



Mile High Flyer

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



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January, 2020

CONTACT!

The past two years have been a real EAA experience. While I've been active in the Experimental Aircraft Association continuously since '76, it has been Chapter 43 that has really drawn me out.

The reason is you gals and guys. There's something about the synergy and life to our chapter. One reason may be that it's large and there are lots of people that like to pick up each particular cause. Another reason that is most evident is that there are lots of longtime friendships in the chapter, and that we are a bunch that likes to participate with our friends. Add to that, members are most willing to welcome a newbie (like me) into the group.

After forty-some-odd Oshkoshes, I've finally found MY home with the wing rib building booth. I don't just go to Oshkosh now. Thanks to you guys, I participate. I help; I'm beginning to give back what EAA has done for me. You, the members of Chapter 43, have given that to me.

So I'm really impressed with my fellow members of Chapter 43. Thanks for taking me in, and thanks for letting me wave the gavel a little. It has been an honor to be trusted and to a degree, to be needed. Thank YOU for the opportunity. You've won another believer.

Cliff - you're up. It's a great group.

Safe landings, Phil

Next Meeting - [Saturday, January 11, 2020](#)

**6 PM cocktails & 6:30 PM Dinner at the [Colorado National Golf Clubhouse Restaurant](#)
2700 Vista Parkway, Erie, Colorado**

*This is our annual banquet meeting, and a chance to honor and recognize
the volunteers who help to make Chapter 43 work for all of us.*

See the Chapter 43 Banquet link (<http://www.eaa43.org/banquet.htm>) for a PayPal button and a link to the reservation form. The reservation form is also on page 15 of this newsletter. It's too late to get your reservation to the address on the form, so bring the form and a check to the Banquet! No form required if you PayPal.

Upcoming Events Calendar

2020 CHAPTER 43 EVENTS

JANUARY

Sat 11 EAA Chapter 43 Banquet, Master's Restaurant, Colorado National Golf Club, Erie CO.
Cocktails at 6 PM, Dinner at 6:30 PM

FEBRUARY

Sat 8 EAA Chapter 43 Membership meeting, BJC, 6 PM

2020 AREA EVENTS

JANUARY

Sat 11 Colorado 99's are hosting Stan Specht's "Six Months in Antarctica" at 10 AM at Centennial Airport (exact location TBD)

<https://www.facebook.com/events/3021017537926071/>

Mon 13 EAA Chapter 648 Membership Gathering, LMO, 7 PM

Wed 15 EAA Chapter 1627 Membership Gathering, KBDU, 6 PM

Fri 17 EAA Chapter 301 Membership Gathering, South Metro Fire Rescue Authority Building, 9195 East Mineral Avenue, Centennial, 7 PM

Sat 18 Exploration of Flight Young Eagles, 13005 Wings Way, Englewood CO, 8AM-12

<https://explorationofflight.org/event/young-eagles-saturdays2-2-2-2019-02-16/all/>

FEBRUARY

1 Exploration of Flight Pancake Breakfast Fly-In/Drive-In, 13005 Wings Way Englewood, CO. Pilots eat free!

<https://explorationofflight.org/event/pancake-breakfast-fly-in-or-drive-in-6/>

6-9 Copperstate Fly-In and Buckeye Air Fair, Buckeye Municipal Airport (KBXK), Buckeye AZ (west of Phoenix) <https://www.copperstate.org/>

Mon 10 EAA Chapter 648 Membership Gathering, LMO, 7 PM

Sat 15 Exploration of Flight Young Eagles, 13005 Wings Way, Englewood CO, 8AM-12

<https://explorationofflight.org/event/young-eagles-saturdays2-2-2-2019-02-16/all/>

Wed 19 EAA Chapter 1627 Membership Gathering, KBDU, 6 PM

Fri 21 EAA Chapter 301 Membership Gathering, South Metro Fire Rescue Authority Building, 9195 East Mineral Avenue, Centennial, 7 PM

In this issue:

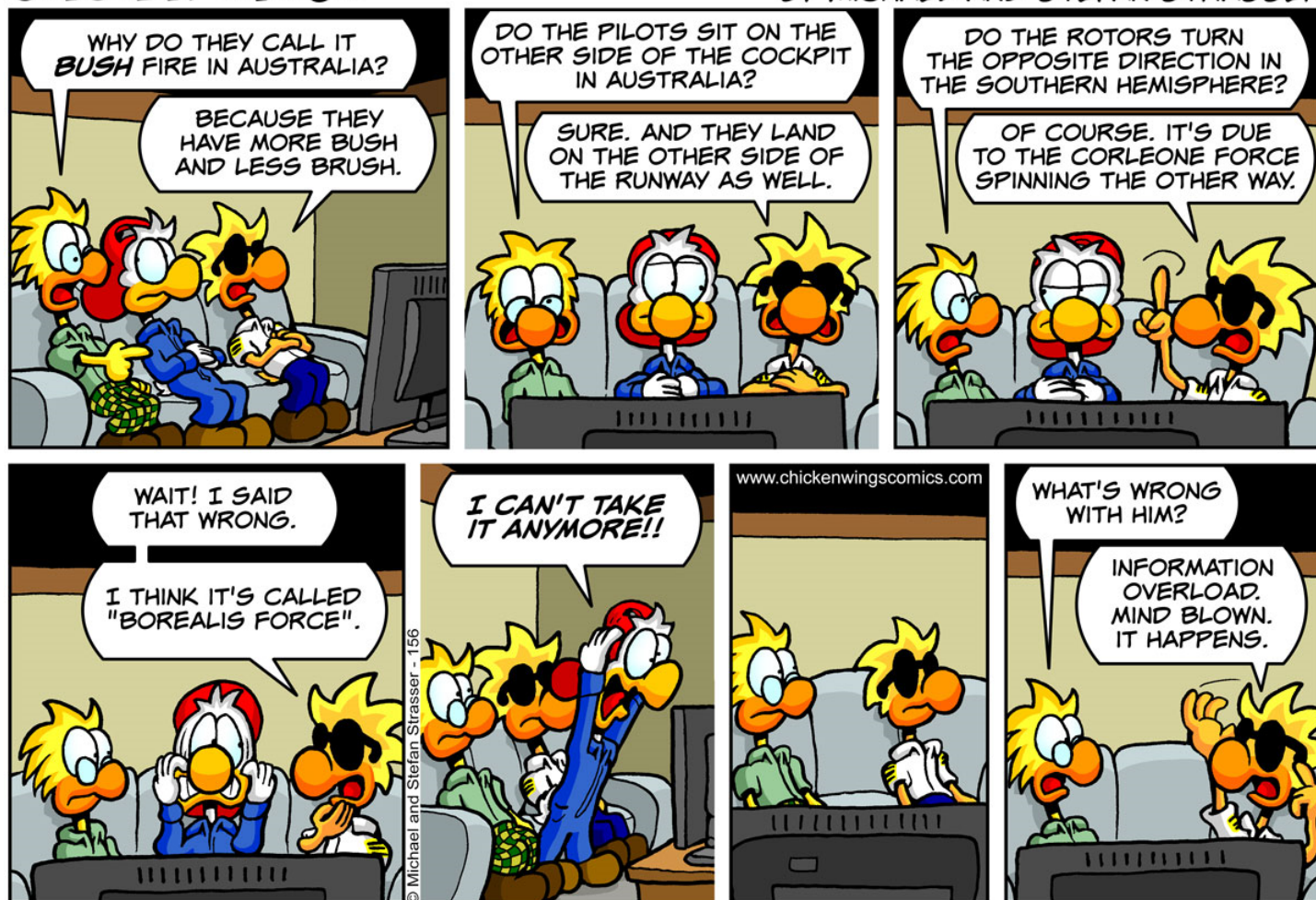
- The title picture on page 1 celebrates the Miracle on the Hudson, which occurred in January of 2009.
- The Chapter Banquet is coming up on January 11! **The Banquet registration form on is on page 15;** payment via PayPal or a check and completed form were due to Chapter Treasurer Myles Lee at the Dec. meeting or you could mail it to the chapter at the address on the form before Dec. 28. Miss the dates? It's not too late! Pay on the Banquet page via PayPal, or bring the reservation form with a check.
- Check the calendar for a Colorado 99's talk by our own Stan Specht, also on January 11. I'll try to send out a chapter email once a final location is announced.
- It's touted as Sun'n'Fun for the West, with forums, exhibitors, workshops, airshows, aircraft judging, and an AeroMart! The first day will feature Poker Run, Spot Landing, and Flour Bombing competitions open to the flying public! It's the Copperstate Fly-In in Arizona, see the calendar listing above on Feb 6-9!
- Starting on page 3, an FAA Safety article courtesy of Steve Beach - thanks, Steve!
- Note the return of Wes Bessler's Zodiac to the Want Ads - the original asking price was \$47.5K, so the price has been discounted more than 25%. Buy an airplane for the cost of a mid-sized SUV, and help a fellow aviator out!

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! 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. I can also re-print some published articles, send me a link!

CHICKEN WINGS®

BY MICHAEL AND STEFAN STRASSER



FAA Safety Team | Safer Skies Through Education

Pay it Forward with PIREPs

Notice Number: NOTC9911

What are PIREPs and why are they important?

Pilot weather reports, or PIREPs, have the potential to prevent accidents and loss of life. They are time-critical reports of weather events, both adverse and favorable, that are encountered by a pilot during flight. Reports of adverse weather serve as a warning to other pilots and inform Air Traffic Control (ATC) about potential hazards to keep pilots clear of weather risks. However, PIREPs are not just for adverse weather. Pilots are encouraged to submit PIREPs when they encounter favorable weather as well. PIREPs can either be submitted by pilots or initiated by ATC.

What types of information should a PIREP cover?

The following are some of the conditions that pilots are encouraged to report promptly:

- Cloud bases, tops, and layers
- Flight visibility
- Precipitation
- Visibility restrictions such as haze, smoke, and dust
- Wind at altitude
- Temperature aloft
- Thunderstorms and related phenomena
- Icing
- Turbulence
- Wind shear
- Volcanic ash clouds

How do I submit a PIREP?

Pilots should submit a PIREP via the radio or telephone to the facility with which they are communicating; e.g., Flight Service, ATC, or an Air Route Traffic Control Center (ARTCC). If a PIREP cannot be made before landing, pilots should submit the report of the conditions they experienced during the flight, after landing. Pilots can also use tablet and smartphone-friendly PIREP submission tools, some with time-saving, auto-populated values based on user preferences or GPS data. The FAA also has an electronic PIREP submission tool at the National Weather Service's Aviation Weather Center Digital Data Service (ADDS) website. Registered users can electronically submit PIREPs on this site, which are instantly displayed in graphical form and distributed nationwide. Visit www.aviationweather.gov/user/register to register. See FAA InFO 14011 – Electronic Submission of Pilot Weather Reports at <https://go.usa.gov/xnVcW>, for more details.

When you submit a PIREP, remember to be as complete as possible, but don't be overly concerned with strict format or phraseology.

How are PIREPs used?

Information gathered from a PIREP has widespread value that is important for continued safety in the National Airspace System. Here are a few ways your PIREPs are put to good use:

- ATC Towers use PIREPs to expedite the flow of air traffic in the vicinity of the field and for hazardous weather avoidance procedures.
- Flight Service Stations use PIREPs to brief other pilots and provide in-flight advisories and weather avoidance information to en route aircraft.
- The ARTCC uses PIREPs to expedite the flow of en route traffic, to determine most favorable altitudes, and to issue hazardous weather information within the center's area.
- The National Weather Service (NWS) uses PIREPs to verify or amend conditions contained in aviation forecasts and advisories. In some cases, pilot reports of hazardous conditions trigger the issuance of weather advisories. PIREP information is also fed into weather forecast models to help improve the accuracy of the next forecast output.
- The NWS, other government organizations, the military, and private industry groups use PIREPs for research activities in the study of meteorological phenomena.
- All air traffic facilities, and the NWS, forward PIREPs into the weather distribution system to ensure the information is made available to all pilots and other interested parties.

How do I fill out the PIREP form?

Use FAA Form 7110-2 to report a PIREP. (Note: this form is currently under review, but is available at the back of each Digital — Chart Supplement publication at https://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/dafd.) It might help to think of the PIREP form as being in a *who, when, where, and what* format. The *what* segment (Items 6-12) does require some extra detail, but be sure not to skimp on precision for the mandatory *who, when* and *where* sections (Items 1-5). Onboard technology can help with capturing time, location, and altitude, but be sure you're keeping tabs on accurately noting and reporting this information when you see something.

Most pilots are not professional meteorologists, and so the ability to properly assess and relay weather conditions that pilots encounter is typically linked to training and experience. A new or low-time pilot, for example, may have a tendency to overestimate turbulence and icing intensities.

Icing intensity should be reported as trace, light, moderate, or severe and by type (rime, clear, or mixed). Be sure to include sky cover and temperature with an icing PIREP.

A common tip for estimating turbulence intensity is to imagine how a full cup of coffee would react in the cabin: from a slight slosh in light turbulence, to flat out wearing the coffee in severe or extreme conditions.

To refine your reporting skills on icing intensity and turbulence, take a look at the Aeronautical Information Manual, paragraphs 7-1-20, -21, and -22. Also, FAA Advisory Circular 00-45H, *Aviation Weather Services*, contains extensive information on how to report and read PIREPs, how to apply intensity modifiers for precipitation and other weather phenomena, and how to use the remarks section to further describe the weather phenomena. The FAA is currently reviewing ways to better harmonize and possibly revise the guidance located in both of these resources.

Here is some additional guidance on each of the 12 reporting items in the PIREP form:

1. UA – Routine PIREP / UUA – Urgent PIREP

2. /OV – Location: Use Airport or NAVAID identifiers only.

- Location can be reported as a single fix, radial DME, or a route segment (Fix- Fix)
Examples: /OV LAX, /OV LAX-SLI120005, /OV PDZ-PSP

3. /TM – Time: When conditions occurred or were encountered.

- Use 4 digits in UTC
Examples: /TM 1645, /TM 0915

4. /FL – Altitude/Flight Level

- Use 3 digits for hundreds of feet. If not known, use UNKN
Examples: /FL095, /FL310, /FLUNKN

5. /TP – Type aircraft: Required if reporting Turbulence or Icing

- No more than 4 characters, use UNKN if the type is not known
Examples: /TP P28A, /TP RV8, /TP B738, /TP UNKN

6. /SK – Sky Condition/Cloud layers:

- Report cloud coverage using contractions: FEW, SCT, BKN, OVC, SKC
- Report bases in hundreds of feet: BKN005, SCT015, OVC200
- If bases are unknown, use UNKN
- Report cloud tops in hundreds of feet: TOP120
Examples: /SK BKN035, /SK SCT UNKN-TOP125, /SK OVC095-TOP125/ SKC

7. /WX – Weather: Flight visibility is always reported first. Append FV reported with SM

- Report visibility using 2 digits: FV01SM, FV10SM
- Unrestricted visibility use FV99SM.
- Use standard weather contractions e.g.: RA, SH, TS, HZ, FG, -, +
Examples: /WX FV01SM +SHRA, /WX FV10 SM -RA BR

8. /TA – Air temperature (Celsius): Required when reporting icing

- 2 digits, unless below zero, then prefix digits with M
Examples: /TA 15, /TA 04 /TA M06

9. /WV – Wind: Direction in 3 digits, speed in 3 or 4 digits, followed by KT.

Examples: /WV 270045KT, /WV 080110KT

10. /TB – Turbulence:

- Report intensity using LGT, MOD, SEV, or EXTRM
- Report duration using INTMT, OCNL or CONS when reported by pilot
- Report type using CAT or CHOP when reported by pilot
- Include altitude only if different from /FL
- Use ABV or BLO when limits are not defined
- Use NEG if turbulence is not encountered
Examples: /TB OCNL MOD, /TB LGT CHOP, /LGT 060, /TB MOD BLO 090, / TB NEG

11. /IC – Icing:

- Report intensity using TRACE, LGT, MOD or SEV
- Report type using RIME, CLR, or MX
- Include altitude only if different than /FL
- Use NEG if icing not encountered
Examples: /IC LGT-MOD RIME, /IC SEV CLR 028-045, /IC NEG

12. /RM – Remarks: Use to report phenomena that does not fit in any other field

- Report the most hazardous element first
- Name of geographic location from /OV field fix
Examples: /RM LLWS +/-15KT SFC-003 DURC RWY22 JFK
/RM MTN WAVE, /RM DURC, /RM DURD, /RM MULLAN PASS
/RM BA RWY 02L BA MEDIUM TO POOR 3IN DRY SN OVER COMPACTED SN

Examples of Completed PIREPS:

UA /OV RFD /TM 1315 /FL160 /TP PA44 /SK OVC025-TOP095/OVC150 /TA M12 /TB INTMT LGT CHOP
UA /OV DHT360015-AMA /TM 2116 /FL050 /TP PA32 /SK BKN090 /WX FV05SM –RA /TA 04 /TB LGT /IC NEG
UUA /OV PDZ010018 /TM 1520 /FL125 /TP C172 /WV 270048KT TB SEV 055-085 /RM CAJON PASS

If you would like to learn more about PIREPs, see the article, “How to Be a Weather Wingman,” in the March/April 2018 issue of FAA Safety Briefing at <https://adobe.ly/2FBn459>.

For any questions concerning PIREP procedures, contact Flight Service at 9-AWA-ATO-SYSOPS-FS@faa.gov.

*Want Ads & articles for publication may be sent
to the editor - 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 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!

FOR SALE

LIGHT SPORT

2011 Experimental Zodiac 601XLB, N601WL, TTA/E 340 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, Price reduced, \$35,000 Wes (307) 721-8804 bressler@wyoming.com



ALSO INCLUDED: MISC. PARTS, LIGHTSPEED HEADSETS, NEW UPHOLSTERY AND NECESSARY TOOLS

DATA SHEET

ZENITH 601XL-B - \$35K

By owner/builder

- 2011 Zodiac 601XL-B; always hangared (KLAR); TT340 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; Koger sunshade
- Necessary maintenance tools, Lightspeed Zulu headsets (2), canopy cover, new upholstery set, extra tires, manuals

Minutes for EAA Chapter 43 Membership Gathering Saturday, December 14, 2019

Meeting opened at 6:02 PM by President Phil Brown.

ANECDOTE - Scott Serani

The World's Smartest Man - Michael Jordan, Bill Gates, the Pope, and a pizza delivery guy were flying through stormy conditions. Suddenly the pilot came running back to the passengers, announced that lightning had hit the plane, and they were about to crash. "There are only 4 parachutes for the five of us" the pilot said. "Since I'm the pilot, I get one!" So he grabbed a parachute and jumped out of the plane. "I'm the world's greatest athlete" said Michael Jordan. "This world needs great athletes, so I must live." He then grabbed a parachute and leapt out of the plane. "I'm the smartest man in the world" bragged Bill Gates. "The world needs smart men, so I must also live!" And he grabbed a parachute and jumped out of the plane. Then the Pope said to the pizza guy, "I have lived a long life compared to you, so you should take the last parachute. I will go down with the plane." "You don't have to stay here!" said the pizza delivery guy. "The world's smartest man jumped out of the plane with my backpack!"

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, including national EAA membership with Sport Aviation magazine!

Adam Burch has been an employee at Van's Aircraft since 2011, involved with the RV-12 and RV-14. He is attending the meeting as a guest of Mike Savino.

Tom Newman - a pilot for 18 years, Tom is 18 months in to an RV-10 build.

Allan Collins is a member of Chapter 1373 (Delta, CO), a builder, and is in our area for awhile.

MEETING DEDICATION – Robert William Thompson

Invented the pneumatic tire in 1846.

TRIP REPORTS

None this month, but in a nod to the meeting's program, the meeting slide featured William Hearst's Fokker F.VIIA, lost at sea in an attempt to fly from Maine to Rome in 1927.

CALENDARS ARE IN!

Cost is \$14.99 - nine chapter members signed up and there's one spare (taken at the meeting). There's also desktop wallpaper with a monthly calendar available for download at <https://www.eaa.org/ea/news-and-publications/airplane-desktop-wallpaper>

PROJECT REPORTS - Jim Sutton, Tech Counselor

Here are some Projects Jim knows of that are underway in one fashion or another and their status/progress (text submitted to Secretary following the meeting):

Gary Gregory - Kitfox

The plane is ready for inspection, Gary is completing paper work.

Mike Dugan - Carbon Cub

In the covering phase, engine in transit. His goal is to have it complete and the time flown off by June so he can participate in a fly-in that occurs then. (Not a member of the chapter but a regular at the Wednesday Lunches)

Steve Tautz - Carbon Cub

He was referred to me by Mike Dugan as they are both building a Carbon Cub. Again, not a member of our chapter but has attended Chapter 301 and may have visited 43 as well. Says he's been unable to connect with a group that he feels can give him the support he needs; hopefully, our Chapter can be of help to him. I went on a Tech Counsel visit on 12/15/19 with Mike Sutton and Bill Heltzel accompanying me. Wings are ready for cover, Fuselage is nearly ready for cover.

Steve is a couple months behind Mike Dugan in progress and has benefitted from helping Mike while learning from his mistakes—to me, that's the advantage of being part of our Builders' community, helping and learning from each other.

Gib Cardwell - Zenith 601

This isn't a project under construction but still a project, nonetheless. Somebody referred him to Bill Mitchell and me at one of the Wednesday Lunches. Interesting background, worth telling. Gib purchased this plane from an individual in California and had a ferry pilot fly it here. His plan is to learn to fly in this plane. It should be noted that at the time of purchase, he had only 4 hours total of in-the-air flight training. When the plane arrived there were a few things he wasn't comfortable with and some deferred maintenance, which of course led to other items which led him to us. (Bungee cord replacement on the nose gear, replacement of a throttle body carburetor with a more reliable Bing etc.) When Bill and I first looked at the plane we found a few more issues with the bungee cords binding the nose gear that has a direct connect to the rudder pedals. This led to replacement of the nose gear suspension from the old bungee system to an upgraded rubber donut system which the manufacture now recommends. With all these upgrades and with Gib's low flight time he asked Bill to do a Flight test. I rode along to take notes. After some more carburetor tweaking my son Mike Sutton and I flew the plane to make sure it was ready for Gib's flight training. Gib has finally been able to do some flight training with Mike and one other instructor and is working towards his Light Sport Pilot's License.

Michael Savino - Vans RV-14A

I have made one Tech Counsel visit. He's making great progress. The tail cone and empennage are complete with the exception of fiberglass fairings. He is waiting for delivery of the wing kit. As an aside, his workshop is a thing of beauty! (Mike noted during the meeting that he's soliciting help and advice, he's feeling overwhelmed!)

John Lind - Cozy Mark IV

John contacted me indicating he and his partner are nearing completion of this plane and asking for direction on the next phase of certification. I referred them to Keith Serks and the last I checked, they are working on Keith's list. Again, a non-member of Chapter 43

Neil Johnson - OneX

Neil purchased this plane complete but without all the prerequisite time flown off. He asked if we could take a look at a few concerns he had and wanted to discuss some possible minor upgrades, so once again Bill Mitchell and I went out to take a look. With the help of an A&P in Boulder, they are nearly ready to have a new Designated Area established, which will enable him to complete the required flight time.

Notes from after the meeting:

At the December 14th Chapter meeting, I spoke with Bruce Lee (Vans RV14-A) and Thomas Schibli (Kitfox 7) about their projects and the possibility of future Tech Counseling/Chapter assistance.

Bill Heltzel, an A&P and a Chapter 43 member, expressed an interest in the Tech Counseling process, possibly becoming a Technical Counselor himself. He was helpful at Steve Tautz's workshop and will accompany me on future visits.

Clearly, there's a lot going on. People are excited about their projects and now that I'm retired, I look forward to being more active with supporting the community of builders. Sometimes, that means going out on a Tech Counsel visit, but it can also be connecting Chapter members that might be beneficial to each other.

Submitted by Jim Sutton

jim.sutton.dad@gmail.com

303-598-4205

SAFETY REPORT – Stephanie Wells or Bill Mitchell or

Stephanie showed a picture of a Piper Cherokee left wing, burned by dragging an overheated (as in ignited) tire. She has experienced low tire pressure symptoms during taxi, another thing to check on before heading out to the runway. It's another example of complacency causing dangerous issues, as also shown in a recent article on Boeing's 737-Max woes. A whistleblower complained to management who ignored him and continued to focus on schedule pressure, which forced shortcuts until Bad Things Happened. The same thing can happen to GA pilots - we get away with something until suddenly we don't, and Bad. Things. Happen.

YOUNG EAGLES – Cliff Hasenbalg

The next Young Eagles event will be on Saturday, March 21, 2020. See <https://www.eaa43.org/young eagles.htm> or the Chapter 43 Young Eagles Facebook page at <https://www.facebook.com/Young-Eagles-EAA-Chapter-43-133824303354328/>.

YOUNG AVIATORS – Scott Serani

It's quiet time for the holidays, but attending Young Aviator Edward attested to the previous week's meeting chaos - 20 drones in a warehouse!

SCHOLARSHIP – Roxie Juul/Zach Malone

Need more signups! Stan Specht commented that 6 years ago the chapter lost then-president Dave Bieseemeier when a wing came off his homebuilt Smyth Sidewinder on the way home from a Wednesday Lunch at BJC. Dave's widow Lyne donates every year to a Chapter Scholarship. Stan makes a point of calling her each year to thank her, and she still follows the newsletter closely.

AIRVENTURE – Mark Your Calendars!

AirVenture Oshkosh, July 20-26, 2020. We ALWAYS Need Volunteers - for KidVenture Rib Building and the Young Aviators' B-25.

NEW/OLD BUSINESS

✓ Annual Banquet! Saturday, January 11, 2020, 6:00pm

Colorado National Golf Club

2700 Vista Parkway, Erie, Colorado 80516

(Cutoff date for signup December 31, 2019 Online or RSVP to Myles Lee)

✓ Annual Dues! \$25.00 for 2020, \$100 for 2020 through 2025 - Myles can let you know if a previous 5-year membership is completed, and prefers checks rather than cash, please.

✓ Cliff Goldstein, 2020 President gave a follow-up to the November Mentor Program meeting. Jim Sutton had suggested an online forum for both builder help and matching pilots with chapter passengers. An email was sent out following the December gathering with links and instructions for members to register. Val Gregory will work on a forum calendar with chapter leadership tasks (when to start organizing the picnic and banquet, for example) and other events. A Forum Manager is also sought. Tim Stansbury is working with EAA National's online roster beta and will have that populated around February.

✓ Model Planes GALORE! Phil went to a model show at Wings Over the Rockies and sold about a third of Don Smith's remaining collection for ~\$120.

ANYTHING ELSE?

Phil reminded us to go to Applebee's after the meeting. Jeff Craddock is looking for hangar space for final assembly of his Kolb UltraStar (single place, ~22" wingspan, ~20' long) .

Meeting closed at 7:36 pm.

Respectfully submitted,
Val Gregory
EAA Chapter 43 Secretary

TONIGHT'S PROGRAM – Ernie LeRoy, Aviation Archaeology Enthusiast

Ernie will be presenting a history of the known facts and theories about the greatest mystery in aviation, the disappearance of Amelia Earhart. A short biography of her life, accomplishments in aviation, her world circling attempt, what we know, what we speculate based on known facts, the expeditions and research done to test those theories.

Phil Brown introduced Ernie as follows: *Ernie is a retired Air Force Colonel who specialized in aircraft maintenance and space operations. He also worked for several aerospace companies; Ford Aerospace, Orbital Sciences Corp, Vanguard Research, Boeing Space Systems. He has a Bachelors in Aviation Management, MBA in Aviation, MS in Space Systems Operations, and an equivalent masters in Military Sciences. He is a research member of TIGHAR - The International Group for Historic Aircraft Recovery, the group looking for Earhart. He is also a member of the Colorado Aviation Historical Society. Their AvAr (Aviation Archeology) Branch re-identifies crash sites in the front range area that have been lost to history.*

Ernie - Tomorrow (December 15) is the 75th anniversary of Glenn Miller's disappearance. AvAr is not a large field - Colorado AvAr re-identifies crash sites in the state. Colorado has been home to a lot of military training, and the AvAr Branch is frequently contacted by municipalities and families to identify crash and facility sites. For example, La Junta Municipal Airport once hosted B-25 training as well as AT-9, AT-17, and BT-13/15. The planes were well-used. A B-25 lost engine #1 on takeoff and crashed on the airfield, killing 3 on the plane and 2 on the ground. AvAr studied the crash report to determine the approximate location, then walked the airfield in search of a damaged wall seen in report photos. They also looked at the soil for aluminum shrapnel, but none was found. They identified a wall with patches matching the reported damage, and La Junta erected a memorial near the wall. There have been numerous military crash sites in Colorado, with many in the mountains.

TIGHAR is looking for Amelia Earhart; one founder, Rick Gillespie, has been working on her disappearance for 30 years. All information presented tonight is public and available online - almost all at tighar.org. TIGHAR has other projects, including Glenn Miller - new info in the past 2 years has allowed for a smaller location window. Also looking for Nungesser and Coli, pilots who tried to fly from Paris to New York before Lindbergh. A P-38 (the Maid of Harlech) has been found near Wales, 30 yards off the beach, now visible following beach erosion.

Amelia was born in 1897 and was working as a nurse treating returning WWI veterans in Canada when she learned to fly in her early 20s, and started setting records. In late '28 she married George Putnam, a well known publicist. She acquired a Lockheed Vega in '30 and was the first woman pilot to cross the Atlantic in

'32. Ernie has a signed copy of her book "The Fun of It". She held numerous aviation records and achievements.

TIGHAR uses scientific methods, testing hypotheses and theories. Amelia acquired a Lockheed 10A Electra in '34 which Purdue University sponsored as a "flying lab", modifying the plane accordingly to extend its range by almost 400%. The last flying commercial Lockheed 10B was retired in the '70s. Ernie showed pictures of Amelia and her crew - she was a good pilot, but a poor navigator, especially around the world over long expanses of water. Fred Noonan was a premier celestial navigator as well as dead reckoning. The plane's radio callsign was KHAQQ, and Noonan's navigation station was in the back of the plane.

In their first attempt, on 17-20 March '37, Earhart and Noonan flew from Oakland, CA to Honolulu, HI, setting a speed record and landing at Wheeler Field (Army). On departure from Honolulu to Howland Island, the overloaded plane pancaked on the runway. Crew and plane took a boat back to the States for repairs. On 20 May '37 they started an eastward attempt, flying continuously for 6 weeks before departing New Guinea for Howland Island. Ernie has a video of Amelia and Fred boarding the plane and taking off. A puff of smoke or dust at the tail of the plane was visible on takeoff - kids on the runway later found some wire (possibly the Lockheed's belly-mounted radio reception antenna?) This was the riskiest leg of the trip, 2560 miles to Howland Island and 2650 miles to Gardner Island, now called Nikumaroro (Niku for short). The plane had an 1100 gallon fuel capacity for 24-27 hours endurance. It was 19-20 hours to Howland, and they flew overnight for better visibility at Howland. Wind direction/speed and other factors not known. Howland Island was the US possession closest to the route from New Guinea to Hawaii. The US sent a Coast Guard cutter, the USCGC Itasca, to Howland to level a landing strip and provide fuel and other supplies. Not much of a target! The Itasca also intended to make radio contact to help Earhart and Noonan home in on the island. There was a question about Itasca's record of prevailing winds. Earhart was unfamiliar with radio use - issues with radio frequencies, Morse code, time differences, possibly NO RECEPTION ANTENNA - Itasca could hear her but she didn't respond to their replies. They were also flying into the morning sun. Two radio frequencies had been coordinated and Itasca could tell which one she was on. The radio logs are available on TIGHAR's website in excruciating detail. Earhart/Noonan used Route of Flight/Line of Position navigation, which works great on land - find a landmark and range 30 minutes perpendicular left or right from the route to find the target. Itasca picked up transmissions from Earhart's call sign starting at 0455, but Itasca's response with requests for frequency change went unanswered. A transmission at 0742 reported 1/2 hour of fuel, no land visible. At 0758 came a very loud transmission stating they were listening but not hearing. Then at 0845 the 337°/157° Line of Position was reported in a desperate tone, but the direction from route was not reported. By 0930 Itasca believed the Lockheed was down. The call sign was heard on radio sets in Amarillo, TX and on the SS New Zealand with the message "down next to Norwich". All bearings crossed SSE of Howland Island near Gardner/Niku. The times corresponded to low tide in the Phoenix Group of islands, which include Niku. Niku was uninhabited with no fresh water. It was later colonized by the British for coconut plantations. Ernie showed a picture of the island's reef at low tide - it was relatively flat and could provide for a landing. There have been numerous expeditions to Niku; it was thought she could have landed and made radio calls until high tide stopped the engines. Ernie showed a map of the island with possible Earhart evidence - a campsite, anecdotal sighting of plane parts, the wreckage of the SS Norwich City. A hand lotion bottle from New Jersey COULD have been Earhart's. Also a liniment container, plexiglass, a compact with

rouge, a broken mirror, the sole of a ladies' oxford shoe in Amelia's size. There were signs of castaway consumption not consistent with indigenous practices. Anything organic won't last long on the island and coconut crabs quickly destroy carcasses. Artifacts include a button, knife, zipper pull - can't tell whose, so not direct proof. Hypothesis - the Electra wreckage washed off the reef and down its face. Found a piece of aluminum and tried to match its rivet patterns to those of an aft window cover known from photos to be on the plane - they were checked against another Electra under restoration and were close.

The Bevington object - a British surveyor's photo of the Norwich City showed something poking up from the reef - landing gear? Ernie showed a diagram of the reef drop-off in the area of the Bevington object/ Norwich City. Side view sonar of the area showed nothing definitive. The Maid of Harlech P-38 was pretty pristine, would the Electra be as well preserved? The Shenandoah dirigible with two escort fighters was found off the California coast in ~1300' of water; the fighter wings' roundels and wingtips were identifiable. In 1940 a partial skeleton was transported from Niku to another island for examination by a colonial family doctor. A Forensic Anthropology article in 2018 reviewed the doctor's written report verifying the skeleton of a European woman.

Other theories - Earhart was a spy for FDR, captured by the Japanese, survived and went to New Jersey where she changed her name and remarried. A July 2017 History Channel special tied the Japanese capture to a photo later found to be from a Japanese tour guide published two years before the Earhart attempt.

A National Geographic /Bob Ballard expedition in the summer of 2019 resulted in a two hour special which aired in October 2019. The expedition tried to find the airplane, or engines that could be identified as Earhart's, but nothing was found.

Why was the flight lost? It was the riskiest leg of the entire flight, following 6 weeks of constant flying. The toughest leg was flown while Earhart and Noonan were mentally and physically exhausted. We may never find her, or something attributable to her, Fred, or the plane. It takes a minimum of two weeks to get to Niku - a week of flight to the Phoenix Group, then an additional week by boat. A question was asked on survival duration without fresh water, but signs of fish and shellfish consumption. Radio evidence exists that Fred Noonan was injured. Generally 7-10 days before dying of thirst. The island was surveyed ~5 days after she went down, nothing was seen except the Norwich City. Ernie is working on the Glenn Miller disappearance (we should ask him back to talk about that!)



From the meeting slides:
How's this for a Young Eagle? (Actually, too young, but so cute!)

EAA CHAPTER 43 BANQUET SIGN UP

ANNUAL CHAPTER BANQUET, JAN. 11, 2020

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 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: _____	Annual Dues or	\$25.00
Name: _____	Save! 5 years for	100.00
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EAA Membership Renewal Date: _____	Total	.00

Are you a:

Technical Counselor	Yes ___ No ___
Flight Advisor	Yes ___ No ___
CFI	Yes ___ No ___

Scholarship donations are tax deductible.

*Please make check(s) payable to:
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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.

2020 Chapter Officers

President	Cliff Goldstein	720-280-2916
Vice President	Zach Malone	443-610-3469
Vice President	Scott McEwen	303-895-5058
Secretary	Val Gregory	303-908-1252
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 Stephanie Wells*
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(Note: *- 2 year terms expire end of 2020, **- 2 year terms expire end of 2021)

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Technical Counselor	Phil Brown (fabric, wood & tube)	303-506-3886
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Flight Advisor	Bill Mitchell	303-427-4025
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Young Aviators Advisor	Pat Miller	303-666-8233
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Refreshments	John & Roxie Juul	303-466-2600
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Scholarship Co-Chairs	Roxie Juul	303-466-2600
	Zach Malone	443-610-3469
Scholarship Fundraising	(Volunteer Needed)	

CFI's in Chapter 43

Phil Brown	303-506-3886
Richard Brown	303-558-0793
Mark Davis	303-425-4080
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Jeff Hinkle	303-550-2291
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Mile High EAA Chapter 43

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Mile High Flyer
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First Class



Meetings 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 meeting.