

Flyboy News

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2020 Christmas Dinner



January 18, 2020







I purchased this picture at the Barrett-Jackson car auction here in Phoenix. Asked the artist where he got the idea from. Said he was out hiking and an F-35 buzzed him. Asked him where he got the picture of the B-17 to model from? He said it was the Collin's Foundation B-17 that crashed in the Eastern US several months ago. I got a flight on that airplane when it was touring in Rapid City... flew to Scott's Bluff, Ne about 2002. Feel that is a pretty cool coincidence!

Jim Winters

January 24, 1935-December 31, 2019



Photo by Al Neal_

We got a card which a lot of local aviators signed, please extend our gratitude as this card with so many good friends really means a lot to me and my family.

Dad was cremated. I had a old wooden prop from a Aeronca 7AC Champ (like he learned to fly in) together with a polished aluminum spinner from a Stinson 108 Station Wagon (his favorite airplane) - today I put his ashes inside the spinner on the prop!!! I think he would be proud. The funeral director told me it was the largest urn he had ever seen.

Next summer I plan to take dad for his last airplane ride, we will drop my dads ashes from an airplane.

THANKYOU TO ALL!!!

Next Meeting:

Tuesday, February 11
At WREA Building

6:30 Hangar Talk

7:00 Program
Rick will talk about his new GPS

meeting

If anyone has ideas for programs, please contact Josh jscott_09@iCloud.com or Arie ariemichael1@aol.com

Upcoming Events

A ODA

OPA Fly-In

June 19 & 20 Casper WY

Let Freedom Fly " Air Show

July 4th Pierre Regional Airport Royal Canadian Air Force Snowbirds (and others) will be performing

Ellsworth AFB Air Show

July 25 & 26

The Thunderbirds will be performing.

(more details will follow)

Volunteers Officers Newsletter Molly Benkert President Josh Scott Web Manager Molly Benkert Vice President Arie LaCroix Young Eagles Darrel Sauder Secretary **Gary Schroeder** Safety Officer Jerry Densmore Treasurer Dan Benkert Tech Advisor Jerry Densmore

Member Update

1929 Pietenpol Air Camper Build Summary for EAA
(as of 1/18/2020)
being built by Dave Kornmeyer
photos by Charlene Kornmeyer



1. Pietenpol Project begins 3.9.2017.



3 So far, so good.



E5. engine Mount Fabricated and Secured 10.2.2018



2. Made a jig, started gluing all the sticks together 4.30.2017r



4. Lots of gluing and many steps later, the wings fit! 7.4.2018



6. Engine Test Mounted 12.4.2018



8. Cowling Getting in Shape 7.8.2019



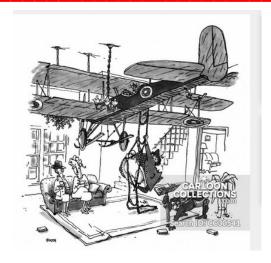
19. Current Stage, Exhaust Fabricated, 1/11/2020



7. The Cowling Fabrication Stage, 5.31.2019



9.Propeller Fits, Hand Made by Culver Props 12.21.2018



"All Vangundy is or ever shall be he owes to his mother."

(No reflection on Dave.)

Building the CP-750 "Beryl", Part 3, Wing and Tail Assemblies

By Scott Christainsen

Spars, spars, and more spars are the main structural component of aircraft assemblies. The Beryl wing has a one-piece box spar 26 feet long and about 6 inches square at the center section. It is strong enough for aerobatics. At the upper center section it has five ½ inch spruce boards laminated together which then tapers to ½ inch thickness past the ailerons to the wing tip. The lower lamination consists of three ½ inch spruce boards and tapers down to one board thickness about half way to the wing tip. The top and bottom laminations are separated by a plywood spacer with a lightening hole about a foot apart. A block of ash hardwood is located where the wing bolt holes will be drilled for attachment to the fuselage. All the flight loads are carried through these wing bolts and the two bolts on the rear spar. The forward side of the spar is flat so it can be built on a long flat workbench. A spar workbench was purchased from another Emeraude builder in Denver, a lucky deal for me. Once all the laminations were glued with epoxy and removed from the spar jig (big job), they were cut to size and ready to assemble into one giant wing spar. The sides of the box spar were covered with birch plywood with scarfs bonding the short sections together to make a single piece of plywood. Each bay had to be varnished prior to closure and the plywood used to complete the "box spar" had to be varnished excepting the glue joints, which would be protected by the spread of epoxy adhesive during final assembly. Prior to final closure, a FAA inspector had to inspect the spar and sign the logbook "OK to close." This was required for all parts on the aircraft that would no longer see the light-of-day. (Too many to list here.) For parts that could fit into my (really big) 1960 Ford station wagon, many trips to the local GADO were made for these inspections or a FAA inspector was asked to inspect these parts at my location. The construction of the wing spar was a six month winter project while I was still living in Boulder, CO.



Beryl Wing



Rear Spars

The wing ribs were built early in the project. I drew a full-size drawing of each rib on heavy brown paper using dimensions from the blueprints. The drawings were attached to plywood so that a jig could be made for each rib. Since the wing is tapered toward the tip, each rib is different from its neighbor. Only six ribs in the center section could use one jig. The ribs were made from $\frac{1}{4}$ by $\frac{1}{2}$ inch spruce with $\frac{1}{16}$ inch plywood gussets. On a good day I could make

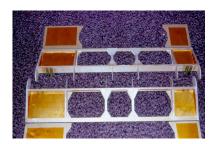


Wing Spar

one rib in the morning before work/school and one rib before going to bed. There were 26 total wing ribs plus 3 short ribs between the right and left flaps. Of course there were additional ribs for the fin, rudder, stab, elevator, flaps, and ailerons, all made similar to the wing ribs.

All wood subassemblies had to be protected from moisture by "marine spar varnish". After assembly by epoxy adhesive, at least four coats of varnish were applied by brush after making sure all future glue joints were covered with masking tape. Metal fittings that required bolts had blind nutplates installed prior to closing up the assembly. These nutplates also allowed future removal of parts for maintenance without having to cut access holes in the plywood or the fabric covering.





Flaps



Tail Surfaces

The blueprints for the wing showed a plywood leading edge wrapped around the ribs from the top of the spar to the bottom of the spar. I couldn't do that so I installed a curved solid leading edge and glued the plywood between the spar and the leading edge. The rear spar has plywood acting as a large gusset between the ribs and the fairings for the flaps and ailerons. The wing tip plywood had a compound curve in it so I had to cut it at the wing spar to make it fit right. The wing walks next to the canopy used thicker plywood so you could walk on it while cleaning the plexiglass and for access to the cockpit. The remaining open area between the front and rear spar will be covered with fabric. The top/bottom of each rib has a one inch plywood capstrip to glue the fabric to each rib in the open area. I had done rib stitching to the flaps, rudder, and elevator and did not like it. The wing and ailerons would use fabric glue instead of rib stitching. It has been working fine.

The making of the flaps, ailerons, fin, rudder, stabilizer, and elevator used the same basic techniques as in the wing assembly. For the sake of brevity I did not want to make this article any longer by describing the construction of these assemblies.

The strength in the fin, stabilizer, wing, and parts of the flaps, ailerons, rudder, and elevator is due in part to the "stressed skin" of the plywood covering. At the end of building, all of the wood assemblies looked so good finished, I hated to cover them with the fabric. At least I took photographs to remind me of how the work I accomplished looked like when it was done. Some day in the future when the fabric is removed, the beauty will reveal itself. See the photos that are included with this article.

Bringing home the Baby Ace By Cindy Baier Boelk



Back home after so many years away.

I do not remember life before the blue and yellow Baby Ace; the first memory of my childhood is seeing rib jigs in the upstairs room of our small farmhouse. One day my Dad's friends (Allen Rudolph, Arden Hjelle, and Jim Dins) came over and helped take the windows out of that second story room and lower the wings down to the ground. The next thing I knew those wings were in our living room and all the furniture was moved! It still makes me wonder how the wings actually got *into* that living room, and even more so how they got *out*. The fuselage had been in the garage, and things seemed to go together rather quickly after that.

The year was 1964, and, in October of that year, the plane flew for the first time. My younger brother Warren was born in January 1965, and that summer we all went to Rockford with Dad's new Baby Ace. We traveled to numerous air shows and watched Dad fly and display that beautiful plane for the next few years. Around 1971, shortly after my youngest brother, Bill, was born, Dad sold the Ace. He said he was going to build something else. Warren and I missed that pretty Ace, and we wanted it back. Years later, Dad offered to buy it back, but the owners had no intent of selling at that time. My brother Warren made up his mind; he was going to get the Baby Ace back, and he never stopped trying.