FOX VALLEY AVIATION ASSOCIATION
EAA CHAPTER 579

# THE NEW PROPWASH

Volume 3, Issue 10
November, December 2007

## UPCOMING EVENTS

**Chapter Meeting**

**Thursday, November 15**

**(Note earlier date than usual)**

**7:30 PM**

**Sugar Grove Firehouse**

**Program:**

Runway Safety - featuring a reenactment of an incident that happened in Providence, Rhode Island several years back. Also, the Aurora tower personnel will review runway safety procedures for the Aurora Airport. And we also have an FAA video on runway safety.

**December Chapter Meeting and Awards/Banquet Pizza Party**

**Friday, December 14**

**Luigi's Pizza & Fun Center**

**732 Prairie—Aurora**

**6:30 PM**

Pizza, soft drinks, and desserts provided by the Chapter.

Call Dick Low to RSVP

630-717-6225

Hope to see everyone there!

This is a combined Nov-Dec newsletter, so put the date on your calendar now!

**Private Pilot Ground School**

**Sponsored by EAA Chapter 579**

Beginning January 8th, 2008

Sugar Grove Firehouse

7:00—9:30 PM

Tuesdays for 12 weeks

If interested, please contact Dick Low

DickLCFII@sbcgloabl.net

630-330-4824

***Inside this issue:***



**Time to Pay Your Dues**

**For the Coming Year, 2008!**

**See the application form on Page 5 of this newsletter. Mail dues to Larry Shaw or bring to the November or December meetings!**

**Chapter Leaders**

| | | |
|---|---|---|
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# NEWS FROM THE PREZ, DICK LOW

The turnout for **last month's Chapter meeting** was again excellent with 19 people in attendance. The program following the regular business meeting was an interesting and entertaining presentation by Andy Capigatti on the construction of his project, a Sonex. It was interesting to hear the concessions that Andy had to make to his wife to be allowed to take over the garage for construction of his project. Andy recently moved the aircraft to Sky Haven for final assembly and said that he expects to have it ready to fly within the next two months. Thanks, Andy, for an excellent presentation.

The focus of the program planned for **this month's Chapter meeting** will be runway safety featuring a re-enactment of an incident that happened at Providence, Rhode Island several years back where an airliner got lost in the fog and ended up on an active runway in front of another airliner waiting to take off. Following that, Aurora tower personnel will review runway safety procedures for the Aurora Airport. Then I will conclude the program by showing a FAA video on runway safety.

The weather for our **last Young Eagle rally of the year on October 28th** was again excellent, although a bit on the chilly side in the morning. We also had an outstanding turnout of volunteers with 16 pilots and 14 ground volunteers. The first two hours were pretty hectic at the registration desk, although not as bad as September, but by about 11 AM we had taken care of the early backlog so that the rest of the day was comparatively normal. The final count was 185 kids, our best day of the year surpassing the 172 that we flew in September. Then Mark Hislop, Jeff Thompson, Fred Foss, Alan Shackleton and I finished off the day by providing Grey Eagle rides to five of the ground volunteers. Following completion of the day's flying activities, some of the volunteers stayed around to help clean out the trailer for the winter. Then Lesa and I towed it back to Al Rickert's farm, since our usual trailer mover, Frank Cosentino, was hunting in Canada. Al is again graciously letting us store the trailer in his barn for the winter.

As announced in last month's column, at the start of the year I sent in a **Chapter goal of flying 600 Young Eagles for 2007** to the EAA Young Eagles office so the 185 kids that we flew in October put us over the top. A hearty thanks to all of our volunteers, ground personnel and pilots, who showed up during the year to make the Chapter's Young Eagles program a success. Service awards will be presented at our December meeting to those volunteers who made a significant contribution of their time to the Chapter's Young Eagles program during the year.

**For anybody interested in learning more about maintaining their own airplane or possibly even pursuing an A & P license**, EAA Chapter 15 at the Lewis University Airport, in conjunction with the Lewis University Aviation Department, is collecting the names of people who would be interested in taking evening or weekend classes on various aviation maintenance subjects from sheet metal repair to engine overhauls.. Classes would be held at the Lewis University Aviation building, Rt. #53, ½ mile north of Renwick and taught by Lewis University Aviation Department personnel. There will most likely be a charge for the courses but there was no indication of how much in the solicitation that I received. So far, 8 people have e-mailed me that they are interested. If you haven't already done so and are interested in taking one or more classes, send me an e-mail by December 1st with your address, telephone number, area of interest and whether you would prefer evenings or weekends.

I have had enough interest in a **Private Pilot ground school** sponsored by the Chapter that I am going ahead with plans to hold it starting January 8th at the Sugar Grove Firehouse. I will be sending out an e-mail in the near future to those that have indicated an interest in attending providing the course curriculum. In the e-mail, I will request that those who plan on attending indicate by return e-mail which of two course material options they wish to purchase so that I can order the materials and have them available on the first night of class. The two options are a full Gleim Private Pilot kit including flight bag for $100 or just the text books for $40. The ground school will run for 12 weeks starting each night at 7 PM and ending about 9:30 PM. Participants must be EAA and Chapter members. The costs for annual EAA and Chapter memberships are $40 and $20 respectively. If you plan on attending but haven't yet notified me, please e-mail me at DickLCFII@sbcglobal.net or call me at (630) 330-4824. If any prospective attendees are not yet EAA members, please have them contact me for the chapter referral membership form.

Finally, I want to announce a change in schedule for our **December meeting and awards banquet/pizza party**. Due to a schedule conflict (I forgetfully booked a flight to Seattle for Christmas for Lesa and myself leaving December 19th), we are moving the December meeting from the 20th to December 14th, a Friday evening. It will be held at Luigi's Pizza in Aurora as has been the case for the last several years.

See you at the Firehouse on the November 15th and Luigi's on December 14th.

Dick Low

President

EAA Chapter 579

## FLYING TO DEKALB—By Lesa Mandru

Most of my flying lately has been out practicing with Dick.. It's always easier & more comfortable having him along side. But finally on Aug 4th, I took my neighbor Barb on a flight to lunch in our Cessna 150. We were going to go to Janesville until we found out about an air show. So we flew to Dekalb. The $100 Hamburger rated The Egg Haven a good restaurant and the airport had a car we could borrow. The weather was good and there was no problem getting lost, as we followed I-88. It turned out DeKalb was having a Young Eagles Rally and it was very busy, but we made it in and the car was still available. There were even a couple of T-6s giving rides and we saw them up close. The staff was very helpful. The restaurant was very good with large helpings. There are many other restaurants in the area to choose from as well. Once we were back in the air, we flew over our condos for an aerial view. Then it was back to the airport, where we were trying to use the winch to get the plane back in the hangar without hitting the cars, but it didn't work. So Dick to the rescue, to get it back into working order Anyway, Barb and I had a fun day in the air and I got a short practice without Dick.

Happy Flying! Lesa

## Tribute to My Friend, Gene Underland—By Mark Quigley

"So you want to build a Brokaw Bullet. Have you seen a psychiatrist yet?" These were the first words I heard from Gene Underland when Doc Brokaw told me to call him. My intent was to join the legion of builders of the Bullet (which incidentally is pretty small). I wasn't quite sure how to take his Minnesota humor at first but, over the years I came to know Gene as a good natured, knowledgeable and serious (and serial) builder. Gene was a partner in a commercial roofing business.

Gene was what one would call a "serial builder." He had built the Brokaw Bullet 10 or so years ago and was onto a Lancair, P-210 and his last project a SeaWind. It was the SeaWind that was his final project.

Although, most of the homebuilts made these days are kit planes, when I was bitten by the "bug" to build an aircraft, plans only was pretty much the only option. I made the decision to build the Bullet because it was at the top of the line for speed and performance. It was sold as an easy plane to build and required "simple" shop tools to build it. Yup, it should take only two years to build it and, let me tell you about this bridge. Gene always had a good joke to tell about the Bullet. My favorite was that he referred to the Bullet as a "prostitute." I said, "What to you mean by that?" "Well, it has no visible means of support – pause – it has such a small wing." Gene was stricken with Minnesota humor.

I had been making progress on the Bullet when Gene made his first visit, replying, "looks good here, maybe you want to think about changing this a bit, keep working at it." "Don't believe everything you see in the plans – gonna have to make some adaptations to make it work." Gene had an answer for everything. After all, he was a serial builder.

Gene was part of the glue at the local airport in Wilmar, MN. He had a lot of friends there that even if they weren't involved in aircraft found their way out to his hangar. As we got to know Gene better, along with his family and friends my wife – Karen and I would camp at OSH each year for the "big show." Gene and his pals would gather like so many other circles in EAA and spend evenings chatting about what we had seen at the show, new techniques on how to fabricate a part or pretty much anything to do with aviation. Gene had a great group of friends and I was glad to know them.

One gets to meet so many people in EAA and other places. Because the Bullet is such an easy plane and popular plane (did I say simple) to build, I have had to seek out all sorts of help from a variety of people. That has been one of the biggest benefits in working on the aircraft. Whether it involves some welding assistance, how to use a milling machine (and keep your fingers), or chasing down parts that you have to make it work. To me, the journey of building an aircraft is as important as the "final product" and it is the heritage of EAA.

Gene and I over the years when talking about the Bullet had become good friends. Earlier this year just prior to Sun'N'Fun I had spent an evening in Florida going out for dinner with Gene, his wife (Vangie), his partner (Rick) and his wife (Kim). Just a couple weeks after that evening, Gene and Kim, were killed in the SeaWind, fortunately, Rick survived. Gene and Kim are on to another adventure. Knowing Gene, he is busy building something. Yeh, people look up to roofers, I do.

# I Flew a Gyroplane! By Albert Dyer

Since reading about the Benson gyrocopters in the mid-sixties I have always been fascinated with these machines. Then I heard all the horror stories about the accidents and how unsafe they were. It seems that about once every decade I get the curiosity bug about wanting to learn more about these machines and how to fly them. I have seen videos of them flying, read articles about people flying them, and then the horror stories about the accidents and how unsafe they are.

Well, this decade, I decided to go to a Rotor plane club meeting and ask questions. I was invited to their hangers in Lansing , Illinois to see many different types of gyroplanes and ask all the questions I could think of to ease what I had heard about them over the past 40 years. The FAA now considers them gyroplanes and not gyrocopters. Ahhh, it must mean that they are safer! Ok, I'll take a lesson or two and judge for myself.

I have now logged about 3 hours of dual in a two-place gyroplane. It's a pretty simple machine as far as construction goes. It has a 150 hp continental engine for power with dual mags. Engine start is the same as any fixed wing aircraft. To taxi, there are rudder pedals that function in the same manor as an aircraft (except some Ercoupes'). Brakes can be fashioned in one of four ways. Disk brakes on the main wheels, drum brakes on the main wheels, a disk brake on the nose wheel or a scuff pad which is pressed against the nose tire itself.

Once the pre-start check list is complete you can begin the rotor blades spinning by just a counter-clockwise push. Or, with the engine running, the pre-rotor can be engaged to begin the rotor spinning. You don't need much rotation to keep the rotor blades spinning. The taxi speed is enough to maintain blade rotation. Some pilots don't taxi with the rotor blades moving for the risk of hitting something, like a hanger as you taxi to the runway. There is a rotor brake which can be engaged and the rotor blades can be stopped in any position. Most pilots lock the rotor blades with a blade in the forward position while the gyroplane is moving. This lets the pilot see the forward blade to minimize the hazard of running the blade into something, but is also prevents blade flap while the gyroplane is moving on the ground.

Just before taking the active runway, you engage the pre-rotor and let the rotor blades spin up a little over 150 rpm. Taking the active runway, flight stick into your lap, you want to accelerate being careful as to not over-spin the rotor blades. As forward speed builds, rotor speed increases because you have the rotor blades taking the biggest bite out of the air. When the rotor speed reaches about 250 rpm, slowly advance the throttle and push a little forward stick. The objective at this point is to balance the gyroplane on the main wheels, not on the nose wheel or tail wheel. Keep advancing the throttle until rotor speed is about 350 rpm and airspeed is 40 mph. This is similar to flying a conventional gear airplane.

At 40 mph, rotate the nose up as you continue to advance the throttle to the forward limit. As soon as the gyro breaks ground, because of torque, it will want to rotate to the left. Correct for this and any drift to maintain runway heading. You will also be climbing at an incredible rate and airspeed will be increasing. Reduce the throttle and maintain 45 mph. At this speed, you're pretty comfortable with respect to wind blast, eyes tearing up, despite wearing a helmet and control response.

To climb, increase the throttle, to descend without gaining airspeed, reduce the throttle. Pushing the stick in any direction and the flight forces are the same as an airplane. The gyroplane is pretty nimble and it's easy to over control, or at least right now it is because of my minimal time in type. Cross winds doesn't really have an adverse effect on a gyroplane.

Landing is pretty straight forward. Line up with the runway center line, reduce the throttle and let the gyro descend. The key is to maintain 40-45 mph in the decent. The rotor speed will maintain its lifting capabilities. At about 10' from the ground begin the round-out. Completing the round-out, you are now about one foot off the ground. Reducing the throttle all the way back as you also bring the flight stick into your lap gives you a very soft touch down and a near zero forward speed. The landing rollout is about 20 feet. During the roll out gently lower the nose wheel to the runway maintaining alignment. Just before forward motion stops, push the flight stick forward to unload the rotor blades. You can now safely taxi back without risk of tipping from a gust of wind or taxiing too fast. If the rotor blades are spinning, handle the gyroplane like you would a conventional gear airplane with respect to direction of wind while it is moving on the ground. If you're done flying, keep the flight stick forward to prevent air from keeping the blades spinning. As the blades slow, stop the forward blade so that it is pointing forward with the rotor brake. This is the safest way to taxi back. You don't have to worry about blade flap or hitting something from rotating blades.

My impression of all this is that if you have a fear of heights…this will cure that fear or scare 10 years out of your life. Imagine making a turn and nothing holding you down in your seat except the lap belt. You first thought is that you're going to slide right out of your seat and fall hundreds of feet to the ground. There is just nothing to hold you in your seat except that little lap belt!

Weather permitting; I'm going to continue this training. The next phase will be engine out autorotation landings. I have been told to expect descents at a 45 degree angle to maintain the required airspeed and rotor speed.

My instructor, feels that with my prior flight experience in aircraft, I should be comfortable flying a gyroplane in about another 4 hours of training. I *think*?... I can agree with him???

Get Well Wishes to Chapter 579 member, Bill Sullivan, who is recovering from surgery.

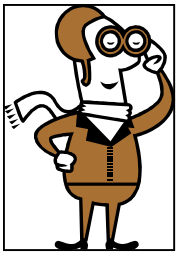
# BEAT BILLY

Question for October:

When is Sopwith Camel not the famous World War I aircraft that we know and love in the aviation world?

Answer for October:

In the Psychedelic world of 1966 San Francisco, California, a band was formed by the name of Sopwith Camel. The band's only number one hit single was Hello-Hello, released in 1967 on Kama Sutra Records. Hello-Hello was the first hit single to come out of the then frantic San Fransico Psychedleic record scene. The band's first gig was at a school dance at the Kathryn Branson School on May 12, 1966.



Question for November/December:

What police department was the first to use an airplane to help enforce flying regulations over heavily populated areas? What did that police department fly? Where did the design for the aircraft come from?

Note from Your Newsletter Editors

This is a combined November—December newsletter. The next newsletter deadline will be January 15th, 2008. We really appreciate all your articles and pictures. Keep them coming. But, we do like articles in word format as an attachment, not as text in an e-mail. Happy Holidays!

Marcia & Bill

*Dues are being accepted for the coming year, 2008!*

**Fox Valley Sport Aviation Association—EAA Chapter 579**

**Membership Application or Renewal**

**Name**_____ **Date** _____

**Address**_____

**City** _____ **State** _____ **Zip** _____

**Phone** _____ **Fax** _____

**E-mail** _____ **EAA #** _____

_____**New** _____**Renewal** **Spouse's Name** _____

**Annual Membership $20.00 -**

**Checks made payable to: EAA Chapter 579**

**Mail application & check to our treasurer:**

**Larry Shaw**

**147 N. Buckingham Drive**

**Sugar Grove, IL 60554**

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**EAA CHAPTER 579**

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Stits SA-2A Fly Baby, built in 1952, Designer-Builder: Ray Stits. EAA Museum Photo by Mike Bowers