



# FLYPAPER

EAA Chapter 18, Milwaukee, WI

Year 57, February 2018

<http://18.eaachapter.org>

## HEADLINES!

### INSIDE THIS ISSUE:

Latest Headlines	1
Skiplanes	2
Blast From The Past	3
Blast From The Past	4
President's Message	5
Young Eagles	6
Calendar of Events	7
Ten Questions	8
Meeting Minutes	9
Treasurers Report	10

**Only 22  
Weeks to  
Oshkosh!**



## Skiplane Fly-In



Hundreds of people flocked to Pioneer Airport on February 10 for the annual EAA Skiplane Fly-In, which is typically held on or near the anniversary of Paul Poberezny's birthday.. Nearly 30 skiplanes participated, and roughly 750 bowls of chili were served to those who braved the cold. During this year's fly-in, a youngster was selected to take the first Young Eagles flight on skis.



# SKIPLANES



## BLAST FROM THE PAST



Powered flight and experimental aircraft building have been among my primary passions for the last 40 years. As a youth, I was bitten by the flying and building bug through my father. There wasn't a time while I was growing up that we didn't have a car restoration, ice boat, dune buggy, or model airplane father-son project in the works. When I was 13 my dad built his first aircraft, an RS-15 kit sailplane, which provided my first insight into soaring. Going full circle some 40 years later, I have followed in his footsteps.



Over the last four decades I have constructed a number of experimental composite plans-built aircraft. My first homebuilt was a single-seat Quickie, followed by a three-place Cozy, and then a Cozy Mark IV with a Lycoming 540 and fully retractable gear. After 3,000 hours in powered homebuilt aircraft, I was looking for a new project with a new challenge. Soaring and sailplanes have always captured my interest with their long sleek slender wings and aerodynamic efficiency. After researching on the Internet, I ran across the Schreder Sailplane Designs page, and the HP-18 became my clear choice.

The HP-18 sailplane kits were offered in the '70s, and I was able to locate and purchase a kit in Alabama that only had the tail surfaces drilled and Clecoed. All of the components were in the original boxes, and the parts list was complete. I purchased a one-way commercial airline ticket to Huntsville, Alabama, and drove back to Wisconsin in a rental moving truck carrying all of the aircraft kit components. With my previous building experience, I decided to incorporate a number of changes to optimize the performance and comfort. These modifications included a modified airfoil design, a higher custom canopy, a new composite nose and composite turtleback, winglets, a center control stick, and retractable twin micro turbines.

The wings were the first items to build with the new Udo 15.3 airfoil geometry. The new wing profile was created using CAD to fit the existing per the plans' spar height and wing chord. The templates were laser-jet cut out of mild steel for the construction of the new wing ribs using 3-foot stations from the wing root to the tip. A total of 396 new leading edge and trailing edge PVC foam wing ribs were made from scratch for the new airfoil geometry.

The fuselage was the next item. A raised canopy and turtleback was needed to fit the twin turbine installation. The old canopy, canopy frame, and turtleback were replaced. A new nose was also added to the fuselage for the new canopy geometry. When you change a couple of items it creates a ripple effect that adds a tremendous amount of extra work and building time.

Bob Carlton (Sonex jet test pilot and air show performer) provided valuable input and needed advice from his previous experience with the micro turbines. By building on Bob's experience I engineered the installation of the retractable twin JetCat P300 turbines.

My goal was to keep the turbine installation as simple as possible. Instead of pivoting the turbines on a fulcrum like the traditional auxiliary-powered sailplanes do with a piston engine and prop, I chose to extend and retract the turbines with a vertical telescoping mast. A 12-volt linear actuator was installed to move the mast up and down with the turtleback turbine cover. The electrical wiring and fuel lines were routed to the turbines with a flexible moving cable guide. Fuel pumps and air traps were installed with the engine control units and cockpit turbine monitoring support units.

Why install twin turbines into a sailplane? By providing the ability to self-launch and restart during flight you no longer have to use a towplane to get airborne. Plus when the lift unexpectedly dies and you get low, a restart of one or both turbines will keep you out of the farmer's field.

The turbines are compact in size (5.25 inches by 14.5 inches) and lightweight. The installation has less complexity than a piston engine with a prop and folding mast mechanism. One great advantage with this installation is that it has little effect on the aircraft's center of gravity and pitching moment. A homebuilt composite 7-gallon fuselage header fuel tank filled with Jet-A, kero-

## BLAST FROM THE PAST



The turbines are compact in size (5.25 inches by 14.5 inches) and lightweight. The installation has less complexity than a piston engine with a prop and folding mast mechanism. One great advantage with this installation is that it has little effect on the aircraft's center of gravity and pitching moment. A homebuilt composite 7-gallon fuselage header fuel tank filled with Jet-A, kerosene, or gas station diesel mixed with 5 percent turbine oil provides enough fuel for a self-launch and climb to 3,000 feet AGL. This quantity also provides enough fuel remaining for 25 minutes of sustained flight, with the use of one engine at reduced throttle settings. Each wing is constructed with a 3.5-gallon fuel cell for another 7 gallons of capacity if needed. The engines lack complexity, have few moving parts, and are virtually vibration-free. So far they have proven to be reliable and easy to start. Extending the engines has a similar drag frontal area as the retractable landing gear. This is quite different than a conventional auxiliary-powered sailplane folding mast with its piston engine and propeller.

The turbine start sequence is fully automated. First extend the turbine mast and flip the turbine master switch "on." Then move the throttle trim levers to the "up" position. Next move the throttles up to initiate the automated start sequence that brings the rpm to idle. At this point the throttles are active, and the turbines are ready for use. The shutdown procedure is as follows: Reduce the throttle to idle, move the trim levers to the down or "off" position, and let the turbines cool down and retract. Total time for mast extension and start up is around 1 minute 15 seconds.

I would like to thank all of the members in our EAA Chapter 18 and our soaring club (Wisconsin Soaring Society) for their support and flight-test assistance. Most importantly I would like to thank my wife for her continued support and assistance.



## PRESIDENT'S MESSAGE



Welcome to the February Flypaper! Here we are in late February- the deepest, darkest heart of what we comically refer to around here as “Building Season.” And yet to look outdoors would make one believe that it is only early November- hardly a flake of snow left on the ground after the recent warm weather and rain. Fortunately it all waited until after the annual EAA Skiplane fly-in at Pioneer airport which was held a couple of weekends ago. I had to miss the event this year due to a family obligation, but from what I saw and heard it was another great event. I know that at least one chapter member strapped on the old skis and flew in, so we can look forward to a good flying report at the next meeting.

Speaking of EAA events, the annual Hops & Props beer tasting at the EAA museum is coming up soon on Saturday March 3rd. This has become a “can’t miss” event over the last decade, and one that a number of us look forward to all winter. In addition to the obvious (beer and airplanes- what’s not to like?) the timing of the event in early March makes it a perfect marker of time- The Beginning of The End of Winter! The end of winter means many things- a young man’s thoughts turn to baseball, not to mention the end of Building Season and the beginning of Flying Season.

Your board of directors is hard at work developing a program schedule for 2018. For February we will be having a program on ADS-B. There is a lot going on in the world of ADS-B, from very low cost DIY receivers, to the looming 2020 deadline for ADS-B out and all of the new technology that is starting to be developed around that requirement. Like many of you I’ve adopted a wait-and-see attitude about installing ADS-B out in the Spruce Moose, and frankly I have been leaning towards not bothering to install it. Not having ADS-B out would only affect about 5% of my flying- hardly worth the investment of several Aviation Monetary Units. However, as the deadline gets closer and the technology gets cheaper, I find myself reconsidering. Viable units are getting into the \$1500 price range, and this number is only going to go down as more players get into the market. When it gets down to \$500, even a cheapskate like my will have a hard time justifying the decision not to upgrade. Will it ever get that low? I don’t know but I am watching it closely, and as we all know- competition is good for the consumer!

Anyway, I look forward to seeing everyone at the meeting on Tuesday. Until then, keep your airspeed up on final and keep your squitter extended.



# YOUNG EAGLES



## **EAA Chapter 18 Young Eagles – 2018** **Free Airplane Rides for Kids ages 8 to 17** *Parent/guardian permission required.*

**April 28 – 10 am to 1 pm**

Timmerman Airport – 9305 W. Appleton Avenue – Milwaukee

**May 19 – 10 am to 1 pm**

Waukesha County Airport – 2525 Aviation Drive – Waukesha

**June 16 – 10 am to 1 pm**

Capitol Drive Airport – 21500 Gumina Road – Pewaukee

**August 18 – 10 am to 1 pm**

Timmerman Airport – 9305 W. Appleton Avenue – Milwaukee

**September 15 – 10 am to 1 pm**

East Troy Municipal Airport – 2083 County Road L – East Troy

**October 13 – 10 am to 1 pm**

Capitol Drive Airport – 21500 Gumina Road – Pewaukee

**November 3 – 10 am to 1 pm**

Waukesha County Airport – 2525 Aviation Drive – Waukesha



For more information: [www.18.eeachapter.org](http://www.18.eeachapter.org)  
Email: [Chap18YE@wi.rr.com](mailto:Chap18YE@wi.rr.com) – (414) 732-6782  
Facebook: EAA Chapter 18 Young Eagles  
[www.young eagles.org](http://www.young eagles.org)

© 2018

# CALENDAR OF EVENTS



**Tuesday, February 27 — EAA Chapter 18 Mtg.**  
7:30 P.M., Timmerman Airport CAP Hanger  
9393 W. Appleton Ave. Milwaukee

**Saturday, March 3 — Hops & Props**  
7:00–10:00 P.M. Eagle Hangar, EAA Aviation  
Museum. Oshkosh, WI  
<https://www.eaa.org/en/eea-museum/eea-museum-events/eea-hops-and-props-beer-festival>

**Wednesday, March 7 — EAA Webinar  
Making Metal Behave**  
8:00 P.M. — 9:30 P.M.  
[http://pages.eaa.org/WBN2018-03-07MakingMetalBehave\\_LP-Registration.html](http://pages.eaa.org/WBN2018-03-07MakingMetalBehave_LP-Registration.html)

**Saturday, March 10 — Spring City Aviation Fly-In Breakfast.**  
8:00 — 11:00 A.M. KMWC, Milwaukee

**Thursday, March 15 — Aviation Adventure  
Speaker Series — Bob Caron**  
“Last Helicopter out of Saigon”  
7:00 P.M. EAA Aviation Museum, Oshkosh WI

**Saturday, March 17 — Wisconsin Light Aviation 25th Annual Safety Seminar**  
Oshkosh, WI <http://www.av8safe.org/>

**Tuesday, March 27 — EAA Chapter 18 Mtg.**  
7:30 P.M., Timmerman Airport CAP Hanger  
9393 W. Appleton Ave. Milwaukee

**Tuesday, April 10 — Sun n Fun International  
Fly-In**  
Sun n Fun Expo Campus, Lakeland FL

**Monday, July 23 — EAA Airventure**  
Oshkosh, WI



2018

MARCH

DOUGLAS AD-6 SKYRAIDER  
CREW: 1  
MAX SPEED: 312 mph (518 kph, 260 knots)  
LENGTH: 36 ft, 10 in (11.0 m)  
WINGSPAN: 52 ft, 10.2 m  
ARMAMENT: Four 20 mm cannons, 15 fuel tanks, with a capacity of 2,000 lbs.  
Price: \$2,000,000

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
dim / dom	sun / mon	mon / tue	tue / wed	wed / thu	thu / fri	fri / sat
25	26	27	28	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

**FEBRUARY 2018**

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	26	27	28			

**APRIL 2018**

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

**EAA**  
THE ART OF AVIATION

## TEN QUESTIONS — JEFF WISNESKI

**1) How long have you been a member of Chapter 18?**

Sounds like a question for Glenn, but I'll go with 5 years.

**2) What are you flying?**

2001 AVID Flyer MK4 Aerobatic Speedwing with a 912 UL

**3) What are you building?**

20?? Sonex Waix tail dragger, acro ailerons, and Turbo 2180cc VW

**4) As Safety Officer for the Chapter, do you complete a thorough safety check of the bathroom before you use it?**

I did give the Daher TBM 930 lavatory a good inspection at Oshkosh last year. It is the most complicated part of the whole plane. You need to watch it deploy, it is impressive.

**5) If you're planning on flying at 1000 feet, and the temperature is 87 degrees, and you need to clear an object that is 2500 feet tall, do you recommend having a burrito the night before?**

Absolutely. Best is the El Fuego Burrito with Jalapenos, but given those numbers, I think margaritas may be required.

**6) What sparked your interest in aviation?**

I can blame my Dad for this one. He would take me to watch people fly model airplanes at the Rainbow Aero Modelers Society (RAMS) field in Franklin. I joined the club and started building and flying my own model planes when I was 10. That is where I first met some Chapter 18 members including Bill Stilley and Jim Hatzenbeller.

**7) In the interest of safety, do you test the Chapter President's coffee before he drinks it?**

Negative. I'll go with I don't drink coffee.

**8) What was your best experience in an airplane?**

Showing Angie negative G's.

**9) Do you fly Young Eagles?**

Absolutely, yes.

**10) What do you like most about Chapter 18?**

The active members.

**JOIN CHAPTER 18 TODAY!** Still considered the "best deal in aviation" by current Chapter 18 President Jeff Point. Fill out the info below and give it to our membership coordinator Glenn Botsford at the next meeting. (Annual Dues are \$10, plus \$5 for name plate)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_



CHAPTER 18 MEETING MINUTES-SECRETARY JIM HATZENBELLER

CHAPTER BOARD MINUTES-SECRETARY JIM HATZENBELLER

### Chapter 18 January Board Meeting Minutes

The January Board meeting was called to order at 6:40 by President Jeff Point at the CAP hangar at Timmerman Field. Jim Hatzenbeller, Tim Meyer, Glenn Botsford, Fed Keip, Jeff Wisneski, Dave Hoefgen and Thaddeus Pinkoski were present.

**Announcements:** Board members were welcomed and thanked for volunteering. EAA Hops & Props will take place on March 3rd at EAA, Oshkosh.

**Old Business:** No old business was conducted. There were no committee reports.

**Young Eagles:** An event is scheduled for January 27th at Waukesha.

**New Business:** Programs for upcoming Chapter meetings for the new year were discussed. Discussion took place in regards to changing the start time of the Board meeting. The new start time will be 6:45. The intent is to keep the meeting on topic and finish by 7:15. This would enable board members to meet with Chapter members and guests before the start of the open Chapter meeting. A change in the number of board meetings was also discussed. Future Board meetings will take place on a to be determined basis.

The spring Chapter picnic will be hosted by Dave Hoefgen at his hangar located at the Palmyra airport. Fred Keip will host the fall picnic at Burlington Airport.

A motion was made and passed for Joe Ptaszek to spend \$200 dollars for door prizes for the October dinner meeting. The evening program will be a FAAST seminar with Wings credit. It will be presented by Jeff Wisneski and Nick Heffron. The program will be "Cold Weather Ops and You".

Minutes from the November, 2017 Chapter meeting were amended. Under building reports, it was incorrectly stated that Jeff Point displayed the rudder for his Breezy which was ready for painting. The Treasurer's report was approved as published in the newsletter.

Meeting adjourned at 7:20.

### Chapter 18 January Meeting Minutes

The January meeting was called to order by President Jeff point at 7:30 PM at the CAP Hangar at Timmerman Field.

**Program:** Jurg Grossenbacher from the FAA Safety Team was introduced. He explained the WINGS program. The evening program will be a FAAST seminar with Wings credit. It will be presented by Jeff Wisneski and Nick Heffron. The program will be "Cold Weather Ops and You". Winter flying in the Midwest. Coffee break was taken after the presentation.

**Announcements:** Guest were asked to introduce themselves. There were no guests for the Chapter meeting. Hops & Props will take place at the EAA Museum on March 3rd. The spring Chapter picnic will again be hosted by Dave Hoefgen at his hangar located at the Palmyra airport. Fred Keip will host the fall picnic at Burlington Airport. All present were reminded that it is time to pay your membership dues for 2018. Tim Meyer reported on a STEM Robotics event to be held in Milwaukee. Contact Tim for details. It was also reported that January 28th is the 65th anniversary of EAA.

**Young Eagles:** It was reported that an Aviation Jamboree will be held at the Waukesha airport on January 27th. A Young Eagles event will be scheduled, weather permitting

**Building Reports:** Tim Meyer reported that he has made a resolution to spend more time working on his Team Tango Foxtrot IV project. Brian Roltgen is in the process of priming the vertical tail of his RV-10. Fred Keip reported that his Wag-A-bond is in a heated hangar at Burlington since October. He is the process of painting the fuselage and has 12 coats of paint on so far. Jeff Romuald reports that he has his RV-7 moved to Waukesha. the engine is mounted and he is working on the cowl and baffles. Jeff Point reported that he is reworking the baffles on his Breezy.

**Flying Reports:** Dave Hoefgen reported on planning to drive his RV to Daytona. After 25 miles, they encountered mechanical issues with the RV. They then returned home and took their alternate RV, Their RV-10. They then flew to Florida, and onto Nassau. On the return flight, he reported icing while flying through Indiana. Jeff Point reported on flying to Schaumburg with Craig Henry. Jim Hatzenbeller reported on making first flight in his GlaStar. Glenn Botsford flew chase plane. Jim went on to thank fellow GlaStar builders Sune Ericson and Greg Allman for their assistance with major steps in the construction of the plane.. He also thanked Tech Counselor Glenn Botsford for all his tips and suggestions. In addition, he thanked Jeff Point for being his Flight Advisor. The flight went indirectly from Mitchell Field to Waukesha and last about 40 minutes. The flight went better than expected, with no surprises. The anticipation of the flight was more stressful than the flight itself. Jim Rodrian reported on flying his Defiant to Sturgeon Bay for lunch and then flying to Washington Island.

**New Business:** It was reported that there was a minor computer issue in getting the newsletter out to all members. It will be corrected and re-mailed to Chapter members. . The treasurer's report was approved as published.

Meeting was adjourned at 9:10pm.



## TREASURER REPORT-TREASURER GLENN BOTSFORD

January 2018	Checking	Savings	Total	Paid Membership
Beginning Balance	678.36	\$1,011.67	\$1,690.03	55
Income				
Nametags	\$5.00			
Dues	\$170			
<b>Total Income</b>	<b>\$175.00</b>			
Expenses				
EAA Chapter Dues / Insurance	\$384.00			
<b>Total Expenses</b>	<b>\$384.00</b>			
Ending Balance	\$469.36	\$1,011.67	\$1,481.03	

## MEMBERS CLASSIFIEDS

### **FOR SALE, RENT or LOAN**

- **Aircraft painting**

Need your project/ Baby painted?

Fly it in, or bring it in pieces to my hangar at Poplar Grove airport and get a great paint job for a great price!!!

For your aluminum airplane we will use the PPG base-coat-clear-coat system for any colors you have ever seen on an automobile. It is a proven system for airplanes and produces stunning results.

For fabric covered airplanes we are practiced in Stits, Air Tech and Randolf.

For complex graphics that include swoops, weaves, waves etc., we work with Aero Graphics to produce perfect designs and symmetry.

Give me a call and we can discuss your needs.

Jim Kidd 414-617-5250 [jkidd@geotacticalsolutions.com](mailto:jkidd@geotacticalsolutions.com)

- **Hanger Space For Rent**

I am building a Zenith CH-200 in a 60' x 66' hangar at KUES on Aviation Dr. with heated floor, compressor, water, sewer and kitchen. I am looking for fellow builders to share space, ideas, tools and synergy. Cost based on the square footage your project needs.

Carl Gollnick (262) 391-4168 [cgollnick@aol.com](mailto:cgollnick@aol.com)

To submit items here, send an email to Thaddeus Pinkoski, [thaddeus@eaa18.org](mailto:thaddeus@eaa18.org)



---

## CHAPTER 18 CONTACTS

### **OFFICERS**

President	Jeff Point	414-915-9173	<a href="mailto:jpoint@wi.rr.com">jpoint@wi.rr.com</a>
Vice-President	Tim Meyer	414-587-3581	<a href="mailto:tgmeyerster@gmail.com">tgmeyerster@gmail.com</a>
Secretary	Jim Hatzebeller	414-483-1246	<a href="mailto:jimhatzy@aol.com">jimhatzy@aol.com</a>
Treasurer	Glenn Botsford	414-764-5936	<a href="mailto:glennbotsford@gmail.com">glennbotsford@gmail.com</a>
At-Large Board	Jeff Wisneski	414-732-4107	<a href="mailto:n4sjeff@yahoo.com">n4sjeff@yahoo.com</a>
At-Large Board	Dave Hoefgen	262-965-4837	<a href="mailto:americanrentalsllc@gmail.com">americanrentalsllc@gmail.com</a>

### **STAFF**

Newsletter Editor	Thaddeus Pinkoski	415-852-0476	<a href="mailto:thaddeus@eaa18.org">thaddeus@eaa18.org</a>
Web Editor	Darrell Kufalk	262-443-2605	<a href="mailto:kufalk@wi.rr.com">kufalk@wi.rr.com</a>
Tool Librarian	Andreas Kerwel	414-343-9529	<a href="mailto:andreas.kerwel@googlemail.com">andreas.kerwel@googlemail.com</a>
Membership Coordinator	Glenn Botsford	414-764-5936	<a href="mailto:glennbotsford@gmail.com">glennbotsford@gmail.com</a>
Young Eagles Coordinator	Stephanie Schulko	414-732-6782	<a href="mailto:mzstef615@wi.rr.com">mzstef615@wi.rr.com</a>

### **TECHNICAL COUNSELORS**

Fred Keip (414) 581-1442			
Scott Jones (414) 461-6013	Jeff Point (414) 915-9173	Paul McAllister (262) 695-7624	Glenn Botsford (414) 732-8384

### **FLIGHT ADVISORS**

Jeff Point (414) 915-9173 [jpoint@wi.rr.com](mailto:jpoint@wi.rr.com)

For more information about EAA Chapter 18, email: [info@eaa18.org](mailto:info@eaa18.org)

To submit articles, photos or other items for the newsletter as well as ideas, suggestions and corrections, contact:  
Thaddeus Pinkoski [thaddeus@eaa18.org](mailto:thaddeus@eaa18.org)