

2025 Leadership

President: Joyce Woods Vice President

Doug Dingman

Secretary: Diana Volker

Treasurer John DeWitt

Board Members Lance Hunter

Eric Achen Mark Wilson George Young Jim Kessler

Standing Committees

Membership Gwen Walcott membership@eaa179.org

Land of Enchantment Fly-In (LOEFI) Sean Babbitt loefi@eaa179.org

Double Eagle Aviation Academy (DEAA) Jim Kessler <u>deaa@eaa179.org</u>

Young Eagles Art Woods, Jim Kessler youngeagles@eaa179.org

Publicity Lance Hunter, Kyle Reinhardt scholarships@eaa179.org IMC Club John DeWitt, Barry Harper imc-club@eaa179.org Flight Advisors

Art Woods, Rowan Phlieger

Scholarships

Jim Kessler Lee Otto Mark Sturm

Technical Counselors David Otero Emilio Verastegui Gwen Walcott

Fly-Outs Mark Wilson

Storage Locker TBD

Reimer Aircraft Factory Lee Otto

Newsletter & WebMaster George Young <u>newsletter@eaa179.org</u> webmaster@eaa179.org

General eMail chapter@eaa179.org

Snail Mail EAA Chapter 179 7401 Atrisco Vista Blvd NW #179 Albuquerque, NM 87120



Upcoming Events & Chapter Gatherings May 20 – <u>Chapter Gathering</u> (BJs) May 24 – Young Eagles, Los Lunas (E98) May 20-21 – <u>Kirtland Air Fiesta 2025</u> (KABQ) Jun 2-6 – DEAA 2025 (KAEG)

Jun 7 – <u>DEAA Young Eagles</u> (KAEG)

Jun 7 – Grants-Milan Pancake Fly-In & Car Show (KGNT)

Jun 17 – Chapter Gathering

Jul 12 – Young Eagles, Los Lunas (E98)

Sep 10-14 – <u>National Championship Air Races</u> (KROW)

Sep 27 – <u>LOEFI 2025</u> (KAEG)

And check NMPA's web site for other events around New Mexico

In This Issue

Notes from Our President	2
Notes from the Editor	
May Chapter Gathering	3
April Chapter Gathering - Recap	
May Board Meeting – Recap	4
Public Service Announcement	4
IMC Club and Membership	
Scholarship Update	6
Young Eagles	7
2024 EAA Chapter Membership Satisfaction Survey	7
Flying Start & Eagle Flights and Painting the Rose	8
Double Eagle Aviation Academy 2025 (DEAA)	9
Land of Enchantment Fly-In and Builder Milestones	
Chapter 179 Youth Outreach and Philanthropy at Work	11
A Flight Report: To Ship Rock and Back – New Mexico	
Geology by Air	
Soaring with Young Eagles: My Journey into Aviation	
So go with the "Arrow Early Aviation and Google	
2024 Individual Chapter Donors	
In the News and Other Interesting Topics	
For Sale	
Thanks to our Major Sponsors & Donors	
NM Aviation & Other Organizations and Resources of Interes	
Invitation to Pancake Fly-In and Car Show (KGNT)	
Recurring Events, Scholarship Donations, Chapter T-Shirts	
Support Your Chapter	22

Throughout the newsletter, blue underlined text indicates a hyperlink – click it to take you there.

5

202

May

Notes from our President Joyce Woods



Hello! Another exciting month in the life of EAA Chapter 179! Warmer spring weather has brought increased activity with teams working on the Pietenpol restoration, the Corsair pedal plane build, and preparing the ACRO I to be mounted at the Albuquerque Aviation Academy. If interested, contact us!

Saturday, we hosted a <u>Flying Start & Eagle Flight</u> event coinciding with <u>EAA's LEARN TO FLY</u> <u>WEEK</u>! Thanks to George Young for organizing this event to inspire and educate prospective pilots! Yes,

as if he's not doing enough already: publishing the monthly newsletter, serving on the Board, and managing our website. Thanks to the Eagle Flight pilots, as well!

In response to member survey "<u>Ideas for Improvement</u>", your Board is committed to enhancing the chapter membership experience. We've planned more social time at recent monthly gatherings by way of shorter programs. We seek a quieter, more central location but so far, no joy. Ideas? Hopefully, we have now fixed the gap between a new member joining and receiving our email communications. More ideas are brewing – we continue to work on being more welcoming to all the new people we've been attracting and improve our communications to new members. But my favorite "idea for improvement" submitted was: "I am not sure. Maybe get myself involved more." If that's you, we can help!!! The city decided to postpone the April Runway Fun Run to fall due to a popular conflicting event. If not rescheduled, there would have been no conflict with air traffic because that morning, the visibility was <u>1/2 mile and it</u> <u>SNOWED</u>! The run was rescheduled to Sept 6. Lance Hunter has our role all figured out so we'll be ready. Thanks to all who had registered and/or volunteered to participate!

We received an inquiry from the City of Gallup who found our 2018 Route 66 Air Tour flyer because 2026 is the centennial of the classic byway. It ties to aviation because the first commercial Air Routes followed Rt66. Here's the AOPA article published: <u>Get your kicks above Route 66</u> <u>- AOPA</u> and our <u>2018 Tour Itinerary</u>. I would love to see us host a tour again. Wanna help?

Our annual <u>Aviation Academy</u> is coming up June 2-6. We invite anyone to stop by the city maintenance facility to see what's up! Great times to visit are 8 - 9AM daily for aircraft displays and from 2:30 Friday afternoon for the reception and closing ceremonies. Mingle with students and parents and appreciate the incredible impact we make by sharing our passion for aviation.

No matter what you are trying to do in aviation, there's a member that knows someone who can help! It is an amazing community. <u>Join us</u>!

Blue Skies and Tailwinds,

Joyce Woods President, EAA Chapter 179 <u>chapter@eaa179.org</u>

Notes from the Editor George Young

Facebook has the reputation (albeit deserved) of being a Rabbit Hole of time used with little value. But, I've been finding a few resources that are worth my time, and perhaps yours. Each has posts with illustrations that bring a clearer picture of many topics that we've studied 'on paper'. Here are a couple:

- <u>The Sky's The Limit</u>: weather, principles of flight, terminology, occasional '<u>chuckles'</u>
- <u>Aviation Knowledge</u>: more technical in tone, explaining many concepts, rules, conventions – principles of flight (<u>stalls and AOA</u>), systems, even the names of things (for the novice or in case you could use a refresher)

I would be remiss, now that I've brought up Facebook, to not mention Facebook Feeds of "our own":

- <u>EAA Chapter 179 New Mexico</u>: This is a private group for 179 Members. To gain access, when you first visit ask to "Join group".
- <u>Experimental Aircraft Association Chapter 179</u>: a public Feed moderated by Lance Hunter, publishing information about our Chapter.
- Fly New Mexico: Similarly, a private group for pilots in New Mexico.

I invite you to check them out;. You will also find other links to online resources that I've found useful on pages 17 & 18.

George Young Newsletter Editor & Webmaster <u>newsletter@eaa179.org</u>

May Chapter Gathering Eric Achen



Tuesday, May 20, 2025 BJ's Restaurant @ Cottonwood Mall

5:00 PM – No host dinner social

6:15 PM – Introductions, Program *Arrive anytime from 5:00 and dinner is not required.*

Program: Brandon Fryar's Rans S-21 Outbound

My project is a Rans S-21 Outbound. I ordered the kit in March 2020 and received my airworthiness in April 2025. Currently I am in Phase I testing and hope to be done with that no later than end of this month.

- I plan to provide an overview of my project, including:
- Why I chose the Rans S-21.
- Why I selected the Titan 340 engine
- An overview of the items purchased, including avionics and their prices
- A summary of my build approach and timeline.
- A laundry list of lessons learned as this was my first build.
- Finally, I share my thoughts on the airplane now <u>that I have approxi-</u> mately 30 hours in the air.



Where: BJ's Restaurant and Brewhouse at <u>Cottonwood Mall</u>, 10000 Coors Blvd NW, Albuquerque

Directions: Take North or South bound Coors Blvd to Cottonwood Mall. Take the Cottonwood Loop to the south end of the parking lot. BJ's is in a separate building.

Monthly Chapter Gatherings offer time to network, with programs centered on exchanging experiences and ideas about aviation – airplanes, flying, and flying activities – rather than the chapter business which is addressed in bimonthly Board meetings.

We hope to see you there!

April Chapter Gathering – RECAP



Preceding our monthly presentations is a social hour with good old -fashioned EAA camaraderie. Some April highlights:



Dominic Martinez brought his instructor, Mateo from Del Sol Aviation. Dominic, a graduating HS Senior is a new Private Pilot with help from a Ray Scholarship, chapter

mentors, and Mateo! He attended DEAA 2023.

Rowan Phlieger recognized Lance Hunter's service as golf cart transport service for the recent Ladies Aviation Social. Flashy pink dice now hang on the golf cart Lance graciously shares for many of our events.



Scholarship Co-Chairs Rowan Phlieger and Art Woods presented certificates and recognition to each of our <u>eight scholarship recipients</u>, including tuition





for EAA's Air Academy in Oshkosh. They each got a chance to briefly address chapter members. And there was cake!

What an inspiration! It's refreshing to see how much they appreciate our help to achieve their aviation dreams and goals. A big thank you to all our scholarship donors! See the Scholarship article in this newsletter for info on our 2025 awardees.



May Board Meeting – Recap

Diana Volker, Secretary

Chapter 179 Board met on May 6, 2025.

- The following is a summary of the topics discussed, and the decisions made..
- Congratulations to Alex Martinez who successfully passed his Private Pilot check ride on May 6, 2025.
- Ava Diaz and Daniel Kiehne will be attending the Advanced Air Academy in Oshkosh during Air Adventure 2025.
- New guidelines for future Ray Scholarship applicants are being beta tested. EAA, National has designed an interactive computer program for potential scholarship applicants that will help them develop a knowledge base to help reduce the cost of obtaining a Private Pilot Certificate. Chapter 179 is part of the beta testing program.
- Joyce has designed a new Chapter 179 brochure. It is 6 panels and will be great for helping the chapter with fundraising and educating the public of our goals and objectives.
- Joyce, George and Doug V. have redesigned the chapter logo. It is very sharp and is in keeping with the EAA National logo.
- The board approved money for improvements to the RAF hangar. The doors are getting new seals.
- Major milestones for some of our builder members. Brandon Fryar and Bill Hutson successfully completed first flights in their aircraft. Additionally, Bob Waters flew his rebuilt Velocity.
- LOEFI planning session will be Saturday 5-17-2025 at 1:00 in the Bode conference room.
- LOEFI the fundraising project is a Corsair pedal plane to be raffled. We need volunteer builders.
- The Pietenpol is under construction. Building times are Tuesday, Wednesday, & Thursday starting at 9 or 10:00 a.m. Check the FB page for the schedule.
- The students at Albuquerque Aviation Academy have submitted scheme designs for the ACRO project. The design is being finalized, and Eclipse will finish up the painting.
- IMC Club meets on the 3rd Saturday of the month. You can join in person 9:30 in the Bode conference room or join online. Join to sharpen your instrument skills and help sharpen the skills of other pilots.
- A fly-out to Grants-Milan, KGNT, is scheduled for June 7th. Fly-in pancake breakfast, car show and NMPA annual meeting. If you haven't been to the museum at the Grants airport this would be a great opportunity. It is small but very well done and interesting.
- DEAA will be June 2-6 with Young Eagle flights on June 7th and there are still slots available.

Diana Volker Secretary <u>secretary@eaa179.org</u>

Public Service Announcement Lance Hunter, Publicity Coordinator

SCAM ALERT

Over the past few months, we have seen an increase of scam-related communications in forms of email exchanges between our chapter board members and our chapter members. These scammers are very good, and it is very easy to be fooled by them.

This email looked like it was sent by one of our chapter officers. It was sent to one of our members. The email requested urgent help to pay a chapter invoice. The body of the email even mentioned our treasure by name. (Which made it look real). The chapter member receiving the email was asked to send money to a Venmo account. Over a period of a few days the scammer requested multiple payments.

How did we catch the scam? The 1st thing that we noticed was although the email came from the chapter officer's name, the actual email address did not belong to that officer. On an IPAD we clicked on the name and reviewed the actual email address.

Another clue was the urgency of the request. Almost a demanding attitude toward making this happen ASAP.

Another clue was that we did not recognize the vendor's name the payment was going to.

Note to all members:

- We (Officers and board members of EAA179) will never ask for your help to pay a chapter invoice.
- If you see an email like I mentioned above, pick up the phone and call the person you think sent you that email to validate it.
- If the text or email seems like the payment needs to be made right away. (Big clue)

Let's be careful out there and work together to catch these scammers before harm is done.

Lance Hunter Publicity Coordinator <u>chapter@eaa179.org</u>



Sharpen your Instrument Flying Skills!

The chapter IMC Club meets the 3rd Saturday of each month at Double Eagle II Airport, still a <u>hybrid</u> session (in person or remote). Anyone welcome!

NEXT MEETING Saturday, May 17; 9:30—11:00 AM

Barry Harper & John DeWitt IMC Club Coordinators, EAA 179

imc-club@eaa179.org

IMC Club sessions provide an open discussion based on instrument flying scenarios. Discussions provide a good review of essentials for IMC flight plus a fun way to meet and learn from other instrument pilots.

- **Participate in-person at Double Eagle II Airport** in the Bode Aviation conference room, 2nd floor, next to the café. Optional: meet at the café prior for breakfast or after for lunch.
- OR Join Remotely via ZOOM: Register in advance for Zoom access info here:

https://us06web.zoom.us/meeting/register/LVzcCQ9tReCaM_TqTCCEDw

You will receive a confirmation email with the meeting Zoom link.

If you'd like FAA Safety WINGS credit, please also register through the WINGS announcement as follows, or sign in-person at the meeting.

- Visit the FAAST Seminars & Webinars page for Events at KAEG.
- Scroll to the bottom and select the IMC Club Meeting.
- Follow Registration Info instructions

See you there!



EAA Chapter 179 Newsletter—May 2025 (return to Page 1)



We are seeking new members.

We always welcome new members no matter the time of year. Please consider joining the 90 plus individuals who are registered as members for 2024. The dues payments help fund scholarships, pay our national EAA fees and enable the Chapter to offer fantastic programs throughout the year.

Annual dues are \$20 for an individual member and \$30 for a family (spouse and children under 18). Dues are not prorated for partial year payments. Also note that separate membership and dues payments are required to the National Organization (<u>https://eaa.org</u>) of which we are a representative part.

To join, simply go online, to <u>https://eaa179.org/membership/</u> where you can submit your dues payment by Paypal or credit card, or you may send a check (include your name, address, EAA National Membership number, a contact phone number, and email address) payable to "EAA Chapter 179" and mail it to:

EAA Chapter 179 Double Eagle II Airport 7401 Atrisco Vista Blvd NW #179 Albuquerque, NM 87120.

If you pay be credit card or Paypal, also forward your EAA National Membership Number (on your ID card) to <u>membership@EAA179.org</u>.

Those who need to join or renew their National EAA membership should visit: <u>https://www.eaa.org/join.aspx</u>

Gwen Walcott Membership Coordinator membership@eaa179.org

Occasionally ...

Low visibility on April 19, the day of *Runway Race Day*



Scholarship Update Art Woods and Rowan Phlieger, Scholarship Coordinators



We were excited to present the scholarship recipients to Chapter members and guests at BJ's Restaurant on April 15th. We filled the room and had a great time!!

AND THE WINNERS ARE:

Orion Francis - Closing in on gaining his FAA-certificated Aviation Maintenance Technician (AMT) license. And Orion will use any extra scholarship funds to start pilot training.

Gabe Pohl – a graduating senior who has his sights set on learning to fly and eventually becoming an Airline Transport Pilot.

Stephan James - finishing up his freshman year, he's eager to start flight training this summer.

Jocelyn Muniz – has proclaimed that she will use her funds to earn a tailwheel endorsement on her way to becoming an aerial firefighter.

Connor Wolff - started flight lessons at Del Sol on his way to earning his pilot's certificate.

Matthew Croshaw - Started flight lessons at Bode Aviation

Daniel Kiehne – ready for an <u>adventure</u>. At EAA's AirVenture in Oshkosh. He will be attending the Advanced Air Academy during 2025's AirVenture.

Ava Diaz – a current Chapter Ray Scholar, who has solo'd, taken her long cross-countries, both dual and solo, and is aiming to finish her private pilot certificate requirements this summer. She's also headed to Oshkosh in July to attend the Advanced Air Academy.







Ava Diaz, Orion Francis, Jocelyn Muniz, Matt Croshaw

Art Woods & Rowan Phlieger Scholarship Coordinators <u>scholarships@eaa179.org</u>

Young Eagles Art Woods, Young Eagles Coordinator



Sometimes you get lucky. Our decision to reschedule from April 5th to April 12th was phenomenal! We had perfect weather and flew 51 Young Eagles.

The Chapter thanks Mark for giving his first Young Eagles flight in Miss Blu! A repeat Young Eagles offender got the thrill of flying in a Gyrocopter!! I think she looks pretty HAPPY!!



Mark with his co-pilot in front of Miss Blu

SORRY – We apologize for having to cancel the May 3rd event, but between health and logistics problems, it just wasn't meant to happen. We will find a date to reschedule. We have emails/names of those who signed up and you'll get first priority to register.

Our next scheduled rally is August 9th. We'll go live with registration about two weeks prior. <u>https://www.eaachapters.org/</u>

See you at Double Eagle!

Art Woods & Jim Kessler Young Eagles Coordinators youngeagles@eaa179.org

2024 EAA Chapter Membership Satisfaction Survey

Joyce Woods, President

Last month, I reported on member responses per Overall Satisfaction from the EAA HQ survey. Member perspectives are always insightful and can provide direction for long term success. Here are comments regarding "ideas for improvement".

Eleven responses can essentially said, "All Good!":

- I cannot think of one thing that needs improvement at this time. My chapter already does so much, and it is all really well done.
- I can't think of a thing we have a building space, with great tech leaders, yearly events (2000+ attendees), IMC club meetings, YE events, scholarships. It is a very active and well-organized chapter.

Some concerns expressed:

- Bigger isn't always better. We don't always need more socials, more scholarships, more members, more activities, more events, more people, more volunteers, more, more, more.
- More members to support the various events/activities
- Need a better online signup. Paid my dues via PayPal, thru the chapter website, didn't hear anything from the chapter until I sent an email with my info. It was like they didn't even read what I sent them--like national membership number

Specific improvement ideas:

- Maybe provide mishap analysis presentations
- Collaborate with other nearby chapters
- Better communications!, Creation of a listserv, slack channel, discord, etc. Less "clicky" insider mindset
- More focus on the build and experimental side of things.
- Clear index of the makeup of the chapter in terms of planes, builds, types, clubs/ partnerships, and resources.
- More YE. Another comment: Do Young Eagle events in the winter months.
- list of area PCP's that will do BasicMed
- More funds from EAA

Several comments suggest a better location for monthly meetings.

- Find a better location to have meetings without all the noise and active commotion
- We need to find a location that allows intermingling of the members.
- That we own an improved meeting space at our home airport.
- More in person activities at the airport to provide more opportunity to get to know new people and involve motivated youth.
- A location that is more encouraging for mingling of members, before and particularly after the meal/program.

My favorite?

I am not sure. Maybe get myself involved more.

Note that 60 members responded, just more than half our members. It is important also to consider those who did not participate. So if this prompts other ideas, we'd love to know! Thanks again to all that took time to respond.

Joyce Woods President, EAA Chapter 179 <u>chapter@eaa179.org</u>

Flying Start & Eagle Flights – May 10, 2025 George Young & Art Woods

Again this year, Chapter 179 presented EAA's *Flying Start and Eagle Flights* event, Saturday morning, May 10th. 'Tho we had many more people register, 8 'prospective pilots' attended the *Flying Start* seminar, and all but one flew their *Eagle Flight* (the exception was due to a maintenance issue on one of the aircraft).

Much thanks go to the volunteers who helped out. In

particular Lance Hunter who set up his hangar for the seminar (and provided transport for attendees from the parking lot) and Doug Volker who took care of getting donuts to go with the coffee that Joyce prepared and fetching the pizza for the after-flights lunch (among other things).



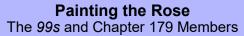
The Eagle Flight flightline Art briefing the Senior Eagles Joyce and Audriana, enjoying Audriana's *Eagle Flight*

For anyone who wants to explore becoming a pilot, visit EAA's <u>Learn to Fly Week</u> seminars



And special thanks go to the eight pilots who gave these "Senior Eagles" their introductory flight to becoming a pilot

themselves.



Back in late April, a group of volunteers assembled at Double Eagle to "refresh" the paint on the Compass Rose. The project was organized by the *99s*, including Rowan Phlieger, and included new Chapter members Mike & Jodi Mallozzi. It needed sprucing up, and ... doesn't it look great now?



Double Eagle Aviation Academy – 2025 Jim Kessler

Double Eagle Aviation Academy

Double Eagle Aviation Academy 2025 June 2 – 6, 2025 at Double Eagle II Airport





Our 11th Double Eagle Aviation Academy is coming up June 2-6, made possible by chapter members, aircraft owners, and career speakers who volunteer their time. We had more applicants than we could accommodate again this year and it looks like another awesome class! Many of our active scholarship students are DEAA alumni. We invite you to come out and meet this next generation of aviators!

Members are invited and encouraged to stop by during the week and get to know students and parents. Best opportunities:

Each morning before class (8:15 - 9:00), we arrange for pilots to show aircraft along the adjacent taxiway.

From 2:30 on Friday, June 6 for the closing presentation and reception.

Closing ceremonies cap the week as students and parents inquire about "What's Next?" We have great family attendance.

The short program is followed by refreshments and time to mingle with students and parents

Groups who can help students engage in aviation beyond our session participate with table displays (Civil Air Patrol, CNM Maintenance Technology, Flight Schools, our chapter, etc.)

Saturday morning, June 7: talk to parents while students are off on Young Eagle Flights. These flights are longer than usual as they fly a route they planned during the week.

DEAA is one of our most rewarding youth activities. If you are interested in helping, contact us at chapter@eaa179.org. If not this year, stop by and see what's up – and maybe help next year and/or find a student to mentor.

Questions? Let us know. Contact us at <u>deaa@eaa179.org</u> **Download** the flyer for <u>DEAA 2025</u> (.pdf)

Jim Kessler DEAA Coordinator <u>deaa@eaa179.org</u>

Builder Milestones Congratulations on Airworthiness Cert & First Flights!

Brandon Fryar Airworthiness Certificate Rans S-21 Outbound April 11, 2025





Bill Hutson First Flight Zenith 750 STOL April 22, 2025

Brandon Fryar First Flight Rans S-21 Outbound April 26, 2025 Also, check out photo and video of <u>his first</u> flight on Facebook



Land of Enchantment Fly-In 2025 (LOEFI) Sean Babbitt, LOEFI Coordinator

Breaking News

The LOEFI Planning Meeting scheduled for May 19th is postponed to <u>Saturday, May 31st</u>

As before, at Double Eagle starting at 1300 hours.

Believe it or not, it is already May! We made some progress this month with both filling positions and getting things in order. I want to thank Alex Basinger for volunteering to be the parking coordinator for the event. While Alex will be running the show I would like to help solicit volunteers to help usher cars in and out of the event. We will set up a volunteer sign up page on the website soon!

Upcoming May milestones are to coordinate pilot/aircraft registration forms, identify signage needs, identify your logistics (chairs/tables), and begin asking for display aircraft.

For June we are looking to finalize Young Aviator Activities as well as the Builder's Corner activities.

Please don't hesitate to reach out if you have an idea or want to help! All the best, Sean Babbitt

Sean Babbitt LOEFI Coordinator loefi@eaa179.org



Chapter 179 Youth Outreach Kevin Frick

"Youth Outreach activities continued with Chapter 179 representation at the Hayes Middle School annual health fair. Besides health related reps, the event also offered students and parents information for different career fields. This is where EAA was able to share aviation-related topics, including LOEFI, DEAA, Young Eagles, and career opportunities. Kevin and Suzy Frick gladly told them all about it.

One student in particular really stood out as he spontaneously expounded about different airliners. Only 12 years old(!), he was the "airplane wiz kid" as he proceeded to tell me all about the A-321XLR and its transatlantic capabilities. Kevin just about fell out of his chair in amazement. Hopefully, youngsters like this will respond and pursue their dreams. Indeed, with most of the kids at this school living in poverty, maybe they will take the first steps by getting involved with the events and activities like those offered by our chapter,

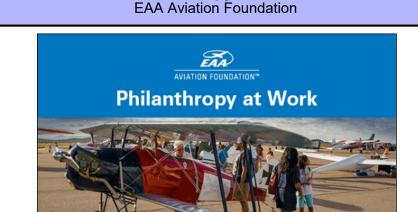
And...a quick note about a need at DEAA. On Friday, June 6, at the DEAA reception, Chapter 179 will have a booth to share about EAA and aviation interests in general. We had a hangar full of students and parents last year, so if you are able to man the booth, please let Kevin or Jim know!

Cleared for takeoff!"

Kevin Frick Outreach Coordinator <u>chapter@eaa179.org</u>







Philanthropy at Work

Youth and Chapter Programming

When donors contribute to EAA® and EAA chapters, they help support events, activities, and outreach programs that build engagement inside and outside the aviation community. Joyce Woods, EAA Lifetime 768728, Albuquerque EAA Chapter 179, appreciates the support EAA and the EAA Aviation Foundation[™] provide chapters through resources and funding. She is committed to helping make that support even better.

Joyce initiated the Double Eagle Academy, a week-long day program for teens to explore aviation as a career or hobby. In response to the growing participation in the program and pool of viable candidates pursuing education, Chapter 179's aviation scholarships now exceed \$22,000 annually.

Actively investing in and supporting youths and youth programming beyond their first Young Eagles® flight has invigorated not only the Albuquerque chapter, but many others around the country.

Giving through the EAA Aviation Foundation, Joyce and her husband, Art, EAA Lifetime 852427, have also designated gifts to the Blue Barn, which is the home of Young Eagles, EAA Eagle Flights®, and EAA chapters during EAA AirVenture Oshkosh. Investing in the Blue Barn provides resources through various chapter-related programs, forums, and activities offered during the week.

About Our Donor

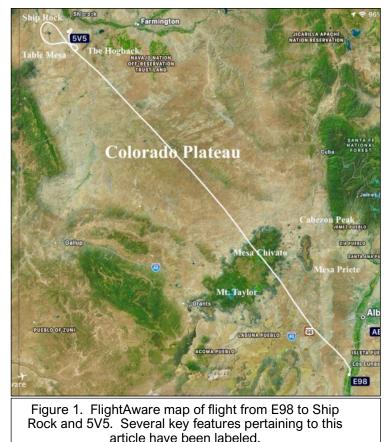
Joyce Woods is a donor and active chapter member committed to helping EAA grow participation in aviation. A retired engineer, she's now dedicated to leading activities which cultivate and grow chapter and aviation communities.



A Flight Report: To Ship Rock and Back - New Mexico Geology by Air Douglas W Dingman

I "learned" to fly in Connecticut (CT) some 15 years ago, starting at Oxford (KOXC), and then, after the Oxford flight school crashed the training airplane, switched to the flight school at Brainard (KHFD) outside of downtown Hartford, CT. The scenery in CT is totally different from what we experience in New Mexico (NM). Here the earth is laid bare and flying allows for very close viewing on a grand scale of our planet earth at work.

Although I am not a geologist, I enjoy seeing the endless geological features NM has to offer and learning about the processes responsible for the formation of these features. So, a few weeks ago (when the weather gods were out wreaking havoc somewhere else and not trying to blow NM off the map) I took a flight to Ship Rock in the northwestern corner of the state (Fig. 1) to get a good look at this volcanic core from the air.



Ship Rock, near the small village of Shiprock, NM, is a geological feature I found well worth the little over 3 hours round trip (including a 20minute layover at Shiprock Airstrip; 5V5) from Mid Valley Airpark (E98). As an aside, the runway at 5V5 is in excellent shape even if there are absolutely NO amenities. The taxiway is another matter, however.

Approaching Mesa Chivato from the southeast at 12,500 ft MSL after departing E98, the distant view of Cabezon Peak, the Rio Puerco volcanic necks, and Mesa Prieta (Fig. 2) presented a geological panorama off my right wing. Mesa Prieta and Mesa Chivato (Fig. 1) were once a continuous landform until the ancient Rio Puerco cut through them exposing the many volcanic necks. Cabezon Peak is the well-recognized prominent landmark standing more than 1100 ft above the current surface on the northerly end of Mesa Chivato. It is the solid core of an ancient cinder (scoria) cone volcano that has been exposed due to erosion over time.



Figure 2. Cabezon Peak and a few of the Rio Puerto volcanic necks. The north edge of Mesa Prieta is just visible on the right of the photo. An earlier photo courtesy of S.M. Douglas.

These features mark the southeast boundary to the Colorado Plateau, which is uplifted and warped continental crust 25 miles thick covering northwestern NM, western Colorado, northern Arizona, southeastern half of Utah, and a bit of Nevada. The landscape of the Colorado Plateau can be easily described to those who have not seen it as being a

A Flight Report: To Ship Rock and Back - New Mexico Geology by Air (continued) Douglas W Dingman

shallow bowl reminiscent of the surface of the Moon or Mars when seen from the air.

While crossing Mesa Chivato, the northeastern part of the Mt. Taylor volcanic field, circular depressions (i.e., maars) can be seen on the surface of the mesa (Fig 3). These are the result of powerful steam-blast eruptions from subsurface volcanic activity in the past. Over time, erosion will likely expose other volcanic necks at these maars. NM is one big landscape of erosion, and these exposed necks represent the inside structure of cinder cones and subsurface volcanic activity.



Figure 3. Maars seen on the surface of Mesa Chivato. Screen capture courtesy of Google Earth.

Flight across the Colorado Plateau, which can often be quite rough, was smooth this time with a few bumps of turbulence thrown in to "shake things up." My personal policy is to use supplemental O2 when above 10,00 ft MSL (makes for a more pleasant post-flight recovery) and, therefore, I was using supplemental O2 throughout the trip. Chaco Canyon slipped by off my right wing, then while approaching Ship Rock and 5V5, I flew past an extensive uplifted ridge (named The Hogback) that ran to the north into Colorado before I crossed Rt 491 and passed Table Mesa (Fig. 1 and 4) off my left wing.



Figure 4. Table Mesa, Barber Peak, and Cathedral Cliff (a volcanic core being exposed by erosion) observed to the south while crossing Rt. 491 from the east to the west. Route 491 is a north-south running road between Shiprock and Gallup. Ship Rock was directly ahead of me.

A Flight Report: To Ship Rock and Back - New Mexico Geology by Air (continued) Douglas W Dingman

Ship Rock (Fig. 5) is the solidified inner core of a volcano that was once high above this formation before the volcanic cone and ground around the volcano eroded away. This majestic structure is on Navajo (Dine') land and is a sacred location in the Dine' culture. So, I looped around the core at a respectable altitude (~10,500 ft MSL) and distance. Ship Rock stands 1600 ft above the current surface and to say it is very impressive is an understatement when seeing it from the air and observing the "wings" radiating from the central core. It's also very impressive from the ground whether at a distance or closeup. I got a few photos plus a short movie, but it's difficult to compose a good photograph while flying and trying to keep the wings on the top side of the aircraft (my Cessna Cardinal 177 RG (Fig. 6) currently does not have a functional autopilot). My aerial photographer and companion pilot, Sharon (aka, my wife) was not with me on this adventure. The return flight to E98 at 13,500 ft MSL retraced the outbound route and was again smooth, but had a little cloud buildup on the north end of Mesa Chivato.

Next up, I intend to do a flying trip visit to either Monument Valley or Meteor Crater, AZ with an overnight stop at Winslow, AZ or Farmington, NM, respectively. This time, my seasoned aerial photographer/ videographer, Sharon will happily accompany me. Now, if I can only find a couple days when the weather cooperates, my life doesn't get in the way, and the plane is flyable.



Figure 5. Photo looking north while circling Ship Rock on the south side and heading back toward the east. One of the solidified magma dikes (aka, wings) that extend from the core is visible.





Figure 6. The trusty steed, "Miss C." A turbo-normalized 1976 Cessna Cardinal RG. An earlier photo courtesy S.M. Douglas on the day of arrival at E98 following a ferry flight from Susanville, CA.

> Doug Dingman Vice President <u>chapter@eaa179.org</u>

Soaring with Young Eagles: My Journey into Aviation Owen Denning



One of the most exciting parts of my journey so far has been flying with local pilots through the EAA Young Eagles program it's awesome! The moment you step out onto



grew and now I'm pursuing a future in aviation.

Ever since I was little, I've been obsessed with flight. It's in my blood—both of my grandfathers worked on legendary aircraft at Lockheed Martin's Skunkworks division, and their stories lit a spark in me early on. I remember walking through the Museum of Flight near Seattle, WA for the first time, taking in every detail about various spacecraft and fighter jets. That curiosity

Flying with Art in his RV-7A

the ramp, the sound of engines and the smell of exhaust hit you. Then you meet your pilot, talk about the aircraft, and before you know it, you're climbing into the cockpit, headset on, ready to fly. The best part isn't *just* the flying, it's getting to ask questions and actually learn from the people who do this every day. It's hands-on, fun, and overall a great experience.

Through Young Eagles, I've had the chance to fly in small aircraft, talk directly with experienced pilots, and get a true feel for what it takes to be in the air. Each flight teaches me something new—how the controls feel, how weather affects a flight, how communication with the tower works. It's given me confidence and reminded me that this isn't just a dream—it's a goal I can work toward.



Visiting the last airworthy L-1011 Tristar & Southwest 737

Right now, I'm a student at the Albuquerque Aviation Academy, studying for my FAA exam and studying aircraft systems, flight planning, and real-world operations. I've spent over 1,200 hours in professional flight simulators, but nothing compares to being in the seat of a real plane.

I'm also hoping to attend the Double Eagle Aviation Academy this summer. I want to take the next step—learning some more about aviation, meeting other kids who share my passion, and getting as close as I can to being a real pilot. The DEAA camp would help me grow my skills, and will hopefully give me some experience that will be useful when I'm flying with Albuquerque Aviation Academy.

If you've ever been curious about flying, I encourage you to sign up for a Young Eagles flight. You don't need any experience—just a sense of adventure and maybe a few questions. Your first flight could be the one that changes everything, just like it did for me.

> Owen Denning Young Eagles and Future Pilot



Flying with Art in Joyce's Cessna

EAA Chapter 179 Newsletter—May 2025 (<u>return to Page 1</u>)



Flying with Emilio in his Bonanza



My flight in a Piper Cub



So... go with the "Arrow"...Early Aviation and Google Doug Volker

On the phone I Google information about aviation. Last week an article popped up from a website named <u>dreamsmithphotos.com</u> about "10 Arrows and 29 Beacons" in Utah. The website shows it as <u>Arrows Across</u> <u>America</u>.

This site shows not only the ten in Utah but also lists fifteen in New Mexico. There is one located just south of KAEG, and hundreds across the United States from New York to California. By looking at the website you can see photos of these unique markers used by early aviators to direct them to their next stop.

This first navigational system was a "hang your head out of the cockpit," look for the marker and beacon, then turn in the direction the arrow points to the next marker....or airport. From there came the introduction of "modern" steam-gauges. Now, in this modern era there are new digital "glass panels" to direct a pilot to a destination. (not as windy either)

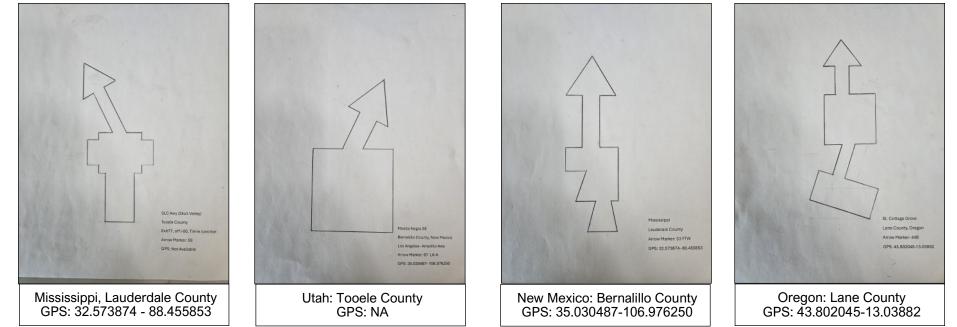
Discussing our excitement in discovering these iconic and decorative designs with Joyce, she told us about a book titled: "Flying the Lindbergh Line: Then and Now", by Robert F. Kirk. This book describes the development and implementation of the first airline in the United States. This airline, called Transcontinental Air Transport, or TAT, was envisioned by visionaries including Charles Lindbergh, Amelia Earhart. Fred Harvey, William Vanderbilt, and other influential businesspeople and woman in the United States. It later became Trans World Airlines (TWA). The Ford Tri-Motor was the first plane used to carry passengers across the continent. This trip was by both trains, which traveled during the night when the ground was not visible, and by plane during the day. It took two days to go from New York to California which cut the total travel time in half. Cost for the trip-\$364.00. New Mexico was an integral part of the routing for TAT with stops in Clovis, Albuquerque, Grants, and Gallup.

One tragic note, the first passenger airline crash took place on Mt. Taylor at Grants, New Mexico. It happened after the pilot received the "all clear" weather data. Unfortunately, as can happen in New Mexico, when they left Albuquerque and approached Mt. Taylor a storm or microburst developed, and the plane flew into the mountain. The airline lost two pilots, a flight attendant and four passengers in that event.

All we can say is... this was fascinating and remarkably interesting reading! If you ever make it to Kansas City, there is a TWA Museum there with information and photographs about the "TAT" and TWA.

(Shown are re-drawings of four unusually shaped "Arrow" markers from the <u>Arrows Across America</u> website. I selected these four designs because of they have unique angles, or their characteristics that are different than the common straight arrow patterns.

> Doug Volker Aviation Enthusiast



EAA Chapter 179 Newsletter—May 2025 (return to Page 1)

In the News and Other Interesting Topics The Editor ... and you?

OK, This article has become bigger than fits on one page. So there is now an overflow page Click on the "Continue on page" link at the bottom to go there.

And I invite you, friend readers, to send me links to resources of interest to you and others.

KABQ Safety Council

 From Wendy Smith, KABQ tower:: The Local Safety Council at the ABQ tower has opened an e-mail address just for pilot feedback/suggestions/questions: KABQ.safety@gmail.com

General Aviation News (repeat)

• New Edition of Pilot's Handbook of Aeronautical Knowledge

FAA FAASTeam

- **** FAA Safety Briefing Magazine >> Check It Out
 - This month's feature: Weather Tech and Automation
- FAAST Webinars: A list of many great topics: most gualify the attendee for WINGS credits.
- Go to Seminars & Webinars, select Show only Webinars, then [Search]
 - All Pro Tips for Maintenance Light-Sport Aircraft Maintenance, Wed May 21
 - Saturday Morning coffee and Wings-The 300 Dollar Annual, Sat May 17
- NEW NTSB Safety Alert: See and Be Seen: Your Life Depends on It
- NEW Reference Data: FAA Fact Book, and Airport Data & Information Portal

Pilot Workshops—<u>sign up here</u> to receive these via email

- Welcome to The Pilot's Tip of the Week (PDFs & videos) (extracts from online courses and manuals)
- How ATC Really Works (A Pilot Friendly Manual)
- Pilot Exercise Program (another Pilot-Friendly Manual)
- Take this VFR Challenge ... what would you do? (videos)
 - Engine Failure After Takeoff A pre-takeoff briefing exists to remove hesitation and doubt from split-second emergency decisions after takeoff. The problem is that most real-world departures present several opportunities to go off script. When your engine
- Standard-Rate Turns Secret
- ADSB Failure
- Three Different Mag Checks
- Flight Following from Non-Towered Airports

suddenly auits on this climbout, will you follow your own pre-takeoff briefing to the letter. or is this a case where improvisation might be needed in order to survive?

Recent Pilots Tip of the Week (New in each issue)

Emilio Verastegui **Bob & Sandy Waters** Dean Wadsworth Memorial

Thank You For Your Support

Quick Links to Chapter Website

Web Site: Young Eagles: IMC Club: DEAA: LOEFI: Scholarships: Newsletters: Calendar: Membership: Contacts: **Chapter Facebook:** Group Facebook:

www.eaa179.org www.eaa179.org/youngeagles www.eaa179.org/imc-club www.eaa179.org/deaa www.loefi.org www.eaa179.org/scholarships www.eaa179.org/newsletters www.eaa179.org/calendar www.eaa179.org/membership www.eaa179.org/contacts www.facebook.com/EAA179 www.facebook.com/groups/ www.eaa179.org

SPECIAL NOTE: Chapter 179 on Facebook Lance Hunter, Chapter Publicity

For those of you who follow things on Facebook, we have two spaces, one, a Facebook PAGE, directed to the public and the other a Facebook GROUP for Members and others closely associated with the Chapter.

Experimental Aircraft Association Chapter 179, is our outlet to the public. Anyone can go to this page and see information about the Chapter and its activities.

EAA Chapter 179 New Mexico is a Private GROUP. Only users who have joined have access to it. It will have up-to-date information and Members can participate with their own posts and in dialogs via Likes, comments, and replies.

Lance Hunter and Kyle Reinhardt are our lead FaceBookMasters. who manage both and keep Chapter information up to date. Contact them with questions or ideas.





PILOT WORKSHOPS

2024 Individual Chapter Donors Gold

Dan & Janice Horschel

Turquoise

Todd Blue Estate Mark & Linda Henderson Kat & Bob Richter-Sand Rick Richter Memorial Joyce Schmitt Art & Joyce Woods

(Continued from page 17)

EAA

 <u>Webinars</u> – EAA & Aircraft Spruce present a constant flow of Webinars that cover virtually all topics aviation, from building to flying to flight rules. And many qualify you for WINGS Credits. Check out the schedule; perhaps you will find one or more of interest to you.



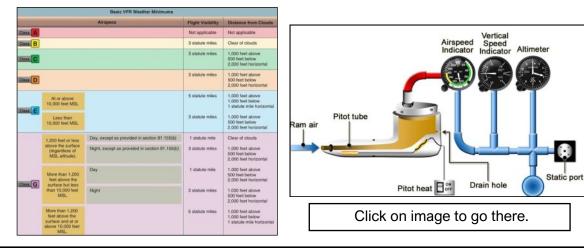
- EAA's Chapter Video Magazines (monthly)
- EAA's eHotline, Announcements for Air Venture/Oshkosh and more

NMPA

- <u>May 2024 NMPA Newsletter</u> Another great issue, with a very good article on Flying VFR - "It's Always Good to be Seen", particularly apropos flying around New Mexico where radio/radar coverage can be limited.
- And visit the <u>NMPA web site</u> for the latest about their activities

Facebook

- New: Student Pilots Group, with many instructional articles
- A Facebook group for local flying: Fly New Mexico, Dave Otero, Administrator.
- Great Facebook spaces: <u>Commemorative Air Force & National Museum of the U.S. Air Force</u>, <u>Pima Air and Space Museum</u> (& <u>Facebook</u>), and a **NEW one** <u>Aviation Update</u>
- **NEW FIND:** Some great resources to keep your "aviation knowledge" up to date:
- <u>Aviation Knowledge</u>, a Facebook thread presenting a variety of topics, to for budding pilots or refresh knowledge: (examples below, click to see original on Facebook)
- <u>The Sky's The Limit</u>, another Facebook thread presenting many interesting facts and perspectives – weather, airplanes, aviation, and



EAA Chapter 179 Newsletter—May 2025 (return to Page 1)

RV-12 One Tenth share for Sale. \$7,500

Be a part of the HDF club (High Desert Flyers) hangared at Double Eagle airport. This EAA kit built now has 350? Hours on it. And a Dynon glass panel with auto pilot.

For more info contact

Mark Dyslin 595-301-4899

Building Materials for Sale

Don Jackson has much 4140 steel tubing and other items that can be used in a scratch built aircraft.

• Approx 500 linear feet of round tubing ranging in length from 24' 6" down to 6' diameters from 7/8" down to 1/4"

• Approx 60' Streamline from 2 1/2" length 10 1/2". 1" by 10 1/2.

• Also 1 used lift strut 2 1'2 by 10 1'2

• Approx 100 ft 3/16 7 by 19 control cable.

• 4 each 4 by 8 ft 1/8 inch sheet mahogany plywood and 1 each 3 by 7 sheet all in original shipping crate.

• 2 new Cleveland certified wheel and brake disc assemblies and 4 sets of brake calipers.

All are for sale along with 72 years of aircraft mechanics tools & shop equipment. Experience is not for sale.

Come see at hangar 58 (AREA 58) at Moriarty airport. And let us talk.

Call Don at 505 296 3746 dljdlj@comcast.net





For Sale



NM Aviation and Other Organizations and Resources Of Interest The Editor

There are many organizations serving aviation interests in New Mexico. These include EAA Chapters and other such organizations, but also government agencies and commercial enterprises. In future months I plan to present a synopsis of the significance of some of these resources, what is interesting about them or what they offer in the way of enhancing our flying experiences.

This is a starter list of organizations that I have tracked down. If you know of others or have corrections or updates, please send me eMail at <u>newsletter@eaa179.org</u>. And if you use any of these regularly, please consider providing a synopsis and review. Thanks.

NM EAA Chapters

- 1306 Edgewood, 1N1
- 530, Los Lunas, E98
- 691, Los Alamos, KLAM & KSAF (Green Chile Chapter)
- 251, Alamogordo, KALM (& Facebook)
- 555, Las Cruces, KLRU (Triple Nickel Chapter) (& Facebook)
- 1570 Santa Teresa, KDNA

New Mexico Organizations

- New Mexico Pilots Association (NMPA) (& Facebook)
- Fly New Mexico! Facebook Group started by David Otero. Ask to Join!
- <u>New Mexico Airstrip Network</u> (NMAN)
- <u>NMDOT Aviation Division</u>
- <u>New Mexico Airport Managers Association</u>
- Lobo Wing of the CAF (& Facebook)
- Rio Grande Norte 99s Facebook Group (Ask to Join!)
- Tuskegee Airmen (local chapter) (& Facebook)
- Albuquerque Soaring Club (& Facebook)
- Women in Aviation Intl Land of Enchantment Chapter (& Facebook)

National and Other State Organizations of Interest

- Experimental Aircraft Association (EAA) (& Facebook)
- <u>Aircraft Owners and Pilots Association (AOPA)</u> (& <u>Facebook)</u>
- Recreational Aviation Foundation (RAF) (& Facebook)
- Ninety-Nines (& Facebook)
- Angel Flight
- <u>Air Care Alliance</u>
- Emergency Volunteer Air Corps
- LightHawk (& Facebook)
- <u>Arizona Pilot's Association</u> (& Facebook)
- <u>Colorado Pilots Association</u> (& <u>Facebook</u>)

Online Resources

- FAASafety.gov
- Kitplanes (eMail subscription)
- Pilots Workshop (& eMail subscription)
- Social Flight & eMail subscription
- AVweb AVWeb Flash
- <u>AOPA News & Media AOPA Newsletters</u>
- Barnstormers Barnstormers eFlyer
- GA News Digital Edition
- On Facebook
 - Fly New Mexico
 - <u>The Aviator's Lounge</u>

EAA Resources

- Hints for Homebuilders
- Learn to Fly!
- <u>Pilot Proficiency</u>
- Become a Young Eagle Volunteer!
- AirVenture—Oshkosh

eMail Resources (Subscriptions)

- <u>FAA Safety Team</u> Safer Skies Through Education Log in to your account, then go to Account Preferences.
- AOPA ePilot and AOPA Aviation eBrief
- AVwebflash

Cultural Web Sites

- National Museum of the United States Air Force (& Facebook)
- <u>National Museum of Nuclear Science & History</u>
- <u>US Southwest Soaring Museum</u> (& <u>Facebook</u>)
- Spaceport America
- National Aviation Hall of Fame (nee Air Force Museum)
- <u>National Air and Space Museum</u>
- The Wheels Museum,
- War Eagles Museum, Santa Teresa (KDNA)

Invitation to Pancake Fly-In and Car Show – Jun 7 Grants-Milan Airport

Dear Chapter Members,

We are thrilled to extend a warm invitation to you on behalf of the city of Grants and the Grants Airport. Please join us for a delightful Pancake Fly-In and Car Show on Saturday, June 7th.

My name is Terry Warner, EAA 129427, and I am honored to serve as a new board member for the Grants-Milan Airport. In my role, I am dedicated to transforming the Grants Airport into a premier destination for sport aviation in western New Mexico, and I am seeking your invaluable support to achieve this goal.

The city has organized an exhilarating car show on Saturday, June 7th, and we are looking forward to welcoming a fantastic turnout of airplanes for the breakfast event. This is an excellent opportunity for aviation enthusiasts and car aficionados alike to come together and celebrate our shared passions.

We are excited to announce the establishment of a new EAA chapter at the airport and our plans to construct new T-hangars, enhancing our facilities and community.

Please come and enjoy the Pancake Fly-In and Car Show! We look forward to seeing you there.

Warm regards,

Terry Warner

EAA 129427 Board Member, Grants-Milan Airport 2ND ANNUAL POKES •• 66 **JUNE 7TH 2025** RIVER WALK PARK PANCAKE BREAKFASTI DATE 06.07 SATURDAY PANCAKES & COFFEE \$5 TIME 8 AM QUESTIONS & REGISTRATION LOCATION 505-290-9305 GRANTS - MILA TERRY_WARNER20 N DALE CARNUTTE P KES ON 66 CAR SHOW BEGINS AT AT THE RIVER WALK PARK Click on image to download it.

EAA Chapter 179 Newsletter—May 2025 (return to Page 1)

Recurring Events for Chapter 179

Check the <u>Newsletter</u> and <u>Web</u> for changes)

Chapter Gatherings

3rd Tuesday evenings, usually at a restaurant in Albuquerque. See the current <u>Newsletter</u>

March – Scholarships, *November* – Annual Meeting, & *December* – Holiday Gathering

Chapter Board Meetings

Normally the First Tuesday of Odd Months via ZOOM

IMC Club

Third Saturdays at Double Eagle II (KAEG) and via ZOOM

Land of Enchantment Fly-In (LOEFI) A weekend in late September

Double Eagle Aviation Academy (DEAA) First full week in June

Young Eagles Flights

Monthly each spring and fall. Follow our <u>web site</u> and current <u>News-letter</u> for details.



Call for Chapter 179 Scholarship Donors

We're proud of our recipients and enjoy sharing in their successes!

As our 2025 Scholarship program is well underway, it's a good time to consider contributing. Chapter 179 scholarships are funded by a combination of donations and from funds from activities throughout the year.

We appreciate donations of any amount to our Chapter 179 Scholarship fund, to extend EAA's Ray Scholar Fund, or in past member Memorial funds. Your specific wishes may be designated in the optional notes at the top.

You can donate online via Paypal or Credit Card:



or send a check to EAA 179 Scholarships; Double Eagle II Airport, 7401 Atrisco Vista Blvd NW #179, Albuquerque, NM 87120-6601.

EAA Chapter 179 is a 501c(3) tax exempt charitable organization.

Support your Chapter Joyce Woods

Proud to be a Member? Want a Chapter 179 shirt?

Two designs available by special order.

Contact Joyce at <u>secretary@eaa179.org</u> with your SIZE. Payment due on receipt of shirts. Proceeds benefit our chapter programs.

DEAA T-Shirts

Design on shirt front \$15 each (men's or women's sizes available, no pockets)



Chapter 179 Polo Shirts

Gray with embroidered logo on left breast. \$28 each. Add Pocket (\$2)

