THE WINDSOCK

November 2022

Editor: Frank Huber | Layout Editor: Frank Huber

The President's Flight Deck

Hello Chapter Members! November is upon us and our Chapter is as busy as ever. We hosted a successful Chapter breakfast on November 5th, and it was wonderful to see Chapter members get together to enjoy aviation camaraderie. These events are very fun to volunteer at, and any amount of time you can donate is appreciated! Our next breakfast is December 3rd.

As you may know, EAA 237 is a supporter of the Tree of Hope organization which collects and donates toys to hospital bound kids. Our Chapter collects toys and brings them to the St. Cloud airport on December 3rd, and then we return with sorted bags of toys ready to be distributed to three area hospitals. Our collections were a bit slim during the previous two years due to the pandemic, so it would be wonderful if we had several vehicles filled with toys to bring to the event. We have a collection box in the Chapter building for this purpose, but toys can be left on the tables as well. Consider bringing a toy to our Chapter breakfast and we can deliver it to the event that day! Here is a link to their web site, https://holidaytreeofhope.org/.

I am often asked what scholarships are available from EAA for youth and sometimes for adults. Of course, I am always proud to mention the success of our Ray Aviation scholarship program run by Frank Huber, but we are limited to the number of students we can accept into the program. Well, while pursing the November issue of *AOPA Pilot,* there was an article about nearly $1 million of scholarships available to aspiring aviators, mostly for youth, but there are some for adults as well! I encourage you to visit https://www.aopa.org/training-and-safety/students/aopa-flight-training-scholarships, and check out the scholarship options. Our next Chapter meeting will be held on Monday, November 28th. Dinner hour begins at 6:00 PM, followed by our business meeting at 7:00 PM, and possibly a guest speaker at 8:00 PM. More details will follow as the date approaches.

Our Holiday party is scheduled for December 19th ! This is always a very fun Chapter meeting in which we honor the hard workers of the Chapter, and enjoy a bountiful dinner! Details to follow.

Until next month, remember to introduce someone to the great world of aviation, and invite them to an EAA 237 event.

Kevin

CHAPTER 237 BLAINE, MN EAA

YOUR CHAPTER BOARD OFFICIERS

Kevin Sislo, President
Robert Henkes, Vice President
Ellen Quist, Secretary
Mark Heule, Treasurer
Charles Jasicki, Director
Michael Grzincich, Director

Contact the Board at: board@eaa237.org

EAA CHAPTERS GOLD 2019

Our chapter held another successful Young Eagles event on a cold Saturday on November 12 out of the Atlantic FBO. We flew 36 Young Eagles on 21 flights. There were 9 girls and 27 boys, who braved the cold weather to go flying with our six pilots: Joe Gmitter, Michael Grzincich, Mark Heule, Chuck Jasicki, Glen Martin and Mike Miller. They were assisted by six ground crew members. Michael says that there were 40% no shows on that cold winter day. This will be our last Young Eagles event for 2022 as there will not be an event in December. Many thanks to all our volunteers this year, who have made this another very successful year for our Young Eagles program! Also a big thanks to Atlantic Aviation for hosting all of our events at their great facility and to our Young Eagle Coordinator Michael Grzincich, who makes it all happen!

Our Chapter 237 BSA Aviation Explorer Post has a busy schedule for the next few months. They received a tour of the Sun Country Operations Center on Friday, November 4. They will be holding elections at the Friday, November 18 meeting. On Friday, December 16, they will getting a tour of the C&P hangar, which is full of WWII military aircraft, including a beautiful B-25, a P-82 Twin Mustang project, numerous L-Birds and other projects. On Wednesday, December 28, they will be getting a tour of Wipaire at Fleming Field. Wipaire is the largest manufacturer of airplane floats in the world. Here's a link if you'd like to read more about the history of the company: https://www.wipaire.com/about-wipaire/the-history-of-wipaire-inc. If you know a young man or woman interested in aviation be sure to tell them about our Aviation Explorer Post.

WHAT OUR MEMBERS ARE BUILDING, RESTORING AND FLYING

Rich Hoch's BD-5

Rich Hock's BD-5 successfully passed the airworthiness inspection done by Steve Wagner, on Tuesday, October 25 The aircraft had been ready for the inspection since last year, but was delayed because of Covid-19 slowing down the process by the FAA. The BD-5 has been around since the 1970's designed by Jim Bede, approximately 6000 kits were produced before he went out of business. They have been powered by many different engines from jets to two cycled snowmobile engines. Rich got his kit from Arlo Habben who lived in Rochester, MN, who by the why had 43 kits from non-started to 50 % completed, minus engines. Rich had seen ads in his father's flying magazines and always wanted one. He started the kit in 2010. In the beginning, like most people who purchased one, he really didn't

know this was such a complicated project. But he became friends with Arlo and once or twice a month he would drive to Rochester and they would look over the plans and discuss the best way to move forward. He also met another builder and the drive system designer Jerry Kauth and so it began.

The engine systems was the major problem in the bankruptcy of the company. No good engine was available to make it fly. Arlo has been playing with a Geo metro car engine, a Suzuki 1.3-liter 4 cycle for the plane. During their time together they build up a test engine and had it running in one his junk planes to prove it out. The Suzuki engine is the one Rich is using, with some upgrades. It was sent out and rebuilt and up graded to 100 HP from the stock 72 HP. He installed a SDS Simple Digital System fuel injection and electronic ignition system and also had a tuned header exhaust built. He estimates the power between 115 and 120 HP. Rich is sorry to say Arlo passed away a few years ago and never saw his completed plane. The plane weighs in at 563 lbs. with a narrow 2-inch window on the weight and balance. He is running a 46-inch propeller and will not know final performance numbers until he test flies it. Estimated speed of 200 knots at 4 gallons of fuel per hour using 100 LL is expected, but he will see. The workmanship on the airplane is outstanding. Rich has built a beautiful airplane that has solved the age old problem of the BD-5 with a rock solid engine. With winter arriving, Rich may have to put off his test flying until spring or trailer it some where south. *Frank Huber*

The Finer Points

The BOX CANYON Turn - LEARN TO TURN THE AIRPLANE IN THE SHORTEST HORIZONTAL DISTANCE.
https://www.youtube.com/watch?v=MlCK97CWd-A

Airplane Rudders! Learn to FEEL coordination in the airplane and avoid stall spin flying accidents
https://www.youtube.com/watch?v=zdZ2Rwq86vA

boldmethod

Abnormal Preflight Leads To Cessna 172 Taking Off With The Tow Bar Attached
https://www.boldmethod.com/learn-to-fly/aeromedical-factors/cessna-172-takes-off-with-the-tow-bar-attached/

Ground Effect: Why Your Plane Floats During Landing
https://www.boldmethod.com/learn-to-fly/aerodynamics/ground-effect-why-your-plane-floats-during-landing/

Floating Down The Runway? Here's How To Fix It.
https://www.boldmethod.com/learn-to-fly/maneuvers/how-to-fix-floating-down-the-runway-and-land-on-your-point/

Why Engine Fires Happen More Often In The Fall
https://www.boldmethod.com/learn-to-fly/systems/why-you-are-more-likely-to-have-an-engine-fire-during-start-over-prime-fall/

How To Fly A Flawless Traffic Pattern At A Non-Towered Airport
https://www.boldmethod.com/blog/lists/2022/10/how-to-fly-a-flawless-traffic-pattern-at-a-non-towered-airport/

Are Your Short Field Landings Checkride Ready? Check Out These 9 Tips To Pass Without A Doubt
.https://www.boldmethod.com/blog/quizzes/2022/11/are-your-short-field-landings-checkride-ready-check-out-these-nine-tips/

How To Avoid a Stall-Spin Accident In The Traffic Pattern
https://www.boldmethod.com/learn-to-fly/maneuvers/where-stall-spin-accidents-happen-the-most-often-in-flight-phase/

5 Fall Preflight Items To Watch Out For
https://www.boldmethod.com/blog/lists/2022/11/five-fall-preflight-items-to-watch-out-for/

Frost Contributes To Cessna 172 Takeoff Accident
https://www.boldmethod.com/learn-to-fly/weather/how-frost-contributed-to-takeoff-accident-cessna-172/

7 Ways To Find An Airport Hidden By Nighttime Darkness
https://www.boldmethod.com/blog/lists/2022/10/seven-ways-to-find-an-airport-hidden-by-nighttime-darkness/

boldmethod

Quiz: Do You Know These 6 Common IFR Enroute Chart Symbols?
https://www.boldmethod.com/blog/quizzes/2022/10/6-ifr-enroute-chart-questions/

How To Use A 'VFR-On-Top' Clearance
https://www.boldmethod.com/learn-to-fly/regulations/understanding-and-how-to-use-a-vfr-on-top-clearance/

Quiz: Do You Know What These 5 Uncommon Enroute Chart Symbols Mean?
https://www.boldmethod.com/blog/quizzes/2022/11/do-you-know-what-these-five-uncommon-enroute-chart-symbols-mean/

How To Enter A Holding Pattern
https://www.boldmethod.com/learn-to-fly/regulations/how-to-determine-your-holding-entry-procedures/

6 Maneuvers You Should Practice On Your Next Flight
https://www.boldmethod.com/blog/lists/2022/11/six-maneuvers-to-practice-on-your-next-flight/

5 Ways To Join Final On An Instrument Approach
https://www.boldmethod.com/blog/lists/2022/11/five-ways-to-join-final-on-an-instrument-approach/

Can You Circle-To-Land From An ILS Glide Slope?
https://www.boldmethod.com/learn-to-fly/maneuvers/can-you-circle-to-land-from-an-ils-approach-to-landing/

How Does An Attitude Indicator Work?
https://www.boldmethod.com/blog/learn-to-fly/systems/how-does-an-attitude-indicator-work-round-dial-and-glass/

Quiz: 5 Questions To See How Well You KnowThese IFR Regulations
https://www.boldmethod.com/blog/quizzes/2022/10/five-questions-to-see-how-well-you-know-these-ifr-regulations/

QUICK LINKS

AIR FACTS

the journal for personal air travel - by pilots for pilots

The $20/hour Cessna 172 experiment—Update OCTOBER 31, 2022 BY JAY O'DONNELL
https://airfactsjournal.com/2022/10/the-20-hour-cessna-172-experiment-update/?trk_msg=LR4NR01MHRAK5FQPJL7GFQ7HTK&trk_contact=RMPCRR64F9CCIR5GOMICQNF7OC&trk_sid=DHUO6G29C6S66RP163EMUP30NG&trk_link=19FD6J0PP8RKP32APDG2S45TDO&utm_source=listrak&utm_medium=Email&utm_term=The+%2420%2fHour+Cessna+172+Experiment—Update&utm_campaign=F22111A&utm_content=Cirrus+Accident+Trends+%2b+The+%2420%2fHour+Cessna+172

Memories of flying the Boeing 727 "three holer" BY JEFF HILL
https://airfactsjournal.com/2022/11/memories-of-flying-the-boeing-727-three-holer/?trk_msg=LR4NR01MHRAK5FQPJL7GFQ7HTK&trk_contact=RMPCRR64F9CCIR5GOMICQNF7OC&trk_sid=DHUO6G29C6S66RP163EMUP30NG&trk_link=UOAN8SKB4AVKR7DMCPGSVLF2QS&utm_source=listrak&utm_medium=Email&utm_term=Memories+of+Flying+the+Boeing+727+&utm_campaign=F22111A&utm_content=Cirrus+Accident+Trends+%2b+The+%2420%2fHour+Cessna+172
Editors note: The later 727-200 had larger engines, which greatly improved the aircrafts performance.

Flying a Russian biplane through Alaska BY DOUGLAS FULTON
https://airfactsjournal.com/2022/10/flying-a-russian-biplane-through-alaska/?trk_msg=82F89VJBD4F4P29KVPGS5D6U10&trk_contact=RMPCRR64F9CCIR5GOMICQNF7OC&trk_sid=4307TAJKM9R1BKMAJ8HUDOT96K&trk_link=NLVK6COQL2HKH3B2KSPI2A31BO&utm_source=listrak&utm_medium=Email&utm_term=Flying+a+Russian+Biplane+Through+Alaska&utm_campaign=F22104A&utm_content=Flying+A+Russian+Biplane+Through+Alaska

Engine failure: how to predict it and how to react BY DAVID GISSEN
https://airfactsjournal.com/2022/11/engine-failure-how-to-predict-it-and-how-to-react/

Glass cockpits – don't make it harder than it really is BY JOHN ZIMMERMAN
https://airfactsjournal.com/2018/03/glass-cockpits-dont-make-it-harder-than-it-really-is/?trk_msg=82F89VJBD4F4P29KVPGS5D6U10&trk_contact=RMPCRR64F9CCIR5GOMICQNF7OC&trk_sid=4307TAJKM9R1BKMAJ8HUDOT96K&trk_link=BOOMTVNE2IJK156MAIB06V2B9G&utm_source=listrak&utm_medium=Email&utm_term=Glass+Cockpits+–+Don't+Make+It+Harder+Than+It+Really+Is&utm_campaign=F22104A&utm_content=Flying+A+Russian+Biplane

MASTERY FLIGHT TRAINING, INC
PURSUE MASTERY OF FLIGHT

Thomas P. Turner ATP/CFI/CFII/MEI

I've noticed a trend in Loss of Directional Control on the Runway (LODC-R) and runway excursion mishaps that seems to peak in the transition in seasons between winter and spring each year. There's an autumnal equivalent of seasonal change and in the U.S. we're in it now. Look at these events as reported by the FAA's preliminary accident reporting website in the past two weeks:

1. Cirrus SR22 "couldn't stop in time when landing and went off the end of the runway…."
2. Boeing A75N (Stearman) "landed, veered off [the] runway due to [a] wind gust and flipped over…."
3. Aeroprakt A22LS "practicing touch and goes, went off the runway, hit a sign and flipped over…."
4. Cirrus SR 20 "landed and veered off [the] runway into a ditch…."
5. Piper PA30 "landed, veered off [the] runway into rough terrain. [The] gear collapsed…."
6. Gulfstream AA-5A "on landing veered off [the] runway…."
7. Cirrus SR22 "on landing experienced a gust of wind and was pushed off the runway into the grass damaging [the] landing gear…."
8. Howard DGA-15P "slid off the runway due to a gust of wind damaging [its] nose and tail…."
9. Piper PA28 "incurred a prop strike and veered off the runway during landing…."
10. Piper PA28 "experienced a runway excursion, incurred a prop strike and [its] gear collapsed…."
11. Cessna 140 "lost control during landing, ran off the runway [and its] right landing gear separated from the aircraft…."
12. Cirrus SR22 "on landing, veered off [the] runway and struck a runway light…."
13. Cessna 182 "veered off [the] runway during departure…."
14. Aeronca 7AC "landed and ground looped…."

1. Cessna 172 “veered off [the] runway on landing….”
2. Cub Crafters CCK-2000 “during touch and go experienced a gust of wind, forcing [it] off [the] runway into [the] airport windsock….”
3. Cirrus SR20 “lost control on landing, damaging gear and wing….”
4. Boeing PT-17 (Stearman) “lost control on landing…and ground looped….”

There were others attributed to hard landings and landing gear collapses that may have begun as a LODC-R set-up that manifested in the stated (preliminary) cause as well. Even without those extras, however, this is a disappointingly long list.

A good landing, they say, is the result of a good approach. A good approach is one in which on final approach the airplane is:

- On speed (speed and angle of attack trending toward attaining the 50-foot/over-the-threshold speed at the point you cross the beginning of the prepared runway surface);
- On glidepath (a constant angle of descent to the point where you’ll being your landing flare);
- In configuration (flaps and, as appropriate, landing gear set as appropriate for the point in your approach, and set for landing before reaching the runway threshold);
- In alignment (lined up with the extended runway centerline between your main wheels); and
- With zero sideslip (i.e., maintaining that runway alignment).

Evaluate your approach against all of these criteria—flying “in the slot.” If you fail to meet one or more when below about 400 feet above runway threshold height, **go around**. ***Don’t wait*** until you’re in the flare while behind the airplane to decide.

Once in the flare, if you’ve misjudged its timing, or if a gust of wind causes you to overshoot your intended touchdown zone or begin a sideways drift, **go around**. ***Don’t wait*** until you’ve made ground contact too far down the runway to stop in time, you’re drifting off runway alignment toward the edge of the runway, or you’re touching down with aside load on the landing gear.

Do not force the airplane to touch down where you want. This may cause a bounce or overload the landing gear to failure. It may cause wheelbarrowing, that is, LODC-R from too much of the airplane’s weight on the nosewheel and not enough on the mains for lateral control. It can contribute to a ground loop in a tailwheel airplane.

If the airplane bounces follow what I call The One Bounce Rule…and you cannot smoothly recover after the first bounce, **go around. *Don’t wait***.

After a smooth, on target touchdown, gradually add in crosswind control as the airplane decelerates. The slower you go, the more control deflection you need to compensate for a given wind because the controls become less effective with lower airflow. As you reach a normal taxi speed you’ll need full, taxi crosswind controls.

Don’t attempt to turn onto anything other than a high-speed taxiway until the airplane has slowed to a normal taxi speed. Turning too fast puts a side load on the landing gear that can cause immediate failure or contribute to fatigue that, over time, can build until the gear breaks or collapses even while under a normal load.

I find myself reviewing the criteria for final approach, conditions that call for a go-around, the One Bounce Rule and techniques for crosswind control during rollout fairly often. When I see a list of LODC-R events like that above in such short order, maybe I need to review them even more often.

Comments? Questions? Relevant experiences? Let us learn from you at mastery.flight.training@cox.net.

EAA 237 COMING EVENTS

* IMC/VMC Club meeting will be held on Thursday, November 17 via Zoom. The VMC meeting begins at 6:30 pm and the IMC meeting begins at 7:30 pm. An email with a link to the meeting will be sent to all members prior to the meeting.

* Chapter 237 Explorer Post meetings will be held on Friday, November 18, beginning at 7 pm.

* Chapter 237 monthly meeting will be held on Monday, November 28. Dinner will be served at 6 pm and the meeting will begin at 7 pm. **The meeting will be our annual membership meeting.** A table will be set up with the following services: Mark Heule will be handling membership dues payments (check or cash preferred), Bob Henkes will be checking the member's information in the roster management system, Dave Peterson will be checking the member's information in the MailChimp email system, and Don Heutti will be available to take pictures for the chapter website.

* The Chapter will be holding a breakfast Aviation Social on Saturday, December 3 from 7:30 am until 11:00 am. Breakfast includes pancakes, sausage, scrambled eggs, fruit, coffee and juice. It is all you can eat for just $7.00. PICs of aircraft flying in and kids under 12 are free!

* The Tree of Hope toy collection will be taking place at the St Cloud Airport on Saturday, December 3 from 8am to 12pm.

* Chapter 237 Aviation Explorer Post meetings will be held on Friday, December 2 and December 16 beginning at 7pm

* The IMC/VMC meetings will be held on Thursday December 15 via Zoom. The VMC meeting begins at 6:30 pm and the IMC meeting begins at 7:30 pm. An email with a link to the meeting will be sent to all members prior to the meeting.

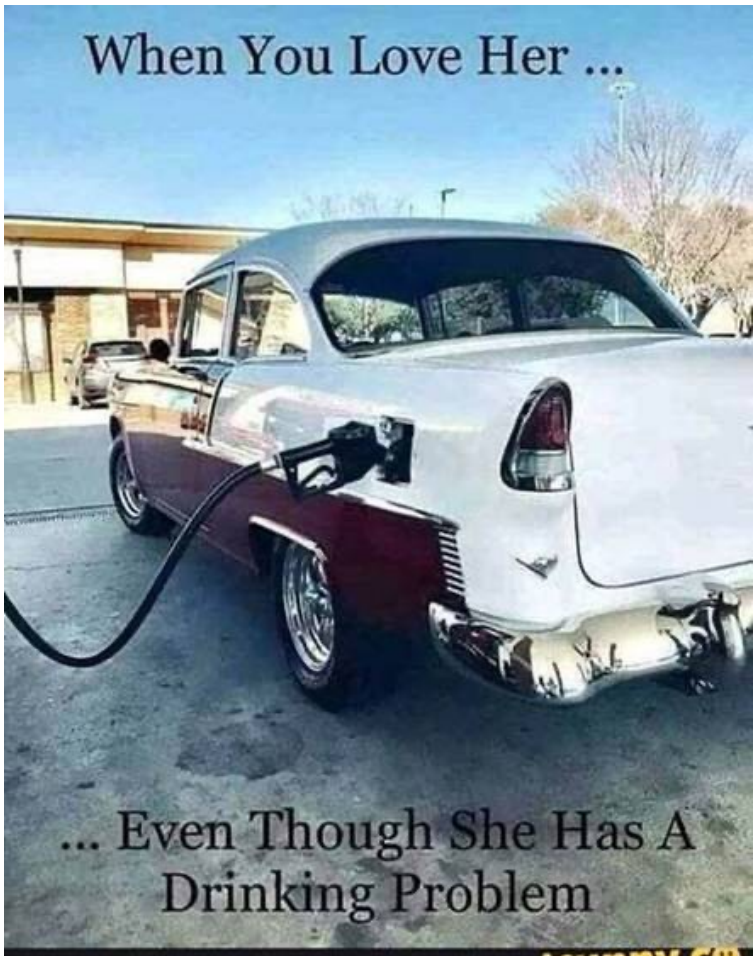
* The Chapter 237 Annual Christmas Party will be held on Monday, December 19 beginning at 7pm. Members are asked to bring a side dish or a desert.

* RECOMMENDATION: Because of the possibility of changing events, we recommend checking our Chapter Events page and our Monthly Events Calendar on our website for the most current information.

* _____

On The Lighter Side

* She says I keep pushing her buttons. If that were true, I would have found her mute button by now.
* Common sense is like deodorant. The people who need it most never use it.
* I put my scale in the bathroom corner and that's where the little liar will stay until it apologizes.
* Apparently RVSPing to a wedding invitation "Maybe the next time" is not an appropriate response.
* Sometimes God puts you in the same situation to see if you're still a dumbass.
* I am responsible for what I say, not what you understand.
* As I watch this generation try and rewrite our history, I'm sure of one thing: It will be misspelled and have no punctuation.



Long ago in a land far far away!

And that, my friends, was car seat safety in the 70s!

CHAPTER 237 SIMULATOR PROGRAM

Dave Peterson Simulator Program Manager

Flight Simulator Rudder Pedal Repair

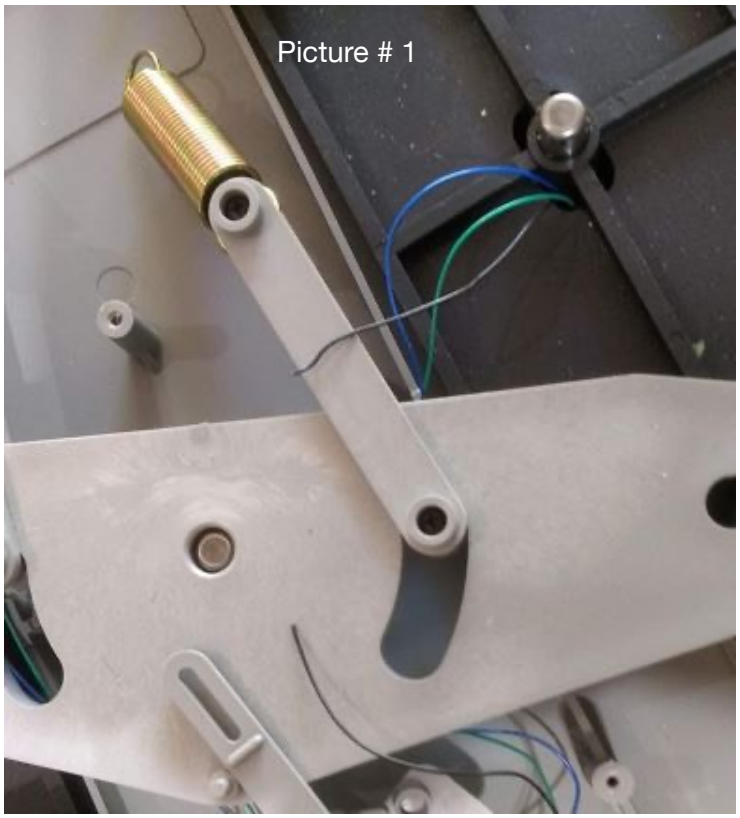
This last spring a couple of our users of the chapter's flight simulator reported that they were having a problem keeping the simulator airplane on the runway centerline when attempting to takeoff. It would veer off to the left even when applying full right rudder. I first took a look at the sim's software calibration settings for the rudder pedals, but everything looked OK. After looking at a couple of other things in the software and using a third-party diagnostic software tool, it was determined that there must be a hardware problem.

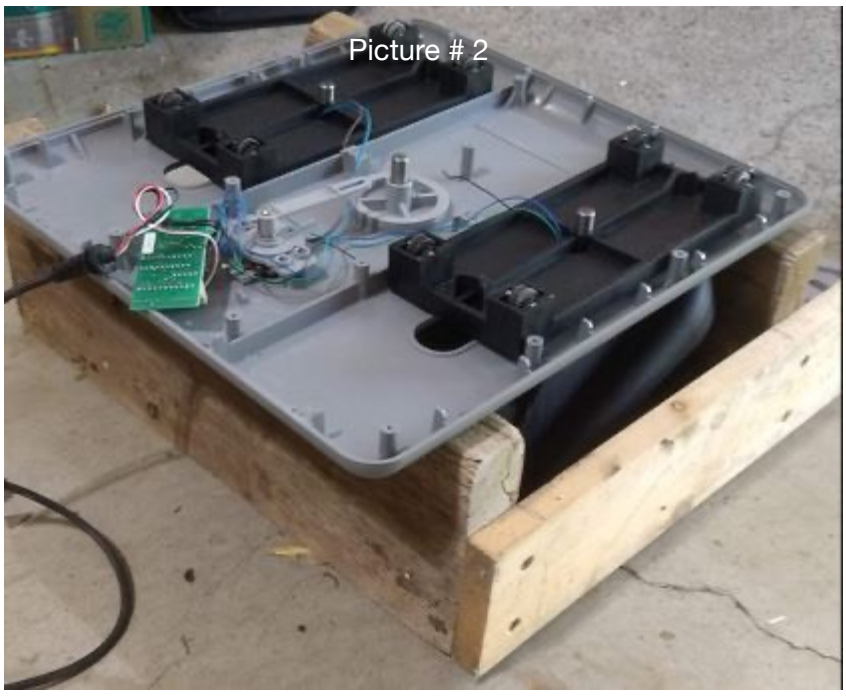
I brought the rudder pedals home and after doing some searching on the internet (without much luck) decided the only way to proceed was to take the unit apart to see what I could find. Interesting how one learns how you should have taken something apart after you actually have it apart. The clue was when I heard some springs go "boing-boing" just after removing the last screw. In any case, as soon as it was opened up a broken wire was found as shown in photo 1. It is a wire that goes to the brake potentiometer in the right rudder pedal.

After splicing the wire, I built a temporary stand out of a couple of pieces of 2x6 lumber as shown in photo 2. This supported the top half of the platform in an up-side-down position so that it could be put back together. This included getting the rectangular pedal bases back into their tracks in the platform housing, along with their little rollers in each of the four corners (both top and bottom). The next challenge was to get the two centering springs hooked up again to their holding pins in the base. As shown in photo 3 this required rotating the platform housing in a counterclockwise direction in the temporary wooden support base so that there was less tension on the second spring to hook up. Photo 4 shows everything back into position just before putting the two halves of the platform base back together. But this was tricky because the pivot pin in the center of the lever arm has to fit into a hole in the base's bottom half (while being careful not to knock the ends of the springs off of their pins in the process). After several tries, SUCCESS.

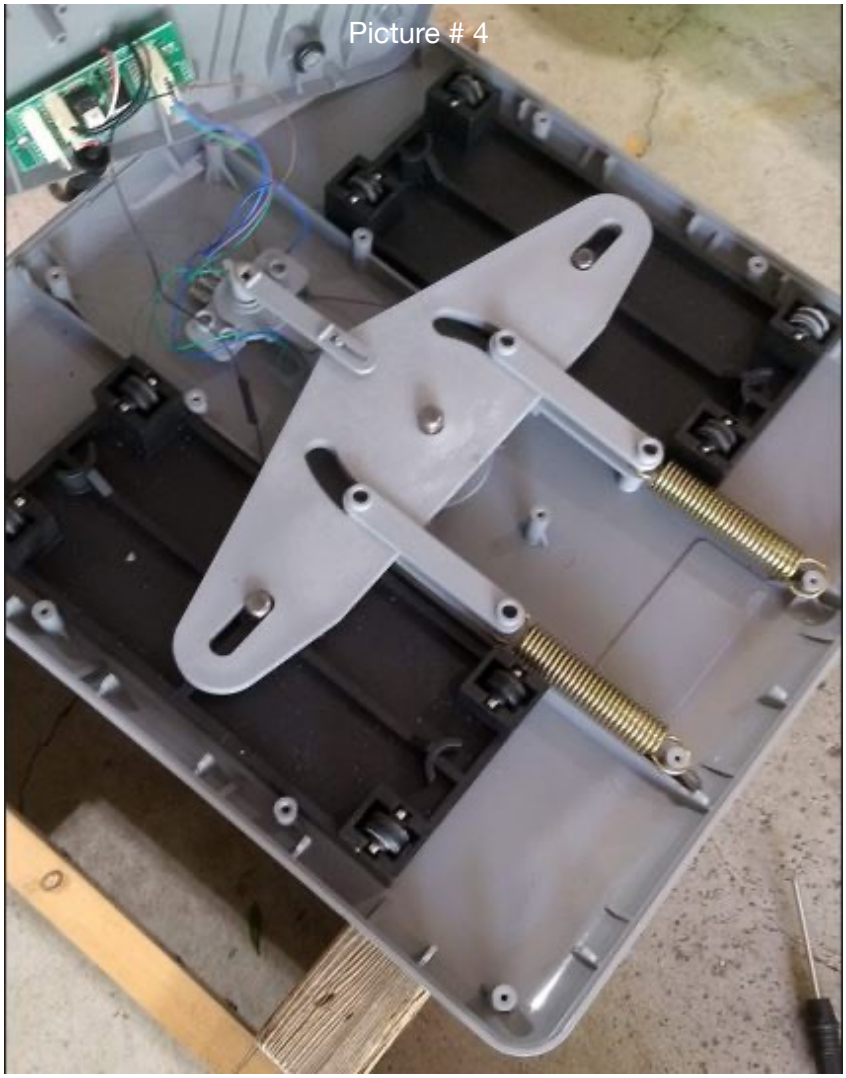
The good news is that this fixed the problem. I have my fingers crossed that we don't have any more broken wires. If we do, then it will probably be a good idea to replace all of the wires that go up to the pedals with larger gauge wiring. This is stranded wire, but it is very small gauge and quite flimsy. Not surprised that it broke after considerable use.

If you are interested in getting an orientation on our chapter flight simulator, please send me and email at: flight-sim@eaa237.org. Even if you are not sure, I would be glad to give you shorter one hour demo session where you could just give it a try.


Picture # 1


Picture # 2


Picture # 3


Picture # 4

1990

2022

TREE OF HOPE BEGAN MORE THAN 30 YEARS AGO WHEN RAY & CELESTE SHEFLAND NOTICED A PROBLEM; HOSPITALIZED CHILDREN IN NEED OF A SMILE OVER THE HOLIDAY SEASON. GATHERING THEIR AVIATION FRIENDS, THEY COLLECTED & DELIVERED TOYS TO LOCAL HOSPITALS.

SINCE THOSE EARLY YEARS, WE'VE GROWN TO SUPPORTING MORE THAN 40 HOSPITALS, SHELTERS AND CHARITIES IN MINNESOTA & WESTERN WISCONSIN WITH TOYS.

THEIR MISSION CONTINUES BUT WE NEED YOUR HELP.
SHOP FOR TOYS (INFANTS THROUGH AGE 18), MAKE A FINANCIAL DONATION OR BECOME A SPONSOR. VISIT OUR WEBSITE

WWW.HOLIDAYTREEOFHOPE.ORG

OR SCAN THE QR CODE FOR MORE INFORMATION.

COLLECTION DAY

FLY OR DRIVE TOY DONATIONS TO THE

ST. CLOUD REGIONAL AIRPORT, HANGAR H

SATURDAY, DECEMBER 3RD, 8AM-12PM

TREE OF HOPE IS A REGISTERED 501(C)(3)

In future Windsock editions, I plan to showcase aircraft that our members are building, restoring and flying. Please email me with the aircraft you are building, have completed building, are restoring or have purchased and are flying. I will follow up with you to provide a questionaire and will come out to take pictures to include with your article.

If you have a story or photo you would like to see in our newsletter, contact Frank Huber | eaap51@comcast.net | 763-245-0170

To view past issues of The Windsock, visit www.eaa237.org and select newsletters.