



The Flyer



Volume 45, Issue 4

Experimental Aircraft Association Chapter 44

April 1, 2013

SAC UPDATE

by Norm Isler

While our friends from Boy Scouts of America have been busy at work helping to improve the SAC, our members have also been busy. Recently, the last of the doors to go up in the building were hoisted into their frames and screwed into place. Once in place and fully trimmed and adjusted, they will be refinished to match the other doors and woodwork, and have appropriate hardware, grills, etc. installed. Vanities and privacy dividers are under construction for the restrooms, and should be in place before the summer breezes blow into town.



Many thanks to the great efforts and skills of our resident runway renegade, Greg Hoaas. If you haven't seen the Grande Promenade lately, you're in for a treat! Greg's work schedule kept him away for a while after he finished the black "pavement" in the promenade. With some time to spare, Greg came back, and now has all the numbers and stripes in place. Be sure to observe the Hold Short line until all traffic is clear!

Summer is coming, and we are looking forward to enjoying many activities at the SAC. Check in for more information on Young Eagles, Hots & Hamburgs, Eagle Flights and just plain fun flying.

See you at the SAC!

ENOUGH IS ENOUGH!

by Rob Williams

I heard on the news the other day that an indictment came down against Pauxitawny Phil for his terribly inaccurate prediction of an early spring. It is probably lucky for him that he is now caught up in the US legal system, otherwise he might have found his demise at the wrong end of an assault rifle. All ten rounds. Or is it seven now?

Regardless, there are certainly enough annoyed people around lamenting the extended winter season. Us aviators are no exception. We are tired of the miserable cold and wind. That painful feeling grates on us as we fight the chill to accomplish our necessary pre-flight rituals. A few months ago I wrote about the cold pre-flight and how once aloft it makes it all OK. Well that's great, but come on! Enough is enough!

Hopefully by the time this gets to print, things will have changed. Then again I have been saying that every week for the last month or so. I can't wait to get out and retrieve my Stearman from the shop in PA where it was essentially fitted with a new engine. I want to spend hours in the warm air, smelling the spring smells while breaking that engine in. I badly need my fix. I did get down south to do a little flying in the warm weather, which was great, although it took place on one of the cooler, record low setting weeks in Florida. Ugh! Ok Mother Nature, we bow to your power. Now please, bring on the warmth and the spring flying season.

CAVU! Really!

AN EAGLE OF A DIFFERENT FEATHER

By Norm Isler

On Saturday, March 23, 2013 our Sport Aviation Center debuted in a new (for us) community role. We hosted over 60 guests for our first Boy Scouts of America Eagle Court of Honor.



Eagle Scout Nick Gennarino III & his proud parents after his Honor Court at the SAC.

As most of you know, EAA Chapter 44 has been fortunate over the past year to be the beneficiary of three Boy Scout Community Service projects, funded through the generosity of Triumph Aerospace Systems Seattle. Over several weekends, Nick Gennarino III and his team of scouts, family, friends and other volunteers transformed our Pilot Lounge/Board Room area from a combination storage area/construction zone/ junk catcher into an attractive space suitable for pilots to lounge in. Complete with two tone walls, stained trim and a great looking laminate floor this area is now ready for final decoration.

As a result of his hard work and the success of his project along with many other efforts, Nick was awarded his Eagle Scout, the highest rank to which a Boy Scout can aspire.

The ceremony was led by Scott Speer, an Eagle Scout himself, (awarded Eagle rank in 1981), who now serves Scouting as an adult volunteer. Proud parents, along with many family and friends helped fill out the room, along with several EAA members who were there to help cheer for Nick.

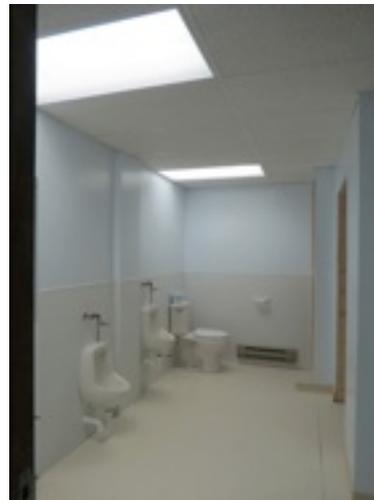
At the Court of Honor, the scouts were kind enough to give us a moment to explain who we are, and what we do at EAA. When I described our Young Eagle Program, many scouts decided they wanted not only to become Eagle Scouts, but Young Eagles as well.

Now for the quiz; EAA Chapter 44 has at least TWO Eagle Scouts as members. A free beverage for the first to correctly ID them.

EAGLE SCOUT PROJECT MOVES BATHROOMS CLOSER TO COMPLETION

Eagle Scout Candidate Matt Rice and his crew spent two weekends working on our bathrooms. The project involved Matt developing cost estimates, raising money and purchasing the materials, recruiting and supervising a crew of 15 adult and Scout volunteers.

The work crew refinished the two doors, painted walls, hung mirrors, hung a drop ceiling, and installed baseboard heating. Vanities, stalls, and urinal dividers will be completed by EAA 44 members (AKA Norm.)



This work on the bathrooms is greatly appreciated and puts the SAC two rooms closer to the final, once-an-for-all finish of Phase 1. After these rooms, then the "Airplane Shop" will be tackled. And then we really WILL be done. Except for the outside landscaping, which we will do this summer. And then the....

Thank you to Matt Rice and his volunteers. Thank you to Triumph Aerospace Systems Seattle for financial support for the project.

ATTENTION ALL PILOTS AND ADULT AVIATION ENTHUSIASTS!



Would you like to share your love of aviation? Chapter 44 is seeking Pilots to fly students for our Spencerport Aviation Class on May 4th and our Young Eagles Day Rally June 8, 2013.

- You must be a licensed pilot
- A current member of EAA National
- Have a current medical (If required by license type)
- Be up to date and “current” (Biennial)
- Have liability insurance as airplane owner or renter
- Be willing to fly students ages 8-17 for free

The rallies will be held at Sport Aviation Center at the Ledgesdale Airport (7G0) and run from 9:30 AM ‘til Noon. Pilots need to report for their briefing at 8:45 AM. Please contact Elise Isler: singholley@aol.com or 585-638-8098 to volunteer and/or get more information for either/both events.

Ground crew members are also needed to help register Eagles, escort them to their planes and monitor the ramp and surrounding areas. No experience – aviation or otherwise is needed!!! Please come and join the excitement. Again, volunteers please contact Elise Isler: singholley@aol.com or 585-638-8098.

Thank you in advance!!!

LAST MONTH’S GUEST SPEAKER BLOWING BUBBLES & NUCLEAR GA

Last month we had a very entertaining presentation by Carl Bouwens talking about his former aircraft canopy business, and then what he sees as a future power source for general aviation.

Carl started in the “blowing bubbles business” in 1971 when he was building a jet airplane and no one made canopies for it. So in typical EAA fashion, he designed and built his own. And they turned out pretty good! Enough so that Oshkosh attendees would buy them out of the back of his car. He had no competition in the early days because he sold only East of the Mississippi River and built only narrow, fore-and-aft canopies, while his competitor built them West of the river and for side-by-side seating.



The second half of Carls’ presentation I’m afraid went over this Editors’ head. He talked about an upcoming fuel source called Low Energy Nuclear Reaction (LENR), a form of cold fusion. The promise of this technology is that one will be able to get out more power than is put into the system, and that for a very small amount of fuel, 5 pounds for example, one could fly an LSA at 125 MPH for over 200 hours.

The technology is still being developed while Carl believes it will be a beneficial power source for the future.

NUTS & BOLTS PROPELLERS PART III by Mike Clayton

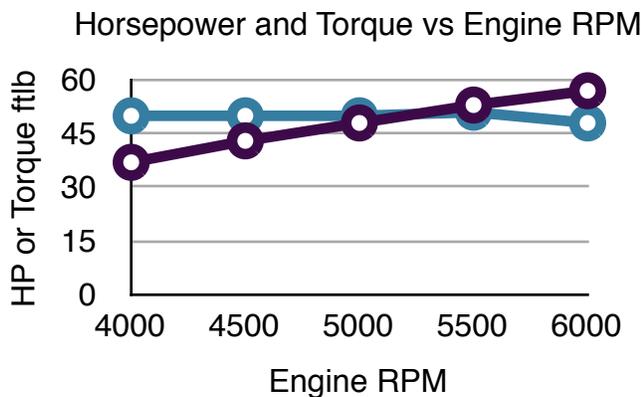
Last time, we looked at performance characteristics of a two cycle engine, and briefly discussed what impact they might have on propeller design. This time, we will look at a four cycle engine, see what the performance characteristics are like, and how that might affect the propeller design.

Let's look again at the equation that provides the propeller efficiency:

$$\eta = \frac{\text{propulsive power out}}{\text{shaft power in}} = \frac{\text{thrust} \cdot \text{axial speed}}{\text{resistance torque} \cdot \text{rotational speed}}$$

The bottom of the right hand side is the product of engine torque and propeller RPM, or horsepower. For a two cycle engine, we saw that torque increased with RPM, and the output of the engine was a strong function of the RPM.

For the four cycle engine, the torque curve can be controlled by the engine designer to a greater extent than the two cycle engine. Typically, the torque curve tends to be flat, compared to the two cycle. These are a notional set of curves showing how a four cycle engine's performance characteristics look:



These curves are similar to the HKS 700E performance characteristics. In this case, the curve that is nearly horizontal is the torque curve. As a result the horsepower curve is linear with speed. In the two cycle case the horsepower also increases with speed, but increases faster at higher RPM. The torque of the four cycle engine is higher at lower speeds than that of the two cycle engine. So what??

Ask yourself what it is that causes the propeller to turn. The answer is torque! So, the four cycle engine can produce more torque at a lower RPM than the two cycle. This means that the four cycle engine can spin a larger prop at lower RPM, or a higher pitched prop of the same diameter than a two cycle.

In our next installment, we will start to put all these pieces together and see how the ideal propeller might look for each engine type, and get an idea of how to size it, determine the pitch and the diameter.

MIKE KUYT BUILDS A CUP HOLDER

Mike and Julie Kuyt had a problem. There was no place to securely hold their coffee cups on their early morning breakfast flights.



So woodworker Mike built one that also holds charts, a handheld radio, and AFD, and of course the coffee cups. **Thanks for the show and tell Mike.**

“PLANES” WORLD PREMIER AT THE SAC

It was announced today that the EAA Chapter 44 Sport Aviation Center has been selected for the “Red Runway” premier of the animated “Cars” spin-off entitled “Planes.” The premier is August 9, 2013 in 3D. Let’s plan a Chapter movie night!



“Dusty is a cropdusting plane who dreams of competing in a famous aerial race. The problem? He is hopelessly afraid of heights. With the support of his mentor Skipper and a host of new friends, Dusty sets off to make his dreams come true.”

Sources: text from <http://www.imdb.com/title/tt1691917/>, images from an Internet image search.

Val Kilmer and Anthony Edwards reprise their F-18 “Top Gun” roles as Bravo and Echo, and will be our guests at the Premier.



A sequel, “Planes 2: Fire and Rescue” is in development along with a yet-untitled third edition of the trilogy.

EAA Chapter 44 Board of Directors’ Meeting 12 Mar 2013

Board Members Present: Hurd, Clayton, Nelligan-Barrett, North, Peters, Williams, Isler

Other Members Present: Gail Isaac

Reports:

- President (Rob Williams):
 - Capital Campaign - meeting with Larry Greeno to discuss fundraising ideas.
- Vice President (Norm Isler):
 - Nick Gennarino’s Eagle Scout Court of Honor will be held at the SAC on 23 March (Sat).
 - June 8 will be Chapter Young Eagle event at the SAC
- Treasurer (Dave Hurd):
 - Report read and approved.
 - Paid yearly rent to airport owner, check still not cashed.
 - Per guidance of EAA National, the Chapter Vice President will conduct audit of the Chapter’s finances

Business:

- Building Committee (Darryl Byers / Mike Clayton)
 - The new storage shed is on order, due towards end of April. Need to begin site prep very soon.
 - Added a doorbell to alert building occupants regarding visitors who either forgot / don’t have a passcode.
 - Backflow preventer inspection completed thanks to Mike Clayton’s assistance.
 - Definite plan for spring – Cover over drain line and water supply trenches, cover over buried power line. Need front-end loader, some manpower and some clean fill.
 - Matt Rice making very good progress on restroom upgrades as part of his Eagle Scout project.
- Old Business:

Continued on next page.

- Norm to submit order for Hugh Jones memorial plaque, will write up bio.
- Potential visit from Ford Tri-motor this year. Waiting to get information from National.
- Linda Howell – Cosgrove Middle School aviation program. The first parent's information meeting is Thursday, 14 Mar 2013. Young Eagle flights scheduled for 4 May.
- National has started a new program to support Young Eagle programs with cash reimbursements based on Young Eagles flown.
- New Business:
 - Future programs – Still need ideas, volunteers, and food coordinators.
 - In response to a request from the donor to “re-assign” ownership of the PC flight simulators to another aviation organization, Board decided that the Chapter should be able to put them to more regular use in the near future.
 - The Board gratefully acknowledged receipt of a donation from Mike and Julie Kuyt of \$250 worth of wall clocks for SAC.

**EAA Chapter 44
General Membership Meeting
19 Mar 2013**

Reports:

- President (Rob Williams):
 - Rob outlined details of the “Wingman” program, an effort to pair up new members with a mentor to help them become more familiar with Chapter activities and membership.
 - Rob noted with sadness the passing of Norm Isler's father. Additionally the local aviation community has lost noted author Paul Roxin. Sympathy cards were circulated for both.
 - Rob has met with Larry Greeno, the new Capital Campaign chair, to review plans for developing an effective donation program.
- Vice President (Norm Isler):
 - Absent
- Treasurer (Dave Hurd):
 - Report read and approved.

- Secretary (Stephen North):
 - Report read and approved.
- Builder's Reports:
 - Dave Hurd's Glasair is on its way to the paint shop.

Business:

- Capital Campaign (Larry Greeno)
- Building Committee (Darryl Byers / Mike Clayton)
 - The new storage shed is on order, should be arriving sometime in April
 - Matt Price, the Eagle Scout candidate working on finishing the bathroom as her community service project, has made excellent progress and should be completing this project shortly.
- Old Business:
 - Mike Clayton is still working on arranging a stop from the EAA Tri-Motor sometime this summer.
- New Business:
 - Tom Bowdler presented an outline of plans for an upcoming Boy Scout Aerocamp scheduled for May 17 – 19 (Fri – Sun). Young Eagle rides will be offered on Sunday. Tom will be looking for volunteers as the camp gets closer.

SCOUTS TAKE A “BATHROOM BREAK” TO SEE WHAT WE DO

Scouts took a break from working on our bathrooms to see one of our members planes. Dave Amsler flew in for a SAC work day in his Sonex and he showed it to the kids and adults.

Thanks Dave.



CONTACT EAA 44



The Flyer is published monthly. For an electronic copy, go to <eaa44.org> and enter your email address where requested. For a mailed hard copy (\$10), contact Treasurer Dave Hurd. For membership info, contact Treasurer Dave Hurd.

Stories and photos by the editor unless otherwise noted. Article deadline is 1st Tuesday of the month. Send submissions to Editor Bob Nelligan-Barrett.

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EAA 44 is a 501(c)3 organization.

Gifts of cash, securities or other property to the Chapter for the benefit of the Sport Aviation Center are welcome and fully tax deductible.

Contact Treasurer Dave Hurd for details.



Sport Aviation Center of Western New York

REGIONAL CALENDAR

ONTARIO BEACH KITE DAY
May 5, Charlotte NY

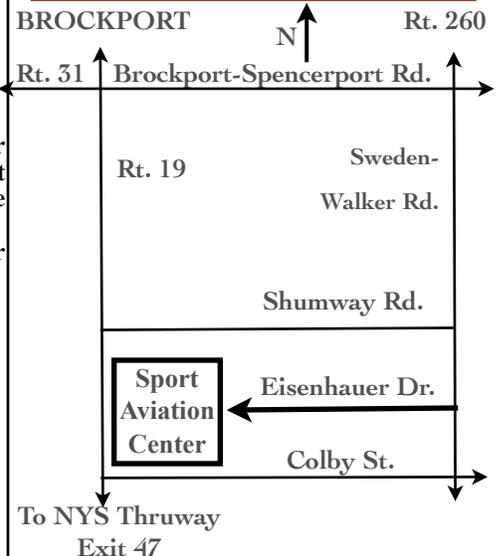
AOPA ASI SEMINAR at the SAC
"Chart Challenge"

May 23, 7-9 PM
Program description in the February newsletter and
<<http://www.aopa.org/asf/seminars/seminar.cfm>>

ROCHESTER AIRSHOW CANCELLED! SEQUESTERED!!
June 1, 2 KROC, Rochester NY

AIRVENTURE 60th Anniversary
July 29 - August 4
Oshkosh, WI
<eaa.org>

NATIONAL AVIATION DAY
marking Orville Wright's 142nd birthday.
August 19



EAA 44 Calendar



NEXT GENERAL MEETING

Tuesday April 16

New member Jamie Oliver will be talking to us about paragliding.

Please bring a dish or side dish to pass to complement our ham dinner provided by Jeff Peters.

Apr. 13 SAC Work Day
Apr. 16 General Meeting
Apr. 27 SAC Work Day

May 4 Spencerport School
Young Eagle Adventure Day
May 11 SAC Work Day
May 14 Board Meeting
May 17-19 BSA Aerocamp
May 21 General Meeting
May 23 AOPA ASI Seminar
May 25 SAC Work Day

Jun. 9 Int'l YE Day &
Open House
Jun. 15 Geriatric Pilots visit
Jun. 22 SAC Work Day

All activities take place at the Sport Aviation Center unless otherwise noted.

Sport Aviation Center

44 Eisenhower Dr. 14420
Brockport Airport/
Ledgedale Airpark (7G0)
43° 10' 56" N 77° 55' 1" W

Board Meetings-

2nd Tuesday of the month, 7 PM

General Meetings-

3rd Tuesday of the month
Dinner 6:30, Meeting 7:30

SAC Saturday Work Days-
2nd & 4th Saturdays, 10 AM

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