



The Beacon

The newsletter of Chapter 54
Lake Elmo, Minn.

FEBRUARY 2017

February 2017

NEXT MONTH'S PROGRAM WILL BE ON

MONDAY March 13, 2017

- Social hour from 7:00 to 7:30 PM
- Meeting at 7:30 PM
- CHAPTER HOUSE, ENTRANCE B, LAKE ELMO AIRPORT 21D
- Speaker:
- Our Chapter Web site address: www.eaa54.org

INSIDE THIS ISSUE:

| | |
|---------------------------|---|
| REVO'S LITTLE BROTHER | 1 |
| SWIFT FUEL | 3 |
| AIR FORCE ARMAMENT MUSEUM | 4 |
| PRESIDENTS MESSAGE | 6 |
| YOUNG EAGLES | 8 |

Revo's Little Brother by Kevin Szalapski

There is a weight shift trike manufacturer in Zephyrhills Florida called Evolution Trikes.



They have been making the Revo model since 2009 and have sold quite a few. The Revo is a two seater trike that usually is found with a Rotax 912 100 HP engine. You can buy a carbureted or fuel injected version, the 912iS. It has 3 wheel hydraulic disk brakes, a curved mast, and a very rugged suspension system. The wing that was designed to lift the Revo is a double surface, strutted, wing that has an option of electric trim in flight. It can be very fast and has a very light roll feel, that can be easily over controlled by a new pilot.

In the cockpit is an optional MGL avionics display that has Synthetic Vision and Satellite Weather superimposed and terrain display. Radio and transponder are a flush mount version in the small cockpit area. As you can tell by my de-



scription, the Revo is a high end trike priced in the \$90,000 range with used ones being cheaper .

However I wanted to talk about it's little brother in this story - The REV. This is the 2nd model from Evolution Trikes. It is a single seat trike, that has very innovative design.

The basic frame of any trike includes 3 structural components that form the frame. They are the base tube, mast , and compression strut. These tubes are fully welded chromoly frame the are welded together, not bolted as in most trikes. The base tube runs across the bottom of trike and wheels and suspension are attached. There is a front fork attached to base tube, for steering and the suspension is all wheel. Also welded to the base tube in the rear is engine mount. Above this is the curved mast that is able to be lowered forward for wing installation, removal, and transport of trike.



From the top of the mast, down towards the front fork is usually the compression strut. These 3 components would complete the triangle of the basic trike, but not the REV. It's mast was designed with the strength needed to support wing with no compression strut !

This means the pilot has nothing in front of him, a wide open view with no distractions, a very nice feature. Since this craft is a true ultralight , no license is needed. Empty weight is 251 Pounds and gas tank is 5 gallons. The gas tank looks like a little beer keg and is mounted behind pilot. It is powered by a Poloni THOR 250 engine. This is a 2 stroke engine that produces 36 HP. The gross weight of 600 lbs. allows the pilot to eat as much as he wants. The stall speed at gross weight is 27 MPH. The cruise speed is 43 MPH. The flight time with a full tank is 2.5 hours. The cost of this trike depending on options is \$20,000. Takeoff distance is 130 feet. This one could fly in and

out of your home if you had a small grass area with a good approach. A BRS parachute mount. has also been planned and is an option that would be mounted right behind pilot seat. The whole front end can be simply removed by pulling out some anchor pins for storage and transport. As you can see from the photos in this story the design is very innovative. It always fun to see the advances that Evolution Aircraft is making for the trike world. Larry Mednick is the owner of Evolution Trikes, and if you call him with an issue or question he almost always answers the phone. The customer support is excellent. I know this because I bought a Rival S wing from him to put on my Airborne trike.

I hope you enjoyed reading about the Revo and Rev. It is fun to watch the new stuff come into production. You see the

detail and thought that went into making a very well built aircraft. See www.evolutiontrikes.com for some great videos and more specs.



Sport Expo: Swift Pushing UL94

Swift Fuels says it's pushing hard to market its 94UL unleaded aviation fuel to more airports and that the infrastructure is in place to refine and distribute it virtually anywhere in the U.S. At this week's Sport Aviation Expo in Sebring, Swift's Chris D'Acosta told *AVweb* that UL94 can be burned by about 65 percent of the U.S. general aviation fleet. The remaining aircraft require 100-octane fuel.



In [this podcast](#) recorded at the show, D'Acosta said about 40 airports are selling Swift's UL94. "We've got lots of places that are taking the fuel. One of the issues about the fuel is the availability of spare tankage. So there are private users or airports that have taken steps to put tankage in place to allow people to buy the fuel," D'Acosta said. Currently, UL94 is produced and distributed from near Swift's Lafayette, Indiana, headquarters, but the company says it can be refined by many refiners and production could be ramped up quickly. Swift's UL94 appears to retail for a price between what mogas typically sells for and the current price of 100LL. About 100 U.S. airports offer mogas, but because there's pressure on refiners to absorb ever more ethanol production, the availability of so-called E0 is threatened. D'Acosta said this might represent an opportunity for Swift if the tankage becomes available.

"Pilots who are flying it really love it. We have consistently good reports," D'Acosta said of 94UL. "There's things about our fuel that autogas can't compete with. So we just have to make those things clear. The mechanics who have torn down engines and looked at them have all said very positive things," D'Acosta said.

Meanwhile, Swift continues to work with the FAA's Piston Aviation Fuels Initiative to complete testing on its 100LL replacement fuel. Swift, along with Shell, has a candidate fuel that's supposed to be ready for market after 2018. Engine and airframe testing is scheduled to last through the end of 2018 and some 20 engine test cells are also collecting data on the two replacement fuels. A dozen aircraft have been selected to carry on the flight testing.

D'Acosta said he believes PAFI is on track to deliver a fuel by 2018 or shortly thereafter. "Working in a broad program ... it's understandable to expect there to be some slowdowns or periods where deadlines might be missed. But I think everyone is working with passion and diligence. We speak to the FAA and regularly to the OEMs all the time," D'Acosta said.

US Air Force Armament Museum at the Eglin Airforce Base, Ft. Walton Beach, FL



Karen and I had the opportunity to visit the Airforce Armament Museum during a January winter break this year. The Air Force Armament museum is smaller and less well known than the Navy Aviation Museum located in Pensacola, FL but is well worth a visit. There are 29 aircraft on display but the main attractions are the weapon systems that have been used on war planes.

The displays begin with small bombs and machine guns first used during WW-1. The Red

Baron would have been familiar with the 7.92 MM Spandau which was used on many German aircraft of that time.

The Viet Nam era is well represented with a Douglas AC-47 gunship and a Republic F-105 along with Gatling guns, big bombs and electronic devices.

Need to take out a bunker? The 30ft. long, 21, 600 pound MOAB (Mother of all bombs) will probably do the job! This bomb was so big it had to be dropped from C-130 aircraft.



There is a lot to see, plan on at least 2 to 3 hours for your visit.

Dan Bergstrom

(More photos on the next page)



The Douglas AC-47 on display outdoors still shows bullet holes and scars from battle.

There are examples of WW-II aircraft and weapons including a B-17 and several fighters. This is a nicely restored Republic P-47





FROM THE FLIGHT DECK (PRESIDENTS REPORT)

JIM PEARSALL

There is so much to update this month: including a busy meeting, lots to share from it and from my trip to the Leadership Training in Oshkosh.

Most recently -- yesterday at the clubhouse, Scott Hansen presented an overview and update on the new BasicMed specifically to identify the impact to FAA medical requirements. In addition to Tailwinds Safety Class to be held at the Anoka EAA 237 Chapter House on Saturday, February 18 2017. Everyone is welcome

This past Monday at our February meeting, Kurt Stoltz and Kirk Fjetland visited from Chapter 237 in Anoka.

In his talk, Kurt introduced us to "Instrument Meteorological Conditions" (IMC) Club efforts at Anoka. The emphasis of the club is on increasing Pilot in Command (PIC) skills. This meeting happens every 2nd Saturday of the month. Due to the large numbers of participants and the fact a Pancake Breakfast is served from 7:30 am to 11:00 am concurrently with the session at the 237 clubhouse, this event happens in a nearby hangar. A Visual Meteorological Conditions (VMC) club at 237 is scheduled for the fourth Saturday of each month. See the 237 website for details on all of their activities: <http://www.237.eaachapter.org/apps/calendar/>

Next, Kirk focused on the activities of restoring a B17 and B25 at the Weekes hangar at Oshkosh. They meet as a work party on the 4th Monday of every month. He talked about two restoration work party dates at Oshkosh March 16th to 19th and May 18 to 21st 2017, 2017.

They invited Chapter 54 members to join them as they work on the warbird restorations. Housing, food and fun are all provided for free by EAA. Kirk reminded us that in many cases, 40 hours of volunteer work at Oshkosh earns a worker a weekly wristband and camping privileges at Air Venture this Summer (July 24 - 30). Kurt made a great point "General Aviation is comprised of such a small group that we all need to stand together." More information on the work parties is on EAA's Website. <https://www.eaa.org/en/aaa/aaa-chapters/aaa-chapter-resources/chapter-b25-work-parties>

Going back a bit further to the beginning of the month, I attended the EAA Chapter Leadership Conference in Oshkosh. The Chapter Leadership conference is a gathering of chapter leaders from around the country. Staff from the EAA headquarters lead discussions and information sharing on topics important to chapters. For example, Young Eagles, and Eagles participants are provided free 6 month memberships in EAA (including the Sport Aviation Magazine for Eagle participants. Young Eagles also are eligible for flight training scholarship. Data was provided at the leadership training on the EAA roster noting the percentage of members who are also chapter participants is small. This provides an opportunity for chapter growth. To support this EAA continues to provide tools like the email blast we leveraged for our annual event last summer. Speaking of scholarships, I am preparing a talk on the subject first for our Ground School, also a candidate for a future meeting.

Professional name tags (plates) for EAA members are available, and look real smart, as exhibited by our guests Kirk and Kurt at our last meeting. The Board of Directors will discuss purchasing tags for our members since they can be worn during normal pilot activities resulting in good Public Relations and publicity.

Reports from Monday's meeting:

The Ground school has 18 people enrolled. One of our largest classes to date.

The Board meeting is being scheduled for early March. Our goal is to have it before the next regular meeting but sched-

ules may not allow that.

The Air Academy is filling up – there are always a limited number of openings and we always sponsor between 1 and 3 students, Linda Amble is working to identify candidates if you know someone who is deserving of our scholarship.

Johnson High School has a donated, partially assembled ultralight airplane kit that will be displayed in their main entrance. There may be an opportunity for the chapter to help them over the summer break. Stay Tuned.

EAA provides a basic website for chapters but it does not have all the features we need.. It could be the landing page where we direct folks to things like our Newsletters, sign up for ground school and Young Eagles.

Festivities were unceremoniously closed at 9:00 pm. Thanks to Jack Miller, VP Chapter 54 for scribing the meeting notes, contributing information for this month's letter.

Over and out until next month. Jim Pearsal



EAA 54 Young Eagles – 2017 Event Schedule

You are invited and welcome to help as a 2017 Young Eagles volunteer. If you've been involved with Young Eagles before, come back and help again. If you are kind of interested in Young Eagles, but never volunteered before: this is your chance

2017 EAA Chapter 54 event dates are:

May 13
June 10
July 8
August 11
September 8 and
October 14

Young Eagles meets the second Saturday of each month starting in May and runs through October. We meet around 8:00 am to get set up, and start rides at 8:30. The events are held at Lake Elmo Airport, on the south side of the field, near the newly constructed observation area.

Anyone interested will receive an email one week before each scheduled YE date. If you could please respond, for Ground or Pilot, then we have an idea if there's enough help a week before the event. There also is a required background check everyone must go through once.

Volunteer positions / activities include:

Greeter, registration, manifest/certificate printer, load master, ground support for safety and help with event flow, photographer, and pilots.

We will be working with EAA for new web site assistance including YE signups, newsletters, general announcements, and easy transition to the wealth of information available at EAA.org.



I'll be talking to the EAA chapter contact person, in Oshkosh, this week to get a timeline for transition to a new system for YE signups. For now we'll go with the tried and true EAA54 website sign up system that we currently have in place.

Thanks and see you soon!

Linda Amble

EAA54 Young Eagles coordinator

651-353-4450/ lamble1219@gmail.com



Chapter 54 Directory

| | |
|--|--|
| Housing Director | |
| Dave Fiebiger | |
| President | housing@eaa54.org |
| Jim Pearsal | |
| president@eaa54.org | Membership Director |
| Vice President | John Renwick |
| Jack Miller | |
| member-ship@eaa54.org | |
| vicepresident@eaa54.org | Young Eagles Director |
| Treasurer | Linda Amble |
| Tom Gibbons | |
| young eagles@eaa54.org | |
| treasurer@eaa54.org | Newsletter Editor/Director At-Large |
| Secretary/Class IV Director | Dale Seitzer |
| Vacant | |
| secretary@eaa54.org | Newsletter@eaa54.org |
| Education Director | Chapter Historian: |
| Lief Erickson | Jeff Hove |
| education@eaa54.org | 21D RCO 118.625, Uni-com: 122.8 |
| | 21D AWOS:120.075, TPA: 1932' |
| | Runways:: |
| | 4-22 (2497' x 75') |
| | 14-32 (2850' x 75') |

FOR SALE

Two Peltor Nordica Sport 6T aircraft headsets. \$75 for the pair, or \$40 each. Contact ddsylverson@comcast.net

Aircraft manuals for sale. All are used items, some are OEM printings and some are reprints. Priced each or make me an offer for the collection. Contact: ddsylverson@comcast.net

- Piper Super Cub (PA-18) Owner's handbook.....\$5.00
- 1972 Cessna 182 and Skylane Owner's manual (OEM printing).....\$7.50
- 1960 Cessna 182 and Skylane Owner's manual (re-print).....\$2.50
- 1980 Cessna 152 Information Manual(OEM printing).....\$7.50
- 1985 Cessna Skyhawk Information Manual(OEM printing).....\$7.50
- Piper Arrow (PA-28R 200 B) SN 28R-7135001 and up Owners Handbook (Reprint).....\$5.00
- Piper Cherokee Archer PA-28-180 information manual - Handbook part number 761-556 (OEM printing).....\$8.00
- Piper Cherokee Warrior PA-28-161 Revision July 14, 1975 (Reprint).....\$7.50



Tailwinds Flying Club Welcomes New Members

Tailwinds Flying Club is based at Lake Elmo airport. We are a non-profit corporation of 39 pilots who equally own three aircraft and one hangar (25E). Our goal and philosophy are to fly great airplanes safely and inexpensively. We currently have a Cirrus SR20, Archer II and Cherokee Six. Some of our members belong to EAA 54 and we love to fly Young Eagles. Please stop by and visit us anytime! North side, Fairchild Lane, Hangar 25E. To inquire about membership, please call 612-584-1740 or visit www.tailwinds21d.org.