

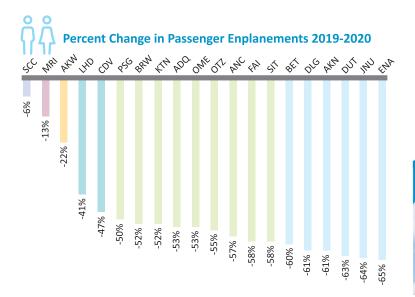
## **BY THE NUMBERS**

#### Passenger Enplanements, 2019-2020

The COVID-19 pandemic has undoubtedly had severe impacts on the aviation industry, including both operations and airport planning projects. According to Forbes, the pandemic caused the most dramatic decrease in passenger travel on record, falling 95% from April 2019 to April 2020. Experts project that a full recovery of the aviation industry will not occur until 2023 or 2024 at the earliest. Throughout the pandemic, T-100 data automatically pulled from the FAA's dataset into the AASP has served as an important tool to monitor pandemic impacts on Alaska's aviation industry and individual airports across the state. The bar graph below shows the percentage change in passenger enplanements from select Alaskan airports from CY 2019 to CY 2020.

While the pandemic caused airport improvement project cancellations and postponements, it also opened up new opportunities for some airports to upgrade their facilities while passenger traffic remains at historic lows. With the average U.S. airport aged at 40 years, these upgrades are becoming increasingly necessary for continued operations. With the newly passed bipartisan Infrastructure Investment and Jobs Act (IIJA), \$25 billion dollars will be invested nationally into improving America's airports. This means:

 \$15 billion in formula funding for the FAA Airport Improvement Program which supports projects such as planning, installing and expanding runways, gates, and taxiways and improving runway lighting and navigation.



- \$5 billion for FAA's Facilities and Equipment Program, which includes funding for FAA-owned Air Traffic Control facilities and contract towers.
- \$5 billion in grants for a new Airport Terminal Improvement Program, which includes set asides for small hub airports, nonhub, and nonprimary airports, ensuring airports in communities of all sizes benefit.

www.AlaskaASP.com

## AASP PROJECT UPDATE

The Aviation System Plan team continues to move forward on several fronts. Check out the Airtime and Coach Class articles on page 3 for more details on improvements to the internal AASP website. The team completed a review of the Capital Improvement and Maintenance (CIMP) inspection process and are collaborating with DOT&PF to improve the inspection questions, website, and iPad application. Work continues for the inventory and needs list updates and additional changes to the website are in the works. Classifications and Performance Measures website updates are complete and posted.

The pilot study project that is part of the Alaska Aviation System Plan Phase 3 was originally requested by the Aviation Advisory Board (AAB) to address air carrier complaints across a number of airports and other factors plaguing our airfields, such as coastal erosion, tundra settlement, extreme weather or rainforest conditions; all contributing reasons for deterioration of runways, taxiways, aprons, buildings, visual aids, and other infrastructure required to operate a safe airport system. After further direction from the AAB, the *continued on page 2* 



#### AASP Project Update continued

study has taken on a resiliency focus for western (rather than just coastal) Alaskan airports. The airport resiliency study began by holding Technical Advisory Group (TAG) meetings to discuss the study plan and scope

that include research on the contributing factors impacting rural airport infrastructure. The team is focusing resources to research the latest innovations, track project successes, compare construction material, and research new technologies to improve airport resiliency. The results will provide important tools for

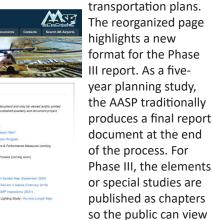
<page-header><text><text><text><text><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header>

project design and construction. This special study is in the development stage, and we are excited to move forward with input from various public and private sectors. In other news, check out improvements



to the Documents

page on the website for access to recently posted fact sheets, new maps, current newsletters, documents from AASP Phases I and II, and regional



each step as it is completed. The new document page layout allows the user to quickly click to documents from any phase and then move to other phases with one click.

Our Winter Newsletter Spotlight is on St. Mary's Airport Manager Erik Weingarth. Erik started with DOT&PF as an equipment operator in 1993. He was promoted to St. Mary's Airport Manager in 2011 and has shown superb leadership ever since. Erik's substantial responsibilities include

managing the St. Mary's hub, overseeing nine other Western District airports along the Yukon River from Grayling to Mountain Village, and maintaining 30 miles of gravel roads connecting three of the region's communities. On top of this, Erik regularly goes above and beyond what is expected, creatively overcoming challenges such as arctic weather conditions and remote logistics to ensure that runways stay open and life-sustaining medivac and supply flights get where they need to go.

Erik's caring personality and generous nature means that he is always lending a hand to whomever needs it, including working closely with state and FAA mechanics and electricians and collaborating with project design teams. In his own time, Erik is very active with local search and rescue and civic affairs in the region.

Alaska DOT&PF Commissioner Ryan Anderson stated that Erik has built a great team and "does an awesome job keeping St. Mary's and the surrounding airports open and



safe for all the communities. He's shown time and time again an ability to tackle challenges in difficult circumstances." If travel is necessary at -30F to fix broken runway lights, or when severe weather impacts that 3am medivac flight out—no matter what, Erik keeps Alaska moving for communities along the Yukon.



# FAA and Airports Get Ready for Winter Weather

With winter weather here, the FAA is working with airports to make sure airport operations remain safe. These winter preparations are the subject of the Preparing for Airport Winter Operations video and CertAlert No. 21-06, both of which help airports and aviation stakeholders get ready for winter weather.

Snow and ice control are often a complex, dynamic, and demanding endeavor. It requires vigilance and a heightened sense of awareness by all stakeholders. The video and the CertAlert highlight the importance of communication and operational best practices. They also provide airport operators and stakeholders key points of awareness during winter operations. This includes essential training to deal with deteriorating or changing conditions, reduced visibility and overall situational awareness, such as receiving runway clearance before removing snow and ice.

Airport operators should share the CertAlert and video to help airport employees and others better prepare for winter operations and its associated challenges.

In addition to safety resources, the FAA provides funding to support winter operations at the nation's airports through the Airport Improvement Program. These grants pay for snow removal vehicles, plows, snow blowers, deicing equipment and snow melters. Grant funding also may be used to construct, modify, or expand snow removal buildings to house the equipment. In 2021, 100 airports received a total of \$64.8 million for snow removal equipment. In fiscal year 2021, Alaska received \$13,549,604 in snow equipment removal funds through



the AIP program, a significant portion of the national total.

An operator moves snow with a loader at the Valdez Airport.



# **Q** Do we ever close needs? And how is it done?

A Yes! Needs can be closed in the system and should be closed eventually to show project accomplishments.

Needs which have a status of "In Project" can only be closed after the project is completed. Once the project is completed, the need can be closed on the Needs tab with the "Close Need" button. Needs which have a status of "Need Created" can be closed in the event work was completed or purchased outside of the APEB or CIP processes

# **Q** Is there anything new in Reports that I should know about?

(Facilities > Needs).

A The Query Tool now contains the ability to search several new data elements from a recent General Tab update. Some new items which can now be queried include expanded Utilities types and the Certified Weather Station type (Reports > Query Tool).

#### **Q**I see this new tab in Reports called Popular Reports, but it is under construction. Is something coming soon?

A Great question. We are considering what reports we can place on this page. These reports will be queried in advance, so they are simplified for oneclick operation. If you have a suggestion on a report to list here, contact Rebecca Douglas at rebecca.douglas@alaska.gov.



#### **Coach Class** Updated Facilities Tab

AIP Grant

By Annette Lapkowski, PE, Panther International Project Manager

The Facilities tab was updated to streamline some elements and to clarify data terminology. Updates are viewable within each airport General tab.

These changes include updates to AASP Classification. To see detailed information on the classifications, hover over the question mark icon next to the data element.

Along with updates found in the General Information section, the System Planning Data and Services sections were also amended. Standard airport characteristics as well as information on the Last Grants (Airfield, Building, Equipment, and Planning) are now available.

For information on prior grants and more details on current grants, please select the AIP Grant tab.

		DATABASE a compose Alaska A	viation System Plan	Alaska Aviation System Plan
Facilities	Inspection Comr	nunities Operators Re	ports Projects	Resource
Facilities				Switch Facility: BIRCHWOOD
	BIRCHWOOD : Gener	al		Print Vie
Nipads	Base Information			
rupaus	Owner:	ALASKA DOT&PF CENTRAL REGION	FAA Associated City:	BIRCHWOOD
	NPIAS:	02-0034	DOT&PF Region:	Central
com	Airport Use:	Public	DOT Owned:	True
	Type:	Airport	Facility Status:	Active
ion	General Information —			
	Name:	BIRCHWOOD	FAA Associated City:	BIRCHWOOD
	DOT Owned:	Yes   No	Alternative Name:	
inks	State Region:	Central 🗸	Location ID:	BCV
05	M&O District	Anchorage V	Borough/Census Area:	Municipality of Anchorage
Measures	FAA Site ID:	50069.*A	Facility Use:	Public 👻
	NPIAS Number:	02-0034	Facility Type:	Airport 🗸
	MDLAC L and at Carrier .	Connect Aristics - Local	Facility Status:	Active 👻
	AASP Classification: 🕥	Local High Activity 😽	EAS Facility:	🔍 Yes 🔍 No
	- System Planning Data		Data Ele	
	Last scored APEB: Seasonal Closures:	None	Current ARC: O	B-II V Utility:
	ALP Approved:	6/14/2013	Ultimate ARC: Current Design Aircraft:	B-II V Utility:
	Master Plan Approved:	1/1/2007	Current Design Aircraft: Wind Coverage:	>95% V
	Property Map Date:	6/3/2013	Crosswind Runway:	>+33% ♥ ○ Yes ● No
	Federal Grant Obligation:	🖲 Yes 🔿 No	Non-Standard Conditions:	○ tes ◎ No ○ Yes ◎ No
	Federal Grant Expiration:	2032 ¥	Horr-scandard conditions.	Vites Vite No
	Seaplane Haulout Ramp:	N/A ¥		
	Full Airport Sponsor Property Ownership:	Yes   No	Compliant RPZ for Property Control:	🔿 Yes 🔘 No
	Documented Need For:		Property Control: Compliant RPZ for Land	Yes No
	Leased Lots:	🔾 Yes 🔘 No	Use:	
	Tie-downs:	🔾 Yes 🔘 No	Land Use Compliance: Fencing:	Select One 🛩
	Floatplane Parking:	🔾 Yes 🛞 No	i circing.	run V
	Auto Parking:	🔾 Yes 🔘 No		
	Last Airfield Grant:	3-02-0200-122-2018 [Various Grant] Rehabilitate Runway 02L/20R Various SPM - Birchwood (Apply Markings and Grack Seal to Runway 2L/20R, and, Incidentally, RWY 20L, TWY's, and	Last Equipment Grant:	3-02-0200-055-2006 [Various Grant] Acquire Snow Removal Equipment (Hydrostatic loader-mounted snow blower) 7/19/2013
		Apron)	Last Planning Grant:	3-02-0034-008-2018 Update Airport Master Plan Study AMP Update and
	Last Building Grant:	3-02-0024-001-1997 Improve Comm		appropriate and a second secon
	Last Building Grant:	3-02-0034-001-1987 Improve Snow Removal Equipment Building 12/9/19 Reconstruct TW B, C, D, E, G, & Apro		aeronautical survey



Operator Mel Matthews conducting snow blowing at Gulkana Airport.



Runway 2L snow removal operations at Fairbanks International Airport.

# In The Works ...

Work continued through the fall on reevaluating and updating the current performance measures to ensure that they are relevant and logical for the Alaska Aviation System of tomorrow. The website updates are live, and a report is coming soon. With outreach and feedback efforts now complete, the team is transitioning to implementing the new and revised measures on the website. We look forward to sharing the fresh performance measure data and scorecards in early 2022. We are even incorporating a mechanism to baseline the statewide data so that comparisons can be made year over year. Stay tuned - more to come!



## A Look Back

#### Alaska Airfields & Roads: Two Histories Intertwined

Many Alaskans may be familiar with the Alaska Road Commission's central role in developing the state's highway system, but did you know that the Road Commission was also a driving force that built the foundation upon which Alaskan aviation sits today? In other words, the Road Commission played an integral role in funding and constructing the state's first airfields and establishing air travel as "the ideal mode of transportation for the huge and rugged territory."

The first airplane to fly in Alaska took off from Fairbanks on July 4, 1914, as a part of a planned "aviation circus" to celebrate Independence Day.

Piloted by one of America's aviation pioneers and the inventor of the first successful tractor biplane, James Martin, the flight began above the Fairbanks ballpark where event promoters were charging \$5 admission to see the show. To nobody's surprise, except clearly the organizers, Martin



Noel Wien in the Fokker F. III that made the first commercial flight in Alaska from Fairbanks to Nome in 1925. UAF Archives, ID# UAF-1969-95-536

flew above an empty ball field, but likely noticed that excited spectators crowded onto every rooftop and woodpile across the town, watching the show for free. After this exciting event, Alaskans took notice as "the Aviation," as it was commonly called, had reached the vast territory where it would innovate travel indefinitely.

Following several more high-profile test flights by aviators in the 1920s including the Army Air Service's Black Wolf Squadron, Carl Ben Eielson, and Noel Wien, Alaskans were hooked on the idea of aviation and now needed only the infrastructure to support it: aviation fields. In 1925, Noel Wien was chartered by Norman Stines of the Fairbanks Exploration Company to fly a Fokker F. III aircraft from Fairbanks to Nome. However, one major issue stood in the way of this iconic flight: where to land? To solve this problem, the Alaska Road Commission stepped in. Granville R. Jackson and an employee of the Road Commission familiar with aviation field requirements started scouting locations in Nome for the new

field. The team settled on a location on the parade grounds of the old Fort Davis for

of June 1925 and headed to the newly

constructed Nome airfield. This iconic flight

was ultimately successful but not without its

harrowing moments. Wien had to make an

the new airfield. The Alaska Road Commission was tasked with completing clearing and construction of the new Nome airfield with \$5,000 appropriated by the territorial legislature.

Noel Wien took off in the Fokker F. III from Fairbanks in the first week emergency landing outside of Ruby due to harsh weather and a lack of suitable sandbars to land on the Yukon due to a high-flowing breakup season. Repairs were necessary in Ruby after the plane flipped during its emergency landing, but all passengers eventually made it safely to Nome.

From 1925 onward, the Alaska Road Commission was tasked with overseeing the development of airfields across the Alaskan territory. Robert J. Sommers, Alaska's Territorial Highway Engineer and former Superintendent of the Alaska Road Commission, developed standard procedures for aviation field construction projects. Airfields should be 1,400 by 600 feet and be oriented such that aircraft take off into the prevailing winds. These fields were to be smooth and firm with good drainage and free of soft spots.

In summer 1925, the territorial Board of Road Commissioners authorized the Alaska continued on page 5



Nome airport today.



An example of a later aircraft operated by Wien Airlines around Nome and in the Seward Peninsula region. UAF Archives, ID# UAF-1969-95-536

#### A Look Back continued

Road Commission to construct airfields at Takotna, Flat, Fort Yukon, Wiseman, Livengood, Lake Minchumina, Ruby, Circle, and Chena Hot Springs. By 1928, fifteen airfields had been completed for a total of \$13,963. Airfield construction continued to accelerate and by 1932, over seventy airfields had been built for \$173,243, with the Alaska Road Commission at the center of this huge effort.

While airfield and road development were intertwined during the emergence of Alaskan aviation, today, airports off the state's road system have taken on a great importance for Alaska's rural and remote communities. Additionally, due to expansions in e-commerce and global shipping of consumer goods in recent years, ANC and FAI have developed into key cargo hubs both in-state and internationally. Scan the map below to see how the Alaska aviation system has changed since 1931. Can you spot which airfields have survived and gained regional or statewide importance

as hubs, and which of today's airports had yet to exist in 1931? Check out the table below for some stats on how the system has grown from 1931 to 2019.

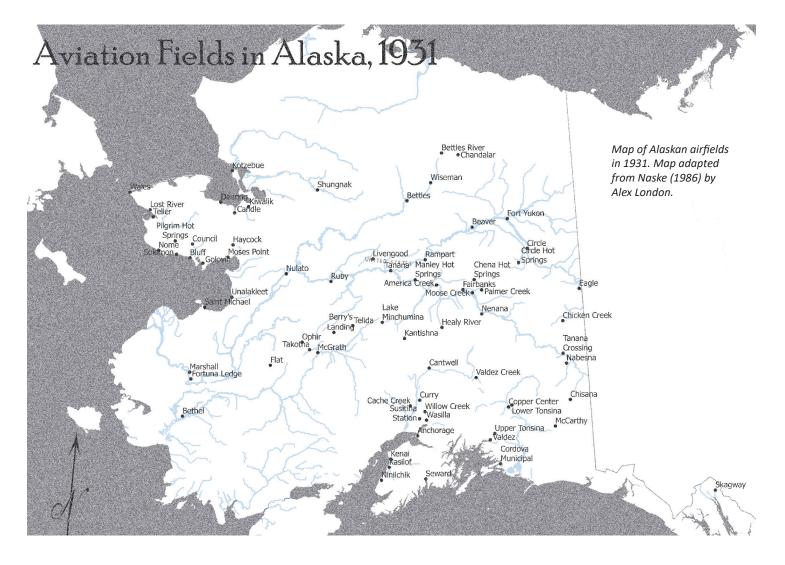
# Alaska System Growth19312019Planes in<br/>service318,762Passengers<br/>carried6,6375,350,463

Mail &

express

carried

496,680 lbs 1,811,044,091 lbs



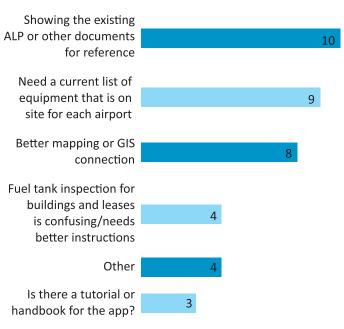
Article adapted from source: Naske, C. (1986). Paving Alaska's Trails: The Work of the Alaska Road Commission. ALASKA HISTORICAL COMMISSION STUDIES IN HISTORY; (N152). Acknowledgment: Thank you to Tom George for bringing this interesting historical source to the attention of the AASP team.



## **2021 CIMP Survey Preliminary Results**

From November 3rd-12th 2021, the AASP project team conducted a preliminary Capital Improvement and Maintenance Program (CIMP) survey to learn about user experiences with the process and app and to explore potential improvements. The survey was distributed electronically to CIMP users, including Alaska Department of Transportation & Public Facilities (DOT&PF) and other inspectors. The survey included eight questions asking respondents about perceived challenges and opportunities for improvements in every step of the CIMP survey, including to the app, pre-inspection, inspection frequency, checklists, upload and processing, needs input, and review.

Sixteen respondents completed the survey, providing the AASP team with valuable insights on existing challenges and opportunities to improve. Respondents identified their top issues as "Photos not properly associated to deficiencies" (7 responses), "Why can't I process all D&F deficiencies together, instead of once on each checklist?" (7 responses), and "Too many steps to complete" (5 responses). Top suggested improvements to the app are shown in the graph to the right. Respondents noted that the largest roadblock to completing regular CIMP inspections is "Funding for travel" (10 responses), followed by "Not enough trained inspectors" (5 responses). Data gathered through the CIMP survey will be very useful to the CIMP Technical Advisory Group (TAG), which has already met several times to start addressing future improvements. Survey responses to: What section or feature would you like added to the app?





Alaska Aviation System Plan

#### **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

Annette Lapkowski, PE, Panther International Project Manager

Panther International, LLC 727.556.0990 x1025 l alapkowski@pantherinternational.com

> Natalie Lyon, AASP Newsletter Editor RESPEC Inc. 907.452.1414 | Natalie.Lyon@respec.com

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

Sunset over the runway at Ralph Wien Memorial Airport (OTZ) in Kotezbue.

www.AlaskaASP.com

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 3-02-0000-024-2018 and 3-02-000-028-2021) 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 apororiate public laws.