# ALASKAN AVIATION SAFETY FOUNDATION



### Loss of Control will be the topic at the Safety Seminar

#### By Harry Kieling, Chairman

How often have you heard the cause of an accident was loss of control? Probably a lot, because 40% of General Aviation fatalities are caused by loss of control or LOC. But stop and think for a minute. Do you really know what LOC means and how many situations in the air can result in LOC?

Airplanes fly on immutable laws of nature. We all learned about the forces in flight early in our ground school days. Airplanes fly when they are within the parameters of flight. In simple terms it means having altitude below you, sufficient flying airspeed, (flying Angle of Attack or AOA), appropriate aircraft weight and balance, etc. So what does LOC mean? It means the airplane is no longer flying and it is not doing what you think it should do.

If an airplane stalls, you are no longer in controlled flight. How you react can mean the difference between life and death. If you quickly realize you have lost control and break the stall you may live to see tomorrow. But how do you get in a situation where the airplane stalls? Well it can happen in training when you intentionally stall the aircraft so you can practice stall recovery. Or it can happen expectantly and unintentionally when you stall in the base to final turn while trying to salvage a bad approach. It can happen if you have to go-around on final and don't push the yoke forward to maintain flying airspeed. It can happen if you inadvertently go from VMC to IMC and become spatially disoriented. It can happen when you are desperately trying to keep that bull moose in sight and exceed critical angle of attack.

In all of these situations and many more the airplane is no longer in controlled flight. If you don't recognize it and recover correctly and immediately, your airplane is probably going to stop flying and crash which will not be survivable for you or your passengers.

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Is this rocket science? No, it is preventable by situational awareness. You know what keeps a plane flying. Pay attention to the immutable laws of nature, (Airspeed/AOA and Altitude), and don't exceed your personal minimums which may lead you into dangerous situations where you can lose control.

The Alaskan Aviation Safety Foundation and the NTSB are sponsoring a Fall Seminar on Nov 5, 2016, focusing on Loss of Control. It is such a big problem the NTSB is sending a team to Alaska, including Dr. Earl Weener, a national Board Member, to help with the presentations. It will be held in Anchorage at UAA's Aviation Technology building and hopefully will be available on the internet as well. Details will follow. In the meantime don't lose control.

Fly Safe!

Harry



FOR MORE INFORMATION, PLEASE CONTACT THE AASF OFFICE AT 907-243-7237

### TO ADS-B OR NOT TO ADS-B?

### by Gary Bennett

The ADS-B equipage deadline is quickly approaching and has generated a lot of the same questions I get asked daily. So, I will cover here what we have learned both about the availability of equipment choices, and the mandate requirement as it applies to Alaska.

First, the mandate requirement date is January 1, 2020. The current FAR's state that aircraft operating in certain airspaces be required to transmit a certified ADS-B signal while operating within those airspaces after January 1, 2020. This is commonly referred to as the "ADS-B out" requirement. The FAR addressing the ADS-B mandate and airspace requirements is 91.225, for those who want to get into the nitty gritty of the mandate verbiage (which went into affect 8/11/2010). FAR 91.227 addresses the equipment performance requirements. Most commercially made ADS-B systems available today meet those requirements.

As far as Alaska is concerned, only the Anchorage Class C airspace is affected (and flight above 18,000 ft.). Alaska is exempt from the Class E airspace requirement. Therefore, many Alaskan aircraft will not be required to have ADS-B out by 1/1/2020. However, a majority of our installations are for pilots choosing to equip anyway for their own safety benefits, even outside the mandated airspace!

For those who wish to equip, there are many ADS-B equipment choices available today. This is a welcome sign as we have seen capabilities increase as equipment cost has decreased since the early ADS-B days (Capstone). Since the mandate's inception, we have installed many different types of ADS-B equipment from various manufacturers. We have found that one size does not fit all. So what is the right equipment for you? I will take you through our method of determining the best equipment choice, and also go over the various considerations when deciding on the perfect ADS-B box for your needs.

Even though the mandate is for "ADS-B out", we start with talking about "ADS-B in". With "ADS-B in" you will have the ability to see your own traffic picture, (although not always complete), as well as view current weather products while in range of the FAA ADS-B ground station system.

I always start with "Do you want ADS-B in"? So far, the answer has been 100% "YES". This is where you have to be the most informed in your equipment choice, and you will see why. My next question is "What do you plan on displaying your "ADS-B in" on?. The answer is simple if you already have a IFR system with compatible Multi-Function Display (MFD), or fancy new Touch Screen Navigator in your panel. But that is not the case with most of the aircraft out there. If you want to display "ADS-B in" on your existing installed equipment, you will want to make sure the unit you purchase is compatible. Many of us are now flying with PED's (iPads, etc), and that seems to be the most popular way to display "ADS-B in". Of course you will need an App (ForeFlight, Garmin Pilot, etc) compatible with the ADS-B equipment you are installing. Most current ADS-B systems have capabilities to stream "ADS-B in" to PEDs in some fashion, either built-in or as an option.

Here are some things to consider when choosing the best system for your aircraft:

- Do you want ADS-B in?
- What are you going to display ADS-B in on?
- If on a PED, what App are you using? Each ADS-B system has its own limitations on App compatibility.
- If on a Garmin Portable GPS Only certain Garmin equipment is compatible.
- Do you want to have audible traffic alerts? Not all units have this capability, for some it is an option.
- Do you have future avionics upgrade plans? Not all systems are capable of also talking to panel mounted equipment.
- Do you already have a portable "ADS-B in" device? There are some considerations if you plan to keep your "ADS-B in" device.
- Do you currently have a transponder? What is its age? The most popular systems today can actually replace your transponder. Do you plan on flying to the Lower 48? The 1090ES systems available today will also meet anticipated future Canadian requirements.

### Flying while on medication?

by John Mahany

It seems so obvious; but before taking any medication, you should always check to see what, if any, side effects there are. This is especially true if you have a need to fly. The medication now becomes a risk management issue, as is spelled out in the Pilot's Handbook of Aeronautical Knowledge (PHAK) 2016 ed., chapter 2, page 2–8.

The 'M' in the IMSAFE checklist directly applies here. 'M' refers to medication, and poses the question; "am I taking any medication that might affect my judgment or make me drowsy?" Consult with your AME if possible and ask about a particular medication and how it will affect you. A typical family practice doctor may not be aware of any adverse side affects on the body resulting from being several thousand feet in the air, in a non-pressurized cabin, while on a particular medication. Here are three websites with aeromedical information: aviationmedicine.com, AOPA's medication database and leftseat.com.

As we all react differently to various medications, we owe it to ourselves to find out all we can about any required medications. As was reported by AOPA, in a study by the NTSB on pilots and drug use, the findings were incomplete and inconclusive.

In a study of more than 6,000 cases that reviewed toxicology tests performed on pilots who were killed in aircraft accidents over a 22year period, the study simply concluded that drug use of all types, including prescription and over-the-counter drugs, is on the rise among pilots and that the risk of impairment, as well, is on the rise. However, there was no corresponding increase in the proportion of accidents in which drug impairment was a factor. There were only a small number of accidents each year in which drug impairment was cited as a contributing factor.

Still, flying and medications generally don't mix and it is prudent to exercise appropriate caution. If you find yourself in this position, ask yourself, how important is a particular flight? Can it be postponed? Can someone else fly it? Your health is more important, have a plan "B" in mind.

If you are flying for hire (corporate or charter), that is a different situation. But that is when a wise pilot should call in sick and not be available. Again, your health is more important. Of course, having been in that situation before, I know from experience that that is easier said than done, especially with small operators.

Exercise good judgment, and fly safely!

John Mahany has been flying for 30+ years. He is an ATP/CE-500 and an MCFI in southern California, with corporate, airline and charter experience. He spent 4 ½ years flying in Alaska. He is currently a King Air and Citation Instructor at FlightSafety International in Long Beach, CA. He flies a 1953 CE 180 for fun!

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Some of the most popular systems are getting hard to keep in stock, and here's why: The FAA currently has a \$500 rebate program going on which could put \$500 back in your pocket after you equip with a certified ADS-B system. The FAA has allotted 20,000 rebates and they are going fast. Visit <u>www.faa.gov/nextgen/equipadsb/rebate/</u> to see if you can qualify. We have had a number of customers make it through the rebate process already. Here's a few helpful notes about the process. 1) Make sure your registration information in the FAA database is current. 2) Have equipment and installation date firmed up with your installer ahead of time. 3) The validation flight will require you to fly within the Anchorage Class C airspace for 30 minutes.

We are always happy to help you sift through these and other considerations when choosing the right ADS-B system for your needs. If you are considering installing ADS-B into your aircraft, now is as good a time as ever!

Gary Bennett has worked at Northern Lights Avionics for over 30 years. He was on the original Capstone industry council and performed the first ADS-B installations in Alaska for both Capstone Phase 1 and Phase 2. He has installed hundreds of ADS-B systems since.

## FINAL FLIGHTS

### **Bruce Robert Walker**

Bruce Walker, 66, passed away on August 2, 2016, at Virginia Mason Hospital in Seattle, Washington after a brief illness. Bruce was born in Fairbanks to Frank and Lillian Walker of Circle, Alaska. Bruce's parents were Bureau of Indian Affairs teachers who taught him to enjoy travel and life in villages throughout Alaska. Bruce graduated from Wrangell High School and attended the College of the Redwoods in California and Southeastern State College in Oklahoma, earning a Bachelor's Degree. He settled in Anchorage and worked as a pilot, flight instructor and chief pilot, flying Twin Otters for Alaska Aeronautical Industries. In 1986, Bruce started work as an inspector and supervisor at the Federal Aviation Administration, retiring in 2016. Bruce leaves behind his lifelong partner and soul mate Linda, his son Kris Hovila (Tammy), three grandchildren, his brother Wayne Walker (Colleen) and many friends and co-workers.

The Safety Foundation would like to thank his friends and co-workers at the FAA Flight Standards District Office for their generous contributions to the Alaskan Aviation Safety Foundation.

### Zach Justin Babat

Zach Babat "Super Zach" was taken from us too soon on Aug. 31, 2016, at the age of 44. He died doing what he loved, flying a Piper Super Cub in bush Alaska. Alaska was where Zach's heart was and it inspired him to paint intimate portraits of the wildlife he loved. Zach lived life to the fullest, whether flying a Piper Super Cub in Alaska, fly fishing the Blue Ribbon Trout Streams of Montana, spending time with family and friends or painting the wildlife he loved so much. He made the world a better place through his sense of humor, joy of living, his passion for life and through his artwork.

Zach was raised in upstate New York where, thanks to the support of his father, he learned to fly fish at a very young age, beginning his passion for the great outdoors. His first job was with the Orvis Fly Fishing Company, leading him to look for fly fishing jobs out west. He answered an ad in a sporting journal looking for a fly fishing guide at Lost Fork Ranch in Montana. Little did he know he would meet the love of his life. Zach and Kerry met at a young age and it was love at first sight. Despite many miles, years, college degrees and flight ratings, Kerry and Zach found their way back to each other. They lived in Alaska for many years and were able to experience the wonders of Alaska from the view of a Piper Super Cub.

In 2008 they moved back to Montana, where it all first began and Zach started painting. His inspiration came from his time spent flying and guiding in Alaska and Montana. He loved to paint the personality of the animal, not just the horns, claws or fins; he believed the personalities are what made the animals of the West magnificent. His artwork brings joy and sometimes laughter to all who have the pleasure of viewing it and has been selected for the CM Russell Art Auction. He also painted at the National Wildlife Art Museum Plein Air.

Zach's artwork lives on and can be viewed on his Facebook page, Zach Babat Wildlife Artist or at his website <u>www.zachbabat.com</u>. He is survived by his wife, Kerry Pride; parents, Richard and Cynthia Babat; brother, Alex Babat; father and mother-in law, Merritt and Barbara Pride; as well as numerous aunts, uncles and cousins.

The Safety Foundation announces heartfelt thanks for the generous donations from Zach's friends, family and others whose lives he has touched.

## FINAL FLIGHTS

### Harry Wrase Jr.

Harry was born on October 23, 1967 and died on Wednesday, August 31, 2016 as the result of a midair collision near Russian Mission. Harry loved flying and was a thoughtful, encouraging and kind leader. He will be missed by many, including his fellow pilots, coworkers, friends and passengers in rural Alaska.

The Alaskan Aviation Safety Foundation offers condolences to Harry's friends and family.

### Christopher Phillips

Chris passed away unexpectedly on the morning of August 5<sup>th</sup>, 2016. Chris, along with his wife Tamera, were advocates for aviation safety; Chris was a longtime supporter of the Safety Foundation. We are grateful to have known him.

# Alaskan Aviation Safety Foundation

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