public airports, the Alaska Department of Transportation and Public Facilities (DOT&PF) also plays a key supporting role. Wildland firefighting in Alaska depends much more heavily on aviation infrastructure and resources than operations in the Lower 48 due to the expansiveness of the

state and its lack of widespread road connectivity. Airports allow first responders to access remote locations, provide facilities for staging personnel and gear, and support both seasonal and permanent fire bases through leases.

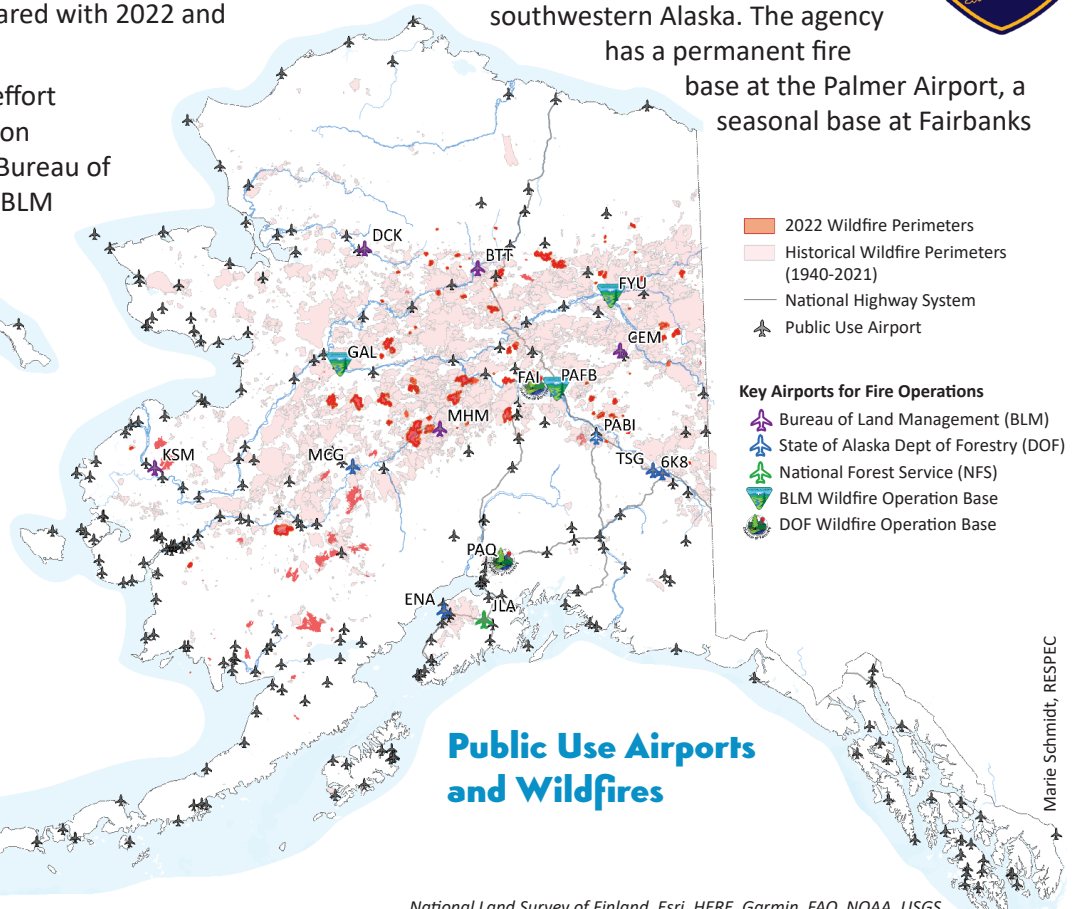
Key Agencies & Airports

Alaska Division of Forestry & Fire Protection

The DOF fire protection area includes 153.9 million acres, located primarily in southcentral and southwestern Alaska. The agency has a permanent fire



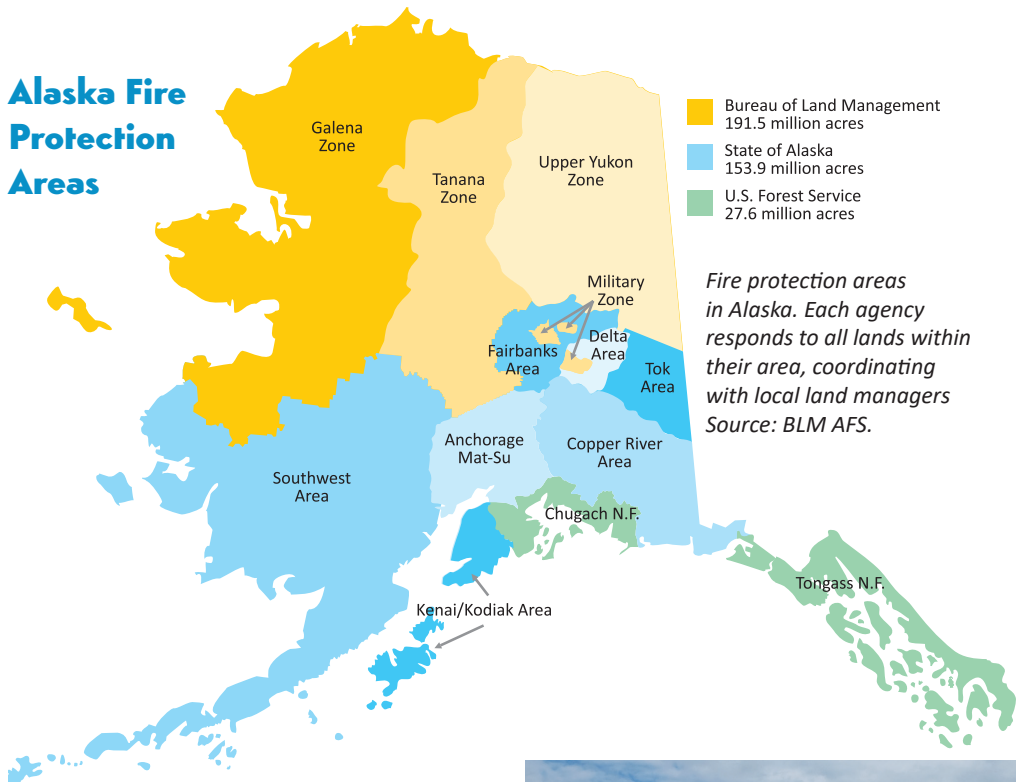
base at the Palmer Airport, a seasonal base at Fairbanks



Public Use Airports and Wildfires

Marie Schmidt, RESPEC

Alaska Fire Protection Areas



Fire protection areas in Alaska. Each agency responds to all lands within their area, coordinating with local land managers
 Source: BLM AFS.

International, and smaller air tanker reload bases at Kenai, McGrath, Tanacross, and at Allen Army Airfield at Fort Greely. The Palmer base is situated at the north end of the Palmer Airport and includes a hangar for offices, personnel support areas, aircraft storage, and maintenance facilities. The DOF holds a long-term lease for the base with the City of Palmer, who is the local sponsor and owner of the airport.

The DOF utilizes both fixed and rotary wing aircraft. The agency owns four fixed wing aircraft for logistics, aerial supervision, and tanker coordination: a de Havilland Beaver, two Aero Commanders, and one Cessna Caravan. DOF also has two exclusive use contracts for air tankers, a Convair 580 turboprop air tanker based out of Fairbanks and a Bombardier Q-400 twin turboprop air tanker based in Palmer. While BLM AFS is the primary contracting agency for Fire Boss aircraft in Alaska, DOF can call for additional Fire Boss support as the



A DOF-contracted Q-400 twin turboprop air tanker at the Palmer Airport DOF fire base.



A Fire Boss Single Engine Air Tractor on display at Fairbanks International Airport Aviation Day.

season demands, including from the Lower 48. Formerly housed at Fort Wainwright, DOF has shifted its seasonal fire base to Fairbanks International Airport (FAI) and now holds a 55-year lease on a portion of the south apron. The FAI base includes space for tanker staging and refilling, and modular living quarters to support 5-15 personnel throughout the season. According to Jason Jordet, DOF Fixed Wing Aviation Manager, the agency



BLM AFS Firefighters stage equipment at Lake Minchumina airstrip on August 10th, 2022.



DOF-owned de Havilland Beaver at Nakochna River Lodge near Skwentna assisting with the Kichatna Fire in June 2022.

hopes to upgrade the seasonal base into a permanent one, similar to the Palmer base. The FAI base has grown consistently each year, with more personnel and greater aircraft activity to support the increasing need for fire response.

During the 2022 fire season, DOF air tankers delivered 192 loads (450,000 gallons) of fire retardant from FAI to nearby fires, including the massive Clear Fire. The Palmer fire base supported several firefighting operations in the Copper River Valley, and the Tanacross base supported operations between Tok and Delta Junction, including at the Dot Lake fire. DOT&PF and

DOF are currently coordinating to explore upgrades to the Tok airport that could better support DOF firefighting operations in the region.

BLM Alaska Fire Service

The Bureau of Land Management's Alaska Fire Service (BLM AFS) oversees BLM's entire aviation program in Alaska, including law enforcement, firefighting, and resource management capabilities. BLM AFS is



permanently based at Fort Wainwright's Ladd Army Air Field (LAAF). The agency's fire protection area covers 191.5 million acres located mainly in northern and western Alaska. BLM AFS also maintains turn-key fire bases at Galena and Fort Yukon airports. Bettles, Dall Creek, Central, and Lake Minchumina are other key airstrips often used for fire response. Because the Dalton, Steese, and Elliott highways only provide access to a fraction of BLM AFS's protection area, the agency relies heavily on airports and airstrips to access remote fires and provide protection to rural communities.

Four out of seven of BLM's nationally-owned aircraft are based in Alaska. These include a PC-12 Pilatus and a Quest Kodiak that serve wildfire response, habitat survey, and personnel transport needs. In addition, the BLM contracts aircraft annually for the wildfire season, including four water-scooping Fire Boss Single Engine Air Tractor aircraft. BLM AFS at Fort Wainwright is also

home to the Alaska Smokejumpers, an elite crew of parachuting firefighters who serve across the state and Lower 48.

Airports support firefighting in other unexpected ways, too. During the East Fork Fire in 2022, DOT&PF airport staff worked closely with BLM AFS. The Airport Manager offered up St. Mary's Airport facilities to host BLM daily briefings and local DOT&PF Equipment Operators helped build a fire break to protect the nearby village.

U.S. Forest Service – Region 10

The U.S. Forest Service (USFS) fire protection area includes 27.6 million acres in the Tongass and Chugach National Forest regions. Fires in the USFS protection area tend to be relatively small, human-caused, and close to the road system. Fires in the region typically receive an immediate response and full suppression because of their proximity to people and infrastructure.

USFS Region 10 does not own or lease aircraft to prepare for a typical fire season. The agency sometimes utilizes the "call-when-needed" aircraft pool or requests support from in-state BLM AFS and DOF



View of the East Fork Fire burning about 5 miles from the village of St. Mary's in 2022.



BLM AFS Smokejumpers.



BLM AFS sign at the Galena Airport, where the agency maintains a turnkey fire base.



The BLM AFS Fire Cache Warehouse at Fort Wainwright, where fire equipment, gear, and supplies are stored.



Contracted CL-215T (yellow) and CL-415 (white) water scooping aircraft parked at BLM AFS headquarters on Fort Wainwright's Ladd Army Air Field.

aviation resources. When aircraft are used, the USFS relies heavily on local airports since there are no permanent USFS fire bases in Alaska. Local air strips such as Cooper Landing become instrumental in reaching active fire areas.

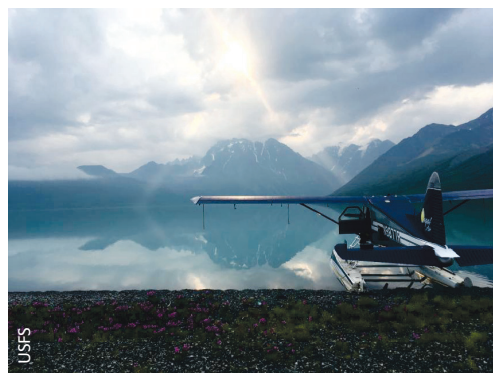
Conclusion

According to Tom Kubichek, BLM AFS State Aviation Manager, “without the airstrips in the state, we could not do our jobs.” Similarly, Palmer Airport Manager Rosalie Kelly described the DOF fire base in Palmer as a mutually-beneficial relationship between the agency and community. The fire base’s location in Palmer is ideal because fire-fighting aircraft can get in and out easily while avoiding busy air traffic in Anchorage. Palmer’s 6,000-foot runway helps support these operations. According to Kelly, “We in the community really work together to communicate. When we hear a firefighting call sign, everyone works quickly to clear the air traffic pattern and give priority to the firefighters. The Fire Bosses, Dash 8s, and fire-fighting helicopters also draw people to the airport.” During the fire season, these specialized fire-fighting aircraft can be viewed safely from the Palmer Airport Road and the parking area near the flight service station.

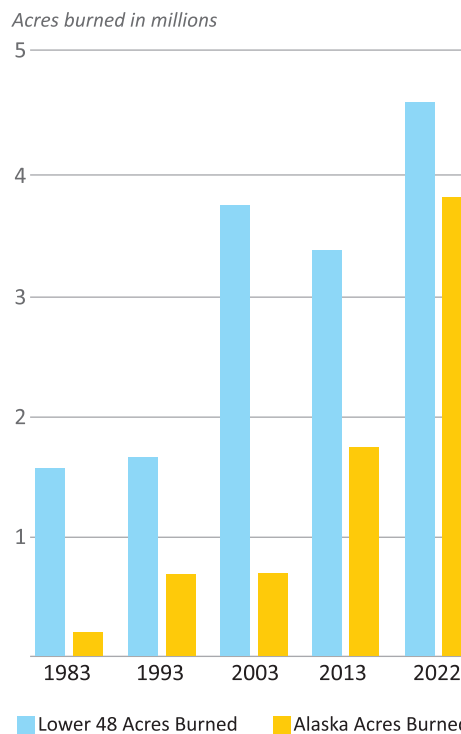
Palmer, Fairbanks International, Ladd Army Airfield, and all of the other airstrips highlighted in this fact sheet illustrate how airports provide the critical backbone for wildland firefighting in Alaska. Airports provide access to communities and remote areas inaccessible by road, serve as locations to stage gear and firefighting personnel, and support both seasonal tanker reload bases and permanent fire bases through leases and ongoing agency collaboration. As in Palmer, they also provide opportunities for the public to see firefighting operations in action and learn about how wildland fire agencies and DOT&PF work together to protect people and property throughout the state.



Smoke rising over the Kenai Lake Overlook Fire along the Seward Highway near Cooper Landing in May 2022.



Small float planes are commonly used by the USFS to transport supplies and resource personnel throughout the Tongass National Forest’s remote, rugged, and wet terrain.



Wildfire acres burned in Lower 48 and Alaska, for selected years.



Project Contacts

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

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

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

Annette Lapkowski, PE, B2Gnow Project Manager
B2Gnow/Panther International, LLC
727.556.0990 x1025 | annette.lapkowski@b2gnow.com



BLM AFS Chena Hotshot Crew hikes out of a dozer line constructed around St. Mary’s on June 9, 2022.

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.

The preparation of this document was supported in part with financial assistance through the Airport Improvement Program from the Federal Aviation Administration (AIP Grant # 3-02-0000-028-2021) as provided under Title 49 USC § 47104. The contents do not necessarily reflect the official views or policy of the FAA. Acceptance of this report by the FAA does not in any way constitute a commitment on the part of the United States to participate in any development depicted therein, nor does it indicate that the proposed development is environmentally acceptable in accordance with appropriate public laws.

