FARTHEST NORTH



CHAPTER BULLETIN

February Chapter 1129 2014

Calendar

February

- 6 EAA Chapter 1129 **Regular Meeting.** 6:30 pm
- 21 EAA Annual
 Banquet.
 Tickets available
 NOW at Tamarack Air

March

6 EAA Chapter 1129 **Regular Meeting.** 6:30 pm

REMINDER for Winter Meetings:

The meeting is
CANCELLED if the
temperature at the
airport at 5 p.m. is -30°F
or lower. Call 458-3745,
then enter 1113.

EAA Chapter 1129 Web Site:

http://1129.eaach apter.org

Or check us out on Facebook!

http:// www.facebook.co m/EAA1129

Next Meeting:

When: Thursday, February 6 at 6:30 pm. Where: Tamarack Air

President's Hot Seat

Michael Armstrong

My seat is HOT this unusual January in Fairbanks. I could fly the Stearman in this weather! Driving and walking have been treacherous.

I suppose that a new year makes us all reflect on where we have come from. Reflect on the things that we have done that make us unique. Check out my article in this news letter. I enjoyed writing the article, and even enjoyed the editing process. I'll bet that each of us has a story to tell. If you have a story, but are nervous about the writing, fear not! I would be happy to help. Let me know if you want to give it a try.

The EAA 1129 Banquet, our celebration of an infant Spring with our friends, is coming up soon. I am always ready to begin to shake off the winter with the EAA banquet! This year's banquet speaker is Ron Klemm telling about the restoration of Cliff Everts Travelair 6000!

March 7th there will be an IA Refresher Clinic, brought to you by the UAF A&P School. All they need is the blessing of the FAA to ensure that the IA's can use it for continuing education credits. The FAA used to host this Clinic, but Sequestration cuts too deep sometimes. When I attended the A&P School, they "suggested" that we attend these seminars. The content will be pertinent to aircraft mechanics. What is an EAA member, but an amateur aircraft mechanic just for the love of it? I wouldn't miss the refresher clinic.

See you at the EAA General Meeting Thursday February 6 at Tamarack!

EAA Chapter 1129 Mission Statement:

Build, restore, innovate and educate to preserve Alaska's aviation heritage, and to promote Alaska's aviation future.

Membership Renewals

It's that time of year again. Annual EAA 1129 membership dues are due in January. The membership dues have not changed: \$15 for an individual or \$20 for a family. Many EAA 1129 members have already paid for 2014 but here is a reminder if you have not had a chance to renew yet. You can mail your renewal to **P.O. Box 83913 Fairbanks, Alaska 99708** or bring it to the next meeting.

Lead Free Avgas: is it ever really going to happen?

Mark Morlino

I am a fairly new pilot. I started working on my private ticket in 2006. I distinctly remember my CFI guiding me through my first pre-flight inspection and pointing out the blue tint in the fuel in the fuel tester. Like any good CFI, he explained that Cherokee used 100LL and he showed me how to take samples and check fuel for water, particulate contamination and the proper color. I was smart enough to figure out what the "100" meant and he explained that "LL" stood for "Low Lead".

The US began phasing out leaded fuel before I was born but being sort of a car guy, I knew what tetraethyllead (TEL) was and that it had been banned from use in cars. I had owned a few cars without "unleaded fuel only" placards, but I had never actually purchased leaded car gas. Anyway, I remember being very surprised to learn that piston airplanes were still using leaded fuel in 2006.

I did some reading later and discovered that even though it is called "low lead" it actually contains about 4 times more lead than automotive gasoline ever did.

Before we finished the pre-flight, my CFI had mentioned that the future of 100LL was uncertain. The reasons for this were that there is only one company producing TEL, and the "greenies" were trying to ground the entire GA fleet by banning it.

Basically nothing much changed for the next 8 years of my involvement in aviation. In 2014, there are still lots of airplanes that need 100LL, there is still only one company producing the TEL additive and environmentalists are still pushing to ban TEL.

Recently, there has been some movement on the 100LL replacement front.

In March 2013, the FAA created the Fuels Program Office and announced that it was hoping to replace 100LL by 2018.

In December 2013, Shell Aviation announced that it had developed what it hoped would eventually be approved as a drop-in replacement for 100LL. Lycoming and Piper have been working with Shell to test the new fuel and the performance is reportedly similar to 100LL. Shell claims that refineries could be setup to start producing the new fuel "overnight."

In January 2014 Congress passed the omnibus spending bill which allocated \$6 million to the Piston Aviation Fuels Initiative (a joint effort of the FAA and industry) to evaluate 100LL alternatives. Most of the \$6 million will go to the William J. Hughes Technical Center in Atlantic City, New Jersey where the fuel testing will be conducted. Evidently slightly more funds were allocated for this than were requested. I don't follow all facets of the federal budget but it seems unusually to me for someone to get more money than they were asking for.

Something about these recent developments makes me think that we might see unleaded avgas become a reality even before my RV7 project becomes an airplane.

Unfortunately, leaving out TEL is not likely to lower the price of avgas.

Electronic Newsletter Subscriptions

The Board would like to encourage members to switch to electronic delivery of the newsletter. We realize that not everyone is comfortable with this format but if you are, then please let us know. The PDF version of the newsletter gets delivered faster and helps the chapter save money on printing and postage costs.

Swimming with a Helicopter

Michael Armstrong

This is not about a fun trip to the beach in a helicopter. In 1981-1982, I sprayed crops in South Florida, using the famous Bell 47. I learned a lot, had fun ("the most fun you can have with your clothes on"), and for the first time felt "one with the machine". I had a lot of flight instructing time, but that is about letting the student make mistakes and then saving their ass. There is not a lot of "manipulating the controls" in flight instruction. Spraying is much better in that regard.

The routine at Allied Helicopter Service was to brief your loader, make sure he had the chemicals, and knew where we were working. He would drive to the field with a pickup and a trailer with a mix tank. I would fly from South Bay to the fields that I was scheduled to spray that day. The loader would drop a hose in the canal at the edge of the field and suck water into the tank to mix with the chemical. I would land, and he would load 60 gallons of mix into my tanks, which was good for six passes on the uniform - straight- unobstructed 20 acre fields. There were hundreds, maybe thousands of these 20 acre fields side by side. These fields were set up perfectly for spraying with the Bell 47. It took six passes to cover the field with a 60 gallon load.

All day long I would land, load, do a running take off (we were too heavy to hover, so we had

to do a running take off), start my first pass, spray -turn into the wind, do five more passes, land and reload with chemical. In eight minutes I would perform a maximum gross weight take off, spray six passes, do ten spray turns, and land. That put 20 acres in my earnings. I think they were paying me five cents an acre; a dollar for six minutes of spraying. Some months I earned \$500.00, some months I hit the Mother Lode, and earned \$2000.00!

It wasn't dangerous if you paid attention.

I sprayed some goofy little irregular fields with wires and trees. I hit tree branches twice with my rotor blades, just some green smudge to clean off with the chemical residue. I cleaned my own blades, bubble, and spray nozzles every day. I greased the "ship" every morning. The company policy was to change engine and transmission every 600 hours. The mechanics were first class. This took the worry out of relying on the machine as I accumulated those 600 hours, six feet off the ground.

So where does the swimming come in to the story, you ask? One day, I was spraying a fungicide called Manex on celery on those nice, wide- open 20 acre fields, all lined up side by side. Manex is really chalky, and heavy, and doesn't mix too well. It likes to fall out of suspension and fill the bottom of the mix tank. I had made a few take offs, and sprayed a few fields, with no problems. The next time I landed, I watched the chemical rise up in the clear plastic tube strapped to the edge of the bubble, waiting for the chemical to touch the 60 gallon mark (in magic marker). It hit the mark. I waved the loader off, and started my running take off. I was in the groove, one with the machine, as a pilot can only be if he or she works a machine to the limits all day, every day.

Immediately after becoming airborne, I knew something was wrong. The old Bell was sluggish, and my RPM started to decay. To fly a piston helicopter one must twist a motorcycle- type throttle on the collective; the objective is to

maintain 3000 RPM. Every control input required me to adjust that throttle to maintain RPM. It became second nature; I didn't even have to stare at the tach while I was working the machine. Then I was over the canal, with my RPM decaying. I couldn't maintain the pitch I needed on the rotor blades to clear the far bank without that 3000 RPM. This was when I considered the REAL POSSIBILITY that the Bell and I were going swimming that day.

My mind flashed on an article I had read about ditching a helicopter. I would have to roll the machine on its side so that I could "swim to the surface without being decapitated "by the residual energy still turning those rotor blades.

Instead of teaching myself to ditch the Bell 47 that day, I relied on the excellent training I had received from two exceptional instructors in Tulsa. They taught me to "milk the collective". Milking the collective requires that the collective be lowered enough to take some pitch off the

rotor blades, thus reducing the power requirement long enough to get some RPMs back. Then with RPMs restored, pull pitch, move forward and try to maintain altitude. I had to "milk the collective" **three times** in order to traverse the 100 feet to the far shore of that canal!

I then slid into the crop on the far bank of the canal. A look at the clear tube on the side of the bubble told me that I actually had 80 gallons of mix instead of the 60 that was the maximum allowable load. The extra 20 gallons is at least 180 lbs over gross. The inadvertent overload was significant on a broiling Florida day in a 200 horse power helicopter.

Had I not had superb instruction when I was learning how to fly helicopters, and learning how to spray, <u>you</u> might not have the pleasure of reading this article. Thank you, Lambert De-Gavere, and Ken Turner! It is funny that this significant memory was not even noted in my log book!

Great Benefits for Chapter 1129 Membership!

Why join the Farthest North EAA Chapter if you are a National EAA member? After all, you already get the great glossy magazine, and maybe you can't regularly make the chapter meetings in Fairbanks due to distance/conflicts/too busy (check all that apply). However, chapter membership can have many benefits even for you. First, you will get this GREAT newsletter approximately 9 times/year. Second, you will get a discount if you wish to attend one of our seminars (great topics such as welding and sheet metal work). And last, but not least, you will be doing your part to show your support for general aviation and aviation safety and education in Interior Alaska. Not bad! Interested? Membership is just \$15/year (\$20/year for EAA family members).

Of course, you are always welcome to attend our meetings and other gatherings, such as our Annual Banquet, and Pancake Breakfast, even if you choose not to join!

Membership chair: Pat Crisenbery. Phone: 474-3971, email: crisen39@gmail.com.

Name:	Mail with check to:
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	P.O. Box 83913
Phone:	Fairbanks, AK 99708
E-mail:	
EAA National Number (required for full	Chapter membership):

Experimental Aircraft Association - Chapter 1129 Annual Banquet

February 21, 2014

Pike's Waterfront Lodge



Ron Klemm

Long Time Alaskan Pilot and Mechanic

Presents

Rebuilding the TravelAir "Time Machine"

Join us for an evening with Ron as he shares his adventures and misadventures while reconstructing the classic TravelAir "Time Machine".

6:00 p.m. No Host Bar * 7:00 p.m. Dinner Barbecue Buffet featuring Ribs and Chicken

Games * Door Prizes * Silent Auction

Public Welcome

Ticket Prices: \$40 before Feb. 19 * \$45 Feb 19-21 \$30 for children under 12 Only 100 tickets available! NO TICKET SALES AT DOOR



Tickets available at:

Tamarack Air, 3900 University Ave. S

Bulletin Advertising Rates:

Business card ad...\$50/year Contact Pat Crisenbery 474-3971 for more information

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Join our Chapter! Membership is only \$15/ year and there are many benefits. Interested? Call or email Pat Crisenbery. 474-3971 TVC is now offering Flight Physicals by *Matthew Raymond*, *D.O.*, *M.P.H.*

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