



# WASH

## May 2020







The current environment has forced us into new ways to work and stay connected with friends. We are all doing our best to try to maintain a sense of community until we can comfortably get back together face-to-face.

On May 28th we held our May Chapter Gathering virtually as we had done in April. It was a great opportunity to check in with each other, share some aviation stories, watch a "Bucket List" flight video created by one of our members, explore a cool weather app and play a challenging aviation

trivia game. By the way, a big Congratulations to Ken K for coming in first by correctly answering over half of the questions and to Larry W for finishing a very close second. If you would like to test your trivia chops, I have included the questions on page 4 of this month's Propwash.

The Featured Photo at the top of each month's Propwash usually highlights a shot of a smiling Young Eagle, a fly-out adventure or a crowded chapter gathering, this month however I am sharing a "Hollywood Squares" style image taken during our Virtual Chapter Gathering. Hopefully in the very near future, this image will be a nostalgic reminder of how strange things were in the first half of 2020.

As of May 29th, most of Illinois has moved into Phase 3 of the reopening plan. This means face coverings in public continue to be required, but gatherings of 10 people or fewer for any reason can resume. This is great news and while it may still be a bit premature to plan our next in person chapter gathering it is very encouraging to see things moving in the right direction.

Please stay safe, stay healthy and enjoy this month's edition of Propwash.

Mike





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# **CHAPTER 579** 2020 MONTHLY CHAPTER GATHERING SCHEDULE

January 23

February 27

March 26

April 23 (Virtual)

May 28 (Virtual)

June 25



July (TBD)

August 27

September 24

October 22

**November 19** 

**December 17** 

# **Aviation Website of the Month**



# Windy

https://www.windy.com

Windy is a Czech company providing interactive weather forecasting services worldwide.

The portal was created in 2014 and provides weather forecasts based on data from multiple international models including the GFS models, ECMWF, and NEMS model.

Initially, the portal focused on wind animation, but it has expanded to other meteorological parameters including temperature, pressure, relative humidity, cloud base. It also has airport data such as METARS, Runway Configurations and 5-day forecasts.



Be sure to follow *EAA Chapter 579* on Facebook to get the latest updates on all of our activities.







Check out our chapter website at **EAA579.org** for detailed information about our Chapter





# CHAPTER 579 2020 YOUNG EAGLE RALLY SCHEDULE



Rally Dates

May 17 (Cancelled)

Jun 28

Aug 23

Sep 27

Oct 25

Rain Dates

May 31 (Cancelled)

Jul 12

Aug 30

Sep 27

Oct 04

Nov 01

Launched in 1992, the Young Eagles program has dedicated more than 25 years to giving youth ages 8–17 their first free ride in an airplane.

It's the only program of its kind, with the sole mission to introduce and inspire kids in the world of aviation.

Today, more than 2.2 million young people have enjoyed a free introductory flight through the Young Eagles program.

Join us in offering each child, tween and teen the opportunity to experience the Spirit of Aviation by becoming a Young Eagles volunteer today!









**Young Eagle Questions?** 

**Ask our Young Eagle Coordinator Sebastian Saavedra** 

youngeagles579@gmail.com



# 579 Trivial Pursuit



Test your mental agility with the 579 Trivial Pursuit Game we played at our May Chapter Gathering. Remember... No using reference materials.

- 1) Orville Wright was born in Dayton, OH. In which state was Wilbur born?
- 2) Tom Cruise was the star of Top Gun, but what Disney character was modeled after Cruise?
- 3) Kite flying in China dates back 2300 years and is thought to be the earliest example of man-made flight. According to the Chinese zodiac, 2020 is the year of what animal?
- 4) Early aircraft were constructed primarily with wood. Who were the models that posed for Grant Wood's famous painting, American Gothic?
- 5) There are some competing theories on the primary cause of lift creation in an aircraft. Who was the first person to create an elevator for a building?
- 6) Bobby Hull is regarded as one of the greatest hockey players of all time. In 1961 he helped the Blackhawks win the Stanley Cup. What was his nickname?
- 7) In 1927 Charles Lindbergh went from obscurity as a U.S. Air Mail pilot to instantaneous world fame by making the first nonstop flight from New York to Paris. What country is the arrow at the right pointing to?
- 8) In 1997 the Steve Miller Band popularized the song "Jet Airliner" when it was released on their Book of Dreams album. What jet was referenced in the lyrics of this song?
- 9) One of da Vinci's most famous inventions, the flying machine displays his powers of observation and imagination, as well as his enthusiasm for the potential of flight. What paintings holds the Guinness World Record for the highest known insurance valuation in history?
- 10) The Right Stuff is a 1979 book documenting the stories of the first Project Mercury astronauts selected for the NASA space program. Who wrote the Right Stuff?
- 11) In 1947 Chuck Yeager was the first person to break the sound barrier the point where a speeding object passes the speed of sound.

  17 years later who recorded the song Sound of Silence?
- 12) The Reno Air Race is frequently referred to as "The World's Fastest Motor Sport." What is the nickname for the city of Reno?
- 13) Denver International Airport is the highest international airport in the US with a field elevation of 5,430' what US city comes in 2nd?
- 14) Born in 1937 this American actor and film narrator has been nominated for 5 Academy Awards and won one in 2005 for Best Supporting Actor for Million Dollar Baby. He learned to fly at age 65 and now owns a Cessna 414 and a Citation 501. Who is he?
- 15) What year did the Aurora Municipal Airport Open?
- 16) What was the name of the star of the 2013 Disney movie Planes (either Character or Voice Actor)
- 17) In 1958 (and 1959) a Cessna 172 set the record for the world's longest airplane flight (64 days, 22 hours, 19 minutes and 5 seconds). The Alpine Swift holds the record for the longest continuous flight time of any bird. How long can this bird fly without stopping?
- 18) Who is the athlete who pilots his own \$40M Gulfstream V?

To check your answers, see page 13.



# How I Got Into Aviation



## By John Garretson

As many pilots do, I have always had a fascination with aircraft from the time I was a wee little guy. Of course, it was the fighter jets I was most fascinated with. At the age of 14 I built my first radio controlled airplane which had roughly a 5' wingspan. I spent so many hours building it that I never flew that plane, but instead flew other less expensive options that took considerably less time to build; this held me over as a youngster. Fast forward to high school...

At Naperville Central I was lucky enough to have ground school aviation offered as a class and by this time I was certain I wanted to become a pilot even though I never completely lost hope of flying a fighter jet one day. The class used the exact same book as they used at Lewis University, and was even taught by a Lewis University instructor; the class was great. The instructor even set up a day for each student to fly in a GA airplane with a volunteer pilot at Lewis University later that year. I recall flying co-pilot in a low wing French airplane and using the grass strip, but don't recall any specifics of the airplane beyond that. To this day that is the only low wing GA airplane I have ever been in.



At the end of Senior year, I enrolled at SIU Carbondale to start my pilot training and work toward flying professionally. Of course, many good plans are often changed for one reason or another and I withdrew from SIU just two short weeks before heading off to school. A year later, I found myself signing up to the Air Force; the IL Air National Guard to be exact.

The recruiter wanted me to do satellite communications; but I had my sights set on "being with the airplanes" and since I had no college degree and my eyes were not good enough to fly for the Air Force; this is as close as I could get. It took several months into my delayed enrollment for the job I wanted to become available; a crew chief for the KC-135. The base eventually moved and I was honorably discharged at about the same time.



Fast forward almost 10 years to about 2006 while working for a developer, I had the pleasure of meeting Dave Spano. I learned that Dave was a CFI, but it really never went anywhere beyond some office small talk. Several years later I learned that Dave had opened SimplyFly when I saw his booth at PrairieFest in Oswego. I think it was the second year my family and I saw his booth that we purchased a "Discovery Flight". It



was not until a full year later that I even took that flight. This is now 20 years out of high school, and my wife said it was time - just do it. After my discovery flight, I knew that I needed to start taking lessons or it was never going to happen. A year after starting my training in 2017 I became a certificated pilot, joined in on the Young Eagles fun and also a flying club at DuPage. Then last year, I purchased my first airplane; a 1952 Piper Tri-Pacer. I continue to build hours, and am working towards becoming a light sport Certified Flight Instructor. My teenage daughter shares in my passion for aviation and flies with me when she can. It is the best daddy daughter time ever!







# Beat Billy

By: Bill Cameron



## **April Solution:**

1. During a 2010 minute flight, how many power strokes will a 985 make while turning 1800 RPM's?

For the answer to the question from the March newsletter that I left out a part, well... you will have to continue waiting because I now have lost the answer.

2. When was the first time that more than 200 people were flown in a single flying machine? Where did it happen? What type of machine?

November 3, 1931 at Lakehurst, New Jersey when U.S. Navy airship ZRS-4 Akron carried 207 people aloft for the first time.



# May Challenge:

For this Month I have decided to give you 2 chances to win.

1. Name this plane:



2. What is this and what is it on?



Until next month, keep smiling and don't forget to take off the mask before you key the mic!

**BILLY** 

Send your best guesses to mikebaer150@gmail.com and we will announce the winners next month.

# **Another Breed of Dog**

By Craig Payne

For many years at US airshows, the Cessna Bird Dog was the only 'dog in Warbird parking. Then the Bulldog started showing up about 18 years ago. Currently, 56 Bulldogs are on the US registry out of 323 produced. For the Warbird operator, the Bulldog is a good aerobatic mount, suitable for formation training and airshow work. A decent supply of parts are still available and many general aviation components are used. Maintenance requirements are comparable to general aviation types.



The list of fixed tricycle gear, low-wing piston, Warbird aircraft available in quantities is short: The Slingsby, which served with the USAF and RAF, and the Scottish Aviation Bulldog. Yes, I know about the 60 RV-6A's that Nigeria built and used as trainers in 1989. They were called "Air Beetles". Taiwan built 20 Pazmany PL-1's as their primary trainer in the 1970's. Neither of these were designed for military use.



My introduction to Warbirds started in 1995, when I bought a Nanchang CJ-6A back to Aurora. I owned that airplane for 23 years, upgrading to an M-14P engine, restoring inside and out until the day came when insurance companies felt I was getting too old for that airplane. During that span of ownership, I used N285CJ to get my Commercial rating, an A&P license and a Formation Lead rating. After flying in dozens of Warbird of America shows, I earned the WOA Command Wings, set with a diamond, a nice perk from the EAA. I continue to support both Yaks and CJ's through my business: Payne Aviation LLC.

**Ancestry:** Based on the Beagle Pup, the 'Dog was designed by Beagle Aircraft in the U.K. which folded after the Swedes signed a contract for a trainer in 1970. Scottish Aviation was formed to fill the contract and land more business, helping Scottish industry. The first model was customized for the Swedish Airforce followed by an additional order for the Swedish Army. Customization included passing trials on snow skis as well as turf runways. Spin characteristics and recovery required additional design changes.

The RAF was always considered as a customer and their version was produced in the largest numbers, replacing the revered Chipmunk. Other nations requiring a capable but cheap trainer placed orders too.

What It Is: A side by side trainer, with a single rear seat in Swedish models. Construction is aluminum, with liberal use of round headed rivets. Stoutly built but still susceptible to metal fatigue at about 5000 hours of aerobatics, or 8760 hours if modified. The Civil Aviation Authority in the UK tested two model 121's to destruction and developed a fatigue index, as well as spar patches to extend service life. Many of those "timed out" models were exported to world markets. My Model 100/101 is not subject to that rule unless imported into the UK.



The cockpit is huge, 44" wide with plenty of headroom for tall pilots wearing helmets. Up to 220 pounds can be carried in aft baggage or combination of 3<sup>rd</sup> passenger and gear. The result is really good visibility but with the drag of pushing a large hole through the air.

A Lycoming IO-360-A1B6, rated at 200 HP @ 2700 rpm, spins a Hartzell constant speed propeller. This is the same Lycoming used in Mooney's and Piper Arrows. 38 gallons of 100LL feed the engine through a series of 4 tanks but the pilot only sees Left, Both and Right on the fuel selector. Most models were equipped with inverted oil system.

Flight surfaces are metal, with large, balanced controls that yield quick positive action with a light touch. The rudder is very powerful, allowing a high crosswind component. Tested to 35 knots, the RAF limits operators to 30 knots direct. Later testing was at even higher crosswinds. Landing gear is fixed, with oleo's inside the structure, under the seats.



My Swedish SK61A Model came with dual instrument panels whereas the RAF version was furnished with a single panel and off-center stack. Swedish models were equipped with a boarding step and handhold on each side, and a 3<sup>rd</sup> seat in back with openable windows. These are the primary reasons I chose this model. Another perk is a Left side throttle, in addition to the center quadrant throttle. I use it for taxi with the canopy slid back. That large canopy can be locked at 4"-8" gap up to 120 Knots; a blessing during Florida summers.



**How it Flies:** Compared to my CJ-6 it has a lighter feel, and responds quicker with barely any breakout force. Roll rate feels quick even though it is actually slower at about 80°-90° degrees per second. I think this is the result of those large, balanced control surfaces.

Aerobatics are straightforward but it is a "momentum" airplane requiring sufficient entry speed as published. To gain those entry speeds, a liberal amount of forward stick is required to get moving. My biggest compliant is how slow it is, cruising at 110-112 KIAS at 65% power, 115-116 KTAS, burning 9.2 GPH. While it is rated at 130 Knots full power, lower settings burn less fuel without climbing the "drag wall". That big canopy and all those Bridge Rivets take their toll. Military Vne is limited to 185 KIAS but early testing of production models was done to 210 KIAS. Va is set at 140 KIAS and 145 KIAS for a half roll off a loop is the highest entry speed required. That is about 20 knots slower than my CJ-6, or Texan T-6 require for the Immelmann.

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For Takeoff; Rudder and Elevator trim is set, and 1 notch (10%) Flap selected. Rotation and liftoff come quickly and climb at 80 KIAS seems steep, slower than a stock CJ-6's 91 KIAS but it gets to the end of the runway at about the same altitude. Those 200 Horses at a typical light weight yield 10.85 Lbs/HP power loading, about the same as a Huosai-engined CJ-6.

Landings are a non-event, select Flap Position Full (45°) on final at 75 KIAS for normal landings, 60 KIAS for short field. Add 5 knots for crosswinds. Get down close to the runway for the flare and it "plops" onto the runway when done flying. Visibility is exceptional during all aspects of the landing approach.

As a Formation platform it is very good. Cross-cockpit visibility issues are tempered by sitting high under a huge canopy. I use the rear windows on the right side to spot a lagging wingman on a right rejoin. Set Lead power for 95-105 KIAS for best results. This gives Bulldog wingmen 15-20 knots advantage.

Maintenance: Licensed as Experimental-Exhibition, the same rules apply as for other imported Warbird aircraft. Like an Amateur-built experimental, an A&P can conduct the General Condition inspection. However, an annual Program letter must be submitted to the controlling FSDO. Born of Military DNA, there are access panels for every maintenance need. Even the lower cowl has access to change lower spark plugs and an underside panel to get at what can't be accessed by removing the single piece upper cowl. The Lycoming engine stays dry compared to a radial and my 1500-hour engine still gets 8-10 hours on a quart of oil. Far better than the 1 quart/hour I was used to with the CJ-6. All major components are General Aviation off-the-shelf. Many parts are still available as New Old Stock, as well as plenty of serviceable used parts. One exception is that bubble canopy, it must be repaired if cracked.

For access to the instrument panel, the entire glare shield removes as a single piece, held by four wing screws. Ventilation panels on both sides of the windscreen also remove for instrument access. Entry to the aft fuselage is through the battery panel and removeable cabin bulkhead.

**Gotcha:** All airplanes seem to have a least one maintenance "gotcha". For the Bulldog, it is replacement of the Vacuum pump, which really make it a Lycoming issue. Turning the propeller backwards can shear the vacuum pump coupler. Specialized removal tools can be found at Aircraft Spruce. Not as bad as changing the Air Compressor on the Yak/CJ, but reminiscent of that nasty experience.

**The Closer:** What sealed the deal for me was the fact that Mr. Sherrill Greene had acquired the entire Swedish spare parts inventory and it is stored just 75 NM away in North Fort Myers. Sherrill and his son, Tony, support many Bulldogs around the world with their inventory.

## **Some Novel Features:**

Ski Attachments: Model 101's were certified on snow skis.

**One-way fuel door/caps:** Goof proof, all airplanes should use this feature. **Canopy Jettison:** Single centered overhead lever, down then up and away.

**Shoulder Harness Release:** Pull a lever next to the seat to unlock and lean forward against the straps. Release and the harness will retract to locked position.

**Lift/Tie Down Rings:** Threaded through bolt uses the same ring, top or bottom. **Nose Gear Castor Pin:** Remove the pin for towing, insert for nosewheel steering.

Rubber Tail Skid: Replaceable skid pad.



**Ski attachment:** Four mounts are installed on the fuselage for aircraft snow skis. The label translates as "Earth Here" for the center grounding lug.



**Ski Pole Box:** The pilot's ski pole bottoms are stored in the bulkhead cut out.

**The Market:** Certainly, the Covid19 pandemic will chill the entire aviation market for a while, but Bulldog sales in 2018-2019 saw prices range from \$45,000 to \$70,000. The only real differences between these airplanes are general condition, engine and airframe times, and how much money someone put into the panel. Bulldogs are trainers, not designed for fast and efficient cross-country transport. A full 'glass panel was not worth extra money to me.

27 SK61A's were selected and transferred to University flight programs as instrument and crew trainers for the Swedish airlines; undergoing conversion to the Civilian Registry with upgrades to instruments, avionics, alternate static, and stall warning horn. My Bulldog was upgraded to an SK61D and was given a unique paint scheme for airshow display and promotion of the flight school. Flight and maintenance summaries on neatly indexed 5" x 8" sheets started at 10 hours TT and continued until transfer to the Lund University Air Academy in 2001 as SE-LLA. These aircraft accumulated less time and wear than their military brothers, making them desirable acquisitions.

Imported in 2006 and certified in 2008, S/N 38 underwent N-number changes, upgrades and a fair share of neglect as well. It was owned by Stuart Glenn of Naperville from 2012-2016. After a year of searching the country for a low-time model 101, I found my 'Dog was based just 23 miles away in Tampa by happenstance as it was not listed for sale. I guess it works that way sometimes. As of this writing, I am in the process of removing the RAF markings and getting Swedish markings made. Not exactly what it was, but in the same theme.

# Model 101 Specifications (SK61A):

**Length:** 23'-3"

Wingspan: 33'-3"

Wing Area: 129.4 ft<sup>2</sup>

Height: 7'-6"

Empty Weight: 1430 Pounds standard

Aerobatic Max Weight: 2238 Pounds with 2 crew only

Max Gross: 2350 Pounds (same as the Empty Weight of my CJ-6)

Max Fuel: 38 Gallons Useable

Rate of Climb @ Sea Level: 1034 ft/min at gross weight

Service Ceiling: 16,000 ft

Stall, full flap, power off: 53 Knots
Max Cruise @ 4000' ft, 75%: 120 Knots

**Economy Cruise: 105 KIAS** 

Craig Payne joined Chapter 579 in 1979 and was Vice-President/Board Member as well as Newsletter editor for 20 years. Craig hangared at Skyhaven in a rental with the CJ and flew about 150 Young Eagles in it.

Before he ramped his Cherokee and a Tomahawk at ARR. Craig is now based in Florida.





# Trivial Pursuit Answers



(From Page 4)

- 1) Millville, Indiana
- 2) Aladdin
- 3) Rat
- 4) Sister Nan & Dentist
- 5) Elisha Otis
- 6) The Golden Jet
- 7) Portugal
- 8) 707
- 9) Mona Lisa (>\$650M)
- 10) Tom Wolfe
- 11) Simon & Garfunkel
- 12) The biggest little city in the world
- 13) Paradise, NV (McCarren Int'l) 2,181'
- 14) Morgan Freeman
- 15) 1966
- 16) Dusty Crophopper—Dane Cook
- 17) Up to 6 months
- 18) Phil Mickelson



### **CHAPTER INFORMATION**

EAA Chapter 579 is a 501(c)(3) non-profit organization formed for educational purposes and is incorporated in accordance with the State of Illinois Not For Profit Corporation Act.

### **MONTHLY MEETINGS**

The Chapter meets on the fourth Thursday of the month, January through October and the third Thursday in November and December at the Chapter's headquarters at SimplyFly at the Aurora Municipal Airport, starting at 7:30 pm. Please check our Facebook page for schedule updates. Family members and guests are always welcome.

### MEMBERSHIP INFORMATION

Membership dues for EAA Chapter 579 are only \$20 per year and are due on the first of January for the upcoming year.

579 Chapter members are to be current members of the EAA, Oshkosh, WI.

Individual membership to the EAA is \$40 per year. Family memberships are available for an additional \$10 per year. Both include a twelve month subscription to *Sport Aviation* magazine.

A 579 Chapter Membership Form is included as the last page of this newsletter.

### **ADVERTISING IN PROPWASH**

If you would like to support Chapter 579's educational mission by advertising in Propwash, please contact:

### mikebaer150@gmail.com

Size (Page %)	<u>Monthly</u>	<u>Annually</u>
10% (business card)		\$50
25%	\$10	\$110
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# EAA Chapter 579 Membership Application

Today's Date://	EAA Member #:	New Applicant: Renewal:		
Last Name:	First Name: _	Spouse:		
Address:	Cit	ty: State: Zip:		
Home Phone: ()		Cell Phone: ()		
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Membership Category Regular (Individual) Regular (Family) Youth (Under 18) Life	Annual Dues \$20 \$35 \$15 \$500	Please complete this form, attach check payable to EAA Chapter 579 and mail to:  EAA Chapter 579  422 Clinton Ave.  Oak Park, IL 60302		