EAA 663 NEWS

Livermore, California

Membership Meetings

VMC / IMC Clubs

Dec 8th VMC Dec 22th IMC

BUILDER BREAKFAST

Old Mexico 1848 Portola Ave. 8:00 AM

Board Meeting:

Dec 15th BOD Meeting @ Five Rivers - LVK

Chapter Meeting

December 1st, 2022 1st Thursday Five Rivers and ZOOM

Young Eagles Rally

Starting again in Spring 2023!



Next Chapter Meeting
At Five Rivers Aviation and **ZOOM**7:00PM Thursday December 1, 2022

Our December 1st chapter meeting will be held in-person at the Five Rivers Aviation Conference Room at 7pm and will feature a discussion about next year's chapter activity calendar and a selection of short how-to videos focusing on aircraft construction.

December's Fly-Out is scheduled for December 3 to <u>Castle Airport in Merced</u>, please <u>visit the EAA 663 website</u> for details and to sign up. **Be sure to sign up so you can be notified if plans change!!!**

See the pictures from November's Fly-Out to Half Moon Bay at the back of the newsletter.

Updated Tool Location: The tools are now located on the South side of the field Hanger 172. To check out tools please contact Johnny Neves, contact information can be found below in the chapter volunteer list.



EAA Chapter 663 June 3, 2021

EAA Chapter 663 Volunteers

President:

John Youngblood

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Vice President:

Robyne Teslich

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Secretary & Newsletter Editor:

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Counselors and Coordinators:

Bob Sinclair

Chapter Tech Counselor 925-935-7465

Barry Weber

Chapter Flight Advisor & Technical Counselor 925-963-0834

Peter Friedman

Chapter Flight Advisor & Technical Counselor 925-818-6642

Will Fares

Fly-Out Coordinator 925-209-4527

Johnny Neves or Keith Johns

EAA 663 Tools

Keith Johns

EAA 663 Website 650-759-0199 keith@flycloudniner.com

Young Eagles Coordinators

Sophia Patel

415-306-1776 sophie prpro@hotmail.com

Eagle Flight Coordinator

Keith Johns

650-759-0199 keith@flycloudniner.com



President's Comments

Hello EAAers,

Congratulations to Taris Keiper on his first solo flight!! As our very first Ray Flight Training Scholarship recipient, Taris is well on his way to becoming a Livermore aviator. Since Taris has already completed his ground school requirement, he expects to finish his Private License by early spring. Be sure to attend this week's chapter meeting and help us celebrate Taris' achievement.

Chapter 663 is planning our Annual Awards Banquet on Saturday evening, January 28, 2023 at the Clubhouse at Las Positas (Beeb's banquet room) at the Livermore Airport. All members and guests are welcome. We will have two speakers from JOBY Aviation scheduled to make a presentation on design, development, and operation of their eVTOL (Electric Vertical Take Off and Landing) Aerial Vehicle. With an approval from the Air Force, a Part 135 FAA Air Carrier Certificate, partnerships with Toyota, Uber Technologies, Delta Airlines, plus many others, JOBY is poised to become the first operational eVTOL airline. Be sure to make your reservations soon with our Treasurer (Jan DeVocht at (925) 699-7577) or through our web site on the CHAPTER EVENTS tab.

This month's chapter meeting will be held in-person at the Five Rivers Aviation
Multipurpose Conference Room on December 1st at 7pm and will feature a discussion
about next year's chapter activity calendar and a selection of short how-to videos
focusing on aircraft construction. If unable to join us in person, please attend by using
Zoom link:

https://us02web.zoom.us/j/83613340012?pwd=aFN2WWtTRGJmVGhiRTNJV2N2U2pId z09

Meeting ID: 836 1334 0012

Passcode: 3zLigY

See you there.

John Youngblood



EAA Chapter 663 Livermore Club Photo June 3, 2021 - With Member Planes & Projects

EAA Chapter 663 Livermore GENERAL MEETING November 3, 2022

AT FIVE RIVERS AVIATION

Chapter President John Youngblood welcomed our members and guests in person and online, for the November meeting at Five Rivers Aviation meeting room at KLVK. John was joined by officers: Jan De Vocht and Secretary Johnny Neves. John reviewed the regular announcements on VMC/IMC Clubs, the monthly Fly-Out, our Young Eagles and our Potluck/BBQ. John shared the monthly video from EAA. Our guest speakers, members Taris and Gia Keiper, gave a great presentation on 3D printing (see pictures that follow), covering how to design and prototype a part as well as the printing equipment and materials available. After that, many members of the club went to see member Yeol Grant's Sling TSi build in progress in his hangar (see pictures that follow for this, too).

TREASURER'S REPORT: During the November Board meeting Jan presented the current financial information. Balance = \$6,718, Total deposits of \$308, Expenses of \$413

REMINDER TO PAY YOUR 2023 DUES - CLICK HERE!

Please visit out chapter website and take just a couple minutes to complete the member profile on the website -**CLICK HERE!**

POLO SHIRTS WITH EAA 663 LOGOS plus PATCHES: First shirt is \$15 for members; all additional shirts are \$25. Two styles of patches, new and old, each of which is \$5.00. Ask Jan De Vocht.



We have completed all of our Young Eagles flights with the Patriots Jet Team Foundation and at Livermore for 2022. We will be developing and positing our 2023 schedule for the Spring.

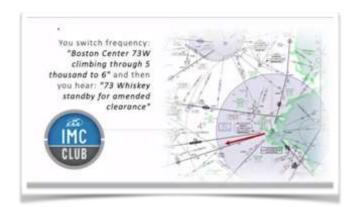
For next year, we will continue to need PILOTS and GROUND SAFETY OFFICERS to help to continue our success. Members are welcome to join the yellow vest brigade for ground operations including ramp safety, photography, career guidance, study suggestions and mentorship. It you are interested in joining us please contact Sophia Patel (see volunteers page).

Livermore April 16th May 14th June 11th Aug 13th Oct 8th Byron March 26th Nov 5th

We welcome all EAA members prepared to talk with Young Eagles and their family to discuss flying as well as the benefits of learning valuable math, science, and thinking skills. We each know from experience that a small spark can lead to a lifetime of flying enjoyment. Contact Sophia Patel regarding the **Young Eagle Safety Check** procedure for adults that must be submitted 7-10 days prior to the event.

BBQs: All Potluck BBQ events will be on same day as Young Eagle rallies starting at 4pm.

BUYING GIFTS? Use our unique link: https://smile.amazon.com/ch/84-4270204 to sign in to Amazon. After shopping, the ½% donation will be automatically allocated to Chapter 663 Livermore without any cost or other input on your part. This is a **great way to help support our EAA Chapter with no cost to us**. Jan De Vocht has set this up. Should you have questions drop him an e-mail. Tom is also seeking volunteers to work with the **Aviation Explorer Scouts**, a group that is open to youth regardless of gender.



Keith Johns will lead the IMC Club through scenarios on December 22, 2022. There is significant value in learning to think through the situations regardless of one's flying skills or experience. You're free to join, listen to others and ask questions that improve your skills for safe flying.





VMC Club and IMC Club: These free-to-member activities focus on improving flying skills and safety.

VMC Club coordinator Andy McSunas, a certified Advanced Ground Instructor (AGI) will meet the 2nd Thursday of every month at 7:00pm for VMC Club

Email Andy McSunas: ajmcsunas@me.com

IMC Club Coordinator Keith Johns, CFII, Instrument ground Instructor will meet the 4th Thursday of every month at 7:00pm. Email to IMC Keith Johns: **keith@flycloudniner.com**

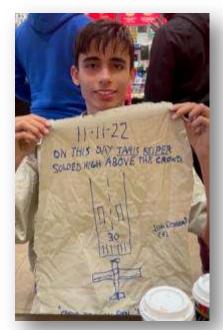
Zoom links shared prior to the VMC/IMC Club meetings



Andy McSunas will lead the VMC Club through a few scenarios on December 8, *Thursday*. You're free to join, listen to others, and ask questions that improve your understanding of safe flying. The VMC and IMC Clubs are free to join and welcome drop-ins. Due to previous COVID interruptions many of us are a bit rusty and could benefit from cycling the gray cells and exploring the envelope!



Congrats to Ray Scholar Taris Keiper!!





Pictures from Taris' and Gia's 3D printing presentation





More pictures from Taris' and Gia's 3D printing presentation









Pictures from Yeol's Sling TSi Build





Pictures from Half Moon Bay Fly-Out













Builder Tutorials

Trystan found these design tutorial references from Sonja Englert were informative:

Tutorial 1 https://youtu.be/NzMGNiY47IY Introduction, wing, stall speed

Tutorial 2 https://youtu.be/6RTcCFIlm0k Preliminary design spreadsheet, performance

Tutorial 3 https://youtu.be/6PAOrBe0tjQ Fuselage, cg, W&B

Tutorial 4 https://youtu.be/WX4PsqikxBA Fuselage mass distribution, cg calculation

Tutorial 5 https://youtu.be/qK2UxLwFMiE Horizontal tail

Tutorial 6 https://youtu.be/6C0HS8CeiyU Vertical tail

Tutorial 7 https://youtu.be/A9jCb6WlGks Control surfaces elevator, rudder

Tutorial 8 https://youtu.be/2j6P4qXkAtk Control surfaces aileron

Tutorial 9 https://youtu.be/70vlrs0Jy08 Flaps

Tutorial 10 https://youtu.be/4MK4PRStZtM Wing planform, lift distribution, induced drag

Tutorial 11 https://youtu.be/mm0cXnXkiBI Airfoil selection

Tutorial 12 https://youtu.be/5enLpAb7lq0 Aerodynamic center, MAC, longitudinal stability

Tutorial 13 https://youtu.be/shGXrv-zg U Engine and propeller installation



EAA 663 Tools as of May 2021

- 1. "G" Meter. This is a free standing mechanical "G" meter that can be temporarily mounted in an airplane for phase 1 testing.
- 2. Antenna analyzer/SWR meter. Has a local radio frequency oscillator which allow SWR checking across the aircraft ban to measure SWR and resonant frequency. Has other tests also.
- 3. Battery Load Tester. Test your battery under load for a valid test.
- 4. ELT Beacon tester, 406 and 121.5. Can test whether by direct connection to the beacon or by radiated signal wirelessly. For 406 beacons, can read out the information being broadcast.
- 5. Bead Breaker. Smaller unit intended for tires up to motorcycle size.
- 6. Borescope, rigid. Self contained with integral screen and recording
- 7. Brake riveter, hammer type.
- 8. Brake Riveter, Screw type.
- 9. Carbmate carburetor synchronizer (for Rotax mostly). This unit is intended for engines with twin carbs
- 10. Compression tester. Standard unit.
- 11. Crimping tool, heavy. For crimping heavy lugs such as used on battery cables
- 12. Drill Doctor. For sharpening drills, knives and scissors. Electric
- 13. Panel punch. Mechanical punch for aluminum panels in both standard sizes for round gauges.
- 14. Prop balancer. Active prop imbalance measure. Optical rpm measure and mechanical vibration amplitude measure with phase difference to allow placement of balance weights, typically on the spinner.
- 15. Scale, crane. Hydraulic scale for use with a crane for measuring lifted weight.
- 16. Scales, electronic. With 4 scales, 4 rollup ramps, and a master control which will show the weight on each wheel. Has tare weight adjustment.
- 17. Spark Lead Tester, High Voltage leakage. Generates high voltage on spark leads to check to leakage.
- 18. Spark plug tester, pressure. Can check sparking under pressure. Needs separate compressor.
- 19. Borescope, articulating, for use with smartphone. The camera can be remotely bent around up to 180 degrees for a better look at engine internals
- 20. Spark plug resistance tester. Check for proper range of internal resistance of spark plugs.
- 21. Tachometer, optical
- 22. Tensiometer, cable. Measure cable tension.
- 23. Tubing flaring tool.
- 24. Ultrasonic cleaner, mostly for injectors. Small bath cleaner used with clean water and a few drops of detergent.
- 25. Wire marker, Kroy. Makes shrink wrap wire marker with alpha or numeric markings. You may have to buy the marker stock you want to use.
- 26. Audible circuit tester perfect for tracing wire ends during your avionics upgrade