## ALASKAN AVIATION SAFETY FOUNDATION



Harry Kieling, Chair of the AASF, thanks Dr. Melchor Antunano and Dr. Dan Johnson for their participation in the fall safety seminar.

# In the February 2019 Issue:

- \* Chairman's Letter
- \* What Alaska's air safety statistics can tell us
- \* A 1976 multi-aircraft tragedy remembered
- \* PIREPs provide a lot of data & should not be overlooked
- \* In memoriam: Alaska Helicopter's Rex Bishopp

The Floatplane Seminar is April 27th

## **CHAIRMAN'S LETTER**

### More on what Your Foundation is Doing for You

In our last newsletter, I wrote about our twice annual Safety Seminars. Last year's very successful fall seminar was October 27. On April 27 of this year we will hold our 34<sup>th</sup> annual Seaplane Safety Seminar in collaboration with the Seaplane Pilots Association. Many of you have mentioned to me how much you have enjoyed these over the years so we intend to continue presenting them.

In addition to our popular safety seminars we publish The Position Report, our Quarterly **Newsletter**. The Safety Foundation is extremely fortunate to have world renowned author and aviation safety expert, Colleen Mondor, as our newsletter editor. Colleen has published numerous items including my favorite book, The Map of My Dead Pilots. Each quarter the newsletter will run at least one feature article. Recently we have focused on each of the "Twelve Deadly Sins, a compilation of what your Foundation considers the worst aviation problems. In addition to our writers on the Board, John Mahany, a well-known and highly respected aviation safety authority, has provided thoughtful and useful guarterly articles.

If there are subjects or questions you would like us to specifically address in the newsletter please let me know.

#### More on the way.

Many of you will remember when we had the twice weekly **Hangar Flying** on Alaska Public television. On the program, which our revered Tom Wardleigh created many years ago, we were able to interview aviation personalities from four star generals and the FAA Administrator to line pilots and mechanics. Unfortunately the program was discontinued by the station and we were unable to develop a replacement. Until recently that is! Joe Darnell, one of your Foundation Board members, has approached the UAA Journalism Department with a proposal that might bring the program back on the air and provide good training for a UAA student (s). Dave Snider, National Weather Service and Ed Ulman, Alaska Public Television, have both been supportive of the idea.

#### And yet another idea

The AASF Board, specifically Mary O'Connor, has been working on another really promising idea we are calling **Hangar Talk** Teaming with the Alaska Airmen, we hope to present a discussion group that will meet approximately once a month during the winter and discuss an aviation topic foremost in our minds. The first session will focus on Mid Air Collision Avoidance. The date and time will be advertised soon.

#### Speaker's Bureau

Another idea the AASF Board has entertained is developing a Speaker's Bureau, which would coordinate requests for speakers on aviation safety with groups in the Anchorage/Fairbanks/ Kenai/Juneau area that might benefit from that collaboration. If any Safety Foundation members can support this worthwhile effort and would like to be involved please let me know. Marshall Severson, one of our Board members and well known safety advocate, has proposed a plan that could bring the idea to fruition if there is enough interest in the aviation community.

continued on page 4

### Don't ignore this most basic aviation habit

#### By Marshall Severson

This may qualify me for ancient aviation commentator status, but I want to hearken back to 1976 and an aircraft accident near Summit Lake (the one down toward Seward). No, I was not flying, I was driving my Opel GT on a fine summer day.

Six people on four aircraft died in a series of related accidents in South Central Alaska and I am sure the families of the victims have as much pain today as back then. I bring these accidents up with all due respect and I hope accurately, because I learned a lesson early on about being responsible, following procedure, as well as the costs of unintended consequences.

A Cessna 170 had gone overdue and a search was launched covering thousands of square miles. Why? Because information on the flown route was sketchy. Yes, a flight plan had been filed, but the search area extended north of Talkeetna (to another Summit) and down towards Homer. Up in the Matanuska Valley, a Civil Air Patrol (CAP) crew crashed looking for the missing aircraft. The observer was killed, two others were seriously injured. Then things got worse.

Five days after the Cessna 170 vanished, a Cessna 402 operating as Alaska Aeronautical Industries Flight 501 was enroute VFR to Seward with the pilot and one passenger onboard as it neared Summit Lake. CAP, still suffering from their fatal accident, soldiered on and had numerous aircraft conducting the search for the 170, among them a Beechcraft Mentor (A45/T34), with two crew, that was looking near Summit Lake.

The C402 and the Mentor collided and fell to earth just west of the Seward Highway with all aboard perishing. A woman flagged me down and said, while she pointed up the hill, that there had been a crash. Someone else had gone to notify the Troopers. I hiked up the hill to try and help and quickly was upon the site. A man had arrived ahead of me. No survivors, and that smoke billowing to the north?...oh, the other airplane.

The NTSB concluded that the probable cause of the accident was failure to see and avoid. That's no surprise, but what if there had been better flight plan information for the overdue aircraft with a more clearly defined area to search? Would this accident have happened? As it happened, the Cessna 170 was eventually located a week after its final flight several hundred miles from Summit Lake, about thirty miles east of Talkeetna. The student pilot did not survive.

There are lots of excuses for not filing VFR flight plans and updating as necessary, but make no mistake, without them there is an informational fog as deadly as instrument meteorological conditions.

As a Fight Service Specialist over the years (now retired) I received numerous calls from parties who lacked basic information such as the N number of the aircraft that they were concerned had not shown up. Often, responsible parties delayed declaring the aircraft overdue, leading to further complicating Search and Rescue (SAR) efforts into hours of darkness, inhospitable weather and related challenges. Sometimes they spent valuable time conducting their own com search (calling airports) but may have lacked the contact info. Please don't add to the agony of loved ones or place our dedicated SAR operators in harm's way unnecessarily, file a flight plan, and assure SAR when overdue.

Continued on page 4

#### continued from page 3

VFR flight plans are for safety, to ensure prompt and efficient SAR activity for overdue aircraft should this emergency service be needed. A recommended practice is to always file a flight plan (for each leg if possible), make position reports and update/amend and timely close the flight plan. Adopting this recommendation helps ensure routinizing the procedures and can result in fewer errors like forgetting to close or not remembering to file until out of radio range, as well as narrowing the search area when a pilot is overdue.

What excuses are there not to file? Here are a few we have all heard:

- Not sure where I'm going.
- Local flight, not necessary.
- I don't have a way to close flight plan.
- I will be gone for several days.
- I don't want anyone to know where I am going.
- Police came for me.
- I forget to close.
- My family keeps track.

Most of the excuses not to file have proven weaker over time. File as accurately as possible, amend when able. Not sure of where you are going? File a plan with route of flight such as 20NMR (nautical mile radius north of XXX). If you have your own aircraft, for quicker service, complete a Master Flight Plan with Flight Service listing static information, including type and equipment as well as parking spot (a field search does not go into hangars!). The hub Flight Service facilities in Alaska still have Fast File services as well, you can record a flight plan with no delay. Leidos and Foreflight are just two online sources that can take an electronic flight plan filing; the old FAA Direct User Access Terminal (DUAT/S) sites are gone.

Have a satellite tracker? Use it and sign up for Flight Services enhanced Special Reporting Service (eSRS), combined with a flight plan it can definitely expedite rescue. Ditto 406 ELT not to mention Personal Locator Beacons (PLB).

Flight plans can still be filed for extended (15 day) durations, as well as Round Robin flight plans back to point of origin...use these with restraint if com is available to ensure no excessive waits until the estimated time of arrival plus 30 minutes when a flight plan becomes overdue, and the initial SAR communications search is triggered.

Don't be intimidated by any complexities of flight plan filing, the service is there for you!

Hopefully when this is read, the government shutdown is over, and federal employees are getting paid, but nonetheless, we should thank those presently keeping us safe such as the Coast Guard and Air Traffic folks under less than ideal circumstances!

continued from page 2

#### Harry's Book Club

And finally I will share with all AASF members something I have been doing on my own for flying friends for the past couple of years. I call it my "Book Club" or FYI. Quite simply I pour through scores of aviation articles every week. Maybe 10% are worth forwarding. I have forwarded some 130 since I began a couple of years ago. If any of you would like to be added to my group just let me know your email address. If you get tired of it or think it is spam also let me know and I will delete your name.

I hope you appreciate the products and services brought to you by your all volunteer AASF Board of Directors. I'd welcome any feedback on what we do, or what you'd like to see us do in the future, please feel free to contact me.

#### Fly Safe

Harry (aasfonline@gmail.com)

# 2018 (and 2008 and 1998) by the Numbers

#### by Colleen Mondor

For the past couple of months I have been working on an Alaska aviation database that incorporates data from the NTSB database and other sources to provide a thorough collection of FAR Part 135 accidents in the state between 1990 and 2018. I am interested in this data for several reasons: I want to be able to track 135 accidents by carrier, by type (scheduled vs nonscheduled) by location (Interior vs YK Delta vs Southeast, etc.) and other certain search factors that don't currently exist. Ultimately, after I receive more information from some outstanding Freedom Of Information Act requests, I should have an incredibly in depth picture of air taxi and commuter accident activity over the past [nearly] three decades.

There are some obvious things about 2018 that are apparent right now: there were 95 total aviation accidents with 20 of them classified as Part 135. (The total number will likely increase as the database catches up with entries not made during the federal shutdown.) Of the published total, ten crashes resulted in eighteen fatalities. There were also sixteen serious injuries recorded in the year. The most high profile accidents were the K2 Aviation crash in Denali, which resulted in five deaths, and the Taquan Air crash on Jumbo Mountain which resulted in six serious injuries.

Looking back over previous decades, the 2018 numbers do show marked improvement from the past. In 2008 there were 108 total accidents, in 1998, there were 171. A myriad of reasons have been suggested for the reduction in total aircraft accidents since the '90s, ranging from expanded weather reporting, to the establishment of GPS approaches, the passage of the Rural Safety Improvement Act (which radically impacted the bush mail system), and participation in the Medallion Safety Foundation programs. What is clear is that it was no one factor that affected the aviation environment in Alaska nor is there any way to separate the impact of one factor from another. But there are some very interesting, and puzzling, other truths in the accident stats.

Here's a table that breaks down the total number of accidents vs those classified as Part 135 for the three years listed above:

Year	Total # Accidents	Total # Accidents Classified Part 135	Percentage of Total Accidents Involving 135s
1998	171	39	22.8%
2008	108	22*	20.4%
2018	95	20	21.1%

\*Mid-airs included in this total - as the NTSB counts a midair as 2 separate accidents, I do as well, but I am careful to count the total fatalities in a mid-air only once.

The reduction in total number of accidents is obvious, but, as you can see, the percentage of them classified as Part 135 remains startlingly close.

#### continued from page 5

Another statistic that is often closely studied is fatalities. In 2018, fatal accidents represented 10.5% of the total. Further, those 18 fatalities occurred in ten accidents. Here's a table to break those figures down compared to 2008 and 1998:

Year	Total # Accidents	Total # Fatal Accidents	Total # Fatalities	Percentage of Accidents Resulting in Fatalities
1998	171	15	25	8.8%
2008	108	11	24	10.2%
2018	95	10*	18	10.5%

\*Mid-air included in this total - with one fatality.

So what does this tell us? Largely, that while there were more total accidents in the past, a high number of people are now killed in fewer crashes. Further, taking a deep dive into the accident reports reveals a lot of almost-fatalities in recent years. For example, the 2018 Taquan Air crash on Jumbo Mountain was strikingly similar to the 2015 Promech Air accident in Misty Fjords except the Taquan crash resulted in serious injuries rather than fatalities. (FYI Taquan Air purchased Promech Air in 2016.) If one more thing had gone wrong on Jumbo Mountain, and it's easy to imagine that, the 2018 fatality statistics would be dramatically worse.

While the total number of accidents was substantially reduced over the three decades (171 to 108 to 95), and the number of fatal accidents shifted from 15 to 11 to 10, the percentage of fatality accidents as part of the whole remains high. (In fact, as the 2018 statistics stand now, there was a higher percentage of fatality accidents that year & in 2008 than in 1998.) Further, the percentage of total accidents that involved Part 135 operators was strikingly close in the three years (22.8% in 1998, 20.4% in 2008 to 21.1% in 2018). It would appear that the more some things change, the more others stay stubbornly the same.

(I am currently reviewing Part 91 accidents for the entire 1990-2018 period to note those that involved Part 135 operators flying under Part 91, such as for positioning or training. These figures will affect the percentage of Part 135-involved accidents each year and I will incorporate them into my future overall analysis.)

This is just a glimpse at the statistics I'm working with but the overall trends from the entire period of 1990-2018 are clear. While the number of total accidents has lowered, the percentage of accidents involving Part 135 carriers remains high and the percentage of accidents resulting in fatalities remains similar over the thirty-year period. As I put together more information, I'll share it with the AASF.

### **PLEASE NOTE!**

The deadline for AASF scholarships is April 30! There are 3 scholarships available at \$2,000 each. See https://www.aasfonline.org/scholarships/for more info. Pilot Reports (PIREPs) are voluntary reports of actual weather conditions or conditions encountered by pilots inflight and at landing areas. Additionally, during a preflight briefing, flight service specialists (FSS) often encourage or request pilots to report conditions such as cloud bases and tops, visibility, precipitation, winds and temperatures aloft, and turbulence.

These PIREPs are important for several reasons. FSS uses the information provided by pilots to brief other pilots about weather or runway conditions, and provide advisories for pilots in flight. Air traffic controllers use the information to expedite traffic, or direct traffic around hazardous weather to more favorable routes or altitudes. Meteorologists from the National Weather Service use PIREP data to verify weather information contained in forecasts and advisories. PIREPs have triggered issuance of weather advisories, as well as been the basis for reducing the geographical coverage area of an AIRMET. Weather researchers use PIREPs as historical data to test new forecasting models before using them operationally. PIREPs can also alert emergency services to the location of wildland fires, volcanic eruptions, and downed aircraft, which may or may not be known to be missing. Reports of river ice are helpful for people living and traveling on the Yukon and Kuskokwim rivers, especially during break up.

Both quality and quantity of PIREPS can be essential. Most pilots are familiar with the sign-off "and pilot reports are appreciated" at the end of each session with a FSS briefer. The FAA requires PIREP solicitation when certain conditions are reported or forecast, such as thunderstorms, ceilings at or below 5,000 feet, or visibility is at or below 5 miles, light or greater icing, moderate or greater turbulence, wind shear, and volcanic ash. In addition, in Alaska, PIREPs are also requested for mountain passes, around ridges and peaks, between reporting stations, and in offshore coastal areas. These are areas which may present hazards to pilots, and often have no other sources of weather reporting available.

When a flight service specialist asks a pilot for specific information, such as icing or turbulence,

they are looking for that particular information for a reason. For example, if a specialist asks a pilot if any cloud layers were encountered in a pass, the specialist may be looking to confirm a forecast, or provide another pilot with real- time information. Pilots are encouraged to respond in a manner in which they are comfortable, regardless of order of information or format. If a controller or specialist wants or needs additional information, they will ask.

The NTSB reported that pilots found PIREPs helpful and would like to see more of them in the system. However, pilots often don't initiate PIREPs because they don't know how to classify weather conditions, or they don't know the PIREP format. Although it is helpful to give thorough and complete PIREPS, pilots don't need to be overly concerned with format or phraseology. The most important thing is to provide key information to help the different audiences that use the reports. PIREPs that report a lack of hazardous weather conditions, such as clear ceilings and visibilities or calm winds are also valuable, especially when conditions are better than forecast.

PIREPs can be given to flight service specialists or controllers by radio, and pilots using the Aerovie application can submit PIREPs directly to Flight Service using a graphical interface. If pilots are unable to provide PIREPs in the air, reporting by telephone after landing is still helpful. Flight instructors should explain the importance and show students how to file a PIREP, instill confidence in reporting, and encourage students to do so. Student pilots should ask their instructors for demonstrations on filing PIREPS, and pilots can confirm procedures or weather conditions with their instructors during flight reviews. Plans are underway for a visual PIREP program to allow pilots in Alaska to share photos of weather or landing areas from the cockpit, which may help avoid some of the hesitation in providing information. Since PIREPs can contain valuable information critical for safe flight, please consider being part of the solution to the PIREP shortage, and contribute to the information available to pilots and others through the PIREP process.

## In memory of Alaska aviation pioneer Rex Bishopp



**Rex Bishopp,** 96, passed away on November 1, 2018, at his home, surrounded by his family. Rex was born in Farson, Wyoming., on June 6, 1922, and lived there on the family ranch until moving to California for college. Rex moved to Alaska in 1967, when he and his wife, Ruth, purchased Alaska Helicopters. In 1978, Rex and Ruth merged Alaska Helicopters with Columbia Helicopters of Portland, Oregon.

Throughout his career, Rex was focused on the safety of his staff, and he actively promoted safety within the aviation industry. Rex was instrumental in creating the Alaska Air Carriers Association and served on their board for more than a decade. In 1987, Rex was honored with the Arlo Livingston award by the Alaska Air Carriers Association in recognition of his leadership in aviation safety. In 2012, Rex was the recipient of the Alaska Aviation Legends award in appreciation for his contribution to aviation in Alaska. In 2013, Rex was inducted into the Alaska Aviation Pioneer Hall of Fame. Alaska Helicopters played an important role in Alaska aviation history and Rex was instrumental in promoting aviation safety. Rex and Ruth had many exciting adventures as they ran Alaska Helicopters as a team. The company was sold in 1995, when Ruth and Rex retired.

Rex was preceded in death by his beloved wife and partner, Ruth, in 1995. He is survived by his children, Laurie (Bob) Bishopp, Renee (Brian) O'Connor, Lynn (Terri) Johnson and Clint (Julie) Johnson; grandchildren, Zachary (April) Johnson, Jessica (Tim) Ezell, Kelsey Johnson, Christopher Johnson, Keely (Jim) Parker and Liam (Sushma) O'Connor; great-grandchildren, Harper Ezell, Harlow Ezell, Everly Johnson, Leland Johnson, Isla Johnson, Ruby Parker, Ivan Parker and Kavya O'Connor; and many family friends.

The Safety Foundation sends sincerest condolences and thanks to the family for suggesting contributions be made to the Safety Foundation, and thanks to those who have donated in memory of Rex.

# A Report On the Fall Safety Seminar

The Safety Foundation's Fall Safety Seminar was a great success with distinguished speakers, a captivating agenda, and fantastic prizes. The seminar was held on October 27, 2018, at UAA's Aviation Technology Building at Merrill Field. One of our special guest speakers was Dr. Melchor Antunano, Director of the FAA's Civil Aerospace Medical Institute (CAMI). Dr. Mel educated and entertained the audience with information about spatial orientation and disorientation and operational hazards, and updated the audience on some of the ground-breaking human factors research being conducted at CAMI. Dr. Dan Johnson provided some serious information in a light-hearted manner in a talk titled "29 Ways to Make Yourself Stupid" and shared some insight into his fascinating work with the Perlan Project. Ms. Noreen Price, Aviation Accident Investigator with the NTSB, wound up the day with a presentation reviewing this year's accidents.

This may have been our best seminar yet for door prizes, with a DeLorme mini Inreach, gift certificates from Stoddards, Garmin Pilot subscriptions, Perlan posters, a tie-down kit, and a hard-wired aircraft carbon monoxide detector awarded to lucky winners. Special thanks to Northern Lights Avionics, Stoddards, DeLorme, EDMO, and Garmin for all the great prizes.

This seminar was a joint effort by the Board of Directors of the Safety Foundation, the FAA, UAA, and the State of Alaska Department of Transportation and Public Facilities. Thanks to the presenters and volunteers, and the members of the Alaska Aviation Safety Foundation. Your support allows us to provide these seminars and bring safety topics and speakers to our community. We look forward to seeing you at the Spring Seaplane Safety Seminar on April 27, 2019. If you have any suggestions, ideas, or requests for speakers or topics to be covered, please contact us at <u>aasfonline@gmail.com</u> or 907–243–7237.

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