



May 2022

Volume 65 Issue 5

Inside this Issue

Presidents Cockpit	2
Bulletin Board	3
Craftsman Tech	4
Classifieds	8
Scrapbook	10,11
Name the Plane	15
Calendar	17
Country Store	16
Contacts	18
<i>Please see our sponsors!</i>	8, 14,19

USAF School of Aerospace Medicine inducted into San Antonio Aviation Hall of Fame

- Published March 9, 2022. By Bryan Ripple
- Air Force Research Laboratory Public Affairs

SAN ANTONIO, Texas (AFRL) – The [Air Force Research Laboratory’s United States Air Force School of Aerospace Medicine](#) (USAFSAM) was inducted into the San Antonio Aviation Hall of Fame during the Dee Howard Foundation’s 2022 San Antonio Aerospace Hall of Fame awards banquet held at the Boeing Hangar at Port San Antonio March 2.

“USAFSAM found its roots in San Antonio at the then-Brooks Air Force Base,” said Col. Tory Woodard, the current USAFSAM commander. “We have a rich history of providing research, education and consultation in support of aviators, astronauts and medics in order to allow them to survive and operate in the extreme conditions and stressors of the air and space environment. It’s truly an honor for the legacy and contributions of the schoolhouse to be recognized by the Foundation and the City of San Antonio.”

Accepting the honor on behalf of USAFSAM was retired Col. (Dr.) Charles Fisher, who served as the commander of USAFSAM during its final years at Brooks City Base San Antonio through its establishment in a new complex at Wright Patterson AFB. He addressed the crowd of well over 500 at the event, with attendees including the Mayor of San Antonio, Ron Nirenberg, other prominent city and state leaders and legislators, educators, aviators, astronauts and aviation industry leaders.

Fisher described the long, amazing history of USAFSAM stating “...for one hundred three years, since the beginning of our involvement in World War I, where there have been aviators, there have been flight surgeons at their side. Those physicians trained at the school in techniques and principles never taught in any medical school. That was the purpose of the school when it was established in 1918 and remains a defining role today.”

In 1926 a small cadre of aerospace medical staff relocated to Brooks Field in San Antonio, where pilots did their initial training to continue that mission. They first occupied the vacant dirigible hangar, then moved to the first permanent structure on Brooks, a building that still stands today. While there they provided medical

(Continued on page 9)

Next Event

May 14
9:00 AM

Chapter
Clubhouse

FLY-in BREAKFAST 9 AM to Noon



Runway 35 is published monthly as a free service for our members and our flying community by EAA chapter 35.

Publisher: Chuck Fisher
Editor: Andrea McGilvray

eaa35news@gmail.com

PRESIDENTS COCKPIT

CHUCK FISHER



I hope this president's column finds you well, happy and enjoying a gorgeous spring...and preparing for AirVenture!

GOLD AWARD: Last month I was proud to announce that our chapter was again selected as among the best in EAA. That, folks, is a big deal – and reflects the hard

work and dedication of a lot of folks including, most likely, yourself.

Think about this. During the Pandemic dozens of chapters simply ceased to exist. Not only did we survive, but we thrived because we continued to be active and to meet the needs of our community. Your chapter turned on a dime, moved to entertaining and educational forums by zoom, built a park in front of the clubhouse, continued to fly, continued to offer VMC clubs and online content, got to know our builders better... and continued to grow with new members. We awarded two Ray Scholarships, and we had a great turn out once again at AirVenture. And we continued to fly!

Without going into the gory details of how a few chapters are selected from the hundreds of chapters, I will say it all boils down to simply "Do Something". Chapters that are active – are the ones everyone enjoys being a member of!

EAA has oodles of great turnkey, often pre-packaged programs we can offer for our community...if one of you is willing to lead the effort. EAA now has literally dozens of fun and educational youth activities we can offer in conjunction with Young Eagles events, they have a pre-packaged build and fly program for kids that want to build and learn to fly Remote Control airplanes (how many of your first flights were in RC?), they have all sorts of resources for adults who want to become pilots and resources for chapters that want to build an aircraft as a team and so much more. We just need YOU to step in and help. If any of these things fall into your interest area, we need you to speak up and to help keep our chapter vibrant and relevant to our community. If not already done, expect a request for volunteers by e-mail separately. If you have not already sent that back, please fill it out send it back to me. YOU will be the key to the next chapter award.

On Deck for May: In addition to a **Fly In Breakfast May 14th** we will hold our first-ever **Learn to Fly Day 21 May 2022**. This event is being put together by Paul Wurster and it is aimed at adults who



would like to learn what it takes to learn to fly. The basics are that we will host them for a discussion of the basics of the costs, types of certifications, options available, etc. then introduce them to instructors and schools, and take them up for an adult flight so they can see that it really isn't all that hard. Some of the students may well have been student pilots before, and want to return to it, or maybe contemplating a career change. Chapters who have done this before, have found they pick up new members from this group as folks re-discover their love for altitude. We'll need volunteers to make this work, so please plan on helping on the 21st.

RV-9 empennage and builders book supplies: I want to extend thanks to Matt Hecker who has donated an RV-9 empennage kit and a library of current builders' texts to the chapter. We have not decided for sure whether the empennage kit will become step one of a chapter build, or whether it will be used to raise funds for our scholarships. I would LOVE your ideas.

(Continued on page 9)

By Chuck Fisher: **Go Fly – Formation!**

Want to do more than the \$100(+) hamburger run? Perhaps you've already read about aerobatics, mountain flying, seaplane flying, low and slow or high and fast. The options for things we can do as pilots are enormous. But have you ever considered flying in close formation?

I'd long admired the big aerial formations at Oshkosh, the skilled



missing man formations, and of course the aerial ballet of precision groups like the Snowbirds. So, when I was introduced to formation flying as a General Aviation pilot – heck yes!

I spent a lot of years in the Air Force, but as a flight doc all in the

(Continued on page 5)

CHAPTER BULLETIN BOARD

On tap for this month



From the Kitchen

So, I have been neglectful in writing this for the past few months. Among the fantastic helpers were Pam Perdue, June Goode, Michelle Hacker and Robin Apsey in the kitchen. Rick and company did a fantastic job at the griddle.

Also, a great big thanks to those who are staying to help clean-up. The kitchen crew greatly appreciates it.

The May 14 meeting will be the second of our pancake breakfast fly-in. We will need help with cooking and serving. Pancakes will be served from 9:00 a.m. through 12:00 noon. Please remember we will need help putting the clubhouse back in order.

That pretty well wraps it up from the kitchen. I believe that the charge at this meeting will be free to those flying in (no, not taxiing your airplane from your hangar to the clubhouse) and \$7.00 for others. Look forward to seeing everyone on May 14.



YOUNG EAGLES RALLY

Are you available to fly Young Eagles or be a ground volunteer on April 30th 1000-1200. If so, please make sure you have completed the background check and youth protection training. Click here for more information: <https://chapters.eaa.org/eaa35/young-eagles-volunteers>.

Here is the link for the event: <https://youngeaglesday.org/?yedetail&event=7uVrPvoiB>

Thank you!
Rebecca Southard
Young Eagles Coordinator
EAA Chapter 35
(507) 210-0504
<https://chapters.eaa.org/eaa35>

Craftsmen's Technique

by Mark Julicher

Break the Brakes

Let's review some Newtonian physics as it relates to stopping airplanes. Assume Isaac Newton had it right that energy can neither be created nor destroyed. Consider then an aircraft that just landed at 60 mph, i.e., 27 meters/second. The airplane in question weighs 2000 lbs, i.e., 907 kilograms.

Remember the kinetic energy formula: $KE = \frac{1}{2} \text{ mass} \times \text{velocity squared}$.

The kinetic energy of this plane is $\frac{1}{2} \times 907 \text{ kg} \times 27\text{m/sec} \times 27\text{m/sec} = 330601 \text{ Joules}$. 174 Celsius heat units. 313 British Thermal units.

Whoopee. Trivia? You know the airplane can be stopped in a thousand feet or thereabouts using the toe brakes, so big deal.

Well how about if Joe Bagadonuts lands this plane ten mph faster? Now the energy at touchdown is now:

$\frac{1}{2} \times 907 \times 31.3 \times 31.3 = 444290 \text{ Joules}$. 233 Celsius heat units. 419 BTU.

That is a 34% increase in energy for a 17% increase in speed. Yeah, that squared velocity thing matters a lot. Brakes turn kinetic energy into heat, and while kinetic energy increased as a squared factor heat energy only dissipates as a linear factor. A little extra speed can mean a lot more landing roll.

In the example above, 1/3 more heat will take about 1/3 more runway. So, if stopping in 1000 feet from 60 mph is "comfortable" to the pilot, landing 10 mph faster will take more like 1333 feet of runway. That may or may not be comfortable depending on the runway in question.

Now granted, this is all back of the envelope style calculations and there are other conditions that affect landing roll, but the point is, hot approaches lead to hot/long landings and longer distances to stop the plane. Ever since (most of us) gave up open cockpits, judging approach speed requires constant use of the airspeed indicator. Those of us not flying heavy iron with anti-skid brakes need to be considerate of those teeny, tiny brakes on our airplanes.

Photo 1 is a pair of worn-out brake pads. These pads are about 2.5 inches long and 1 inch wide. They are made of material that can generate and withstand a lot of

heat. (That used to be Asbestos, but such is no longer the case.) In any event, these little gems give fabulous service. And the less you use them the longer they last (duh). Replacement cost? About \$9 per pad and an hour labor for one brake caliper – say \$95 per typical wheel.

Photo 2 is something seen



Photo 1: Worn-out brake pads

infrequently. It is a worn-out brake disk. It is not necessarily worn out because of the grooves in the disk. However, look at the ridges on the inner and outer diameter of the disk. This disk has been worn thin! There are wear tables that tell when thin it too thin – and this one is too thin. Is it still strong? Probably yes, but it can't dissipate heat as well as a thicker disk. Therefore, that 1333-foot landing roll might stretch into 1500 feet or more. Excess heat causes brake-fade.



Photo 2: Worn out brake disk

Replacement cost? About \$170 per disk and an hour to replace it, so approximately \$255.

Photo 3 is a leaking brake caliper. Hydraulic fluid (usually Mil 5606 in small planes) is leaking out of the caliper. The caliper consists of a housing, a piston (looks like an aluminum hockey puck) and a large rubber O-ring. A heat-averse rubber O-ring. An O-ring that eventually breaks down due to age and heat. The message here is that overheated brakes stress the O-ring and allow 5606 to lubricate the



Photo 3: Leaking caliper

brake pads (hint- wet brakes pads are not desirable.)

Repair cost? About \$1 for an O-ring, \$6 for hydraulic fluid, and two hours to replace the O-ring and bleed the brakes. So, figure about \$177.

Pilots, be nice to your brakes. Approach ON SPEED. Land ON SPEED. Use that runway to coast to a lower speed and then judiciously apply the brakes. And oh yes, we could throw the cost of tires into the mix, but let's save that for another time.



(Continued from page 2)

right or back seat. A lot of that time was on the wing of another plane. Owners of my type of plane (L-17/Navion) are fortunate to have some very strong regional type clubs, and ours gathers quarterly. Within that group are a bunch of guys that fly in formation for fun and for ceremony.

At one of our events a friend asked if I'd like to ride along for an evening of formation training. What fun....I was hooked.

So, after some delays for weather and other issues, I finally attended my first formal training in formation flying and I'll share a little about that experience. So, let me start by saying this is through the eyes of a rookie. I am not a professional and I don't even play one on TV.

Many pilots have participated in group fly-outs or maybe even flown alongside other aircraft for photos and fun (hopefully pre-briefed). Some may have attended sessions aimed at training for mass arrivals and flying with others and not bumping into one another.

But, truly flying as part of a formation is a step beyond those. Pilots must learn to safely fly in a tight formation only a few feet from another aircraft in all flight regimes (steep turns/banks, changing formations, rejoins, and emergency situations) and thus every pilot know exactly where the others will be....and totally trust them to be there. So, every pilot in the formation must have trained to a high level of proficiency using the exact same techniques, communications, and to regularly demonstrate proficiency in those skills.

Flying in Formation is generally defined as flying solely with reference to another aircraft with spacing less than 500 feet or flying "In-Trail" solely with reference to another aircraft with more than 500 feet separation. The FAA "rules" for how this is done and currency requirements really only apply when flying in waived airspace (like an airshow) but the safety aspects are applicable any time two airplanes are close together. And, every formation you will ever see, whether 2 planes or 200 planes, relies on the same basic skills and fundamentals. The Blue Angels just do them a LOT faster and a whole lot closer together!

Several years ago, after an ugly formation mishap, there was substantial risk that the FAA could and would prohibit non-military formation flying in waived airspace other than those by aerobatic artists with special training and permission. So, in 1995 interested organizations formed or became signatories on a standardized



training and certification program called the Formation And Safety Team (FAST) modelled after but not identical to military formation flight training. There are now sixteen organizations around the globe that are FAST signatories. Check FAST out at <http://www.flyfast.org/>

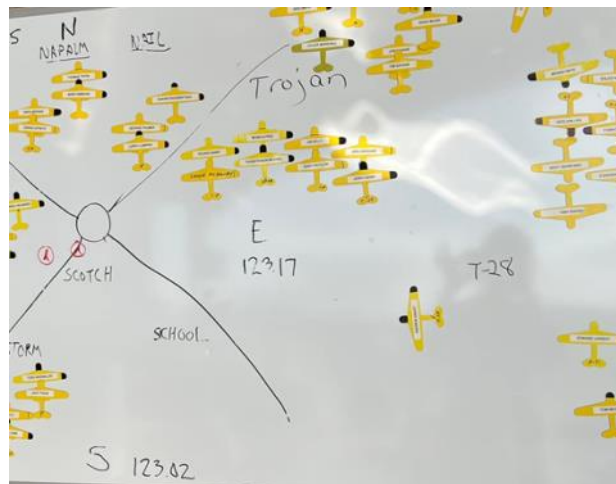
My recent experience was a clinic held by the North American Trainer Association over at the lovely facilities at Houston Executive. L-17s like mine were originally North American Aviation aircraft so our planes tend to fall within NATA and within the Joint Liaison Formation Committee for training. I am a member of both. There are organizations more aligned to the Jets, helicopters, liaison planes, heavy iron and others for RV's, Stearman/biplanes, and former soviet trainers (Yaks/CJ's). Different "clinics" tend to attract different sorts of aircraft as it is much better to train with other "like" aircraft (T-6 with T-6, T34 with T34, L-39 with L29, etc.) and instructors who fly them. So, some clinics might be heavy on T-6s, others RV's, etc. A walk down the ramp for this particular clinic took you past a dozen T-6s and 4 L-17/Navions.

Formation pilots spend a lot of time learning fundamental skills, and eventually earn a card to fly independently as a wingman. With experience, more training and checkrides, they will advance to four ship qualifications, flight lead, and instructor and check-pilot levels. It may take years of practice to do so.

Attendees at this clinic ranged from new rookie formation students like me to some of the most experienced warbird pilots flying. Yes, even the guys that do this every week for a living, still attend the clinics, still must demonstrate proficiency and currency. And they love to teach others to do so as well.

The clinic starts with ground school where all the fundamentals are covered. Everyone is expected to have already read through the "textbook", FAA guidelines and all the NOTAMs and changes to procedures ahead of time. There is a test to ensure the candidates have done so and fully understand the rules and techniques.

And most importantly, the leader was very clear - new candidates will require several clinics and a lot of flights before they should expect to have a check ride and earn their Wing card. It wasn't going to happen this weekend. Phew - honestly, that took a lot of pressure off knowing there was no time pressure to accomplish all the skills.



The next day started early with a mandatory safety briefing covering everything from flight ops, air traffic control (who are a big part of the operations), emergency procedures and operations, to the area and weather. The whole airport was involved from the airport manager to the controllers to the extraordinarily skilled line

(Continued on page 12)

Adopt a tool

by Rebecca Southard

We are looking for chapter members that are willing to sponsor a piece of equipment that is located in the hangar. If you are interested, please indicate which number (and equipment name) and your preferred contact number. We will put your name & number on it so if someone has questions/issues they can contact you directly.

Responsibilities include:

Maintain sign-in book and equipment manual

Clean & tune up equipment -- Initially determine if it's worth keeping. If so, put together a list of parts needed for repair/upkeep and send to Rebecca. If not, we need to know that as well.

Maintain and inspect it periodically to ensure it's in good & safe working order

Create instructional video(s) on the use and safety (such as how to change out blades/drill bits, etc)



CLASSIFIED ADVERTISEMENTS

Stratux Portable Dual Band ADS-B Receiver with AHRS. Includes external GPS antenna, rechargeable battery and suction mount. Works with most electronic EFB's including ForeFlight, WingX and FlyQ. These are selling for \$389.00 on Amazon. Asking \$125.00. Call or text Doug Apsey at (210) 913-2539 or email me at dapsey@satx.rr.com.

**Pietenpol project for sale**

Pietenpol Air Camper project for sale. Fuselage, one piece wing, empennage, & controls surfaces all built with Sitka Spruce & Finnish Birch plywood glued with T-111 glue. The cabane struts are made from old Piper struts. All fabricated steel is 4130. Sale includes a disassembled Model A engine, 4 Piper wing struts, 1/8" stainless control cables sufficient to finish project, extra wood, & 4130 steel stock. Landing gear was remade to move 8 1/2" fwd. & is in progress. Plane is on gear. Wheels came from a Piper Cherokee. Tail-wheel made from plans from BPA Newsletter, not full swiveling. The stick & rudder bars are made & installed. Instruments are installed. Builder's log included. The plane is located at Comfort, Texas, near San Antonio. Asking \$5000. Contact minerjb@hctc.net with any questions.

T-Hangar for Rent San Geronimo Call: Andrea McGilvray 210-413-7392 or email: Cowgirlcapital@att.net \$375/month

WE NEED YOU!**Need Volunteer for:**

News Editor needed immediately: Assemble this newsletter on a monthly schedule. From volunteers.

Country Store Manager(s): Do you like to SHOP? Looking for someone to take over country store, manage inventory, find and purchase cool stuff for our members!

Contact president@eaa35.org



LOOKING FOR:

I am a chapter 35 member and looking for a hangar.

Mark Vondrasek looking for a hangar at the San Geronimo Airpark. Looking for something larger than a tee hangar. Must have electricity. I need room to finish my gyrocopter project and store a trailer. Please call me at (608) 438-9077

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

2018 - 912ULS - with 320.7 tach hours on it
Includes:

- Integrated reduction gear box (2.43:1) with slipper clutch
- Heavy duty electric starter and starter relay
- Regulator/Rectifier
- Electronic dual ignition with RFI suppression
- 2 carburetors
- Fire rated Stratoflex 101 fuel hoses with fuel return
- Stainless steel exhaust sockets with lock nuts
- Oil tank with UNF (AN8) Fittings
- 2 sensors for coolant temperature
- 1 sensor for oil temperature
- 1 oil pressure sensor

- 1/20/22, 3:26 PM Gmail - Re: Engine for Sale
- UNF (AN8) oil pump inlet connection
- Coolant expansion tank with pressure cap
- Series 2 for fixed pitch propellers
- AND Complete Exhaust System.

They are running \$20,585 from 'Leading Edge Airfoils' new. Without an exhaust system.

Call: Vr Donnell Dalesandro (210)850-7024



Anderson Aviation

Flight Instruction & Aircraft Rental



16 Located at Bulverde Airport in Downtown Bulverde, TX 34



Private Pilot Instrument Commercial Multi-Engine Ratings

(830)438-IFLY (4359)

<http://andersonaviationtx.com>

Paid Advertising Through Sept 2021

(Continued from page 1)

care, worked diligently on building flight and pilot training techniques and pioneered the use of aircraft for medical evacuation, a mission the school would continue up to the present, Fisher said.



The remainder and full article can be read online <https://www.afri.af.mil/News/Article/2960386/usaf-school-of-aerospace-medicine-inducted-into-san-antonio-aviation-hall-of-fa/fbclid/usaf-school-of-aerospace-medicine-inducted-into-san-antonio-aviation-hall-of-fa/>



From the Cruise Director Rick Vinas, Vice President

We had so much fun and such a good turnout for our April Pancake Breakfast that we decided to do it again for our May meeting! The festivities start at about 0900 (9 AM), but anyone who can help out with set up and prep should get there a bit earlier. I intend to get there at about 7 or so and get the spinning griddle heated up for the pancake cooking. We expect the typical May morning: Cool, sunny, getting hotter by lunch, then time to get into the A/C! Can't wait to see you all there.

By the time you see this, we will have had another great Young Eagles day at San Geronimo on 23 April! If the Country Store plan came together, we had some pretty nice shirts for the kids to buy that were pretty inexpensive. We also have (as always) mugs, dress shirts, "Remove Before Flight" key chains, EAA patches, and Chapter 35 stickers to sell cheap. Of course, if you fly Young Eagles, you want to make sure you have WashWaxAll on hand to make your airplane shine. Fortunately, we have a selection of products to keep your airplane, helicopter, gyrocopter, or powered parachute looking good. Can you tell I'm also the Store guy?



(Continued from page 2)



New Builder Coordinator! Along those lines, let me welcome **Fred McMahon** to your leadership team as he has agreed to become our Builder's Coordinator. Fred flies a beautiful RV he built and maintains, so is well connected and quite experienced as a builder. The very essence of EAA is the aircraft designer and builder, so his role to ensure builders have a home, tools, and encouragement within this chapter is huge! Builders, expect for Fred to contact you in

the next several weeks for progress checks, and technical counselors please help Fred locate you and the best resources for our builders.



Ray Scholar Nominations: Finally, we are accepting nominations **RIGHT NOW**, for our 2022 Ray Scholar. The deadline is within days, so if you know a worthy young aviator to be...please help them access the nomination on our website eaa35.org and write a letter to the board on their behalf. Your support and mentorship could well be the deciding factor on who gets this up to \$10,000 boost to becoming a pilot.

So with that....Go Fly!



APRIL GATHERING

More photos on eaa35.org



APRIL GATHERING

More photos on eaa35.org



(Continued from page 5)

crews provided by the Commemorative Air Force. And they were all there bright and early...just to support us students.

In the front of the room was a display board with little magnetic airplanes arranged in boxes representing training areas and altitudes. Sure enough, one of them was mine! Each cluster of airplanes included planes with the instructors' names on them as well. Initially we would start in 2 ship elements to learn the basics.

I was fortunate that we had a big group of airplanes like mine, and some of the most experienced formation guys I know were there as instructors. And it didn't hurt that the pilots and instructors were also good personal friends. So, though I could still embarrass myself, I was among friends who could also teach me their techniques for handling my plane better.

Next came the briefing. The flight lead planned the flight then went through a very structured briefing about what we would do, how we'd do it, what to do in an emergency and so forth. There was time for teaching, going through the hand-signals and techniques to help with the sight picture and more.

On the flightline each step was scripted, highly disciplined and choreographed. Check in on the radio together, start engines together, taxi together, take off together, etc. A lot of the communication was done through hand signals from cockpit to cockpit. It seems so simple, but communicating using hand signals requires everyone to understand them, so there are standards and it takes practice. Just getting the radios set up right for each of the three or four frequencies in the correct order, and "pushing" or "going" to the right place at the right time took planning and discipline.

After taxiing to the run up pad together (sidestep to the opposite side), we ran up in unison, did mag checks together, then I followed my lead into the air. He began a gentle right hand turn. I put his tail on his outboard wingtip and kept turning inside his turn. Landing gear, throttle, prop, mixture were all adjusted without taking my eyes off my lead. Fortunately my habit pattern is not to look down for those anyway, so that was not hard. Lo and behold we gently tucked in position just aft of his right wing. It worked! This first one went really well, some others were a little more ... awkward.

I should mention that the weather was just not cooperative. Howling winds made walking to the planes difficult and low clouds kept us pinned to the ground. And some of the flights were bumpy, really bumpy. Not, perfect for flying 10 feet apart but good practice, nonetheless.

In my plane there is a flap hinge that aligns with the nosewheel and a cowling line that aligns with a flap gap and a couple other visual clues, and for almost the entire flight my focus was on those keys but keeping a wider view on the overall situation. In a four ship that ability to see the other planes out of the periphery while keeping focus on the lead aircraft is very important.



Over the next two days and several flights we practiced increasingly steep turns in formation, separating and rejoining from various positions, changing into various positions on either side and in close trail (right under and aft of the tail of the plane in front) while maneuvering, over-run procedures, lead changes and so forth.

The purpose and emphasis of this was and is on precision, being in the right place all the time. This was not aerobatics and my flight leads were smooth and gentle in their transitions. Everything was deliberate, planned and safe. So, it was much more an aerial waltz than X-games.

Afterwards, there was a debrief in which everyone had a role. Questions were answered and critiques levied for training. Then, back to the board to see when the next flight would be or if the sun is low, I headed out to top the tanks and put the plane to bed. The whole group had refreshments and dinners at the end of each day of flying.

To me, the flying experience was great, but what was truly humbling was that we had instructors fly in from all over the nation. One of mine from Colorado, another from South Carolina...all to teach the rookies to fly, and refresh the skills of those more experienced.

I had a chance to sit among and fly with some of the most experienced warbird pilots out there, and felt totally comfortable. The regimentation and rigor was very real and once the briefing started the play stopped and it was all business. And, in the air there is correct and not correct...only. But, there were just simply no egos. Really. Although some of the guys sitting next to me owned squadrons of planes of their own, some flew extraordinarily rare warbirds professionally, several performed regularly in big acts like Tora Tora Tora or flew the heavy metal professionally, in this setting they were just airplane folks you'd like to have a brew with any day.

It takes a lot of flying to become proficient as a formation pilot but it is not out of reach for any one of us by any means. And really, who is opposed to a lot of flying? Most of us lack time and resources of a military student pilot, but the FAST program provides a structured means for pilots like me to fly in formation safely within the scope of my skills and the performance of my plane.

I had some trepidation at first, but seeing how disciplined the training was and how skilled the leads are gave me great confidence in the safety of this training program. So, time and circumstances permitting, I'll be working on this for quite a while as the opportunities avail.

Next time you watch a formation group, whether RV's, military warbirds or highly disciplined airshow acts perhaps you can get a sense of the intense work and hours and hours of practice each of the pilots put in to get there....and make it look easy. And, if you have an airplane suitable for formation flying and want to scratch the itch, you can do so too! Links to the signatory groups are found at <http://www.flyfast.org/>.

Go Fly!





Ad valid until August 2022

Come Learn to Fly with US!
Call to make your appointment!



Become a Private to Airline Pilot! (ATP)

- ⇒ Flight School
- ⇒ Aircraft Rental
- ⇒ Aircraft Maintenance

Kelly Airfield
401 N. Frank Luke Dr.
San Antonio TX 78226
830-460-9028 ext 1

mario@barioaviationservices.com
<http://barioaviationservices.com/>



Aerobatic Aircraft Owners:

Skydiving Castroville provides experienced, professional parachute rigging and maintenance.

The Master Riggers have a full service rigging loft right here in Castroville!

When is the last time yours was professionally serviced?

Give us a call.

Your life could depend on it!

Castroville Municipal Airport
10527 Airport Rd.
Castroville TX, 78009
Phone/Text: (830) 444-5003
Email:
SkydiveCastroville@gmail.com
<https://skydivecastroville.com/>

Paid Thru May 2022

You Can Skydive!



Skydive Castroville

Skydive only 15 minutes from San Antonio

APRIL MYSTERY PLANE REVEALED!

BY DOUG APSEY

Our April mystery airplane was the Lockheed YO-3A Quiet Star. The YO-3 was developed by Lockheed at the request of the Army for a small reconnaissance aircraft that was “acoustically” undetectable. Its mission was to fly at very low altitude at night over the jungles of Vietnam and monitor enemy troop movement.

The YO-3 first flew in 1969 and the design was based on of the Schweizer SGS 2-32 glider. It carried a crew of two seated in tandem with the pilot in the back and an observer in the front seat under the large bubble canopy. As you might expect, it had a long wingspan measuring 57 feet. The YO-3 was powered by a 210 hp Continental IO-360 initially swinging a six bladed propellor that was later changed to a three bladed constant speed propellor. Top speed was only 103 mph while cruise speed was 81 mph. Stall speed was 64 mph. Maximum take-off weight was 3800 lbs.

To reduce engine exhaust noise, the YO-3 used an asymmetrical, cross-over exhaust system that fed the exhaust through an acoustical fairing and a resonating muffler before exiting well aft on the fuselage. The cowl and firewall were heavily insulated to further reduce engine noise. The key to keeping the YO-3's noise level to a minimum however was keeping the propellor rpm extremely low. This was accomplished by using a belt driven 3.33:1 reduction system driving the specially designed broad bladed wood propellor. It is said that at 1000 feet agl, the YO-3 could barely be heard as it approached a target followed only by the sound of air passing over the wings as it flew overhead. Once past the target, it was nearly impossible to hear.

A total of eleven YO-3's were built. Nine of these were sent to Vietnam where they successfully flew night missions between June of 1970 to September of 1971. Early on the crew had to rely mainly on their own eyes to spot the enemy but later the airplane was fitted with a night vision system mounted in the front cockpit allowing the observer to have some enhanced night vision capability. Although three YO-3's were lost to crashes in Vietnam, none were lost to enemy fire.



© 2010 Eric Van Gelder



Militaryimages.net

After Vietnam, two of the YO-3's were used by the Louisiana Department of Fish and Game to catch poachers. The FBI later acquired these aircraft and used them for several years to assist in the apprehension of criminals. NASA also acquired one that was used for acoustical testing to measure aircraft and helicopter noise levels including the sonic boom from the SR-71. This aircraft was sold in 2015 to the Vietnam Helicopter Museum in Concord, California. Of the original eleven YO-3's, six still are known to exist. All are owned by museums where three are on display while the other three are in storage.

Sources for this article include:

[This Silent Plane Flew Over Vietnam's Treetops Undetected \(warhistoryonline.com\)](http://warhistoryonline.com)

[Lockheed YO-3 Quiet Star - Wikipedia](https://en.wikipedia.org/wiki/Lockheed_YO-3_Quick_Star)
[Lockheed YO-3A Quiet Star: The Original Stealth Aircraft of the Vietnam War - ITS Tactical](https://www.lockheedmartin.com/en-us/products/lockheed-yo-3a-quiet-star.html)



NAME THE PLANE






DOUG APSEY

Here is this month's mystery airplane. Who will be the first to email me at dapsey@satx.rr.com with the answer to the following questions.

1. What is its name/designation?
2. Who manufactured it?
3. What year did it first fly?
4. How many were built?
5. Extra credit question: Why can't you use this airplane to get your twin engine rating?



CHAPTER CALENDAR — CONTACT EAA35VP@GMAIL.COM - PROGRAMS ARE TENTATIVE AND SUBJECT TO CHANGE!

2022	DATE 01/05/22	EAA Chapter 35 Activities Calendar
APRIL	30	 YOUNG EAGLES RALLY (watch for announcement)
	29-30	WASP WWII 80th Homecoming Anniversary Fly-Out (Sweetwater)
MAY	14	 0900 FLY-IN PANCAKE BREAKFAST
	20	6:00 pm VMC Club (see FAA Wings page and e-mail); 8:30 Movies on the Lawn TBA)
	21	<i>Flying Start Event</i> (see below)
JUNE	11	 International Young Eagles Day YOUNG EAGLES RALLY (RAIN DATE---25 June)
	17	6:00 pm VMC Club (see FAA Wings page and e-mail)
JULY	9	11:30 Social/12:00 Program: Fly Yourself to Alaska Brief
	15	6:00 pm VMC Club (see FAA Wings page and e-mail)
	26-01	AirVenture
AUGUST	13	 0900 FLY-IN PANCAKE BREAKFAST
	19	6:00 pm VMC Club (see FAA Wings page and e-mail)
	20	 Young Eagles Rally (Rain Date 27 Aug)
SEPTEMBER	10	11:30 Social/12:00 Program: Chapter 35 Member Open House and FlyMart
	16	6:00 pm VMC Club (see FAA Wings page and e-mail)

Upcoming Area Events:

<https://Socialflight.com>
<https://Eaa.org>
<https://Funplacestofly.com>

the right thing, If you might know someone who might be interested in participating, send them to <https://flyingstart.org?389>.

May 14th, Smithville 84R Fly-in 10am-2:30

May 28th, San Marcus, KHYI, Go Wheels Up

April 29-30 WASP (Women Airforce Service Pilots) Homecoming (dance 29th, FLY-IN 30th) Avenger Field Sweetwater

April 28-30 IAC Aerobatic Competitions—*RESCHEDULED for FALL*

May 7th, Kingsbury 85TE Wings & Wheels Fly-in

May 21st, Our Chapter's first Flying Start event is coming up in just a few more weeks. On Saturday, May 21, 2022, we will have the adult version of "Young Eagles" here at San Geronimo. We already have a dozen people signed up, and now I need volunteers to help work the event and pilots with aircraft to fly. Please contact Paul Wurster at Paul.Wurster@eaa35.org if you are a good person and want to do

YOUR AD HERE!

Advertisement Prices for EAA 35 Newsletter

Size (percent page)	Monthly	Per YEAR	Savings
10% (business card size)		\$ 35.00	
25%	\$ 8	\$ 86.40	10%
50%	\$ 15	\$ 153.00	10%
100%	\$ 30	\$ 324.00	15%
Classified ads	(Members Only)		Free



Country Store

By RICHARD VINAS

It is getting close to Airventure and time to get some shirts for the large contingent of Chapter 35 folks who will be there this year. Apparel, key chains, coffee cups, and hats are only a small part of the merchandise we have for sale, but you might have an idea for the type of shirt to wear to Oshkosh. Newer members can grab me at the monthly meetings to find out what we have, what we will likely have soon, and even make suggestions on what they would like to see for sale. Let me know if there is something that you think our members would be interested in and we will see about adding to our inventory. As you have seen in the newsletter, I am looking for a retail-oriented type to take over my duties at the Store, which have been getting neglected more than ever by my move to the Vice President

role, so step up if you would like to try your hand at the EAA Chapter 35 Country Store.



These "Scrubbers" are great for de-bugging the leading edges of your wings.



TEXAS FLAG POLO SHIRTS	Sold Out - If you want one, let me know!	\$39.00
TEXAS FLAG FISHING SHIRT	One Medium- Men's	\$46.00
YELLOW POLO SHIRTS	One Small	\$31.00
	One Medium	
YELLOW FISHING SHIRT	ONE Small Men's	\$40.00
KHAKI FISHING SHIRTS	ONE MEDIUM	
	ONE LARGE	
TEXAS FLAG APRONS	3 left	\$26.00
Additional Items available		
BASEBALL CAPS (with logo)	SIX NEW ONES	\$12.00
CHAPTER 35 DUFFLE BAGS	Only 2 left	\$31.00
COFFEE MUGS	EIGHT	\$7.00
REMOVE BEFORE FLIGHT KEY TAGS	Plenty	\$5.00
KOOZIES	Plenty	\$4.00
BUMBER STICKERS, DECALS AND PATCHES	Lots of them	\$1.00 - \$3.00
ALUMINUM WHEEL CHOCKS	3 Double sets	\$40.00
WASH WAX PRODUCTS	Limited supply	\$8.00 & up

EAA Chapter 35 Leadership



Officers

President	Chuck Fisher	210-878-5561	president@eaa35.org
Vice President	Richard Vinas	210-912-1699	vicepresident@eaa35.org
Secretary	Ian Heritch		secretary@eaa35.org
Treasurer	Dee Brame	210-493-5512	treasurer@eaa35.org

Board of Directors

Past Presidents	Nelson Amen (2012-2014)	210-834-1991	nelson.p.amen@gmail.com
Past Presidents	Darren Medlin (2020-2021)	(210) 875-9971	darren.medlin@eaa35.org
Past Presidents	Ulf Balldin	(210) 663 7391	uballdin@yahoo.com
Member At Large	Ron O'Dea	210-488-5088	r2av8r@gmail.com
Member At Large	Tom Rich		tmriws@gmail.com
Member At Large	Andrea McGilvray, Director	210-413-7392	cowgirlcapital@att.net

Chairpersons

Facilities Maintenance	Widener Wiems/Darren Medlin	(210) 875-9971	facility@EAA35.org
Groundskeeping	Thomas Reyna (and family)		lisareyna@aol.com
Event Coordinators	Darren Medlin/Peggy Fisher		events@eaa35.org
History and Archives	Jeanette Hunt		janet3679@aol.com
Membership	Ron O'Dea	210-488-5088	membership@eaa35.org
Country Store	Richard Vinas	210-912-1699	vinas@sbcglobal.net
Public Affairs	Jose Garcia		eaa35pr@gmail.com
Newsletter Editor	Andrea McGilvray	210-413-7392	eaa35news@gmail.com
Newsletter Publisher	Chuck Fisher	210-878-5561	eaa35newspublisher@gmail.com
Website	Ian Heritch		webmaster@eaa35.org
VMC	Matt Van DeWalle		eaa35vmclub@gmail.com
Safety Officer	Ron O'Dea	210-488-5088	r2av8r@gmail.com
Scholarship Coordinator	Jane Kellogg	580-421-5998	eaa35scholarship@gmail.com
Young Eagles	Rebecca Southard	507-210-0504	youngeagles@eaa35.org
Air Academy	Maarten Versteeg	210-256-8972	maarten.Versteeg@sbcglobal.net
Tool Crib/Hangar	Rebecca Southard (for immediate access call Lew Mason at:	507-210-0504	lewnan@sbcglobal.net
Builders Coordinator	VACANT—Need a Volunteer		

Flight Advisors

Flight Advisors	RB 'Doc' Hecker	210-391-1072	tcflyingdoc@yahoo.com
Flight Advisors	Mark Julicher	210-382-0840	mjulicher@earthlink.net
Flight Advisors			

Technical Counselors

Technical Counselors	RB 'Doc' Hecker	210-391-1072	tcflyingdoc@yahoo.com
Technical Counselors	Mark Julicher	210-382-0840	mjulicher@earthlink.net
Technical Counselors	Steve Formhalls	210-289-3984	sf3543@sbcglobal.net
Technical Counselors	Nick Leonard	830-765-7481	ohlson38@gmail.com
Technical Counselors	Lew Mason	210-688-9072	lewnan@sbcglobal.net

The FINE PRINT: Please note that, as always, in the past, present, or future, any communication issued by the Experimental Aircraft Association Chapter 35, regardless of form, format, and/or media used, which includes, but is not limited to this newsletter and audio/video recordings, any digital formats including any EAA Chapter 35 website, is presented solely for the purpose of providing a clearinghouse of ideas, opinions, and personal accounts. Anyone using the aforementioned does so at their own risk. Therefore, no responsibility or liability is expressed or implied and you are without recourse to anyone. Any event announced and/or listed herein is done as a matter of information only and does not constitute approval, control, involvement, sponsorship or direction or any event local or otherwise.

Pd Thru Dec 2022



Andrea McGilvray
Broker
210-413-7392
cowgirlcapital@att.net

Selling Real Estate
for 11+ years
Expect Results,
I do!

www.cowboycapitalrealty.com

Paid Thru Apr 2022

DAVID BAKER ARTIST



bakerdf@sbcglobal.net

275 Thorain Blvd.
San Antonio, Texas 78212
(210) 410-2323

www.davidbakerart.com

Paid Thru Sept 2022

The Pilot Shoppe

JANET SHIRES
Owner

Mon-Sat 10AM-6PM
FAA Testing Center
Flight Simulator Rental
(210) 524-9525

600 Sandau Rd., Suite 100
San Antonio, TX 78216
email: pilotshop@aol.com
www.thepilotshoppe.com

Paid Thru August 2022



Richard B. Hecker, D.O.
Senior Aviation Medical Examiner
FAA HIMS / IMS AME

Assend Dragon
AVIATION

CP: (210) 391-1072 **SCHEDULING: SA-AME.COM**
Fax: (830) 980-8866 29890 Bulverde Lane
Email: faexamdoc@yahoo.com Bulverde, TX 78163

Paid Thru August 2022



Richard B. Hecker, D.O.
Senior Aviation Medical Examiner
FAA HIMS / IMS AME

SCHEDULING PORTAL: SA-AME.COM

5108 Broadway Office: (210)226-2485
Suite 203 Fax: (210) 957-0882
San Antonio, TX 78209 Email: faexamdoc@yahoo.com

Paid Thru Sept 2022



2376 Bulverde Road, Suite 112
Bulverde, TX 78163-4593
(830) 386-4236
(210) 745-1750
Fax (830) 515-5941

GERALD SABOE DO MPH COL USAF RET
CHARLES R. FISHER JR. MD MPH COL USAF RET
Specialists in Aerospace Medicine
FAA Senior AME
Make appointment at www.saboeavmed.com

Paid Thru Aug 2022



"I Fix Planes"

Located in San Antonio, Texas

Eric M. Knight

Airframe & Powerplant Mechanic Phone: 206-696-9563

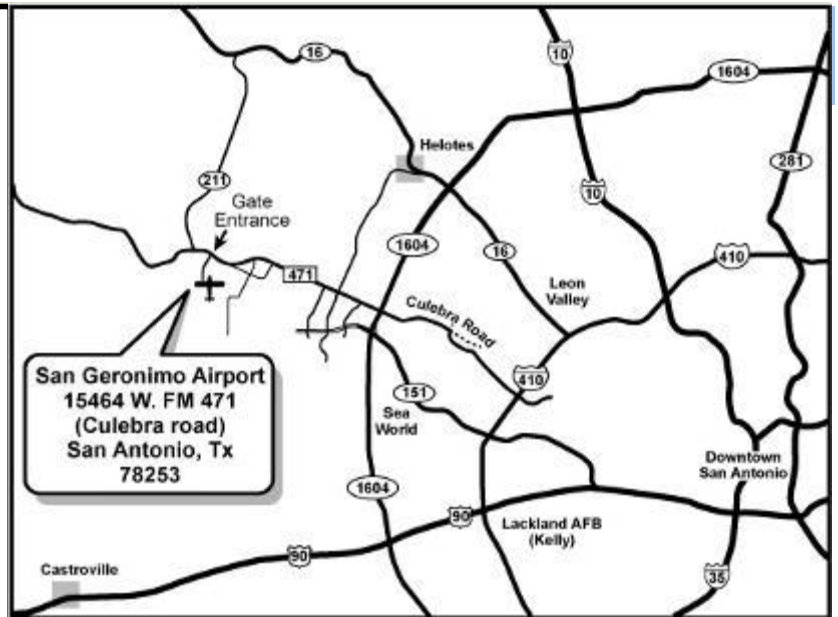
Aviation Instructor Email: ericknight40@yahoo.com

NEXT EVENT

May 14 0900

Chapter 35 Clubhouse

8T8 (San Geronimo Airpark)



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 60 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](#)

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

Paste Address Label Here

ALL You Need to Keep it Looking New!

Water-Based, Non-Corrosive, Alcohol & Ammonia Free. Meets Boeing Aircraft Spec. D6-17487P & D6-7127M



Wash Wax ALL
All purpose cleaner/wax that you can safely use on everything you clean. Leaves an anti-static protective coating on aircraft, cars, boats, motorcycles, and RVs. Lifts dirt without scratching.
Spray On - Wipe Dry



Wash Wax ALL Degreaser
All purpose Degreaser/wax that you can safely use for those tough, greasy, oily cleaning jobs such as, aircraft engine and exhaust areas, landing gear, car wheels and tires, boat transom and water line. Removes dirt and black streaks without scratching.
Spray On - Wipe Dry



Belly Wash
The quickest and easiest way to clean the dirtiest aircraft bellies, engine areas, and landing gear. Safely removes grease, oil, hydraulic fluid, and exhaust soot without scratching the surface.
Spray On - Wipe Dry



PlexALL
leaves an anti-static protective coating on all aircraft windows, both plastic and heated glass. Plex ALL is also safe to use on cockpit instruments and displays.
Spray On - Wipe Dry

NEW

Waterless Wash Wax Mop - Faster, Easier, Safer.

NEW

The only mop with two sides, one wet and one dry. Now you can waterless wash and wax with the reach and leverage of an extension pole. This allows you to clean a much larger area faster and with less effort, while also eliminating the safety hazards associated with

constantly climbing and moving a ladder. Our customers report time savings of up to 50% over waterless hand application.



Aero Scrubber

Soft, non-scratching, long-lasting, reusable scrubber pad. Use with Wash Wax ALL for removing bugs from leading edges and for tough cleaning jobs such as aircraft bellies and engine areas.



AeroTowel

All purpose microfiber towel. Super soft, absorbent, long-lasting, and lint-free. The best towel for all of your cleaning needs.



AeroDiaper

Soft, absorbent, lint-free, 100% cotton 1-ply diaper for all your cleaning and polishing needs.



NEW

Waterless Wash Wax Mop Starter Kit

All you need to get started with the new Wash Wax Mop.



Starter Kit

All you need to get started with Wash Wax ALL.



Leather/Vinyl Kit

All you need to clean, restore and protect leather and vinyl in one kit.



Cabin Cleaner
Cleans and removes beverage spills and stains from carpets, seats, tray tables, side panels, cockpit, and galleys.



SafeSolv

All purpose citrus solvent. Removes tar, oil, hydraulic fluid, adhesives, and gum. A safe, effective, alternative to toxic chemicals that is safe to use on paint, plastic, glass, bare metal, carpet, and seats.



Leather Soap

Safely and gently cleans leather and vinyl. Removes dirt, grime, body oils, and lotions.



Leather Care

Restores, moisturizes, conditions, and protects leather and vinyl. Repels dust and dirt without leaving oily residue. Provides long lasting protection.



Rubber Care
Easy to use water-based rubber and de-ice boot care product. Restores and protects rubber, giving that new semi-gloss look, without leaving an oily residue. Excellent on weather stripping, tires or any rubber or plastic item.



Water Spot Remover

Quick, easy, safe way to remove hard water spots from paint, plastic, vinyl, clear coat, gel-coat, bare metal, and other hard surfaces. Use Wash Wax ALL to prevent hard water spots.



PolishALL

Easy-on, easy-off liquid polish. Removes oxidation and fine scratches from paint, plastic, aluminum, silver, and other metals. Can be used by hand or with power polisher.



Wash Wax Clay

Safely removes surface contaminants allowing wax to bond better. Removes overspray, tree sap, acid rain, & rail dust. Safe to use on paint, plastic, glass, chrome, gelcoat, and other hard surfaces.



©2010 San Antonio, Texas

Sold By: THE EAA CHAPTER 35 COUNTRY STORE