

# Prez Sez

When EAA rolled out the new SITECORE template one year ago (March 2020), they gave all chapters the opportunity to build their own website from a powerful platform. EAA's main website is built on the SITECORE program. It is a WYSIWYG drag and drop tool to build web pages and content. For EAA chapters, it is free of charge. I thank Tim Sullivan who took on the painful challenge of moving our content from our old site to SITECORE.

EAA information technology staff developed reusage pages including: About Us, chapter photos, chapter event pages, Ray Aviation Scholarship page, Young Eagles, Projects, and more. Then about the middle of February, I poked my nose into SITECORE to see what it was all about. Charlie Becker prepared a dozen short videos on how to use SITECORE. I watched all of those and started to logon and make little changes at first.

I was curious what other EAA chapters had done to enhance their websites. Last month, I looked at 67 chapters in California. 19 chapters are using the SITECORE template, 29 are custom sites, and 19 are broken or suspended sites. My observation is that 30% of the chapter

# GENERAL MEETING INFORMATION

This Wed at 7pm via Zoom. Link provided on *pg*. 3

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websites converted to SITECORE, 40% have kept their custom sites, and 30% are broken or do not have a site.

Of those chapters that took the plunge, only a few have utilized the features available. Our website now has features that brand the site our own, like the top banner with the hangar, and connect the visitor to links for registration to events like Young Eagles, Flying Start and information on scholarships and upcoming events.

#### Other features:

Welcome to our chapter – a welcome message with a Google map that you can zoom in satellite view and get a bird's eye view of the hangar. Someone stuck a red push pin in the roof! Check for leaks!

**Contact Us** - send an email message to chapter email <u>eaa512pvf@gmail.com</u>

About Us - includes Officers, our Silver Award, Technical Counselor, Flight Advisor, and chapter history.

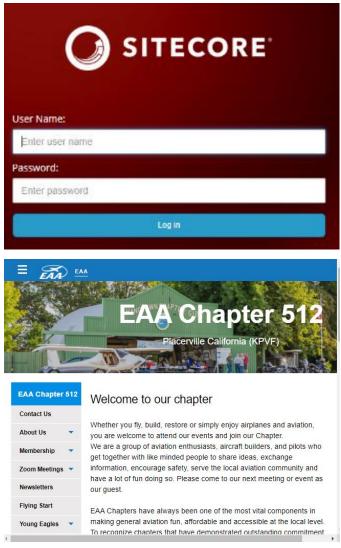
**Membership** - if someone wants to join, they fill out the online form and SUBSRIBE. That gets them in our membership database for distributing email and meeting invitations.

**Newsletters** - all *Strobe* issues are available to read or download as a PDF.

**Flying Start** - we are holding an event on May 15<sup>th</sup>, 2021. a page allows 18ers and older to register for the event.

Young Eagles -Chapter 512 has scheduled an event on June 16. Parents may register for the event, print and sign the legal waiver and bring it to the hangar on the national Learn to Fly day.

**Builder's Log** - look at the progress of Dale Kral and Bob Penzien on their aircraft.



**Scholarship** - Sonny Atkins Scholarship and Ray Aviation Scholarship pages

**Photos** - We have several photo albums just waiting for your pictures. Email them to Jim Wilson or <u>eaa512pvf@gmail.com</u> for uploading. Include a short filename and description.

- At the Hangar
- Member Aircraft
- Pancake Breakfast
- Fly-outs

As we continue to hold Zoom meetings during the next few months, the agenda will be posted on a custom page for each meeting. If you missed a meeting, you may go to the meeting page and get the essence of the meeting content. The February meeting has a video of Paul Dye, the presenter and NASA flight director and Kitplane Magazine editor, and a real-time video of the Mars Perseverance landing on the next day, Feb 18. We held a spontaneous Zoom meeting minutes before touch-down, and we had eight front row seats at NASA mission control room at the Jet Propulsion Laboratory. <u>Very exciting!</u>

I think you can see that despite the pandemic restrictions, the chapter is growing with new members, we continue to engage in online meetings of the board, IMC/VMC Club, and chapter gatherings. And we are near a restart of pancake breakfasts at the hangar. Not in April, but we are planning for May. If you have not been to an online meeting, I sincerely hope you will join us on your computer or iPad and participate in our friendly aviation community. <u>It's easy and fun!</u>

#### **ANNOUNCEMENT**

A LETTER FROM EAA HEADQUARTERS -Congratulations! EAA Chapter 512 has been approved for a 2021 Ray Aviation Scholarship! Due to your chapter's dedication to EAA, youth engagement, and the wonderful application submitted, EAA and the Ray Aviation Scholarship Review Committee is excited to have your chapter onboard in 2021!

#### CHAPTER SURVEY

We are conducting a survey of chapter member's interest in our upcoming activities including pancake breakfasts, Young Eagles, fly-outs and other activities. If you know of a young aspiring aviator between 16 and 19, please complete the survey and submit his or her name for a Ray Aviation Scholarship nominee. Look for the survey in a separate email.

# ZOOM MEETING

# **General Meeting**

### March<sup>th</sup> at 7pm.

Check your email for an official invitation.

# IMC/VMC

## April 1<sup>st</sup> at 7pm

Virtual meeting via Zoom

If you are interested in attending, please email or call Greg Stein to ensure you're on the mailing list to attend.

Email: greg.stein777@gmail.com Call: (916)862-0175



# Cameron Park Airport

Night Operations are now permitted at the Cameron Park Airport. Be careful if it has been a while since you were last night-proficient. And please continue to fly quietly and be safe!

...



Sent in by Nate Prince

# Windmilling v.s. Stopped Propeller

Rob Bulaga

During this month's IMC/VMC meeting, the discussion turned to "What would you do with a single-engine, fixed-pitch, engine-out situation? Is it better to glide with a windmilling propeller or a stopped one?" Opinions were mixed. I promised to look further into it...

I went to the aerodynamicist's bible on drag: Sighard Hoerner's "Fluid-Dynamic Drag". According to Hoerner, "The flow past a stopped propeller is detached from the rear of the blades. Their drag is consequently similar to that of plates in a flow normal to their surface." With a fixed-pitch blade, that cannot be feathered, the drag coefficient of a stopped blade is 1.1.

As an example, a Cherokee 180 has a 76" diameter by 5" chord propeller; a flat plate area of 380 in<sup>2</sup> or 2.64 ft<sup>2</sup>. The best glide speed for a 180 is 85 mph (74 kt, 125 fps). The drag of a stopped propeller is (I know, math is involved, but please bear with me):

#### $\frac{1}{2} \rho V^2 C_d S = D$

 $\boldsymbol{\rho}$  is air density, 0.002377 lb. sec<sup>2</sup> /ft<sup>4</sup> at sea level

V is airspeed in ft/sec

Cd is the drag coefficient; 1.1 in this case

**S** is the blade area of the propeller in  $ft^2$ ; 2.64  $ft^2$ 

Then, the drag of the stopped propeller is 54 lb.

Hoerner states that a windmilling propeller's rotational speed is a function of propeller characteristics, airspeed, and mechanical friction within the engine. The complexity of the problem exceeds the scope of his drag book. However, he does offer a procedure to make a first-order

estimate of the drag of a windmilling propeller. "The power required to drive the engine is in the order of 10% of the rated power at the respective rpm. The efficiency of the propeller acting as a windmill is estimated to be less than 50%. The drag of a propeller in this condition is consequently at least" (again, math is involved):

 $(10\%/50\%) (N_{wind}/N_{rated}) (550 P_{rated}/V) = D$ 

Where:

10% is the estimate for friction power

50% is the upper estimate for propeller efficiency operating as a windmill

**N**<sub>wind</sub> is the windmilling rpm

**N**<sub>rated</sub> is the engine's rated rpm

(his assumption is that friction power is directly related to rpm)

 $P_{rated}$  is the engine's full power rating, in hp

V is airspeed in ft/sec

Back to the Cherokee 180, the assumptions are that it is rated at 180 hp at 2700 rpm and that the windmilling speed at 85 mph is 2000 rpm. (I'll be willing to revise these assumptions with better numbers from anyone out there.)

Then, the drag of the windmilling propeller is **107** lb.

So, the drag of a windmilling propeller is nearly twice that of a stopped propeller!

I will add the caveat that Hoerner says the windmilling prop is a very complex problem. His, and our, assumptions could be way off. It would be interesting if one of our members took their plane up to 5000' over Placerville airport, shut off the engine, established best glide speed, and compared rate of sink with stopped and windmilling propellers. Of course, if you do this test, you have to be prepared to make a dead stick landing if you don't get an engine restart in the air.

# Welcome our Newest Young Eagle & EAA 512member Jaeger Ruckman!

I contacted Hal Stephens on Saturday around 1 p.m. to ask how he'd like to receive the <u>EAA 2021 World of</u> <u>Flight calendar</u> that he purchased to help support our chapter, and to let him know that I received the check he sent in from his recycling efforts which goes directly to our EAA 512 scholarship fund.

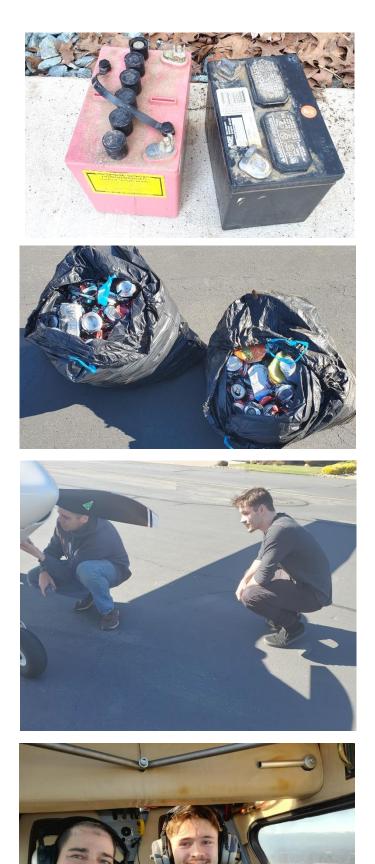
For the record, we provided or administered over \$8,000 in scholarships in the last 6 months of 2020. I think that's something we should all be very proud of! But back to my story...Hal and Nancy were driving, on their way to visit their daughter for her birthday celebration for a few days.

Hal, Nancy, and I chatted for a bit while they drove (with them on blu-tooth, I'm certain), and I asked some questions about the type of things they are able to recycle. I found out that aluminum isn't limited to cans. The most valuable aluminum they get is often from ladders or wheels from cars and trucks. They roped Chuck Stein into cutting up the ladders into more manageable pieces. Thank you, Chuck! Batteries are only lead-acid, which means NOT the flashlight batteries, but rather batteries from cars, lawnmowers, boats, RV's, motorcycles, scooters, etc. And then there's copper, from pipes and wiring.

I was curious to learn how Hal spread the word about our recycling program, and found out it's mostly through our newsletter and word of mouth. I'm thrilled that we've done as well as we have that way, but felt a blast on the Nextdoor app and through a couple of Facebook groups may be worth a shot, and Hal agreed.

Within a few minutes, I had posted about our recycling program on <u>Nextdoor</u>, and on Facebook in the <u>Fans of</u> <u>Cameron Airport group</u>, in our own <u>EAA 512 group</u>, and in El Dorado County Chat.

Within 3 hours I had the promise of 4 batteries, and much more significantly, a connection to a 17 year old Pondorosa student, Jaeger (pronounced Jay-grrr, not like Jaegermeister, which brings back some pretty serious love/hate memories of my 20's... but that's a story for another time) Ruckman, who is passionate



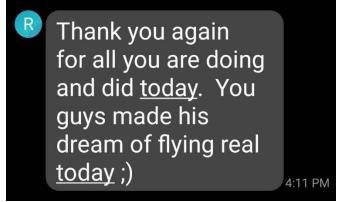
about aviation, and has his dreams set on becoming a fire bombing pilot.

Fast forward 25 hours to Sunday at 2 p.m., when Jaeger showed up for his SURPRISE Young Eagle flight, secretly arranged between me and his dad, Rick.

He had an amazing time with Glenn as his pilot. They flew over Folsom Lake, did straight-and-level flight, climbing and descending turns, and moderate banks. They went over to Placerville and did a landing there, and of course Jaeger took the controls. All in all, 0.8 hours.

Jaeger landed back in Cameron Park with the permagrin we always see on the faces of our Young Eagles, and we are thrilled to have been the ones to take him on his first small airplane ride!

Jaeger and his entire family (mom, Atalie, dad, Rick, and 20-year-old brother Zane) became immediate members of our chapter, and Dad gave our chapter a very nice donation along with this text:



Of course, his donation will go straight into the scholarship fund! Rick also brought 2 huge garbage bags of crushed aluminum cans, and Jim Wilson stopped by at the same time to drop off mail and pick up calendars. off at Hal's, along with Hal's calendar. Conveniently, he grabbed the batteries and cans and will drop them

There's a whole LOT that happened between the time I asked Hal how he'd like to get his calendar, and just over a day later, when the calendar was dropped off! That's what I call a fruitful conversation!

Jaeger had to get to work, but we're going to be meeting again next weekend to discuss his career path. In the meantime, he's going to get started on the Sporty's Learn to Fly program. I'm sure by the time we meet, he'll be well on his way to earning his free flying lesson (\$130 value) which is provided to him when he completes the first 3 modules of that program I want to specifically thank our very own Colonel John Crocker, who may not realize that he lit a fire under me in our last board meeting. In that meeting, John talked about the importance of each and every one of us being open to recognizing that gleam in a young person's eye when they absolutely light up talking about aviation. Being willing to step up when we come across someone who's ready, who is craving guidance and a mentor, and helping them in taking the steps along their path, is the way we will ensure the longevity of our chapter, and of G.A. in general.

Please help to welcome Jaeger and his family to our EAA Chapter!

If you want more information about calendars, recycling, fundraising, Young Eagle flights, or membership in our chapter, please feel free to reach out to me at <u>judiEAA512@gmail.com</u>

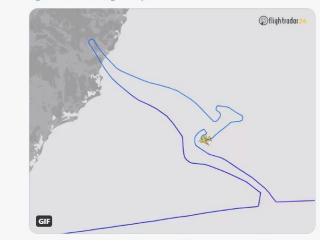
## Tells Creek B-17C Crash Circa

1941 sent in by Dave Lugert





Flightradar24 ② @flightradar24 · Jul 22, 2020 · · · · Qantas said goodbye to its 747 today in style beginning with a low altitude tour of Sydney, a quick visit to retired fleet mate VH-OJA, and then a massive Qantas 'Roo' before heading across the Pacific. flightradar24.com/blogo/final-aan...



Sent in by Kim Stein

# 2021 VETERAN & VINTAGE aircraft displays PLACERVILLE AIRPORT

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SATURDAY & SUNDAY 9AM-1PM

> APRIL 3, 4 MAY 1, 2 JUNE 5, 6 JULY 3, 4 AUG 7, 8 SEPT 4, 5

Sponsored By EAA Chapter 512

#### IN CONJUNCTION WITH EAA 512 FAMOUS PANCAKE BREAKFASTS

(social distancing permitting)

### <u>Owners must sign-in</u> <u>aircraft each date</u>

Visitors, please sign in



On the edge of the world. Pilot Log-KPVF March 2021 Solo sunset. Audrey Brand

### Non-Flight Pilot Training

NAFI MentorLIVE! demonstrates one example of the type of non-flight pilot training that we all should be spending 3-5 hours a week on and also taking notes in case we need to refresh ourselves in the future. Pilots need to be safe, proficient, and ready for each flight and not just for check rides and flight reviews.

It takes this kind of commitment each week along with at least an hour of specific flight maneuver refreshing to ensure all ACS and AC61 98D considerations are covered. Yes, sometimes you have to adjust the above schedule. Life is difficult!

Dig 'em out now and make your own personal annual training plan! Also don't expect your instructor to plan everything for your next flight review. Do some weekly homework and preplan your own starting 2 years ahead of time. Your instructor will be impressed and more importantly, you'll be more confident in yourself as a safe pilot.

> Don Knight HIGHFLY4U@gmail.com Cell/Text 603-931-8108

# Contacts

## Board of Directors

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#### Director at Large:

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(must read)

Add value to the newsletter; contribute your own stuff. Anyone can do it. It's easy, it's fun, it's publishable.

Email Content [to Helen] at: more\_right\_rudder@yahoo.com

### INCLUDE

- 1. Article, Link, Ad, Image, Misc.
- 2. Title (or I'll make one up)
- 3. Date (current or evergreen)
- 4. **Notes** (additional publishing details & context, or I'll be creative on your behalf)

# **DEADLINES 3RD SUNDAY**

For anything you'd like to share, The Strobe is here to propagate the Spirit of Aviation

Sincerely

The Editor

#### EAA Chapter 512 Monthly General Gathering February 17, 2021 MINUTES

#### Meeting called to order at 7:04 PM by: Jim Wilson

#### Number Present: 23 Zoom connections

Guests: Paul Dye (speaker), Amelia Korveziroska, Ray Arceneaux, Makar Loktyukin, Gerhard du Toit

#### **MEMBER PROJECTS & ANNOUNCEMENTS:**

- Will Mathews Successfully completed his Instrument checkride last week. Has his CFI checkride scheduled for next week.
- Greg Stein Also successfully completed his Instrument checkride last week. Asked about where he might find an aircraft and school to work on his twin rating.
- Judi Gordon (treasurer) Annual dues are due.
- Jim Pinkowski (vice president)
  - The Capital Airshow is currently planned as a 3-day event; September 22-24. To provide social distancing, there will be limited ground displays this year. However, a great airshow is anticipated and fly-ins are encouraged.
  - Mike Busch, a pilot and aircraft owner for more than 50 years and arguably the bestknown A&P/IA in general aviation, is available to be a guest speaker to our Chapter. We are soliciting questions that we would like to ask him? Please send questions to Jim (jamespinkowski@comcast.net) or Helen Brand (more right rudder@yahoo.com).

#### PRESIDENT'S ANNOUNCEMENTS

- The Chapter has a new, updated website; <a href="https://chapters.eaa.org/eaa512">https://chapters.eaa.org/eaa512</a>. Please check it out. We will be adding to the Builder's Log section and would appreciate your input.
- Foothill Flight Center, in Cameron Park, is offering Private Pilot and Instrument Ground Schools.

#### PRESENTATION

- Paul Dye, editor at Kitplanes magazine and the longest serving NASA Flight Director, discussed "Tips from Mission Control", presenting advice from the world of aerospace-operations that can be directly applied to the design, construction and operation of homebuilt aircraft. Safety and Risk Management were emphasized, with numerous stories from NASA's mission control.
- Jim Wilson presented a few short videos about the rover mission, scheduled to land on Mars on Feb 18.

#### Meeting adjourned at 8:46 PM by: Jim Wilson

#### EAA Chapter 512 Monthly Board of Directors March 10, 2021 Minutes

#### Meeting called to order at: <u>7:05</u> p.m. by: Jim Wilson

#### **Board Members Present (Online Meeting):**

- √ Jim Wilson, *President*
- V Jim Pinkowski, Vice President
- √ Judi Gordon, *Treasurer*
- V Rob Bulaga, Secretary

#### **Other Members Present**

- √ John McPherson
- ✓ Dale Kral
- ✓ Jaeger Ruckman

- V John Crocker, General Director
- √ Dave Lugert, General Director
- √ Al Herron, Past President
- ✓ Dick Wampach
- ✓ Rick Ruckman

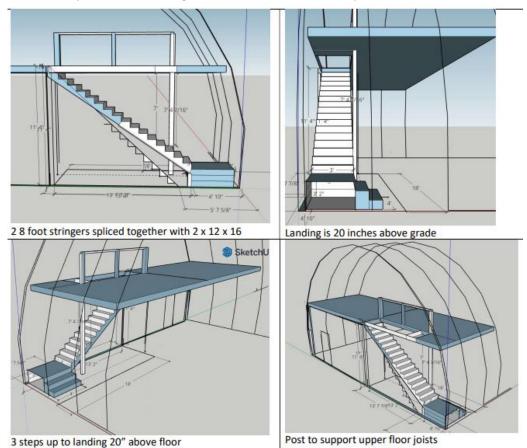
#### Business from the Floor, Changes to Agenda - none

#### Approval of Minutes - approved

#### **Board Member Reports**

- Jim Wilson President
  - Donations
    - Rick Ruckman donated \$100 to the Chapter as a thank you for his son's Young Eagle flight, given by Glenn Gordon. Rick and his son, Jaeger, are new Chapter members and attended this Board Meeting to introduce themselves.
    - Cameron Park Community Foundation donated \$100 to the Chapter.
    - Troy Eberlein donated \$100 to the Chapter.
  - Events Update
    - Jim played a 3 minute video where Charlie Becker discussed EAA upcoming public events: Flying Start, May 15; International Learn to Fly day, June 12; and a webinar on Food Service Protocols, March 24.
  - Chase Bank Signature Card
    - Jim still needs to sign as President
  - Ray Aviation Scholarship
    - Andrew Gordon's progress report was submitted 2/3/2021 for final payment (\$1500), which has been received. Andrew has passed his written, completed his X-C flight, and is in final preparations for check ride later this month. A final report is due after check ride.
    - Our application for a 2021 Ray Scholarship was submitted on 1/31/21. Last week we were notified that we will be awarded a scholarship. Our Scholarship Committee will review candidates and make recommendations to our Board. We currently have 3 candidates for this scholarship.
  - Website Updates
    - Jim completed major improvements to the Sitecore website and sent an announcement from MailChimp. He gave a quick tour of the new website, chapters.eaa.org/eaa512, for those of us that have not yet visited it.
    - Jim reports that of the ~70 EAA chapters in California, about 20 have updated their websites with National's software; ~20 are sticking with their current websites; and, the remaining have no websites. Jim has reached out to other chapters to offer assistance in revamping their sites.

- Chapter Goals
  - Survive COVID-19. We will continue to hold virtual meetings (Zoom) for Board, General, & IMC/VMC, for the foreseeable future.
  - Grow membership by at least 5%.
  - Continue planning hangar improvement projects:
    - Loft railing (Tim)
    - New stairwell (Doug) The current stairwell (45 degree 8" rise x 9" tread) is not safe, and not to code. We plan to replace it with a stairwell, (34 degree 6.75" rise x 10.5" tread) 3 steps to 3 x 4' landing, 90 d turn with 16 more steps.



- Skylights Replace 6 fiberglass skylights with 4' x'4' wood frame with flat plexiglass or safety glass routed in. Or, replace with 5 dormer style wood framed vertical windows with the center panel on west side being replaced with a door and enclosed entry to enclose compressor on existing concrete slab.
- Workshop/Storage Investigate 8' x 8' x 20 shipping container modified with doors and windows for building projects and storage of tools
- Pancake Breakfasts Plan for pancake breakfast with modifications, plexiglass barriers, limited capacity seating, serving protocols, etc. beginning in May.
- Display Days Host Display Days starting in April. As host, we will provide coffee & donuts and will greet aircraft owners.
- O Jim Pinkowski Vice President
  - Leadership Webinars Without in-person Leadership Bootcamps or Training Seminars, EAA has been hosting Leadership Webinars. In order for the Chapter to get credit for attending these webinars, we need a board member to attend 6 events (at least 3 live and the remaining recorded). Although we have attended at least this many, it has been a group effort; no one member has attend 6 events. Due to our past performance, however, EAA National will credit us with our attendance.

- Guest Speaker The guest speaker at this month's General Meeting will be Jeff Edwards. Jeff was Flight Instructor of the Year in 2003. He is an expert on accidents, incidents, and lessons learned. The exact content of his talk will be decided this weekend and posted in the Strobe.
- Judi Gordon Treasurer, Membership
  - Banking Account Balances as of 2/26/2021:
    - Cash and checks on hand: \$983.90.
    - Chase Checking 6001: \$17,300.40 (of which \$5,251.45 is earmarked for scholarship funds of which \$500 is earmarked for Tobias Klein) \$1,500 is Ray Scholarship money that has since been paid to the flight school.
    - Chase Savings 8668: \$2,922.22 (Airport security account held in trust. Not property of EAA 512)
    - Current total: \$18,284.30 plus \$2,922.20 in Airport Security Account.
  - Annual Financial Review Is rescheduled for this weekend.
  - Membership
    - We have 5 new members in 2021, exceeding Jim's goal of growing the chapter by 4 members (5%): Amelia Korveziroska, Mehrdad Mehranpour, Brian Rauchfuss, Jaeger Ruckman, and Nathan West. 4 of the 5 are 17 and 18 year olds!
    - We have 50 paid members and 32 unpaid members. Email response was good (went from 18 paid, to 50 paid), and I will send out prepaid envelopes to anyone who still hasn't paid after the General Meeting next week.
  - Young Eagle Will Matthews, my Eagle, just got his CFI.
  - Calendars Due to high demand we ordered a 3rd lot of calendars. We now have 7 available for sale.

#### **Comments, Announcements, and Other Business**

- **Display Days** Dick Wampach reminds us that Display Days will start on the weekend of April 3-4. The Chapter, through Jim Wilson, will supply coffee and donuts.
- Wing Cradle The Gordon's have donated a Wing Cradle to the Chapter. This is essentially a sling to support your wings during the construction phase of your project.
- **B-17 Crash Site** In 1941 a B-17C crashed in El Dorado county. The county is touting the memorial site as a "Place to Visit". Check it out.

Meeting adjourned at <u>9:19</u> p.m. by: Jim Wilson