



Runway 15



The Monthly Newsletter for Experimental Aircraft Association Chapter 1541, Lincoln, California

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On the Horizon: Calendar of Events

For the most up-to-date information, go to the chapter website: <http://eaa1541.org/>

Date	Topic
Note	On Thursday, March 12, 2020 the chapter Board voted to suspend face to face meetings in compliance with directions from public health offices in our region, to limit spread of the COVID-19 virus. We are continuing our IMC club and monthly chapter meetings online. Join us!
August 19, 2020 6:30 pm	Online Chapter membership meeting Program by chapter member John Tate, on "COVID: An Airline Pilot's Perspective." Details and link to join below.
September	Online IMC Club meeting with

2, 2020 7 – 8 pm	FAA Wings credit. Online registration link will be distributed to chapter members by email. All are invited to participate.
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September 16, 2020 7:00 pm	Monthly chapter meeting. Program: Aviation News You Can Use , and a video Homebuilder Hint .
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EAA CHAPTER 1541 INFORMATION

Meetings	Usually the third Wednesday of each month held at KLHM Hangar S-12. Details available on the website
E-mail	eaa1541@gmail.com
Website	http://eaa1541.org
Mailing Address	EAA chapter 1541, PO Box 1126, Lincoln, CA 95648
Chapter Hangar	Hangar S-12, Lincoln Airport
President	Darren Coomler
Vice President	Dan Masys
Secretary/Treasurer	Jim Hughes
Chapter Board of Directors	Cheryl Andrade John House Mike Lagomarsino Ray McNaught Bruce Robinson Randy Sharp Scott Thompson Scott Whelan
Webmaster	Dug Smith dug@dugbert.com

Newsletter and Tech Counselor	Dan Masys dmasys2@gmail.com
Membership	Chapter dues: \$20 per year for individuals; \$30 for families; \$300 for gold membership

President's Corner



Hello EAA 1541 Chapter Members and Friends,

Here we are in the “dog days of summer” - hope all are well and finding ways to stay cool. I have

been out at the hanger the last few days and I’m noticing all the activity at the airport, a few of you have stopped by and it’s been great visiting and catching up. I am looking forward to the day when we can all share some food and stories together again.

Even though we have not been meeting in person, the chapter is active in new ways. The Sim team is getting closer to unveiling Sim2 - the pitching, banking motion simulator, and as Dan was explaining it to me the other day, I predict it will be a real E ticket ride. For those of you not knowing what an E ticket ride is, ask your parents about Disneyland a long time ago. Along with mentoring and leading the Sim team, Dan has been running the IMC Club with great success.

At last month’s member meeting we had a presentation from Steven Stein on NTSB Crash investigation -- what a great program. At this week’s chapter meeting we have our own John Tate speaking to us on the changes taking place

in the major airline industry due to the pandemic. Mark your calendars - don’t miss it.

It my pleasure to announce the recipient of the 2020 EAA Ray Scholarship, Hannah Treehan. Like Amy before her, I believe we are going to see great aviation related milestones from this young lady.

Lastly, I am looking for an old dead piston aircraft engine, my goal is to make a cut away section so we can use it as a teaching aid on how the engines in most of our aircraft work.

Hope to see all or you soon, stay safe and healthy.

Darren Coomler



**August Member Meeting Program
COVID:
An Airline Pilot’s Perspective**

Chapter member John Tate has the distinction of being our only chapter member who flies international routes as a Boeing 787 Dreamliner pilot for United Airlines. John was regularly flying routes to China and other East Asia and South Pacific destinations when the virus first appeared, and will present an insider’s look at how international travel and the economics of the airline industry are being changed by the pandemic. John will also offer a future view of how the post-pandemic world is likely to be different. He will also give a pilot’s perspective on what it is like to fly the 787 Dreamliner.

About our speaker:



John Tate, is a former Air Force pilot who flew the T-37, T-38, KC-135 and Global Hawks and achieved the rank of Lt. Col. Prior to becoming a pilot he was a crew chief on the KC-135 and spent 9 years in aircraft maintenance. A graduate of Sacramento State University with a bachelor of science degree in mechanical engineering, he has spent more than 30 years with United Airlines and has flown the Boeing 727, 747, 777, and 787 Dreamliner.

You can join the meeting online at 7:00 pm on Wednesday, August 19 by clicking [here](#). An all hands e-mail message will go out the morning of the meeting with the Zoom meeting link.

**EAA chapter 1541 Sim Team
Garners National Recognition**

Our chapter’s student member “Sim Team” is featured in the August 2020 issue of *Sport Aviation* published by EAA national. The story, written by EAA staff writer Beth Stanton, is entitled “All Online” and begins on page 14. It describes the accomplishments of chapter members Anthony Moreno (age 14), Kevin Treehan (14) and Hannah Treehan (16) in building FlightSim One, a static flight simulator pod, with direction from tech counselor Dan Masys. The article also outlines the team’s plans for FlightSim Two, a motion

simulator that will use a 3-D Virtual Reality headset and the just-released Microsoft Flight Simulator 2020 to provide movement cues to a sit-on-top motion platform that pitches and rolls in response to pilot inputs, and creates the ‘somatogravic’ illusion of acceleration and deceleration.

INNOVATION
CUTTING-EDGE DEVELOPMENTS

All Online

Kids find and build solutions for a DIY full motion flight simulator
BY BETH L. STANTON



FULL MOTION FLIGHT SIMULATORS create a realistic flying experience, but their high price tag limits their use to mainly the military and airlines. At least, that was until 14-year-old Anthony Moreno, EAA 151736, a student member of EAA Chapter 1541 in Lincoln, California, thought that a full motion flight simulator would be a fun way to get more kids his age fired up about flying.

Anthony had seen DIY full motion flight simulator ideas on YouTube and internet forums, but they were either impractically small, difficult to re-create, or didn't create a realistic flight experience.

"I think full motion simulation would be quite exciting because a lot of people want to try aviation but don't have the money or time to rent a plane or take a lesson," Anthony said.

He outlined his vision to Chapter 1541 Vice President Dan Masys, EAA 300410, at breakfast.

"Now that would be something special to build as a chapter project," Dan said.

TEACHING TOOL

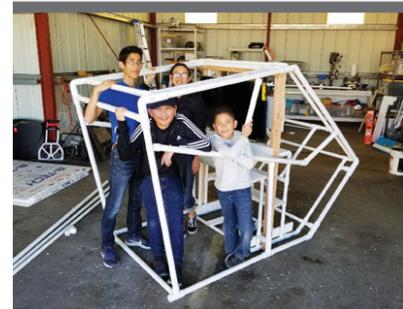
A plan was conceived to build a series of increasingly capable flight simulators for use in the chapter's hangar and at events such as Young Eagles rallies and Airport Fun Days. The first step would be to build a simulator pod on a mobile platform.

Research led them to Roger Dodger Aviation's online tutorial, *DIY Flight Sims*. The online training course consists of videos, text, pictures, and printouts for each step of the project. Using inexpensive and readily available materials, people can build a unit that makes a home computer look and feel like an airplane cockpit.

After studying John and Martha King's videos for years, Matt Thomas, CFI and founder of Roger Dodger Aviation, knows that video is a great teaching tool.

"It occurred to me they were flight instructors just like me," Matt said. "But while I only taught one student at a time, the Kings had thousands of students all at once through their videos."

Matt has sold more than 5,000 of his show-and-tell style, easy-to-understand tutorials since 2006. His customers fall into three equally sized groups — flight simulator hobbyists, former pilots wanting to reconnect with aviation, and future pilots.



From left: Kevin, Anthony, Hannah, and Dan.

By Sport Aviation August 2020

PHOTOGRAPH COURTESY OF EAA CHAPTER 1541

Chapter 1541's Sim Team is featured in the Innovation section of the August 2020 issue of EAA Sport Aviation, in an article entitled "All Online."



Attaching motor actuators to platform

A milestone was reached on Sunday, August 15th when the Sim team connected the motion actuator units (which are powered by 24 volt electric scooter motors driving go-kart sprockets) to the mobile platform via pushrods. And like a mechanical bull, the platform came to life for the first time! Testing of software control of the actuators is now in progress.



Sim team members Anthony, Hannah and Kevin build Sim2's computer from components

The Sim Team has also built a high power special purpose computer specifically designed to drive a Virtual Reality display, with a Graphics Processing Unit (GPU) capable of computing 6.5 TeraFlops – over 6 trillion floating point operations per second, about the same as a processor in a 2004 Cray X1 supercomputer. This processing power enables rendering of complex 3-D images at more than 140 frames per second, for very smooth photorealistic motion pictures. It looks like

Sim2 is going to be a very engaging sensory experience as a flight simulator!

The Sim Team's progress is being updated regularly online. Just click on the **Sim Project** link at <http://eaa1541.org/>.

Ray Scholarship Update

by Shirl Whelan



This is the great news I received from EAA:

“Congratulations! EAA chapter 1541 has been approved for a 2020 Ray Aviation Scholarship! Due to your chapter's dedication to EAA, youth engagement, and the wonderful application submitted, EAA and the Ray Aviation Scholarship Review Committee is excited to have your chapter onboard in 2020!”

As a board and scholarship committee we chose to put the selection of the next Ray Scholar on hold until after our first Ray Scholar, Amy Whelan completed her successful training. This allowed us to focus on mentoring Amy and develop a plan for our next Ray Scholar. We were also hoping to have the gathering restrictions lifted and be able to come together to celebrate the completion of Amy's training and announce our new 2020 Ray Scholar in person. Unfortunately, restrictions for gatherings in Placer County continue and in an effort to keep our membership safe we will not have an in person gathering to announce our next Ray Scholar but instead we will reveal our selection here.

DRUMROLL PLEASE....

Chapter 1541 is excited to announce that Hannah Treehan has been selected for our 2020 Ray Aviation Scholarship. Hannah will be receiving a grant sponsored by EAA and the Ray Aviation Foundation for \$10,000 towards the cost of earning her Private Pilot Certificate. Chapter 1541 will be responsible for administering the funds and mentoring her throughout her flight instruction. Hannah has put in many hours on the SIM project and will continue to be involved in our chapter by being on the SIM team and volunteering her time as needed for future meetings and events when we are allowed to get back together again.



Our chapter's second Ray Scholar: Hannah Treehan

The Ray Aviation Scholarship is a \$10,000 grant sponsored by EAA and the Ray Aviation Foundation. It is paid in three installments based on milestones. The initial \$4000 installment is paid after approval of the scholar application and grant agreement. The second \$4000 installment is paid after the scholar

solos. The final \$2000 installment is paid after the scholar passes the FAA written exam. The scholar is given one year to complete their training. The training timeline includes completing their first solo within three months, completing FAA written within six months, and passing the FAA check ride within 12 months.

Hannah is doing her training with The Spitfire Flight School and Mary Wick as her flight instructor. Mary is one of our long time supportive members and is looking forward to being on the mentoring side of such an important scholarship. Mary has had the privilege of receiving not one, but two scholarships that helped her achieve her goals and she will use this experience to train and mentor Hannah.

Please join in congratulating Hannah and wishing her well in her training!

Shirl Whelan
EAA Chapter 1541
Ray Scholarship Coordinator

A Special Ground School Offer for EAA members

Captain Mary Wick at the Spitfire Flight School has made a gracious offer to all EAA members. Her On-line Live **Private Pilot Ground School**, normally retails for \$249 and the cost of materials. She is offering it to EAA Members for \$99 and is including the ASA Test Prep book, an E6B and a plotter (a value of \$50). As one who attended her first group I can guarantee Mary's classes are very informative and Mary's passion and enthusiasm are demonstrated in every instruction. You will enjoy Mary's real world experiences and her curriculum is designed to achieve the students' success.

The class has a 100% pass rate. You can follow the link below to sign up for the next round of instruction. Even though the class is a Live On-Line instruction, if you not able to meet during the Live Class, a full library of the classes will be recorded so that you can watch them when it is convenient for you and Mary is always available to send her questions. I liked the ability to go back and reviewing the recorded classes. Then if you would to continue your training, she is also doing On-Line classes on Instrument and Commercial ratings. The next session is scheduled to start September 1st.

Please follow this link for the EAA Members offer: <https://www.flightschool.live/sales-letter-order-form1584669630163>

Scott Whelan
EAA chapter 1541 Board member

Ground School Scholarships For Chapter Student Members

To complement our Ray Scholarship award from EAA national, the chapter would also like to award to our youth members a scholarship to attend the **Spitfire On-Line Live Private Pilot Ground School** described above. The award will cover the cost of the On-Line sessions and provide you with the materials necessary to prepare you for the FAA Written Knowledge Test.

The next session is scheduled to start **September 1st**, so please submit a brief email application to the chapter at eaal541@gmail.com no later than August 24th.

In your application please include a paragraph on why you believe you should be selected and how you believe you will succeed. **The only requirements are that your EAA Membership is current and that you will be**

at least 15 by the time you take the written test (the written test is only valid for two years and you cannot take your check ride until you are 17).

Cheryl's "She-Said" Tid-Bits

STILL HAPPY SUMMER!

YOUNG EAGLES:

Due to the ongoing restrictions, our anticipated in-person airport events (Airport Fun Day and Young Eagles) are still on an indefinite hold. However, we have good news for the chapter's student members related to the online Live Ground School course, as described in the article above.

And for our Young Eagle pilots, something to think about while you are not flying:

"How come you never see a headline like 'Psychic Wins Lottery'?" ☺ Jay Leno

Stay safe, and hope to see everyone very soon.

*Cheryl Andrade
Young Eagle Coordinator*

For Sale: EZ PowerTow 35



A used EZ PowerTow aircraft tug was donated to our EAA chapter by my hangar neighbor. The owner used it at his other hangar in the Bay area to move his Cessna P210. He no longer has that hangar so he donated it to our

chapter. It is in excellent condition and includes the manuals and a service kit; belt and control cable, value \$50. It will connect to a Cessna nose gear without pants, otherwise an adapter is needed, available from EZ. These powertows now cost \$2,000 new. Price, \$800 OBO. Contact Jim Hughes, jim.hughes1@att.net, if interested.

The sale of this unit will support our 'Young Aviators' program, fund ground schools and allow us to donate pilot supplies to our student pilots, and our newest Ray Scholar

The Wild, Wild West

by John House

I've spent a significant part of my life at airports. I literally grew up at an airport and was at one point the manager of arguably the busiest GA airport in the Sacramento area. Sadly, that airport is long gone and to a certain extent the reason it's gone is pilot behavior. To a large degree, the general public thinks "those little airplanes are not just noisy but dangerous." It is imperative those of us who fly to be mindful of flying both safely and conscientiously.

How many of you have heard the saying, "Plus 3/minus 8"? Here is a hint: It refers to the time where 80% of aircraft accidents occur. It means the first 3 minutes and the last 8 minutes of flight. Those 11 minutes are in and around airports and more specifically the airport traffic pattern.

We learned – or should have – all about traffic patterns in the first few lessons during our primary flight training. We learn about upwind, crosswind, downwind, base and final legs. We learned about 45° entries, teardrop, straight in

as well as right or left patterns and at what altitudes patterns should be flown.

At KLHM, we have all manner of aircraft using the pattern. Everything from light-sport, gyrocraft, Piper Cubs and even Gulfstream G-600 (yep, just last week). The point is, to be safe we all need to use the traffic pattern responsibly. Fly the pattern the way you learned when you first slipped "the surly bonds of earth."

In general, enter the pattern in level flight at pattern altitude and maintain that altitude until abeam your touchdown spot on the runway. Start your decent and when you reach a point about 45° from your touchdown spot make your turn to base leg. Don't overshoot the extended centerline of the runway when you make your turn to final. If you're remaining in the pattern, maintain runway heading until you're past the departure end of the runway and within 300 feet of pattern altitude before turning crosswind.

You're the Ace of the Base and you know all this so why am I wasting your time? Over the past week alone I've seen some interesting things. I watched (video recorded too) a biplane doing circuits around the airport at about 300 feet with the downwind leg over Tony K's hangar. I watched and heard a Bonanza scream into the pattern and shove the prop pitch into high RPM then jerk the power back as he blew by an Aeronca already on downwind. I watched a Cherokee cross midfield at 2,500 and do a descending teardrop right over the departure end of the runway. Today, I got stuck behind a Cessna B-52 that turned base three miles (yes 3 miles) from the end of the runway.

But wait, there's more. Bruce, Tony and others watched a Cessna 182 with a flight instructor and student practice an emergency landing by intentionally setting up and landing on the taxiway going against the traffic already in the pattern. When they were politely queried about

it, the instructor expounded his teaching methods as preparation for emergencies. Sure glad Hans was not instructing in the R-22 as he uses the taxiway for approach to the helipad. A windshield full of Skylane would be at least an 8 on the Pucker Factor Scale.

Flying the pattern at Lincoln at times feels like an E-ticket ride at Disneyland (are you old enough to remember those?) The FAA in both the Airplane Flying Handbook and the Airman's Information Manual (AIM) as well as ALL primary flight training manuals detail a standard traffic pattern to assure that air traffic into and out of an airport moves safely. All of us should have a look to at least refresh ourselves. Remember, Lincoln (KLHM) is not an uncontrolled airport. It is a non-towered airport.

Okay, so what's the point I'm trying to make? I lived through the death of an airport. It was like losing a brother. Look out the window as you overfly KLHM and see all the homes encroaching into what was until recently farmland/ranchland. Look at the city plans for development around the airport. I see so many parallels to what I lived through. I don't want to see it again. Heaven forbid we have a midair and an aircraft ending up in a neighborhood. That would be a tragedy on all counts. That

would surely get our new neighbors organized to fight against the airport.

Last Minute Update!!

Stupid is as Stupid does. On Saturday I witnessed a blue on blue with blue Piper PA28R land downwind, against traffic, on taxiway Alpha. I recognized the aircraft because I have flown in it and it appears to have had the same flight instructor at the controls. There is no doubt in my mind I witnessed a 14 CFR 91.13 violation and therefore felt compelled to file a complaint with the FAA. I don't like to "rat-out" a fellow pilot but I'd rather do it than try to explain to a love one that "we all knew he was going to kill someone." KLHM is a very busy airport with four fixed wing and one rotor-craft flight schools in addition to home for hundreds of GA aircraft. It is no place for careless and reckless operations.

Fly Safe.

John House
EAA 1541 chapter Board member



Sightings

Since it is way too hot out there, here is a cool pic:

