



*Mile High Flyer*  
*The Official Newsletter*  
*of*  
*The Experimental*  
*Aircraft Association,*  
*Chapter 43*



*Volume 46 Issue 3*

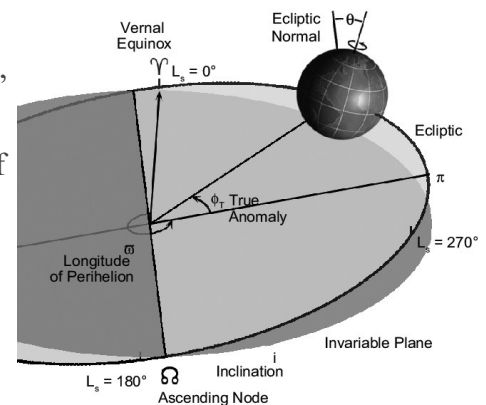
*On the web @ [www.eaa43.org](http://www.eaa43.org)*

*March, 2019*

**CONTACT!**

Some people are fan of Christmas as a “Most Important Day”. Some would tell you Fourth of July, or perhaps Superbowl Sunday. And I suppose some might say the just completed Oscar Night. “Green Book” was good, Sue and I saw it for my birthday.

But if you were to ask me, my “Most Important Day” is the First Day of Spring, the Vernal Equinox. It isn’t actually a day, but an astronomical moment when the Earth’s Equator is tipped such that the sun is directly above the equator, and moving north. It occurs at the same moment for everyone on the Northern Hemisphere, and that moment this year is Wednesday, March 20 at 3:58 pm MDT, 2158Z. To me, that first moment marks a rebirth of life. No more shivering, no more lighting the woodstove, “It’s all uphill from here!”



It is a great time to pick up something new, or to begin again something you used to do. May I make a suggestion? EAA has a lot to offer, and your EAA Chapter 43 has a lot going on. Only about half of our members come to our monthly gatherings. Give us a try again. Also consider volunteering at one of our Young Eagles rallies, and help to give the magic of flight to a newbie? Or volunteer to help out our Young Aviators group (which needs a new home!) Perhaps our Scholarship Committee, itself going through a little flux and new leadership, would be a great opportunity to meet some of the wondrous young people who hope to soar as we once hoped. Or maybe you haven’t been to Oshkosh in a while - it’s a real eye and ear opener! Consider EAA again, please, as it has a lot to offer and EAA and Chapter 43 need you a much as we ever did. Please participate!

Safe landings, Phil

**Next Gathering - [Saturday, March 9, 2019](#)**

**6 PM @ the Mt. Evans Room in the Terminal Building @ Metro Airport (BJC)**

**Presentation for the March Membership Gathering**

**Paul “Otis” Anslow - RMMA Airport Director**

Paul will be speaking on his military flying career, including multiple deployments worldwide, a stint with Marine One, and airport management at MCAS Kaneohe Bay in Hawaii.

## *Upcoming Events Calendar*

### 2019 EVENTS

#### **MARCH**

Sat	9	EAA Chapter 43 Membership Gathering, BJC, <b>6 PM</b>
Mon	11	EAA Chapter 648 Membership Gathering, 7 PM
Tue	12	EAA Chapter 1627 Membership Gathering, 6 PM
	14-16	WAI (Women in Aviation International) 30th Annual Conference, Long Beach Convention Center, Long Beach, CA <a href="https://www.wai.org/conference">https://www.wai.org/conference</a>
Fri	15	EAA Chapter 301 Membership Gathering, 7 PM
Sat	16	EAA Chapter 43 Young Eagles Rally, EIK 7:45 AM
Sat	23	EAA Chapter 301 Young Eagles Rally, FTG 8 AM

#### **APRIL**

	2-7	Sun'n'Fun, Lakeland, Florida (KLAL) <a href="https://www.flysnf.org/sun-n-fun-intl-fly-expl/">https://www.flysnf.org/sun-n-fun-intl-fly-expl/</a>
Mon	8	EAA Chapter 648 Membership Gathering, 7 PM
Tue	9	EAA Chapter 1627 Membership Gathering, 6 PM
Sat	13	EAA Chapter 43 Membership Gathering, BJC, <b>6 PM</b>
Fri	19	EAA Chapter 301 Membership Gathering, 7 PM
Sat	20	EAA Chapter 43 Young Eagles Rally, EIK 7:45 AM
Sat	27	EAA Chapter 301 Young Eagles Rally, FTG 8 AM

In this issue:

- **This is really important** - the regular gathering time is changing. In order for the airport staff to clean up the Mt. Evans room and get to other tasks, we have to vacate the room no later than 9 PM. Since that doesn't allow for gathering overrun or chatting afterward, the Board of Directors and Chapter Officers have decided to start the gathering an hour earlier, at 6 PM.
- I will add a caveat to our President's characterization of AirVenture - be aware that your neck and face may be painful after a day or two - from constantly looking up to see what's overhead, and from the huge grin you'll be wearing!
- What's with the Membership Gathering terminology? We're making a change to indicate that we don't get together for a boring business meeting (although there may be a little bit of chapter business we have to take care of); we get together to share our travel stories, airplane building or flying celebrations and oopsies, have a few laughs, and get to know each other better.

Since I currently don't have a second set of eyes to review the newsletter, I'd like to ask all of you to help find my boo-boos for cookies! I don't think I've got any outstanding edits, but you still have a chance for cookies in March if you find something in this newsletter. Let me know at [newsletter@eaa43.org](mailto:newsletter@eaa43.org).

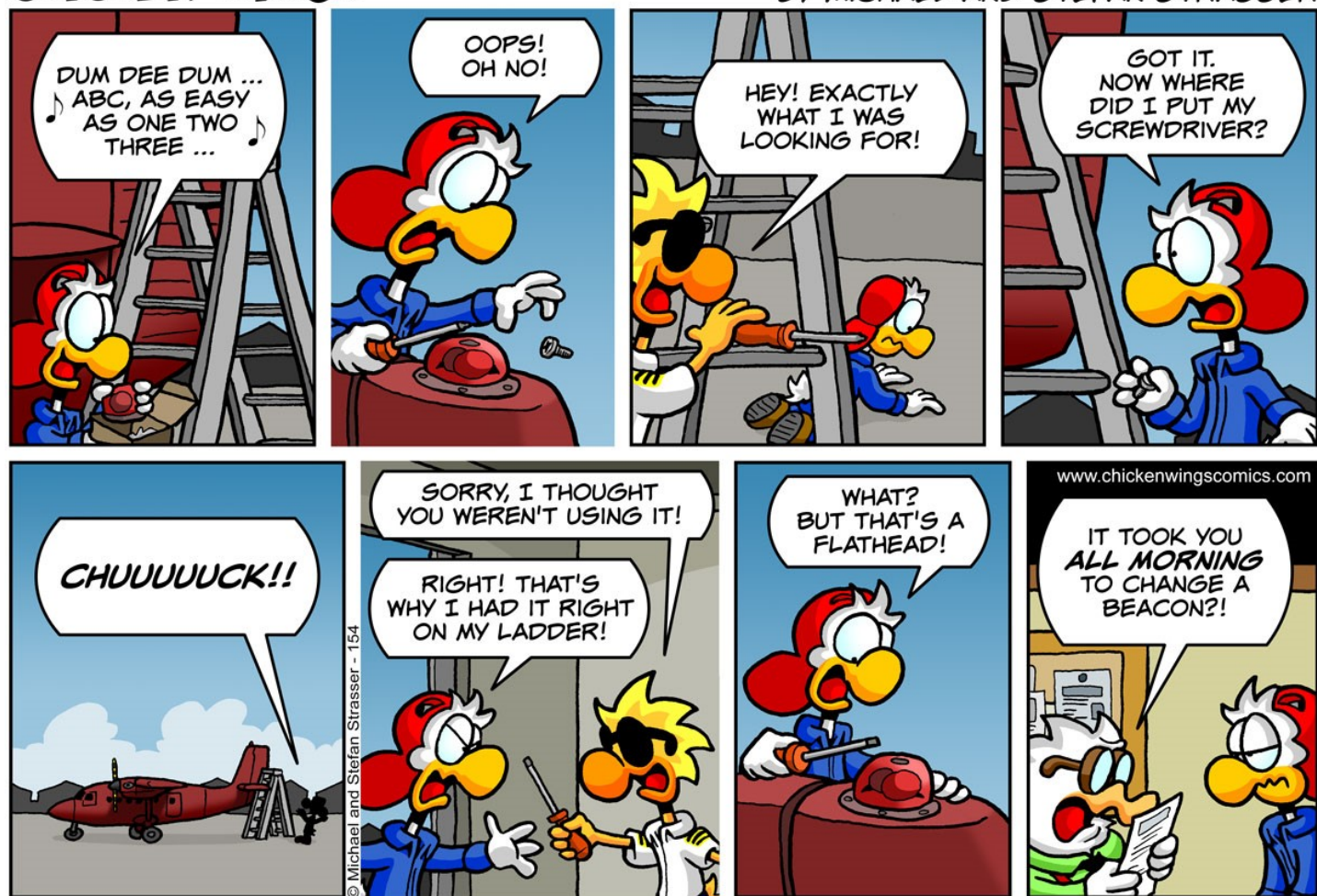
If you'd like to contribute a newsletter article on a trip, a tool, component, or aircraft review, a how-to for build or test, historical or ANYTHING airplane or chapter related, don't be shy. I'm still struggling with input that's not electronic, but you can email [newsletter@eaa43.org](mailto:newsletter@eaa43.org) with anything ya got in electronic format. Be aware that Gmail limits attachments to 25MB, so if it's bigger than that, try multiple emails.

## Chapter Volunteer Highlight - Roxie and John Juul

If you come to our monthly gatherings (if not, you should!) you know that we have a break between the regular monthly reports and the program. And at the back of the room, there's coffee, cookies and pastries to sip and nibble on. That's because our Refreshment volunteers, Roxie and John, schlepp in the goodies and coffee pot, set it all up, and clean up afterward. You may also have noticed the coffee can that's there for donations supporting the refreshments. So at the March gathering, while you're picking up something to drink and nosh on, drop a buck or two in the can, and drop a thank you to the volunteers that made it happen!

## CHICKEN WINGS®

BY MICHAEL AND STEFAN STRASSER



I'm fairly sure that all you builders out there can sympathize with Julio, even if you don't have a Chuck to contend with! This type of thing is why that 1800 hour build can take 6 years, even when you can devote big chunks of your time to the job!

***Want Ads & articles for publication may be sent to the editor - [newsletter@ea43.org](mailto:newsletter@ea43.org)***

## ***Want Ads***



**Custom Embroidery**  
**Valerie Wait**  
 720-352-2630  
 1705 Flemming Drive  
 Longmont, CO 80501  
 email: valandjimw@yahoo.com

Bill Mitchell reports that Valerie can embroider a couple of different sizes of our chapter logo on jackets, shirts, etc. Bill showed some examples at one of our gatherings, and they were beautifully done!

Challenger II Ultralight Serial Number CH2-0908-CW-2850

Kit in unassembled form, includes Hirth 3202-03 engine, seats, and transport racks. Asking \$20,000. Please see photos at <https://1drv.ms/f/s!Aq1feZw5G-ofkRNBH9qLknRGMcKI>. Located at Pueblo West. Contact Daryl Jacobs, [daryljacobs46@yahoo.com](mailto:daryljacobs46@yahoo.com), 208-421-3589 cell.



**2011 ELSA Zodiac 601XLB**, TTA/E 335 hr., Jabiru 3300, Dynon 180 EMS/EFIS, Garmin AERA500 GPS, ICOM A-200, ELT, Garmin GTX 320A Xpdr, AOA, Sensenich GA prop, elevator & aileron trim, dual brakes and throttle, always hangared, fresh annual, builder and maintenance logs. Laramie, WY. MEDICAL ISSUE forcing sale, \$47.5k (See specs on next page.)

Wes (307)721-8804



## DATA SHEET

ELSA ZENITH 601XL-B - \$47.5K

By owner/builder

- 2011 Zodiac 601XL-B; always hangared (KLAR); TT335 hrs.
- Fresh condition inspection
- Sensenich ground adjustable composite propeller
- 15 gallon fuel tanks
- Navigation and strobe lights
- Electric elevator and aileron trim; electric flaps
- Center yoke with dual brake and throttle controls
- Jabiru 3300 with oil cooler
- High Altitude Control-manual (HAC man)
- Dynon 180 EFIS/EMS
- Dual VSI, AS, & Alt.
- Removable GPS – Garmin AERA 500
- Communication-ICOM A-200; Intercom-Flight Com 403mc
- Transponder- Garmin GTX 320A
- ELT – Ameri King AK450
- Tannis engine heater; baggage wing lockers; Kruger sunshade
- Necessary maintenance tools, Lightspeed Zulu headsets (2), canopy cover, new upholstery set, extra tires, manuals

## Minutes for EAA Chapter 43 Membership Gathering Saturday, February 9, 2019

Gathering opened at 6:02 by President Phil Brown

### **VISITORS, NEW MEMBERS** - Please tell us about yourself

Location

Flying, What? Many Months/Years?

Building anything?

Flying HOPES?

Sign in and get 6-month trial membership in Chapter 43

Bruce Lee flies out of Front Range and has been an EAA IFR member since 1989 but has not belonged to a chapter. He joined Chapter 43 online before attending tonight!

Gib Cardwell is a latecomer to aviation and is trying to find LSA training within an hour's travel of Broomfield.

### **ANECDOTE**

[www.technicallyfunny.com](http://www.technicallyfunny.com) video. Go to the link, it's hilarious.

### **DUES**

See Treasurer Myles Lee if you're not sure you're paid up.

### **MEETING DEDICATION – Isaac Babbitt**

Isaac Babbitt made the first brass cannon in the United States. In 1839 he produced the first babbitt metal for bearings which was hard particles of copper and antimony in a soft matrix of tin. The tin wore down and left channels for the lubricant. (Today we use copper and aluminum.)

### **OSHKOSH MEMORIAL WALL – MAS YOSHIDA**

Efforts are underway to memorialize Mas on the EAA Memorial Wall at Oshkosh. If you're at AirVenture 2019 on the last Sunday of the event, try to attend the memorial service that morning at the Wall.

### **TRIP REPORTS**

No trip reports this month. John Redding reported that Stephanie Wells should have a report in March from her travels in Central America (John is flying down to join her next week).

### **SCHOLARSHIP – Eric Serani**

Interviews were completed in January for the EAA Air Academy camp at Oshkosh and flying lesson scholarships. It was a great class of applicants. Aniya Perkins is the leading candidate for the camp scholarship, which is funded with Young Eagle credits. For flying lessons, there were four candidates in the final round, with 2 standouts. For the \$3K scholarship, Lindsey Beauregard, 22, a new college grad, grew up flying with her mom. Lindsey works at Specialty Flight Training. For the \$5K scholarship, Jay Davis (the young man who was partially paralyzed in a T-18 landing accident with Bill Mitchell) blew the committee away with his drive to get back into the cockpit and to inspire others. The scholarship will be used to get him through medical and equip his plane. Glenn Hetchler noted that there's a Truckee glider pilot with paralyzed legs. Scott Serani pointed out that the \$5K scholarship is named for Cleon Biter, and Jay was one of Cleon's students.

Eric asked for volunteers for the Scholarship Committee. Eric's business is demanding more of his attention, and a new chair is needed. He said that these scholarships change lives, and that he will coach the new chair.

### **PROJECT REPORTS**

Wayne Gibson and his son Edward are working on a Zenith, specifically on the wing kit (received in December) in their COLD garage. Flaps and ailerons are done and the spars are started. Wayne thanks Scott Serani for assisting with the delivery of the 525 lb, 14' long wing kit, getting it into place with no lift.

Steve Paschke and his Venture 333 – custom radiator and relocated stroke (?). He also made a list of the remaining items – it's very long!

Cliff Goldstein – Erin Miller finished the build of his 200hp RV-8 and got through Phase 1 testing before moving to Oregon. Cliff is dealing with an engine recall on his RV-14 and asked for advice on P-mags.

Gary Gregory's Kitfox has been ready for first engine start since December, delayed by a tendon injury to his left hand. In the meantime, he showed off the seat cushions with tail art embroidered by Valerie Wait (see the ad section) and upholstered by an automotive upholsterer in Denver (ask Gary for a business card). He called several area upholstery shops - some had closed, and the rest were not willing to tackle an aircraft project.

Jeff Jones' fuselage is done, with help from Dale Serani on the cowling. Further work is delayed due to parts shortages at Lycoming for the engine ordered in August, so working on the wings.

### **SAFETY REPORT –Bill Mitchell**

Bill reminded us that it's slush season, which can cause more issues than you can believe – one of which is freezing in wheel pants following takeoff. Glenn Hetchler noted that even without wheel pants, he had issues in Minnesota when the brake pucks froze to the rotor and sheared the brake pad rivets on one side.

### **YOUNG EAGLES – Cliff Hasenbalg**

Young Eagles will be starting again in March! It's been 3 years since EAA started requiring Youth Protection Training, so adults involved with Young Eagles may need to renew their training. Cliff also had certificates for those volunteers who could not attend last month's banquet. There are 15 kids signed up so far for March and April. Go to the EAA Young Eagles Volunteer Resources webpage (<https://www.eaa.org/ea/youth/free-ye-flights/ye-volunteers>) to take Youth Protection Training. (If you're not sure when your renewal is due, there's also a Training Lookup link, just make sure you're logged in to the website – Publisher.) Young Eagles volunteer emails will be coming soon, see Cliff to add or remove your name from the volunteer lists. Phil Brown hinted that a future Chapter outing (flying for lunch or pie?) after a Young Eagle event is a strong possibility.

### **YOUNG AVIATORS – Scott Serani**

Young Aviators is getting exciting! B-25 is going to a full simulator configuration – the missions will be real for the pilot, co-pilot, nose and tail gunners, and the turret position. Fredy Tello (design and network) and his friend Kirk (equipment sourcing, and there's cookies for the first email to [newsletter@eaa43.org](mailto:newsletter@eaa43.org) with Kirk's correct last name) are leading the charge; Jeff Jones is heading up the nose gunner/ bombardier team and Cliff Goldstein leads the turret team. Ground Control will handle takeoff and landings (so missions don't "crash" before they get started or completed!) Wayne Gibson heads the control station team. There will also be 2 video screens for spectators, to include Young Aviator and sponsor marketing. Scott Serani is looking for a marketing/fundraising volunteer to attract corporate sponsorship to help pay for the upgrade. At the last Young Aviator meeting, there were ~50 people working and bench



testing. Event invitations are coming in for the B-25, including Utah State University at the end of June (shakedown for AirVenture).

Scott also asked the membership to help find the Young Aviators a new home. Meetings have been held at Scott and Patrice McEwen's home at Erie, but they will be moving soon. An Erie location is preferred, and a high door hangar is needed for the B-25. Young Aviators currently numbers 35 kids with lots of chapter and parent involvement. Phil Brown showed the Dodge Ram 1500 commercial featuring Eric Serani, Young Aviators and the B-25 – it was shown during the Super Bowl!

[https://www.youtube.com/watch?v=SNS\\_aOF9cWE](https://www.youtube.com/watch?v=SNS_aOF9cWE)

## **MARK YOUR CALENDARS! AIRVENTURE 2019 JULY 22-28**

### **NEW/OLD BUSINESS**

New Meeting Time is 6pm, invite to Applebee's afterward.

**FEBRUARY OUTING!** Stan Specht has organized a tour of the Denver ARTCC (Air Route Traffic Control Center), 9:50 am Saturday, February 23 at 2211 17<sup>th</sup> Avenue, Longmont, CO. The chapter has toured the facility before, but it was 4-5 years ago. Stan asked for a show of hands with ~20 respondents. Wayne Gibson asked about minimum age (for son Edward). Ken asked about total attendance limits, Stan said extra personnel could be called in to support a largeish group, will send out a chapter-wide email with additional information and maximum attendance. Scott Serani asked about a Young Aviator tour in a few months, and Stan said he'd help set that up.

### **ANYTHING ELSE?**

Phil Brown asked that if anyone in the chapter was unhappy or disagreed with something the chapter is doing, PLEASE bring it up to the membership, a chapter officer, or board member. Chapter 43 is every member's chapter, let's talk the issue out before getting angry and leaving!

### **CROSS-POLLINATING – VAL GREGORY – MOTORCYCLES AND THE INTERNET**

Val made a short presentation of her life on two wheels, and how the birth of the Internet benefitted that activity.

Respectfully submitted,  
Val Gregory  
EAA Chapter 43 Secretary

## TONIGHT'S PROGRAM – Brent Olsen

Bill Mitchell introduced Brent and talked about the 1995 NSI electric plane – Brent helped set it up so the plane didn't turn into a glider with engine failure.

Bio – Brent flies a RANS S-6ES. He has served in the USAF, is a radio operator, professional engineer and served in the Naval Air Reserve.

Brent has reviewed batteries – traditional Lithium Ion are the most dangerous, with the highest energy densities and the smallest size. LiFePO<sub>4</sub> (lithium iron phosphate) batteries are safer. Encapsulated and vented batteries are best for aircraft cabin installation. The EarthX ETX 900-UNT is an example. Brent is currently working on a two-battery system (2<sup>nd</sup> is for backup) with a weight less than that of an AGM (Absorbed glass mat) battery. The system needs a proper charger and regulator (rated for 13.2V vs. 12V). Issues with counterfeit batteries from China. The batteries need to be monitored for under/overcharge. These batteries are more expensive but have a longer shelf life and are much lighter. EarthX is the leading player in experimental aircraft batteries. The Battery Management System (BMS) also needs an over voltage protection device (OVPD). Brent is currently designing this for EarthX. Call Brent if you have questions!

LiFePO<sub>4</sub> batteries are better than traditional Lithium Ion batteries that contain cobalt (and "greener" too).

Discussion of the Over Voltage Problem – anything over 16V for a sustained time can "smoke" the aircraft avionics. Discussion of Power Protection Systems. The B&C regulator is a crowbar device.

Bob Wilson asked about the 787 battery failure and fire – the source of the FAA specs now in force. John Evens has a B&C regulator and didn't notice any lag during bench testing.

EarthX is in Windsor, CO and its products are assembled and tested in the US.

Question on extreme cold – Lithium batteries don't perform as well as lead acid batteries – EarthX batteries are limited to -20F. There have been several instances of folks leaving the power on or forgetting to charge in the backcountry, need sensors to indicate what's happening and an automatic switch to the backup battery. Brent's system also has an audio alert. The unit is about the size of a deck of cards, plus connectors (panel mounting is 1" x 3"). Brent has the schematic for the dual system – solid state, lightweight. Power up to 8A available and is customizable. Contact [www.Olsentechllc.com](http://www.Olsentechllc.com) or [BrentO@olsentechllc.com](mailto:BrentO@olsentechllc.com). Brent is a dealer for Garmin, MGL, uAvionics and EarthX.

Question about how to travel on commercial air with lithium tool batteries (don't!) But most tools have a UL rating, they're safe.

Cliff Goldstein said that Brent helped him with his RV systems and even wiring.

Gathering ended at 8:14



**Membership Enrollment Information**  
**(Needed for Current Roster & Chapter Correspondence)**



**MANDATORY INFORMATION:** *If nothing has changed from last year, this is all the information required. We need EAA Membership # and EAA Renewal date to comply with EAA Charter and Chapter 43 by-laws.*

Date: _____	Annual Dues or	\$25.00
Name: _____	Save! 5 years for	100.00
National EAA Membership #: _____	Scholarship Donation (Optional)	____.00
EAA Membership Renewal Date: _____	Total	.00

Are you a: *Scholarship donations are tax deductible.*

Technical Counselor      Yes \_\_\_ No \_\_\_  
 Flight Advisor            Yes \_\_\_ No \_\_\_  
 CFI                            Yes \_\_\_ No \_\_\_

*Please make check(s) payable to:*  
 EAA Chapter 43  
 P.O. Box 1725  
 Broomfield, Co. 80038-1725

**NEW MEMBERS PLEASE COMPLETE - RETURNING MEMBERS OPTIONAL INFORMATION:** *Supply any information that may have changed from previous year (if you want a field deleted from your record, please tag it).*

E-Mail Address: _____	Home Phone: _____ - _____ - _____
Spouse: _____	Cell Phone: _____ - _____ - _____
Street: _____	
City, State, and Zip: _____	

**HOW WOULD YOU LIKE TO BE INVOLVED IN THE CHAPTER?**

Participate in Young Eagles functions, either as pilot or volunteer? _____	Pilot	Yes ___ No ___
	Ground Crew	Yes ___ No ___
Arrange, Or Be, The Program For One Of Our Meetings? _____		Yes ___ No ___
Host A Chapter Meeting At Your Project? _____		Yes ___ No ___
Run for a Chapter Officer Post? _____		Yes ___ No ___
Interested in attending hands-on workshops (under consideration)		Yes ___ No ___

**AIRCRAFT INFORMATION:**

Note: Status: ---Built, Building, Restoring, Considering, etc.

<u>Make, Model</u>	<u>Status</u>	<u>Based At</u>
_____	_____	_____
_____	_____	_____

*To keep costs down the monthly newsletter is delivered via E-Mail (unless otherwise requested). We also send out periodic news items by e-mail.*

## **2019 Chapter Officers**

<b>President</b>	Phil Brown	303-506-3886
<b>Vice President</b>	Cliff Goldstein	720-280-2916
<b>Vice President</b>	Scott McEwen	303-895-5058
<b>Secretary</b>	Val Gregory	303-908-1252
<b>Treasurer</b>	Myles Lee	720-295-8778

### **Board of Directors**

Phil Brown (Chairman)  
 Jeff Jones\*  
 Zach Malone\*  
 Pete Watkins\*\*  
 Stephanie Wells\*\*

(Note: \*- 2 year terms expire end of 2019, \*\*- 2 year terms expire end of 2020)

### **Volunteer Officers**

<b>Technical Counselor</b>	Jim Sutton	303-598-4205
<b>Technical Counselor</b>	John Reuterskiold	303-881-3517
<b>Technical Counselor</b>	Bill Truax	303-249-2578
<b>Technical Counselor</b>	Phil Brown (fabric, wood & tube)	303-506-3886
<b>Technical Counselor</b>	Stewart Bergner	303-229-7799
<b>Flight Advisor</b>	Bill Mitchell	303-427-4025
<b>Newsletter Editor</b>	Val Gregory	303-908-1252
<b>Young Eagles Coordinator</b>	Cliff Hasenbalg	303-744-8180
<b>Young Aviators Advisor</b>	Pat Miller	303-666-8233
<b>Young Aviators Advisor</b>	Scott Serani	303-358-2858
<b>Data Base Editor</b>	Tim Stansbury	719-494-7398
<b>Web Master</b>	Steve Paschke	303-451-8490
<b>Safety Officer</b>	Stephanie Wells	303-503-0147
<b>Refreshments</b>	John & Roxie Juul	303-466-2600
<b>Audio/Visual</b>	Herrill Davenport	303-460-7789
<b>Scholarship Chairman</b>	Eric Serani	303-918-5446
<b>Scholarship Fundraising</b>	<b>(Volunteer Needed)</b>	

### **CFI's in Chapter 43**

Phil Brown	303-506-3886
Richard Brown	303-558-0793
Mark Davis	303-425-4080
Joe Gilmore	720-318-5100
Jeff Hinkle	303-550-2291
Bill Mitchell	303-427-4025
Tom Shaw	303-275-0904
Mike Sutton	720-515-5269
Stephanie Wells	303-503-0147

## *Mile High EAA Chapter 43*

### **Disclaimer**

Be aware that as always, in past, present, and future, any communications issued by Experimental Aircraft Association Chapter 43, regardless of format, and/or media used, which includes, but is not limited to, this newsletter and audio/visual recordings, is presented only in the context of a clearing house of ideas, opinion, and personal experience accounts. Anyone using ideas, opinions, information, etc., does so at their own risk. Therefore, no liability is expressed or implied by the Experimental Aircraft Association, Chapter 43, or any of its members. Any event announced and/or listed herein, except as noted, is done as a matter of information and does not constitute approval, sponsorship, control, or endorsement of said event.

This newsletter is published by Chapter 43 of the Experimental Aircraft Association for the use, education, and enjoyment of the members and others to whom it is provided. No claim is made for technical accuracy of material presented. Editorial content is the opinion of the contributor and does not reflect the position of Chapter 43 or the Experimental Aircraft Association. The submission of articles, comments, or inquiries for publication in the newsletter is encouraged - email to [newsletter@eaa43.org](mailto:newsletter@eaa43.org).

*Mile High Flyer*  
*EAA Chapter 43*  
*P.O. Box 1725*  
*Broomfield, CO 80038-1725*

**First Class**



**Gatherings are normally held on the second Saturday of each month at 6:00 P.M.—Location determined monthly. See Page 1 for details of the upcoming gathering.**