EAA THE SPIRIT OF AVIATION

RUNWAY 35

The Official Newsletter of EAA Chapter 35, San Antonio TX

MARCH 2016

Volume 58 Issue 3

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Next Event

12 March 2016

1130

Fourth Annual San Geronimo Open House and Hangar Sale

Chapter 35 Clubhouse

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FLYING FOR THE FUN OF IT

Jim Humphries

Some days were just meant for flying airplanes. This was one of the best of the best. I woke up to a chilly Saturday morning in late January, had a light breakfast, and dressed warmly for the flight. The sky was bright blue and crystal clear as I trudged up the backyard hill to feed the birds before leaving for the San Geronimo Air Park to fly with Casey Fox in his iconic Hatz Classic biplane. There wasn't enough wind to float a flag as one talented scribe put it. Not being a morning person, I was still groggy with sleep. But the anticipation of going up in the biplane was exhilarating.

Casey had sent me a text message on Friday afternoon.

"Do you wish to fly in the am?"

I replied, "I'd love to fly with you Saturday. thanks for inviting me. Say when, and I'll be there."

His reply was came right back,"9:00 am San Geronimo."

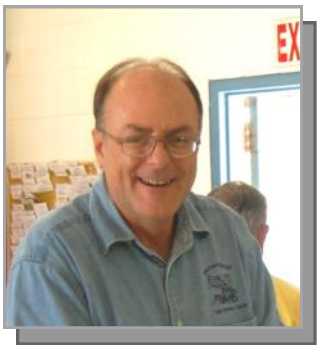
Casey had advised me to dress warmly, including a scarf.

One more quick message came Friday afternoon, "Fredericksburg for breakfast. Scarf heavy. Cold going out. Comfortable coming back."

Traffic was light at eight in the morning as I drove toward the air park. The morning paper had an advisory about road closures on Loop 1604 starting at Scheinfield Road. But driving was easy for a change in San Antonio, and I was soon at the beginning of the con-

(Continued on page 4)

PRESIDENTS COCKPIT



Steve Jones
Chapter 35 President

In our endeavors, equipment malfunction is serious business. We train for failure, and develop plans to proceed in our travels to the best of our ability with the equipment we have remaining for the flight. With this in mind, I wish to thank all our members who endured our sound system issues during the February meeting, and I want to bring you great news as well. Our sound system is actually in pretty good shape. We found the problem with our system boiled down to one well-used microphone. It was ready for retirement. Our replacement microphone system is in and it's a doozy, featuring four radio channels, two hand-held mics, two body packs and a choice of lapel mic or headset to go with the body packs. We can now outfit an emcee, president or televangelist as well as the featured speaker with hands-free mics. In addition, we can place a high quality mic at the presenter's laptop to capture audio and pipe it to the overhead speakers. But there's more. Even with all this audio goodness, we still have a mic available to pass around the room so our directors, chairpersons, and chapter members can have a word or two about how things are going.

We had a great turn out for the meeting with approximately 57 members and guests present. Craig Geron graciously stepped up to chair the Aircraft Builder's committee and outlined a plan to bring new emphasis to the building process and the resources available not only to current member-builders, but to casually interested people we may meet in passing. He laid out how a typical introductory conversation, or elevator pitch might proceed to explain what it is that makes our hobby/vocation/lifestyle so intriguing.

Phil Vaneau provided an outstanding view into the hectic world of international package delivery from the perspective of the flight deck. I have a new respect for his vocation. That's a tough life.

As I work from home these days, I got to witness something very interesting. In the days leading up to the meeting, I noted a flurry of activity. The phone here rang off the hook as Freda coordinated with an ad hoc committee of volunteers to assemble the February meal. I knew that Gail and Freda stayed busy, but to witness the coordination first hand was impressive. Thanks to everyone who helped!

For the February meeting, I changed the order of march in a bid to give you, the members a greater opportunity to visit. I reasoned that if we covered the chapter business meeting in conjunction with the meal, we could take a three-hour session down to something more manageable, and give you more time to visit. It was a great plan on paper, but it failed in execution. I found myself interrupting great conversation, and catching our directors and chairpersons in mid-bite, trying to enjoy their meal. We'll keep experimenting with better ways to conduct the meeting and I'm sure we'll make more mistakes along the way. Suffice to say, I won't do THAT again.

We had a few words about introducing rusty pilots to CFIs, in a bid to drive down incidents to make our corner of general aviation more satisfying to pilots and public alike. I'll be putting a plan together in the coming weeks. If you're a CFI who is interested in leading a seminar or would be willing to work one-on-one with a pilot who is ready to return to the air, please contact me at (210) 570-9435 or by email: eaa35pres@gmail.com.

MEMBER NEWS

Please welcome:

Dr. Charles and Rebecca Hood of san Antonio

Dr. Hood is a retired Naval Flt Surgeon and Army Sr. Flt Surgeon. He is currently a self employed AME. You may contact Dr. Hood at chhoodmd@yahoo.com

Dave and Cathy Frost of Utopia, TX

Dave is a Commercial, Instrument rated pilot that has a C-150, C-172, C-182 and is rebuilding a 7AC Champ. Dave may be contacted at castustwentytwo@yahoo.com

Steve and Dianne Law of Devine, TX

Steve is a Private Pilot who is building Sonex, one place, folding wing "Onex"! he reports that the tail is complete and the fuselage kit is on order. Steve may be contacted at SLawFlys@aol.com

Chris and Meredith Neill of San Antonio

Chris is currently in the flag pole installation business, and is an Air Force Flight Test Photographer. Photography is his passion and he is available for Air to Air and Air to Ground Photography. Chris may be contacted at neillcasa@yahoo.com

Stephen Sheppard and his fiancé Gretchen Umbeck of San Antonio

Stephen is a Private Pilot that is building a Long EZ. He is retired from the US Army Corp of Engineers and is a professionally registered Civil Engineer in TX. Stephen also co-wrote the US Army user manual for the Air Force C-17. Stephen may be contacted at roverporsche0708@yahoo.com

CHAPTER BULLETIN BOARD

Hangar Space Available

Building a Project? Assembling a kit?

Chapter 35 has a First-Class building space will soon be available for a nominal fee. You are not likely to find a fully equipped wide access hangar anywhere in the San Antonio area. First to contact Lew Mason at *210-688-9072* *lewnan@sbcglobal.net* gets it—hurry!

YOUR Articles Needed

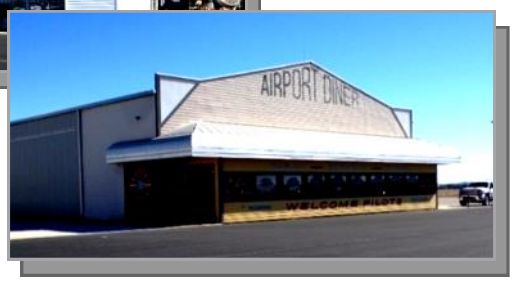
This Newsletter is YOUR newsletter. I put the articles in it, but ***you*** have to write 'em! Your chapter needs YOUR contributions. Please share your experiences, skills and wisdom, photos, humor and announcements with our membership. What may be common knowledge to you, may be priceless for a new pilot or builder. Even if you are not a Pulitzer level author—send me your words, I'll buff up the grammar if needed. Send input to: **eaa35news@gmail.com**

A DAY TO FLY (CONTINUED)

(Continued from page 1)

struction area, stopped dead in a two-block-long queue at that intersection. But it soon cleared, and I was on my way again on good roads. At the airport gate, I stopped to punch in the code, and hurried back into the car as the iron gate began to swing open.

As I drove along the entrance road, I watched in the rear view mirror for the gate to close behind me. But it never moved, and I was soon around the bend heading for Casey's hangar. I got there a few minutes before he showed up. The hangar was closed up tight, and there was little activity at the field. Just before nine, I saw his van coming, and our fun-flying day was about to begin. Casey opened the side door, and was soon sliding the tall hangar doors open. And there in morning light was the biplane, as pretty as ever. Casey swung it around and pulled it out tail-first into the sunlight. He helped me climb into the front cockpit



and get strapped in. I slipped on the leather flying helmet bulging with built-in earphones, pulled the fur collar of my flight jacket up, and wrapped the mandatory scarf around my neck. He climbed into the rear cockpit, and shortly called out, "Clear!" and hit the starter. The Lycoming engine balked in the cold air, but caught with a roar on the third try. We taxied out between the row of hangars, turned right onto the empty runway, and taxied to the south end in S-turns for forward visibility. Casey steered the biplane off the runway onto the run-up area, letting the engine idle until it was warmed up enough to fly. After a quick mag check, he taxied back onto the runway, and broadcast his takeoff intentions. The Lycoming IO-320 was a perfect fit for the airplane. As it came up to full power, we sped down the runway and into the air at 75 miles per hour. Casey set up a climb at 80, and turned toward Fredericksburg, and I marveled as the invisible air over the wings lifted us magically into the sky. I had dressed perfectly for the cold morning air, and was completely comfortable in the front cockpit. The intercom came to life as Casey checked on his happy passenger. He had turned off the hot mike mode to squelch background noise. I could reply by pressing the press-to-talk button on the panel. All was well in both cockpits as we leveled off at 3,600 feet. Casey offered me the airplane, and I kept the wings level as we headed for Fredericksburg, airspeed reading about 89 mph. There was intermittent radio chatter as other private planes flew in the general area, reporting their positions and intentions.

I had asked Casey if he planned to intersect Interstate Highway 10, and follow the roads to Fredericksburg. But no, he was quite familiar with the local area, and just pointed the nose in the general direction of the town. He called out the town of Comfort as we crossed IH10, and had me steer twenty degrees right for a mid-course correction. Soon he pointed out a row of white hangars along the runway at Gillespie County Airport at Fredericksburg, way up ahead. He had his pattern entry already set up as we approached the field on a forty-five to a right downwind for Runway 14.

As we approached the field, Casey radioed our intentions. We descended to pattern altitude, turned from base to final, and lined up with the black runway. I tried to keep my head out of his line-of-sight as we flared and felt for the runway. Casey new how to land the biplane to perfection, and this was no exception. We taxied to the ramp, and pulled in between a pair of light planes. He cut the mixture, and the prop wound down to a stop. Facing us ahead were two large buildings. On the left was a large WWII Quonset hangar converted into a fine hotel, named appropriately ! And adjacent to it was the flightline restaurant, with " " emblazoned across the front beneath the peak. Breakfast was waiting, and we were soon going in.

There's another pleasure in an excursion like this. That diner was buzzing with weekend fliers and a host of aviation-friendly customers at booths along the windows to the flight line. As Casey entered, he spied an old friend, Russ Luigs, an 83-year-old pilot who told me later that he was a UFO pilot! He explained that it wasn't what I was thinking. His UFO was an acronym for the , and, he informed me that I, too, was qualified for membership if I resumed my flying. Lately, as I brought up the subject of flying again, my sweet wife reminded me, "You're too old to fly!" She has tried to convince me of that recently as I brought

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A DAY TO FLY (CONTINUED)

(Continued from page 4)

up the subject. She reminded me abruptly on one occasion, "You can't even drive and think!" Now that was serious. But she's not far wrong. I'll be driving just fine, and she'll notice that I've gradually slowed down. She knows that I'm thinking about a completely different subject than driving the speed limit. "That's what I'm talking about!" she says. And I snap back to focusing on what I'm doing. That's one reason that talking on a cell phone is now prohibited by law.

Marsha tells me a joke about two old ladies driving along a busy road with many stop lights. The driver was talking with her passenger friend when she ran a red light without comment. She ran the next red light to the consternation of her observant friend. As she sailed blithely through the third red light, her concerned friend shouted, "Mable, You've just run three red lights!" To which the driver replied, "Oh, Am I driving?!" And Marsha thinks that's where I'm heading! No way! Just a busy mind!

Casey and I introduced ourselves to Russ and the other guys in the booth. Russ suggested that we get a large table at the rear of the diner. We ordered breakfast, and the others, who had just finished eating, brought their coffee cups. The bond between people who love aviation makes for friendly gatherings of even strangers. Soon the conversation was going strong, and breakfast was served. Pancakes and bacon seemed appropriate fare. I had ordered a single pancake. When it arrived, it filled the plate. I ate till I was stuffed, and half of it was still untouched. They feed you big in Texas!

Bob Dee had been a C-141 pilot in 1972 as Vietnam was winding down. He had left the Air Force to pursue a civilian career. Now he was flying an RV12 monoplane that he had built. Rick Olson sat across from me and inquired about my flying history. I told him a bit, and we chatted back and forth as we listened to Russ, the senior member at the table. Russ was a story himself. A very personal man with all kind of experiences from flying airplanes to restoring derelicts into works of art. He is the manager of the Flying L Ranch, a grass strip a few miles north of Bandera. He had flown over to Fredericksburg in his bright yellow customized Super Cub look-alike. His plane had a 100 horsepower engine, and was a little wider and roomier than a standard Super Cub.

But it still bore the black flash along the fuselage sides. I could see it through the diner window, tied down beside the row of assorted light planes. As we were breaking up, Russ invited Casey and me to drop in at the Flying L Ranch for a visit. Neither Casey nor I had to hurry home, so we agreed to rendezvous at his grass strip as soon as we could put some more 100 octane, low-lead avgas in the biplane.

A few minutes later we strapped in, started the engine, and taxied to the gas pump. I experienced a Rip Van Winkle moment as we pulled up beside a small building containing two hose reels, a step ladder and a computer panel, but with no attendant in sight. No line boy to wave us in, and clean our windshields and set up his ladder in front of the wings. That was refueling as I remembered it. Casey climbed out, put his credit card in a slot, selected his fuel type, unreeled the hose, climbed the ladder, and started pumping av gas into the tank in the center section of the upper wing. When he had finished, he replaced the fuel cap, climbed back down the ladder with the nozzle in hand, and pressed a button to wind up the hose. That was it. I had never thought that the modern age might change refueling an airplane to how it's done today with automobiles. I asked him if the pump asked for his zip code. He replied, "They figure if you can afford an airplane, they're not worried that you'll not pay the tab!" And with that, he restarted the engine and taxied out to the end of runway 14 to takeoff behind a Bonanza who was holding for a plane on short final. We were soon airborne, again climbing out at 80 miles an hour, heading west.

I recognized some of the landmarks that we had passed over coming in to the Gillespie County Airport. Soon we crossed over

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A DAY TO FLY (CONTINUED)

(Continued from page 5)

IH10, just north of Comfort, and continued on a straight line to the Flying L Ranch. Casey pointed out the Kerrville airport off to our right as we listened to radio chatter from pilots over there. A lot of activity. We could see the Mooney hangar alongside the runway. Casey commented on a grass strip along the way with a single house and hangar near one end. "How would you like to have that runway in your back yard?" he asked. Nice!

Soon the Flying L Ranch came in sight, and Casey flew a left hand pattern, curving around from downwind to final to keep the runway in sight. He reminded me to keep my head out of his line of sight on short final. We had discussed that previously, and my guideline was to put my head on the same side as the nose on final. The light crosswind said, look right, and I did.

This was a grass strip about 3700 feet long. Russ said that King Airs and T-28s and other larger planes had landed there. At the south end was the only building on the field. We taxied off the runway onto a concrete ramp and swung around to park beside the building. Russ had already landed and put his Cub in the hangar behind the office building. The photo below shows this building with an elevated observation platform along the front. Russ' office was inside.

Russ met us as we left the biplane. The temperature by then had climbed into the seventies. Casey was right. It was going to be a lot warmer on the way home. We entered the building and walked through the front office into an elegant hangar with four beautiful planes parked on a shining white floor. Right away I noticed the big Stearman with an uncowled 450 horsepower Pratt and Whitney engine; the plane bright red with a checkerboard rudder. This was Willie Langholz' 450 Stearman that he had told me about at the last EAA Chapter 35 meeting. Willie said that this monster biplane would humble you in a heartbeat, and I sensed that at first glance. It had twice the horsepower of the original trainer powering this former crop duster. I had heard tales of 450 Stearmans back in the late fifties when I was flying in the Rio Grande valley near Mission. Impressed with the capabilities of this powerful airplane, I wrote a short story featuring the duster. I offered it to several magazines for publication , but got "thanks but no thanks" on the rejection slips. I must not have made it sound too good, because I promised to send Willie a copy, but I haven't heard from him since. But there in front of me was this magnificent brute of a Stearman on steroids.

Russ's yellow Super Cub was beside the biplane. Russ took me over and explained all the improvements that made this a really impressive, fun airplane. I was impressed with the right-side drop-down window, common to Cubs, but nothing like the flimsy original version. This window was an aluminum affair over an inch thick, with the upper and lower sections joined with a piano hinge. With the window down, there was plenty of level surface along the hinge line for a comfortable arm rest.

This was a dream hangar. The floor had been built up to have a gentle slope toward the hangar doors, making it easy to move planes in and out. Over in one corner was a P-51 Mustang built from scaled-down plans, probably about 2/3 size overall. It was a beautiful replica of the real Mustang. I suggested it probably cruised about 145 knots, and Russ agreed. The engine had a different profile than the Rolls Royce Merlin, which changed the nose profile slightly. The builder compensated by installing a larger diameter spinner. I peeked inside, and found a two-seat cockpit. I'd love to see this plane fly. In a front corner of the hangar was an orange and white Volkswagen "bug" that belonged to Russ' daughter. At first glance, it appeared to be painted red, and I wondered if somehow Russ had come to own Paul Poberezny's Big Red One that was seen everywhere at Oshkosh.

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A DAY TO FLY (CONTINUED)

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But no, that was just my first impression. Russ took us back into his elegant front office where we had an enjoyable conversation about restoring a Cessna 195, and restoration of the 450 Stearman, and items of interest all around the office. Books of all types were along the front wall below the windows in recessed shelves. Many were about aviation, airplanes and engines. But quite a few were biographies of famous people. There were books on oil fields and drilling and cattle ranching which had been Russ' occupation. He had photos of famous planes, including a beautiful, four-engine Boeing 314 flying boat that flew the Pacific in style. I was pleased to see that Russ admired it too.

The day was slipping away in such pleasant company and the elegance of the setting that we were surprised at the hour. It was time to say goodbye to Russ, and head back to San Geronimo. We made a quick climb up to the observation deck which was fitted with a staircase that was formerly a wheeled boarding ladder for the airlines. The top platform was welded to the upper deck. I took a final photo of Casey and Russ looking out over the dry grass runway and taxiway. Russ again urged me to apply for UFO membership and get back to flying after a twenty-one year hiatus. We were soon on our way home, passing over Bandera and Medina Lake before sighting San Geronimo.

Casey greased it on again, and I commented on his ability to do that time and again. He cautioned me to hold the compliments until we were parked at the hangar. Tail draggers sometimes do things that pilots don't like to imagine. We put the biplane away, talked about our great day and headed home.

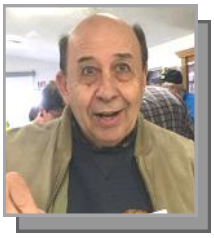
When I got in, Casey sent me a text, "Jim. I enjoyed the day."

I replied, "Me too, Casey! Many thanks!"

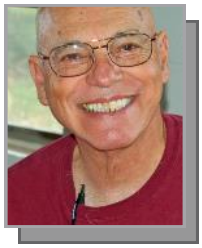
50 Year Members— A Life-Long Passion for Flying

The Experimental Aircraft Association was founded in 1953. Shortly thereafter, 59 years ago its 35th chapter was chartered in San Antonio, TX. To our knowledge we have no charter members of chapter 35 any longer, but several of our members can reflect back on a lifetime of experimental aviation. Most were pilots and active long before becoming members. EAA Chapter 35 has two (that we know of) members who have been members for 50 years or more.

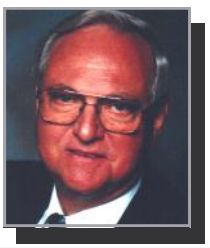
BG Retired **Julius Braun** joined the EAA in ***June 1959*** which by the editor's calculations makes him the senior member of our chapter. He has witnessed and been a leader in aviation from his crucial role in WWII all the way to fielding the orbital GPS system. Tucked away in his hangar is a wonderful replica of an aircraft used in the 1941 Louisiana War Games to prove the value of light civilian aircraft as observer planes.



Colonel, Retired, **James Humphries**, a former Air Force B-57 pilot knew Lou Stolp back when experimental aviation was in its infancy and since 1966 has continued that lifelong passion for flying with 50 years of membership. See his most recent article in this issue.



John LaTour is a past president and omnipresent member of the chapter. He joined EAA in New Orleans in 1966 and decided to build his first of six airplanes instead of working on private pilot license. He built a Pou Du Ciel / Flying Flea, assembling the wing, fuselage & rudder on the second floor of a one bed room apartment. "My neighbors almost drove me out of town for cutting lumber on balcony". He's just completed his latest project as part of "the Merlin Team".



Colonel, Retired, **Robert Drumm** was a rotary wing command pilot and instructor who served on active duty in the USA from 1943—1972 and served in Guam, Japan, Korea and had a delightful tour in Hawaii. Since 1966 he too has kindled a passion for flying for half a century of membership.

YOUNG EAGLES EVENT APRIL 16!

Phil Vaneau

We are planning to have our Spring Young Eagles Rally at Stinson on Saturday, 16 April, 0900-1300. It will be part of the City of San Antonio's Stinson Aviation Education Fair and Young Eagles Rally. The City of San Antonio Aviation Public Affairs branch is advertising to area STEM schools and we expect to fly around 125 area youth. We will need pilots, static displays, ground instructors, escorts, and help with ramp operations. Please sign up early by sending me an email at pvaneau@gmail.com. Feel free to give me a call at 210 887-3135 with questions. Thanks for your support.

Reminder for Young Eagles Volunteers—Youth Protection Training

Starting 1 May 2016 EAA will require all volunteers and staff interacting with Youth to complete:

1) EAA Youth Protection Course & Test
2) Criminal History Background Check.

I would highly encourage all Pilots and Ground Volunteers to compete the training now. The criminal background check can take up to 10 days to process but is good for 3 years and . I was able to accomplish both requirements in 15 minutes. Go to www.EAA.org/youthprotection for a summary of the requirements and instructions on how to accomplish them. You can accomplish everything on your EAA online Account. If you have any questions, give me a call at (210) 887-3135.

MARCH OPEN HOUSE!

Freda Jones

The menu for the March meal is pot luck, with a focus on hearty soups and sides that go well with soup. Garden salad will be provided.

Requesting:

* ***Your favorite homemade soup***
* ***Side dishes that go together with soup***
* ***Your favorite dessert***

If you're bringing dessert, you can take it directly to the Goode hangar or the chapter clubhouse. We will have runners available to move your dessert to the right location.

Soup, salad and sides will be served during the general meeting, at the chapter clubhouse. Dessert will be served at June and Brian Goode's hangar right after the main course.

The February meal went very well thanks to our volunteers. I would like to say thank you to Gail, Julie and Peggy for helping. I would also like to say thank you to everyone who brought a dish or dessert. Your contribution was very much appreciated and enjoyed by all. It was a huge success.

Hangar Sales During Open House

Hello everyone, As most of you know the EAA Chapter is having our 4th annual "Open Hangar Day" whereby we trailer / cart people around to various hangars all over the airpark . There will be food, drinks and snacks at various stops.

We have had a few requests to combine a "garage / yard sale" along with this event.

If you have "stuff", especially aviation stuff that you want to get rid of, set up a table or two and display your stuff on Saturday, March 12th at your hangar, or if you don't have one, up at the clubhouse. The event will run from 11:30 till 2 or 3 pm, or maybe longer.

This is not a "Garage Sale" (so no drive around junk collectors) and will be open only people attending the Open Hangar Day. Hope to see you there.

Contact eaa35vp@gmail.com with questions (or to volunteer!)

SIMPLY UNDERSTANDING OCTANE

Chuck Fisher

Have you ever wondered what 100LL actually means other than you get to pay twice the price for it? Or, have you heard that 100 octane fuel is "more powerful" than 87 octane. Heck, 93 Octane at the pump is more expensive – it must be better! Well, indeed there is a difference, but it might not be what you thought.

Iso-Octane is a chemical that explodes more slowly. A long time ago, the fuel industry needed some measure of explosivity – as some mixtures exploded all at once, and others in a more controlled fashion (as far as explosions go…). So, they hit upon comparing the gasoline to different concentrations of iso-octane as a standard to measure gasoline explosions against. Gas with a slower explosion rate matched the explosiveness of a test fuel with more iso-octane in it. Hence the term "octane", but today's fuel does not actually contain octane.

Thus, higher octane fuels burn slightly slower and lower octane fuel will burn (explode) more rapidly and will explode more easily.

Different types of engines have different fuel requirements. Diesel engines have no spark plug, so they require a fuel that will ignite and explode by pressure and heat alone. Thus, they require a fuel with lower octane rating and higher energy content.

Jet fuel needs to exhaust all of its energy right away and burn completely before it vents to the open air. There is no need for anything to slow its burn down at all, so it has zero octane. Boom!

Piston engines, though, provide a spark to light off the explosion slightly before the piston reaches top dead center. So, the fuel needs to stay in aerosol form until lit. Most auto engines are low compression, cool running engines so the risk of spontaneous explosion by the pressure of heat alone is not too great. So, lower octane fuels, 87 or so, will work fine for most. However, in engines that run with higher temperatures or higher pressures, lower octane fuel will ignite early causing pre-ignition (knocking or pinging) which can damage the cylinder or piston. Even lower compression engines under load may increase cylinder pressure enough to knock under some circumstances. Those who have pulled trailers through mountains might recognize this. Those engines need a higher octane fuel to prevent pre-ignition and "slow down" the explosion.

Aircraft piston engines run at very high temperatures and high RPM. So, they need very stable fuel. Until about WWII aircraft engines were limited to big bore, low RPM radials because there was no extremely high Octane fuel. In-line, high compression engines just didn't provide the performance needed. Jimmy Doolittle, working with Shell Oil, finally convinced the US military to use high octane aviation fuel previously used only in air racing. This little publicized development allowed the US to field supercharged, high compression piston engines that ultimately were a game-changer in WWII.

To do this, in addition to combining a mixture of fuels that provided high energy content, the company added tetraethyl lead. This inert compound effectively blocked the molecules from colliding and exploding on their own (OK this is a little oversimplified…). So, fuels could actually have octane ratings well above 100 yet maintain their entire energy content.

So, even 87 octane gas with lead, had a stabilizer to slow the burn from compression alone, but it had all of its energy content intact. Nowadays, autogas tends to have alcohol as an additive instead. Alcohol slows the burn of the fuel as well but it does not contribute energy in the explosion. So, a gallon of 87 octane auto fuel with 10% alcohol will explode at 87 octane rate, but with less energy per bang than 87 octane leaded fuel did.

OK, why is this important? Jet fuel has zero Octane. So, when exposed to heat or a spark it will explode all at once. In an engine not specifically designed for that, and I don't know of any pistons that are, this can and very well might blow the cylinder heads right off.

Lower octane gas – say autogas – in a plane with a high compression, hot running engine will be likely to detonate before the spark and again may damage the engine. When will this happen? At max power settings on climb out.

So, contrary to popular belief, higher octane fuel is *not* more powerful fuel. However, higher octane fuel is a more appropriate choice for high temp, high compression, high load applications. Older planes like mine specify 87 octane fuel. But, that is 87 octane LEADED fuel, not today's MoGas. The energy content of 87 octane fuel today is much less than it was back then. The combustion cycle is measured in milliseconds and even slight changes can be catastrophic. In the air, alcohol is generally a poor choice as it attracts water, and Jet fuel belongs only in jets. So, know what is in your tanks!

Why do you care? Read the following safety article!

EAA 35 FEBRUARY MEETING

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SAFETY NOTES & NOTAMS -MISFUELED!

Ron ODea

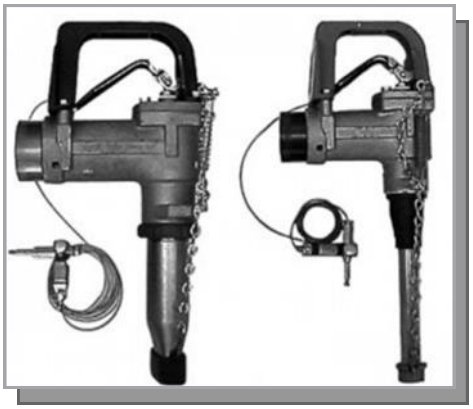
This months Safety Article deals with aircraft fueling. This is an area most of us feel we have a good handle on. I thought so too until I read Mike Busch's recent article.

His message struck home because it reminded me of an accident that took place in the mid '70's in the Cincinnati area. A Cessna 340 had just refueled at Cincinnati Lunken Airport. Shortly after take off both engines failed and the aircraft crashed. It was later determined that the aircraft had been fueled with "Jet-A" instead of Av-gas.

The aircraft's' engine nacelles had the decals "Turbo-Charged"on the side. The line person thought it was a jet. The result was that fuel companies changed the size of the fuel nozzles and insurance companies paid aircraft owners to add opening restrictions to the fuel tanks to prevent misfueling.

Please read Mike's article about his experience with misfueling!

Please, "Keep your brain in the Game". Be safe out there!



Jet fuel nozzles have a wide spade top that is theoretically incapable of being inserted in an

Mike Busch

Reprinted with permission

Check out Mike Busch at www.savvymx.com

Jet fuel contamination of avgas remains a killer.

On March 2, 2008, a turbonormalized Cirrus SR22 was destroyed when it crashed shortly after takeoff in Rio de Janiero, Brazil, killing all four people aboard. Shortly after the aircraft departed from runway 20, the airplane's engine lost power, and the aircraft hit a building and exploded. Further investigation revealed that the aircraft had been refueled with Jet A instead of 100LL.

This report reminded me of an incident 16 years earlier during which my own 1979 Cessna T310R was misfueled with Jet A at San Carlos (Calif.) Airport, a busy GA airport just south of SFO. Fortunately, I caught the (mis)fueler in the act, red handed. Had I not been lucky enough to do that, I probably wouldn't be writing this column.

Normally, I either fuel my aircraft myself (at a self-serve pump) or watch it being fueled (when avgas is supplied by truck). On this occasion, I'd radioed for the fuel truck and waited patiently for it to arrive. After 10 minutes of waiting, Mother Nature intervened and compelled me to walk into the terminal building in rather urgent search of a loo. By the time I took care of my pressing business and returned to the ramp, there was a fuel truck parked by my airplane and a lineperson pumping fuel into my right main tank. As I approached the aircraft, I observed to my horror that the truck was labeled "JET A."

Theoretically impossible

At first, I was not too worried, because I believed that misfueling my airplane with Jet A was physically impossible. That's because in 1987 (the year I purchased by T310R), all turbocharged twin Cessnas became subject to Airworthiness Directive AD 87-21-02 which mandated installation of restrictor ports on all fuel filler openings. The restrictor ports were designed to make it impossible to insert an industry standard Jet A nozzle, while accommodating the smaller diameter avgas nozzle.

The AD was issued because the FAA became aware that a large number of misfueling incidents and accidents were occurring in turbocharged aircraft. These aircraft typically were prominently decorated by the factory with the word "Turbo" and apparently linepeople were confusing it with "Turbine" and pumping Jet A into the tanks.

So the FAA mandated that jet fuel trucks install a wide spade-shaped fuel nozzle, and that vulnerable airplanes (like turbocharged twin Cessna) have restrictor ports installed into which the wide jet fuel nozzle would not fit. This made misfueling of piston aircraft with jet fuel theoretically impossible. (They also said that it's theoretically impossible for bumblebees to fly.)

But as I arrived at my airplane, I discovered that indeed my left main tank had been topped with Jet A. How was this possible? A subsequent investigation by the local FSDO revealed that the Jet A fuel truck at San Carlos Airport had not been fitted with the correct spade-type nozzle. (I suspect they got in trouble for that.)

Undoing the damage

I spent literally hours trying to find an A&P on the field that would assist me in purging the fuel system of its witches' brew of 100LL and Jet A. That turned out to be surprisingly difficult. The fueling company was falling all over itself to be helpful (because I'm sure they feared a big lawsuit) but they had no mechanics or maintenance capabilities. There were several maintenance shops on the field, but none wanted to go near my contaminated airplane, clearly afraid of the potential liability exposure. Finally, I persuaded one

(Continued on page 13)

MISFUELED (CONTINUED)

(Continued from page 12)

maintenance manger to help me out after writing and signing an omnibus waiver absolving the shop and its mechanics of any liability in connection with their work on my aircraft.

The purging process itself was quite an eye opener. We drained the tanks as completely as possible, putting the noxious effluent into a 55-gallon drum provided by the fueling company (who had agreed to deal with the costly disposal of the nasty stuff). We disconnected the fuel line going to the engine-driven fuel pump and drained all the fuel from that as well.

Be sure all your fuel filler ports have restrictor rings. The big GATS jar (available at Sporty's

Next, 5 gallons of 100LL (donated gratis by the fueling company) was poured into the main tank, and then pumped through the system using the electric boost pump and drained from the disconnected fuel line into a 5-gallon bucket. The fuel in the bucket was tested for Jet A contamination using the paper-towel test: A few drops are placed on a paper towel and allowed to evaporate completely. Pure 100LL will not leave an oily ring on the towel, but even small amounts of Jet A contamination will leave an obvious ring. The stuff in the bucket flunked the test.

Another 5 gallons of 100LL were poured into the tank, and the process repeated. Once again, it flunked the paper-towel test. We had to repeat the procedure three more times before we were satisfied that the system was essentially kerosene-free. We reconnected the fuel line, cowled up the engine, the fueling company then topped off the airplane (again gratis), and I was finally good to go…fully six hours after the misfueling incident.

Lessons learned

I learned some important lessons that day. Perhaps the most important is that it's impossible to distinguish pure avgas and a mixture of avgas and Jet A by color alone. My main tanks had been about half-full of avgas, so after the misfueling they contained roughly a 50-50 mix. If you take a jar full of pure 100LL and another jar full of a 50-50 mix of 100LL and avgas, I guarantee you will not be able to see any difference in color or clarity between the two.

I hadn't realized that before. I has always been taught that you sump the tanks and observe the color—100LL is blue and Jet A is straw color. What I was not taught is that a mixture of 100LL and Jet A is also blue and that you simply can't tell the difference visually. In retrospect, I shudder to think what would have happened had I not caught that Jet A truck in front of my airplane.

I was also taught that since Jet A is significantly heavier than avgas (6.7 lbs./gal versus 5.85 lbs./gal), the Jet A and 100LL will separate just like oil and water, with the Jet A at the bottom (where the sump drain is) and the 100LL at the top. That's true, but only if the contaminated fuel is allowed to sit for hours and hours. It turns out that 100LL and Jet A mix quite well, and the mixture takes a surprisingly long time to separate.

There are at least two good ways to distinguish pure 100LL from kerosene-contaminated 100LL. One is by odor: Jet A has a very distinctive odor that is detectable even in small concentrations. The other (and probably best) is by using the paper-towel test: Pour a sample on a paper towel (or even a sheet of white copy paper), let it evaporate, and see if it leaves an oily ring.

Nasty stuff

What effect does Jet A contamination have on a piston engine? Enough to ruin your day.

You can think of Jet A as being fuel with a zero octane rating. Any piston engine that tries to run on pure Jet A will go into instant destructive detonation. However, in real life, we almost never encounter that situation because the tanks (at least the main tank used for takeoff) is almost never completely dry when the aircraft is misfueled.

Therefore, the real-world problem is not running on pure Jet A, but on running on a mixture of 100LL and Jet A. Depending on the mixture ratio of the two fuels, the effective octane rating can be anything between 0 and 100. A mixture with a lot of Jet A and just a little 100LL might be detectable during run-up. A 50-50 mix might not start to detonate until full power is applied, and the engine might fail 30 seconds or 3 minutes after takeoff. Just a little Jet A contamination might produce only moderate detonation that might not be noticed for hours or even weeks. Like so many other things in aviation, "it all depends."

The Cirrus SR22 accident in Rio reminds us that the problem of misfueling is still with us, despite all the efforts of the FAA to eradicate it. We need to be vigilant. Always watch your airplane being fueled if you possibly can. Make sure its fuel filler ports are equipped with restrictor rings. Don't just look at the fuel you drain from your sumps—sniff it, and when in doubt, pour it on a paper towel.

FROM HEADQUARTERS

EAA opposes ATC Privatization: urges members to contact Congress

The Experimental Aircraft Association is urging its members to contact their congressional representatives and express opposition to provisions in the Aviation Innovation, Reform and Reauthorization (AIRR) Act that separate the nation's air traffic control system from the Federal Aviation Administration to be managed and operated by a not-for-profit, non-government entity. The legislation (H.R. 4441) passed the House Transportation and Infrastructure Committee on February 11 and may be headed to the full House floor for a vote by the end of next week.

"This will hurt the safest and most complex aviation system in the world, which is why EAA is unequivocally opposed....There will be no turning back. This will permanently change the access and freedom of the nation's airspace for general aviation. That's why all general aviation pilots and supporters should contact their elected representatives on this immediately."

EAA members can find contact information and send correspondence to their House and Senate representatives through EAA's Rally Congress online portal at www.govt.eaa.org.

SportAir Workshops

March 12-13, 2016: Dallas, TX

Register at: http://www.eaa.org/en/eaa/aviation-education-and-resources/eaa-sportair-workshops/eaa-sportair-workshop-schedule

EAA Webinars

http://www.eaa.org/en/eaa/aviation-education-and-resources/aviation-videos-and-aviation-photos/eaa-webinars

3/2/16 8 p.m. CST Fix It Now...Or Fix It Later
Mike Busch **FAA Wings/AMT credit**

3/9/16 7 p.m. CST Fly Your Own Plane to Cuba
Jim Parker

3/16/16 7 p.m. CDT Are You Fit to Fly? Understanding Aeromedical Self-Certification
Dr. Greg Pinnell **Qualifies for FAA Wings credit**

3/23/16 7 p.m. CDT Reviewing the Flight Review
Prof. H. Paul Shuch **Qualifies for FAA Wings credit**

3/30/16 7 p.m. CDT Basics for Tailwheel Airplanes
John Valade **Qualifies for FAA Wings credit**

3/31/16 7 p.m. CDT Avoiding the Base to Final Turn Accident
Gordon Penner **Qualifies for FAA Wings credit**

Misfueling Prevention Resources

National Air Transportation Association Online Training: http://plst.nata.aero/misfueling/story.html

Air Safety Foundation Prevent Misfueling

Carry the card that can save your life!

http://www.aopa.org/News-and-Video/All-News/2016/February/17/Prevent-misfueling?WT.mc_id=160219eftrng&WT.mc_sect=sap

From Air Safety Institute

Misfueling accidents are easily preventable if pilots take some simple precautions, and the AOPA Air Safety Institute wants to help! To make sure pilots and those responsible for fueling their aircraft have no doubt about the type, location (tanks), and amount of fuel needed, the institute developed a variety of fuel cards that pilots can personalize with information specific to their aircraft. The cards, which can be ordered from Vistaprint, will help pilots, line service personnel, and FBO customer service reps clearly communicate and confirm the fuel order to help prevent misfueling. So whether you fly a 100LL-burning piston or a Jet-A powered turboprop, the Air Safety Institute has you covered!

In addition to using the fueling safety business cards, the Air Safety Institute recommends these simple steps to help prevent misfueling.

1. Be present and supervise the fueling.
2. When placing a fuel order, confirm the type and quantity of fuel and ask for a read-back from the customer service representative.
3. Make sure the person taking the fuel order and the person fueling understand the difference between tip tanks and auxiliary tanks, etc.
4. After fueling, check the receipt to verify that your aircraft has received the proper fuel type and quantity.
5. Always sump the tanks before flight, especially after fueling.
6. Smell the fuel: 100LL and Jet A have very unique and different smells—even a blend of the two fuels will smell of kerosene and much different than 100LL alone.
7. Know your engine. Be able to recognize the signs of detonation caused by a misfueling.

SO YOU ARE THINKING THAT YOU WANT TO BUILD AN AIRPLANE?

Craig Geron

A fellow builder and member of our EAA chapter and I were talking after I had finished flying off the 40 hour Phase I on my homebuilt - and we wondered just how many aircraft projects were started but not finished for one reason or another. My friend made the comment that "he would never encourage someone to build an aircraft – but once someone started building, he would help and encourage and support the builder any way that he could".

We wondered how many projects passed through several builders before finally making it into the air, and I understood the wisdom in his comment. After all, there are all kinds of ways to enjoy aviation that don't involve actually building your own aircraft. The EAA provides a great cross-section of aviation involved activities to fit the personalities and preferences of the general public. There are viable sport aviation alternatives to building an airplane, and for certain people in certain situations, the alternatives make more sense than building. But for those who find themselves compelled or even driven to build an airplane – here are some key things to contemplate when making the decision.

To borrow from the news business where a successful story covers "who, what, when, where and why" - I think every successful builder has in one way or another addressed the same basic elements during the build. My goal here is to help cement the decision process and to give each builder the best chance at completing the project and making the first flight. So here goes:

WHO – evaluate your lifestyle, your personality, your track record of project completion? This isn't about who you want to be, it is about being honest about assessing who you are. Can you compartmentalize? Can you manage work, family, finances, and unexpected challenges? There is no right or wrong answer but if you are in your third year of med school, you might want to wait a few years to start the project.

WHAT – evaluate what type aircraft you want to build? What kind of a pilot and builder you are can help with what airplane fits you and your flying style. Why build an acrobatic airplane when any "G" at all makes you uncomfortable. Are you going to fly with your spouse or family? And then of course are you allergic to aluminum dust or epoxy resin? The laws of aerodynamics apply to all aircraft and performance is all about trade-offs and compromise and remember that it is hard to think critically when you see yourself with the scarf in the wind aviating in the clouds doing whiferdills and loop de loops.

WHEN – think about when you are actually going to be working on the airplane. Today airplane kits give rough estimates on the amount of time required to complete a project. Some range from 1,000 hours to upwards of 6,000 hours. Well just so you know, the average 40 hour per week office worker with normal vacation days only works 1900 hours a year (that's the average 40 hour work week for an average year). Can you commit to doing something every day, every week. If you can't, then before you know it you will not have touched the project for a month, then two, and you get the point. You want to keep a slow steady strain – like erosion over time builds the mountains, it is consistency that builds a plane. Also is your oldest son or daughter going to be in college in two years? Tuition is expensive and timing is everything so think big picture and family harmony. The goal is to build an airplane and keep your family happy and supportive in the process. Oh – and you don't want to get voted off the cul-de-sac for bad yard of the year either, especially two years running.

WHERE – most builders begin in the garage. Most builders don't anticipate the dust, noise, and challenges a garage build

(Continued on page 16)

BUILDING A PLANE (CONT)

(Continued from page 15)

can create. Make sure you have buy-in from the family, kids, wife, pets, etc. And then at some point the project will have to transition to a hangar and airport.

WHY- building an airplane takes time, money, commitment, the ability to make and recover from mistakes and disappointments, and intellectual honesty and self-assessment. If you are good at compartmentalizing and you have a supportive spouse and family, and if you have the ability to maintain a well-rounded life during the build – then you are a good candidate to build and complete an aircraft.

Finally – we are all, as members of the EAA, ambassadors for this fine organization. We all have our own aviation talents and experiences and we share a common commitment to furthering the joy and fulfillment of the flying culture. So you don't have to build or want to build an airplane to enjoy all that aviation has to offer. And if you find yourself in a conversation with someone contemplating building an experimental aircraft, it might help if you gently offer the "who, what, when, where, and why" evaluation method. That single act may help a star-crossed scarf in the wind whiferdill , loop de loop dreamer become a successful builder, for all the right reasons.

Craig Geron is the Aircraft Builder's Chairman and a go-to guy for help selecting, starting and, most importantly, completing a project. He can usually be found tootling around in his gorgeous RV-8. But when he's not there he can be reached at the numbers in the back of this newsletter

THE BUILDER'S CORNER -

EXPENSIVE NOISE

Mark Julicher

Starting your engine should be simple. You spray it, spin it and spark it. The engine fires off and purrs nicely. If, on the other hand, anything goes wrong, the result may be some very expensive noise.

We recently finished an annual on a Cessna 150 with the ubiquitous, Continental O-200A . (Continental 85 operators should be paying close attention too!) This particular engine had the old-style pull starter. Anticipating the satisfaction of a completed job, we rolled the plane outside, chocked it, gave it two shots of prime, and pulled the starter T handle.

Photo 1: Starter pinion gear destroyed by engine kickback

Let me back up just a little. We had started this engine four times during the annual to do such tasks as warming the oil and preparing for compression check. These previous starts were uneventful. This start was different. This time the engine kicked back and did not start. The noise from the starter was a horrific gear grinding sound. Youch! This could not be good.

There was nothing to do except remove the starter and have a look. Photo one shows what we found. Obviously the missing gear teeth were somewhere inside the engine. The only

(Continued on page 17)

THE BUILDER'S CORNER (CONT)

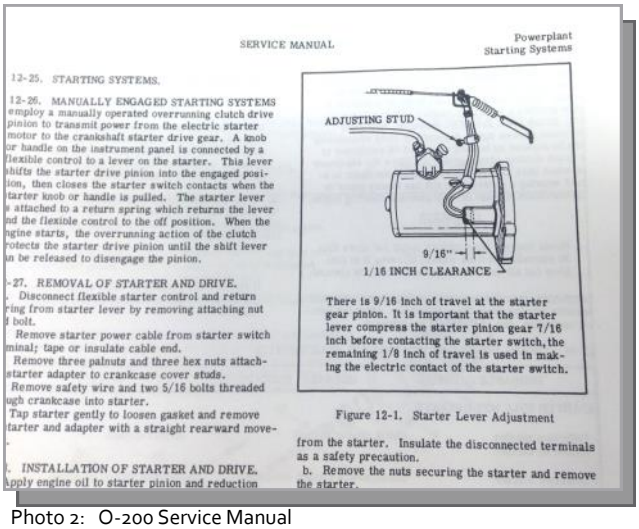
(Continued from page 16)

correct maintenance choice was to continue opening the engine and find the missing teeth..

Several hours later we had pulled the engine off its mount, removed four cylinders and removed the accessory case. The crankshaft gear and camshaft gear were severely damaged, but the missing teeth were found and removed before they had gotten into a cylinder. Ultimately, it was expensive to repair this engine, but it would have been far worse if metal chunks had been allowed to bounce around inside the crankcase. This engine will fly again.

Post Mortem Analysis

Photo two is a page of the Continental Service Manual. The installation and adjustment of the pull starter is clearly explained. If you ever have to install one of these, double-check



SERVICE MANUAL

Powerplant
Starting Systems

12-25. STARTING SYSTEMS.

12-26. MANUALLY ENGAGED STARTING SYSTEMS employ a manually operated overrunning clutch drive pinion to transmit power from the electric starter motor to the crankshaft starter drive gear. A knob or handle on the instrument panel is connected by a flexible control to a lever on the starter. This lever shifts the starter drive pinion into the engaged position, then closes the starter switch contacts when the starter knob or handle is pulled. The starter lever is attached to a return spring which returns the lever and the flexible control to the off position. When the engine starts, the overrunning action of the clutch protects the starter drive pinion until the shift lever can be released to disengage the pinion.

-27. REMOVAL OF STARTER AND DRIVE.
. Disconnect flexible starter control and return ring from starter lever by removing attaching nut d bolt.
Remove starter power cable from starter switch minal; tape or insulate cable end.
Remove three palnuts and three hex nuts attach- starter adapter to crankcase cover studs.
Remove safety wire and two 5/16 bolts threaded ugh crankcase into starter.
Tap starter gently to loosen gasket and remove tarter and adapter with a straight rearward move- .

. INSTALLATION OF STARTER AND DRIVE.
Apply engine oil to starter pinion and reduction

ADJUSTING STUD

9/16"
1/16 INCH CLEARANCE

There is 9/16 inch of travel at the starter gear pinion. It is important that the starter lever compress the starter pinion gear 7/16 inch before contacting the starter switch, the remaining 1/8 inch of travel is used in making the electric contact of the starter switch.

Figure 12-1. Starter Lever Adjustment

from the starter. Insulate the disconnected terminals as a safety precaution.
b. Remove the nuts securing the starter and remove the starter.

Photo 2: O-200 Service Manual

this section before you begin. In the previous case, the engine had been starting just fine, so we had not suspected a problem with the starter installation. Look carefully at Photo 3 and let me explain the operation of the pull starter.

A cable is attached at position 1 and this cable runs off screen to the left and into the cockpit. When the cable is pulled, the starter lever rotates on the pivot and pushes the pinion to the right. The pinion meshes with the crankshaft gear, which is not shown. Ideally the pinion meshes fully with the crankshaft gear BEFORE the adjusting screw presses on the electric switch.

Once the engine starts, the pilot releases the cable. The starter lever and pinion are spring-loaded to return to the disengaged position.

If the adjustment screw is not set correctly, the electric switch is closed whilst only a small bit of the pinion is meshed in the crankshaft gear. The full force of engine cranking is applied to

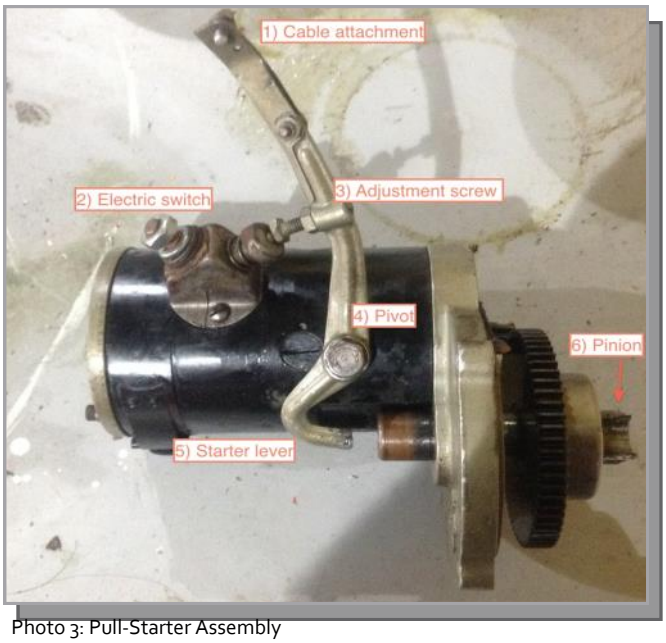


Photo 3: Pull-Starter Assembly

just the tip end of the pinion. The pinion grinds the crankshaft gear. If the engine kicks back, the partly meshed pinion can't resist and it breaks.

The lesson here is not to ignore the adjustment and operation of your pull starter. The gears are expensive and it takes many hours to tear down the engine.

Mark Julicher is an EAA technical advisor and frequent contributor to this newsletter for which the editor is immensely grateful. He can usually be found at Bulverde Airpark and would love to help you with your technical issues. His contact information is in the back of this Newsletter

FEBRUARY MYSTERY PLANE REVEALED

By Doug Apsey

Congratulations to Jack Wright, David Baker and Charlie Brame for correctly identifying our February mystery airplane as the Taylor E-2 "Cub" designed by C.G. Taylor in 1930. The first flight of the E-2 was on 12 September, 1930. The airplane

was initially powered (or more accurately underpowered) by a 20 hp Brownback "Tiger Kitten" engine that proved to be insufficient to get the airplane more than five feet into the air on initial test flights. The engine was then upgraded to a Salmson A-9 radial engine from France which provided sufficient power but proved expensive to maintain so Taylor continued to look for other options. In early 1931, Continental came out with the 37 hp A-40 four cylinder horizontally opposed engine and Taylor decided on that power plant for his new design.

Homebuiltairplanes.com

The E-2 Cub was a high wing, two seat tandem design with a tube and fabric fuselage and a wood and fabric wing. Originally it was an open cockpit design but in early 1932 the cockpit was enclosed. Empty weight was 510 lbs. and maximum take-off weight was 970 lbs. Cruise speed was said to be 70 mph although one source lists cruise at 65 mph and another at 55 mph so 70 was probably pretty optimistic. The rate of climb was reported to be 400 to 450 ft./minute. Stall speed was 28 mph.

Holcomb's Aerodrome (airminded.net)

Twenty-two E-2 Cubs were sold in 1931, the first year of production, and they retailed for $1,325.00. By the end of its production run in 1936, a total of 353 Cubs had been sold. In November of 1937, the Taylor Aircraft Company became Piper Aircraft Corporation and the E-2 Cub evolved into the Piper J-3 Cub. Over 23,000 J-3's have been produced. C.G. Taylor left Piper vowing to produce an airplane that would outperform the Cub. The result of that effort was the Taylorcraft which, according to my father who owned one of each, he succeeded in doing.

Sources for this article include:

https://en.wikipedia.org/wiki/Taylor_Cub

http://www.airminded.net/e2/e2.html

To view a YouTube video of the E-2 in flight, check out the following link:

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

NAME THE PLANE

Here is our third Mystery Plane for 2016. Who will be the first to email me at dapsey@satx.rr.com with the following information?

Wikipedia.org

1. Which company designed and built it?
2. What was its designation and/or name? i.e. C-172 Skyhawk, PA-24 Comanche, etc.
3. What year did it first fly?
4. What was unique about the construction of this airplane?

Country Store

Brian Goode

SHIRT NEWS The EAA Chapter 35 Fishing shirt inventory is being replenished and the order should arrive before the next Chapter meeting. If you placed a special order, it will arrive at the same time, so bring your check book or a handful of cash to the meeting and pick up your merchandise.

The new Safety Yellow golf shirts went fast. There were only a couple of these bright shirts left, so we ordered a couple of more so we would have some for to sell at the February meeting.

LOG BOOK TOTE BAG We have one (1) log book bag remaining. It would be good for storing your aircraft log books, your laptop computer, iPad or personal "stuff" when traveling. Only $29.00 gets this last of a kind.

Wash Wax All Products: The Country Store has recently become a dealer for the Wash Wax All aircraft care products. These fine products are manufactured locally by Aero Cosmetics on the San Antonio International Airport.

We have ordered some inventory which will be on display at the Feb meeting. We will be doing a show and tell of some of the products at the meeting, so be sure and attend.

Our prices ***for EAA Chapter 35 members*** will be better than other outlets because our overhead is nothing compared to a retail outlet. We won't advertise the prices, but they will be posted at the monthly meetings at the Country Store table. Stop by and pick up some product. It works well on automobiles, snow mobiles, boats, jet skis and motor homes as well as aircraft.

MERCHANDISE FOR SALE AT THE COUNTRY STORE

"Fishing Shirts" Short Sleeves	Men's & Lady's	$43.00
Logoed Safety Yellow polo shirts	SM – XL	$30.00
Log Book Tote Bag w/Chapter 35 logo	Black	$29.00
Cloth Baseball Caps	EAA or Chapter 35	$11.00
Mesh Top Logo Baseball Caps	**Close Out**	$3.00
Chapter 35 Sew-On Logo Patches		$3.00
Chapter 35 Bumper Stickers		$1.00
Wheel Chocks – Aluminum (pink or yellow)	Two pairs = a set	$45.00
"Wash Wax All" Cleaner or Degreaser	Pint -16 OZ	***See us for exclusive member's only pricing***
	Quart -32 Oz	
Mop Head with Pads	Washable	
Scrubbing Pad with Handle	Reusable	

All prices include 6.75% sales tax For merchandise please call Brian or June @ 727-709-1159 or ladybgoode@msn.com

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Ron O'Dea			
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Nick Leonard		*Lew Mason*	
830-765-7481	*ohlson38@gmail.com*	*210-688-9072*	*lewnan@sbcglobal.net*

CHAPTER CALENDAR — CONTACT EAA35VP@GMAIL.COM

MARCH	***12***	**Fourth Annual San Geronimo Open House and Hangar Sale**	**EAA Chapter 35 Clubhouse 11:30 (till whenever**
APRIL 	***9***	**FLY-IN BREAKFAST EVENT** ***All you can eat pancakes eggs, sausage/ bacon*** ***"Alamo Remote Control Society –RC Aviation, Bill Ponseigo"*** **BOD Meeting**	**EAA Chapter 35 Clubhouse** ***9:00 - 12:00 am*** ***12:30 am***
	16	**YOUNG EAGLES** Stinson Airport (KSSF) ***Volunteers Needed!***	**9:00 am – 1 pm Stinson Airport (SSF) POC: Phil Vaneau**
MAY 	***14***	**SPRING CLEANING! Yard/Chapter Building Work Party**	**EAA Chapter 35 Clubhouse 10:00 am – 12:00 pm Lunch Served at Noon**
JUNE	***11***	**ANNUAL CHAPTER 35 PICNIC** **Chef, Prep Cooks, Servers Needed**	**EAA Chapter 35 Clubhouse 11:30 am to?**
JULY 	***9***	**FLY-IN BREAKFAST EVENT** **Chef, Prep Cooks, Servers Needed** **BOD Meeting**	**EAA Chapter 35 Clubhouse 8:00-10:00 am 10:30 am**
AUGUST	***13***	**LUNCH MEETING** **Matt Van De Walle, C5/C5M Pilot**	**EAA Chapter 35 Clubhouse Lunch 11:30 am Meeting/Program 12:30 pm**
SEPTEMBER	***10***	**LUNCH MEETING**	**EAA Chapter 35 Clubhouse Lunch 11:30 am Meeting/Program 12:30 pm**
OCTOBER	***8***	**BOD Meeting** **LUNCH MEETING**	**10:30 am EAA Chapter 35 Clubhouse Lunch 11:30 am Meeting/Program 12:30 pm**
NOVEMBER 	***12***	**ANNUAL CHILI COOKOFF EAA Chapter 35 Fly-mart** **Annual Membership Meeting and Election of Officers** **Lunch and Chili Judging**	**EAA Chapter 35 Clubhouse 10:00 – 11:30 am 11:30 am Immediately following the meeting**
DECEMBER 	***10***	**CHRISTMAS PARTY Christmas gathering 11-12 Lunch catered Gift Exchange ~$10 target for gifts but that's up to you!**	**EAA Chapter 35 Clubhouse Social Hour 11:00 pm Lunch Served Noon-1:00 pm Gift Exchange 1:30 to 3:00 pm**

30x40 hangar AND **T hangar for rent**. Contact Richard Gramling 210-846-5134 *(expires Mar 2016)*

40X34 ft. Hangar for Rent at San Geronimo, available 1 Jan. Utilities furnished. Call Joe @ 210-710-6063 *(expires Mar 2016)*

T-Hangar available for immediate lease. Contact Doc Hecker at 210-391-1072 or faaexamdoc@yahoo.com. *(expires Jun 2016)*

Hangar for Rent: 40'w by 32'd, on east end near runway. Electrical and water included with overhead fluorescent lighting, concrete flooring and ramp in front of hangar. Available immediately. Call Dave Baker 210-410-9235 *(expires Jun 2016)*

To post a classified—contact the editor at eaa35news@gmail.com

- ***You must be an EAA Chapter 35 member.***
- ***Ads are FREE and will run for 3 Months from the last date you re-verify that the item is still for sale.***
- ***PLEASE Notify me when your item sells!!***
- ***You must contact the editor by e-mail or phone to extend your ad beyond the expiration date***

Upcoming Local/Texas Events and Airshows

Aviation Calendar of Events websites

Aero Vents	**http://AeroVents.com**
EAA	**http://www.eaa.org/calendar**
Fly-ins	**http://www.flyins.com**
Fun Places	**http://funplacestofly.com**

International Council of Air Shows
https://www.airshows.aero/Page/ASCalendar

11-13 March	2016 Wings of Freedom Tour (Collings Fdn) Stinson Field (KSSF) http://www.collingsfoundation.org/event/san-antonio-tx/
1-3 April	Texas Corvair College #36 San Marcos http://flycorvair.net/2016/01/11/2016-corvair-college-registration-pages/
Apr 9-10	Wings of South Texas (Blue Angels) Kingsville, TX http://www.wingsoversouthtexas.com
Apr 16	CAF Centex Fly In / Drive In

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To place an ad, please contact the editor at EAA35news@gmail.com or Dee Brame at DeeB@satx.rr.com

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Ron O'Dea, Membership Chairman
15464 FM 471 W., #14
San Antonio, TX 78253

The Official Newsletter of EAA
Chapter 35, San Antonio, TX

Chapter 35 meets

Each Second Saturday of the Month

12 March 2016

Fourth Annual San Geronimo Open House and Hangar Sale

11:30

Chapter 35 Clubhouse

EAA Chapter 35 is part of the worldwide network of EAA chapters. EAA embodies the spirit of aviation through the world's most engaged community of aviation enthusiasts. EAA's 170,000 plus members enjoy the fun and camaraderie of sharing their passion for flying, building and restoring recreational aircraft. Our clubhouse and building facilities are located at San Geronimo Airpark (8T8) located off FM 471 (Culebra Rd) West of San Antonio.

For over 50 years Chapter 35 has represented aviators of creativity who share a passion for flying. Come join us!

[Click Here for Link to 8T8 on AirNav.com]