

# **Alaskan Aviation Safety Foundation**

# Notes from the Cockpit,

#### **Seminars**

One of my visions for the Alaskan Aviation Safety Foundation is to provide safety seminars to communities all over Alaska. I am looking for an individual who can volunteer to organize this effort. This individual would reach out to communities and offer to provide information in a seminar format on topics that are of concern in various areas. This should be a great way for local pilots to get to know each other, and in cases where seasonal hires fill many left seats, would give a chance for local pilots to get to know some of these seasonal fliers and share knowledge. I suspect in many cases, the locals who have been successfully flying for many years can offer tips for staying out of trouble. But I have also been amazed at the knowledge of airspace and changing regulations that some of the newly minted pilots can share. After several months of trying to find an individual who can take on the job of organizing seminars and not finding anyone, we need to come up with another plan. I would like to hear from people all over Alaska who would like the AASF to bring a road show to their community. We will take your information and see if we can organize an event. Please give our office a call.

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# **Meeting Minutes**

One of our members recently asked about meeting minutes. The AASF holds an annual meeting as required by our bylaws and the State of Alaska Articles of Incorporation and other meetings as needed. These minutes have always been available to the membership upon request. I do not want to clutter bandwidth by broadcasting information that folks may not want, so I would like to offer the reminder that if you have questions, concerns, or curiosities, please call the office and we can get you a copy. The AASF is a member driven organization, and meeting member requests is an important part of our mission.

# Sustainability

This is a tough year for many non-profit organizations around Alaska. Personal budgets are tight and when people are making choices of whether to purchase heat for their homes or pay other daily expenses, membership dues in many worthwhile organizations are put aside. If you have been putting off renewing your membership in the AASF, please reconsider supporting us and our efforts to improve aviation safety. We can only accomplish our mission with support from safety minded pilots like you.

## **Scholarships**

We have successfully awarded three scholarships this year.

- The Tom Wardleigh Memorial Scholarship of \$1,500 is awarded to Amanda Zharoff of Homer, AK.
- The Virginia Hyatt Scholarship of \$1,500 is awarded to Natalie Creamer of Homer, AK.
- The AASF Ellen Paneok Memorial Scholarship of \$1,000 is awarded to Lewis Phillip of Kongiganak, AK.

Congratulations to the scholarship winners. We hope this scholarship will assist in you meeting your aviation goals.

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## **Safety Tip**

Pilots in Alaska are so very lucky in so many ways. We have a chance to view some of the best scenery in the world. Weather is the concern that I hear about the most from pilots. Interestingly, the FAA statistics show takeoff and landing accidents cause the highest number of accidents by far. I think pilots view airport accidents as events they could control for the most part with proficiency and training, but weather accidents are something that is many times beyond the pilot's control (other than to stay home). I wanted to offer one of my weather experiences that we pilots in Alaska sometimes forget about, Density Altitude. A few summers ago I landed in Gulkana for fuel, before heading on back to Anchorage. It was a beautiful sunny summer day in the interior, 85 degrees and humid since it had been raining. I was heavy, but never really thought about it. The plane had already made a couple of takeoffs and landings earlier that day. I was glad the runway in Gulkana is 5,000 feet long because we used a lot of it, and climbout was really anemic. We get so spoiled that we never think about a warm, humid summer day increasing the density altitude to critical levels. So if you are flying this summer, and it is a warm interior day, or if you are hunting from a high altitude camp, think about calculating the density altitude before taking off.

## **Collier Trophy**

When I first heard that ADS-B had won the Collier Trophy, I admit that I went to the web and looked up the Collier Trophy to see what all of the hoopla was about. Well I found out that the Collier is a big deal. On June 12 the Collier Trophy was presented to the teams of people who helped to make ADS-B a reality. About 20 Alaskans attended the awards ceremony, along with many other aviation groups from around the nation that have worked on this system. The AASF has been a part of the development of ADS-B since 1995. Jim Cieplak and I represented the AASF at the awards dinner and ceremony. AASF Board Member Leonard Kirk also attended while representing the University of Alaska. While in Washington DC we also had a full hour meeting with Bobby Sturgel, Acting Administrator of the FAA. While we do not know if he will be confirmed as the FAA Administrator, he is familiar with many of our Alaskan aviation issues. During his military career he flew fighters in Alaska.

## **Cost of Flying**

Many people are suffering sticker shock with the price of fuel including avgas. While it is a shock to see what a fillup costs, consider the price of fuel as part of the total cost of your flying. Avgas costs about a dollar more than the the last time I wrote. If you are a flyer that flies about 100 hours a year, and your aircraft burns about 10 gallons per hour, this increase will cost about \$1,000. But think about the increase on an hourly basis and it does not feel so bad. An extra \$10 for that hour of proficiency is worth the cost to keep you and your loved ones safe and sound. So try to not let the cost increases spoil your efforts to stay proficient. Accidents in Alaska are down this summer, primarily I

Photo Courtesy: Burke Mees

think because people are just not flying. If you are saving your funds for hunting season, or that trip to visit relatives, be sure to get in some proficiency time before you go.

Lastly, the AASF is a member supported organization. If you have renewed your membership, thank you. If you have not, please send us support today. We can only accomplish our safety programs with your support.

#### **Carl Siebe**

Chairman of the Board



You heard it in the Sun-N-Fun 2008 LSA Mall. Whether you were talking to pilots of Cubs, Luscombes, Bellancas, Cessnas or Beechcraft, it echoed strong in the Type Club tent. It was the talk of manufacturer's displays and the exhibition hangars. It was even touted by purveyors of very light jets. It seems like the biggest thing on pilots' minds is the cost of airplane fuel, whether mogas, 100LL or even jet varieties. There's not a lot individuals can do to affect the cost of a gallon of our gas-of-choice. But there are some things we can do to reduce our fuel consumption, and have at least some say in fuel costs.

# Safety

First, let me emphasize there are some fuel tactics that might save a little gas money, but that have a negative effect on safety. Regardless of your fuel strategy do *not* use fuel pricing as an excuse to press on when you have too little fuel on board, to exceed best-practices engine temperatures or to violate fuel-related aircraft limitations. It does nobody any good to save a few dollars up to the point of impact. It's probably sacrilege in the world of flying to say this, but if you can't afford to put fuel through your airplane of choice with an adequate safety margin *you can't afford to fly that airplane* and you need to find a cheaper way to get around. For some of us it means it's time to step down to a slower or smaller airplane to continue making the trip or the hamburger run. For others of us, very unfortunately, it may mean it's time to get out of flying until we can afford to fly safely again. If you're like most pilots, however, you can realize significant fuel savings by changing your operating technique in the plane you fly. Commit to flying safely, while investigating these techniques for controlling your fuel costs.

#### **Power Setting**

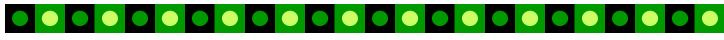
One way to reduce fuel burn it to choose a lower power setting. You'll be surprised how little time you lose (extra flying time you get to put in your logbook!) while saving a good bit of fuel along the way. Get out your Pilot Operating Handbook (POH) and make a few power-setting comparisons. For example, the 180-horsepower Diamond DA40 Flight Information Manual (FIM) tells us a flight at 5000 feet and the traditional, go-fast power setting of 75-percent power (about 24" mp and 2400 rpm) nets 136 KTAS while burning 11 gallons per hour (gph) at a best-power mixture setting. Drop back to 65-percent power (23" mp/2200 rpm) and you can expect 128 KTAS and 8.2 gph. Come way back to what many of us consider a very low propeller setting, 2000 rpm, and you can still get 65-percent power at 5000 feet (by running at 25.4" mp) for that same 128 KTAS at only 7.9 gph fuel burn. That's only eight knots loss of true airspeed compared to high-speed cruise, but a savings of three gph. Now fly 200 nautical miles. At 75-percent and best power, it'll take 1.5 hours and require 16.5 gallons. The 2000 rpm, 65-percent power, economy cruise will take about six minutes more, but you'll burn only 12.6 gallons ... nearly four gallons less on the same trip with a negligible time difference. (These comparisons assume no wind.) At an average \$4.94 per gallon (the AirNav nationwide average for 100LL on the day of this writing), that's a savings of \$19.76 on this one flight, with no real time difference en route. So dig into your airplane's POH and look at the real-world effects of using something other than a go-fast power setting. It'll have a big impact on what it costs you to fly.

#### The Economic Advantage of Tailwinds

When the winds blow strong, especially on longer trips, you might be able to get even better economy. Adjust your power setting for a planned *ground* speed, not true *air*speed. If you're lucky enough to have a tailwind component, throttle back for the "normal" groundspeed and rake in the savings as you attain that speed at a lower fuel burn. Yes, you'll still have to fight your way into headwinds sometimes, and if they're very strong you may even be "forced" to fly at higher power settings to make any real progress. Using tailwind to reach the "normal" groundspeed with lower fuel burn when able, though, will offset the higher fuel costs of fighting a headwind when needed.

## Fly High

For a given power setting, the higher you fly, the greater true airspeed you'll attain. This is because the air is thinner the higher you go, so there's less air resistance and -- as long is power is maintained -- you'll go faster. (This is the secret of turbocharging.) Most naturally aspirated (non-turbo) engines can maintain 55-percent to 65-percent power to 10,000 feet or more, so all else being equal (headwinds aloft, turbulence, icing, etc.), it pays to fly as high as practical. Won't you burn more fuel climbing to altitude? If you make a long, shallow descent on the other end, you can offset the added fuel cost of an extended climb. So you can save gas by climbing as high as makes sense for your trip. Note: Altitude helps meet the overall goal of safety, also.



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Position Report

## Mixmaster (Continued from page 3)

All too often pilots are taught simple rules for mixture control, like, "Don't lean below 5000 feet," or, "Lean it 'til it sounds rough, then turn the vernier in two turns" as a cruise-mixture technique. These habits may be expedient for high-engine-stress instructional flying, but they are imprecise and in most cases waste fuel. Learn how to properly lean the fuel mixture to glean maximum efficiency from your fuel burn (consistent with good engine-temperature management). Determine if, when and how it may be appropriate to run lean-of-peak in cruise flight with the engine(s) you're flying to save even more fuel -- and money.

#### **Tankering**

"Tankering" is the act of loading up on fuel where it's (relatively) cheap, to avoid having to buy fuel where it's more expensive. Do your homework: Use <u>AirNav</u> or similar Web sites to find locations with lower-priced fuel near your destination and any planned fuel stops along the way. Plan to arrive at these "tanker-ports" with a safe fuel-margin in case you need to divert or the pumps are closed, but with as much room as possible in your fuel tanks to load up while the fueling's good.

## Fun Flying

Sometimes you're going up just for fun, to see the sights or buzz around on a warm Saturday morning. You don't have to give this up because of high fuel costs -- just do things a little differently. Use very low power settings when you're on local sightseeing hops to keep the fuel burn low. Get more involved with local pilots' groups and start sharing the ride. (You can legally split the direct costs of the flight under FARs and the provisions of aircraft insurance, and this sort of aerial "clubbing" is becoming more popular in the go-it-alone United States.) "Air-pool" together to major events like flyins and AirVenture at Oshkosh -- it's fun to share flying with other pilots in the air as well as on the ground, and if you fly a similar airplane type, you might split the flight legs and each log some time going to and from the show.

#### What If I Rent?

You might ask, "What if I rent airplanes? Fuel prices are figured into the rental cost of the aircraft, so as they go up, the hourly rental rate goes up and there's nothing I can do about it." Many FBO used to offer "wet" and "dry" rates for aircraft rental, where wet rates include fuel. Occasionally FBOs will put a maximum price they'll cover for fuel purchased away from base, but otherwise they'll cover the cost of fuel out of what you pay in rent. Fuel burn is usually charged assuming 75-percent, best-power, mixture setting. This historically works to the FBO's advantage when the airplane is fueled locally, because often they can negotiate bulk fuel rates and make a little more than the posted fuel price suggests. Given the reduction in hours flown over the last couple of decades, however, a typical FBO's bulk purchases of 100LL are declining and the FBO may not get much of a discount any more. Renting "dry" means the renter pays a lower rate for the airplane, then pays for his/her own fuel in addition to the fee. Dry rentals went out of favor some time back when fuel prices were low, replaced with the all-fees-up-front simplicity of wet rentals. But now that just a little change in operating procedure can make a big difference in the total cost of fuel, you may be able to negotiate a dry rental rate that covers all the FBO's costs (and profit) except fuel, and pay for the fuel yourself. If your operating technique burns less gas than the FBO's fuel burn assumption, you'll fly for less than the "wet" rental rate. It certainly can't hurt to ask.

#### Don't Skimp On Training

Make a vow to train as much as always despite the cost of fuel. Combine your flying missions if needed to log a safe amount of dual -- ask your CFI along and combine a flight review with the weekend pancake run, or hire a CFII to accompany you on a business trip and get some hood time on a flight you'd otherwise make alone. Pay the instructor for his/her time, of course, but you're ahead the cost of scheduling additional flights for the purpose of training only. You'll find most instructors like to get away from the home 'drome anyway, so chances are you'll find a qualified teacher of flight who will instruct "on the fly," as it were.

#### **Economy Thinking**

You'll most likely come up with a list of other ways you can continue to fly safely while spending less on fuel. I encourage you to use the <u>Comments</u> feature of this article to let others know what works for you. Together we need to change a culture where pilots are judged by the speed at which they fly into one where their worth is determined by the efficiency and economy with which they use an airplane. As the cost of flying fuel skyrockets, you need to be creative to fly safely using less gas. Fly safe, and have fun!

# **Volunteer Opportunities:**

The recent annual meeting of the Board of Directors of the Alaskan Aviation Safety Foundation suggested ways to improve the services delivered to the membership and continue to improve aviation safety in. One of the changes is to make several committees. We need your help from the general membership to fill them. The following is a list of committees where we need volunteers. If you are interested in helping out, send us an email or call us.

- <u>Seminars</u> This is one of the major services the AASF provides to aviators in Alaska. We are looking for 1) a person to organize seminars all over Alaska; and 2) people who can champion a seminar in their home town if we provide support with speakers and presentation materials.
- Membership Memberships of many non-profit organizations are down this year. The AASF is a membership supported organization. All of our membership money is returned to the aviation community in Alaska. The more members in the organization, the more services we can provide.
- **Fundraising** There are opportunities to secure funding for special projects. We need someone who can champion these pursuits.
- **Recognition** We need to say 'Thank you' to the people in aviation community who make the system safer and better for everyone.
- <u>Scholarships</u> The AASF provides annually several thousand dollars in scholarships to students pursuing an aviation career.



Photo Courtesy : Doug Miller. Volmar Lake, North of Big Delta)

• Regulation The FAA and State are constantly changing and adjusting the regulations that govern how we all fly. The AASF tries to provide input to support our members. We need a leader for this effort.

If you have a passion in one of these areas, or can even spare just a few hours a year, there is a place for you to help with our efforts to make aviation in Alaska as safe as it can be.

# "Hangar Flying"

Many of you know the Hanger Flying program that the AASF helps produce on PBS every Friday at 5:40PM (the time may be different in your viewing area). In general the program is oriented towards aviation safety topics, but we sometimes do other topics. Carl Siebe and Harry Kieling are the co-hosts and would like your input on what you like or would like to change with the program.

- Would you like to be a guest on the show?
- Do you know someone that would like to be a guest on the show?
- What kind of subjects would you like to see?
- Can you provide us with your feedback on the show?

The AASF has approximately the first 900 episodes of Hangar Flying now on DVD as part of our efforts to archive the programs. These need to be screened and scored to determine which are worth permanently archiving. A scoring criterion has been developed, and now we need volunteers to review and score the programs. We are seeking volunteers that can review a small number of DVDs so the workload is spread out. Are you interested in helping? Please contact us.

#### **Events:**

We are in the process of scheduling our events for the remainder of 2008 but mostly 2009. Would you like to see certain events happening in your community? Contact us for more detailed information and perhaps we can arrange an event in your area.

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Courtesy of: Sanne Cassee, 7

# **Upcoming Events**

- DAWSON CITY MEMORIAL FLY-IN Contact Mary Ames at 907-479-9500 for more information, July 11-12, 2008
- Alaska 99's 2008 International Conference, August 6-9 2008. @ Eagan Center and the Anchorage Hilton Hotel.
- FAA 50th Anniversary, August 23 2008.
- "Alaska Air Carriers Annual Dinner"- Barrington Irving, Guest Speaker. The first African American to fly solo around the world. September 19 2008.
- Oktoberfest. Alaska Airmen Annual Membership Social, October 11, 2008.
- Aviation North Expo www.aviationnorth.org, October 16-18, 2008.
- AASF Fall Safety Seminar, November 1, 2008