

HATZ BIPLANE ASSOCIATION

NEWZLETTER

March 2021

Hatz of the month: Brownlow Classic, N741HC ...Wild Rose, Wisconsin

hile searching online for an inspiring photo of a Hatz for my computer background recently, I came across the stunning sunset (sunrise?) image seen below. President Jeff Orear suggested it was former HBA President Chuck Brownlow's Hatz Classic, which Chuck confirmed to be the case.

A few weeks ago, the news reached me that Chuck's Classic, his beloved "Rocinante", is today in great shape and resting in Oklahoma. For many of you who have been members of the Hatz Biplane Association for some time, the story of Chuck's redwith-black Classic is not a new one. I refreshed my knowledge of it by reading the article that



appeared in the 2011 issue of the EAA's *Sport Aviation*, entitled "Tilting at Windmills" and written by Greg Laslo. A few of the images from the article reappear here, with credit to an icon of Aviation photography, Jim Koepnick, and flying skills of Chuck himself.

Jeff Orear sent me a few words regarding Chuck's contributions to our organization that I think bear passing on to others:

"Chuck is to blame for getting me into this mess, both building and being an officer of the HBA. I was drawn to his Classic at OSH, which by the way was a Bronze Lindy winner, and made the decision to order plans after talking with him and looking over his beautiful airplane. I also signed up to join the HBA, as he

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here has the time gone? A common phrase for many of us. Since I retired in 2019, I have been experiencing the perceived acceleration of time even more. Add to that the COVID pandemic and subsequent social distancing, etc, and the days just seem to race by.

March 11, 2021 marks the 10th anniversary of making my first batch of gussets for my

The View from Above Jeff Orear, President Hatz Biplane Association

Classic project. Talk about where has the time gone! The fact that it has been that long ago that I started the "journey" of building a Hatz is just hard to believe. I look back at all the work that has been accomplished and it seems like a blur.

I have thoroughly enjoyed the process of building my Classic, including learning to weld and fiberglass fabrication, as well as building with wood and using some of my experience with aluminum learned from my RV build. It's been an amalgamation of several skill sets.

With the passage of ten years worth of building, I have acquired much more than a close to finished airplane. In those ten years I have had the pleasure of meeting some



of the best fellow aviators and builders imaginable. am humbled to be associated with level of talent the craftsmanship that is so common among Hatz builders. Builders who invariably are quick to share their knowledge and experience with others. On top of all that, I consider many Hatzers I've met as friends. I'd say it's been a very productive 10 years! Have a very Hatzy New Year everyone! Like Mike Patey always says, "Back to work!!"

> As always, Remain Calm and Hatz On! Jeff Orear



Hey Jeff, tell us about the N782P number and paint scheme of your RV-6A! "I graduated from my undergrad college, Ripon College, yes, located at that famous Oshkosh waypoint, in '78. Graduated from Northwestern University Dental School in '82. Got married in July of '82, and my callsign, if you want to call it that, among my airplane friends is 'Painless'. It all seemed to fit. The derivation of the paint scheme was one of the hardest tasks for the whole project. It's a facet of the build that will be permanent, difficult and expensive to redo, so I took my time with it. I shied away from anything that was trendy, or too, shall we say,

busy. I basically borrowed from different schemes I liked to get a general idea of what I wanted. There was a guy on the RV forums, I wish I could remember his name, that offered scheme renditions for something like \$50, so I gave him my ideas and turned him loose. What you see is what he came up with. I chose the colors because I like the combination and it has a sort of subtle elegance to it. People say to never paint an airplane green, but I beg to differ. The prop is an early rendition of a Catto Prop. He now incorporates a very nice nickel leading edge on them for abrasion protection. As it is, I avoid flying in rain. If you don't keep the rpm at or below 2200, the edges of the prop will abrade. There is the prop guard option, basically a thick tape-like material that can be applied, but I'm cautious about that with unbalancing the prop as well as damage to paint getting it off to replace it. The yellow tips were done by Catto. You can select from several different colors, as well as have a custom color done."

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was secretary at the time.

"Fast forward a couple years and I get a call from him suggesting I 'run' for secretary of the HBA as he was planning to step down. I thought, what the heck, I'll 'run' for the office, as I had experience holding that office in other organizations I was in. I probably wouldn't win anyway due to being relatively new to the group and no one really knowing me. Brodhead comes around where the annual meeting is held, including elections. Chuck nominates me for secretary, other candidates are asked for. Crickets. So ľm running unopposed! Boom. I'm secretary. The rest is history. "

"Bottom line..... Stay away from Chuck Brownlow! All kidding aside, Chuck is one of the many great folks I've met as a result of being a Hatz builder. It's wonderful that the list keeps growing every year."

Chuck, who nobly served as the president of the Hatz Biplane Association for six productive years, also sent a few comments on his airplane:

"I went to OSH one year, late '90s, interested in building a Glastar. Looking through Homebuilts on the Flightline, I saw the top wing of Billy Dawson's Grand Champ. I walked toward it without seeing any of the other planes. I ordered plans from Jeff Shoemake and started building Hatz ribs soon after. Never thought of the Glastar again, though that would have been fun, too.



"I was privileged to handle the task of Newsletter Editor for several years back when I was building my Hatz Classic, N741HC. I sold it to a person in Oklahoma in 2014 who has maintained it well. He has flown it very little since 2014. My guess is that it probably has fewer than 200 hours on it.

From the EAA's article: "I think the most important thing is the relationships I built — the phenomenal generosity of other builders and aviation people that







I never could have understood before I started," Chuck said.

Plans Champion 2010 -Bronze Lindy, Charles Brownlow, Wild Rose, Wisconsin, 2009 Hatz Classic, N741HC

Kent Misegades



HATZ BIPLANE ASSOCIATION LATEST CLUB NEWZ



HBA Member Bob Beaty invites Hatz fans to a lunchtime gathering on Thursday, April 15th during SUN 'n FUN 2021. The location is "Jo's Place" pavilion in Camp Duffy on the SUN 'n FUN grounds at the Lakeland Linder International Airport (KLAL). SUN 'n FUN takes place this year on April 13-18. If you are even thinking of attending, please contact me at the email to the right, below. Rick Shultz will be there and plans on briefing us all on his Classic with the Verner radial described on page 9 of this issue. Kent

Bob Beaty, a pharmacy professional and entreprenuer, has been an avid aviator for 45 years during which time he built four experimental airplanes. He is currently in the process of a plans-built 5th construction project called the Hatz Classic, a 1920's era biplane. He is a long term member of the Experimental Aircraft Association and Aircraft Owners and Pilots Association.

Bob became a volunteer with SUN 'n FUN in the mid 1990's and has enthusiastically served in many leadership positions including Chairman of the Board, Vice Chairman of the Board, Board Secretary and Co-Chairman of Fly By Showcase. He currently is Vice Chairman of the Board of SUN 'n FUN, Vice Chairman of The Board of Aerospace Center for Excellence, Chairman of the Master Planning and Site Committee and Chairman of Camp Duffy.

More News from the Editor, Kent Misegades

- Thanks to **Chuck Brownlow, Rob Lynn, Bernie Willis and Rick Shultz** for their contributions to this issue of the HBA Newzletter.
- Anyone with knowledge of the status of the **Brodhead, WI and Blakesburg, IA Oldtimer Fly-Ins** this summer is requested to send information to the editor at kent@aerosouth.net
- An archive of HBA Newsletters can be found now at aerosouth.net/hba. This page is hidden from the general public.
- Your officers are working with **Land's End** to offer **Hatz logo gear** through our own **online store.** Stay tuned for details coming soon.

The NEWZLETTER is published on a regular basis by the American Hatz Association dba Hatz Biplane Association, founded by Lorin Wilkinson, Past President, Emeritus, for Owners, Builders and Lovers of the Great Little Biplanes Inspired by John Hatz.

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Hatz CB1 Kelly-D Hatz Classic Hatz Bantam Vintage Hatz



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HATZ BIPLANE ASSOCIATION MEMBER SHOPS & EVENTS





ed "Mr. T" Tracy sent us this picture with an explanation: "The shirt was a gift from a buddy (we only talk about welding almost every day), he saw it and thought it was funny and hit "buy it now"! The shop shown here is where Rick Shultz (see pg. 9) is building his Classic in Sidney Ohio, and I was up there for our version of welding school. Or personal abuse, call it what you want! Cheers, T." The text on the shirt reads AND I THINK TO MYSELF, WHAT A WONDERFUL WELD. Anyone who has attempted to weld thin-walled chromoly tubing or aircraft aluminum will appreciate this.



UPCOMING EVENTS

April 9-11, Uncle John's Fly-In, Triple Tree Airport (SC00), Woodruff, SC, USA, tta.aero

April 13-18, Sun 'n Fun Aerospace Expo, Lakeland Linder International Airport (KLAL), Lakeland, FL, USA flysnf.org

May 7-9, Spring Wings & Wheels Fly-In, Old Kingsbury Aerodrome (85TE), Kingsbury, TX, USA pioneerflightmuseum.org

July 22-July 25, Hatz/Pietenpol Fly-In, Brodhead Airport (C37), Brodhead, WI, USA, eaa431.org

July 26-August 1, EAA AirVenture 2021, Wittman Regional Airport (KOSH), Oshkosh, WI, USA, eaa.org

September 1-5, Antique Airplane Association Homecoming & Fly-In, Antique Airfield (IA27), Blakesburg, IA, USA, antiqueairfield.com

September 20-26, Triple Tree Fly-In, Triple Tree Airport (SC00), Woodruff, SC, USA, tta.aero

November 12-14, Fall Wings & Wheels Fly-In, Old Kingsbury Aerodrome (85TE), Kingsbury, TX, pioneerflightmuseum.org

Please send details on any event that attracts biplane people to the newsletter editor, Kent Misegades.

Mexican AF Hatz by Rob Lynn Hatz Biplane Association

just returned from Mexico, ahead of the Covid test requirement. It would have been a nightmare trying to get a test AND the results in a prompt manner in Mexico. Nothing works quickly down there - except maybe the decreasing level in the tequila bottle!

So I am now home, and will get back to work on the Hatz. Once I am finished quarantining, I will invite some friends over for an engine assembly party - masks required, of course. Hoping to have her inspected and test flying this summer.

Anyway, I thought I would send some photos of my project, and a list of what I used for covering. Maybe you can use this for the Newzletter, at some point. She is painted in the colors of the Mexican Air Force. No problem here in West Virginia, but I just hope she never goes to Texas!





When I would empty a can of Poly Fiber product, I would toss the can in the barn. I need to recycle them, so I counted what was out there to give other builders an idea of what I used. No matter how well you plan, you will be buying more of some stuff, and have too much of other stuff. Just the way it goes.

Here is a list of materials I used to cover my Hatz using the Poly-Fiber system: 60 medium fabric. 2 yds light fabric for doilies and such. Tapes: I did not keep track, but guestimate maybe 7-8 rolls 2", and make sure you buy 2 each of straight and biased 3" and 4" tapes. I also bought 1" but did not use any. Poly Tak: 1 gal + 1 pint. Poly Brush: 6 1/2 gals, including 1 1/2 gals of untinted for fuse. Poly Spray: 12 gals. Reducer: 10 gals. Poly Tone Insignia White: 3 gals, for undercoat since I colored with yellow. Poly Tone Yellow: 4 gals. MEK: 5-6 gals. Wax/Grease remover: 1 gal. Trim Paint: 3-4 qts, various colors.







Hopefully my list will give others a starting point for covering. I enjoyed the process, and still have to spray Aerothane on several aluminum and fiberglass pieces. That will occur in the spring, so I will probably be buying more Aerothane.

[On the editor's asking amigo Rob why the Mexican Air Force paint scheme?] We have had a condo in a community about 60 miles south of Cancun for the past 10 years. And frankly, I have better internet in a "third world country" than 1 do here (Independence, WV). But, good diving, paddleboarding, biking, snorkeling, good eats and good people. And the tequila selection is quite voluminous and well priced, especially with exchange rate now. I wanted to paint the Hatz in Mexican colors out of respect to our second home.

Stay Hatzy, Rob Lynn





Covering Systems Compared by Bernie Willis

Hatz Biplane Association

[Editor: I have enjoyed learning more about building, maintaining and flying aircraft in the Alaska bush through HBA member Bernie Willis in recent weeks. Bernie is a retired Alaskan Airlines Captain, A&P/IA who now runs a busy bush aircraft maintenance facility at his own airport near Anchorage, Greeb Lake (AK45). His son Andy flies freight for Ryan Air Services and has his own guide service, Xytreme Xpeditions (check them out at xxalaska.com). Since Bernie does a great deal of fabric work, I asked him if he could compare and contrast the most popular systems. He gracefully replied, and in detail, in the following paragraphs.]

ent, here are my general Impressions of three common covering systems, Poly-Fiber, Stewarts and Oratex:

When compared the original cotton fabric and nitrate/butyrate dope systems I grew up with, each of these systems is a great improvement. The only negative thing about them as a group is that they last so long. Cotton under the sun only lasted three years while dacron will last 30. On some planes it is the only thing holding them together. Tubes rusted through can still hold their shape under these fabrics, NOT recommended.

The Poly-Fiber product is excellent because it has a chemical bond between each of the layers. With its solvent base each layer kind a flows together



Bernie Willis checking some details on his set of Hatz plans.

making a complete bond. The solvents evaporate and will stink up your house and do serious harm to you if not protected by an air system.

The Stewart System is water born instead of solvent and is pretty harmless to deal with but requires some protection when spraying the color coats. Because it has a mechanical bond instead of the solvent, proper sanding and timing are important.

The glue is unique because it can be set with heat from the iron. A strip can be applied to a wing tip or fuselage tube for instance and a day later a tape can be touched to it and stuck down with the iron, no mess, no clamps. Also because the



The black fabric here is Oratex, the fuselage from Stewart's and the wings are Superflite poly.









products are water born instead of solvent the evaporation rate is very humidity-dependent which means that it can dry too fast in some circumstances making more sanding necessary.

If applied too heavily it will dry on the outside before the inside and blisters will form. But then there are no flammable vapors to ignite from your garage heater. The most popular finish is very shiny and looks like a hand-rubbed dope finish from a



Blue Piper PA-12 Super Cruiser wing in Bernie's shop with typical Stewart System shine.

Covering Systems Compared by Bernie Willis Hatz Biplane Association

museum restoration.

With both of these products the amount of UV protectant and color coats can make the result quite light or not. Either way it will be about half the weight of the original cotton and dope.

Oratex products you probably have used in the past with model airplanes. It is the shrinkable fabric look covering used for years on model aircraft. Today's product is the same high quality material but in a heavier and stronger version. It is approved in both the US and Canada for many types of light aircraft.

Its main appeal is that it comes painted. However this needs to be weighed against the fact that much of any fabric airplane is not fabric and needs painting anyway. So the skills, tools and space are still necessary. Inspite of its light weight in my experience it is at least as strong and perhaps stronger than the typical Dacron fabrics based upon holes I've repaired in bush Cub tails over the years.

Because Oratex comes already painted, though in limited colors, any tapes or repairs have white edges. These show a lot with black or dark blue fabrics. The pinked edges are hard to get to stick down. The lighter colors are translucent allowing the substructure to show through. The glue is very temperature sensitive and has a short shelf life.

The Poly-Fiber glue will work below freezing anywhere while the Stewarts will freeze.

In terms of coats and materials, here is an overview of the three systems, Poly-Fiber / Stewart / Oratex:

Cost for Super Cub: 6K / 4.5K 10K **Colors:** anything / anything / about 8 Hazards: fresh air breather / charcoal mask / nothing Fabric: Dacron / Dacron / Proprietary pre-painted Temperature (F) at application: 50 plus / 65-75 / 75 plus **Humidity** for painting: critical / 50% plus / not critical Finish texture: glossy or satin / glossy or satin / satin, translucent except for black and dark blue Clean-up: solvent / water / no need **Tools:** spray gun / spray gun / spray gun for metal parts **Iron:** iron / iron / tempcontrolled heat gun and iron Scissors & Brushes for all three Weight: approx. 20 gm/sq.ft. / approx. 20 gm/sq.ft. / approx. 13 gm/sq.ft.

These three systems are all satisfactory when completed. Stewarts will cost less in dollars but more in application time. Poly-Fiber painting is more like typical auto painting than Stewarts but does require a fresh air breather system for personal protection. Oratex in my opinion





is the lightest and fastest with the least attractive product when finished.

So much for the fabric story. It's really not an advertisement or condemnation of any of them, just my experience. I know [HBA member] Mark Lightsley very well, a Poly-Fiber distributer, Andy Humphrey from Stewarts has been here for demos and of course Lars Gleitsman of Oratex, who is in our EAA chapter.

Sincerely, Bernie Willis



Bernie comments on the picture left, below: "The wing is a Stewart's system project. I chose Pontiac Red for this one as I like primary colors and already have in the fleet a blue PA-12 and vellow PA-18. It will end having a black leading edge, white lettering and white kydex interior. The color paint is their Ekopoly. I chose it because it doesn't collect dirt and sheds snow easily, plus looks good for a long time and remains flexible. I use their recommended spray gun, a Devilbiss fine line IV with a 1.3 mm tip adjusted to 23 psi at the gun while spraying. Spraying is a science I suppose but there are so many variables that it's more of an art to me so far. You must deal with temperature, humidity, pressure, viscosity, speed of movement, overlap, lighting and ventilation. Maybe more."

Progress Report by Rick Shultz

Hatz Biplane Association Secretary, Sidney, OH, USA

Rick kindly sent us a progress report on his Hatz Classic in the form of these images and his captions. He is nearing completion of the firewall forward of his Verner radial. He plans to attend Sun 'n Fun where he has offered to provide more details. Editor



Checking tank fitment again, making sure threaded inserts are clear of any "munger" by running a tap thru them. [editor: Rick explained that "munger" is a term he learned from his father, meaning unwanted debris. Here in North Carolina, we'd call it "goober".]



The exhaust collector on the jig (upside down) And my engine sitting next to it. Verner Scarlet 9.





Moving engine close on a stand to check fits and clearances.



Side view of speed ring brackets.





Top view of a speed ring mount bracket.



Front end dishpan and other firewall forward stuff.

Progress Report by Rick Shultz

Hatz Biplane Association Secretary, Sidney, OH, USA



My wife Kathy helping me with checking the tank fit, one last time!



Another shot of the dishpan and fire wall forward.



COMMANDING THE SKY

HATZ

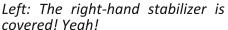
BIPLANES



A bunch of speed ring brackets made. I used one on each head (9). Less may be possible, personal choice.



Close in dishpan shot. You can see the air/oil separator line running down, some wiring and engine turned firewall.



Right: Speed ring, dishpan and other aluminum skins attached. "OMG" is all one can say [editor]





Progress Report by Rick Shultz

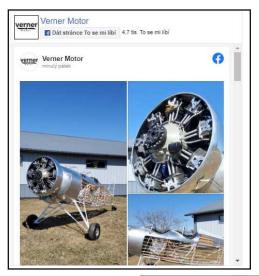
Hatz Biplane Association Secretary, Sidney, OH, USA





Above: One last shot of Rick's impressive craftsmanship. It will almost be a pity to cover over the fuselage given its lovely lines. Below: Rick's Hatz Classic is featured on the web site of Verner Motors, based in Vikýřovice, Czech Republic. Anyone for a road trip to see these engines made? vernermotor.com [editor]











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Hatz Biplane Association Back-issue Newzletters



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The Hatz newzletter (1992 â€* 2005 issue #1) is available on CD-ROM. All issues from volume 1 number 1, through volume 14 number 1 are present, with many of the pages in full color. The newzletter is in Addoption 1 number 1 are presented in the program and is displayed exactly like the original paper master from which it was scanned. All text, photos, and advertisements are here. The Hatz Biplane Association history and communal support is presented in detail. Research in topics of interest can be investigated through the word search capabilities imbedded in the PDF file. All 793 pages may be printed by the enthusiast (in color and/or black and white).

Computer requirements: CD-ROM drive and software to read the newzletter (PDF version 1.5). Software is freely available from (www.adobe.com). Adobe Reader version 4 works fine, though Adobe Reader version 5 or greater is recommended for word search capability.

Newzletter back-issues

Hatz Biplane Association Members price: CD-ROM \$20.00 U.S. each Nonmembers price: \$40.00 US (CD-ROM and 1 year HBA membership)

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