

EAA Chapter 866 Smilin 'Jack Chapter Newsletter

July 2021



Ben Charvet was having trouble with his Pietenpol starter till he found this one legged guy!

Hello to all EAA Chapter 866 members and friends,

What a breakfast team we have! It does my heart good to see so many pitching in and working hard – no complainers here!! Everyone seems to be enjoying themselves as they serve the folks who come. I have heard several “eaters” comment that we have the “best breakfast in Florida” – and this has been the case for many years. So - a big thank you to the whole crew for the fun.

I am looking forward to building the device that Lennie Duncil presented at the last meeting to use for test flying the plane that I am in the process of building. It will be so much easier to determine rate of climb and decent.

A few have asked about the outcome of the vote that was taken regarding moving the chapter to TIX, partnering with the Valliant Air Command, holding three Young Eagles rallies per year, etc. I did announce the results

during the refreshments after the meeting, but my voice does not carry well at all. The bottom line is that – as you all know- the main event that our chapter sponsors, is the monthly breakfast. And - we intentionally keep the price low to encourage the community to come. The main event that the Merritt Island chapter sponsors is the Young Eagles. They do that well and we do what we do well. Also, even though the Valliant Air Command has a great facility, we are kind of partial to our own humble meeting place – building 10. As a result, the idea of moving our chapter to TIX was not received well by anyone in the chapter. The result: we are not moving and we will continue to do what we do well and let Merritt Island do what they do well – of course everyone is encouraged to work with Merritt Island’s chapter to support their Young Eagles event.

Our next meeting is after the breakfast this month, (the breakfast is July 3rd and the meeting is July 7th). If you read the account of our flying trip back from Page, AZ, in this edition of our newsletter, you find out that we landed at an unintended airport. At the meeting, please feel free to share a story if this has ever happened to you. I would like to see if there is a common thread in the stories. Later, Richard, our chapter secretary, will do a presentation on the historical background of what he is trying to do with a World War II airship movie and how their Twister (aircraft) figures into that. A tentative title for this 20 min. presentation is "Rigid Airship Design in 1938." In addition, I have a new item to share in the “bag of tricks” segment. The meeting will wrap up at 7:45 *sharp*- to break for refreshments/dessert and socializing.

If you will recall, before the meeting last month, we had a cookout featuring burgers and dogs and a few sides. **I would like to have a food get together before each meeting this summer.** There is plenty of daylight to go along with the heat and humidity. So as the sun starts to fade – say about 6:15, we will start eating – then the meeting will follow at 7. **I think the easier we make this (meaning less work and cleanup) the better. As a result, I propose more of a pot luck/crock pot dinner. [You bring it – then if there are leftovers, you bring them home]. There will also be burgers, dogs, rolls, drinks and chips left over from last month. I will cook them up and put them out by 6:00. Bring whatever is easy/convenient for you – but only if you can do this easily. If you plan to bring something, please let Deborah or me know. (We can eat inside in the cool and comfortable meeting room.** Speaking of our air-conditioned meeting room – the person most responsible for the comfort is Bob Rychel – who is the subject of our member spotlight this month.



Bob Rychel and his RV6A

Bob was born in Springfield, IL, but only lived there about two years before moving to Texas, where his mother remarried. By the time he was six, his mother remarried again, and the family moved to Montana. The city of Butte was a copper mining area said to be one mile high and one mile deep. His dad was multitalented, a mechanic and a carpenter. By the time he was ten, the family bought a ranch – there were plenty of chores to do and freedom to constantly learn how to do whatever needed to be done to keep things running. They cooked on a wood stove, with which they also heated water for the weekly bath. They rotated, taking turns who got the clean

water first each week in the tub. He attended Rocker Elementary - a two room school. There were two teachers, one for kindergarten to 4th grade and the other for grades 5-8. He started driving when he was 14 and got his license at 15 – but driving to high school was not the best way to use the family resources, so they sold the ranch and moved into town. One day, his dad purchased (2) 1941 Fords. One had a bad transmission, the other a bad engine. He told Bob and his brother to make one car out of two – and together they learned how to make it happen. They also learned that it would have been better to change the engine than the transmission – a true learning experience. He attended and later graduated from Butte High School. He turned 18 that summer and began working as a diesel mechanic, then a carpenter in Glasgow, MT.

That year, Bob decided it was time to see the world, so he joined the Air Force at 18. He was stationed at Moody AFB, and there he met his wife. In the Air Force he worked on several different aircraft, among them the F-86 Sabre.



F-86

F-4

He worked on the F-4 “Phantom” at the RTAFB Ubon, Thailand from 1965-1967 and also went to Vietnam. He was a crew chief working on the F-4. His wing commander was Robin Olds, who was a triple ace who fought in WWII and Vietnam.



Colonel – later General - Robin Olds

After Vietnam, Bob was transferred to McDill AFB, right here in Florida. After 8 years of service, and a probable return to Vietnam, Bob thought that was enough; he went to work at the Cape for Bendix Launch Support. As every contractor knows, work at the Cape can be sporadic and Bob was laid off in 1972. He was never really out of work and used this time to get his bachelor's degree and do many "odd jobs". He worked for Union Carbide in Oak Ridge, TN for about a year before he got a call to work for USBI at the Cape – then Rockwell North American. He worked on the entire Saturn V rocket program. He was there to hear the words "Houston, we have a problem" during Apollo 13. He fondly remembers the thunderous launches of the Saturn rockets. When the rocket would ignite, it was held on the pad, for a full 9 seconds, then it would lift off – so very slowly with its 7.5 million pounds of thrust. Everything shook – like no other rocket then – or now. He remembers watching Walter Cronkite reach out at the press site when he saw the protective glass vibrating and was firmly told – "don't touch the glass". Bob worked many jobs including cryogenics and the clean lab.

Sadly, his wife passed in 1996, and by 1998, he decided to leave the Cape. He spent several years building houses for himself and his family and helped others build their houses.

He met his wonderful lady companion, Jan about 12 years ago. Through her, he met her brother Gene, who happened to be a pilot in Arizona. Gene had worked with Chris Heinz on one of his early designs – the Zenith CH-2000.



CH-2000

Gene encouraged Bob to build a plane – so in 2011 he went to a rudder workshop in Mexico, MO and met the folks in Zenith and purchased a CH-650 kit. It took him a year to build it, then he got his pilot's license in 2012. This, of course, led to further projects. When Jan went away for a month, he decided to buy another kit – on short notice. Zenith had a cancellation so he drove to Missouri with his trailer and brought home a 750 kit. Next it was the Panther project with Les and Eddie and finally he finished the RV-6A – originally started by Jim Morgan.

Bob was our MVP chapter member at our last winter party – mainly because he can do just about anything and he has! So, I say, if you need to know how to do anything, or you need help – “just ask Bob”.



Chapter member Casey Fesperman and his sister, Doris (105yrs) showed up at our hangar one Saturday

Brother and sister story

One Saturday morning at Dunn Airpark, Casey and his sister showed up at our hangar and it was an honor to meet her! She works five days a week still drives her own car. She is sharp as a tack and when she shook my hand, and this 105 yr old lady still has a firm handshake too!

They told a story about a flight her brother took her on one time. It was in Casey's J5 Piper Cub and he was taking her to Charlotte from Albemarle North Carolina when suddenly they were trapped by an approaching thunderstorm. They had to land or be torn apart by the storm so, Casey saw a clover field with one tree in the

middle and he landed in that field and taxied over to the tree and pulled the plane under the canopy of the tree branches and they rode the storm out sitting in the plane! Doris said she'll never forget how the wind rocked them around sitting there! After the storm passed they took off again and flew on to Charlotte. He gave her a ride so that she wouldn't have to take a bus to Charlotte about 30 miles away. This was in the year 1949! Casey said he remembers the year because that's when he owned that J5 that he'd purchased for \$525.00!Larry



Last weekend we had a longtime family friend visit from Bradenton FL. She's a retired newspaper journalist and school principal. Just after treating her and her two granddaughters to a Chapter 866 breakfast I gave her two granddaughters, Chloe, 12 and Bella, 9, their first ever airplane rides in my J-3 Cub. Not sure who had more fun, me or the girls! Truly an honor and a privilege to share the joy of flight.

Regards,
Tom Charlton

There's More To Starting An Airplane Engine Than Luck

Paul Berge
June 13, 2021
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Yesterday—a nonsensical dateline since I don't know when you'll read this—I encountered the unimaginable. Asked to move a friend's Nissan Altima (car not an airplane), I pressed the brake and turned the key. I didn't first check the oil, drain a fuel sample, or yell, "Clear!" as I would in most modern airplane starts, and "modern" implies post-1949.

Nor did I prime the cylinders, energize a fuel pump, or set the mixture. Didn't even use a checklist. Instead, I turned the key, and—this is the unimaginable bit—it did not start. Yeah, this modern(ish) automobile acted like an airplane piston engine, the starting of which is a crapshoot that involves a fair amount of mystery theater.

“Three shots and four blades,” could pass for rejected lyrics from Leonard Bernstein’s Jets and Snarks number in West Side Story, but in classic aviation it means, “Give it three shots of prime and rotate the propeller four times (blades).” Then, “Contact!” and my Champ’s Continental four-cylinder engine will start on the first pull or balk because it’s flooded. Remedy that by making the world counterrotate to turn back time and undo what I’d just screwed up. “Switch OFF, throttle FULL.” Now pull the prop through backwards a dozen times—no more, no less. Why do we do this?

Tradition!

Forget science, aviation lore percolates through Broadway musicals, and although Tevia in Fiddler on the Roof begrudgingly acknowledged changes threatening his Minnesota airport, Anatefka Muni (6Z6), some of us are reluctant to accept what masquerades as progress. Oh sure, we *luftmenschen* embraced GPS and ForeFlight like maniacal gameshow contestants, after winning a Cuisinart Metamucil Dispenser, but largely we cling to familiar ways.

Examples: Raising traffic patterns from 800 feet AGL to 1000 creates a stupid waste of fuel. I’ve done the math. Replacing “Taxi into position and hold” with “Line up and wait” was pointless. Sounds like instructions at a COVID up-your-nose site. When tower tells me to line up and wait for GodotAir to clear the runway, I rebelliously taxi into position on the runway and hold my tongue after compliantly reading back the instructions.

Non-pilots think that landing an airplane is the most difficult phase of flight. It’s not. All airplanes will eventually land, or as Kate Strauss, an instructor at the FAA Academy told us ATC cadets between drags on her Virginia Slims, “We have yet to leave one up there.” The toughest part is starting a piston engine, a process in which success hinges on tradition and less from what’s in the POH.

Whether normally aspirated or fuel injected, no two piston airplane engines start the same. Toss in variables such as sloppy maintenance, or hot versus cold starts, and the process conjures more alchemy than science. This becomes overwhelmingly apparent when starting an engine by hand, and there are only two reasons for doing so. Either the battery is dead, and you’re stranded on a rapidly calving glacier, or the airplane has no electrical system. The latter applies to my daily ops, but—and I’ll risk a merit badge here—I’ve hand-propped Cessnas with weak batteries. Not recommended, but if ya gotta, ya gotta, an excuse that withers under post-incident scrutiny.

I’ve been starting my 75-year-old airplane by hand for 39 years and still have all 10 fingers. Adding those figures together nets 124, which is the number of possible ways to mangle a forearm or, worse, flood the engine if I don’t employ the exact starting ritual, perfected through trial and frustration. Beyond the “three shots and four blades” for warm weather starts, I set the mag switch to LEFT, because the left magneto alone has the impulse coupler, which retards the spark for easier starting. Easier being a relative 1940s term. Magneto being an 1890s term.

With the left magneto set to fire, the throttle is “cracked,” a calibration defined at the Council of Trent in 1545. Cracking in my airplane is 5/16 of an inch (7.95 mm). Once all steps have been met, the person dragooned to spin the propeller does so with precise downward pressure and snap to rotate the crankshaft to trigger the mag spark that ignites the compressed fuel/air mixture, while not lingering in the propeller’s arc during that millisecond, perhaps longer, as the power-stroked cylinder inspires the others to explode in sequence. For my engine that order is 1,3,2,4, repeat. It’s a chemical/mechanical marvel. The marvel being it works at all, which occasionally it doesn’t. Usually when already apprehensive passengers await.

Flashback: It was a warm sunny day in Idaho. I was climbing aboard my Cherokee 180, when I noticed a Piper Turbo Dakota (235-HP), loaded with three passengers and a pilot with epaulets on her crisp white shirt. I was less envious of the charter captain’s insignia than of the Dakota’s turbocharger, as my normally aspirated Lycoming had been wheezing asthmatically through the high country. Captain Dakota made certain the airplane door was secured before she cranked the engine. Multiple times. Nothing happened.

Sealed inside the Piper solarium, passengers wilted like wax figures in a sauna. I was impressed with the Dakota’s battery as it cranked the starter, intensifying futility to the rhythm of Ravel’s Boléro. Trying not to display pride after my normally aspirated Lycoming fired up, I taxied past the Dakota and its captives.

Airborne, I turned on course with smug pride, knowing that following my traditional start procedure always works. Then, I remembered I’d left my wallet on the FBO’s counter. Chagrined, I 180’d the 180. The now running Dakota was holding short of the runway for all the passengers to witness my bounced arrival. After taxiing to the FBO, retrieving the wallet, and climbing back into the Cherokee, I watched the Dakota lift and turbo its way home, relieved of the Karma that had left it to climb aboard with me.

Somewhere in a quantum parallel universe there sits a Cherokee 180 with a heat-soaked engine and a younger me running the battery down, doomed to spend eternity trying to get it to start. Yet grateful it wasn’t a Nissan Altima.

Tom Charlton found this article on Avweb and brought it to my attention to use in our nsltr.....thanks Tom

Chapter 866 Inc. The *Smilin’ Jack* Chapter
EAA Chapter 866 Inc.

Minutes of the June 2021 Meeting of

The EAA Chapter 866 June meeting was held on the 2nd at the regular meeting location, 480 N Williams Ave, in Titusville, Florida, immediately following a cookout prepared for and by members, with Chapter foodstuffs and member-prepared dishes.

Chapter President Kathy Anderson presided over the meeting, which she opened about at 7:00 PM with the recitation of the Pledge of Allegiance.

Ben Charvet, Chapter Vice-president, Herman Nagel, Chapter Treasurer, and Richard Van Treuren, Chapter Secretary, were in attendance, along with about 20 other members and two guests.

Chapter President Kathy Anderson presented a video showing a pilot's dead – stick TAKEOFF (pushing an airplane off a cliff and landing successfully below) and her own innovative method of using a bubble level to hold a riveting gun for accurate installs.

Ballots were distributed and collected allowing members to vote on last month's proposal made by Bill Teixeira of the Valiant Air Command concerning relocation of various 866 functions to Tico.

Lenny Duncil gave a presentation of his device built using an Arduino, which is an open-source electronics prototyping platform. His finished unit could be used for very accurately determining an aircraft's best rate of climb. Passing the unit around, Lenny promised to publish a PDF about it in the next newsletter.

Members discussed a bulletin from Continental recommending removing alternatives and re-installing a magnetic oil drain plug.

Welcome aboard new members Ron Hendrickson and John Godke.

2021 - A flying trip to remember: following the Colorado River – returning home – Bob and Kathy



Anderson

Last month I wrote about the flight we took in our Cessna from Titusville, overflying Leadville, Colorado, then Tennessee Pass to intercept the Colorado River and follow it to Page, Arizona. Following is the account of our flight back home:

We took off as soon as the Page FBO “Classic Aviation” opened up – it was about 8:00 in the morning, Sunday May 16th. From past flights, we knew that flying over the desert can be an uncomfortable experience as the sun gets higher in the sky.

The plan was to head east/northeast to fly over Monument Valley, then turn southeast toward Albuquerque (ABQ). The air was already hot when I pushed in the throttle. At an elevation of 4317 msl – the performance was better than the higher airports we had left behind. It would all be “downhill” from here – with a few higher peaks to avoid along the way. The sun was directly in our eyes as we headed east; but rose quickly as we passed over (what the chart called) the “Rainbow Plateau”. The variety of colors was beautiful.



Rainbow Plateau Scenery

Next, our course took us over the Monument Valley Airport, UT25, a private, unattended strip with no fuel or services – prior permission is required to land. We continued on, hoping to find the town (and balancing rock) at Mexican Hat. On the way the land before us was desolate, but at the same time - majestic.



Monument Valley Airport Balancing Rock at Mexican Hat (from above)



San Juan River as it passes through Mexican Hat to Lake Powell

Having found our way this far, I turned right, headed to OTTO VOR – east of ABQ. This course would avoid most of the higher mountains, crossing the Sandia Mountains north of ABQ. On the way we spotted an impressive landmark known as “Ship Rock”



Ship Rock



Sandia Mountains

As the cumulus clouds were forming over the ridges, we cleared the Sandia Mountains, then I cut the corner and headed directly to our destination, Plainview, Texas (PVW). Soon we were seeing the first of many irrigated fields, east of the Santa Rosa “Route 66” Airport (SXU).



Patchwork fields and

with windmills in the distance

Due to the fact that Page, AZ is in the Mountain Standard time zone; we lost two hours as we headed into Texas, so we decided to make an overnight stop (532 nm). We had visited “Rocket Aviation” in the past and found them very friendly and helpful. When we landed, they offered us a hangar to house the plane overnight for \$30, telling us that storms were expected that night. We declined, fueled and securely tied down the Cessna for the night. They gave us the crew car and we headed for a nearby hotel.

During the night, the thunder and lightning were intense, then the hail started. Pea sized- it continued pelting everything we could see out the window of the hotel for at least two hours. We watched the weather radar on the cell phone – and held out little hope that our plane would be flyable after the storm.

When the sun began to rise, we could see that the weather outlook was poor, severe weather was hovering north of the Dallas area, blocking our path. We had about given up hope to fly out this day, May 17th; but checked the radar one more time before going to see if we still had a flyable plane after the hail. Incredibly, the storms had moved south – over Dallas, so we quickly left the Quality Inn, in hopes we could fly on.

Apprehensively we approached the airport as the sun was rising, and after a thorough preflight – found the plane undamaged! We were so grateful. The man at the FBO told us that just a few miles away, the hail had been much larger and broken automobile windshields. We vowed that if we were ever offered a hangar again – we would gladly take it!

There were lines of storms ahead, Dallas was a mess and there were more storms coming up through Louisiana, but we pressed on – it was Bob’s turn to fly – I was glad about that.



Near Wichita Falls, TX

With an indicated altitude of 11,300 ft, we were using our trusty Boggs Gases oxygen bottle – as we had earlier flying over the mountains. Since we were VFR, we were not talking to ATC – but were glad to see the Dallas traffic diverted out of our path. Most of the time, we were able to see the ground below, occasionally we were between layers, then I noticed I could no longer see anything out of the wing camera video app on my phone. It was covered with ice! The temperature had fallen to just below 32 degrees – but this did not last long and it melted off before there was any cause for alarm.

Dallas Traffic Iced up wing camera

During this portion of our trip, we had not yet decided where we would land to refuel. It depended on the winds. We wanted to go as far as possible, hoping to make it home this day. We were making good speed, so we headed for Vicksburg. Now – unbeknownst to us, there are two Vicksburgs – one in Louisiana and one across the river in Mississippi. We intended to head for Vicksburg (VKS), MS; but ended up landing in Vicksburg (VTR), LA. The runway headings are both north/south and they are about 5 miles apart. When we selected the airport to extend the runway on our iFly GPS tablet, (it was a little bumpy) we selected runway 18 at VTR. When we landed – after dodging clouds on the way down, the friendly guy who happily fueled our plane informed us we were at “Vicksburg-Tallulah” VTR – not VHS!! This was a first time for us landing at an unintended airport – after 50 years of flying – I guess we were overdue! We would highly recommend this airport though – which we were told has an excellent aviation museum. Maybe we will see it in the future.

The Vicksburgs Vicksburg-Tallulah VTR

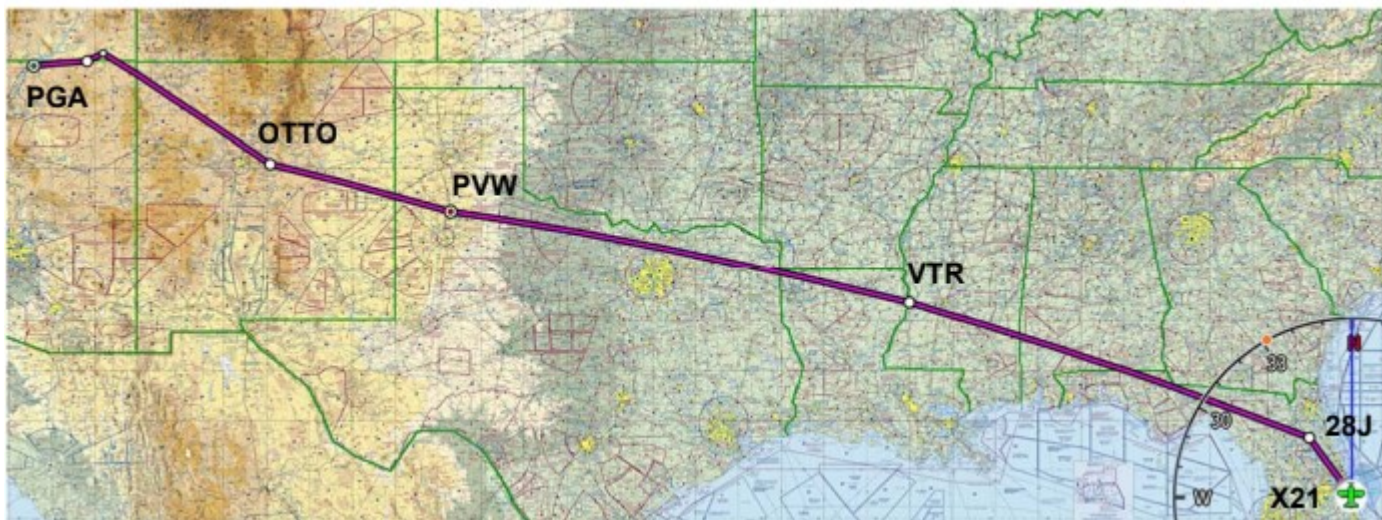
As it ended up, this airport after a 580 nm leg, was the best place for us. Weather was rapidly moving in from the south and VTR – a little further west - gave me more time to climb out and get settled before having to choose a path to avoid the heavy precipitation ahead. Since it was my turn to fly, I was glad about that.

The takeoff from Tallulah was uneventful, but the flight became difficult. The storms ahead were no fun at all, but we got through and broke out into increasingly clearing skies and headwinds as we headed for home.

Landing at Palatka we refueled – a distance of 517 nm.

For the last leg home, only 78 miles, it was Bob's turn to fly. The only obstacle ahead was the practice area west of Daytona for Embry-Riddle students. No problem, but a lot of pointing and head turning was in order to navigate through the throng of planes. Safely home again – we were grateful and tired. 3534 nautical miles and 33 hours of flying in 5 days – but the trip of a lifetime!

Daytona Practice area traffic



Page, AZ to X21 total trip 3534 nm, trip home 1707 nm

Chapter Officers

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Chapter Meeting

Weds. July 7, 2021 – 6PM for cook out and 7PM meeting

You read that on pg 1, RIGHT?

Bldg 10 Meeting Room, Dunn Airpark

480 N Williams Ave

Titusville, Fl

Chapter Breakfast

Sat. July 3, 2021 - 8AM

Dunn Airpark, (X21)

Titusville

EAA Chapter 866
Pre-meeting
Eat and Greet
Bldg 10 Clubhouse
Wed July 7, 18:15



Need info?



Call Kathy at 321-795-8810 N73KA@earthlink.net
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