

EAA 663 NEWS

Livermore, California



EAA Chapter 663 April 13, 2019 BBQ Livermore

Membership Meetings

May 2, 2019

Five Rivers Aviation
700 Terminal Circle,
Livermore, CA 94551
Doors open at 7:00 p.m
Cookies & Meeting 7:30 p.m
Thursday, May 2, 2019

Presenter:

Ken Bower
SOFIA Project
NASA infrared
telescope in 747SP

Presentation: ~8:00 PM
Guests Welcome

Board Meetings

3rd Thursday of every
month at 7:00 PM

May 16, 2019

Location: Youngblood's place



May Guest Speaker will be **Ken Bower** who will talk about the **NASA SOFIA** program. SOFIA is an **astronomical telescope mounted inside a 747SP**. By observing from the stratosphere, scientists can make observations of the universe with infrared light, which are impossible from the surface of the Earth. It can do things Hubble cannot.

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EAA 663 Newsletter 510-390-0840



Trina Anderson Young Eagle Coordinator

Our Treasurer is retiring from his position in the fall of this year. Anyone, or spouse, interested or needing additional information in the position please contact Mark Palajac at: palajac@gmail.com.



EAA 663 Chapter Members and some of the members' homebuilt planes July 2018

EAA Chapter 663 Minutes

APRIL 2019 MINUTES: GENERAL MEETING EAA CHAPTER 663, 4/4/2019, 7:35 PM FIVE RIVERS AVIATION MEETING ROOM, KLVK.

Chapter President John Youngblood called the April 4, 2019 meeting to order for EAA Chapter 663 members and guests. Vice President Chuck Ray, Treasurer Mark Palajac and Secretary Kirk Knight were also aboard. Note that Chuck is inviting a replacement so he can spend more time finishing his airplane! Volunteers are welcome.

Chapter 663 meetings warm up about 7:00PM with the practice of showing a video. This month we have a special video provided by member Renee Robinson of one of the EAA Ford Trimotor planes at Concord in March with the support of the Chapter 393. They flew 63 flights, hosting over 650 passengers who donated \$75 apiece over three and half days. They generated over \$3,000 for the Chapter funds to support activities such as Young Eagles.

Touring the plane is free. Renee, one of the ground support team, recounted her flights over the years in the Trimotor. It flies low at 1,000 feet and slow, giving passengers the sense of literally going back in time. The low level is reminiscent of the barnstormer days in attracting people who follow the plane back to the airport to see the plane and buy a ride.

<https://www.youtube.com/watch?v=6Y5aepl4f3I>

We suggest that members and guests arrive at 7:00PM for ad hoc discussion, as the audio track is kept low enough to be heard but not to interfere. Often people will pause to watch something of interest in the video.

John brought to attention to Bruce Cruickshank's successful recovery from heart surgery. He's able to get in and out of a car, and John said perhaps he'll make it to the April BBQ (*NOTE: see photos, he did!*)

GUESTS: Jon and Oliver Gavin, son and father respectively, came to get Oliver involved as a Young Eagle with his first flight. Brian and his wife Kim Carpenter came due to Brian approaching his 50th trip around the sun. He's embarking on a long-held dream of building a plane. He started his logbook many years ago. He was in the Air Force, then semiconductors, Apple and now owns a factory in Redwood City where they build autonomous drones. He's been debating the RV-12, RV-14, RV-8... John Youngblood pointed out all the RV builders sitting around Brian who could provide insights.

FLIGHT PERFORMANCE TESTING: John Youngblood had an update and photos of a new Catto 3 blade constant speed pusher prop on his Velocity. Catto has built a couple for Berkuts. Craig Catto started with a McCauley hub and had to make some mods, and then more mods. The Catto appears to be a marked improvement in performance on the Aero Composites prop he has been using.

One look at the Catto prop and you'll see it looks different. It has an airfoil curvature all the way out to the tip, as just one distinction. After John completes his 80 hours of testing, he'll send it back to Craig for analysis.

TREASURERS REPORT: Mark Palajac reported that the Chapter has 66 members, he expects 15-20 more soon, and confirmed that NASA sent a refund for \$1,750, so the Chapter balance is \$5,278.54. He politely corrected a typo by the Secretary that inserted an extra "4" in the NASA refund.



*Catto Constant Speed Pusher Prop
on John Youngblood's Velocity*

Mark is accepting \$30 payment for 2019 memberships. Bring your checkbook to the May Meeting for membership.

NEWSLETTER: Kirk Knight is also newsletter editor. Mark Palajac offered the generous compliment that the March Newsletter was filled with a remarkable amount of useful information on a wide range of topics. The editor notes that was possible because our members and guests have remarkable information to share. In the hope of inspiring others, such as teenagers exploring a career or interest in flying, we should pass the newsletter along whenever possible.

Kirk is soliciting stories about recent flights, flyouts, BBQs, Young Eagle ADSB suggestions as 2020 is right around the corner, insights from your first or your 30th BFR. If you have photos, stories you want to tell (record it with your iPhone voice memo and

I'll transcribe), videos, lessons learned or other items of interest kindly send them to captkirk@woz.org.

YOUNG EAGLES:

Our superb Young Eagles Coordinator, Trina Anderson reviewed plans for our first event of 2019 on April 13, at Livermore. Trina clarified that the Young Eagles and parents will gather at the new Livermore Administration building, it's not the terminal, an error by the Secretary. If you know kids who would be interested in their first flight and if you're available fly, please sign up with an email to Trina. The FlightSquid system that worked so well last year is no longer operational.

She needs PILOTS to confirm.

Call or email Trina 209-609-2162 DNTAnderson@gmail.com

2019 Young Eagle events:

May 18, 2019	KTCY
June 8, 2019	KLVK
July 13, 2019	KTCY
August 17, 2019	KLVK
September 14, 2019	KTCY

Trina is setting up a blue box in the back of the meeting room with handouts for Pilots and Young Eagles so you don't have to wait for events. If you have someone who wants to fly, pick up some blank registration form and follow the instructions. There is also info for new pilots. Same for Eagle Pilots. The child safety program is for 3 years, and this is the third year. If you're new you'll need to take the online training and certification.

Repeat this year are the new AVIORE comic books. It's about aviation, how planes work, and stuff to do while they're waiting for their flight.

BBQs: The schedules are the **same days as the Young Eagles events.**

April 13, 2019	KLVK
May 18, 2019	KTCY
June 8, 2019	KLVK
July 13, 2019	KTCY
August 17, 2019	KLVK
September 14, 2019	KTCY

Location is Hangar 114 at the NE corner of LVK. Beverages cold at 3:30PM, coals at 5:00PM. **Check the NEW code for the fence!** Bring your own entre to barbecue, and a side dish or dessert to share. Soft drinks and adult beverages, plates and flatware are provided.

Conversation is free, spouses and supervised children are welcome. To the surprise of some, there is often sparkling conversation that includes subjects in addition to flying, often related to food and travel.

Photos reveal there the beanbag competitions are heating up, so practice your tossing skills. Last year's beanbag skills demonstrated rapid process improvements while retaining safety margins and a sense of humor.



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FLY-OUT EVENTS: Dave Walters is demonstrating increasing success – now that the weather is cooperating – with organizing weekend fly outs.

[See *Grapevine* Newsletter story about most recent month's flyout and plans.]

Slack is a useful resource with the goal of organizing a couple weeks beforehand, but there are last minute changes due to weather.

ea663.slack.com

Dave has suggested trips to visit EAA Chapter 512 in Placerville for their \$6 breakfasts on Saturdays. They're also offering \$0.25 per gallon fuel discount!

May Flyout May 31, June 1 & 2

This is an event, including camping, sponsored by **Canards West** and you may find complete info at: **canardswest.org** There is a \$20/person charge for the seminars on Saturday and that includes Saturday nite's dinner. If you plan on camping the charge is \$10/person + your airplane (not clear on that). If you arrive on Friday or early on Saturday I will provide Saturdays breakfast sandwiches, coffee & juice for our' members and their guests, BUT, you must tell me you're coming or you'll get nada because I'm not bringing the food truck, only my trailer, and that'll be over where the trailers are. Contact me: **Dave Walters, 925/348-3584 (text preferred)**, or grayson_segal@yahoo.com
Aviate, Dave

Get on the list as the plans change due to weather, etc. As of this evening the plan was an April 20th flyout to Quincy. (*See the color text box for latest information as of the May meeting.*)

WEBSITE: <https://www.663.eaachapter.org>

Brad Olson gave a status update. He transferred the old URL to a new domain service and will then use web forwarding to invisibly allow the old EAA663.org name to connect to the new free EAA webserver at www.663.eaachapter.org. **Will Pitt** will be building this, but he has recurring Thursday night conflicts so his meeting attendance is curtailed. This isn't yet designed to accommodate all our photos our past *Grapevine* Newsletters, but it does have some to provide a presence.



Tom Manger with BD-5 becoming a car at the Tri-Valley STEM Center

TOOLS: Bob Farnam has no new tools. See the list of tools in the *Grapevine* Newsletter.

BOARD MEETINGS: Next Board Meeting is scheduled for May 16th 7:00PM at John Youngblood's. Email John Youngblood for his address.

MAY 2019 Chapter Meeting will be on May 2nd at 7:00PM at Five Rivers Aviation Livermore Airport 700 Terminal Cir, Livermore, CA 94551

MAY MEETING SPEAKER will be Ken Bower who will talk about the NASA SOPHIA program. SOPHIA is an astronomical telescope mounted inside a 747SP. By observing from the stratosphere, scientists can make observations of the universe with infrared light, which are impossible from the surface of the Earth.

Ken Bower began working on projects for NASA while an undergraduate at Stanford University. He applies his engineering skills to enable scientists to make novel measurements of physical and astronomical properties of the universe. Ken helped to build and operate the Gravity Probe Relativity Mission, and now plans missions for NASA's airborne observatory, SOPHIA.

OTHER ANNOUNCEMENTS:

Tracy Airport KTCY Anniversary June 15 9:00AM to 4:00PM. Check with Trina Anderson for more details.

BAY AREA FLYING CLUB is setting up a new flight school with monthly membership of \$35 a month.

Evgeny Gubin had some details. The goal is to reduce 141 flight school costs. Proposal includes 2 C172s, a Cirrus, a Baron with an organization out of Longmont, Colorado.

Hayward Air Rally is May 16-18. It's challenging with many classes to compete with all pilots regardless of your aircraft.

Wings of Freedom will be at KLVK on May 26-28 with P-40, P-51, B-25, B-17, B-24 filling the ramp and providing paid tours and rides.

Scaled Composites will be hosting their annual Mojave Airport open house on April 12-13. If you want to see exotic aircraft, this is the center of the known universe.

Members reported a number of flying experiences, now that the weather is improving and we don't have forest fires (yet). If you want to get a weekly fix or **hangar talk** with builders and pilots, every Saturday at 8:00AM at The Brick in Livermore you'll see the regulars in the back. Ask for Bob. Typical breakfast costs about \$12-14, but the conversation is invaluable.

AOPA FLY IN: Add space on your calendar for the AOPA fly-in at KLVK scheduled for June 21-23rd. Of the three days, the first 2 days of events will be open to the public on Friday and Saturday June 21st and 22nd. Space will be provided for 60-70 exhibitors, with as many vintners who can fit. It will be a similar footprint to the 2018 Open House. They're preparing for 300-700 planes, dependent upon weather.

POLO SHIRTS WITH EAA 663 LOGOS: First shirt is \$10 for members; all other shirts are \$22. Ask Mark Palajac.

MEETING BREAK 8:18 PM



Trystan Clark rivets on
John Youngblood's RV-14A

APRIL GUEST SPEAKER:

Peter McCutchen of the California Civil Air Patrol gave a brief version of the 90 minute **WINGS FAAST** course on **How to Survive Off-Airport Landings**.

Peter has been an EAA member since he helped build a Harmon Rocket. CAP is a volunteer organization associated with the US Air Force. The volunteers are the people who answer the calls late at night, leave their homes, assemble the team that works to find you. It's what they make a commitment to do.

His presentation demonstrated the value of many profound and subtle lessons learned the hard way by hundreds of pilots and their passengers. There have also been many technology improvements and capital investments. He identified many ways to greatly improve your decision-making, as well as to improve your odds should you make a poor decision.



Peter McCutchen -
Guest Speaker

He offered many insights into how their unique cellular forensics team can locate people. However, if they have to rely upon your cellular phone data, correlate it with radar data, it can be many hours, even days, after a crash. It's a good thing, but you can do better.

Number one takeaway is that if you fly anywhere, it's worth your while to file a flight plan, use flight following and invest in a 406 MHz ELT with GPS.

- A few other insights
- Pilot attitude is a leading indicator of your likelihood to have an off-airport landing. You may have heard these before:
 - Impulsivity....Anti-authority, etc.
- Pilot attitude is also a leading indicator of your likelihood to survive long enough to be rescued from an off-airport landing
 - If you prepare ahead of time, you're more likely to survive
 - Having a positive mental attitude will greatly improve your odds of surviving
 - If you want to increase your probability of survival, which means being rescued after surviving an off-airport landing
- **Get a 406 MHz ELT with GPS.** They can locate you to within 0.05 NM within minutes. A panel mounted switch is also recommended.
- If you have a 406 ELT *without* GPS, you'll be within a 1-3 km radius. Use geometry to calculate the several orders of magnitude you've added to the search radius.
- Help Search and Rescue to find you and rescue you. File a flight plan and use Flight Following so someone is watching you in real time. Should your plane disappear off the radar on Saturday they won't wait until Tuesday to send out Search and Rescue.
- Get a vest and fill it with key survival gear
- Get a survival kit, fill it with appropriate gear, and know where to put it in your plane
- Carry specific tools, water, food, clothing, blankets, etc. for the season and countryside
- If you have cell phone, text a photo as it will include GPS coordinates! SMS text messages require less bandwidth than voice and are more likely to be received in bad cell zones
- Survival knives with a seat-belt cutter are invaluable. These should be one-handed as your other hand may be disabled. Put one on each side of your vest

Take the FAAST course if you haven't done so recently. The rescue improvements since 2016 are impressive, but they depend upon informed pilots. Your life may depend upon it.

MEETING ADJOURNED by John Youngblood. 9:30 PM

Minutes submitted by Kirk H. Knight Secretary.



Excited Young Eagle leads the way
April 13, 2019



Kim Hunter pre-flights his Maule



Young Eagle with Kim Hunter



Young Eagle with Tom Irion



Young Eagle with John Goldsmith



Bob Tucknott and copilot



Young Eagles Dad is excited, too!



Nona Manger, Ground Safety



Dave Walters assists John Goldsmith
with Young Eagle in John's RV-7A



Bob Tucknott's 182



Bob Tucknott with Young Eagle



Tom Irion and Young Eagle



Tom Irion & Young Eagles



Young Eagles with Kim Hunter



Bob Tucknott describes vortex generators



Dave Walters ground safety
does photo duty



Young Eagle with Tom Irion



Trystan Clark with Tom Irion explains
the program to Young Eagle family



Kim Hunter's Maule taxis out



Young Eagle dad, YE, and Kim Hunter



Tom Irion and Velocity with Young Eagle



Nona Manger & Dave Walters
Ground Safety as Kim taxis to 25R



Tom Irion, Young Eagles, Nona Manger



Tom waves on taxi back



Trade-up-plane for Nona Manger



Kim Hunter with a pair of Young Eagles



Young Eagle permanent grin!



Kirk Knight "I prefer an RV"



Tom Irion explains prop safety



4 Ship Flight practices for KLVK airshow



Darryl Ray - Charcoal Master
April 13, 2019 KLVK



BBQ coals are ready



Dorothy Hamilton



Loretta & Tom Irion, Steve & Jodie Robinson,
John Goldsmith & John Youngblood



John Youngblood & Jan DeVocht



Darryl Ray & Steve Robinson



Jan Farnam, Alessia Duran, Trystan Clark



Comparing hats



BBQ is served with Bruce Cruikshank



When will the coals be ready?



Barry Weber examines Ray Brothers' project



Barbara & Dave Walters, John Youngblood

EAA 663 Tools as of March 2019

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 band 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. Borescope, articulating, for use with smartphone. The camera can be remotely bent around up to 180 degrees for a better look at engine internals
8. Brake riveter, hammer type.
9. Brake Riveter, Screw type.
10. Carbmate carburetor synchronizer (for Rotax mostly). This unit is intended for engines with twin carbs
11. Compression tester. Standard unit.
12. Crimping tool, heavy. For crimping heavy lugs such as used on battery cables
13. Drill Doctor. For sharpening drills, knives and scissors. Electric
14. Panel punch. Mechanical punch for aluminum panels in both standard sizes for round gauges.
15. 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.
16. Scale, crane. Hydraulic scale for use with a crane for measuring lifted weight.
17. Scales, electronic. With 4 scales, 4 rollup ramps, and a master control which will show the weight on each wheel. Has tare weight adjustment.
18. Spark Lead Tester, High Voltage leakage. Generates high voltage on spark leads to check to leakage.
19. Spark plug tester, pressure. Can check sparking under pressure. Needs separate compressor.
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.