



**The next Chapter meeting for is planned for July 11<sup>th</sup> via online broadcast.**  
**Information will be sent out prior the meeting.**

### **Annual Chapter Dues (\$35)**

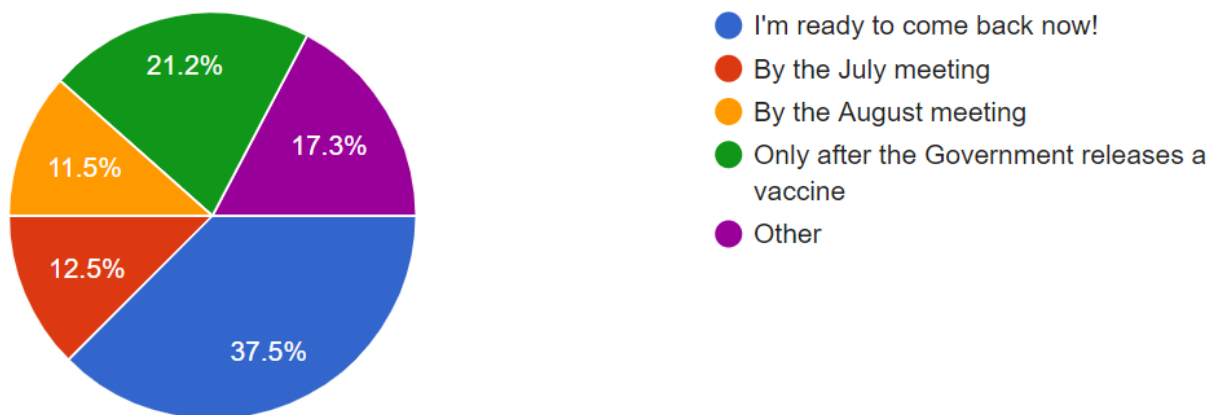
Send check to EAA Chapter 292, 4803 Airport Rd. Independence, Oregon, 97351

### **President's Message**

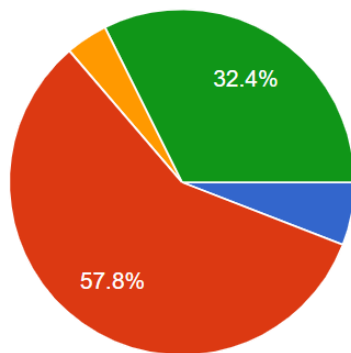
**Sorry I'm Late Again!** - Today is June 23<sup>rd</sup>. The Taledragger should have went out THREE days ago! Why is it late? We'll that requires a somewhat lengthy explanation. The long-and-short of the answer is that I was busy prepping for my IFR checkride. To find out how it turned out, scroll down later in the newsletter to the Tell-Tales section where I write up my "educational adventure!"

To Meet or Not to Meet...That is the Question! – Several weeks ago, the Board sent out a survey asking how the Chapter members felt about getting back to having regular in-person meetings. First of all, Thanks to Everyone who responded...we had 104 responses which is over ½ the Chapter. That is an awesome response! I thought you might be interested in your fellow Chapter members felt, so here are some summaries:

50% of the Chapter responders were ready to come back by the July meeting!



That is counterbalanced by 21% not comfortable coming back until there is a vaccine. 64% think the video meetings are working fine (considering the Covid situation).

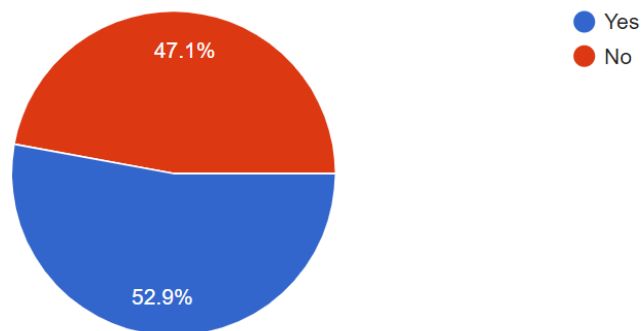


- They are great! They completely replace the in-person meetings
- They are good for now during the circumstances
- I've tried them, but don't feel like they have much value
- I've never participated in the video meetings

6% think that by using video meetings, we don't need in-person meetings at all! (alright...that worries me a little...). Overall, few people had suggestions about what we could be doing better. There was a good suggestion that members should wear masks when working in the Chapter hanger when others are present. We asked flat-out "if we had an in-person meeting in July, would you attend?" 53% said yes!

If we held a July meeting in the clubhouse, would you attend?

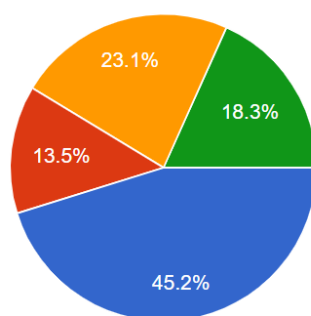
104 responses



Regarding the August Fly-In, most felt that we should just cancel and come back stronger in 2021. Many felt that they couldn't commit to volunteering for the event, and 24% said they wouldn't participate in any manner.

Concerning the EAA 292 Fly-In, you feel we should:

104 responses



- Cancel it for this year and come back strong next year!
- Hold some small Chapter member-only activity or event (no visitors)
- Hold a limited event, no dinners/forums, allow visitors but maintain social distancing
- Hold it just the way we have in the past. Covid-19 won't be an issue.

**The 2020 Fly-In is cancelled** – Based on the previous results, the Board made the unanimous decision to cancel this year's event. However, we've already set the date for 2021, so get ready for a great program next year!

We published a Facebook notice that read like this:

*It's with much sadness that EAA 292 must announce that due to the uncertainty of the COVID-19 situation, we're canceling the August 2020 EAA 292 Fly-In, Van's Homecoming and STOL Expo. However, we are full-speed ahead with our 2021 event! Save the date Aug 20-22, 2021. See you there!*



**The July Chapter meeting will be Video** – Just what we thought that we enough members and support to have an in-person meeting, the Oregon Government essentially put the “kibosh” on that by re-enacting many of the group restrictions and social-distancing requirements that are going into effect on 6/24. So, we’re scrambling to figure out our content for the July 11<sup>th</sup> meeting. If you have anything you’d be willing to present, contact us at [eea292@gmail.com](mailto:eea292@gmail.com) !

### December Chapter Officer Elections



A reminder that we will hold our Club's election of Officers at the December Chapter meeting. We really need to know soon who will be willing to volunteer for a position. Officer positions up for nomination are: 1) President, 2) Vice President, 3) Secretary, 4) Treasure, and 5) 3X Trustee positions. If anyone is interested in volunteering for one of these offices, please contact Jerry Pryce at [sierrab24r@yahoo.com](mailto:sierrab24r@yahoo.com) who is heading up the nominating committee. Depending on the position, the commitment may be just a few hours per month. We are always looking to have new members with new ideas on the Board!

Again, sorry for being late with the issue. There are a lot more topics I wouldn't mind sharing, but at this point, they'll have to wait for next month! It's more important to get something out to you soon!

Regards,  
President Mike

## Meeting Minutes

Board meeting 6/12/20

- On the call – Mike Kelley, Ernie Moreno, Mike Short, Steve Sands, Bob Schwarzler, Vince Homer, Dave Ullman, John Roberts, Rich Harrison, Dennis Fuhrman, Tim Isaac, Jerry Pryce
- Mike discussed the responses from the survey. Over 90 members had responded in the 2 days since it went out. The following items were discussed as a result:
  - A discussion about the future meetings and fly-in was held, a motion was made by Jerry to not hold the Fly-In for 2020. This passed unanimously by the board.
  - Tim is still looking to hold some form of STOL event, maybe over several days with no audience. He will be checking into insurance and with ODA.
  - We will attempt to do a meeting in July in the club house that will also be broadcast and do a possible outside event in August.
- Secretary report - We have picked up 4 new members, we are now at 180 paid for the year. There are still 40 people from 2019 that have not renewed.
- Treasury Report
- Youth – We need update from Cindy on the September date for the Young Eagles if we can still hold it.
  - Al is to be working on trying to restart the Youth Build with the kids. Two new youths on the Airpark are looking to get involved.
- Ernie – Builders Group – trying to get the Kolb finished up, Denny is working on the Lancair and the Cessna 172 for the Flying Club.
- Mike discussed the proposed fencing project around along Airport Rd. A meeting was held to respond to the proposal from ODA. Some changes have been suggested including the height and requesting that the fence not be topped by barbed wire along Airport Road.
- Mike closed the regular meeting and went into the long-term planning meeting topics.

Chapter meeting 6/13/20

- Mike opened the meeting at 10AM
- Mike touched on the do's and don'ts of a conference bridge.
- Sec and Treasure reports
- Youth group
  - Not much happening. Still waiting to see if we can hold a September Young Eagles.
- Mike went over the results of the chapter survey.
  - We will attempt to hold some form of meeting at the clubhouse next month with a Virtual component. Information on this will come out as we get later.
  - Mike announced that the board has voted to not hold a Fly-In this year.
  - Tim is still working on some form of STOL, more to come.
- Mike talked about the Taledragger, and requested more articles for next issue.
- Safety corner.
  - Mike Short talked about UAS operating areas (Drone) that have been coming up in our area.
  - Mike also talked about some safety concerns including an encounter with a model airplane at 1500' and a couple of incidents of aircraft operating in the opposite direction on the runway.
- Mike introduced Paul Dye who first showed a video about his SubSonex jet.
  - Paul then discussed the other aircraft he flies and then discussed the construction of the SubSonex.

- Mike played another segment of Mr Gizmo's (Ron) segments. This covered a ratchet that turns by rotating the ratchet handle. (*This came in really handy when removing and reinstalling the flaps on my C-182 - Ed*)
- Al Cleveland and Bruce Patton updated the chapter on the Youth RV-12 build.
- Mike ended the meeting at 11:45
  - It was noted that we had upwards of 57 people on the video bridge!

## "Tell-Tales"

### Checkride Blues

It was my intention to write a story of my successful Instrument rating checkride where I would dazzle you with a tale of me demonstrating my "piloting prowess" to the overly-impressed DPE (Designated Pilot Examiner). Instead, I'm sitting here staring at a "Notice of Disapproval" that the examiner awarded me with **after I gave him a big fat check!** How could that have happened....to me?????



Let me start at the beginning. I did awesome on the oral exam! (I'm sure that's what he meant when he said I did OK). Anyway, I did enough to progress to the flying portion of the checkride. I knew that I'd had a few issues busting altitudes while training and I was sweating the first time the altimeter said 101' over target and the DPE would say "ride over" (I'll jump ahead and say that didn't happen 😊). For the actual flight, the DPE said we'd go do the Corvallis VOR-A approach with a circle to land, then we'd do the RNAV 35. And finally go over to Salem for a simple ILS. I thought to myself "easy-peasy!" I'd practiced all of these except the circle-to-land, and that wasn't too tough. So I showed the DPE my marvelous checklists, and how I set up all my radio and navs. I was going to naïl this VOR-A approach. The DPE decided to simulate ATC instead of having me contact Cascade Approach which was fine by me. As we were getting close to Corvallis, the DPE said "...uh Lancair N164MK, I need you to do a hold north of the CVO VOR, 360 degree radial with a 180 degree inbound." WHAT...an unpublished hold???? He didn't tell me about that! All of my radios and setups were for the approach! Well, I successfully muddled through the hold well enough to progress to the next step. Now, depart the CVO VOR and shoot the VOR-A Approach. That wasn't too bad. However, I was getting nervous about the amount of notes the examiner was taking along with him shaking his head back-and-forth. But he told me that if I really messed up, he'd stop me then and let me know that I'd failed, so no-news-is good-news!

After the VOR-A approach we descended to circling minimums and he had me land. I'd planned a touch-and-go and everything was going fine until the right brake grabbed a little (which it has a history of doing...note: address in the next annual), and the plane started heading for the taxi lights. I quickly corrected and got us cleaned-up and back in the air. (The DPE later told me that he briefly thought about taking over control, which would have been the "kiss-of-death" for the exam). In hindsight, I probably should have mentioned that possibility before we landed.

Next he gave me vectors to the IAF for the RNAV 35 approach. I did pretty well on this one, but RNAVS and ILS are pretty easy (remember that comment later). I nailed the 500' decision height and waited for his signal that we made or missed the approach. He waited until we were ½ way down the runway, and he told me to simulate landing the plane by going all the way down to the runway, but not touching. That is a drill that I've NEVER attempted, but I did it and he seemed satisfied that I could fly the approach and handle the plane.

I was starting to breathe easier. I'd gotten past all the hard stuff and only had the ILS 31 at Salem remaining. I'd flown this approach dozens of times...it was easy! *Then my luck began to turn.* The DPE told me to contact Seattle Center and get clearance for the approach. We were 22 miles SE of Salem. Center answered right back and after hearing my request for SLE 31 approach, told me to contact Cascade Approach...Arrrgggg! The DPE

had given me vectors and an altitude for Salem (which I was desperately trying to hold). So I said to him, "lets just go a little farther, and call them again." That might have been a big mistake. So I waited until we were 17 miles SE from Salem and call Center again. No response...16 miles no response, finally around 15 miles They respond. I give my request for the ILS 31 approach and they tell me to "report established." I'm giving thanks that the crisis was averted when I look down and we're nearly on the segment then! Holy Cow!!! (not exactly the words going through my head). I quickly report established, and start to feel relieved again. Not so fast... The DPE says "now I want you to do the procedure turn at Lotke." For those of you who fly IFR at SLE, there really isn't a procedure turn on the ILS 31...there's a holding pattern that can be used for traffic separation and timing. **Hey...no fair!** I've never practiced that! From my experience, ILSs are supposed to be Vectors to the course, make the needles line up correct, and land. By now, I was WAY behind the plane and the procedure. In fact, that procedure wasn't even loaded into my NAV. I was quickly approaching the fix, and said to my self..."Look, I can do this. It's a simple hold aligned with the course. I'll do a timed turn, leg, turn and re-establish. Not too difficult" About this time the examiner saw what I was doing and had other ideas. He hid my map display and zoomed out the NAV so that I couldn't see the course. No problem, I know the course is 313 and 133 for the legs. I'd just use the CDI for guidance..."Now why isn't the course coming in the way I'd expected???" (side note – DPE said I was relying too much on situational awareness and not enough on the instruments)

About this time, I heard those word's I'd dreaded... "I'm afraid that I have to notify you that this task was unsatisfactory...those needles will never come in doing-what-you're-doing." In that moment it all became clear. In the chaos of delayed ATC communications, and the interjection of the timing hold, I'd forgotten to run my checklist which included 1) brief the plate and 2) Check the frequencies. I was still tuned to the Corvallis VOR, not the SLE ILS! **GAME OVER DUDE!**

In fact the checkride wasn't a total washout, I passed everything EXCEPT the "easy" ILS which I will need to demonstrate on my retest (already scheduled for mid-July). About the altitudes...the DPE was keeping a scoresheet for how many times I busted the 100' limit. I won't share how many marks I had, but I asked him how many it took to fail. He said that if an applicant "consistently" busted, they would fail...especially if they didn't take "aggressive" (his word) to correct. Guess that makes me inconsistent 😊. I actually learned a lot by going through this ordeal. The DPE didn't make me fail, I screwed up. In fact, I'd recommend this examiner. He was more-than fair. But no one likes to fail, so instead of a failure, I'm going to look at this as a "near-pass." I only have one, "simple" maneuver to finish! (but I think I said that earlier 😊) More to come next month...

*Ed- the Instrument Check ride is extremely stressful, I know this was a learning experience and you will get it next time.*

## One of Chuck's Adventures and Challenge

### Part 1

Each adventure / challenge is unique in its own way! My latest adventure started back in January, prior to the current pandemic. A young man and private pilot, Tanner, fell head over heels for N9780T, a well-cared for C-172A and made a deposit on the aircraft. I had agreed to fly with Tanner from Independence to Midland when the deal closed. Tanner only had about 100 hours





flight time. Well guess what, things do not always happen the way we plan and the pandemic hit us all. The pandemic added another element of risk and concern. Having to adjust our plans is what all of us deal with and especially pilots if we are to survive.

After the deal closed, Tanner was somewhat concerned about getting his airplane in a timely manner. I had to keep reassuring Tanner that I would get 80T to him.

Then the next part of the adventure starts to fall in place. Mike Ryer's PA-22 he had purchased from the Houston area needed to come back to Independence. It wasn't coming back the way he had planned. The Mighty Tri-Pacer, as Mike refers to it, could be my way back home from Texas. Only problem was the PA-22 was in Houston and I did not want to walk, drive or fly commercially to Houston.



Ah, wait, idea! How about a reposition of the Mighty PA-22 to Midland (KMDD). I gave Mike a call and the plan to reposition the Tri-Pacer started and the previous owner agreed to get it done. The Mighty PA-22 was repositioned to KMDD the day prior to my arrival. This was a first for me, ferry flights in both directions.

Now:

- 1) Due to the pandemic, I need to start looking at reasonably safe places to land for fuel and stay overnight. Internet searching and calling the FBO's. **Unique to this trip.**
- 2) Prep the aircraft
- 3) Pack
- 4) Look for a weather window. Note: A high pressure over the area is nice, but offers an uncomfortable ride due to higher winds in the mountains.

Things shape up for a departure early on Tuesday May 26<sup>th</sup>.

- Day one 5-26-20 for 80T
- Leg one: 755 – KLWS 2.8 hours - Note: Had to stay under and around weather to the Gorge. 2000 MSL and below
- KLWS – KLWT 2.8 hours – Note: Weather a bit of an issue on this leg and no smooth air.
- KLWT – KBHK 2 hours – Note: Glad the day is finished
- Day total 7.6 hours
- Day two 5-27-20 for 80T
- Leg one KBHK - KCDR 2.2 hours – Note: Finally, a smooth ride!!
- Leg two KCDR – KGLD 2.2 hours – Note: Rough air and high fuel price! \$5.10
- Leg three KGLD -KDHT 2 hours – Note: May need to see a dentist at home!
- Day total 6.4 hours
- Day three 5-28-20 for 80T KDHT – KMDD 2.1 hours
- Total hours for trip 16.1



Tanner

I hope the return trip home is a bit nicer. What the heck have I gotten myself into? Well the Superman colored PA-22 is here at KMDD and I have a way back home if "If I choose to accept the mission". First, I choose to take a day of rest on Friday 5-29-20.

Well I didn't totally take the day off. Did some training with Tanner. Plus, prepped the Mighty One and myself for the flight home to 7S5.

- 1) Do a good pre-flight inspection.
- 2) Fuel and oil the airplane.
- 3) Set up my equipment
  - A) GDL-39 3d
  - B) AERA 660
  - C) SPOT locator beacon
  - D) CO detector
  - E) Power cables for equipment
  - F) iPad will go in tomorrow

Note: I will not ferry any aircraft without my equipment. Most of the airports I go to are uncontrolled, so a hand-held radio is not brought along.



- 4) Get some food for the return (trying to socially isolate myself)
- 5) Get some rest
- 6) Check the weather
- 7) Wash my dirty clothes and repack
- 8) Load the airplane with items not needed for the evening. 4 qts of oil is one item.
- 9) Test fly and run airplane. Oh, it will be okay! Wrong – Wrong – Wrong

Ferrying aircraft is a challenge and a rewarding experience! I have been fortunate to have moved a variety of light airplanes. Each aircraft has different operating capabilities that makes you think about what can be done safely. Taking a marginal performing airplane across the Rockies in either direction is a challenge.

*Ed - We look forward to the "Rest of the Story" from Chuck.*

### **DUAL FAILURES ARE RARE, BUT CAN LEAD TO .... Gary Brown**

We were preparing to push back from the gate in Newark for our fairly short flight to Chicago. The fueler handed up our fuel slip, it showed we had the proper amount in the wings and belly tank, however the belly tank fuel gauges were inoperative, so they used the "sticks" which can be lowered from the belly tank, the top of the stick is a magnet at the fuel level riding on a floatation collar. The fuel slip showed we had 2500 pounds, per the "sticks". Right after takeoff, the center tank fuel pump low pressure lights illuminated. We considered the center tank empty, and calculated the wing fuel remaining compared to the flight plan fuel requirements. We had sufficient in the wings, so pressed on. Upon landing in Chicago, we had the ground crew stick the center tank. They advised it was showing 2500 pounds. I asked



them to "sump" the tank. It was bone dry! It was discovered that the reason the center fuel gauge was inoperative was the capacitance wire had disconnected from its loom, and was hanging down inside the center tank. The secondary issue was that the "dip" sticks hung up on the wire loom instead of floating on the actual fuel level, giving the erroneous reading! We pilots are pretty good at troubleshooting, compound failures are rare, but don't rule them out! Fly Safe!

### One-Shot Jet Jockey.....Dave Martin

1975 might be called "The Year of the BD-5," Jim Bede's tiny single-seat kit airplane designed to be powered by a 40-hp Hirth two-stroke pusher powerplant. *Flying* magazine devoted most of an issue to the BD-5, which had already sold hundreds of kits. The first segment consisted of a plan set and a lot of flat aircraft aluminum.

Longtime friend Peter Lert, who has flown nearly everything, was writing a column titled "Westerlies" in *Flying*, and he was invited to be the first journalist to sample the -5. The fuel pickup had not been optimized, and the flight out of home base in Newton, Kansas, was in turbulent summer air. The engine quit on downwind leg for BD-5 Lert's approach. His glider experience helped him make a normal-looking landing.

### Money

But there was another more serious problem. Despite \$1 million of startup funding for Hirth supplied by Bede, progress toward a mass-produced engine was exceedingly slow; the 40-hp engine would not be available in quantity any time soon.

Jim Bede needed cash flow for his company, which had built an attractive factory and showroom at Newton, and he hired quite a few employees including Burt Rutan, who is credited with the excellent flight control system in the -5. So what do you do to keep things rolling while waiting for engines?

Hmmm. Well, gliders don't need an engine, so why not design a sailplane version of the BD-5? I remember seeing ads for establishing a BD-5S glider club, consisting of three BD glider kits and a BD-6 single-seat towplane kit based on the boxy but successful BD-4 four-seater.

Peter Lert arrived back in Newton to fly the prototype BD-5S for a first flight. He quickly discovered that nobody at Bede Aircraft had ever flown a sailplane. The mod to the BD-5S consisted of lengthening the span, adding a tow hook and some weight in the tail to replace an engine, and not much more. The ailerons stayed where they were, which would result in considerably lower roll rates compared with the powered -5.

Lert also noted something else: no spoilers or effective flaps for glide path control. That shouldn't be a problem, he was told. The retractable gear (which your wrist flicks up or down in about 2 seconds) could be used as needed to add drag.

"Let me get this straight," Peter told me he said. "I get low on short final and you want me to *raise the gear*?" The BD-5S flight didn't go much better. The ineffective ailerons made the tow really uncomfortable. Bede dropped the BD-5S plan.

The next cash flow scheme worked better. I was one of about 6000 enthusiastic BD-5 fans who sent \$400 deposits on a BD-5D, which was to be manufactured and FAA-certificated. For a while, Bede had enough money to proceed.

### The Navy Connection

Mert Pelligrin was an F-4 pilot in VF-11, the last fighter squadron I was in. We flew together occasionally. After VF-11, he was selected for Navy Test Pilot School at Patuxent River, Maryland, and after graduation, he became a TPS instructor.



By this time, I had shore duty relating to the F-14 Tomcat program in DC, and I ran into Mert at the big annual Reading, Pennsylvania airshow. The BD-5J demo team, headed by Corkey Fornof, was performing. Mert and Corkey had been best friends in high school in Houma, Louisiana, and Mert introduced me to Corkey.

Monday, back at work in Washington, I mentioned to my boss, Commander Joe Walter, that I'd been introduced to Corkey. Joe knew about the BD-5J and that the U.S. Air Force was testing the concept of a low-cost ACM (air combat maneuvering; "dog fighting") trainer. Bede Aircraft had shipped three BD-5Js to Edwards AFB in California, and Air Force Test Pilot School pilots were doing the evaluation. Joe asked if I could contact Fornof or Bede and get checked out in a -5J during one of my monthly trips to the West Coast and write a brief report for the Navy on the experience. Jim Bede and Corkey Fornof agreed.

Holy smokes! Wow! I'm not a Navy pilot, and despite lots of hours in Navy F-4s and a few in the F-14, all of that time was in the back seat where there are no flight controls. (AF Phantoms had controls in the back.)

### **My Turn? My Turn!**

On my next trip west, I stopped in Kansas City, rented a car, drove to Newton, and spent the night test-hopping a brand new water bed at Corkey's house. I don't recommend that until the heater gets the water up to temperature. Chilly!

The next day I was briefed on the -5J, and got check-out in the famous Bede Truck-a-Plane,

which was an engineless BD-5 on a boom attached to a beefy pickup truck. The truck driver was a qualified BD-5 pilot, and the rig got up to 70 mph on the 7000-foot Newton taxiway. There was an intercom connection between the truck driver and the BD-5 cockpit. For most pilots including me, it was a first experience with a sidestick. I could climb to about 10 feet and bank about 10 degrees (but not long or I could pull the truck off the taxiway).



The Truck-a-Plane also revealed the pilot's view from sitting about 20 inches above the ground! Jim Bede had mentioned that people with high-performance glider time (which I had) were familiar with the view. Everybody who was there to sample a prop BD-5 got the same drill.

The next step was to man an actual BD-5J, accelerate on the runway to 70 knots (not faster!), pitch up gently and hold the nose wheel several inches above the runway. I was less than smooth on my observed runway pitch exercise and was invited to try again.

That was successful. Considerable crosswind and lack of direct nose wheel steering required tapping the downwind brake often, and about halfway back on the taxiway the hot wheel deflated. I called Bede Base and was told to pull the airplane off the taxiway. I'd have given quite a bit for a video camera for what happened next. Two guys showed up with a wheel. One got under the low wing and acted as a jack while the other replaced the original. I taxied back to the hangar and was cleared to fly.

### **Actually Flying**

For the jet checkouts, the procedure was for Corkey to take off first. Ninety knots was the required rotation speed, and that was maintained during the climb. We flew to a checkout area and Corkey monitored from a distance. Handling was close to delightful (thanks Burt!). The mid-length span of the -5J provided nice aileron rolls, and I tried a gentle dive followed by a loop. Airspeed dropped a lot on the way up, and I nudged the stick toward zero G (ballistic) on the top while still having pitch authority. Nothing serious happened.

Maximum level airspeed I saw was 145 knots indicated at 10,000 feet on a hot summer day. We headed back to Newton, where Corkey landed first and taxied to the approach end of my landing runway. He reported on correct touchdown attitude and altitude. That plus the glider experience (and maybe luck) resulted in a smooth landing. The flight had lasted half an hour. What a kick!

### Epilogue

I smiled all the way from Kansas City International to LAX that evening. I'd completed my first, last and only turbojet flight as PIC.

Joe Walter seemed happy with my writeup. The USAF test program came to nothing. Somewhere I still have copy of that report. Hirth went out of business. Nobody got a complete BD-5 kit, and the certified BD-5Ds were not built. Bede Aircraft declared bankruptcy.



*Ed- So you were not the one flying the BD-5J in "Octopussy"?*

## Builder Reports

### RV-14 Update.... Lyn Robertson



Between the lockdown and recent retirement, I've had lots of time to work on my RV-14A project. I got the (IO-390 Thunderbolt) engine about a month ago and installation is coming along nicely. The panel is pretty much done. The engine cowlings and wing attach are the last major tasks. The latter will have to wait until I can move out to the Corvallis airport. I've been on the waiting list for a hanger for months but haven't yet gotten a call (fingers crossed).



I am extremely grateful to Al Cleveland for his help and advice along the way. I am a first-

time builder and have benefited greatly from his counsel.

Here are some recent photos: The last one isn't related to my build but is my son, Grant, after his first solo in a T-6 Texan II at the end of April. After graduating from the Naval Academy in 2018, he earned his Master's Degree in Aeronautical Engineering at the Naval Postgraduate School in Monterey California, graduating last summer. He's now at Whiting Field near Pensacola and hopes to fly helicopters for the Navy.





### Here's a Mr. Gizmo Understudy submission from Adrian Lavrov

This is a called a sidewinder wrench similar to this month's gadget report.

Not as compact, but able to deliver higher torque for bigger stuff.

This is the 3/8 version had it for years.

Great for spark plugs, lug nuts and Cessna 172 Strut attach bolts in particular :)

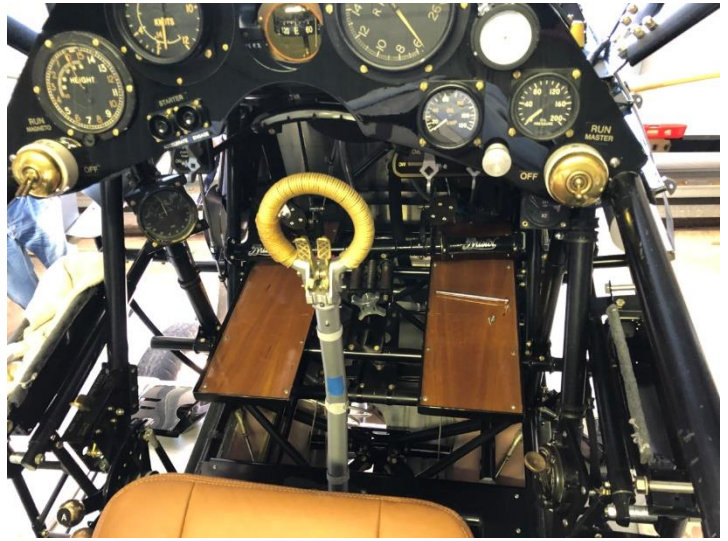
Also a substitute for a right angle drill with appropriate attachments.

But in that case, it's like using an old bit-n-brace vs electric drill, it gets the job done but slowly.

<https://www.aircraftspruce.com/pages/to/wrenches/sidewinderwrench.php>



### Bristol Bulldog Update.... Dave Ullman



Vincent Homer and I flew over to Tillamook to see Ed Storo's assembly of his Bristol Bulldog. Attached are photos of the cockpit. I could not get a picture of the whole plane as it is in a "T" hangar. Ed has spent 17yrs and an estimated 20,000hr plus on the reproduction. This is an accurate plane down to the types of fasteners. It will taxi and fly this year. It will be the only flying Bulldog in the world!

*Ed - This is a great example of the work our members have produced. I hope to see this flying soon and receive all the attention and awards it deserves.*





## More Bristol Bulldog Updates...Ernie Moreno



Ernie also visited Ed Storo and the Bulldog and brought back these pictures. Ernie has been working as the Tech Counselor on the project for the last 7 or 8 years. There is so much detail that Ed has put into the project over the past 15 years (he took 2 years out to build an RV), and he has been following the original blueprints to a T. Ed cast all the fixtures himself as none are available, did all the frame welding and it is covered with Stits. All the markings and labels are hand painted, no decals.



One exception is there are no serviceable Bristol Juniper engines available, so a concession was made to use a Pratt 1340. Ed built a fake exhaust collector on the front of the engine to mimic the look of the Juniper.



Stay tuned, in the next couple of months a "Roll-Out" party is planned at Ed's Tillamook hangar. Everyone will be invited to come up and inspect this beauty. We will send out info when available.



## Follow-Up on Intercom Install....Gary Matteson



Gary showed the work in progress last month of installing a new intercom in his Grumman Cheetah. Here are a couple of shots on the completed install showing the intercom in the radio stack and the Pilot / Co-Pilot jacks installed in the former ash tray location in the center console.



## Replacing Legacy Fuse Holders with Klixon Circuit Breakers....Rich Harrison

As part of the Annual Inspection this year on my Grumman AA-1B I decided to replace the original CBs and fuse holders with Klixon breakers. I did this on my Cessna 182 last year, and have them installed in my AA-1 Yankee project. Removing the old Fuse Holders required breaking off the front of the holders (the 44-year-old plastic shattered when squeezed with plyers) and removing the old bus from the rear.

I used the Klixon 2TC2 series of breakers as these also carry an FAA TSO certification. I used 1/2" wide by 1/16" thick copper strips to make a new bus, then covered it with a shrink tube. I cut flaps in the shrink for where the screws and contact service of the breaker touch the bus.



Ed - Thanks to all that contributed to the Taledragger over the last 3 issues. Please keep the stories and pictures coming!