October 2018

ALASKAN AVIATION SAFETY FOUNDATION

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The Fall Safety Seminar is October 27th


Alaskan Aviation
Safety Foundation
Fall Safety Seminar
Saturday, October 27, 2018
0800
Check-in
0830
Presentations Start
UAA Aviation Technology Center
2811 Merrill Field Drive
Anchorage, Alaska
Featured Speaker:
Dr. Melchor Antuñano, M.D., M.S.,
Director of the FAA's Civil Aerospace Medical Institute (CAMI)
AASF
UAA
Aviation Technology Division
University of Alaska Anchorage

A Commitment to Safety Seminars

This quarter I would like to remind you of one of the services the Safety Foundation has been able to provide for the past few years: two annual safety seminars. It has always been a challenge to plan these events but it's a task that your Board of Directors has always stepped up to.

The Seaplane Seminar in the spring has been a tradition for over three decades. The fall seminar is younger but one that we feel our members appreciate. These seminars are planned and executed by volunteers and the costs are usually covered by our small foundation budget (your membership dues).

In the past, Alaska Airlines has helped us with tickets for our speakers and Inlet Towers and Copper Whale Inn have provided complimentary rooms. UAA Aviation Technology Division has also been incredibly supportive by allowing us to use their auditorium. Alpha Eta Rho and Jim and Charlene Derry have provided us lunch (which in itself has become a tradition). We also have enjoyed the support of many offices of the FAA (including WINGS Credit). The NTSB has provided top notch presenters and topics. And of course many of the other local aviation organizations have always been there to help out including AOPA, Seaplane Pilots Association and the Alaska Airmen.

Our fall seminar this year will be on October 27 at UAA. Once again Dr. Melchor Antuñano, the Director of the FAA's Civil Aerospace Medical Institute (CAMI) will entertain and educate us. If you saw Dr. Mel a couple of years ago I think you will agree he is fascinating speaker and AASF is so glad that he has agreed to come back up to Alaska. Also Dr. Dan Johnson, an internationally noted aviation speaker, will present two lectures. One is on a project he has been working on to take a glider to the edge of space (literally!). Dr. Marcel Dionne, our Regional Flight Surgeon, will provide an update and the NTSB will look back on the year from their perspective.

I hope you can all attend and together, can be better prepared to fly safe!

Harry

Crosswinds and More: Mid-Air Collisions

by John Mahany

Mid-Air Collisions are something you don't usually think of when flying in the bush, going to and from remote airstrips, unless it's peak season and a gaggle of aircraft are all trying to get in or out of the same airstrip. Then, your head is on a swivel. You typically think of mid-air collisions when flying to or from a busy non-towered airport or airstrip, and at least one aircraft is probably "NORDO". But you should always be aware of your situation and what other aircraft, if any, are in the vicinity. Hopefully they are using the CTAF and transmitting their position accurately. Hopefully.

The most recent mid-air collision in Alaska occurred this past summer, on June 13, 2018, between two small aircraft in the Mat-Su Valley. There was one fatality. One of the aircraft was able to make an emergency landing on the dirt strip at Lake Hood Seaplane Base. One month later, on July 18, 2018, a mid-air collision over the Florida Everglades killed all four people in two aircraft involved in training flights.

The FAA's own statistics reveal that 82% of mid-airs result from one aircraft overtaking the other; 27% occur in cruise flight. Forty-five percent of mid-airs occur in the traffic pattern. What are key takeaways? Be proactive and aggressive looking for traffic! Know where mid-airs are likely. File a NMAC (near mid-air collision) report, FAA Form 8020-21. Where to file it? Either via radio or phone to the nearest ATC or FSS facility. Or, in writing to the nearest FSDO.

A near midair collision is defined as any incident associated with the operation of an aircraft in which a possibility of collision occurs as a result of proximity of less than 500' to another aircraft, or a report is received from a pilot or a flight crew member stating that a collision hazard existed between two or more aircraft.

What about Traffic Collision and Avoidance (TCAS) requirements? These have made a huge difference, following the 1978 mid-air collision between Pacific Southwest Airlines flight 182, a Boeing 727 and a Cessna 172 at San Diego's Lindbergh Field. As a result of this accident, in 1991 the FAA required that all commercial airliners with more than 30 seats be equipped with TCAS.

For general aviation the requirements are thus: US registered aircraft operating under FAR 91 are not required to be TCAS-equipped. However, if a US registered aircraft is TCAS-equipped, it must be an 'approved' system, operating in accordance with FAR 91.221. TCAS is required for turbine general aviation aircraft operating under FAR 135 that have 10-30 seats.

AOPA has developed a seminar addressing mid-air collisions called, appropriately: "Collision Course – Avoiding Airborne Traffic". According to the description, ASI's course explores risk management strategies to avoid all aircraft in flight. You'll learn about high-risk scenarios and locations, and you'll review strategies for avoidance.

I have had a few close calls myself, over the years. Surely, we all have. One was many years (decades) ago in Chicago when I was working on one of my ratings, and I got too close to the final approach course for one of the runways and a DC-9 zipped past me…way too close. Surprise! What was I thinking? Did they even see me? Another time was years later over the Kenai Peninsula, when I somehow got too close to a C-130. What were we both doing there? Though the details of these events are hazy, I still remember them.

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Back then I was not aware of the NMAC report mentioned earlier. But I have learned to keep my head on a swivel and to rock the wings to check the blind spots when need be, to make sure there is no conflicting traffic. And now, ForeFlight with ADS-B and the Scout enables you to see traffic displayed on your iPad. Progress!

Mid-Air Collisions. Maintain good situation awareness and be not only proactive, but aggressive, taking prompt corrective action to avoid them.

Fly safely!

John

John Mahany is an ATP/CE-500, as well as a Master CFI and has been flying for 40-years this summer. He has 'transitioned' into many different aircraft in 40 years of flying. He is currently a Citation Instructor at a Part 142 school in Southern California. He flies a 1953 Cessna 180 for fun!

A Survey of Some Recent Alaskan Mid-Airs

ANC10LA094B
September 15, 2010 in Dillingham
2 float-equipped Piper PA-18 aircraft
1 Serious, 1 Minor
Probable Cause: Both pilots' failure to see and avoid each other during initial climb, resulting in a midair collision. Contributing to the accident was the pilot of N9699P's inability to use his airplane's radio for air traffic advisories.

ANC11FA062B
July 10, 2011
Lake Clark Pass
PA-31-350 and C206
No injuries
Probable Cause: The failure of pilots to see and avoid the approaching airplane. Contributing to the accident was one pilot's failure to listen to radio position reports from the other airplane on the common traffic advisory frequency and the absence of any forward-facing lights on his airplane.

ANC11FA071B
July 30, 2011 in Talkeetna
Float-equipped C206 and float-equipped C182
4 Fatalities
Probable Cause: The inadequate visual lookout and failure to see and avoid by the pilots of both airplanes while maneuvering to land, which resulted in a midair collision. Contributing to the accident was the lack of standardized, unequivocal procedures concerning common traffic advisory frequencies used in the area.

ANC15FA009B
January 31, 2015
Wheel/ski-equipped PA-18 and ski-equipped PA-18
2 Serious
Probable Cause: Both pilots' inadequate visual lookout and failure to see and avoid each other while in level cruise flight, which resulted in a midair collision. Contributing to the accident was the obscuration of the other pilot's visibility due to sun glare.

ANC15LA033A
May 31,2015
C-185 and C-172
1 Serious, 1 Minor
Probable Cause: The C-172 pilot's failure to maintain an adequate visual lookout, which resulted in a midair collision. Contributing to the accident was the C-172 pilot's failure to follow Federal Aviation Administration-recommended traffic pattern procedures.

ANC16FA061B
August 31, 2016
C-208B and PA-18
5 fatalities
Investigation ongoing: VMC prevailed in the area at the time of the accident. The C-208B departed from Russian Mission Airport about 0958, destined for the Marshall Don Hunter Senior Airport, Marshall, Alaska. The PA-18-150 departed the Bethel Airport about 0907, destined for a remote hunting camp about 20 miles northwest of Russian Mission, with company flight following procedures in effect. They collided midair while both airplanes were en route about 6.5 miles northwest of the Russian Mission Airport.

ANC18FA045B
June 13, 2018
C-207 and C-175
1 fatality
Investigation ongoing: VMC prevailed in the area at the time of the accident. The C-175 departed a remote fish camp about 1126 en route to the Lake Hood Seaplane Base with no flight plan filed. The C-207 departed Merrill Field about 1200 with about 250 pounds of cargo on board, destined for Tyonek with company flight following procedures in effect. They collided midair near the mouth of the Big Susitna River, about 20 miles west of Anchorage.

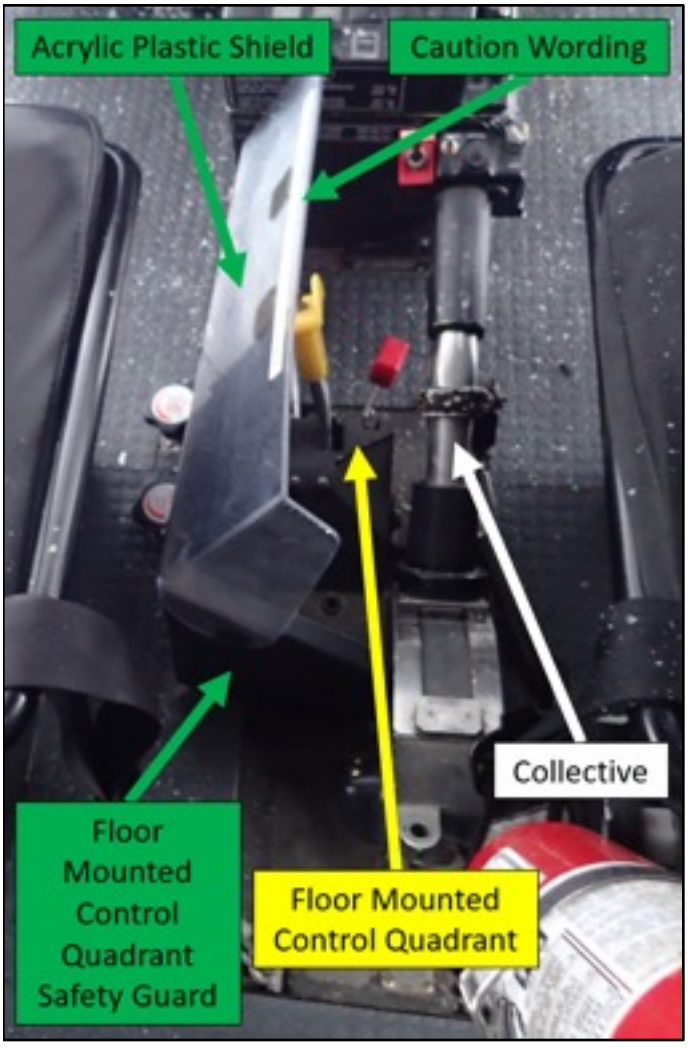
Safety Briefing: Airbus AS 350 Series Floor Mounted Control Quadrant

The Airbus AS 350 series helicopter, also known as an "AStar" or a "Squirrel," is a popular helicopter used throughout Alaska. Its performance and maneuverability make it ideal for a variety of missions, including commercial operations (aerial photography, glacier treks, heli-mushing, heli-skiing/snowboarding etc.), public use, and natural resource industry support (oil, gas, mining, forestry, etc.).

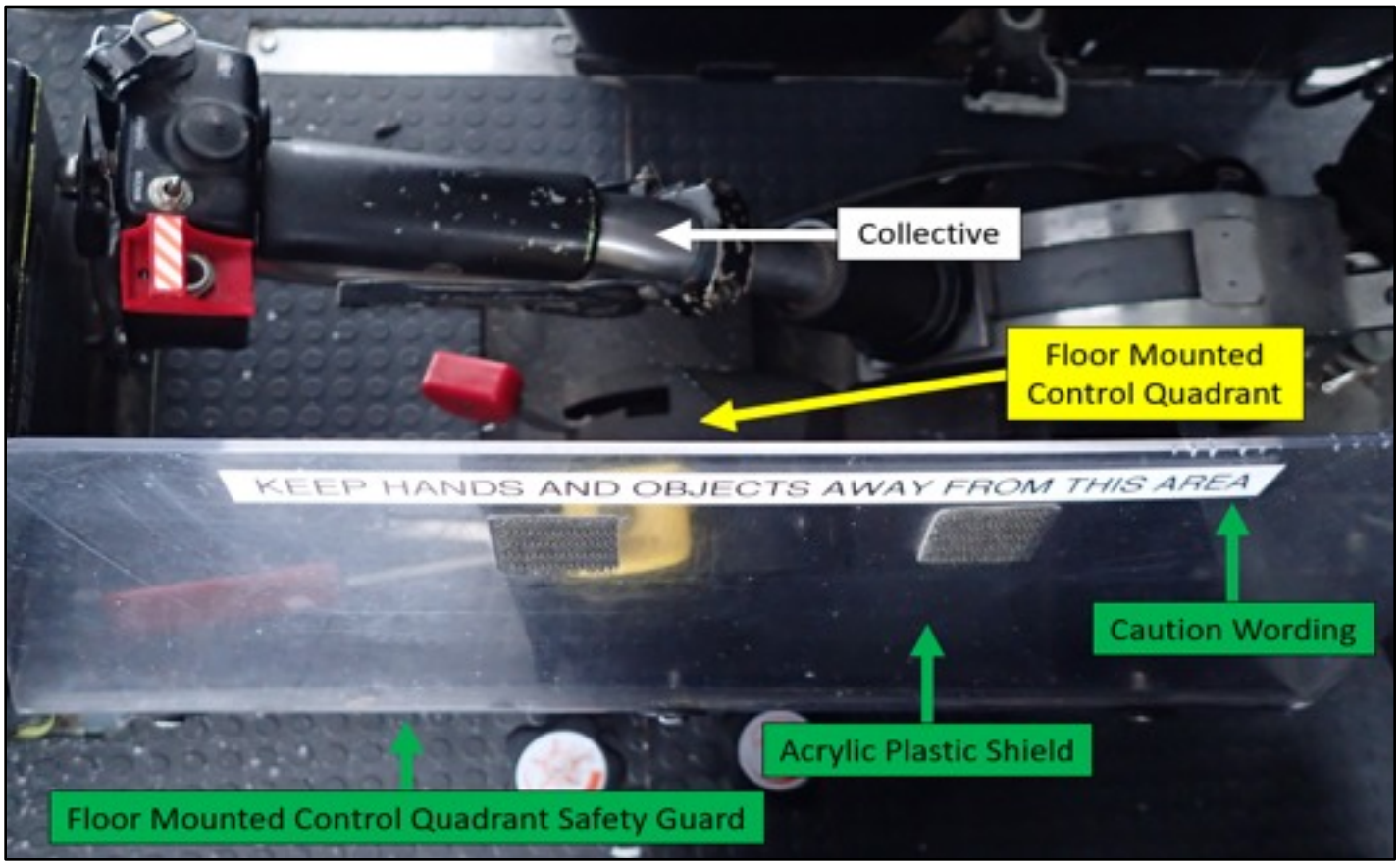
An Airbus AS 350 conducts a pinnacle approach in mountainous terrain.

A review of several accidents in the US and internationally found inadvertent movement of the fuel flow control lever by the front seat passenger, which resulted in a loss of engine power. (See the Safety Briefing at the AASF website for more on the accidents.) The control quadrant of the Airbus AS 350 series (AS 350, AS350 B, AS 350 BA, AS 350 B1, and AS 350 B2) is located on the floor between the pilot's seat and the left front seat, and the various control quadrant levers (the main rotor brake lever, the fuel flow control lever, and the emergency fuel shutoff lever) are susceptible to interference from passengers and objects.

Operators of the Airbus AS 350 series with a right seat pilot drive configuration should consider installing a safety guard to help protect the control quadrant from interference. This safety guard is installed via an FAA-approved supplemental type certificate or field approval processes. If the safety guard doesn't provide adequate interference protection from the left side and above, an acrylic plastic shield can be installed on top of the safety guard. For left seat pilot drive configuration, operators should consider installing an acrylic plastic shield on the left side of the control quadrant to prevent interference. The acrylic plastic shields should be placarded with caution wording to communicate the interference danger to passengers. This best safety practice of using a safety guard along with an acrylic plastic shield is incorporated by several AS 350 operators in Alaska.



An installed exemplar safety guard (right seat pilot drive configuration), with an attached exemplar acrylic plastic shield and caution wording, as viewed from the cabin.



Commercial operators and public use organizations should be familiar with this safety issue, and provide education to management, pilots, mechanics, and ground crew personnel to enhance safety awareness. If animals are carried onboard the helicopter, they should be secured from moving near the control quadrant. Information should be included in the operations manual about specific passenger briefing requirements, passenger loading and unloading procedures, passenger en route procedures, and object securing procedures that address the prevention of interference with the control quadrant.

Pilots who fly AS 350 series helicopters should ensure passengers are adequately briefed on the potential to inadvertently move the various control quadrant levers and should use extreme caution when loading and unloading passengers and during en route procedures. Passengers should understand that all body parts and objects must always be kept away from this critical safety area, and ensure all objects are properly secured prior to flight. Examples of objects that could interfere with the control quadrant levers include: camera straps, backpacks, purses, clothing, electronic cords, tools, ski/snowboard equipment, mountaineering equipment, tactical equipment, etc.

If an object is dropped anywhere in and around the control quadrant (such as a cell phone, pen, tool, camera lens), the passenger should not reach for the item but rather immediately alert the pilot. Objects dropped inside the control quadrant gate plate have the potential of causing jamming with the levers.

A free passenger briefing supplement for the AS 350 that address control quadrant interference is available at the Alaska Aviation Safety Foundation website. All seat belt assemblies for the front passenger seat should always be secured when not in use and not left dangling loose. If an interference event occurs due to the inference susceptibility of the control quadrant design, the event should be reported to the FAA via a Service Difficulty Report.

For more information, please go to: http://www.bst-tsb.gc.ca/eng/rapports-reports/aviation/1994/a94w0037/a94w0037.pdf

https://www.tc.gc.ca/media/documents/ca-certification/1997-01.pdf

A Final Flight Notification

CARL DAVID OBERG

Dave passed away September 24, 2018, as a result of a plane crash near Rainy Pass. Dave was a lifelong Alaskan and was appreciative of the opportunities that aviation provided to see and experience the beauty around him. Dave was a member, supporter, and friend of the Safety Foundation; our heartfelt condolences go out to his family and friends.

DAVID WILLIAM KING

Dave was a founder of Kingdom Air Corps and a longtime aviator, he perished in a helicopter crash in southeast Alaska on September 28, 2018. He was a friend to many among the Safety Foundation; his loss will be felt deeply in the aviation community.

NOTES

The Alaskan Aviation Safety Foundation would like to say THANK YOU to all of the Alaskans that donated a portion of their PFD through Pick.Click.Give. Your donations help us bring you safety seminars, provide scholarships, and spread safety messages. We appreciate your support, and the support of our members.

Thanks to Magic Mike Bennett at the State of Alaska DOT & PF Graphics Department for the flyer for the Fall Safety Seminar. Please mark the date on your calendars!

Finally, you can find more information on midairs in the Safety Briefing section of the Safety Foundation's website, there are two Alaska-specific briefs with information on avoiding midair collisions near airports and while en route.

Alaskan Aviation Safety Foundation

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