



The Beacon

The newsletter of Chapter 54
Lake Elmo, Minn.

AUGUST 2018

August 2018

NEXT MONTH'S PROGRAM WILL BE ON

MONDAY September 10, 2018

- Social Hour 7:00 PM
- Meeting Begins 7:30 PM
- CHAPTER HOUSE, ENTRANCE B, LAKE ELMO AIRPORT 21D
- Our Chapter Web site address: www.eaa54.org

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Chapter Calendar of Events

September 8 Young Eagles

September 10 Chapter Meeting

Durand Design Doesn't Stall

Two-place biplane has excellent visibility and handling, By Randy Dufault



Photo credit: Lyle Jansma

July 27, 2018 - Negative stagger biplanes, where the top wing leading edge is aft of the lower leading edge, are a concept that occasionally shows up in both commercial and experimental designs. There are good reasons for the configuration. One is the good visibility the setback upper wing allows, but another is behavior in the stall.

"It is virtually unstallable," said Jim Swatosh, EAA 1108191 of Stillwater, Minnesota, and current owner of the original Durand Mark V biplane. "This was all by design of course. When the plane goes into a climb and into a stall situation, it just drops, then raises. One wing stalls, and the other wing raises [it back up]." Originally built by the type's designer, William H. "Bill" Durand, Jim's plane is the first example of the type and made its first Oshkosh appearance back in 1978.

Durand actively flew the craft for a number of years. He made plans available and, according to Jim, approximately 15 examples eventually made it into the air. A number of them continue to fly to this day.

Jim acquired the title to the airplane and the underlying design in 2015. It had not flown for more than 30 years and did require a bit of repair to get it into the air. Since then about 40 hours have accumulated on the tach up until its visit to EAA AirVenture Oshkosh 2018.

The two-seat, all-metal biplane cruises at 130 mph while burning 8 gph in its Lycoming O-320 engine. Roll control leverages spoilers in lieu of ailerons, allowing space for four full-span flaps.

Pilots report that the design’s handling qualities are superb, and the plane nearly flies itself. Jim said cockpit ingress, egress, and comfort is a key feature of the Durand design. With the forward sliding canopy open, passengers and pilots simply step into the plane standing up, get situated, and sit down. The canopy rides on a set of ball bearing slides and virtually closes itself once the pilot releases a small latch. Other comfort features include adjustable seats and a cabin air exhaust system.

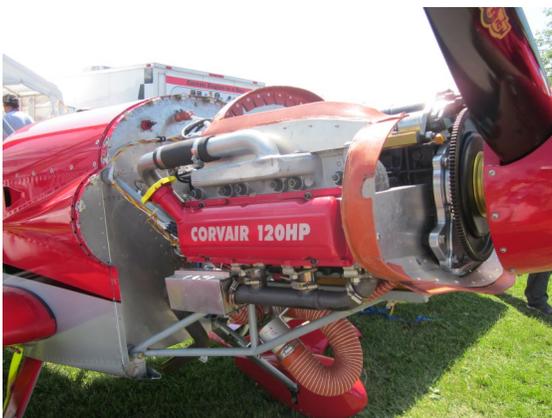
Jim’s airplane includes a steerable nose wheel that provides simple handling on the ground. Tailwheel configurations are an option, and at least one builder equipped a Mark V with floats.

Jim is selling plans on his website at www.DurandMarkV.com. He just completed a full 3D rendering of the craft in SOLIDWORKS and is making that data available to prospective builders as well. He is also considering offering a kit, if there is enough demand.

The classic Durand is tied down just east of Homebuilders Headquarters.



https://www.facebook.com/groups/1758480814425620/?ref=group_header



Oshkosh Engines

Corvaire left and D Motor side valve engine on the right





Mark Holiday Wins Vintage Airplane Award at Airventure 2018



Oshkosh Show Planes — Small and BIG





PRESIDENTS MESSAGE

JACK MILLER

A trip to Oshkosh will always be an adventure. This year several of our members claimed some camping spaces in the Campground for the entire week. I was one of them.

Other members camped around the grounds in a variety of settings - tents, under airplane wings and in a B&B. After Tuesday there were no more camp sites or places to park ones airplane. The place was jammed more tightly than a cork in a wine bottle.

One of the FAR requirements is to have 45 minutes of fuel in reserve when flying into Oshkosh. Many found that to be practical as they were sent away to find their own roost for the night. One of our members did that and took a bus 40 miles back to OSH only to find that the bus could not even get on grounds for more than an hour.

Once on the grounds there was more than enough opportunity to eat, learn, hear great speakers, watch movies on a huge screen and eat some more. I caught up with an old friend and we searched out the best apple fritter known to humankind. Learning was another fine opportunity. I listened to air traffic controllers who were understandable and even nice, I heard Bud Davidson preach the exciting benefits of flying tailwheels. Several of our members made presentations, one was in the airshow, and the list goes on.

Next year we hope to make it easier to attend the frenetic fly-in by hosting a larger campsite for our membership. We hope to make some money by hosting a pancake breakfast. We hope to make new friends from around the world and next door. Consider joining us there. You will be glad you did,

Greetings EAA54 members.

As President of the Lake Elmo chapter of EAA 54 I feel it necessary to address the reasoning behind the cancellation of the August 12th Pancake Breakfast.

1. Historically this breakfast has served as a medium not only to earn revenue to support our stated objectives, but as a means of building relationships among our members.
2. We have invested time and money in equipment and furnishings in order to facilitate this event.
3. Over the past several years my experience has been that it has become more difficult to get our members to commit to leadership roles. We started our search last March and to date have not secured the necessary leadership needed to maintain the high standard of food and service we have seen over the years.
4. Also, income has been already generated by sponsoring the Ford Tri Motor rides last month. This was done with minimum people power. We have not received the final figure on the \$5 per ride fee we receive for our sponsorship, but it should be less than, but close to the profit generated by the breakfast.
5. In conclusion, the decision to cancel the breakfast for this August was made by the executive council after the June Board meeting. No board action is needed to cancel an event. The decision was not made in a vacuum.
6. We are looking at hosting a fun event this Fall at 21D which will be open to all people connected to our chapter and to this community.

We apologize for any negative feelings generated by this decision. I believe members in general hope to see this Breakfast take place in August 2019. We are open to anyone who is willing to take a leadership role for that event.

Thanks,

Jack D. Miller
President EAA 54

Chapter 54 Members at Airventure



Stan Dardis at Innovation Forum Airventure



Jay Schrankler and Paul Randall



Above: Dave Matheny



Above: Dale Seitzer, Jim Pearsall and Marlon Gunderson

At the Chapter 54 campsite in Camp Scholler, Airventure



KSGS first airport in Minnesota to sell unleaded avgas

JULY 17, 2018 BY GENERAL AVIATION NEWS STAFF

ST. PAUL, Minn. — South St. Paul Municipal Airport-Richard E. Fleming Field (KSGS) is now selling Swift Fuels unleaded UL94 aviation gasoline for its piston aircraft customers.

Fleming Field is the first airport in Minnesota to sell the unleaded avgas.



tends costly oil change maintenance intervals in relation to 100LL, which is a huge benefit to cost-conscious pilots.”

“Swift Fuels’ UL94 is the only commercially-available unleaded avgas, it’s sold nationwide, it’s commercially insured for aviation, and our pilots requested we supply it,” added Joel Ludwigson, Airport Commission chairman. “We’re extremely proud to be the first airport in Minnesota to join the progressive nationwide movement toward unleaded avgas.”

More than 110,000 aircraft are already FAA-authorized to use the UL94 Avgas as a “drop-in ready” fuel, Swift Fuels officials note.

UL94 is not a full replacement for 100LL, so only aircraft with engine/airframes requiring 94 motor-octane fuels or lower are compatible, which represents 65% of the U.S. piston fleet, according to company officials.



The first shipment of Swift Fuels.

According to airport officials, the Swift Fuel will replace ethanol-free autogas and will now be the only unleaded fuel distributed at Fleming Field, located just two miles south of South St. Paul.

“With a large portion of our airport traffic being piston-engine aircraft, we not only sought a cleaner performing alternative to 100LL, we also needed a more durable option than recreational autogas,” said Andrew Wall, airport manager. “Autogas has a higher vapor pressure, which can contribute to vapor lock, and it has a much shorter shelf life. Swift’s UL94 solves these issues and it also eliminates lead-fouled spark plugs, which greatly ex-

Now Available at Fleming Field (KSGS)!



What is Swift UL94 Avgas?

Swift UL94 is an unleaded aviation gasoline that meets several international ASTM standards. It’s already FAA-approved for up to 65% of the U.S. piston aircraft fleet (that’s over 100,000 aircraft) and is petroleum-based, using the same hydrocarbons as 100LL, but without the lead. It’s certified and ready to use today.

What are the benefits?

Swift UL94 gets the lead out! This means a safer fuel with lower deposits—longer spark plug life, increased intervals between oil changes, and no acidic corrosion like what’s found with 100LL. In short, there’s less wear and tear for longer engine life! It’s already FAA-certified so you can take advantage of these benefits now.

Can I use it?

- You can use UL94 if you meet any of the following criteria:
- Your airframe/engine combination is type certificated to operate on Grade 80 fuel (listed as Grade 80/87 in ASTM D910) or Grade UL91 (ASTM D7547)
 - Your airframe/engine combo is type certificated to operate on minimum 80 octane or lower (73 or 65) avgas
 - You have an auto fuel STC, OEM approval, or Swift avgas STC

Don’t have an STC or other approval? Swift Fuels offers STCs to cover tens of thousands of aircraft. For more information and to check eligibility, visit Swift at: <https://swiftfuels.com/stc/>

Swift UL94 can be mixed with both 100LL and mogas, so you can add it to your existing tank without the hassle of draining!

When will it be available?

Swift UL94 avgas will be available starting Tuesday, July 17th.

What happened to the Mogas?

Fleming Field has converted the mogas tank to Swift UL94 avgas as a result of declining sales and limited users. UL94 is approved for a much wider variety of aircraft and is more stable (up to 2-year “shelf life” vs. 60-90 days for mogas).

NFL Green Bay Packer Jimmy Graham Named Honorary Co-Chair Of EAA Young Eagles

Graham joins air show pilot and legend Sean D. Tucker in leading aviation's foremost movement to introduce kids to flight

OSHKOSH, Wis. (July 26, 2018) – NFL football tight end Jimmy Graham is adding yet another title to his illustrious career: EAA Young Eagles Honorary Co-Chair. EAA and Sean D. Tucker today announced that the Green Bay Packer and accomplished, licensed pilot is in Wisconsin not just for training camp, but now as honorary co-chair of the world's largest volunteer air force that has introduced more than 2.1 million kids to flight.

“Jimmy Graham is on our team! He is going to inspire so many young people to rise above any challenge, to search for excellence in execution, and to believe in themselves,” said Tucker. “Jimmy is a reverent aviator, fun to be around and such a positive role model for kids. We are thrilled he has teamed up with us.”

Jack Pelton, Chairman and CEO of EAA, commented, “There's such great energy between Jimmy and Sean. Jimmy has a very unique story that kids are going to resonate very well with – it's so sincere, it's so real. We are very excited about having Jimmy as part of Young Eagles.”

Graham and Tucker Take Teens on Young Eagle Flight

Graham has accepted his new role with gusto. On July 23, the opening day of EAA AirVenture Oshkosh, Graham and Tucker flew two Young Eagles: 11-year old Deanna Gilson of Castle Rock, Colo., and 16-year old Lucas Van Handel of Hortonville, Wis., in Graham's 1957 De Havilland Beaver aircraft. Prior to the flight, Graham stated, “It's truly humbling that they would ask me to be a part of this great organization. But it's really about the kids and inspiring them. It brings me back to my childhood and how much love I had for my first flight.”

EAA Young Eagles took flight during the 1992 EAA Fly-In Convention in Oshkosh, Wis.

Award winning actor and Pilot Cliff Robertson served as the program's founding chairman. Other past chairmen include Gen. Chuck Yeager, actor Harrison Ford, and US Airways flight crew Chesley “Sully” Sullenberger and Jeff Skiles. In 2013, Sean D. Tucker was entrusted with the honor of being chairman.

BELOW: Chapter 54 Camping Site, Airventure



Chapter Clubhouse Gets New Siding— Thanks Gregg Adler and crew!



EAA AIRVENTURE OSHKOSH 2018

FACTS AND FIGURES

Comment from EAA Chairman Jack Pelton:

“A ‘perfect’ event may be unattainable, but AirVenture 2018 came about as close as one could imagine. The combination of outstanding programs, aircraft variety, a robust economy, and good weather combined to complement the efforts of our staff and 5,000 volunteers throughout the grounds. The week was upbeat, exciting, and filled with many ‘Only at Oshkosh’ moments.”

Attendance: Approximately 601,000, nearly two percent above of 2017’s record total. Comment from Pelton:

“EAA members and aviation enthusiasts attended in large numbers, even without the presence of a military jet team as we had in 2017. Our efforts to create unique attractions and aviation highlights across the grounds were incredibly successful. Attendance on opening day was the best in our history, as the vast majority of our guests came to Oshkosh early and stayed throughout the week.”

Total aircraft: More than 10,000 aircraft arrived at Wittman Regional Airport in Oshkosh and other airports in east-central Wisconsin. At Wittman alone, there were 19,588 aircraft operations in the 11-day period from July 20-30, which is an average of approximately 134 takeoffs/landings per hour.

Total showplanes: 2,979 (second straight year over 2,900): 1,160 homebuilt aircraft (5 percent increase), 1,094 vintage airplanes, 377 warbirds (7 percent increase), 185 ultralights and light-sport aircraft, 75 seaplanes, 22 rotorcraft, 52 aerobatic aircraft, and 14 hot air balloons.

Camping: More than 12,300 sites in aircraft and drive-in camping accounted for an estimated 40,000 visitors.

Commercial exhibitors: 867.

Forums, Workshops, and Presentations: A total of 1,500 sessions attended by more than 75,000 people.

EAA aircraft flights: 2,800 people flew aboard EAA’s Ford Tri-Motors, while 3,032 people flew aboard EAA’s Bell 47 helicopters and 680 flew aboard EAA’s B-17 *Aluminum Overcast*.

Social Media, Internet and Mobile: More than 12 million people were reached by EAA’s social media channels during AirVenture, including 5.5 million via Facebook videos; EAA’s website had more than 1.7 million page views; EAA video clips during the event were viewed 2.2 million times; and EAA’s 2,400 photo uploads were viewed more than 12.4 million times. Additionally, EAA web streams were accessed nearly 800,000 times by viewers in more than 200 countries, who watched more than 170,000 hours of activities from the AirVenture grounds. The AirVenture app was downloaded and used by nearly 50,000 attendees.

Guests registered at International Visitors Tent: A record 2,714 visitors registered from 87 nations, also a record total. (Actual counts may be higher since international visitor registration is voluntary.) Top countries represented by registered visitors: Canada (538 visitors), Australia (386), and South Africa (277).

Media: 976 media representatives on-site, from six continents.

Economic impact*: \$170 million for the five counties in the Oshkosh region (Winnebago, Outagamie, Fond du Lac, Calumet, and Brown). * - based on 2017 University of Wisconsin Oshkosh economic impact study

FOR SALE

Stratoflex clamps PN 10781-4-22CR - SS clamps used for securing firesleeve over hose assemblies. I have 6 of these - \$2 each or offer (new price is \$4.35 ea at Aircraft Spruce) ddsylverson@comcast.net

Tailwinds Membership, \$4,000 see ad below. Josh Tocko (Owner) FLIGHT LEVEL 510 DESIGN 651.587.0999 design@fl510design.com

I am in a partnership on a 1958 Champ at Lake Elmo and one of the partners recently decided to sell his share and we would like to find a replacement. [Chip Berniard <eberniard@gmail.com>](mailto:ChipBerniard@gmail.com)

I have a share of the Hobo's Flying club for sale. Each share is worth 20% of the club (There are 5 Members). The plane is a 1971 Bellanca Champ Monthly dues: \$60 Wet hourly flying rate: \$50 Club Initiation fee: \$200 Asking price: \$6000 / obo wschanks@gmail.com

Piper PA-12 project; Additional miscellaneous parts and older instruments also available. This aircraft has been in my wife's family since 1971. No damage history and all logs. Asking \$35,000 for the project and \$23,000 for the 160hp 0-320. If interested, please email me at joelbrodd@gmail.com

WANTED

"Working Partner" to develop Durand Mark V as a Kit plane, working knowledge of Solidworks or CAD. An A & P background is desired...Investment is negotiable Contact Jim Swatosh 956-607-6088 jswatosh@hotmail.com www.durandmarkv.com

FOR SALE

1997 Glasair FT1. \$62,000. 550 TT on airframe. 1200 hours on engine major. Up to 200 mph cruise at 10-12 gph with an IO 360 Lycoming. 47 gal fuel. Less fuel burned and slower if pulled back. It has steam gauges but can be flown IFR, a great autopilot. Everything works. Whirlwind constant speed prop. 2000 fpm climb in this weather at 130 mph. Flies great. Comfy interior. No problems at present. More info upon request. Insurance 1/3rd that of retract. Good bird - I built it. Hangar on 21D might also be for sale. Cheap to heat. Clean and cozy. David Briggs dgbrig550@gmail.com 612 799 1254

WANTED — TO RENT

Hangar space to rent at Lake Elmo Airport for final assemble of Zenith 750. High wing about the size of a Cessna 152. Ed Trudeau 651-303-4936.



Chapter 54 Directory

Housing Director	
Dave Fiebiger	
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Young Eagles Director	
Treasurer	
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Newsletter Editor/Director At-Large	
Dale Seitzer	
Newsletter@eaa54.org	
Chapter Historian:	
Jeff Hove	
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')	



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.