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Albuquerque, NM Chapter 179

The Leader In Recreational Aviation

Visit Albuquerque EAA Chapter 179 Web Site: *www.eaa179.org* Newsletters are at: <u>http://eaa179.org/newsletters/</u> The Web Site for the LOEFI is: <u>http://www.loefi.com</u>





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Upcoming Events & Chapter Meetings

October 20, Tuesday, EAA Chapter 179 Social Gathering Using ZOOM, look for an email with the link and time (6 PM) information - coming soon.

Our remaining scheduled Young Eagles date for 2020 is November 7. - On Hold pending COVID-19 concerns.

Election of Chapter 179 officers (see From the President)

From the Editor, Harley Wadsworth

I am pleased to see another newsletter filled with really good stuff. Thanks again to all our contributors. And thanks to all our friends and members who are putting some life back into 2020.



Here are some things to see in this issue:

- Emilio's "From the President" article for chapter news.
- Art Wood's article about dealing with wind damage to his rudder.
- Golden Eagle flight for Curtis Smith.
- RV-12 Flying Club forming to buy and then fly our chapter project plane.
- Airspeed indicator, V speeds review by Emilio.
- Update from Madison Thompson.
- Chapter 179 Awards second 2020 Ray Scholarship

And more... enjoy!



Lee Otto with a piece our Chapter 179 RV-12 project.



THE CLUB JUST FOR INSTRUMENT PILOTS (AND STUDENTS)

Click on the above logo for more info

Other NM EAA Chapter Newsletters

EAA 691, the Green Chile Chapter: <u>http://eaa691.org</u>

EAA 555, Triple Nickel Chapter: <u>http://555.eaachapter.org/</u>

EAA Chapter 1306, Edgewood, NM - Not on the web yet, but they have a nice newsletter.

Find or Become a Tech Counselor and/or Flight Advisor: (your EAA login is required to see this information) <u>https://www.eaa.org/en/eaa/eaachapters/eaa-chapter-resources/chapterprograms-and-activities</u>

The <u>Lobo Wing of the CAF</u> The Lobo Wing is located at hangar 80 of the Moriarty, NM Municipal Airport.



www.nmpilots.org

From the President, Emilio Verastegui

Hello my fellow EAA members!

I trust you have done everything to keep yourself and family healthy and safe from the COVID-19 virus. Obviously, this has been a year that has challenged all of us, and not necessarily in a good way. Here we are now in October and it seems like this anomaly will not end. As far as our Chapter activities are concerned, we have hardly had any this year and it looks like that may be the case for the remainder of the year. Sadly, there is not a whole lot that we can do about it as a Chapter, but we keep trying.

I learned just a few days ago the we will be losing an invaluable member of our Chapter, the Chairman of our LOEFI Team, as well as our Eagle Chairman, Eric Goldman, Air Traffic Controller, par excellence! No, nothing sinister or health related, but a loss is still a loss! As many of you are aware, Eric has stepped up to fill positions within our Chapter when others were too busy or unable to do so. He willingly took on the LOEFI position after Mike Paxson departed. Eric wanted greatly to get our Eagle Flight Program started and off the ground, but the COVID thing put a stop to that and just about everything else here in the Chapter. We all owe Eric a great THANK YOU for all he has done for the Chapter and all that he was willing to do. His untimely departure will be a loss for all of us. We will miss him greatly! Our Chapter, LOEF, and our Eagle Program will never be the same and will have to continue without his style of leadership!

It turns out that his wife Ashley, a TSgt in the USAF, has been transferred to Pensacola FI. She and their 4 kids are either on their way or are already there. Eric had notions of transferring there at the end of 2020 to join them, but plans change! Eric will now be leaving at the end of October! Congratulations to Eric, Ashley, and the whole family! We will miss you all greatly and

hope that you come back for a visit soon! Best wishes for the future to all of you.

One thing we can do to help make our Chapter better is to build an airplane! I recently had the opportunity to work on the Chapter Build Project, the RV-12. I was closely supervised by Lee Otto and Doug Dingman, one of our newest members (Welcome Doug). I had fun and learned a few things about the RV-12. I think it will be a totally fantastic airplane to fly after it is finished. Lee has flown with Gwen Walcott in her RV-12, among others, and I have only heard glowing reports about the airplane. Lee told me he will be having a Builders Gathering every Wednesday, weather permitting, starting at 0900, in the build hangar at Bode Aviation. I urge each of you to go out and take a turn pulling rivets or helping with what ever the task is for the day. You will have fun and Lee will appreciate the help.

As you may remember, EAA's "One Week Wonder" visited us back in September of 2019. Hopefully, our Build Project RV-12 will also be flying soon. As you may remember, our Chapter was



one of only several chapters that were recognized by EAA National as being one of the most active and most engaged of the many Chapters in the EAA organization. Our Chapter was awarded a Gold Chapter label, which I think was richly deserved! This was possible because our Chapter met 9 of the 10 criteria that EAA set as goals for each chapter.

Then came 2020 and the COVID-19 issue! Because of the many shutdowns, closures, and other impositions, we were not allowed to have a "normal year". We and many chapters were not able to do what chapters normally do, that is to bring aviation to other aviation enthusiasts and to the general public. With that in mind, EAA National has decided to combine the year 2020 with 2021 in hopes that things will improve sufficiently and chapters can meet the judging criteria. Sounds easy, right! EAA National has also updated their 10 criteria that chapters have to meet or exceed in order to be considered "most active and most engaged"!

Here is a list emailed to me recently regarding the ten upgraded criteria:

- 1. Attends a chapter leadership training session
- 2. Growing or steady membership
- 3. Offers IMC or VMC Club programs
- 4. Participates in Young Eagles or Flying Start programs
- 5. Has EAA-approved Flight Advisor or Technical Counselor
- 6. Participates in EAA's Annual Chapter Member survey
- 7. Participates in Young Eagles Build and Fly, Young Eagles Workshops, or sponsoring a youth to Air Academy*
- 8. Requests an EAA ChapterBlast email**
- 9. Hosts at least two public events each year
- 10. Owns/leases a facility

11. Extra credit activity, such as a chapter build project, youth build project, chapter scholarship (separate from Ray Scholars), a chapter tool crib, IAC competition, etc.***

*This criteria replaces ChapterGram readership

**Requesting promotional material has been removed from this criteria.

***Chapters will be able to submit for qualified extra credit criteria beginning in September 2021.

As you can see, we meet most of the criteria already, or will when we can start back to our "normal" activities. If you look closely, you will see that items #1 & #10 are really the only two that might be questionable. Attending a Chapter Leadership Training Session is something that I have done once. It was a very impressive class and I learned some valuable and useful information. After 2020, it might be time to either attend another session or send a another officer.

Item #10 might be harder to achieve. Although it is always possible that Chapter 179 will one day have it's own hangar or Chapter house, or both, there are many obstacles in our way (RIP Johnny Nash). The main obstacle, of course, is money! A source must be found that generates lots of enthusiasm in the Chapter, which in turn, generates the necessary funds to support our own facility at Double Eagle Airport. I ask you to help me find and nurture that source for the benefit of all current and future Chapter members. A Chapter hangar would catapult us to the next level and facilitate our Social Gatherings, Young Eagle events, IMC Club sessions, our RV-12 Build project, LOEFI, Eagle Flights Program, and many other activities that we probably have not thought of yet. It is my feeling that a Chapter hangar would become the focal point of all our Chapter aviation activities and thrust our Chapter into the future!

And speaking of activities, we still have one more Young Eagles

Fly Day scheduled for 7 November. A decision will be made later in October to determine if that event will take place. Please stay tuned!

As a reminder, I want to let you know that Chapter elections will be held in November. Although we have not had a regular Social Gathering in quite some time, expect to have a virtual vote or something similar for the elections. More on that soon.

Also, there is another BOD meeting scheduled soon, again on Zoom. Since January, it has been scheduled for 10 November, at 1730 (5:30pm). If you need help logging on or with the ID or password for the meeting, we can help! Everyone is welcome to attend.

If you have any questions or comments (stabs & jabs), please feel free to contact me anytime. I usually don't bite and I play nice with others! My contact info is on the opening banner of the newsletter. Our next Chapter Meeting (Social Gathering) will be starting at 1730 on 20 October.

Please try to join us on Zoom. If you need help with the ID or password for the meeting, we can help!

Sincerely,

Emilio Verastegui, President EAA Chapter 179, 505-280-2421



Lee Otto and Jim Kessler review the next step in the plans.

> Randy Reimer shows off progress. The chapter workshop is attracting visitors and new members! (plastic keeps parts clean)



This is our chapter 179 RV-12 work area. Thanks to Bode Aviation for allowing us to use this perfect space in the back of their hangar. It conveniently has a door next to our storage container.

RV-12 Build Underway!

The chapter build team has acquired tools, set up shop, unpacked the fuselage kit, taken inventory, and professionally organized parts on shelves and bins. If you were nearby this past week, you probably heard RIVETING sounds!



How do you get from this

to this?





With a little help from your friends!!

By Art Woods



In August's record heat, we flew to Montana to visit Joyce's mother. We are proud of our relatively newly acquired RV7A built by John "Vyking" Nystrom. With extremely favorable tailwinds, most of the time we were showing upwards of 180 - 188 kts (yep, that's 216 mph) across the ground. A quick turn-around at Redtail Aviation in Price, Utah had us door to door in a little over 5 hours. After takeouts from our favorite Dairy Queen and Paul's Pancakes, it was time to return south. Since it was my Sister's birthday, we stopped in Montrose, CO to celebrate. We'd be there for only 2 nights (anyone remember "for a three hour tour"!?!). Sitting on the patio of our favorite coffee shop, we received the fateful FBO call that a lineman saw some wind damage to our RV. We hastily motored to the airport to look at the plane.

We drove up and saw that it was sitting a little sideways with the free-castering nose gear sitting at about 60 degrees to the fuselage. I thought – no big deal. The lineman doesn't understand RV nose gears and we straightened it out. Done. Well, except when I looked at the tail of the RV and saw the rudder moving around in the slight breeze. And then my jaw dropped, my heart sank, and my stomach churned at sight of the hole in the rudder. The rivets on the rudder stops were sheared off leaving the gust lock dangling on the rudder.

After much poking around, pushing and pulling on the rudder and looking at rivets and doublers it appeared the only damage was to the skins on the rudder where the right elevator had poked through from one side to the other. We found some yellow-gold Duck tape and restored the airfoil. Thoroughly. Got up the next day and flew 1 hour 25 minutes to Double Eagle, in very smooth air! The only

weird part was that it required LEFT rudder on take-off and in cruise. Landed uneventfully on RW22 and moved it into the back of the hangar.

After conversations with Van's Aircraft about just patching both skins, David "Stogie" Otero noticed an ever so slight curvature in the trailing edge of the rudder. Hmmm. Sounds like a big trim tab that caused the left rudder requirement. At that point, the decision was essentially made for us – build a new rudder and hang the current art piece "Vyking Air" on the hangar wall. It was then that the long list of generous and skilled builder friends stepped forward to help get us airborne again. Stogie built the rudder from a new Van's rudder kit. Lee Otto with Randy Reimer's support did some magical fiberglass work on the top and bottom caps. Chris Nichols, an eager Young Eagles pilot, gave me the name of a colleague who happens to work in the paint shop at Eclipse Jet at Sunport. Mike "Zap" Rehberg pulled new CherryMax rivets for both rudder stop tabs. And Stogie came back at the end to get the newly built and painted rudder back on the airplane. So 51 days since the fateful wind event, *we are flying!!*



To quote Mel Brooks, "It's good to be the King". But BEST to have friends in all the right places!

Golden Eagle Flight – Curtis Smith

By Joyce Woods

A few years ago, Past President Bob Richter-Sand encouraged Young Eagle pilots to consider taking up pilots who are no longer flying. He dubbed it a "Golden Eagle Flight".

Long time, no see -- Curtis Smith recently showed up at Double Eagle II Airport to see what is going on. Curtis served EAA179 over the years in many capacities. I know him as a Young Eagles pilot, LOEFI Chair, and Membership and Promotions Chair. He organized a chapter fly-out to Vaughn which filled the ramp! Curtis enjoyed flying his Ercoupes and a Sport Cruiser.

I offered him a local flight some time ago and we finally made it happen. His flying skills haven't lapsed, nor the joy of exploring the desert southwest. It was a fun flight for both of us!



Good evening Chapter 179 friends and members,



Given the known and unknown detailed below, would you be interested in buying into an **RV-12** Flying **Club?** An initial formation meeting will be held in October, preferably in person if that's possible.

The Chapter/Flying Club Strategy Team is looking for charter members of the yet-to-be-named flying club that will purchase the completed airframe being built by the Chapter 179 Build Team. The club would install, with

help from the Build Team, and pay for, avionics, engine and propeller. It is felt the club can accept up to 12 members, which should allow all club members reasonable access to fly the airplane. Members can be wanna-be pilots, sport pilots or even airline pilots!

The club will incorporate under New Mexico non-profit rules as an equity membership club and file with the IRS as a 501c7 non-profit social club (can take donations but they are not tax deductible by a donor).

The RV-12 is being built as an E-LSA (experimental light sport aircraft), with the qualifications laid out by the FAA for a light sport airplane and sport pilot privileges.

The build completion date is unknown at this point, especially since the build is also for educational purposes. The wings and tail are mostly done, while the fuselage is yet to be started and the finish kit is extensive.

The final RV-12 cost is anticipated to be \$65,000 to \$85,000. If the club has 10 members, buy-in cost per member would be \$6500 to \$8500. And if there are only 5 mem-



bers, obviously double that amount. Estimated monthly dues, with 10 members, would be \$100/mo (insurance, hangar, annual inspection, etc.). Estimated cost per flight hour with fuel is \$55 - \$65 (fuel, engine & prop reserve, oil, maintenance reserve, 100 hr insp). These costs assume that the airframe purchase price from the Chapter is less than \$20,000. Even though a substantial portion of the airframe has been donated to the Chapter, IRS rules dictate that the airframe be sold at fair market value.

Several existing flying club operating agreements, by-laws, and articles of incorporation will be used as guides to write this club's formation documents. Input from EAA National is also available.

If you are interested in becoming an equity member or have questions, please email me at:

rv7@flylonecone.com. Regards,

Art Woods

Let's look at V speeds or safety speeds for your aircraft!



The picture above depicts an aircraft airspeed indicator and is for reference only.

All "V" speeds should be very important to you when considering flight safety. Adherence to those numbers are critical for a successful flight. During my career as an airline pilot, V speeds were calculated prior to every take off and landing. The First Officer and I worked as a team to determine the proper V Speeds we would need. Today, I am flying a small GA airplane and it incumbent solely upon me to determine my critical V speeds and to take a hard look at the conditions that affect them every time I plan a flight.

Aircraft designers and manufacturers perform flight tests to determine aircraft performance and limitations. They use the resulting flight test data to help determine specific best speeds for safe operation of the aircraft. Once the designers and manufacturers have done their part, government flight safety inspectors verify the data during type-certification testing.

If you are flying your freshly completed Experimental aircraft or any other aircraft, it is your job to verify that the flight test data you gather conforms to what the designer or kit manufacturer said it would actually be. And V speeds are a critical component of that data.

But keep in mind that while these speed values are a good reference, they are not absolute nor are they set in stone. Conditions that can affect the numerical value of V-speeds include:

- 1. Aircraft weight and configuration
- 2. Altitude
- 3. Temperature (which has implications for pressure altitude)

Since V speeds determine aircraft performance during take off, landing and during other portions of your flight, let's do a brief review of some of the these speeds - Here are some of the most often discussed V speeds for GA aircraft:

Rotation Speed — Vr

A smooth transition from your takeoff roll into the climb portion of your fight is essential. If you find yourself significantly above this V speed and are still on the runway during your takeoff roll (yikes!), something is very wrong. Snow or frost on the wings is an example of how this might happen. If you find yourself in this situation, then you might want to consider rejecting your takeoff before running out of enough runway stop the aircraft successfully.

On the other hand, trying to force an airplane into the air before it's ready to fly only demonstrates your lack of takeoff planning. Visually, it is anything but smooth and this technique often invites disaster! You can find the videos on YouTube. A better technique is to apply a little back pressure on the yoke/stick to set the appropriate pitch attitude, then wait for the aircraft to fly off on its own when sufficient lift is available, based on prevailing conditions. In general, Vr equals 1.15 times Vs1 (the bottom of the green arc).

Approach Speed — Vref

This V speed is 1.3 times the stalling speed in the proper landing configuration for the conditions. It assumes all maneuvering has been completed, in other words, wheels and flaps down. While not indicated on the ASI, it can be calculated as 1.3 times Vs0 (bottom of the white arc).

A common rule of thumb says that for each knot above Vref, add another 100 feet to the landing roll. GA pilots tend to become complacent about the landing roll while flying light aircraft from runways that are three or four times longer than is actually needed. Bad things can happen when flying an instrument approach with too much speed or trying to land with a tailwind or both! Occasionally, the wind at pattern altitude and that at ground level can sometimes differ significantly in direction and speed. Believe me, I have experienced this many times. Any airline pilot will tell you "Fly Vref to nail a good landing!" Your landing is what your passengers will remember most, but to get yourself to that impressive landing, fly Vref, always!

${\rm Maneuvering}\;{\rm Speed}-{\rm Va}$

Calculated by the manufacturer, Va is the speed at which the aircraft will stall before exceeding design maximum G loading. This is a good speed to know when flying in turbulence, which is quite common in NM and sometimes even in IMC. Flying with a critical eye towards Va will help prevent damage to the airframe. Just like Vref, you can calculate Va. A rule of thumb says 1.7 times Vs1 (the bottom of the Green arc).

Other V Speeds — Vx, Vy, Vg

Best angle of climb (Vx) is useful for takeoff over an obstacle, flying a missed approach, or when there is a need to perform a short field landing.

Best rate of climb (Vy) is the best airspeed to get you most efficiently to your enroute altitude.

Best Glide (Vg) This is the most important airspeed you should know. For most GA airplanes, it is about halfway between Vx and Vy. Vg assumes you are in a no power condition, with no power from your engine at all. I hope you never have to fly it or use it, but you should know it by heart. If you have to fly at Vg, then you are having a really bad day!

In GA airplanes, Vx, Vy and Vg speeds should all decrease about a half-knot for each 100 pounds under Max Gross Weight. This means that these speeds will always be lower than the book value should the need arise to use it.

I hope this brief review has been informative and contained information you can use. It is always good to learn (or re-learn) something that will keep you safe.

For all you Trekies out there, to paraphrase, "Fly long and prosper!"

Written mostly by : Emilio Verastegui, a pilot,

Here is an *update from Madison Thompson!* She's a past Young Eagle, DEAA alum and 179 scholarship winner. Great progress!

Madison and her parents are also featured in EAA's launch video about the Young Eagles Workshop offering, a day camp program for chapters.



Hello EAA Chapter 179!

I really miss socializing with all of you but my schooling here in Kansas has been keeping me quite busy. I thought I would give you an update on what has been going on in my life related to flying. As most of you know I completed my instrument rating in February of this year. Unfortunately, due to COVID-19, shortly after my flight program temporarily shut down and I was forced to come home giving me very few opportunities to fly and progress with my ratings. Although, after a few months of quarantine I received the good news that my program was starting back up at a limited capacity. I was one of the few lucky ones that they allowed to come back due to how quickly they have seen me progress in the past. Beginning of May 2020, I made the long 10-

hour drive back to Salina with both my parents that assisted me in moving into my apartment. After it felt like ages that went by, I finally got to fly again and start on my commercial pilot license. Kansas State University breaks commercial in two parts, Comm 1 and Comm 2. Comm 1 consists of 41 solo cross country, 19 dual, and 10 simulator hours. It worked to my advantage that not many people were around because I was always able to get an airplane. Flying every day at 7:30 in the morning (most people are still in bed at this time) I was able to finish Comm 1 and the first progress check in 5 weeks as opposed to the normal 9 or 10 weeks that it takes most people. I started Comm 2 on Monday, August 17th, which consists of 14 simulator, 25 dual, and 11 solo hours. Within the first 2 weeks I finished all of my simulator hours and my second progress check. As of yesterday, September 14th I have started my dual and solo hours which are primarily used for perfecting my commercial maneuvers. My instructor is extremely pleased with my maneuvers as they are all within checkride standards on only my second flight. I am very pleased and excited to report that if I continue

progressing at this rate, I will be taking my checkride and be commercially licensed by middle to end of October. I hope all of you are also having fun flying experiences and I hope to have more updates for you guys soon. Everyone stay safe.

Madison Thompson



Congratulations Jacob Edington! Chapter Awards second 2020 Ray Scholarship

A recipient of EAA 179's \$1500 aviation scholarship in March 2020, Jacob Edington started flight training this summer.

Chapter 179 secured a 2020 EAA Ray Aviation Scholarship by committing \$5000 of chapter funds which were matched by EAA for a total of \$10,000. Based on candidates and estimated costs, our scholarship committee hoped to support two 2020 Ray Scholars. Sophia Haag had already soloed and with chapter support, completed her training, recently passing her Private Pilot check ride. Remaining funds now have now been awarded to support Jacob's flight training with the goal of completion within 12 months.

Besides flight training, Jacob is homeschooling and expects to graduate June 2021. He joined EAA 179 when he moved to Albuquerque in August 2018. Referred to EAA by a friend in Huntsville, AL, he enjoyed his first Young Eagle flights with Art Woods and David Otero.

Jacob's says his "goal of becoming a pilot was solidified when I had my first Young Eagles flight, and I am determined to make it happen. I would not be able to realize my goals without the assistance of the EAA—thank you."

More info on EAA's Ray Scholarship and chapter participation is available <u>on our</u> <u>website</u>.









Southwest Aviation Weather Safety Workshop #9

Aviation Weather Forecasting Workshop -- Friday, 9/17/21 Aviator & Controller Weather Workshop -- Saturday, 9/18/21 At the Marriott Albuquerque Uptown Free of Charge -- Earn FAA WINGS Credit on Saturday <u>https://www.weather.gov/psr/SAWS9</u> Brought to you by ZAB ARTCC/CWSU; NWS ABQ, PSR, & EPZ