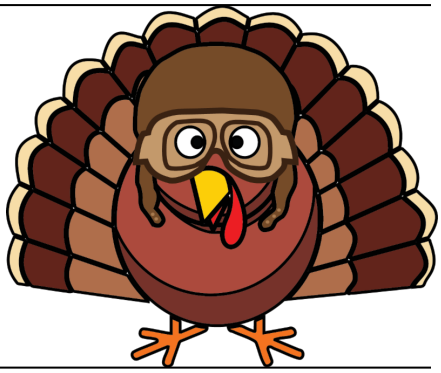
Mile High Flyer

The Official Newsletter of The Experimental Aircraft Association, Chapter 43 Established May, 1958



Volume 45 Issue 11 *On the web @ www.eaa43.org* *November, 2018*

CONTACT!

I'm sitting here in a hotel room in Bumthang, Bhutan. Haven't seen the city yet so I can't say it's lovely or interesting or anything. Sport aviation has not been on my mind but I need to write my monthly thought, so I'll bring up a topic I've had on my mind for some time. I'm throwing this out as food for thought, ...and it's probably better food than some of the strange Bhutanese food I've tasted.

I speak as a flight instructor and a practical thinker...Put yourself in the standard VFR left hand pattern to landing mode. One of the problems that has proven tough to solve is the stall that occurs all too often on turn from base leg to final. Simply Google "base to final stall" to see a host of discussions. The problem seems to be that the pilot misjudges the turn, often aided in that misjudgment by the wind, and while low and slow tries to correct an overshoot of the centerline, often with an uncoordinated skidding turn. A wing drops and there is insufficient altitude to recover.

There are, in my mind anyway, other problems with the base to final turn. First, in a high wing plane, the dropping wing in the turn obscures the airport environment and the runway. Second, the airport is 90° from our view and at or beyond the practical limit of our scan, and that scan is reduced simply because we are at a busy and critical time.

So what I often do is first to extend my downwind leg a little to give myself more room for my second step. Then I make a normal turn from downwind to base, adding flaps and power and other corrections as I feel appropriate.

My second step is where I make my deviation from normal. Instead of turning 90° left to intercept the extended centerline, at an earlier time I turn **45° left** and maintain this heading until I feel that **a second 45° left turn** will intercept the centerline. I'm probably not maintaining this odd 45° course for more than ten or fifteen seconds, but it provides for me the following pluses.

+ It gives me a better opportunity to see the airport pattern before turning to final.
+ It gives me more opportunity to see and feel the effect of any crosswinds before I turn to final.
+ Should I be executing a left hand pattern at an airport that has the odd right hand pattern, and we've probably all done that, it gives the opportunity to better see traffic in conflict.
+ It makes it possible to use a lower rate of turn which makes coordinated turns easier, and miscoordinated turns less troublesome.
+ It gives a better opportunity to time the turn to final to avoid overshooting or excessive turn rate. And this is the big advantage. Avoiding overshoot is a big step in avoiding the base-to-final loss of control and low altitude stall-spin.

Next time you're out VFR and you are alone in the pattern, try my two-turns-to-final idea. You'll see it doesn't require much extra downwind, and it seems to add a margin of safety. Let me know what you think. If you like, we can discuss this in a winter doldrums meeting. Fly safely and keep flying!

Safe landings, Phil

Next Meeting **-** ***Saturday, November 10, 2018***

7 PM @ the Mt. Evans Room in the Terminal Bldg. @ Metro Airport (BJC)

Presentation for the November Membership Meeting

Dustin Putnam Chief Pilot Kepler Spacecraft

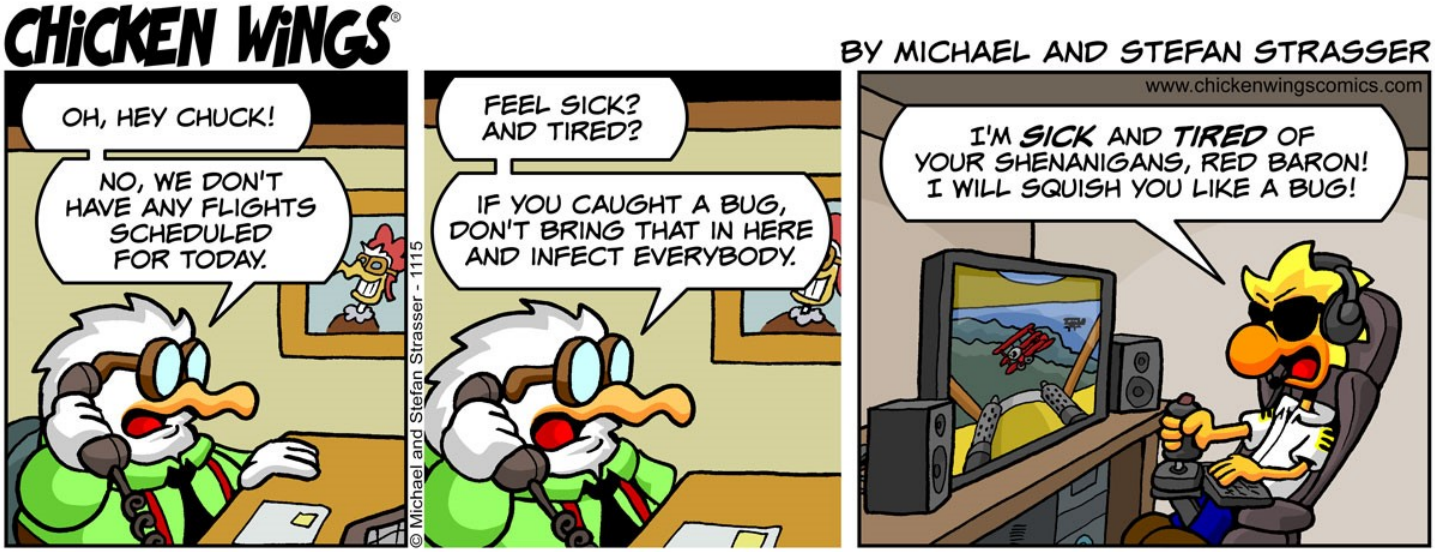
Dustin received his Bachelor's degree in Aerospace Engineering from Iowa State in 1994 and his Master's degree in Aeronautics and Astronautics from Stanford University in 2000. He has worked at Ball Aerospace for nearly 18 years as a spacecraft control system engineer. His work has primarily focused on spacecraft orientation control, but he has also worked in the mechanism pointing and tracking area. He started work on the Kepler program in 2004 just prior to preliminary design review, and continues to support spacecraft on-orbit operations. He has supported numerous other spacecraft during his time at Ball as well.

Dustin will speak to us about the Kepler Spacecraft, which orbits the sun and observes patches of sky for extended periods of time to find small anomalies in space.

Dustin will talk about the Science of what the telescope is observing, and then the mechanics of building, launching and piloting the spacecraft to insure a stable craft so that the telescope is as still as possible, to observe distant objects.

In this issue:

- Everybody's flu and pneumonia shots are up to date, right? Any mention of contagious illness (aside from colds and strep) should be like Chuck's comments to his flight simulation game below!
- Check out the October Program article following October's Meeting Minutes if you weren't able to join us at Bye Aerospace!
- The Annual Chapter Banquet is coming in January! Sign up and pay online via the Banquet link at the bottom left of the Chapter 43 webpage (eaa43.org) or use the signup form attached to the newsletter to mail with your check! OR bring the signup form and check/cash to the November or December meetings and turn in to the Chapter Treasurer, Myles Lee.
- It's also time to renew membership - Sign up and pay online via the Join/Renew button just below the Banquet button at eaa43.org, or use the form attached to the newsletter to mail in with your check OR bring it and check/cash to the November meetings and turn in to the Chapter Treasurer, Myles Lee. If mailing, save a stamp and put your renewal and banquet signup together!



Upcoming Events Calendar

2018 EVENTS

NOVEMBER

Wed	7	Antique Aircraft Association of Colorado meeting, BJC, 7 pm
Sat	10	EAA Chapter 43 Membership meeting, BJC, 7 pm
Mon	12	EAA Chapter 648 Membership meeting, LMO, 7 pm
Fri	16	EAA Chapter 301 Membership meeting, 7 pm

DECEMBER

	1-2	AOPA FIRC (Flight Instructor Refresher Course), Crowne Plaza Denver Airport Convention Center, 15500 E. 40th St., Denver, CO https://hangar.aopa.org/events/item/92/1442
Wed	5	Antique Aircraft Association of Colorado meeting, BJC, 7 pm
Fri	7	11th Annual Wine & Wings Fundraiser, Spirit of Flight Center, Erie, CO, 6 pm http://spiritofflight.com/2018/01/14/friday-december-7-2018-11th-annual-wine-wings-silent-auction-and-fundraiser/
Sat	8	EAA Chapter 43 Membership meeting, BJC, 7 pm
Mon	10	EAA Chapter 648 Membership meeting, LMO, 7 pm
Sat	15	AOPA Rusty Pilots at Centennial, 9 am - 12 pm - see https://hangar.aopa.org/events/item/52/1783 for details and a link to the registration page
Fri	21	EAA Chapter 301 Membership meeting, 7 pm

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! YOU have a chance for cookies in November if you find something in this newsletter. Let me know at 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 with anything ya got in electronic format. Be aware that Gmail limits attachments to 25 MB, so if it's bigger than that, try multiple emails.

Suggested by Stan Specht, from a recent EAA Nation email -

E-AB Accidents at All-Time Low

October 18, 2018 - The 2018 FAA fiscal year ended on September 30, and the experimental fatal accident number came in well below the FAA established not-to-exceed limit for this year. Experimental aircraft were involved in 44 fatal accidents during the fiscal year, with amateur-built aircraft accounting for 33 of those. The not-to-exceed number, based on a one percent reduction in accidents from the previous three-year average, was set at 51 for this year.

This is the fourth year in a row that the accident number stayed well below the FAA's limit, and the downward trend of fatal accidents in both experimental aircraft and general aviation as a whole continues. Last week we reported that the fatal accident rate for amateur-built aircraft in calendar year 2017 was 2.63 per 100,000 hours, an all-time low.

The continual decrease in accident numbers is the result of EAA's strong commitment to improving the experimental safety record, but there is still more work to be done. EAA is actively working on a number of safety initiatives with a goal of further lowering the experimental fatal accident numbers. See https://www.eaa.org/en/eaa/eaa-news-and-aviation-news/news/10-04-2018-amateur-built-accident-rate-drops-to-new-low-in-2017 and https://www.eaa.org/en/eaa/aviation-advocacy-and-safety/safety for more info!

Want Ads & articles for publication may be sent to the editor - newsletter@eaa43.org

Want Ads

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

RV-6A $65,000

TT Airframe/Engine 57, Engine: Lycoming O-320-D2A, Prop: Sensenich 70CM7S9-0-79, Sliding Canopy, Electric flaps, Garmin Stack with GMA-340 Audio Panel, GNC-250XL GPS/COM, GNS-430W NAV/GPS/COM w/WAAS, GI-106A Glideslope, and GTX-327 Transponder, Rocky Mountain Instrument Engine Monitor, Anti Splat Nose Gear.

Contact: Mike Powell, located near Denver, Telephone: 630 244-0190, e-mail: rvmike.mp@gmail.com

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

1994 RV-6 N93MY

TT 1778hrs LYCOMING 0-360 A1A Constant Speed Prop

A ground loop ran the plane into a hangar with slight repairable damages to the plane, mostly cosmetic. The main damages were to the engine and prop.

Must be seen to fully understand the situation.

Open to bidding.

Call 303-589-8552 (leave a voice message)

Minutes for EAA Chapter 43 Member Meeting
Bye Aerospace, Centennial Airport
Saturday, October 13, 2018

Phil Brown called the meeting to order at 9:05 am.

Phil reminded us that we will be holding elections in November. There are two open Board of Directors positions (2-year term), and all Chapter Offices are subject to annual election, though all the existing officers are willing to continue in office. Candidates are actively solicited.

November and December meetings are regular meetings, held at our usual location. The January meeting (Jan 12) is the Chapter's annual Banquet, held at the Colorado National Golf Course just east of EIK (Erie Tri-County Airport). See the signup form later in this newsletter or go online to the Banquet link at the bottom left of the Chapter homepage, eaa43.org.

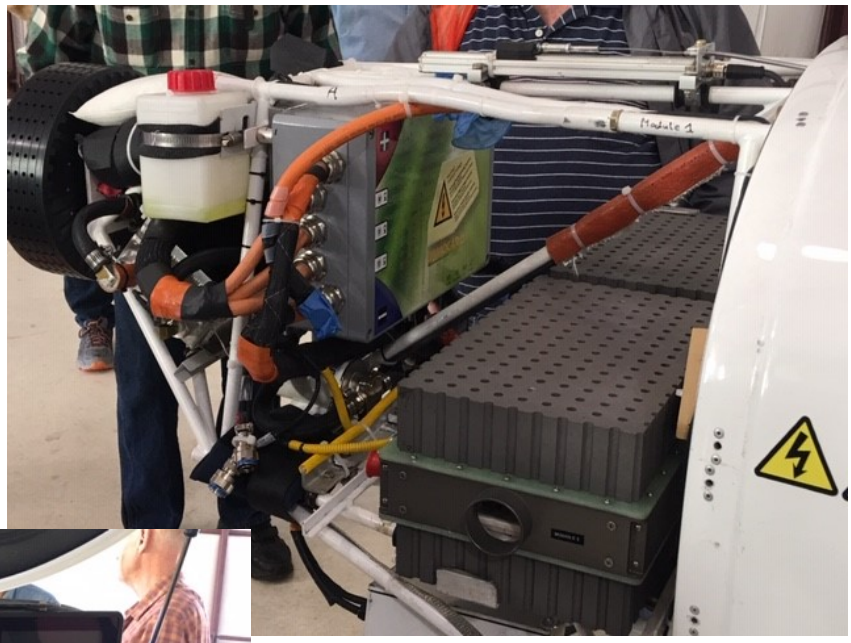
Herrill Davenport asked about meeting room costs that have been implemented for events held in the Mount Evans room at BJC – Stan Specht is working on making reservations and seeing if a cost offset may be available, possibly in association with chapter members volunteering at airport events.

Respectfully submitted,
Val Gregory
Chapter 43 Secretary

October Program – Tour of Bye Aerospace's Sun Flyer 2
George Bye and one of the company's design engineers led the group from Bye Aerospace's office to their hangar where they explained various aspects of the Sun Flyer 2, a two-place, side-by-side composite and electrically-powered aircraft intended primarily as a trainer. With a flight endurance of 3 hours, the plane is designed for two training flights in the morning, recharge during lunch, and two more training flights in the afternoon, all for a cost of ~$16 per hour – compared to an hourly operating cost of over $88 for a Cessna 172!

From Bye Aerospace's website - hangar confines prevented getting a full shot of the plane during the tour.

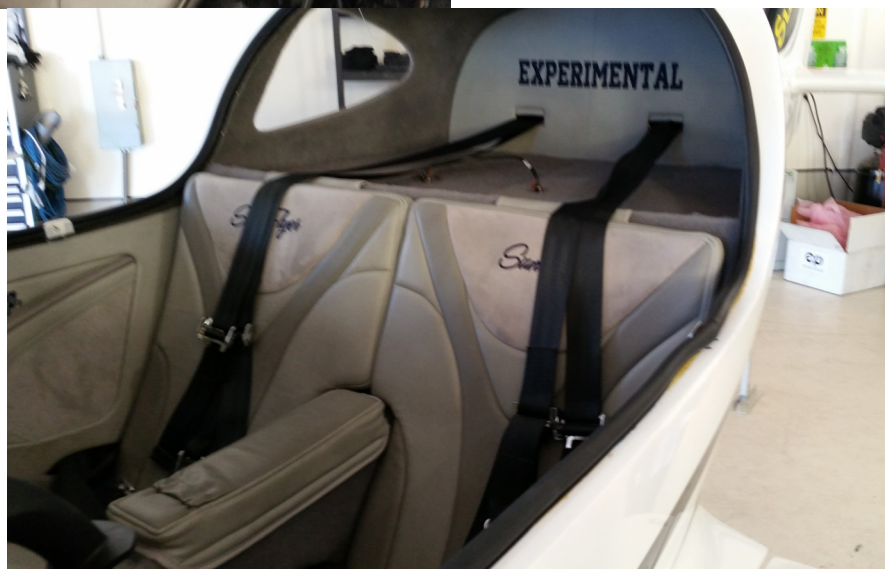
Sun Flyer 2's motor - 80kW output from a total of four batteries with two up front and two behind the seats for balance.

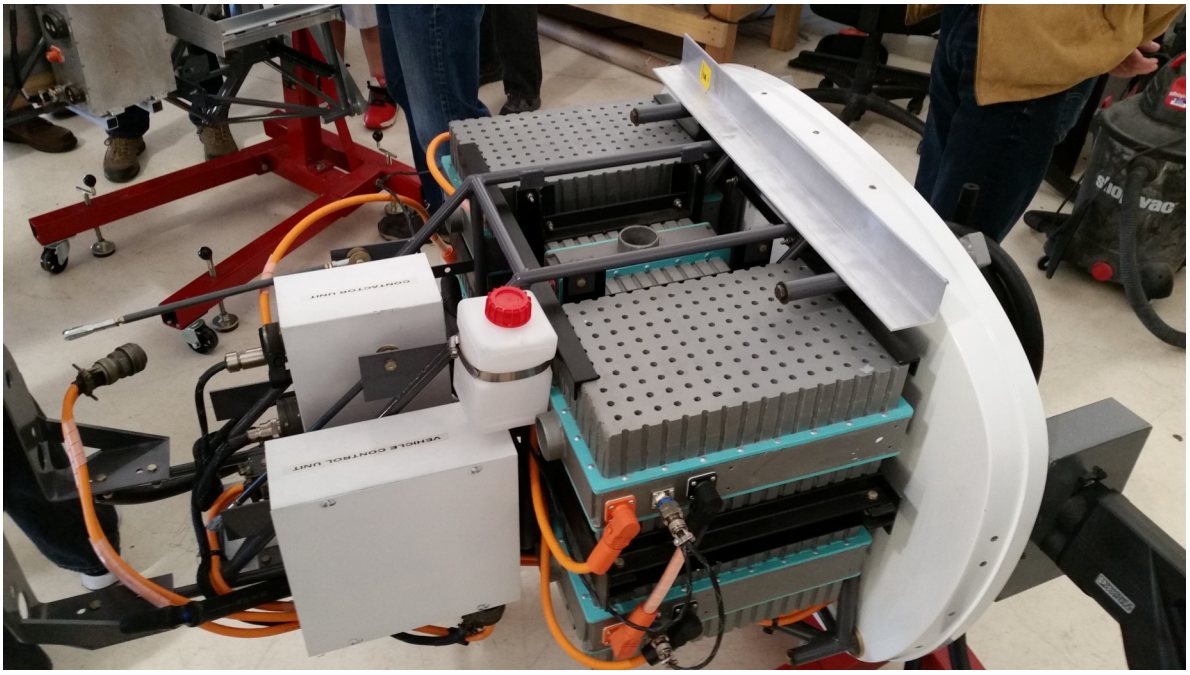


Inside the cockpit. Note both steam gauges and glass for training on either, as well as instrumentation for aircraft development in the test phase.

George Bye and Scott Serani discuss the engine.

More cockpit pictures.





An alternate motor arrangement with four dummy batteries up front. Batteries are 3-D printed for layout use only.

Following our tour, many attendees adjourned to The Perfect Landing for lunch and plane watching. There was an F-18 on the ramp (perhaps getting an avionics checkup from Sierra Nevada) and we watched Stan Specht taxi out to return to BJC for a 99's event. Then we went to the south end of the airport to Exploration of Flight's Boeing Blue Sky Aviation Gallery, to play with various simulators and interactive displays and check out the aircraft on display.

EAA CHAPTER 43 BANQUET SIGN UP

ANNUAL BANQUET, JAN. 12, 2019

COCKTAILS AT 6:00 PM, DINNER AT 6:30 PM

COLORADO NATIONAL GOLF CLUBHOUSE RESTAURANT

2700 VISTA PARKWAY, ERIE, CO.

$20 PER MEMBER, FIRST GUEST $20

(ADDITIONAL GUESTS $30.00)

*NAME*_____

*NO. IN YOUR PARTY*_____

*AMOUNT INCLUDED $*_____*(PLEASE INCLUDE FULL AMOUNT)*

*PHONE NUMBER*_____

*EMAIL ADDRESS*_____

PLEASE PRINT OUT AND MAIL THIS FORM AND, IF YOU DID NOT PAY ONLINE, YOUR CHECK (MEMO ON CHECK THAT IT IS FOR THE BANQUET) MADE OUT TO:

EAA CHAPTER 43

PO BOX 1725

BROOMFIELD CO 80038-1725

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: _____

Name: _____

National EAA Membership #: _____

EAA Membership Renewal Date: _____

Are you a:

Technical Counselor	Yes____No____
Flight Advisor	Yes____No____
CFI	Yes____No____

Annual Dues *or*	**$25.00**
Save! 5 years for	**100.00**
Scholarship Donation (Optional)	**___.00**
Total	**.00**

Scholarship donations are tax deductible.

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: _____

Spouse: _____

Street: _____

City, State, and Zip: _____

Home Phone: _____-_____-_____

Cell Phone: _____-_____-_____

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.

Make, Model	Status	Based At
_____	_____	_____
_____	_____	_____

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.

2018 Chapter Officers

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

Board of Directors

Phil Brown (Chairman)
Cliff Hasenbalg**
Stan Specht**
Jeff Jones*
Zach Malone*
(Note: *- 2 year terms expire end of 2019, **- 2 year terms expire end of 2018)

Volunteer Officers

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

CFI's in Chapter 43

Phil Brown	303-506-3886
Mark Davis	303-425-4080
Dave Dooley	303-358-0506
Joe Gilmore	720-318-5100
Jeff Hinkle	303-550-2291
Bill Mitchell	303-427-4025
Mike Sutton	720-515-5269
Richard Treat	303-868-0451
Stephanie Wells	303-503-0147

Mile High EAA Chapter 43

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EAA Chapter 43

P.O. Box 1725

Broomfield, CO 80038-1725

First Class

EAA™ THE SPIRIT OF AVIATION

Meetings are normally held on the second Saturday of each month at 7:00 P.M.—Location determined monthly. See Page 1 for details of the upcoming meeting.