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erry Christmas and Happy New Year!

We had our last night on December 13, 2022 with a pot-luck and open house for the families of the BuildAPlane students. It was touch and go whether our last night was going to happen. The weather forecast did not bore well for us. By Tuesday everyone in the MN area was on edge—what is the weather really going to do. By 12:30 pm we started having sleet/rain. Then it would stop, on again and off. By 5:30 it was a steady drizzle of rain. Even with these odds against us, the party did happen! We had over 35 people join us to see what the students had been working on.

As EAA (Experimental Aircraft Association) says after their event; we went through 80 pieces of chicken, 50 bottles of water, a pot of coffee, gallon of lemon aid and I have no idea how many salads and desserts that were eaten.

The WagAero Cuby was front and center. The aircraft is ready to push to the airport location and then have the wings installed this Spring.

Duane had finished the Engine Test Stand that many of the students helped with and the students were able to show and tell their parents what they worked on.

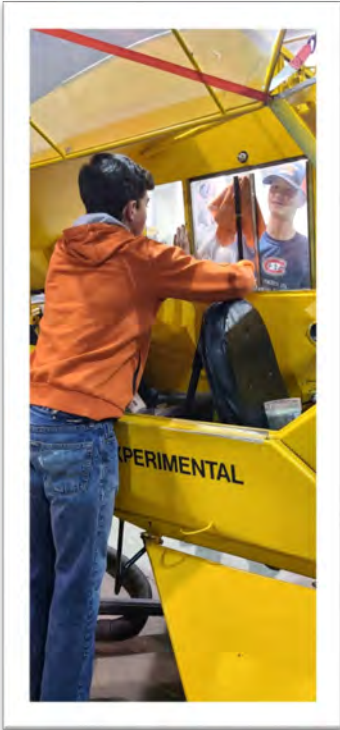
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#### Special points of interest

- Christmas Cheer
- WagAero Cuby
- Discovery Flights
- Kruse Aviation, In.

## The WagAero Cuby



The **Wag-Aero CUBy** is a replica of the Piper J-3, designed by Dick Wagner and marketed by Wag-Aero of Lyons, Wisconsin as plans or in Kit form.

The aircraft is currently marketed under the name Wag-Aero Sport Trainer.

*The following information was written by Jack Cox in 1975.*

Wag-Aero started with a line of inspection covers, then eventually a comprehensive line of aircraft parts, including a full line of parts for the Piper Cub. After several attempts to purchase the rights to the Piper Cub for new production, Wag-Aero owner Jack Wagner designed a homebuilt kit that would allow homebuilders to construct new aircraft similar to the Cub.

While the CUBy was initially offered with wooden wing and spars like the Piper Cub, aluminum ribs and spars were later added as an option. The aircraft does differ from the original Piper design, in several ways, includ-

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*"The desire to fly is an idea handed down to us by our ancestors who, in their grueling travels across trackless lands in prehistoric times, looked enviously on the birds soaring freely through." By Orville Wright ; First flight of the Wright Flyer December 17, 1903*

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### Continue from page 1



Our Piper Colt had some extra attention this fall and will be going to the paint shop (after our weather settles down).

We also had a competition of building paper airplanes and how far you can fly your aircraft. We had over 1/2 of the group participate.

So in spite of the weather (which rained the whole two hours) it was a dry, happy event. Thanks to all of you that joined us and to those that have sponsored our group over this last year.

Merry Christmas and Happy New Year 2023!





ing having its fuselage fabricated from 4130 steel instead of the Cub's original 1025 carbon steel and utilizing a conventional elevator-mounted trim tab in place of the Cub's jack screw trimming system that adjusts the Cub's elevator angle of incident.

The CUBy drawings were drafted by Bill Blake.

The prototype first flew on March 12, 1975 fitted with skis.

The introductory model was displayed with a contrasting paint scheme, one half painted green with a yellow stripe, and the other half painted yellow with a green stripe. This unusual "court jester" paint scheme was used to differentiate the prototype from the standard yellow scheme used on the Piper Cub, for marketing purposes. Paul Poberezny became the first customer to build a CUBy.

Poberezny's aircraft became part of the EAA AirVenture Museum Foundation and was used to demonstrate the use of automotive fuel in aircraft engines for the Experimental Aircraft Association. The designer of the aircraft Dick Wagner flew the unpressurized aircraft as high as 20,000 ft (6,096 m) to demonstrate that auto fuel would not cause vapor lock.

### General characteristics

- **Crew:** one
- **Capacity:** one passenger in tandem seating
- **Length:** 22 ft 5 in (6.83 m)
- **Wingspan:** 35 ft 3 in (10.74 m)
- **Height:** 6 ft 8 in (2.03 m)
- **Wing area:** 178.5 sq ft (16.58 m<sup>2</sup>)

**Airfoil:** USA 35B

- **Empty weight:** 695 lb (315 kg)
- **Gross weight:** 1,400 lb (635 kg)
- **Fuel capacity:** 12 US Gallons, 45.42 litres
- **Powerplant:** 1 × Lycoming O-235 , 125 hp (93 kW) (Flight Expo's Cuby has a Franklin Engine)

### Performance

- **Maximum speed:** 102 mph (164 km/h, 89 kn)
- **Cruise speed:** 94 mph (151 km/h, 82 kn)
- **Stall speed:** 39 mph (63 km/h, 34 kn)
- **Range:** 220 mi (350 km, 190 nmi) , 455 miles (396 nmi; 732 km) with 26 US gallon (98 litre) auxiliary tank
- **Service ceiling:** 11,200 ft (3,400 m)
- **Rate of climb:** 490 ft/min (2.5 m/s)



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Continuation of Wag Aero  
Cuby from Page 2-3

Flight Expo, Inc.'s Wag Aero Cuby was originally built by Clement Gelezunas a World War II B-17 crew member. Mr. Gelezunas passed away in September 2006. From what we were told and received with our donation are the original plans (Serial #683) that Mr. Gelezunas worked off of to build our Cuby.

Mr. Gelezunas built his Cuby in his garage in Middlebury, Connecticut. He passed away before the aircraft took to the air.

Upon his death the aircraft was sold to Harley Carnes who had a Piper Cub that he had an incident with and needed another set of wings. Mr. Carnes did not realize that the Cuby wings are wood and his were aluminum. According to the FAA they would not inter mix.

Since the donation has come in (February 2022) our group has taken every access panel off, inspected and adjusted or fixed what needed to be done. The fuel tank was completely flushed, new interior for the seats, the tail section cleaned out inside. Wings cleaned on the outside and inspected on the inside.

Prop inspected, and this spring 2023 we should be starting the aircraft and get the FAA approval to fly the required hours off of the aircraft. (about 25—40 hours).

We hope the Mr. Gelezunas and Mr. Carnes are proud of our group and the love we have given their aircraft.





# THANK YOU TO OUR VOLUNTEERS

We have an amazing group of volunteers that help with our programs.

**Duane Kruse** owner of Kruse Aviation, Inc. He brings over 30+ years of aviation to our group. He holds a aircraft and power plant license, an Inspection Authorization license, both a fixed wing and rotor wing pilot.



Thank you Duane for all you do for our group. (Please look for his business card on page 6 with this coming years special).



**Cyndi Romuld** has been volunteering for the last 6+ years. She brings a strong background in organization skills, always ready to capture the moments of what is happening, and a great wealth of aviation and mechanical skills to encourage our students and monitors our social media and web. Thank you Cyndi!



**John Bjornstad** grew up in the aviation industry. He has over 15+ years of working as a aircraft mechanic. He holds a aircraft and power plant license, a fixed wing pilot and currently is working on his Inspection Authorization license.

**Wally Johnson** started volunteering with the Tsunami Project and now helps out in our Build A Plane program on the week ends. He holds an aircraft and power plant license and is working as a aviation mechanic.

Thank you both John and Wally for all of your help





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Share the GIFT of FLIGHT TODAY  
 with Flight Expo, Inc.'s  
**"Discovery Flight"** Gift Certificate.



## Introduces Coffee & Wrench Once a Month Membership!

Join us once a month on Saturday for a cup of coffee and roll and do some wrenching on various aircraft parts. Help us disassemble aircraft parts, label them and get them ready to list on our web site.

When: Our first Saturday will be January 21, 2023 Time: 9 am—12 or later

Annual cost: \$30 Military cost: \$15 (for the donuts and water of course)



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[www.flightexpo.org](http://www.flightexpo.org)  
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## JOIN US FOR SOME GREAT FUND RAISING

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**Knit Hats: \$20**



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“Making Dreams Become A Reality”*

Color selected: ☒ Athletic Oxford

<input type="checkbox"/> Athletic Gold	<input type="checkbox"/> Athletic Green	<input type="checkbox"/> Athletic Orange	<input checked="" type="checkbox"/> Athletic Oxford
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<input type="checkbox"/> Black	<input type="checkbox"/> Black/ Athletic Oxford	<input type="checkbox"/> Black/ Athletic Red	<input type="checkbox"/> Black/ Athletic Royal
<input type="checkbox"/> Brown	<input type="checkbox"/> Coyote Brown	<input type="checkbox"/> Maroon	<input type="checkbox"/> Millennium Bl.
<input type="checkbox"/> Navy	<input type="checkbox"/> Navy/ Athletic Oxford	<input type="checkbox"/> Neon Blue	<input type="checkbox"/> Neon Green
<input type="checkbox"/> Neon Orange	<input type="checkbox"/> Neon Pink Glo	<input type="checkbox"/> Neon Yellow	<input type="checkbox"/> Olive Drab Green
<input type="checkbox"/> White	<input type="checkbox"/> Woodland Brown		



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**These can not be  
shipped during the  
winter season**

