

The only monthly dedicated All-Canard flyers newsletter for events, resources, updates and more in the canard flying world.

June 2020 Volume X, Issue 5





FAA Developments:

Odd side effect for ADS-B by Gary Mowad, Scottsdale, AZ: "A word of caution you can spread to the group in the next newsletter. Over the last five months I have learned to really enjoy my ADS-B system, but today I just discovered an unexpected negative to the system. It seems there is a homeowners group in Scottsdale, AZ that hates small airplanes flying over their neighborhood. One or more of these neighbors bought an ADS-B unit to track airplanes flying overhead as they descend into either Scottsdale Airport or Deer

Valley Airport. Their ADS-B unit on the ground gives them the N number of planes flying over the neighborhood. Did I mention it's in an area where approaching planes are descending for landing? To make matters worse, the neighborhood is just east of Pinnacle Peak which is an area higher than the surrounding terrain and a reporting point for VFR aircraft approaching either of the two airports. This homeowners group has reported a dozen or so airplanes to the FAA already. Fortunately, the FAA is being reasonable about the overzealous reporting by these airplane haters. I advise Canardians and other pilots to enable the anonymous mode on their ADS-B units. By doing so these, and other haters, won't capture your N number." Beagle: Of course you lose some of the benefits in search and rescue and joining up in formation – but if you are likely to be flying around Scottsdale, decide if you want to increase the FAA's frustration with the group reporting this nonsense or keep out of the focus of their efforts. Either way, if you encounter activist reporting like this, please notify us so we can share it with others.

RUTAN TIME:

From one of my irresponsible friends:

"OSHKOSH 2020: We could go anyway.

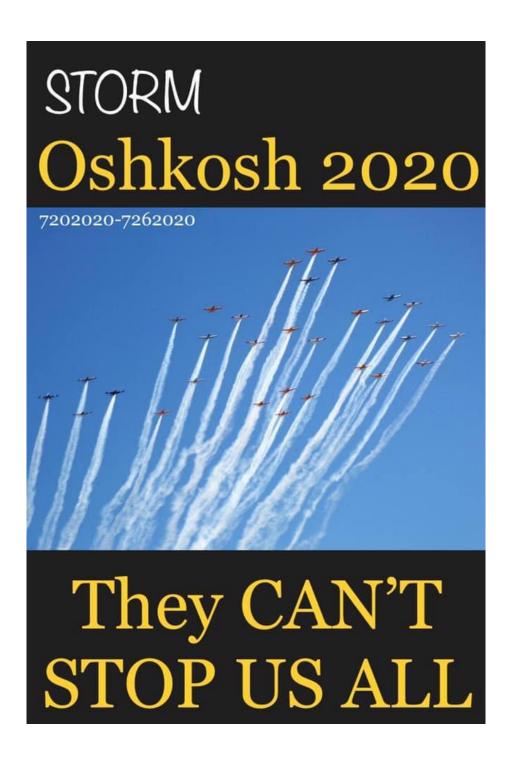
Show up with thousands of homebuilts, ultralights and warbirds and have our own airshow?

How about noon, July 25th at the Brown Arch.....".



No hotels or food needed. Just show up, enjoy the contents of your picnic basket, stay 6 ft. apart. Depart later in the day with a swing in the flyby pattern.

Enjoy the fun part of Oshkosh, without the hassle......." Beagle: Who would give us day passes? HA! Actually, I wouldn't have to cringe when the fat woman flaps here wings over the tractor or cover my ears when the stupid biplane with a jet engine bores through the sky, or that new twin hull monster with a jet slung between fuselages does the same - can't believe there are two nuisances like that now.



Promoting the Breed:

Central States has passed on to COBA - Canard Owners and Builders Association - and unlike Central States and the Canard Squadron - COBA has a website for its members - canardowners.com
I'm sure they told me, but if you haven't gone beyond e-mails in and out, like Marc Zeitlin's excellent e-mail discussions for Cozy builders, there is a lot more at the website - as with the prior topics in Marc's site. For the Canard Squadron, the history is in the Library for which I have a bibliography I can send you and I'll send you the 36 plus years of documents I have scanned from that library organized by plans chapter.

Klaus Savier, Santa Paula, CA, has been reminiscing - here's a quick summary of 30+ years of performance analysis:

"Looking back on the development of both airplanes (Varieze "Delaminator" with hopped up 0-200, Long EZ "Determinator" with hopped up 0-360) it looks like 2mph gain/year is the average. The Varieze started with a max speed of 187 mph in 1983 and topped 253 at 3000rpm in 2010. A lot of the lessons learned on the Delaminator went into the Determinator so it was quick right out of the box in 2010, a bit over 250 at 2900rpm. Now, 10 years later it is a good 20mph faster at only 2800 rpm. The typical cruise at 17.5 is >250mph at 40 mpg. You cannot buy this performance at any price! And thanks to Burt and the team from Mojave for such a great design to start with!"

Beagle: I must say I've never met anyone else who started out carrying an extra cylinder and piston to the races.

CALENDAR - Canard Events in RED (This comes in Still listed (But Check), Don't Know or Cancelled:

JUNE 2020:

June 13, 2020 **SARL** Galveston Island 150 Air Race moved to July **June 20**, **2020**: While Website down Aerotech news says it is on the schedule and features PT-17 Stearman Walk around on the flight line, in front of the Voyager Restaurant, with Diane Barney and Dustin Mosher. **And Social Distancing**. Mojave Airport's museum **Plane Crazy Saturday!** 10 a.m. - 2 p.m. Free admission! 3rd Saturday of every month.

June 25-28, 2020 USPA Flyin to Branson, MO https://www.uspilots.org/

Checking for delayed date?: UK EZ Flyin Seething Aerodrome (EGSJ

No Jackpot Flyin this year

Checking Status: June 20th, 2020 8:00 AM - 4:00 PM Northeast Fly-in

JULY 2020:

New date: July 11, 2020 (All Day) SARL Galveston Island 150 Air Race http://sportairrace.org/sarl/

July 18, 2020 While Plane Crazy Website is Down - Check Aerotech news - they said the Museum started Plane Crazy Saturday up again June 20th Mojave Airport's museum *Plane Crazy Saturday!* 10 a.m. - 2 p.m. Free admission! 3rd Saturday of every month.

July 23-26 Oshkosh cancelled

July 23 – 26 for VELOCITY FACTORY WORKSHOP AND SEMINARS FOR OWNERS, BUILDERS AND WANNABEES

Where: Velocity Factory in Sebastian FL. (masks provided) (spacing along guidelines) Hours: Everything starts at 9:00 am and ends at 4:00 each day. Lunch provided. Agenda: Three days of Seminars and Workshops on everything Velocity

For the spouses: Shopping trip to the Outlet Mall and an afternoon at the Beach Housing: Local Hotels with Reduced Rates

Transportation: Those who fly in will be transported to and from the Hotels

Seminar and Workshop

Instructors: Duane, Scott, Riley, Bryan, Randy, Chad, Ingrid, Tom, Travis, Brad, with guest speaker: Ray Howell (DAR) and Lee Blankenship (Lima Bravo Aircraft Insurance)

Cost: \$150 for individuals, \$200 for couples. This includes transportation, three lunches and a Saturday evening catered dinner with complimentary Beer, Wine and Entertainment

Departure: Sunday July 26th any time.

Instruction can be arranged any time during the 3 days if Ingrid or Tom are available. (There is an additional charge for this service)

Interested: Contact the Velocity Factory for registration. 772-589-1860. Payment by cash, credit card or check.

AUGUST 2020:

Aug 6-9, 2020 USPA Flyin to Colorado Springs, CO "Join your fellow pilots for a weekend of fun. Air Force Academy, Royal Gorge, Pikes Peak and much more." https://www.uspilots.org/

Checking status: Canards Over Georgia

August 14-16, 2020: Arlington Northwest EAA Fly-in CANCELLED

August 15, 2020 While Plane Crazy Website is Down - Check Aerotech news - they said the Museum started Plane Crazy Saturday up again June 20th Mojave Airport's museum *Plane Crazy Saturday!* 10 a.m. - 2 p.m. Free admission! 3rd Saturday of every month.

SEPTEMBER 2020:

Sep 4-7, 2020 (Labor Day) HHFC KANAB UTAH (KNB)

We had a great time with everyone last year in Kanab, and we are preparing for the Labor Day weekend event again this year. The Rutan Kanab 20xx Fly-in will take place August 31- September 3 (Saturday, Sunday, and departures on Monday). It's become popular with a number of people to arrive a day early on Friday, so we have coordinated with the hotel to block the rooms for the nights of Friday August 30 thru September 1. If you haven't been to the Rutan Kanab Fly-in, KKNB is a small town airport. The three main reasons people say they love coming to Kanab for the fly-in: 1. The laid back atmosphere, 2. The scenery, and 3. The timed event. Every year there seem to be between 20-40 planes that make the trip to KKNB, along with folks who drive in. We don't plan a lot of scheduled activities, so that people can choose what they want to do, including plenty of airport "ramp talk". A few planned group activities that bring everyone together are typically the outdoor pizza party, a group fly out on Saturday morning, the timed event Sunday morning, and a group "awards" dinner on Sunday evening. There is plenty of free time during the 3 day fly-in to explore Kanab, Kane County, and the surrounding national parks and attractions. More "back seat" and "right seat" Canardians are attending Kanab each year, and there are activities available in the area for you if you're not interested in hanging out at the airport.

For 2020, we secured lodging with the fantastic Canyons Collection hotels again (three separate but commonly owned properties in close proximity). We received great feedback from attendees again last year about the lodging, as well as from the hotel management about the event.

The 2020 room rates for the Rutan Kanab Fly-in are as follows:

- 1. The Canyons Lodge xxxxx/night + tax (*includes continental breakfast) 13 rooms available 2. Canyons Boutique Hotel \$xxx/ night +tax (*includes breakfast buffet) 20 rooms available
- 3. Quail Park Lodge \$xxx/night + tax (*includes continental breakfast) 10 rooms available

Please book Canyons Lodge as the primary hotel before the other two. Identify that you're with the Rutan Flyin group when you call to make your reservations. Any hotel based social activities will be held on the grounds of the Canyons Lodge in the common areas. Also... book as soon as you can, because they'll release our block of rooms weeks before our fly-in. After all... Summer is peak travel season. The 7 day cancellation policy will apply to reservations, even though issues crop up last minute. Please contact the hotel management for last minute issues, as they may be able get your room rented to someone else and save you the cancellation penalty.

If you'd like to see the properties, the website is www.TheCanyonsCollection.com. (Again, *please do not book online*.) Travis the owner, and is the only independent hotelier left in Kanab.

When you're ready to book a room you'll need to call them at 844-322-8824. Their desk staff have all been briefed about our group event, and will be able to take your reservation by phone. Gordon is the General Manager, and Travis is the owner for the properties. If you don't get the responses you are looking for from the person who answers the phone, please ask for one of them.

Additional lodging info: For some of you, the Cowboy Bunkhouse might be an option if you've ruled out The Canyons Collection for this year. The contact information for them is thecowboybunkhouse.com phone 435-644-8224 210 W 300 N, Kanab, UT 84741 One of our canard family stayed here a couple years ago (Jim Price) and liked it. It's a hostel. Not a hotel. But it's only a couple blocks away from our hotel.

Because the event has grown in size, we have outgrown many of the "traditional" venues used for the Rutan Kanab Fly-in. As the fly-in evolves, please feel free to add your comments and suggestions. All suggestions will

^{*}Please do not book online*.

be taken as you volunteering to help out.

We are hoping to have the Kane County Visitors Bureau bus available again for transportation to and from the hotel/airport.

Blue Skies,

Laura & Allen <u>AllenandLaura@icloud.com</u>

Phone numbers of interest:

The Canyons Collection hotels 844-322-8824

KKNB Kanab Airport 435-644-2299 (Jeff Turner is the airport manager)

Xpress Car Rental 435-644-3408

Coordinators: Allen Floyd 303-956-6566

Laura Noel 720-670-7681

KKNB Airport Manager: Jeff Turner 435-644-2299 Kanab Police: 435-644-5854

Kane Cty. Sheriff office: 435-644-2349 Kanab Fire/Rescue: 435-644-2718



Cancelled for 2020 Wings over Camarillo

Checking: Durango Airport Flyin

August 15, 2020: While Website is Down - Check Aerotech news - they said the Museum started up again June 20th: Mojave Airport's museum Plane Crazy Saturday! 10 a.m. - 2 p.m. Free admission! 3rd Saturday of every month.

SEPTEMBER 2020:

"I plan for regulars a trip to Brittany in early September if the situation improves.

Good health to all, good flights as soon as the situation allows and see you soon, do not hesitate to share your observations with me."

Still on Schedule Sep 12, 2020(all day) Mark Hardin SARL Memorial Air Race Terrell, TX http://sportairrace.org/sarl/ Race Director Pat Purcell ppurcellk@aol.com

TexasGIG - looking at dates in the Fall at Addison, TX.

Also Considering Mid-September Truckee Tahoe Airshow & Family Festival http://www.truckeetahoeairshow.com/ All Canard flyers are welcome. – Canard Contact: Tim LoDolce: flyingtiger17@gmail.com

Sep 24-27, 2020 USPA Flyin to New Orleans, LA "Join your fellow pilots for a weekend of fun. Learn how Mardi Gras floats are made, see the WWII Museum, French Quarter, Café DuMonde, and more." https://www.uspilots.org/

Sep 11,12, 2020 Rochester, NY AOPA Flyin (KROC) I can't see any clear wording on the AOPA website...

September 19, 2020: While Website is Down - Check Aerotech news - they said the Museum started up again June 20th: Mojave Airport's museum *Plane Crazy Saturday!* 10 a.m. - 2 p.m. Free admission! 3rd Saturday of every month.

Checking: Sep Rough River 800-325-1713 rooms

Checking: Fall Gulf Coast Canard fly-in at 2R5 St Elmo Alabama All canardians welcome. St Elmo Airport [2R5]

Checking: Field of Dreams Tandem Wing flyin this year at Enid, OK (KWDG)

OCTOBER 2020:

Oct 1-4, 2020 Still on Website: HAYWARD AIR RALLY from Hayward, CA KHWD to Laughlin/Bullhead, AZ (KIFP) It is NOT a speed event; fuel management and navigation skills determine your score. After a day of Laughlin's Saturday activities, pilots enjoy an awards party with great food, trophies, awards and door prizes. All types of piston aircraft are accepted. Rally proceeds fund up to three EAA Air Academy Scholarships for deserving students. www.hwdairrally.org or 530-621-1049

Sunrise 100

10/03/2020 (All day)

Confirming: ROUGH RIVER

October 17, 2020: While Website is Down - Check Aerotech news - they said the Museum started up again June 20th: Mojave Airport's museum *Plane Crazy Saturday!* 10 a.m. - 2 p.m. Free admission! 3rd Saturday of every month.

NOVEMBER 2020:

November 7, 2020 (Saturday All day) **SARL** Rocket Air Race Taylor, TX (T74) Race Director Mike Thompson grobdriver@yahoo.com http://sportairrace.org/sarl/

November 21, 2020: While Website is Down - Check Aerotech news - they said the Museum started up again June 20th: Mojave Airport's museum *Plane Crazy Saturday!* 10 a.m. - 2 p.m. Free admission! 3rd Saturday of every month.

DECEMBER 2020:

December 19, 2020 While Website is Down - Check Aerotech news - they said the Museum started up again June 20th: Mojave Airport's museum *Plane Crazy Saturday!* 10 a.m. - 2 p.m. Free admission! 3rd Saturday of every month.

Post-Flyin Contact information:

AZ Bunch "does" Payson, Arizona: "...last Saturday, 5/2/20, we had a good gathering of the AZ Brunch Bunch .. 8 canards made it into Payson, AZ [KPAN] with a runway 5100' long and cheap gas, everyone left heavy .. wahoo!"



Some social distancing by Tim Fisher & Don Berlin:



Tim Fisher on Don Berlin's wing. Social Distancing...

Non-Builder owner advice:

Those windows are very accurate...why introduce more failure points in such a key system?

If you have flown Cessnas, you know how the instructors keep track of how each Cessna in their training fleet's gauges mis-read. I always hated the "when it reads zero, you still have 4 gallons" comments - or "even when full it reads %". But we don't have that problem, our fuel windows as designed, and if calibrated carefully, are right on tank center line and very accurate (even if they don't show the last few gallons or the top 4 or more gallons) - amazing when you realize that the tank is such a complex shape. One of our new owner members installed electric fuel senders to satisfy the glass cockpit's fuel gauge option - can it be more accurate than the stock fuel windows? Where you have metal tanks out in the wings, you have to introduce senders, wires and something to display the fuel totals - but our standard canard gauges can be a lot more accurate. He emptied the tanks, he says and then to calibrate, put 5 gallons in each tank (I've marked my 5 gallon plastic jugs with a 5 gallon mark, I can get nearly 5.5 gallons in them.)

And then our owner decided to change oil and ran the engine to warm the oil up. But for the Canards, I really don't prefer putting in failure points in the process of knowing exactly what fuel you have in the tanks - instead use a mirror if you're old and can't look over your shoulder (one guy put a mirror next to the right fuel window aimed at the left fuel window so he can see both fuel windows looking over his shoulder to the right; another put a camera on each fuel window and on his retract gear

system and put the little monitor next to his right upper longeron to check things.)

The oil warmer guy then asked everyone why the fuel pressure dropped out significantly when he ran his engine whether on the left tank or the right tank. So why, at 500 hours with 5 gallons on both sides, did the fuel pressure drop on both sides? (Certainly not because of filter clogging, my guess.) Member Bill Allen asked this wonderful question: "So, - am I reading that you are doing ground runs with 5 gallons per side, parked nose down?" The humbled modifier raised the nose and found the 5 gallons were fine to build the fuel pressure right up to normal and the engine ran fine on both tanks.

But think about the prior emptying of the tank. If the glass panel says, for example, you have 10 gallons and 3 gallons, do you really have 13 gallons left - total? - better look at the windows instead - in several of my planes in the same example, it would only allow me to read 10 gallons and "don't know", as long as I had 10 gallons on one side, I'd run the "don't know" tank empty at altitude and use the 10 gallons left side to take me, with a full half hour reserve, to the refueling airport.

So what do you think the glass panel was registering with the nose down? What do you think he would have seen looking at both fuel windows? Nothing...so what is the lesson for a new owner. First, fuel is measured accurately only in level flight - and that is the number to rely on. In my planes, the parking nose down attitude would be a descent of about 2000ft/min or more, accelerating fast - you will almost never fly at that attitude unless in aerobatics. If you do nose down like that with only 5 gallons left the sump you will run out fairly quickly and the engine will stumble. So plan your landing in level flight and with at least 10 gallons left - in the windows - while level. In descent, you might not get the right information from any system - know your fuel in cruise - don't trust readings of less than 4 gallons on any tank, or the descent readings. (Even being in a 30 degree bank can make the fuel in the inside of the turn unusable.)

OK, emptying the tanks - how'd he do that? Or put another way, if you put in exactly 5 gallons, how much of the 5 gallons is useable? Did you empty it out of the drains on the lowest point of the tank nose down? Was there usable fuel still in the sump? Thank goodness for our major designs, there isn't much unusable in the standard tank, unlike those Cessna wing tanks - but to be pure (and in case the builder modified where he put the fuel feed tube, you should run the tank "empty" in level flight, switch to the other tank and never go back, any trapped fuel in the "empty" tank is then unusable fuel. With that trapped fuel, you then add x gallons to calibrate the first mark in that tank (I like a 2 gallon mark if I can see it). If you put in 5 gallons in both tanks, exactly, how do you make the next mark on the tank that is getting wider as you go up? Don't you have to then add 5 more accurate gallons? How much do you have in the tank after attempting to start and then successfully run the engine - don't you have to empty it again (or run it out in level flight) and continue the calibration up to 10 gallons, 15 gallons and if you can see it, 20 gallons per In this case, having run the engine, if you just keep adding accurate 5 gallon units - you actually have the marks too low. Don't run your engine in the process of marking your tanks. I'm sure he didn't just continue on. After I wrote this, COBA members discussed electronic fuel tank systems and alternate fuel system design. Library Item: 21CA1/

Congratulations:

To Member Zach Bloom, Austin, TX who has obtained the big engined Velocity he was after and worked his way through a **gear will not extend issue** while duplicating the test period for his own education and a **vibration and oil leak** and did a wonderful job entertaining the Velocity guys with a blow by blow. I've saved his wonderful prose in VOBA, Library Item: 9VV5.

In Memorium:

Jerry Sloan reports that Brian Martinez has died suddenly at 60 years of age leaving a pilot wife, a house in Rosamond - opposite the Edwards gate where he worked as a civilian flight test engineer, a beautiful Defiant project and a Q200. Our thoughts go out to his wife and family.

Bob Holliston reports that Bruce Smith, who was preparing a Long EZ for inspection and first flight, discovered a brain tumor and died within 2 months leaving a wife, Paulette and son in Vancouver, WA.

Builder's Help Desk:

Eccentrics...the option limited to the Roncz Canard...well, not any more. Dave Ronneberg just undertook a week of development to put eccentrics on a GU canard for a friend. He has a fixture made up to weld up the two tubes and flat strap steel to create the parts to create eccentrics for GU canards - he has the welding skills but limited time. Dave was in the process of test assembling the parts before plating and paint and attaching the lead weight again:



The white part above the eccentric is actually the flox and micro piece he attached to the canard and canard/instrument cover which goes all the way to the canopy lip. There is a matching piece built into the fuselage side. He's developed a very nice drain system to keep the instruments free of rain with the canopy down for the Berkut - this Long EZ modification brings the eccentrics and instrument/ canard cover into one piece. I have a complete description of the Berkut canard/instrument cover and potting the eccentrics for the Roncz canard that would explain this in more detail. Library Item: 12SIII2.

Key Maintenance Tip:

Gary Hunter, Lake Jackson, TX and his science: "It's important to know that RTV requires moisture (humidity) to cure properly. It will take much longer for it cure in Arid environments. I have had success in placing a wet paper towel over the area while curing. Re-wet to towel occasionally with a spray bottle. Having said that, when you apply to RTV to the glue area, allow it sit for a few minutes before you stick it in place. This will give the RTV a chance to absorb some moisture from the air. Otherwise, the RTV along the edges cures first, and blocks migration of moisture to the center of the glue area."

Gap seals for the Gap seals.

Klaus Savier, Santa Paula, CA on achieving cooler engine temps: "I did not mean to imply that drag reduction "might" help with cooling. It does of course. With our fixed pitch props you also turn higher rpm which makes more power and that negates some of the help you get with the cooling. If you reduce drag and then use a higher pitch prop to turn less rpm for the same speed, then the cooling improves greatly. This is why I run very high pitch props, 92" and 104" pitch on the 0-200 and 0-360 respectively. Terry Schubert and others have written a lot about measuring the cooling pressure difference between the top and bottom using an airspeed indicator. That should be a first step. If you don't have at least the 5.5" of water pressure, you have leaks. Differential pressure transducers are \$25 or less and if you have a Dynon or Garmin engine monitor, they can supply the 5V for it and record your data. The second step: check your temps on each ignition source alone. One of them might produce much higher chts than the other. That would indicate a timing issue." Later: "With regards to cooling pressure differential sensors, they are made by "Freestyle" and are available from Digi Key and Mauser. You just need to pick the pressure range you want."

Beagle's Interesting product: I've been using the Ryobi portable compressor on my bicycles and aircraft and find it so much more convenient than turning on the compressor and waiting, the long hose out to the aircraft, or using an air bottle, and certainly better than wondering if the tires are inflated enough. You

need a charger – so if you must buy a Ryobi portable drill or their fantastic little circular saw, it is worth it.



Member Tim Sullivan, Placerville, CA asked the Cozy builders: "Need a source for seal tape on the wing seams. Use to buy it through a glider supply outfit but they do not have it anymore."

Member Joe, Person, Bothel, WA answered: "I like the Bowlus tape."

https://www.cumulussoaring.com/store/index.php?route=product/category&path=18_172

Beagle Confession: While some people simply filled the gaps with silicone, Beagle was lazy, but also saw tape over gaps on other racer planes at Jackpot, Wendover, Mesquite and Kanab years ago and had no clue that it was a real speed mod. But the one that I really missed was a thick silicone gap seal squeezed between the spar and wing (with initial release tape on the wing) to seal off the engine compartment - both for cooling but more importantly so that no pressurized air will go out the wing/spar gaps where it creates a drag fence above and below the gap.

Requests to Individual Members:

Do you have Brock or other pre-fab parts?

Beagle, in addition to the odd social distancing flying, has met with a guy who is taking up a unique design based on the Varieze - my mental picture of what he described looks like the famous Bruce Tifft "Bees". David Coscio asked for the Brock hardware I might have from the various sources, and frankly I had less than 50% of the parts he listed. I've provided used or new sets for a guy in Argentina (Varieze), Italy (Varieze) and more recently Portugal (Long EZ). David Coscio put a big dent in what I keep for people, although I seem to have an undented supply of manual retract systems and manual speed brake parts. I got a good part of these things I sold him from others who trusted me to track Brock parts

I find for sellers so I'll be sending out checks to them. If you have spare Brock parts you don't think you will need, please mark them up, list them and send them to me and I'll get them to new builders as I can. If you have a list of Brock type parts you make, please give me the brock (Rutan) part number so I can refer new builders to them - I have one old Brock catalog document related to canards to send if you need it.

What the flyers are doing:

Jeff Glynn - Pagosa Springs, CO: "...redid the panel in my Cozy N59CZ, second 10" dynon panel, new com and transponder, ADS-B in and out; all the old gauges gone! The amazing thing is it all works! Added new intercom too! We've been up in Pagosa Springs Co. for 9 weeks. Came for a few weeks then all the Covid 19 debacle occurred so we stayed here. Been flying about four times since all the upgrades, all seem good. Sold my Vegas hanger but have one here so all's well with us!"



Dan Ledbetter, Italy, TX told me he liked the photo in the last mailing -I asked which photo "Lol, all of them. My eyes are not getting any better & looks like my Eze days will just be memories & pictures I can see.... Some of these pic's bring back memories of when I used to fly N1122 from Waxaxachie, Texas to Roseburg Oregon. Beautiful times & wonderful experiences. I'll never forget the first time I flew into page AZ, and the beauty of the whole of the Lake Powell area is burned into my memories as is the first time I witnessed the Grand Canyon. Yes they were a bit upset I flew a little low over the water, I however , as a younger man with a Varieze wrapped around me, I simply could not resist the urge..... Blessed memories for sure!..... (Lee Mast one of the builders of 1122) told me he flew it through the Grand Canyon (prior to my purchase). I did not witness that venture, I did however read the newspaper article (pinned on Lee's garage wall) of a "space type ship" that flew right over the water & flew up the bank near the lodge at Crater Lake, OR. Mr. Mast also told me of a horse he had & a story with a mountain lion (I won't go into that one). All this to say I heard tell of these stories during my inquiring about

N1122, I of course at first thought it was maybe BS.... After I took delivery of the plane & during the 2 days I spent with Mr. Mast & Mr. Elhers, (the other builder of N1122) I noticed the old newspaper clippings of the Crater Lake space ship story & a Mountain lion/horse story pinned on a small cork board in their shop. Yes sir, good memories, Thank you sir!"

Bob Hutter, Bayfield, CO: I thought Bob Hutter was at Durango Airport 6689 msl (KDRO) and I'd studied Animas Airpark 6684' msl (00C) right next to it when I visited more than a decade ago - thinking Animas was kind of short. My Beagle formula is 1 foot of length for every foot of elevation for every runway over 3000' elevation. So I shied away from Animas. "We moved to Durango 14 years ago. Animas Airpark is just under 5000 ft long. I've flown the C 310, the Glasair and the Long-EZ out of there. The Long EZ uses less runway than the aforementioned birds. On a warm day in September (like on my way to Kanab) with full fuel, me and bags for 3 days, the O-320 Long will be off in about 1700 ft. This would be right at gross weight. No pucker factor there. Of course density alt needs to be considered, especially for a 235 powered bird and/or pilots not accustomed to high and hot airport flying. Ground speed on approach can be quite high. Of course DA in the winter helps with performance anybody squeamish about Animas can always go to KDRO, which is only 6 miles away. 9000' runway there." Beagle found the O-235 would typically lift off a the same place on the runway as the heavier 0-320 bird - of course accelerating more slowly.

Benoit LeCoq Viuz en Sallaz (Annecy), France to COBA:

"I am finally ready to fly again with my new EFIS panel. Here is a picture of the plane:



Weight before new panel 554 kgs or 1220 lbs - weight after 560 kgs or 1234 lbs. So it is a 6 kgs or 14 lbs increase which is close to what Marc Zeitlin had (as I recall). Now I am left with the following items before flight: Check the mags timing (scheduled next Sunday), run the engine to check for leaks. All configurations is done, autopilot ground check is ok. The GTN 650 is checked. I did a full yearly inspection of the plane this week. So I am hoping to fly next week."

Beagle asked Benoit LeCoq of Viuz en Sallaz, France how many hours or months this took and got the European answer that surprised me: "It is a rather long story. I had to change my radio to cope with the 8.33Khz bandwidth regulation change in Europe. So I initially bought a Trig radio and transponder

set for that which happened to be my 2017 Christmas gift. Then I kind of thought I wanted a bit more. So I started looking at the EFIS market early 2018. There were 4 providers: MGL (the South African company), GRT Avionics, Dynon and Garmin. I had set up an agreement with the MGL French rep but Marc Zeitlin told me he had lots of problems with that brand so I canceled. I then sold the Trig radios to a friend. GRT had no rep in France so that was not convenient. visited Dynon in Seattle in June during one of my last airline flight as a captain - I retired in June 2018. Dynon folks were very kind and I was impressed but a friend running an avionics shop near Paris were I used to fly some time ago told me they have interference problems with Dynon equipment. So I ended up choosing Garmin on which I had a good deal with an avionics shop near Dinard in Brittany. I had an agreement with them in July 2018 and I received all the equipment in November 2018. The last flight with the Cozy before the panel swap was done in December 2018. I had the new panel structure water cut in January 2019 and the panel decoration done in March 2019. In the mean time I had right hips prosthesis surgery in January 2019! I did all the panel wiring between March and July 2019 at home while doing airplane panel dismantling at the same time to pick up some of the parts I wanted to reuse." Beagle's experience with an MGL panel was not good particularly as to user friendliness, but in the US GRT has proven to be so user friendly for an old fellow like me, GRT doesn't seem to make older GRT systems into orphans and they don't seem to require exclusive use of GRT equipment - but I'm not an installer. It also seems to be a good bit cheaper than Dynon and Garmin, although their prices have come down too.

Benoit again: "The new panel was tested and configured at home July to September and mounted in the airplane in late October. The work then got slower as I am living 40 miles away from the airport and we moved homes between November and January. I did quite a bit of rewiring the plane until March 2020 but then the COVID came up. So no Airport work until early May. Now I am ready and hope to fly again next week (June 7th). So it was nearly a 2 years project!"

Al Smith, Rancho Cucamonga, CA just made a nonstop trip from Cable, a privately owned airport just East of Los Angeles to Hondo, TX (988nm) and back again nonstop — we almost always have strong tailwinds going East, headwinds coming back — with oxygen he could have gone further:

"Strangely, the leg out had the headwinds and almost no wind on the way back. I got great performance out of the plane! At 12,500, 8*C, WOT, 18.2" MAP, 2500 RPM and running LOP, I burned 6.1 GPH and indicated 152 MPH...192 MPH TAS! Pushing the mixture in to peak power (7.5 GPH) the cruise speed was over 200 MPH TAS. Not Berkut numbers, but I'm very happy with the Cozy." This was Gaius Cadwell's O-320 Cozy a few years back.



(For our European friends, that leg equals nonstop Londong to Romania or further than Rotterdam to Tunis in North Africa. A little encouragement for the builders.)

Ed Lovrien, Missoula, MT: "Yes I am (still interested in the news). I keep having surgeries which kills my building. When this vivid crap backs down I am going to start (getting involved again)." Beagle: My sympathies to you and all Virus delayed builders and flyers. Ed has been working from original Limo-EZ plans.

Jerry McAdams, Ft. Worth, TX who had to sell a Long-EZ project half done: "I am flying a 1958 Cessna 172 - a vintage aircraft. Larry (my airplane partner) and I made our first flying trip to Oshkosh last year and camped out under the wing for 7 nights. We landed Thursday before the show began, so the Arrival Notam did not apply. We got there early to get a good spot in the vintage camping area - just in time to get rained on really hard. The tower was really busy, but it was great to make my first landing there. I see my friend Bill James once in a while, and enjoy reading about the EZ activities."

Klay Gilbert, Lindsay, TX: "My Long-EZ is still unfinished. I have not touched it in about 10 years (my son is 10 years old). My job keeps me pretty busy and my family takes up the remainder of my time. The Long-EZ patently awaits me."

Troy Chaddon, Oklahoma City, OK: "Still flying my Long EZ.



I put in a Stratus ESG Transponder - it works great.'

Formation:

The SoCal Canard guys have contemplated Formation training a number of times - Beagle and Cookie did a bit just before the Covid19 lockdown. We have a list of people who have been interested but only a few have shown up to be briefed - next time's a charm.

New members:

New area code in the address list:

248 (MI):

Already a member:

00 MILLIN, ANDY "EAGLE 1" & THERESA 228 Cushman St., Plainwell, MI 49080-1349 269-365-6154(cell) 269-685-1643(H) 269-409-1643(text)

amillin@sbcglobal.net Velocity XL/FG:N114MV 475 hrs IO-540-D4A5

http://www.kal-soft.com/velocity Padgham Field (35D)

Joining:

19 BOROZAN, PETER T. 275 Lakeshore Dr., Battle Creek, MI 49015-3169 [269-] Pete Borozan@Comcast.com Long-EZ:N14LE He and his son are working up plane in Ft. Wayne, IN for now. Flying Nickname?

Already a member:

18 BROKAW, TERRY 17021 Cotherman Lake Rd., Three Rivers, MI 49093 734-730-3254 [269-] TerryBrokaw@GMail.com A&P, AI, EAA Technical Counselor, Built Varieze, Berkut:Ch8 Three Rivers Airport (KHAI)

Joining:

20 BOZZONI, MASSIMO "Madmax" Viale XXV Aprile n.88, 10133 Torino, Italy

maxxbozz@icloud.com wide Cozy IV Project - possible twin:



"...Since I was young I have always been an aviation enthusiast - which led me to become airline pilot, first gliding, then flight engineer, then DC9, MD80, B767 pilot, then A320, A330, B747 Captain ...now at 66 it is all over. So I had this wonderful idea of starting this project to fill my days and realize my dreams ... you understand! I am interested on using a Roncz canard on my Cozy IV...And more my crazy idea to slightly enlarge the fuselage 6 inches, and possibly put a couple of engines back like the velocity twin we'll see. So I'd like to join your group and get more help from you guys."

Joining:

98 MASONE, JOE "Jam" POBox 31537, Tucson, AZ 85751-1537 520-906-1943(Cell) jamjet@comcast.net Emeritus sold Long-EZ project looking at getting involved again

Joining:

20 CAULKINS, JOHN "BURGERILLA" 27414 Donald Ave., Bay Village, OH 44140 440-665-4758 caulkinsjw@gmail.com A&P 300 hrs Cessna, a good while ago. Bought: Long-EZ:N61TG O-360 Elyria Airport (1G1)

Joining:

20 SCHOFIELD, STEVE "Bandman" 2099 Big Lost Dr., Gillette, WY 82718 307-670-1660 (Cell) pilot2112@gmail.com Emeritus - in throws of evaluating canards. Gillette Campbell County (KGCC)

"I'm a private pilot that mostly rents 172 / 182 at our local airport (KGCC). I also fly a 182T G1000 for Civil Air Patrol. I've always had a love affair with the Rutan planes and have wanted to check out a Long-Ez (or any canard) up close and in person. Anyone nearby to Gillette, Wyoming that would want to meet up?"

"(Gillette is in the Northeast corner of Wyoming) Casper (KCPR) is less than 1 hour away (by 172 airplane) Cheyenne (KCYS) is 1.7 hours away by air. I would like to get to know as many as possible! I have a contact in Casper, WY (Ross Burk) already. Ian Huss in Boulder, CO as well. Both have offered to give me the grand tour."

Joining:

08 HOLMAN, SAM 93 Bayswater Ave., Ottawa, K1Y 2G2 Canada 613-297-2151 sjheracer@GMail.com bats@sambat.com Defiant:Ch4, E-Racer:ch8 Rockcliffe Flying Club (CYRO)

"In 1987 I purchased the Wicks Defiant kit stored indoors never subject to sunlight. 1990 I purchased the Defiant bow from Featherlite along with a Mooney nose wheel. 1997 I purchased MSG epoxy. I hold plans for both the Defiant and the Eracer. This is as far as I have achieved in this varied and busy life. Sam is in the baseball bat business." sambat.com

Changes in E-mail:

New Address:

18 RANZENBACH, EDWARD A. "SPANKY" PO Box 801 Forest Ranch, CA 95942-0801 530-592-6869 ranz@earthlink.net Long-EZ/Zipper:N16AV aka "Airworthy Elegance" SoCal to Chico Airport

08 MEYER, DAVID J. "OSCAR" 8707 Claremont, Granbury, TX 76049 630-660-6258 [817-] oscarm98@yahoo.com Bought: Long-EZ:N55PM 690 hrs O-235-L2C Pecan Plantation Airport (OTX1)

04 WOOD, CHRIS A. 4893 Alpine Dr., Everett, WA 98203-2823 310-430-2492 chrisw1313@aol.com bought: Varieze: N123JM O-200 986 hours hrs Flying Nickname?

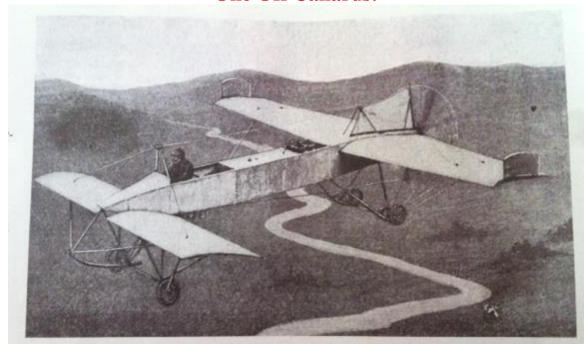
01 GIBBONS, BARRY 10025 Willow Cove Rd., Huntsville, Al 35803 barrygibbons1@gmail.com Emeritus: Sold Velocity sold Varieze

13 MAK, JOHN 7 Ivy Ln., Setauket, NY 11733 347-756-0511 (Cell)

Jemak814@Gmail.com Bought: Cozy IV:N55CR 800 hrs, O-360 sold Long-EZ

Brookhaven Airport (KHWV)

One Off Canards:



STABLE AIRPLANE DESIGN: The gifted Polish inventor Stefan D. Drzewiecki was known for his work on propellers, submarines and this interesting airplane, 1913

The Covid19 Effect:

The FAA concerned about private pilots carrying paying passengers:

27FA16 May'20 FAA letter to remind private pilots they cannot act as an air carrier - based on rumors during Covid19 time frame

The Arizona Bunch and their Saturday ritual has changed a bit - not going into the restaurants and sitting close. Beagle joined the TGIF flyers at John Wayne again - this time to Santa Ynez - a great way to see Southern California. It was good to meet up with Dave Kolstad, Charlie Plumb and Eric Cobb who took my hint to fly up there. I suggested formation but maybe that's not distancing enough... Turns out the Compton Bunch of EZs had already arrived and have been going out on Saturdays and "social distancing" too - maybe they will be the core of the "SoCal Bunch".

Odd State Rules in Australia:

Paul Shluter, Campbelltown, Tasmania: "Aviation is managed federally (in Australia). The state laws governed ground based aviation issues. Aircrew are exempt from isolation requirements. The most confusing thing for aviation has been the state of emergency which has prompted the state to make laws about aviation that were previously absent. For example the state premier has banned interstate flights from landing at private airports. I assume this excludes emergency operations and mercy flights. Flights to Flinders and King Islands are banned as they have no CV19 cases."

One of our guys has been stuck in Japan all this time - he's coming home mid-May but then has to be in quarantine for 2 weeks after he comes home.

One of our guys provides some humor: "My life hasn't been affected much by COVID-19 except that for the most part I haven't been able to instruct any. Other than that I'm working on a tugboat off the coast of Florida right now. Life is good. Someone said that if the whole world is on lockdown and your life doesn't change you may be a recluse. Oh well I guess that fits my description."

Odds & Ends. I hear from one person, one in the Cirrus club of 4000 has had and recovered from Covid. 19 Covid positive in 4500 FedEx pilots. 1 Canard Squadron pilot from a US hot spot with serious Covid treatment in the hospital, not including respirator - and his family in less serious condition, in the Canard Squadron. I've heard from several pilots who "think" they had Covid19 but don't know.

Bruce Hughes is stuck on Maui. He says tourists are still coming to "They may know that there is virtually nothing they can do except look out the window or hop into bed.

- (1) NO rental car and (2) NO restaurants
- (3) NO shopping, although LOCALS may be able to do a little shopping on May 17
- (4) NO walking around anywhere except on the beach and in the ocean.

They cannot even SIT on the beach.

We are still getting about 250 tourists per day (compared to 3,000).

Each one is tested for temperature and warned to do virtually nothing except call room service.

They have to prove that they have a hotel reservation.

Daily the police find someone breaking the rules. So far about 10 people have been sent back."

Former Swissair Pilot, Member Peter Fischer, Bachenbulach, Switzerland, who's Long EZ is in Germany a few miles away: "Germany, Austria and Switzerland agreed to partially reopen borders tomorrow, aiming to completely open mid-June assuming there will be no jump in virus infections, otherwise they might close again. I'll go to the border Sunday talking to the guys, hoping at least to see doc to renew medical, professor said 2 weeks ago, eyes should be good for flying, hope he is right.

German members in the club started flying yesterday BUT there are lots of rules to follow! Masks, no gatherings, showers closed, clubroom partially open, flying without Passengers, license renewal with instructor possible, Masks and Gloves compulsory, disinfecting cockpit

Swissair's fleet is grounded, out of 100 only 5 are in service, but mostly empty. I checked passenger figures to NY, the only Swissair station partially open in US, 23 passengers inbound, 25 back, they received government funds of 1,8 Billion sFr, they are aiming to restart mid-June, however still no sanitary rules published yet, economy is terrible here!"

Peter Fischer, Bachenbulach, Switzerland: "Starting a few days ago short flights, training flights etc. are allowed, however no border crossings during flt! I made it to go by car to

Germany with a special permission signed by clubboard saying I have special duties. New medical received as well on 18th, very happy all went well in the end."

Vance Atkinson agrees with Bill Meher - which he and I find amazing: https://youtu.be/dEfDwc2G2 8

A little humor in the US instructions:

https://www.youtube.com/watch?v=wVs5AyjzwRM

pump has failed.

is EAA's Sport Aviation magazine

Added to the Electronic Squadron Library:

```
2KP31 Mar 2019, pg 46 Making Sandable Foam Glue/Filler An epoxy alternative that's easier to
work with for low stress, structural applications by Vince Homer
2SA9 Dec'19, pg32 "What Should Be in Your Builder's Log - Documenting Your Project by Lisa
Turner
2SA10 Dec'19 pg12 EAA Introduces Free On-Line Builder's Log by Charlie Becker
3MS65 May 2020 Plans Chapter Order Canard Pusher detailed changes on Varieze plans Collected
by Todd DeVito and Organized by Robert Chester
3MS66 Jun'2020 Canard Center of Gravity Calculator (for models)
3SA88 Feb'2020 Index pages and pg 60 Excalibur - One Man's Dream, about Allen Floyd's Berkut
3SA89 Mar'2020 Pg 115 Washington Rutan Long EZ about Bob Holliston's Second Long EZ
9VV5: Apr 2020: Familiarization ride results in gear stuck up, major oil leak and a
vibration for Zach Bloom - writing in VOBA.
9VV6: May'2020: Velocity pages of schematics for the gear and gear warning systems in VOBA
9VV7: June'2020: Greasing the bearings by VOBA's Steve Campbell
21CA1 May/Jun'2020: Long Discussion on modifications to fuel system
Smith, Swain, Collier, Savier, Spreuer, Kriley, Holliston, Jones, Orr, Hart,
James, Jewett, LaDolce, Rutan, Brokaw, Saccani
22CZ13 Apr-Oct 2012 (May 2020 added) Discussion on ELT installation and antenna issues
22MS90 1980s EDM900 Operating Manual
23CZ36 Jul'2012 Cozy discussion on Baffles available by Swenson, Burke, Zadow, Walsh
23CZ37 Jun-Dec'2012 Discussion on the Run-in of a new engine with a new airframe (advised
against by all canard designers) and engine test stand options by Zadow, Aliev, Springer,
Vinnola, Andres, Briggs, Furnweger, Basol, Ugolini
23CZ38 Dec'2011 How to deal with a stuck valve, Allen, Sanders & Miller 23MS15: 1986?:
Prince Aircraft Co. Propeller Brochures.
23MS16: 1985: Hoffman Propeller Brochures.
23MS17: Jul 1985: Ellison Throttle Body Brochure and Mar'84 SA article on same.
23MS18: 1985: Precise Flight Inc. brochure: "Standby Vacuum system" - (Exhaust system).
23MS19: Jul 1981; CAA Maintenance: "Aero Engines Involved in Propeller Strike Accidents -
Recommended Practice.
23MS20: 1988: Aircraft Spark Plug Service, Inc. Brochure.
23SA60 Feb 2020, page 94, The Oft-Overlooked Intake Gaskets - Don't let Failure Sneak Up on
You by Vic Syracuse
26SA2 Jan'20 pg38 The Science of Sitting - The Oregon Aero Story by Lauren Paine
27SA38 Apr'20 page 38 "Engine Out by the Numbers - Practice Leads to Preparedness by Charlie
Precourt
28SA24 Apr 2020 pg 100 First Flights - Make Sure You and Your Airplane are Ready by Vic
Syracuse
30MS64 May'20 Tonya Rutan's "Daisy", the Super Petrel article by Roger Helton.
30SA77 Feb'20 pg 24: Traps and Tips for the Second Hand Homebuilt Owner by Lisa Turner
30SA78 Mar 2020, Cover and Pg 86 A Very Storied VariViggen - 40 Years of Fascinating Flying
about Charlie Spinelli's A/C by Beth Stanton
30SA79 May'20 pg 30: Second Hand Homebuilt Owner part 2 by Lisa Turner
30SA80 May'20 pg 96: The Biggest Question in Homebuilding - The Answer Might Surprise You
(Can I Build an Airplane) by Vic Syracuse
30VV18 May'20 VOBA Velocity modification to Owner's Manual to cover the avoidance of use of
```

high electric fuel pump setting for takeoff, and use that setting only when engine driven

Note: The Bibliography of the Library can also be used to locate canard and building/flying advice in your magazine collection. The first letters are the source of each item, i.e.: SA

Oh and Trivia:

From Last issue: Member Ric Lee, of Sandy, Utah: https://grownmenstuff.com/someone-turned-a-learjet-into-a-street-legal-42-foot-limo-and-its-for-sale/

Of course there is an EZ version of this:



And Cristian Casanova, Lo Barnechea, Chile reminds me of the FlightAware website where you can track recent flights with transponder codes other than 1200 at https://flightaware.com/

