EAA Chapter 1373 Newsletter
August 2020

Next Meeting: Meeting and Graham Meyer Memorial
Saturday, August 1st, 10:00 AM Graham's Hangar, Blake Field, Delta

Frank Graham Meyer Memorial Please join us to share memories of Graham's kindness and aviation experiences with EAA Chapters 800 and 1373.

Ray Veatch shares, I received an email from a very old and wise friend who was a CFI many years ago who suspected Graham's value to our aviation community, my replay is below, and if you think it good enough to print you have my permission. Ray

It is a terrible loss to Aviation; Graham's fingerprints are all over my airplane, including some high quality parts he manufactured that are innovative, as well as probably hundreds of improvements all around the country. It is likely he was the smartest man many of us had ever met and his knowledge was extremely broad; music, electronics, mechanics, aviation, he wasn't a genius in one field, it was across the board, including why he was a staunch conservative, he was my other brother, not just a friend. Many of us suspect that Graham didn't intend to fly on that fateful day but some circumstance dictated otherwise and Graham dealt with it as well as he could but it didn't end well. Graham's family is donating his aviation tools to our EAA Chapter and I know Graham will be pleased. I count myself very lucky to have had the opportunity to know Graham, and one more giant quality Graham possessed, he never, never demeaned those who knew less than him or who he disagreed with, of course he was so smart that if he did demean me I might be too dumb to know it, seriously, he never made anybody feel inferior.

ANNOUNCEMENTS:

From Bill Patterson, July 2020: I received a list of airports in Colorado that will not be listed or shown on sectionals unless the owner/operator contacts the FAA and requests that they be listed. The airports in our area are:

12CO Omega! Hotchkiss
39CO Flying M Ranch Montrose
43CO Boeing Field Paonia
6CO0 Doctors Mesa Eckert/Orchard City
CD97 Montemadeira II Hotchkiss
CO89 Barber Field Delta

If anyone knows the owner/operator for these fields you may want to pass along the information that they need to contact the FAA if they want their airport shown on sectionals. Please call 866-TELL-FAA (866-835-5322) for further information.

Ric Lynch, Don't have a plane of your own?: Are you interested in a flying club or part ownership in a light sport based at AJZ? Contact Ric at 970-856-4234 merlef.lynch@gmail.com

Luke Moore's Aerobatics Training @ Pilot Makers Advanced Flight Academy: This is a great way to way to expand your flight knowledge and experience. And we can soon expect to see Luke twisting and turning in the skies above Delta.

WWW.EAA1373.ORG Members are welcome and encouraged to submit content for the website. Would anyone like to write a blog entry? (You don't have to commit to a series.) Create a resource article (like this)? Publish a trip report? Build your own project page, or just add pictures? As the chapter web editor I organize the site but content is driven by you, the members. Please make this YOUR site to share your aviation experiences and knowledge. If anyone wants their newsletter submission also added to the website just let me know at webmaster. Submissions gratefully accepted.

Big Thank You to our President, Clay Caywood: We appreciate your leadership in this time of change and unknowns. Thank you for continuing to keep us flying and active in the aviation community. This has been an experience we never expected and we just want our old normal back! Good brats, BTW!

Flying Again by Marc Waterman

I have the Thatcher CX4 flying again. The airplane originally went into the shop for engine repairs and miscellaneous modifications. The main problem with the engine turned out to be a failing magneto. The magneto is a government surplus Slick 4220 that was originally used on a ground power unit. They are available on EBay new for about $100 so replacement won't break the bank. I also replaced the spark plugs. In addition the engine had a slight leak in one exhaust valve due to a sloppily cut seat. Lapping the valves took care of that problem. I also modified the intake manifolds to improve fuel distribution. The result of the engine work is that I gained over 100 RPM in the climb.

Some of the modifications were done to improve pilot comfort and safety. Engine fumes were leaking into the cockpit so I cleaned and re-caulked the firewall with fire resistant caulk. I also changed the exhaust system from 4 into 2 pipes to 4 straight pipes in order to get rid of two very loose and leaky slip joints.

The cabin air inlets were originally located behind the engine cooling air exits so they picked up engine fumes. I closed those and put a new inlet at the base of the windshield that blows air directly on the pilot. I also put one low on the side that blows air on my feet. That vent takes care of the heat coming through the firewall and keeps the feet cooler. The new vents work well and the cabin air is much cleaner now.

I had been flying the airplane without the spinner because it had originally been mounted off center and it vibrated badly. While the airplane was down I went ahead and refit the spinner. I am not sure there is any benefit to having the spinner. It didn't seem to make any difference to performance when I used to fly with it. The cowl was designed to use the spinner so it looks better with the spinner and some people say it

helps cooling. More testing might show some benefit but for now I think the spinner is just cosmetic.

Once the airplane was back at the airport and reassembled I had John Frost do the condition inspection. All was good and at this writing I have 8.7 hours on the airplane since reassembly.

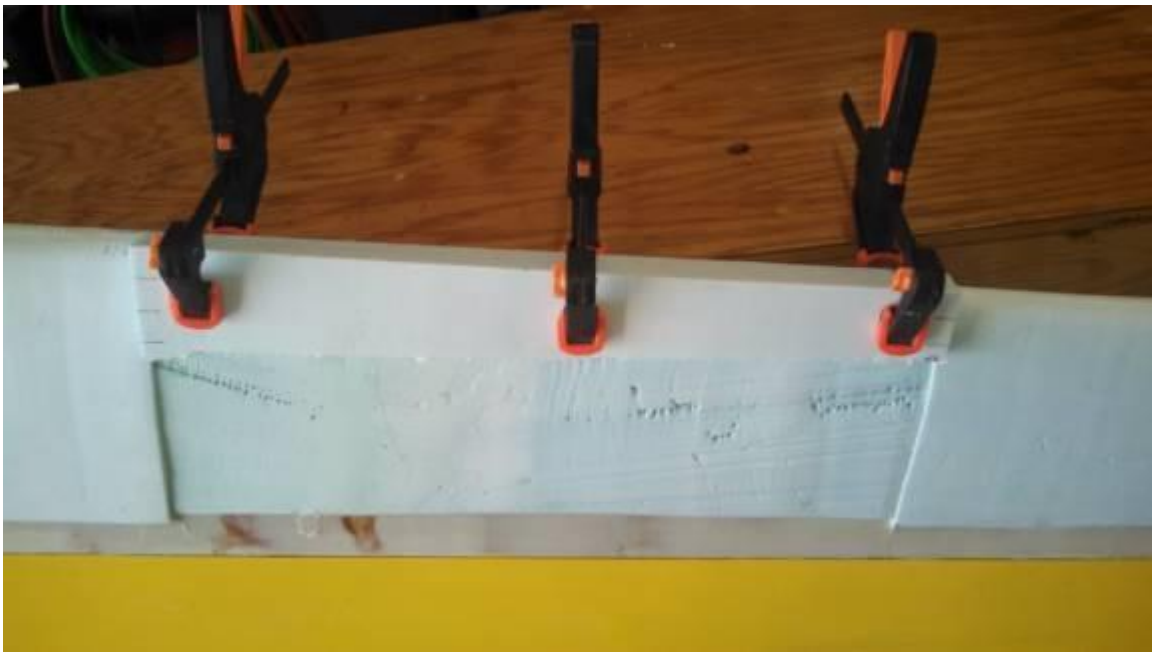
Regards, Marc Waterman

My Personal Hall of Shame! by Roger Olander

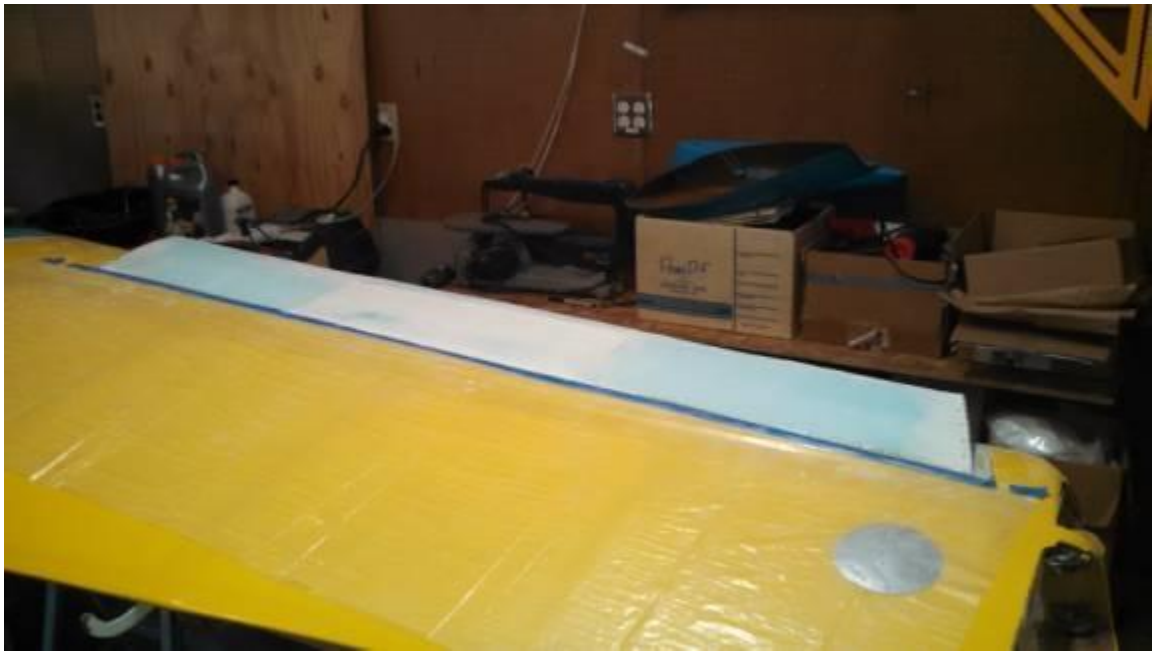
OK, so we're all in lock down and I'm left alone to my own devices while working in the garage. As many of you know, I bought a Mitchell flying wing project a couple of centuries ago and then discovered a fatal mistake in the outer wing panels. But there are options to correct the original builder's mistake, so I have carried on. I finally decided to add a "drooped leading edge" as the correction for the missing wing washout.

But that meant that I needed to design and hot wire cut the foam cores for the drooped LE by myself - it can't be done well by one person working alone. I made a mess of the job and the new leading edges are a disaster – wavy etc.!

One section of one of the new drooped LE was so bad that I had to epoxy the piece which I had cut off back into place so I could reshape the section by using the hot wire cutter free-hand. That did work a little better.



It is looking a little better but I have a lot of work left to make it right.



So I'm spending my lock-down out in the garage, sanding and filling and sanding some more. At this point I'm worried about how much weight all this fill is going to add to my "fat" ultra-light!

On the bright side: I have something to do that is keeping me busy and out of the kitchen, which makes Sharon happy until I tracked dust into the house!

Ok, here are a couple of more pictures showing my progress:

For a couple of weeks all I seemed to do is add fill to the low spots on the surface and then sand it mostly all off. It took a lot of work to get it down to a smooth, wave-free surface (or so I thought!). But finally I said enough is enough and spent a lot of time cleaning the excess dust off the surface with just water and a dry micro cloth.

Laying out the templates for the fabric in order to cover the new cuff

Rather than painting the new cuff, I decided to cover it with Oratex, a shrinkable fabric which is complete with color. The problem is that the color selection is rather minimal and I was not able to purchase a close match to my existing paint scheme.

The fabric I ordered on-line was supposed to have an adhesive backing but I must have received a very old roll because the fabric failed a peel test even though the wing surface had passed its peel test (using adhesive back shipping tape). Fortunately, I still had a bottle of the Stewart Systems EkoBond – which was rather old so I decided to do another peel test to be sure it would still work. It did – the test pulled the paint off of the wing in the small test area. That left me with another fill and sand job!

The nearly finished upper surface!

The nearly finished lower surface

It's been awhile (about 55 years) since I had tried to heat shrink an expensive, colored fabric on a wing surface and I had to make this attempt this by myself, so things didn't go great. I would be done with one wing section except I found a big bunch of little air bubble entrapped under the fabric. Before this wing can fly, I have to find every one of those bubbles and prick it with a pin and then iron the ex-bubble flat and glued to the wing surface. Other than that little detail I have one outboard wing panel done with the other one about 90% done.

Before I continue, I need to point out that in the past I had only used the EkoBond adhesive once and that was with Ceconite fabric. Remember when Ceconite is used to cover a solid portion of a wing, the edges of the wing are painted with the cement; the fabric is bonded to the edges and shrank to the proper tension. Then additional EkoBond is "painted" through the open fabric and the excess adhesive is wiped off with those blue paper shop towels. I had never noticed brush marks using this technique. But, with the Oratex, the process had to be changed because the Oratex fabric is already sealed and colored so the adhesive cannot be applied through the fabric in the usual manner. I started by painting Ekobond on the entire surface which was to be covered by the Oratex fabric. I saw that brush marks were prominent as I painted the adhesive on the new cuff. But the brush marks were unavoidable and they had not printed through during any of my peel testing, so I thought ironing the Oratex to the proper tension "leveled out" the brush marks. I was about to find out that is not true. Evidently the bulk/density of the Ceconite fabric can cover-up brush marks but the thinner Oratex does not.

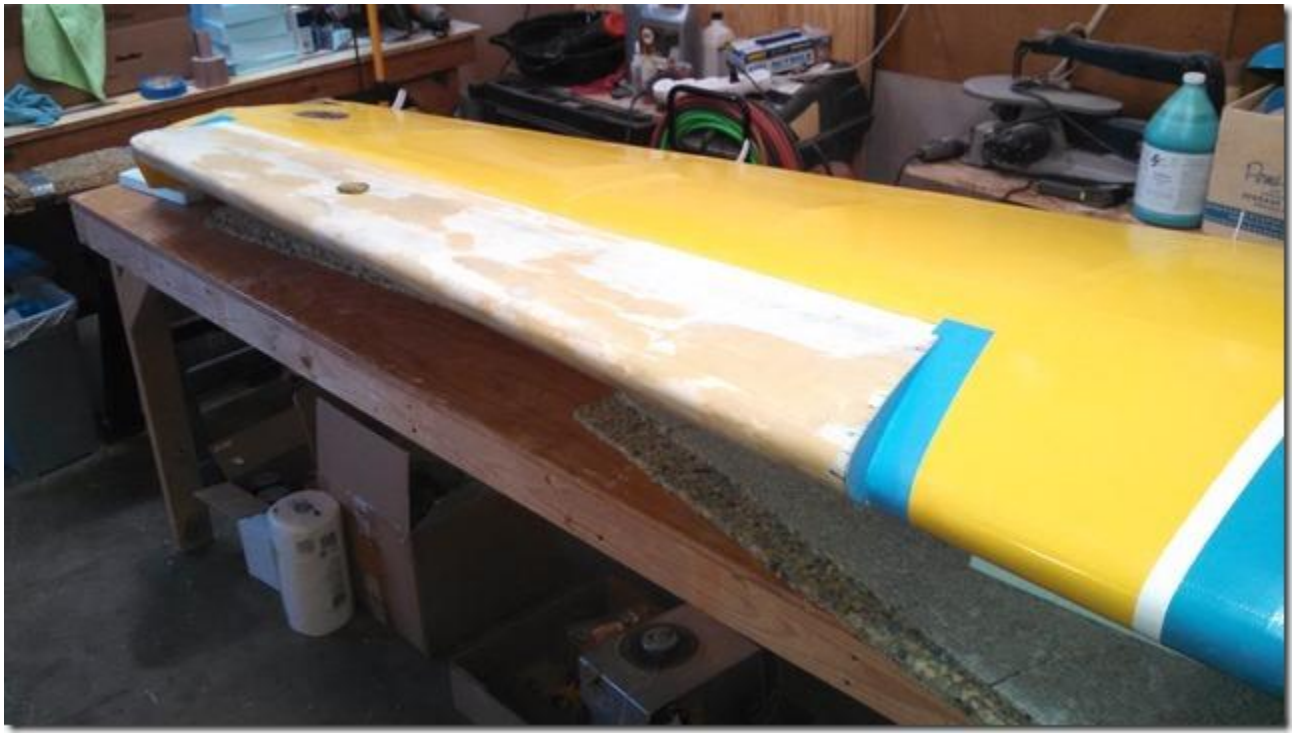
So, continuing: I had nearly finished the cuff to the left outer wing section and was about 90% done on the right section. However I had quite a few "air bubbles" under the Oratex covering on the left wing section, so I knew that I had a little bit of work left to finish that section. Today I finally found some time to work on the air bubbles. As I was picking at them with a pin and then ironing the fabric down into the glue, I saw that the fabric had a rough texture that I had not noticed before. Looking at the texture in the fabric I realized that brush marks had printed through the fabric. Eventually, I accepted the fact that this texture could not be ironed out and that it was not acceptable in the finished part. I had no choice but to pull the fabric off of the cuff.

Brush Marks in the EkoBond Adhesive left behind after pulling the Oratex

After heating and pulling the fabric off of the cuff, I had a lot of adhesive residue to remove. The residue peels away when rubbed like rubber cement. But the Oratex is a lot tougher to remove, so you have to scrape at it with a rubbery material. Steward Systems sells an expensive product for removing their adhesive. But on-line I learned that the adhesive can be removed using a cheap sanding belt cleaner. I cut off a small piece of the belt cleaner and used it to clean the cuff. The brown square sitting on the cuff in the picture below is the belt cleaner. It took me over 3 hours to remove the adhesive from an area that is about 15 X 66 inches.

Removing the EkoBond residue

I'm waiting for a replacement order of Oratex which hopefully will be a fresh roll. In the meantime I hope to be able to develop a process to paint or spray a uniform layer of the EkoBond without brush marks. I left the trim pieces at the ends of the cuff in place as the brush marks did not seem to print through them noticeably.



So I'm nearly back to Square One

Regards, Roger Olander

Welcome Pilots and Friends!

If you are on Facebook, please visit us at https://www.facebook.com/groups/eaa1373/ and click +Join Group under our cover photo of Blake Field. Please feel free to add anything from how you are doing to any updates and photos of your aircraft projects and flying adventures. Share your love of aviation!

EAA 1373 Newsletter Submissions are Welcome eaa1373news@gmail.com

Thanks to all for your newsletter submissions. We are happy to publish aviation-related pictures, articles and items to buy, sell or give away.

Effective February 1, 2020, Chapter members gladly voted to accept Ray Veatch's proposal to step down as Treasurer so that he can take on the role of Young Eagles Coordinator. Chuck Clemen has agreed to take over the Treasurer role in addition to his duties as Secretary. Thank You Ray for helping our Young Eagles! And Thank You Chuck for taking on additional responsibility!

http://www.eaa1373.org/mems_area_page/off_lead_page/

Chapter Board of Directors and Officers

Office	Names	Term
President:	Clay Caywood	2021
Vice President:	Alan Collins	2021
Secretary/Treasurer:	Chuck Clemen	2021

Volunteer Leaders

Position	Names
Webmaster:	Alan Collins
Newsletter Editor:	Marc Waterman
Young Eagles Coordinator:	Ray Veatch
Tech Counselors:	Bob Trumpfheller Graham Meyer Lowell Manary