

# Notes on TTCF Alaska Air Rally

by Pat Collins, TTCF Member and AK Air Rally Participant

When I first saw the announcement for the Alaska Air Rally Tour, I must admit that I had visions of flying in beautiful sunlit splendor over the snow covered mountains and coastlines. I knew I would see the majestic mount McKinley in all its splendor and maybe even get to fly some low level sightseeing along the coastline, taking in the whales and maybe even a bear or a moose. After all, Alaska is all about airplanes and access to everything by air. Well, that got me to sign up. The reality was much different and maybe I should have done enough research to figure it out ahead of time. But, actually making the trip and learning about the challenges of the Alaskan environment was so much fun and such a great learning experience I'm not at all sad about my unmet expectations.

Alaska is truly a different flying environment from anything in the lower 48. The vast majority of the flyers and planes in Alaska are utilitarian planes with floats, skis or balloon tires to allow them to fly low and slow and land almost anywhere while carrying lots of supplies and people. That's really good, because the unsung story about Alaska is the weather. Sure, we all expect the winter up there to have massive blizzards and storms, but the summer? Well, if you believe all the great pictures in the tourist magazines, the skies clear up and sunshine abounds during the summer. Not so. They take those pictures on the one or two days that they get sunshine just to make us think there is a normal summer there. In truth, it rains all summer long. On our two week voyage, we only had two or three days where we actually even saw the sun and then it still rained sometimes on those days. Mostly, it was rain and clouds. Hard IFR for us flying types. The combination of steep, snow covered mountains rising up out of the coastline and the huge Gulf of Alaska to provide moisture ensures the mountains will be perpetually shrouded in mist and clouds and the bays and inlets will get lots of rain. In fact, the rugged coastal terrain creates its own climate. Southeast Alaska has the largest rainforest in North America and gets an enormous amount of rainfall at the lower elevations all year long. In the higher elevations, they get snow, which is what makes the glaciers and so much beautiful scenery (when it's clear enough to see it!).

If you are not flying with floats, skis or fat tires, and you fly faster than 80 to 100 knots, then the elements become much more challenging. The bigger iron and airliners can climb fast and get higher quicker than our Twin Cessnas can. That puts us in a unique position in the middle altitudes and explains some of our challenges on the trip. During our two weeks in June, the freezing level stayed around 4,000 ft and almost every day the area forecast called for moderate icing from 11-16,000 feet with layered clouds from low ceilings up to FL250. That put a bit of a constraint on choosing routes. Direct routing between airports was out of the question. There are some big mountains and the MEAs on most routes are 9,000 and above (right in the worst icing potential). No worries, we'll just fly VFR, at lower altitudes and enjoy the scenery along the coast. Alas, that was not to be either. The coastal slopes were consistently shrouded in mist and clouds and low visibility. Ceilings were usually around 1-2,000 ft, but there were always low scud-like clouds floating around below the overcast to spoil a nice instrument approach at the last minute. We learned that the natives

have an amazing tendency to ignore the scud, fly "around" it, and still find a place to land either on the hard surface or in the water that is inevitably beside every runway. Again, we didn't have floats, so we had fewer choices. It is worth noting that low level maneuvering in a smaller plane is done at relatively low airspeeds. Our planes are much faster and I don't recommend challenging the Alaska coastline at low altitude below the clouds in low vis at 180-200 knots.

There were plenty of other lessons to learn as well. To start with, fuel planning is critical. There are relatively few qualified (legal) IFR alternates and they were usually 30 minutes and up to an hour away from our destinations (even the ones in Canada - which is a whole other concern). Add to that the fact that most of the coastal airports exist in a non-radar environment. There are few radars that can see anything below about 7,000 ft due to the terrain. Even Anchorage Center does not have positive radar contact or continuous radio coverage at low and medium altitudes along portions of the coast. This was brought home to us on the first leg, from Bellingham to Ketchikan, when we had all merrily launched, one after another, at about five minute intervals. Due to the terrain at our coastal destinations, the approach airspace and the departure airspace are the same and, in a non-radar environment, only one plane at a time is going to be allowed in it. So, we soon stacked up in holding patterns at 7,000 ft and above over Ketchikan while we waited, (over 40 minutes in my case) for the planes in front of us to land and the numerous departures to exit the airspace needed for the approach. It became obvious that a courtesy "cancel IFR" call as soon as we broke out on final would shorten the time for our fellow Rally crews still up in the holding pattern. Add to that the need to sequence departure traffic through complicated obstacle clearance departures, the potential for fuel sucking delays became very real. Calculation of "Bingo Fuel" to go to an alternate is an ongoing concern. Even the departures can entail holding patterns to climb to an altitude where Center can see you or at least determine that you have obstacle clearance to allow you on the route to the next challenging destination. I flew more holding patterns on this trip than I flew in my last ten years of airline and AF transport flying.

Another challenge for our Twin Cessnas was the requirement for high rate, "slam-dunk" descents to meet altitude requirements along the approaches, which often take you down over water between steep mountains on either side. It is a tribute to the early Alaska flyers that they were able to do these things without our trustworthy GPS gear. Even so, there were a couple of surprises with our wonderful Garmin gear and trusty ForeFlight augmented cockpits. To start with, XM weather simply doesn't work at Alaskan latitudes. A call to Sirius from Ketchikan informed me why my weather pages were blank and the METAR and TAF pages said "no data available." While the XM weather broadcast has all of the Alaska data available, you can only receive it in the lower 48 states (Catch 22?). It seems the satellite angles are too low to the horizon for reliable XM reception. No worries... I have a Stratus ADS-B receiver and I'll get the weather and traffic info that way... Not so fast. There are very few ADS-B ground stations along the coast and reception was very spotty. I never had more than one tower in range during the trip and most of the time my ForeFlight map page said there were 0 towers in range.

To compensate for this, everywhere we went in Alaska there were excellent Flight Service Stations, the old-fashioned FSS with real live weather briefers and ATC experts. Most

of the ones we spoke with were pilots themselves and very helpful. At most places there are no control towers, but ATC route clearances and airport traffic advisories are handled on the FSS frequency. These provided excellent information and traffic awareness at some very busy airports.

Well, I never did see the top of Mt. McKinley. We didn't make it to Kodiak, Seward or Fairbanks as planned, but some of us made it to Anchorage and drove the Seward highway down to Seward to check that square. All of our Rally flyers survived the trip and even thrived as we had so many wonderful things to do at each destination. I'll leave it to others to describe their maintenance divert to Yakutat, the many changes in the planned itinerary, and how exciting it was to see the whales, sea lions, goats, bears, moose, eagles, sled dogs, Otters and Beavers (airplanes, of course) and the great people we met everywhere. We learned quickly as we went (we took a lot bigger interval spacing) and did a very good job of providing PIREPs and support for each other along the way. It was a great flying adventure and if the opportunity comes again I wouldn't miss it.

## **Notes from a Safety Talk by an FAA Inspector Who Spent 28 Years Bush Flying in Alaska**

by Bob Thomason, Editor

Shortly after our trip, I spotted an FAA Wings program that was being held at a nearby local airport. The title was "Weather or Not: Plan To Live or...? What Alaska Bush Flying Taught Me...About Risk!" Fresh off of 2-weeks of battling AK weather, I had to go. Below is a bullet point summary of the talk.

- AK flying is dangerous. In 28 years, this inspector lost 50 friends to aircraft accidents - many of them pilots he flew with and had taught.
- In spite of a military background and being a stickler for following the rules, ten times in those 28 years he got into situations where he thought his life was in danger. Admittedly, the type of flying he did was on the edge: landing DC-3s on gravel beaches, etc.
- "Alaska is where airplanes go to die. We called them "whistling shitboxes."
- "I would never let my family or friends go to Alaska and take a floatplane ride unless I knew the pilot or the charter company.' He said the inside speculation on the recent cruise ship floatplane crash that killed 9 people was that the operator had removed the synthetic vision from the airplane because of cost. It was free when the FAA was developing the Capstone program in AK but that's over now and operators must pay for the equipment themselves. Some don't.
- The "Direct-To" button kills in Alaska. There is no such thing as a safe direct route in AK for most GA airplanes.

- AK has unique weather systems. There can be rapid barometric changes over short distances. Consequently, your true altitude may not be what you think it is.
- Weather cams have improved safety in AK but they are not foolproof. Fresh PIREPS are best.
- Finally, he said his three hard and fast rules for safe Alaska flying, in order, are:
  1. **Never, ever, ever fly toward an incoming weather system.** Many of the accidents that took the lives of his friends involved this.
  2. **Always have a gold-plated, guaranteed alternate plan.** “In a well-planned flight, there are no emergencies - only a change in plans.”
  3. **Never, ever violate the personal flight rules and limits you’ve set for yourself.** Discipline is key. He credits his military training in helping him live by by this rule over the years.

In summary, I still recommend that anyone interested in flying to and within Alaska to do it. Just know that you will be in a different and more challenging environment. Increased caution, detailed planning and flying discipline will keep you safe and allow you to have one of your best flight experiences ever.