

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

June 2019 Volume IX, Issue 6

Picture of the Month:



Devin Acklin's fisheye view of San Diego

FAA Developments:

An international look at ADS-B systems:

Canadian member Phil Johnson: "If you don't already have a transponder and you have, or are planning to have, an EFIS, consider the uAvionix echoESX which is an extended squitter transponder giving you ADSB OUT on 1090 MHz and ADSB IN on 978 and 1090MHz. This has worldwide compliance whilst still having the UAT IN feature. Grand rapids have them for \$1700 and you will also need a \$500 compliant GPS from uAvionix or GRT (or other sources). Notice that this system works will most EFIS manufacturers except Garmin. For someone wanting a transponder, this has to be the best deal out there. For Canadian builders this should meet the requirement for Canada in 2023 whilst also meeting the US requirement." https://uavionix.com/products/echoesx/

Check ADS-B:

Non-member John Dibble asked the VOBA how to check his ADS-B output - Member Wade Tsai, of Seattle responded:

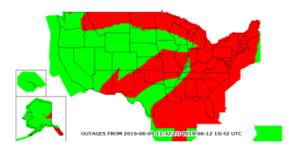
"I checked my ADS-B install

with https://adsbperformance.faa.gov/paprrequest.aspx"

VOBA discussion pulled up a reference to an Anonymous squawk: code 1000 "Wikipedia to the rescue: https://en.wikipedia.org/wiki/List of transponder codes"

GPS degraded?:

Member Ric Lee sent a web article that indicates that the GPS signal can be degraded and that affects different systems differently - many cancelled flights for Collins Glass Panel equipped airliners... https://hackaday.com/2019/06/09/gps-and-ads-b-problems-cause-cancelled-flights/?fbclid=IwAR1NCwVgIO 18NSro4vPwouDSigYnd9O Rzgv5 5wFvMjpyEuBicy1E2mzU



RUTAN TIME:

Burt Rutan attending Oshkosh: "With the hull recent mods, Friday Skigull flew great from the runway. However, the water testing on Saturday showed that I have a lot more to do to have an acceptable seaplane. Basically, the design was intended to jump up on water skis during water takeoff and landing, in order for it to have shock-absorption, thus able to handle rough water better than a conventional seaplane. However, the performance on water at speeds below ski extension has precluded operation of the skis. Modifications to fix this will likely continue to be extensive.

This has been by far the most difficult airplane to develop than any of my previous ones. It has also taken the longest, by far. In 2013 I set some near-impossible goals for it. Also, I made some critical design mistakes along the way.

Skigull will not be flown to Oshkosh this summer. However, I will attend and will do four talks there. When SkiGull can operate from water, I will fly it to Oshkosh AirVenture. I do have a formal opportunity to thank all of you for your support..." I've had suggestions that a Rutan canard rendezvous should be planned. If anyone wants to plan that, please get in touch and I'll share it with the others.

See Calendar for the known Oshkosh speeches...

CALENDAR - Canard Events in RED:

JUNE:

Jun 29, 2019 French Valley EAA Chapter Bar-B-Que per DOUG KANCZUZEWSKI Fallbrook, CA, 951-279-5770 doug@customstudio.com

June 30th, 2019 washout date: July 1, 2019. 8:00 AM - 4:00 PM Northeast Fly-in (Former RV-Canard) Fly-in Rear of KLWM N. Andover, MA Canard Contact: JOEL VENTURA 978-475-6875(H) ventura@brandeis.edu http://www.106.eaachapter.org/xxxxxexperimentalflyin.htm

June 30th, 2019 UK EZ Flyin Dan Gay, Great Yarmouth, Norfolk 011 44 493 301534 dansmusic@me.com Seething Aerodrome (EGSJ): "...the Canard Fly-in at Seething is planned for Sunday the 30th of June, with an alternate bad weather day yet to be decided. B and Bs can be organized for those staying overnight. Once again Dianne is sorting the buffet and BBQ. She does amazing food and you won't be disappointed. It is still to be decided if we will be having the

competitions and prizes this year, but we will keep you posted. All aircraft are welcome, so tell whoever you think might be interested in a fun day out."



(Some of prior year's comments: Our very own Rough River of sorts. I posted all the info on our Facebook Page and will keep you updated on how thing progress. Hopefully we will get some good video and photos of the event."

JULY:

Fascinating tidbit:

June 1st through August 11, 2019 Colorado Aviation Museum, Granby/Grand County Airport Any Friday or Saturday 11am to 2pm visit the museum and learn about private pilot Dwight Eisenhower who used to come for vacation at this airport between 1948-1955...

Jul 13th 2019 - Truckee Tahoe Airshow

Good luck and think about coming to our airshow on July 13th. It's a one day show (Saturday). The longtime Executive Director Squadron Member Tim LoDolce 530-386-3100(H) 530-587-3500(O) flyingtiger17@gmail.com www.TruckeeTahoeAirshow.com

July 20, 2019 Grass Valley Airfest www.ncairfest.com

Jul 20, 2019: Mojave Airport's museum *Plane Crazy Saturday!10 a.m. - 2* p.m. Free admission! 3rd Saturday of every month.

22-28, JULY 2019 Oshkosh EAA.Org/en/ Airventure

I've got some of the Canard Schedule - stay tuned for the Schubert/Hertzler - who will set their timing after they know the conflicts, Klaus Savier, more Burt and Dick Rutan spots. Nick Jones, Corning NY: "...the 2019 [Oshkosh] NOTAM is available."

The Velocity guys have a webinar about going to Oshkosh that is very thorough for the first timer: In VOBA's Reiff Lorenz's words: "It is public and searchable on YouTube, so anyone can find it there. Here's a direct link that you can provide to the Canard Squadron list: https://youtu.be/2BADMMdyEqA There is also:

An EZ flies in at 5:30 PM Sunday, July 23rd, 2017 over Ripon. https://www.youtube.com/watch?v=XbbLXDX6BlM&feature=youtu.be

Monday Jul 22:

Mon, Jul 22, 2019 8:30 AM - 9:45 AM

Location: Composite Workshop

Composite 101 Monday, July 22 · 1:00 PM - 2:15 PM
Composite Workshop

Tuesday Jul 23:

Composite 101 Tuesday, July 23 · 8:30 AM - 9:45 AM Composite Workshop

July 23rd, social hour begins around 5PM BYOB Cozy Girrrls 1st Annual Early Birds Jambalaya Jam. This is a CSA/RAFE group event for Canard Enthusiasts

It's that time again! If you are coming to Osh and are going to be there early in the week (Tuesday) and hoping to connect with other canardians, this is it!

WHAT's FOR DINNER: Jambalaya is a Cajun/Creole dish, it is made in a huge cast iron kettle, it is mildly to somewhat spicy-NOT HOT. Chicken, pork, sausage, veg and rice. LOCATION: We will be at our campsite on North Doolittle providing we get our usual spot otherwise we will put out the word via grapevine where we will be located, as always look for the little red truck. (Their semi sized red Volvo camper.)

\$5 "donation" per person, PLEASE bring a chair this year!

RSVP: ...this is a test, based on previous years RSVP responses we have determined 70% of you either drink a lot when using your computer or your skills at following the simplest of written instructions are questionable, even if they come with M drawings. We wish to thank the remaining 30% for making our lives easier. So, if you are coming to the dinner, please send us an RSVP with a one line response:

Please do it like this: # of people, name(s), email, cell

EXAMPLE: 2, Chrissi, Randi, CozyGirrrl@aol.com, 867-5309

That way there will be enough food and beverage, you wouldn't want to run out would you? There is a threshold where we may need to make a 2nd pot, so real numbers are important.

IMPORTANT:

- 1. If you RSVP, please make sure you receive a Thank You! email from us within 48 hours.
- 2. Picnic tables are probably not available so bring a chair if you are able to scrounge
- $\it 3.\ No\ vehicles$, there is absolutely no parking available, you must park in the BLUE lot and walk.
- 4. Bicycles, golf carts, strollers etc. must be off the road and not on our neighbors' campsites.

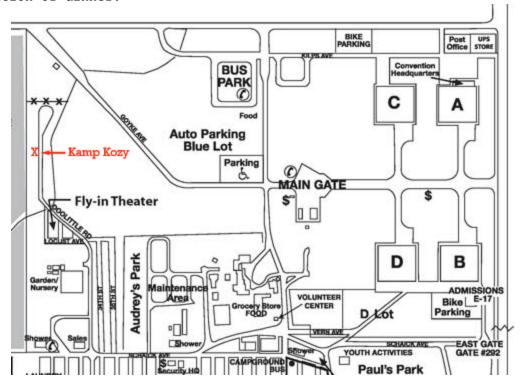
Α

- 5. We do not know of anyone who will be donating alcohol so feel free to BYOB or pass a hat and make a run to Walmart.
- 6. =Please, no animals!= ,we LOVE animals, just not when & where we are preparing and serving food.
- 7. If you RSVP in the 10 days before Airventure you will probably not receive an acknowledgement from us.
- 8. This has been a very wet Spring & Summer so far, count on mosquitoes! Spray yourself.

You will need your chair and maybe a blanket for the movie next door, schedule says Tuesday, July 23: Planes: Fire and Rescue (Cartoon)

This sequel to 2013's Planes takes us into the world of aerial firefighting as Dusty Crophopper gets fitted with a water tank and amphibious floats, and gets to work. This animated Pixar feature features a star-studded voice cast, and nonstop aviation..... or stick around and socialize! Our trusty band of well trained and highly skilled volunteers look forward to seeing you all there!

Secret location of dinner:



Wednesday Jul 24:

Velocity Dinner At Oshkosh - 7/24/2019

(Note: payment is required at the time of registration.)

Join us for the largest gathering of Velocity enthusiasts at this year's AirVenture Oshkosh! Doors open at 5pm on Wednesday, July 24th. Dinner starts at 6pm and will once again be catered by the SOS Brothers. We have a private tent, with tables and chairs. We have use of the tent until 9pm. You will have plenty of time to eat and visit before the night airshow begins.

The location is close to the AirVenture show, at the SOS Brothers "beer balloon;" an easy walk; near parking and bus stops.

The cost stays at \$20 per person, if paid by July 12th. Otherwise it is \$30 per person (paid at the event.)

Register now! Save 33% off the full price when you register by July 12th.

You can cancel without penalty any time before July 12th. Register online here:

Velocity Dinner At Oshkosh - 7/24/2019

Thursday Jul 25:

Friday Jul 26:

Friday July 26 1130 -1245. Burt Rutan SkiGull talk title - "Burt's 49th Manned Research Prototype". I think this presentation, which I will do jointly with Brent Regan, will be at the Theater-in-the-Woods venue.

Friday July 26 1:00 p.m. - 2:15 p.m. The Cozy forum: Curt Smith and Lee Devlin at Forum Stage 6.

https://www.eaa.org/eaa/event/COZY MKIV -

Soup to Nuts?id=BFC0D81534F34A70A567BFA856438C86

Saturday July 27:

Sunday Jul 28:

Bob Tilley BTilley@McGuire.com 225-301-4300 "There is a Composite Workshop at

Oshkosh!!! I was to help Rick Hall this year". Then Rick went and could NOT make it this year.

So I get to make a wing by myself(sort of). So I am asking if there are any new builders who are about to start their canard or wings that could assist. They would then be experienced to do their stuff. Call, text or email if you want to help, even for an hour would be OK. I would like to create as much buzz around the shop as possible. It has been dead for about 12 years till Rick restarted it last year. I now have 4 new us to help full time. It would be good if we could get some experienced folks to stop in and offer advice." This looks to be twice a day...

AUGUST:

August 16-18, 2019 Arlington Northwest EAA Fly-in (AWO) www.ArlingtonFlyin.org with Canard Flyout on Saturday evening? This is a

month later than past years



Camp under your wing with other Canards

Prior year discussion:

With the subject event's airshow schedule on Friday, closing the field from 1830 through 2130, a dinner flight on Saturday, is more viable (field opens up at 1700 after the afternoon airshow concludes).

With this, there are two choices (from my perspective) for a chow run:

1. Friday Harbor (KFHR) on San Juan Island. 3400' strip, and about a 10-minute walk down the hill to town. Several restaurants, and for those who have been before, Downriggers restaurant has reopened after a few years of

being off-the-map due to a fire. The deck space of the new Downriggers is a fair bit bigger than the predecessor building. May be a bit busy on a weekend summer evening.

2. Bremerton (KPWT). Restaurant on the ramp. Good basic chow, and pretty decent fish & chips (last time I was there). Past flights to KPWT entailed a bit of an aerial tour - Puget Sound Naval Shipyard, Seattle waterfront/skyline, Boeing Everett Facility (KPAE).

Mustering on the taxi apron adjacent to the canard parking area before the reopening of the field, and being prepped to go as soon as the field reopens will best-serve the group.

17 Aug 2019 - Canards over Georgia

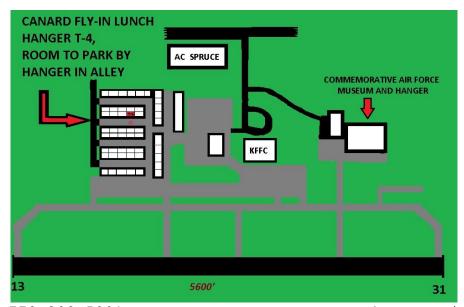
"Canards over Georgia" lunch fly in on 17 August for all us east coast guys who can't fly all the way to the west coast for the big fly in:

"ERacer Aircraft we will be Hosting the 7th Annual "Canards over Georgia" bbq lunch flyin on Saturday, 17 August at KFFC Atlanta Regional AirPort, Falcon Field in Peachtree City, GA

Drop in for some hanger talk, free BBQ and do some shopping at Aircraft Spruce East. The commemorative Air Force museum is also at our field.

Hope to see you there!!!

Rock and Barbara LaRocca ERacer Aircraft



Larocca, Roch 770-298-5001 eraceraircraft@gmail.com Peach Tree City Airport (KFFC)

Aug 17, 2019: Mojave Airport's museum *Plane Crazy Saturday!* 10 a.m. - 2 p.m. Free admission! 3rd Saturday of every month.

Aug 30,31 2019: BRITTISH LAA Rally, Northampton Sywell http://www.lightaircraftassociation.co.uk/xxxx?/Rally/rally success.html

Aug 31, 2019 Kanab below

SEPTEMBER 2019:

August 31-Sep 2, 2019 (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 2019 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 2019, 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 2019 room rates (did not change from 2018) for the Rutan Kanab Fly-in are as follows:

1. The Canyons Lodge \$99-\$169/night + tax (*includes continental breakfast) 13

rooms available 2. Canyons Boutique Hotel \$179/ night +tax (*includes breakfast buffet) 20 rooms available

3. Quail Park Lodge \$139/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 Fly-in 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, 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.

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, feel free to add your comments and suggestions. All suggestions will 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> Allen Floyd 303-956-6566 Laura 720-670-7681

The Canyons Collection hotels 844-322-8824 Xpress Car Rental 435-644-3408

KKNB Airport Manager: Jeff Turner 435-644-2299 Kanab Police: 435-644-5854 Kane City. Sheriff office: 435-644-2349 Kanab Fire/Rescue: 435-644-2718

Post-Flyin Contact information:

Defiant Flyin:

Steve Sorenson: "No, unfortunately it was completely rained out. Three couples drove in but there were no Defiants. Really bad weather. So it was a Defiant drive-in this year. Hoping for better next year."

Canards West, Columbia Flyin:

The Fishers organized another fine Canards West event. There were absolutely no issues with the flying, the weather was great for those in the West, but the massive cells over the High Sierra may have restricted attendance from the East. In fact, I hear that some of the dry lakes up

around Reno are no longer dry lakes at all. We met at the Mexican restaurant in the Columbia State Park, there were a good number of campers at the campground, Beagle and his wife stayed with locals Kim & Victoria Prout who built a Europa after his and his father's Long EZ was destroyed by an instructor pilot; Kim leant me an SUV to supplement the Fishers in running people to hotels and restaurants and back. Saturday meetings included Marc Zeitlin who held an interesting session on Canard Aerodynamics - entertaining so many questions that the session ran long. Yours truly presented a little photo and video session on the young men of the Hole-in-the-Wall - where about 8 Long EZs were built with help from Dave Ronneberg. Dave himself and Dan Robinson were not able to attend to discuss the light weight super powered Berkut540 which is completing the 40 hour fly-off. Attendance was good and Dinner was good on Saturday night. I often find one soul with cowls open on departure day, but everyone seemed to head off without issues on Sunday.

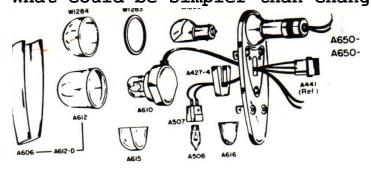
Columbia '19 Planes attending

Long EZ N666BA (Brian Amendala) WA Long EZ N91CX (Ray McCrea) CA Long EZ N131DB (Don Berlin) AZ Berkut N73EZ (David Orr) CA Long EZ N180EZ (Andrew Amendala) WA Long EZ N307EZ (Guy Williams) CA Cozy N32HL (Al Smith) CA Long EZ N58JB (Alan Thayer) CA q2 N46JP (James Patillo) CA Long EZ N731JS (James Napier) CA Velocity N84KJ (Kent Farney) CA&OR Long EZ N360KS (Klaus Savier) CA Long EZ N64MC (Bruce McElhoe) CA Cozy IV N83MZ (Marc Zeitlin) CA Cozy IV N97TL (Shawn Brennemann) CA Velocity N333RR (Randy Ott) CA Velocity N722XL (Tim Irion) CA Cozy IV N14ZG (Rick Hall) CO Long EZ N8714S (Skiby for Fisher)CA Varieze N2077W (Gil Hutchinson) OR Long EZ N4281X (John Bauer) AZ Velocity RG N568Y (John Youngblood) CA Total 22 canards: Long EZ 11, Velocities 4, Cozy IV 3, Varieze 1, Berkut 1, Cozy III 1, Q2 1

Tim Sullivan hosted us at Placerville's EAA breakfast for those of us who flew over there in 15 minutes and then he drove the two hours to Columbia in his VW Van. Tim Sullivan drove over, as did Mike Zwijacz and his younger daughter and Jeff West and his son Johann - Don Denhard and Kim Prout made cameo visits too. I took Kent Farney for a ride in the Berkut and Jason Skiby completed an inspection and brought his passenger Holden Worthen who also got a ride in the Berkut also.

Non-Builder owner advice:

What could be simpler than changing out a strobe bulb?



A recent Velocity guy's lament about dropping glass parts off a Wheelen wingtip unit reminded me of this one. The Whelan strobe light, with two screws, is a very easy thing to disassemble and assemble; unfortunately, you break expensive glass parts the first few times - I broke a few things before I learned to put a big trash can under the wingtip and drape a towel across the entire trash can opening for just the purpose of catching

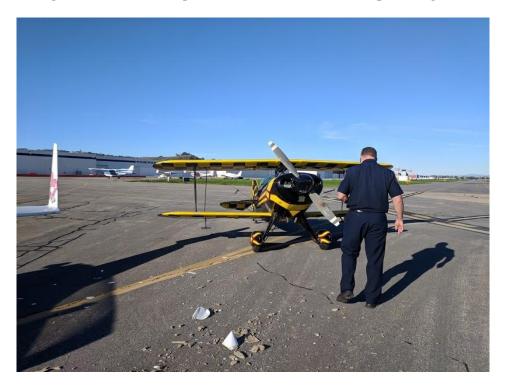
what I didn't think I'd drop. Works every time!



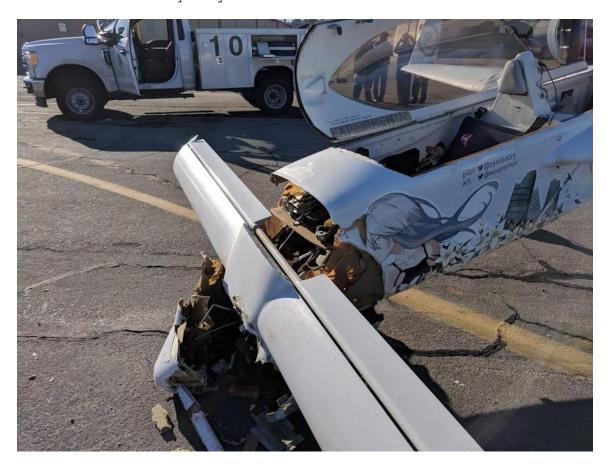
Sad for the nose, no injury:

Pitts eats the nose off a Varieze:

NTSB: "On January 19, 2019, ...an Aviat Pitts S-1T, N31WK, collided with an experimental Rutan Varieze, N27GM, while taxiing to parking at Zamperini Field Airport (TOA), Torrance, California. The owner/pilot of the Pitts was not injured; the airplane sustained minor damage. The owner/pilot of VariEze sustained minor injuries; the airplane was substantially damaged..."



"According to the pilot of the Pitts, upon landing, the tower controller queried the pilot as to his intentions. The pilot stated that he was going to the east T-hangars. He was instructed to taxi via taxiways foxtrot and alpha to the hangars and to remain on tower frequency..."



"According to the pilot of the Varieze, he had taxied from his T-hangar to an area just short of the movement boundary area...the pilot made his initial radio transmission to ground control for clearance to taxi to the runway. After a second radio transmission, the pilot saw the Pitts taxiing in his direction on taxiway Alpha. The pilot stated that the airplane was directly on centerline and was not performing S-turns. He had also not received any radio transmissions from the ground controller and was not concerned as it was common for airplanes to taxi back to runway 29 via Alpha and make a turn at Juliet, which was before his location. However, when the Pitts passed the turn to Juliet, he realized that a collision was imminent. The pilot stated that his airplane was stationary at the time of the collision..."

Marc Zeitlin repaired the plane and the owner says it flies better than before… the prop cut through $4^{\prime\prime}$ ahead of the rudder pedals per Marc Zeitlin.



Great work from Marc and his team.

Builder's Help Desk:

Turn it over for bottom finish?

A member asked about rotating the plane up on its firewall to finish the bottom rather than rolling the plane over completely (canopy removed). He got a lovely pair of photos showing the first option:



Photo by member Ken Walsh

Based on the many Long EZ guys I worked with - the only way to really properly finish the bottom of the wing to strake surface, you need to mount the wing while the fuselage is upside down. Hopefully, you haven't mounted the winglets yet, but even then, you will need to raise the plane while upside down to clear the winglet(s) or tilt it enough to clear the top of one winglet if you have mounted the winglets on the wings before finishing. You can fashion a strong aluminum plate like that at Berkut Engineering (stacking washers to keep the strake/wing gap material from being crushed):



Or a 2"x8" board that extends to all 3 wing mounting bolts and stands proud enough to protect the leading edge of the strake (easier to do if you keep the nose up on a padded bench or short saw horse rather than if it is on a ground pad).

Solar Film on canopy?

New member, Augustin Millan, from Spain to Cozy Group:

"I installed yesterday a SOLAR film in my canopy and it really makes the difference (particularly when on ground on sunny hot days)."

Del Scheir commented: "That looks great! I wonder what film you used and if you had any problem getting it to conform to the compound curves? Did you use a heat gun or hair dryer? My Cozy has film, but with wrinkles. I would try and take it off and re-do it but the local auto places say 3M film is not recommended for Plexiglass; they say you cannot get it off."



Millan's reply: "Yes indeed, it was quite thorough work to get it done, as we struggled to conform the double axis-curves. The solution was a balance of heat and patch, with a great dose of patience. The thing is that this material is not vinyl, it is a solar - ceramic film which is very difficult to conform. The film brand is SOLAR-CHECK, and it can get off from the Plexiglas canopy with no issue."

Beagle's comment: based on 4,000 hours in canards, I'd have to say that tinted canopies are a good idea, but that the sun actually helps with the cold at high altitude. I would have to think that Southern California is at least as warm as Spain, and when the plane is parked outdoors without a canopy cover, the stuff inside does bake - and the belt hardware can burn you, and the panel is getting cooked too. However, our canopies aren't closed when we are on the ground as occupants. So I've found my personal sun protection is handled by an albeit ugly hat that protects my neck, ears and upper face...but can anyone get me to wear sun cream? Nah... and in tandems, the sun is seldom on my arms...not so in the Cozy...you can't always turn your face away from the sun, at least not when in level flight...



The problems of mounting wire along the oil pan:
Beagle got a hint the other day of another way to mount wire and
hoses along the oil pan -

Key Maintenance Tip:

Another high pressure electric pump:

For those with a high pressure Weldon Pump (and with an engine driven pump) for their injection system, I've described the switching a much cheaper auto high pressure electric pump for my failing Weldon Pump on my Berkut. I have the process described in Library Item 23SIII33 - just e-mail Beagle if you are Weldon dependent...

iPAD overheating?

Sporty's iPad News report that "...70% of respondents reported that they have had the iPad shut down on them at least once in flight due to overheating... the normal temperature operating range for the iPad as 32° - 95° F. While using the device below the freezing point may cause the screen to lag a bit, it will still function." When over 95° F "...it will eventually resort to a thermal protection mode and become completely unusable until the internal temperature of the device is reduced. The primary reason for this is to protect the internal lithium-polymer battery (bad things can happen if they get too hot)."

Avoid direct sun, avoid leaving it in the hot plane while parked, avoid charging the pad when it is already warm, avoid "... using the iPad with a fully-enclosed case or kneeboard, you will be restricting airflow around the rear of the iPad..."

If it has overheated, "remove it from direct sunlight and aim a few air vents over if possible." Remove it from the kneeboard or case, remove it from the charging source. Consider a yoke or RAM mount so you can pivot the screen away from the sunlight and expose front and rear to more ambient air. If a recurring problem for you can buy "...the X-Naut Cooling Case along with your iPad. This mounting system features built-in fans to circulate cool air, specifically targeted at the iPad's main hot spots to prevent it from overheating. The mount can be powered off of typical alkaline batteries or USB with a power bank or backup battery. In addition to working with the RAM mount system, you can also turn it into a kneeboard with this accessory kit - perfect for cockpits with a bubble canopy where the iPad is exposed to direct sunlight. The X-Naut is available for the iPad Mini 1-5, the iPad Air 1-2 and 9.7", and the iPad Pro 10.5" / iPad Air 2019 models."



What the flyers are doing:

Phillip Johnson, Ashton, Ontario sent a great photo of his new Cozy retract - now past the 40 hour test period:

Or what they did:

Tim Bailey, Hurstpierpoint, UK: "The article about the X Prize talk reminded me of the following embarrassing moment with Burt & Dick...

Burt & Dick came to the UK to talk about the X Prize at the Royal Aeronautical Society in London and also on the Isle of Man.

The Isle of Man Air Race start was handled by Burt and Dick and I was the only Rutan entrant...Varieze G-TIMB "Kitty", Race 747. They came over and said nice things about "Kitty" (Kitty Hawk & my Grandmother) and signed my aircraft.

The race was part of the UK Handicap Air Racing season and my handicap speed was 175 mph. Each aircraft was given a start time and the starters, Burt & Dick took turns to drop the flag.

I started 10 seconds behind a twin and was cautious about hitting its wake at the first turn. The flag dropped, I released the brakes and started to accelerate BUT THE ASI WAS ZERO. While keeping an eye on the twin and the runway I kept tapping the ASI to get it to work. Because I was in a canard and would be essentially flying with 20 other aircraft at high speed I elected to GO. We got airborne, negotiated the first turn and started to accelerate BUT THERE WAS AN ODD NOISE. It was as we were downwind to the runway that realized the NOSE GEAR WAS STILL DOWN! We came 5th in the race and I looked for the Rutan brothers to explain what happened, but they had gone. Probably thinking "how did that idiot expect to win a race with his nose wheel down?"

The ASI came good on the third lap and I never did find the cause but Air Racing has a history of nobbling... Magnificent Men & Their Flying Machines & Terry Thomas spring to mind. Maybe one of your readers could enlighten me on what happened."

Beagle confesses:

I had my own chance to impress the guys. I arrived at my first Ribbon Cut at the Jackpot races. I knew I could do really well because of my USAF training and Vietnam combat experience. I called "drop drop drop", the toilet roll (with paper clip attached) streamed out, I struck it deliberately, went beyond, pulled back the throttle and made a great turn, the engine quit. But I aimed at the ribbon, thought about the engine quitting and decided I'd better head for downwind instead (I actually had to lecture to myself to make the turn). I was well on my way down to the pattern when I realized I had pulled back the "other throttle"*...I turned back toward the ribbon and couldn't see it any more...my first effort was one ribbon cut. They never came again to see my many wins the years after...but talk about feeling silly. I built my own Long EZ and as I usually came in last at the races, ribbon cutting was important to me, and a lot more fun. While one of the guys developed a baggage pod toilet paper ejector, he sold it and the added fun ended. Beagle...
*the red one, the mixture...

Tim Bailey reports a successful ditching years ago: "Long EZ in my hangar belonged to a group and hardly ever flew. They decided to sell and had engine overhauled to zero life. A colleague at my airline bought it and I agreed to do the air test. The engine would not start and several licensed engineers tried. The engineer who overhauled the engine came and sorted it out. He never said what the problem was but it always missed a beat at certain RPMs on the engine On the third flight I was thinking what a nice aircraft...might buy a share. The engine was at full power for the VNE run...then it all went quiet...tanks full...did all the usual drills...nothing. Thought of John Denver...fly the plane...stay in control. Sea was ideal but beach packed with 50,000 people. Hit the water at 60 knots...main gear and nose snapped off. Nose gear was up but nose of aircraft forward of bulkhead came off as nose slapped down when main gear hit the water. So the water came in and I was sitting with my feet sticking out the front forward of the rudder pedals...one gashed my ankle. Sprained wrist and gashed ankle on control column/ rudder pedals. Otherwise no problem. Aileron trailing edges badly damaged...as if flutter on the water. Aircraft written off...shame...it flew nicer than my Varieze. More damage done dragging it over a pebble beach onto a low loader. Sea was flat calm and I ditched it close to a RIB(Rubber Inflatable Boat) giving pleasure rides. Lifeboat and helicopter attended but not needed. Long EZ was floating right way up, intact except for missing main gear. Rear cockpit was dry so would have been good for long term survival. I went down to thank the RIB operator a few days later...the sea was rough and I think the

outcome would have been a bit different!" [Beagle: For 30 years I've been hearing lower your nose gear to land in the water - it starts the nose up when the main gear hits - allowing a softer ride down.] "Yes, but the owner had fitted a ratchet on the nose gear crank and I elected to fly the plane rather than fiddle with the ratchet...a modified ratchet/spanner that didn't work very well...especially when your hand was shaking!"

Formation:

HAVE YOU BEEN THINKING FORMATION - here's a target for you. Ryzard Zadow is planning to do a 50 canard event for the $50^{\rm th}$ anniversary of the EZ at Oshkosh. Someone might get a Long EZ $40^{\rm th}$ group arrival for 2019 - with Burt attending...but that isn't formation flight...it is follow my leader.

Like all airshows, the FAA has developed rules for formation flight at such events - it doesn't recognize Military Formation Training - there is no grandfather clause for those who can do this:



Formation by T. Martin

Per Ryzard, "[A] formation card is required only for formation flight in waivered airspace, i.e., Airshows. In that light waivered Airspace IS their airspace. We can fly formation on our own anywhere else... To do the 50 plane formation on the 50th at OSH we'll have to have cards. No way around it."

Beagle complained that the Military guys should be grandfathered in. "I know exactly where you're coming from. I had that exact conversation with Barry Hancock who runs the formation stuff for the CAF. Unfortunately no one has a methodology to let us military guys "place out". You're also correct that this is driven a lot by the FAA. The unfortunate reason for that though is in the recent past there have been some incidents that prompted the FAA to tighten the rules. There's really nothing that can be done about it except fly well and prove to the FAA and formation organizations that we can do this as well if not better than they can. Credibility is the key and the only things that gives you credibility is to fly well. I was very impressed with the KC Flight guys. I've been to two of their clinics. They have their act together and fly well. I think

you'd feel right at home as a whole lot of those guys are frustrated old fighter guys like you and I. The 31 plane formation was a sight to see.

What it comes down to is this is reality. It's their sandbox and in order to play in it, we have to play by their rules. Back when I was frustrated with all the politics and BS in the CAF and I'd quit...an old pilot buddy of mine who also flew with the CAF gave me some words of wisdom, he said:

'You can bitch or you can fly. If you want to fly CAF airplanes, do what you have to do to do it. Deal with the politics best you can but never lose sight of why you're there and soak up as much of the flying as you can. But if you just want to bitch then know the only reason you're not being able to fly is you.'

I took that advice and have been flying warbirds for the CAF ever since. Is it frustrating to deal with all the BS? You bet! I just walk away and focus on flying airplanes."

I think one of the 1980s or later military pilot school graduates flying out West would be the ideal to gain "the card" and then start taking on the canard guys out, so many of them are already formation savvy, if not FFI savvy. Perhaps go to Ryzard's next classes as he has developed the Canard version of the FFI rules.

Then we could actually find 50 or 100 canards at Osh'25. Library:

27SA3: Sep 1998, page 6: "Formation Flying, Inc." on new rules for airshows and procedures to get trained.

Bob Mills has taken over FFI per Ryzard: "We've got our program integrated with theirs. Click on this link and scroll down till you find "EZ Supplement". That's RAFEs program integrated with FFI. http://www.ffi.aero/documents.htm"

Ryzard can teach formation with his card and until he gets more people certified, the FFI people must come over for certification. There are other FFI qualified groups teaching out west, particularly RV Ravens. So if you formation pilots get the card, you can work up a program using Ryzard's approach. If interested, get in touch.

New members:

Joining:

19 COLLARD, TODD 301 Spaulding Lane, Ft. Collins, CO 918-404-7880 todd.collard@yahoo.com Pipeline Services Varieze: N6VL O-235 ~2000 hrs. Longmont Airport (KLMO)

"...It's a really well built Varieze. It was flyable when I bought it but I have taken my time and went thru everything on it . Rick [Hall] has been worlds of help with glass work. he is top notch and a great guy! It had a gear up landing at some point .. which had ground the heads of the AN bolts off and it had been freshly painted over! That was kinda scary... So I had to fix all that . I went thru the fuel system ... nothing really wrong! But it was 35 years old so it all got replaced. All the vacuum lines replaced etc. It was just your normal stuff on an old plane... but all in all its a really great plane."

Joining:

19 VINCENT-PHILPOT, TRISTAN 604 Bachelor Button St., Las Vegas, NV 89138 702-241-8360 Quickie:N? Electric, Q2 Project, KR-1 Project North Las Vegas Airport (KVGT)



"I'm a Brit living in Las Vegas (long story) ex-RAF pilot who has been following the experimental aviation world since I discovered it back in 2010. I have degrees in aeronautical engineering but have spent my whole professional life as an operator rather than a builder or designer, so I'm playing catch-up at the projects/homebuilding skillsets. Once hooked by the experimental world, I gravitated towards the Rutan designs and before I knew it I decided to convert a Quickie to electric (Project SQuERTA, facebook page). Then the whole project aviation thing spiraled out of control.

I've been out in the Middle East with work for the last 18 months but this summer will be resettling back in Las Vegas.... I hope the newsletter will embed me further in the community and enrich my knowledge so that the ownership experience of my Rutan designs is as safe and enjoyable as possible."

Joining:

18 MILLAN, AGUSTIN amgvm@hotmail.com 1000 hour pilot Cozy III:EC-XGZ O-320-E3D based Girona Airport (LEGE)

Agustin is "a Spanish pilot with +1000 hours on different types of light aircraft, who has recently received a Cozy MKIII.

The bird's registration number is EC-XGZ, is in flight condition, power plant is an out-of-the-box O-320-E3D, and we are getting the administration processes done and dusted, to bring her back in the sky very soon.

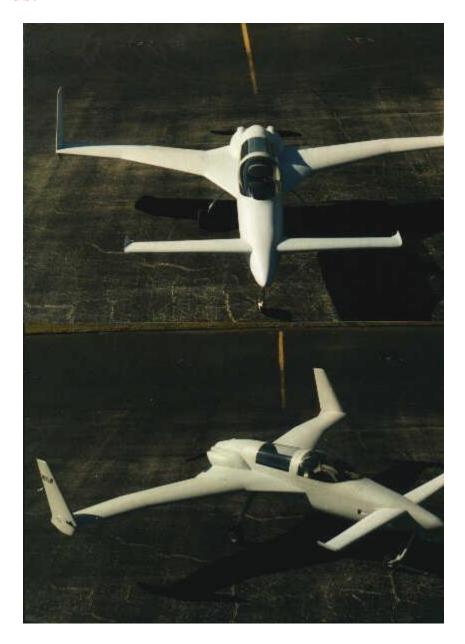
Plans are to have her based at Girona Airport, (LEGE), in Spain, where I have a hangar.

I have a list of upgrades queued up, but at the moment, [they would be] a bridge too far for me.

One of the concerns when carefully reviewing all documents was that the set of drawings which were supposed to be included at the back of section IA are missing, most likely they went missing when used on building the airplane.

Beagle: Indeed, the builders will glue them to templates for cutting foam, unused templates are the most difficult to get.

One Off Canards:



The French Dart - a light weight canard...not actually just one off -

Added to the Electronic Squadron library:

22SA3: JUL 1988, page 27: "A Look At Some Wiring Practices" by Tony Bingelis 23SIII33 June'19 Replacing a Weldon pump on an injected engine with a cheap auto alternative by David Orr

29MS70 Apr'18 Puerto Rico Tourist map in 6 segments

29MS71 2017 Vieques (Puerto Rico) Tourist Map in 5 segments

29MS72 Apr 2018: Lumina Point brochure (off Georgetown, (MYEG))

30MS52 ~1995 Berkut Weight and Balance calculator page

*30MS59 Jun'19 Comparing building Velocity compared to RV construction Steve Campbell, Nick Jones & Alejandro Rhodius

Oh and Trivia:

Boeing PAV (Passenger Air Vehicle) (no pilot):

Non-Member Vance Atkinson sent out a comment about this Being personal vehicle having 4 successful flights and crashing on its 5th, all unmanned. He thought it looked a bit like our canards. https://www.youtube.com/watch?time continue=3&v=yS2t8aInfIM

And Another Pusher - Celera-5001

https://www.thedrive.com/the-war-zone/28409/the-mysterious-and-potentially-revolutionary-celera-5001-aircraft-may-fly-soon?fbclid=IwAR0cSb1Crp0nhq-ZfWVPnCICVh9TpRQvDaSiR2o2xKUKAQlqDd5s4uOYn8o

From Last issue: Calendar corrections

Our **British** Flyin Organizer pointed out I'd put their flyin as July 30th instead of **June 30th** so sorry. I didn't have a date down for the "Canards over Georgia" flyin - but it is now set as **August 17**, 2019, as above.

Marc Zeitlin found a couple of mistakes - "Couple of comments. First, I won't be at OSH this year - you've still got "marz zeitlin" listed as given a presentation.

Second, the cone washers on the nose gear (shown is Nate Mullins' version) are "Bellville" washers, not "Bell" washers." **Beagle:** I forgot the first, usually capitalize and spell names better, know Bellville, sorry!

New Nose Forks for Cozy III-Long EZ-Varieze.

While I'm at it - to be fair I should have shown all the suppliers I've seen for replacement nose forks, not just Mullins' new fork (Mullins has since lost his machinist source):

Here's Girard's Fork:



Here's Emons's Fork:

