

Alaskan Aviatrixes: Pioneers throughout History & Today

By Natalie Lyon, AASP Newsletter Editor, RESPEC

In honor of Women’s History Month, coming up in March, this edition highlights the important role that women have played in the history of Alaskan aviation. While most Alaskans are familiar with the names Ben Eielson, Noel Wien, and Don Sheldon, the historical record is less vocal about the many adventure-seeking, highly skilled, and equally determined woman aviators—aviatrixes—who helped to establish aviation in the territory and state.



Lily Irvine Martin

Helen Rappaport

An appropriate place to start for the history of women in aviation in Alaska is at the very beginning: July 4, 1913. Lily Irvine Martin was a pilot and airplane mechanic. Lily and her husband James Vernon

Martin accomplished the first Alaskan flight. Lily is also known as the first woman aviator in England. Before the Fairbanks air show, Lily assembled their Gage-Martin tractor biplane that had come from Seattle to Skagway by ocean steamer and from Skagway to Whitehorse to Fairbanks by river steambot. While the first flights were a success, the air show was a money-losing flop since thrifty Fairbanksans realized they did not need to pay the entrance fee to see the show, and could instead watch from their front porches, woodpiles, and rooftops for the very reasonable price of: free.

The most well-known aviatrix with ties to Alaska is Marvel Crosson. Part of a brother-sister aviation partnership, Crosson became the first female pilot in the territory when she arrived in Fairbanks in 1927 to fly mail and passengers throughout the territory. In that year, she received her commercial pilot license after completing a check-ride with Ben Eielson. The duo was always interested in aviation; as teenagers, they purchased an old Curtiss N-9 seaplane and rebuilt it using parts scrounged from junkyards and an



Monash University

Marvel Crosson

old boat engine. In another extraordinary feat, to convince skeptics that a woman was indeed flying the plane, Joe climbed out onto the wing—twice—as Marvel flew low and fast over the hangars. Marvel reported that from then on, there was “great fellowship” towards her from the men.

Irene Irvine Ryan was not only a skilled aviatrix but someone who had a lasting impact on the early Alaska aviation system and the state. Irene came north in 1931 after hearing about bush piloting from her uncle who lived in the territory. At 22, Ryan became the



Irene Irvine Ryan

Archives, University of Alaska, Fairbanks

UAF Digital Archives

first woman in the territory to solo at Merrill Field on June 23, 1932. For Ryan, flying was not enough. She embarked on a journey of continuous self-improvement, becoming the first woman geologist to graduate from the New Mexico School of Mines. She married and returned with her husband to live in a 10x10 shack at Merrill Field and then in a Spenard dry cabin. When Pearl Harbor was attacked, Ryan was working on the design and construction of airfields across the territory for the Civil Aeronautics Authority (CAA), a job considered essential. After the war, Ryan worked as a consulting engineer, helping shape Anchorage International Airport and many

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AASP Spotlight

In Memory of Roger Maggard

In November 2022, we lost a dear colleague, friend, and invaluable advocate for Alaska aviation in Roger Maggard. Roger served the State of Alaska for 45 years, 40 of those with DOT&PF where he became an institution and mentor for so many others over his long and successful career. Roger became the Airport Improvement Program Manager in 2005, where he programmed and funded numerous projects, bringing over an estimated three billion dollars to Alaska that were used to create the modern Alaska Aviation System. He had a clear vision for the aviation system and continued to work toward its improvement until the time of his death. Roger was rightfully considered a guru of aviation planning, sharing his knowledge, mentoring, and training with many others throughout his life. In 2016, Roger received national recognition when he was awarded the Distinguished Service Award from the National Association of State

Aviation Officials. Roger's DOT&PF colleagues remember his quick wit, authenticity, kind and caring nature, and his belly laugh that could warm even the coldest heart. And of course, Roger was renowned for having the messiest desk in all of DOT&PF but also the inscrutable ability to find any document faster than you or anyone else could pull it from the server. He was a man of few words, but a deep heart. Alaskans statewide have benefited greatly from Roger's tireless dedication to making sure that every available penny of federal funds were spent to improve and maintain access to cities and villages throughout the state. Roger passed away on November 14, 2022, after a short illness. He will be very greatly missed. Roger, thank you for all of your dedicated years of service to DOT&PF, your colleagues and friends, and all Alaskans.



FAA NEWS & UPDATES

The U.S. Department of Transportation's Federal Aviation Administration (FAA) [proposed a rule](#) that requires charter, commuter and air tour operators, and aircraft manufacturers to implement a critical safety approach that has helped create the safest era in aviation history. The program, [Safety Management System \(SMS\)](#), is a set of policies and procedures where companies identify, monitor, and address potential operational hazards early on, before they become serious problems. U.S. airlines have been required to have SMS since 2018.

"Expanding Safety Management Systems to other players in the aviation industry will reduce accidents and incidents and save lives," said Acting FAA Administrator Billy Nolen. "As safe and efficient as our system is today, we must always strive to achieve the next level of safety." The rule would support the FAA's preventive approach that detects and corrects potential safety issues before they result in accidents or incidents. The FAA has strongly encouraged aviation industry members other than scheduled airlines to voluntarily implement [SMS](#). Boeing, Bell, GE, P&W and Sikorsky all have approved SMS programs.

The proposed rule goes beyond the requirements of the [Aircraft Certification, Safety and Accountability Act of 2020](#), which directed the FAA to mandate SMS only for aircraft manufacturers. The rule also addresses recommendations from the National Transportation Safety Board and independent review panels. Compliance times would vary between one and two years after the rule took effect, depending on the operation. The public comment period on the proposed rule will run for 60 days.



Roger receiving the 40-year recognition award from DOT&PF.



Roger receiving the "Outstanding Aviation Employee" award from the National Association of State Aviation Officials (NASAO) in 2015.

In The Works ...

The next stage of Capital Improvement and Maintenance Program (CIMP) started in January 2023. From the initial efforts of planning, updating checklists, and designing enhancements, the team will now start to develop the new CIMP iPad application and website interface for eventual testing and implementation.



AirTime

Q Where can I use my saved lists?

A Saved lists are generated from the Facilities Search page and can be used in the future from this location to quickly load in a set of locations for viewing. In addition, you will see these Saved Lists in some of the reporting areas including on the new Airport Needs Directory. Using this functionality, you can quickly get reports for your key facilities of interest (Facilities > Search, Reports > Airport Needs Directory).

Q Are the Dashboard charts real-time?

A Yes! The AASP dashboard charts are updated in real-time! Even if you have updated the settings on your individual dashboard, just navigate over to the Landing Page tab to view system charts (Home > Landing Page). The current chart is:

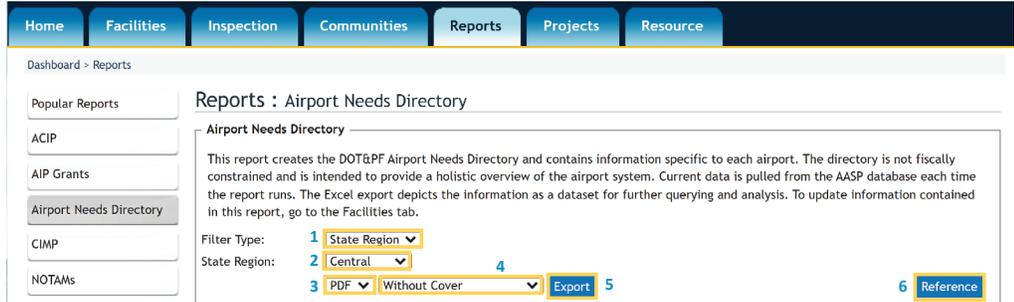
- APEB - Project Count (Meeting Dates: 10/13/2022) - sums the projects submitted for the listed meeting(s) and categorizes project type (new, reevaluation, and replacement) and by region (grants without a Grant Close Date) (Projects > APEB Summary)

Select Print View to take the charts on the go or to share with others.



Coach Class Needs Directory

By Annette Lapkowski, PE, Panther International Project Manager



The Needs Directory is a powerful reporting tool on the internal website which has undergone some modifications to make it more user friendly and readable. It now has new filters so individual facilities can be reported as well as generating information for a Saved List of locations. Individual airport needs reports are available upon request from your area planner or Statewide Aviation.

The document is now available as a PDF Acrobat document, Word document, or Excel spreadsheet. The PDF and Word options allow for no cover, cover, or cover with informational pages. These informational pages are also available by clicking on the Reference button.

The updated Airport Needs Directory consolidates key location specifications within the top table for quick reference regarding the facility. The last CIMP inspection table provides D and F information – once the new CIMP process is implemented the table will be able to provide the full spectrum of inspection scores.

For Airport Needs in Planned Projects, several needs may be combined in one project. Funding is planned, not guaranteed.

Additional Identified Needs are documented and verified but not yet included in a project.

1. Choose Region, M&O District, Facility or Saved List
2. Use 2nd filter to choose the specific area
3. Choose output format as PDF, Word or Excel
4. Choose Without Cover, With Cover and info pages (not available with Excel)
5. Select Export to generate the document
6. Reference will display the information pages

KONGIGANAK (DUY)
 FAA Associated City: KONGIGANAK
 Airport Needs Directory
 February 13, 2023

Owner:ALASKA DOT&PF CENTRAL REGION		
Borough/Census Area: Bethel Census Area	AASP Classification: Community Off-Road	NPIAS Level of Service/Number: Commercial Service - Nonpriority 02-0380
Population (2019): 544	Part 139 Certificated: No	Revenue (2021): \$625
Enplanements (2021): 1,901	USPS Bypass Mail Hub: No	Expenditures (2022): \$42,702
Road Access: None	Essential Air Service: No	PFAS Identified in Soil: N/A

Airport Rating Summary from Last CIMP Inspection: (08/08/2016)				
A	B	C	D	F
			9	17

Airport Needs in Planned Projects*	Funding Source	Estimated Cost	Status	Expected Year
Acquire New Grader	NPE	\$431,250	Programmed	2024
Acquire New Loader	NPE	\$962,500	Programmed	2024
ALP update and wind study		\$830,000		
Construct SREB	DIS, NPE, SA, SUP	\$3,922,147	Obligated	2022, 2023
Expand Apron	DIS, NPE, SA, SUP	\$86,903	Obligated	2022, 2023
Extend Runway Safety Area	DIS, NPE, SA, SUP	\$20,231,164	Obligated	2022, 2023
Rehabilitate Apron	DIS, NPE, SA, SUP	\$962,128	Obligated	2022, 2023
Rehabilitate Runway	DIS, NPE, SA, SUP	\$5,282,221	Obligated	2022, 2023
Rehabilitate Taxiway	DIS, NPE, SA, SUP	\$376,044	Obligated	2022, 2023
Runway Lighting	DIS, NPE, SA, SUP	\$630,174	Obligated	2022, 2023
Taxiway Lighting	DIS, NPE, SA, SUP	\$178,231	Obligated	2022, 2023

* Several needs may be combined in one project. Funding is planned, not guaranteed.

Additional Identified Needs**	Funding Source	Estimated Cost	Priority	Need Origination
Install ASOS or AWOS	AIP	\$2,000,000	Long	Community

** Additional Identified Needs are documented and verified but not yet included in a project.

Community Economic Development Needs***	Need Origination
Construct Passenger Shelter	Community

Community Economic Development/Quality of Life needs make the airport more viable for reasons of economic development and community comfort (passenger shelter/restrooms) and may be accomplished through community funds combined with other sources such as Denali Commission, Tribal Transportation, or private sources. Each community solution to these needs will be unique; therefore, the funding source, estimated cost, and priority are not tracked.

These tables present data for Airport Needs in Planned Projects, Additional Identified Needs, and Community Economic Development Needs.



A Look Back

What's in a Name?

By Megan Flory, Community & Sustainability Planner, RESPEC

Atqasuk – Edward Burnell Sr. Memorial Airport

Ed Burnell Sr., born in 1900 in Washington, moved to Utqiagvik where he operated a nearby coal mine from 1944 until at least 1960. Prior to the opening of the mine, Utqiagvik had been suffering from fuel shortages; other than oil from blubber, driftwood and oil seeps were the primary sources of heat fuel in the area. News articles that ran in the Fairbanks Daily News-Miner at the time reveal that although Ed (as the articles always refer to him) seemed to come into town with coal loads regularly, it was still frequently not enough to satisfy the demand. At some point during his time operating the mine and visiting Utqiagvik, he met Ruth Simmonds, who he would marry in 1954. Ed died in 1984 and Ruth in 2013.

Akhiok – Jim Andie and Robin Starrett Memorial Runway

Jim Andie, born in California, had long dreamed of becoming a pilot. After moving to Montana and spending many years running a successful construction business with his wife, he began splitting his time between Missoula and Alaska to become a bush pilot in Kodiak and near Denali National Park. In the year and a half that he was in Alaska, he became beloved by the community. In 2011, while flying into Kodiak, the wing of Andie's plane clipped a tree, flipping the plane. Andie's injuries were fatal; both passengers were quickly rescued and survived.

After receiving a Bachelor's in Aeronautical Sciences, Robin Starrett joined the Army

and then the Coast Guard, where he was a helicopter pilot. After retiring from the Coast Guard in 2004, Starrett began flying in Kodiak. He was described as "caring, humble, and precise" by a coworker. Tragically, in 2008, Starrett and five of his passengers lost their lives in a crash caused by an equipment malfunction. Four passengers were saved due to the rescue efforts of a nearby pilot, Dean Andrew. The runway at Akhiok Airport was renamed in honor of Andie and Starrett in 2013.

Anchorage – Ted Stevens International Airport

Theodore Fulton Stevens, Sr. spent much of his life serving his country in one form or another. As a young man, he served in the Army Air Corps during World War II. He would later go on to become a federal prosecutor in Alaska before moving on to the Department of the Interior, where he lobbied for Alaska Statehood. Stevens also served in the Alaska House of Representatives and the U.S. Senate, where he was known for, among other things, his short temper. Appointed to the Senate after two unsuccessful election bids, Stevens was Alaska's senior senator for nearly his entire forty-year career. He passed many

major bills, including the Alaska Native Claims Settlement Act (ANCSA) and the Trans-Alaska Pipeline Authorization Act. He was influential in advocating for aviation in Alaska by communicating to federal regulators about the unique challenges of last

frontier flying and the importance of aviation to the state. In 2000, Anchorage's airport was renamed Ted Stevens Anchorage International Airport in the state's Senior U.S. Senator's honor. Stevens and seven other passengers were killed in 2009 in a plane crash while travelling to a fishing lodge in Alaska.

Ketchikan – Murphy's Pullout Seaplane Base

Frank H. Murphy, born in Nova Scotia, traveled to Alaska in 1901 at the age of 26 to fish cod in the Bering Sea. After a few years of fishing, he turned his sights toward gold and moved out to the Yukon and then to Juneau and Tenakee, before ultimately settling in Ketchikan to return to fishing. Sometime in the mid-1920s, while in Ketchikan, he built a warehouse on the water to store boats and fishing gear. The warehouse stood for nearly a century, passed down through generations of Murphys, before it was officially deemed structurally dangerous. The Murphys carried on as fishermen until at least the 2010s.



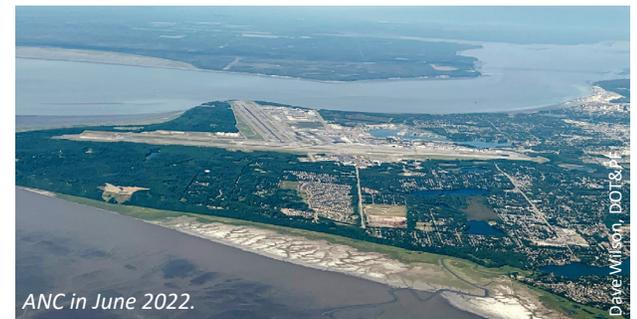
Murphy's Pullout Sea Plane Base.

Dave Wilson, DOT&PF



The Jim Andie and Robin Starrett Memorial Runway at Akhiok Airport, 2022.

Dave Wilson, DOT&PF



ANC in June 2022.

Dave Wilson, DOT&PF



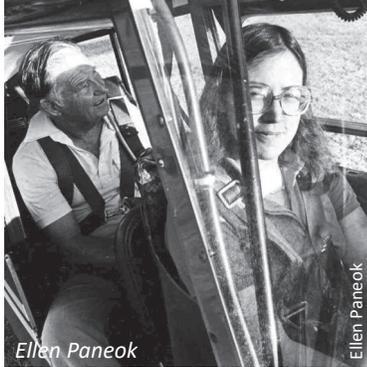
Edward Burnell Sr. Memorial Airport in 2021.

Dave Wilson, DOT&PF

Alaskan Aviatrices continued from page 1

others. "I have found that the best way to be accepted on equal ground is just to go ahead and quietly do the job at hand".

When Ellen Paneok received her private pilot's license in 1979, she had not heard of any other Alaska Native woman pilots in the state. Paneok had a challenging childhood, moving between foster homes and eventually ending up in what she called 'girls lockdown.' There, she came across an aviation magazine. The counselors at the lock-down facility made her go to counseling out of concern over her newfound aviation 'obsession.' Despite this attempted intervention, at sixteen Paneok used her first dividend from the Cook Inlet Region, Inc. (CIRI) to start flying lessons at Merrill Field. At twenty, Paneok gained both her GED and her private pilot's license after years of supporting herself by making art. Three years later, Paneok had her flight instructor and commercial pilot licenses and by 1983 was flying professionally out of Kiana. She flew commercially for 17 years and accrued over 15,000 flight hours. "When you decide to do something, don't let anyone or anything discourage you. It's up to you." Today, women in Alaska aviation continue to make headlines and achieve new 'firsts.' Last year, Dolena Fox was hailed as one of the world's first Yup'ik female commercial pilots when she began her professional flying career with Grant Aviation in early May 2022. At Grant, five out of the 60 active



pilots are women. Several other Yup'ik women have worked as commercial pilots at different airlines in the past, helping to pave the way for Fox and future aviatrixes like her. Today she is one of few pilots from the Y-K Delta flying in the region now that there is no longer a flight school in Bethel. According to Fox, speaking her local tongue of Yugtun as a pilot and serving her local community through flying has been a long-held dream. She also aims to help others in Bethel learn to fly without having to leave home like she did.

Another aviatrix 'first' was achieved by twenty-six year-old Mikaela Young in 2022, who became the youngest and first ever female Fire Boss pilot in Alaska—and the world. Fire Boss aircraft are AT-802F water-scooping air tankers on floats used to fight fires in Alaska. Young grew up outside of Talkeetna and participated in a program called Build-A-Plane that allowed her to rebuild a Cherokee 6, inspiring her to train as a mechanic. Interested in all things aviation, Young eventually became a commercial flight engineer and then a pilot of DC-6 and DC-46s ferrying cargo to remote villages. The first time she saw a Fire Boss while flying, she was hooked and began working with Dauntless Air, one of the companies that contracts Fire Boss aircraft to fight fires in Alaska. "I have always worked in a male dominated field. I do like being the youngest working with all these grandpas. It looks like bring your grandpa to work day."

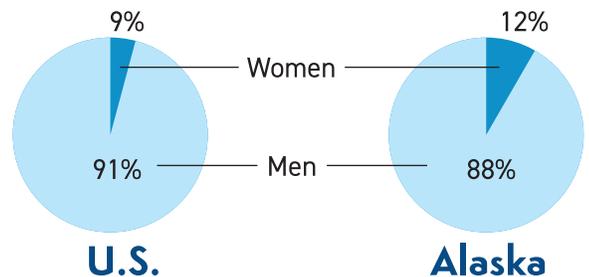


As Dolena Fox and Mikaela Young prove, Alaska's aviatrixes continue to soar to new heights, and their history is still in the making. For more detailed biographies and first-person accounts from Alaska's aviatrixes, check out Jenifer Fratzke's Alaska's Women Pilots and Sandi Sumner's Women Pilots of Alaska.

continued next page



Pilots by Gender



Source: FAA Civil Airmen Statistics

Alaskan Aviatrices continued

Selected Female "Firsts"

1913

Lily Irvine-Martin
Supported first flight in Alaska with James Vernon Martin at Weeks Field, Fairbanks.



Helen Rappaport

1927

Irene Irvine-Ryan
First woman to solo in Alaska at age 22 at Merrill Field, Anchorage



UAF Digital Archives



UAF Digital Archives

Pearl Laska Chamberlain
First woman to solo a single engine airplane up the Alaska Highway



Alaska 99s

Helen Stoddard
Establishes the Alaska Chapter of the International Organization of Women Pilots, called the Alaska Ninety-Nines

1953

Margo Cook
One of the first known female test pilots in the United States moves to Alaska



Alaska 99s

1963

Ingrid Pederson
First woman to pilot an aircraft over the north pole, flying from Fairbanks to Bodo, Norway



Alaska 99s



Ellen Paneok

Ellen Paneok
One of the first Alaska Native women to earn a pilot's license.

1984

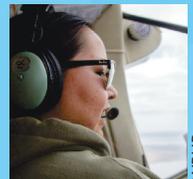
Tamar Bailey
First woman to complete the Airframe & Powerplant (A&P) course at Anchorage Community College



Jennifer Fratzkebook

2022

Dolena Fox
One of the world's first female Yup'ik commercial pilots.



WBUR



Alaska Fire PIOS

Mikaela Young
Youngest and first ever female Fire Boss pilot in the world

"When you decide to do something, don't let anyone or anything discourage you. It's up to you."

Ellen Paneok

AASP PROJECT UPDATE

The AASP team is kicking off the new year with several new and exciting tasks in addition to continuing work on improving data delivery, revamping the Capital Improvements and Maintenance Program (CIMP) inspection process, and updating airport facility inventory and needs directory information.

One new task in the development stage will create video content to expand public understanding of our aviation system. The RESPEC team held two brainstorming sessions with the Video Technical Advisory Committee (TAC) whose membership includes representatives from the Aviation Advisory Board, FAA Airports Division and DOT&PF to explore ideas for informative videos that tell the story of our aviation system and the unique challenges airport sponsors, air carriers, airport operators, and pilots overcome in providing a critical transportation link via the largest aviation system in the United States. The immensity of our state, lack of roads, and harsh climate, combined with a scarcity of weather reporting and navigational aids, are only

a sample of the stories we might tell. The team is also exploring ways to document the enormous challenges and cost of building airports where basic components must be transported great distances with virtually no road system. This is an exciting endeavor with far reaching potential to educate and inform. The TAC meetings will continue to work on subject matter and narrative as they hope to begin filming in the fall.

The Western Alaska Airport Resiliency Study is kicking off the research phase: investigating coastal erosion, embankments failures, airport lighting problems, and other climate or soil related issues that seem to plague some but not all infrastructure investments in western Alaska. The study intends to identify best practices from Alaska and other cold regions to assess methodologies for adapting to climate change and changing weather patterns. Safety and sustainability are key to the mission and goals of the AASP, DOT&PF and the FAA. Identifying best practices for constructing resilient airports serves the mission and the public.

Airport users are a key source of information for improving Alaska’s airport system through the AASP. Please continue to share your ideas with the AASP team. If you have photos of Alaska aviation, we would love to see those, too, and they might even be featured in a future edition of this newsletter. Happy flying!

National Recognition

In other exciting news fit for this edition, our very own Rebecca Douglas, AASP DOT&PF Project Manager, received national recognition from Aviation Pros Magazine when she was included in its [“2022 Airport Business top 40 under 40.”](#) This recognition is awarded to exceptional aviation professionals, especially those who are innovators in the industry. Colleagues nominated Becca for this recognition, with final selections made by the Aviation Pros editorial board. Congratulations, Becca!



Dustin Moore



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