



Summer 2024

# AT-10 WICHITA



AIRCORPS AVIATION

Cadet Air Corps Museum AT-10 Wichita Restoration

by Chuck Cravens



An AT-10 as it is towed out to the flight line.

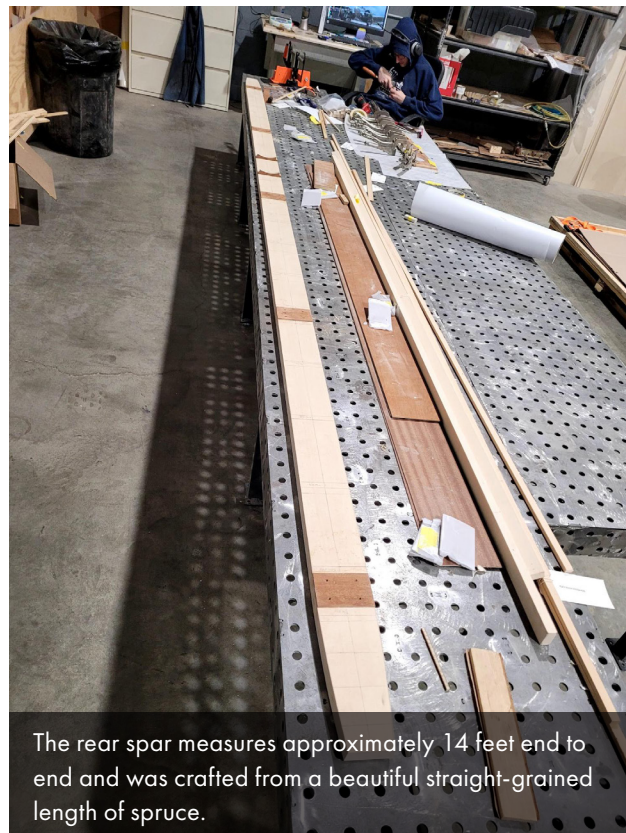
Over the past several months, work progressed on the AT-10 fuselage, horizontal stabilizer, landing gear parts, and the rudder pedals. Marilyn Laird, who knew one of the WASP pilots based at Blytheville, reached out to us with some information about WASP, Mary Eleanor Beckley Martin Sabota, aka Tommy.

Mary Sabota very likely flew 41-27322.



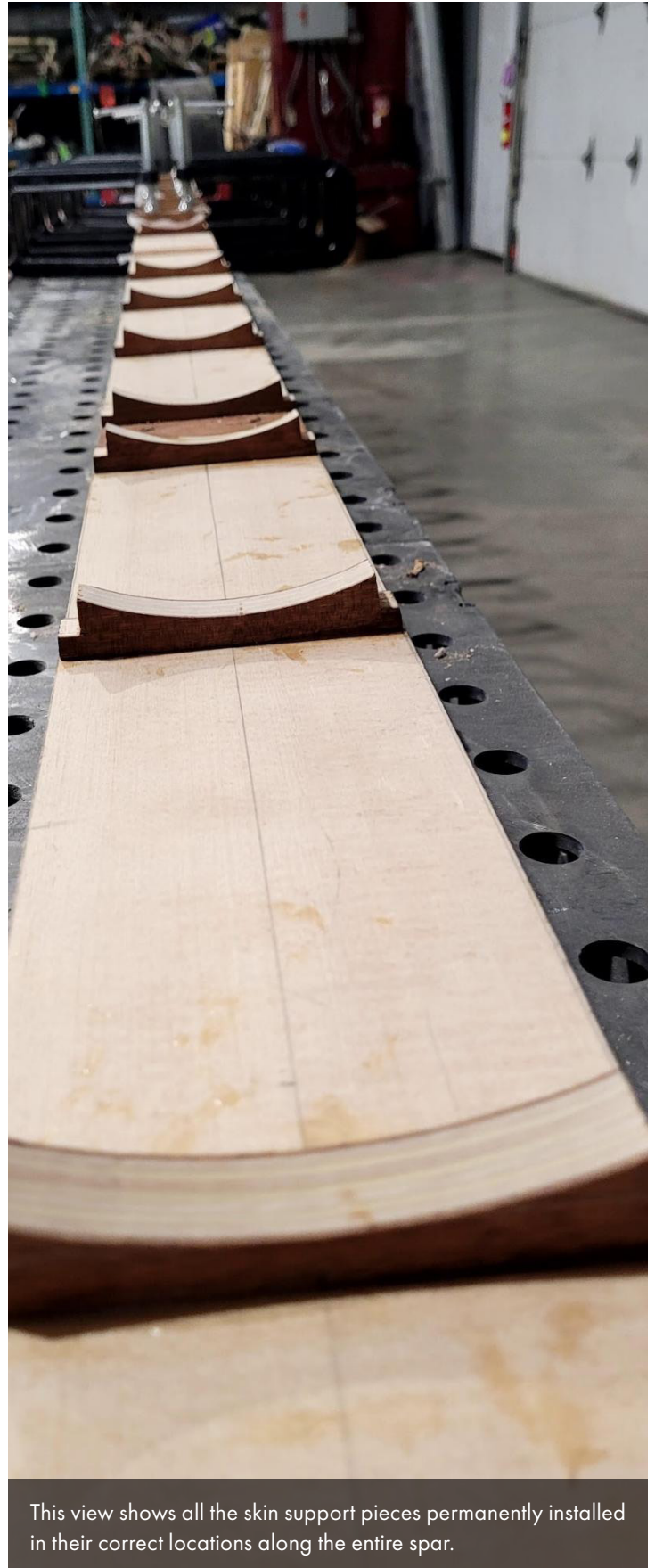
## Horizontal

The horizontal stabilizer is constructed with a box-type front (leading edge) spar and a rear solid spruce spar at the hinge line to the elevators. Aaron fabricated the rear spar for the horizontal stabilizer and trial-fitted it to the fuselage.

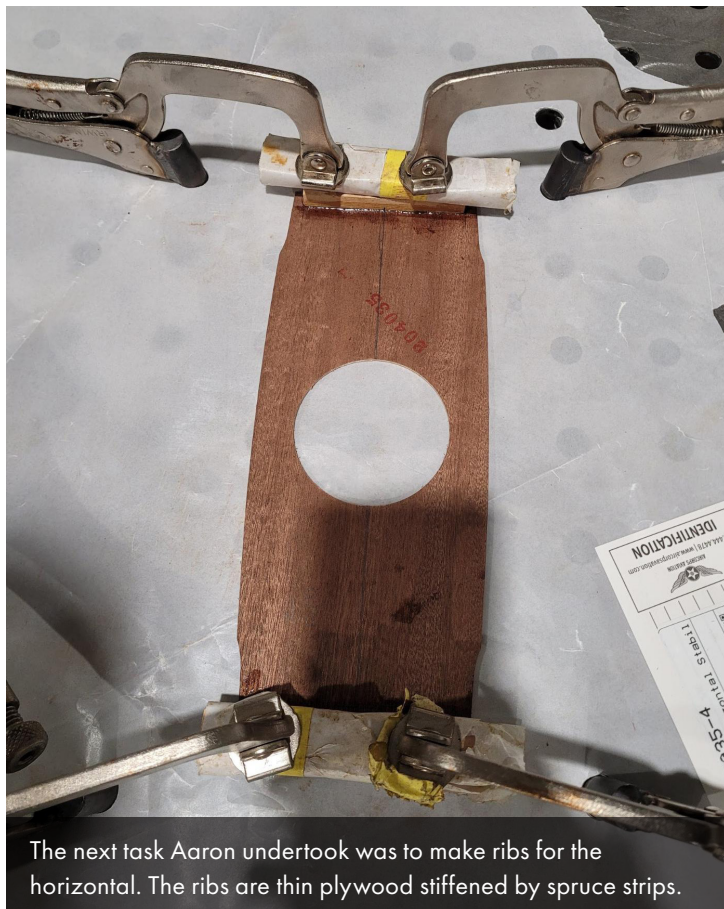




The curved skin supports are glued and clamped to the remaining length of the spar.



This view shows all the skin support pieces permanently installed in their correct locations along the entire spar.



The next task Aaron undertook was to make ribs for the horizontal. The ribs are thin plywood stiffened by spruce strips.



Vertical stiffeners are glued and clamped to set.



The top and bottom strips are glued on each rib.



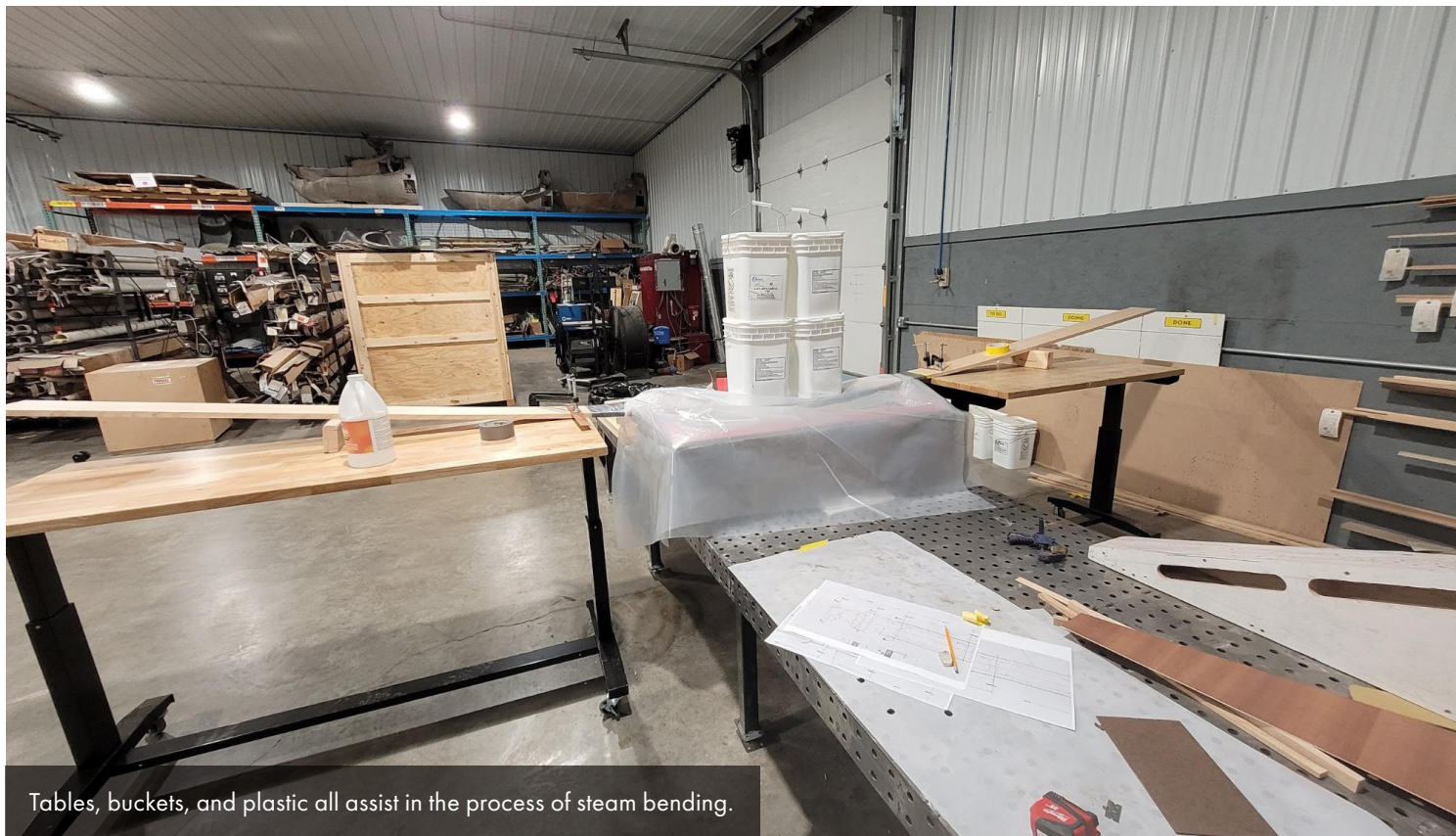
This rib is complete, one of many to be fabricated.



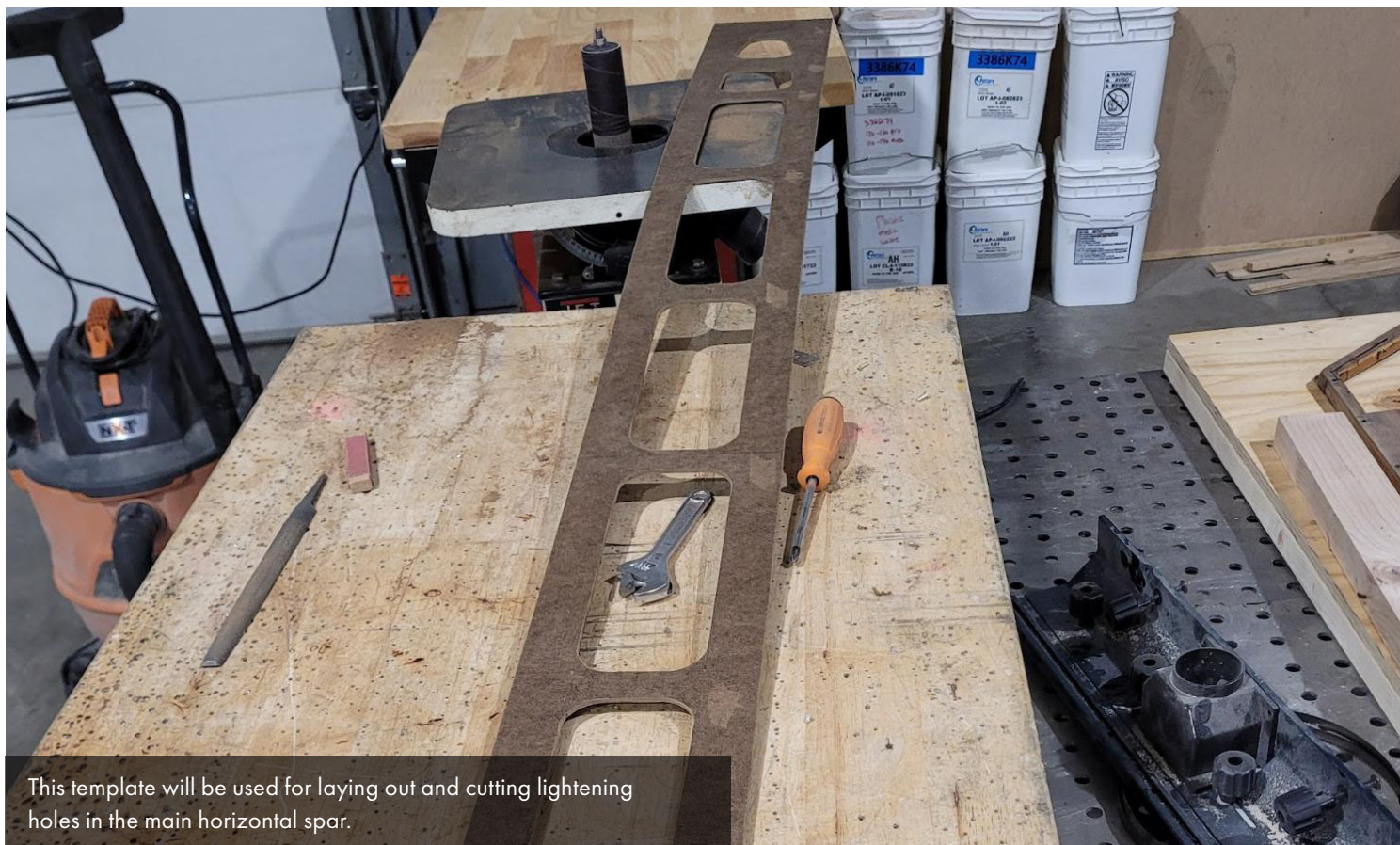
These are spruce blanks for fabricating the main horizontal spar.



The spar is located at the leading edge of the structure and must be steam-bent to follow the curve of the leading edge.



Tables, buckets, and plastic all assist in the process of steam bending.

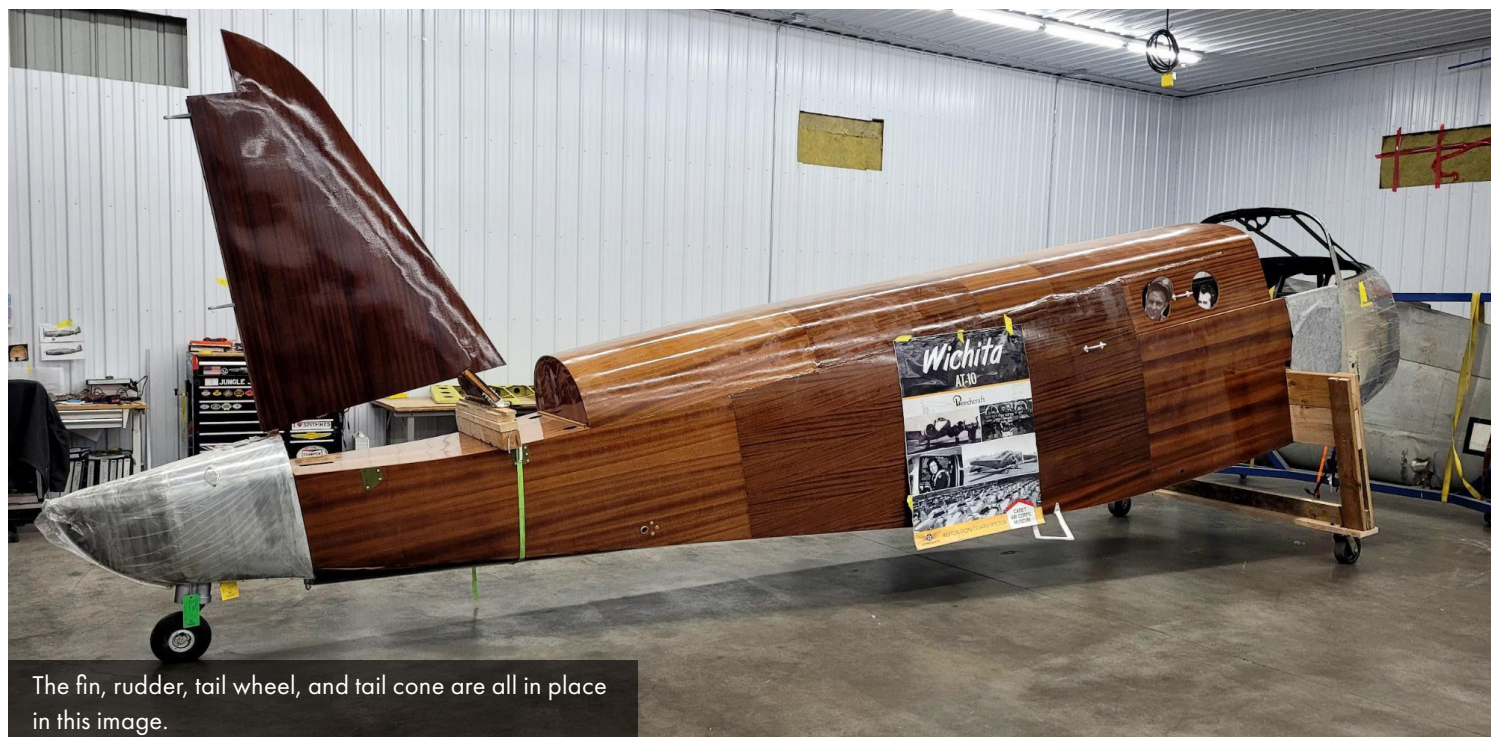


This template will be used for laying out and cutting lightening holes in the main horizontal spar.



## Fuselage

This month was devoted to some final touches on the fuselage, including attaching the tail cone and test-fitting the vertical and horizontal stabilizer components.

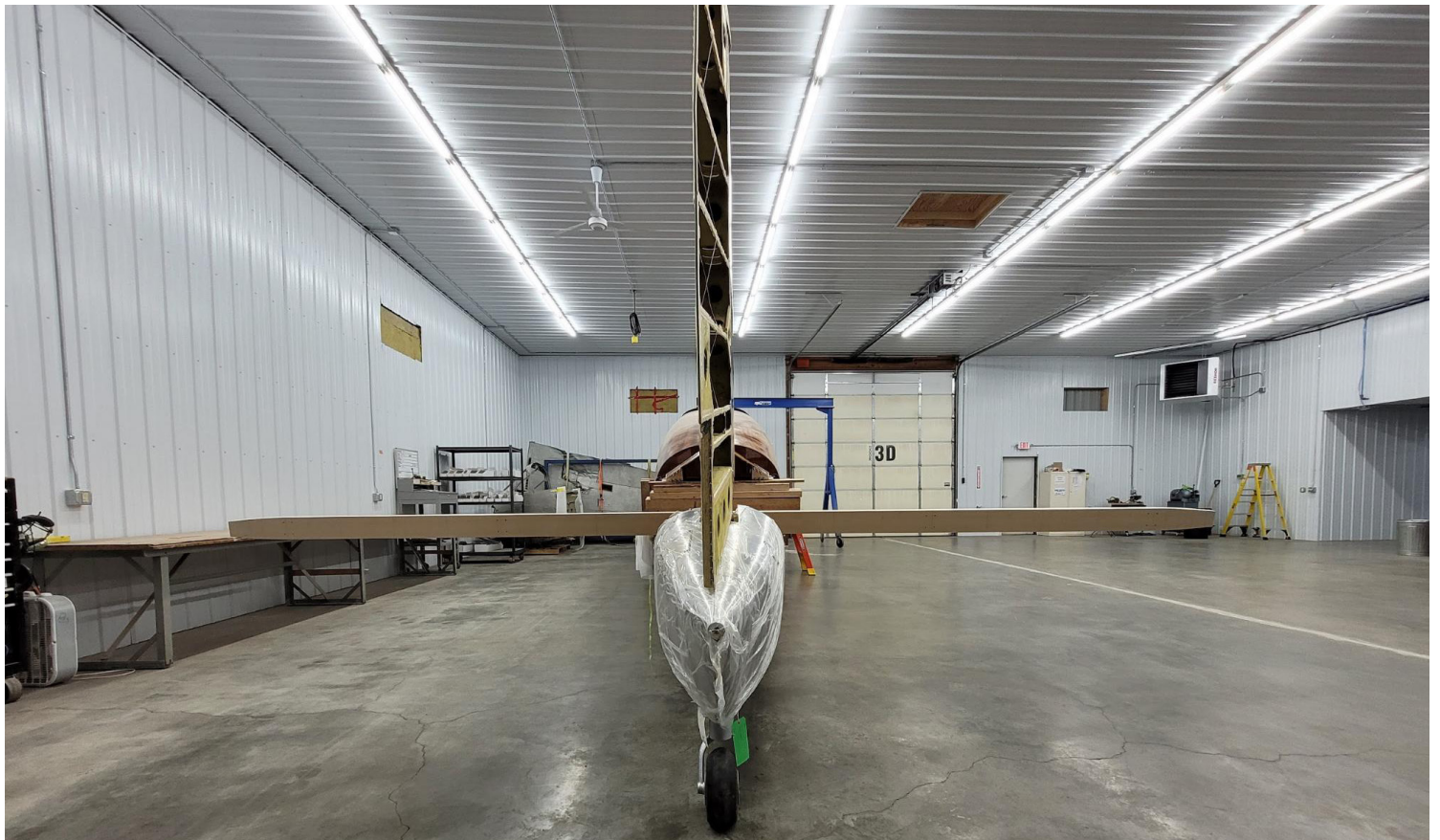




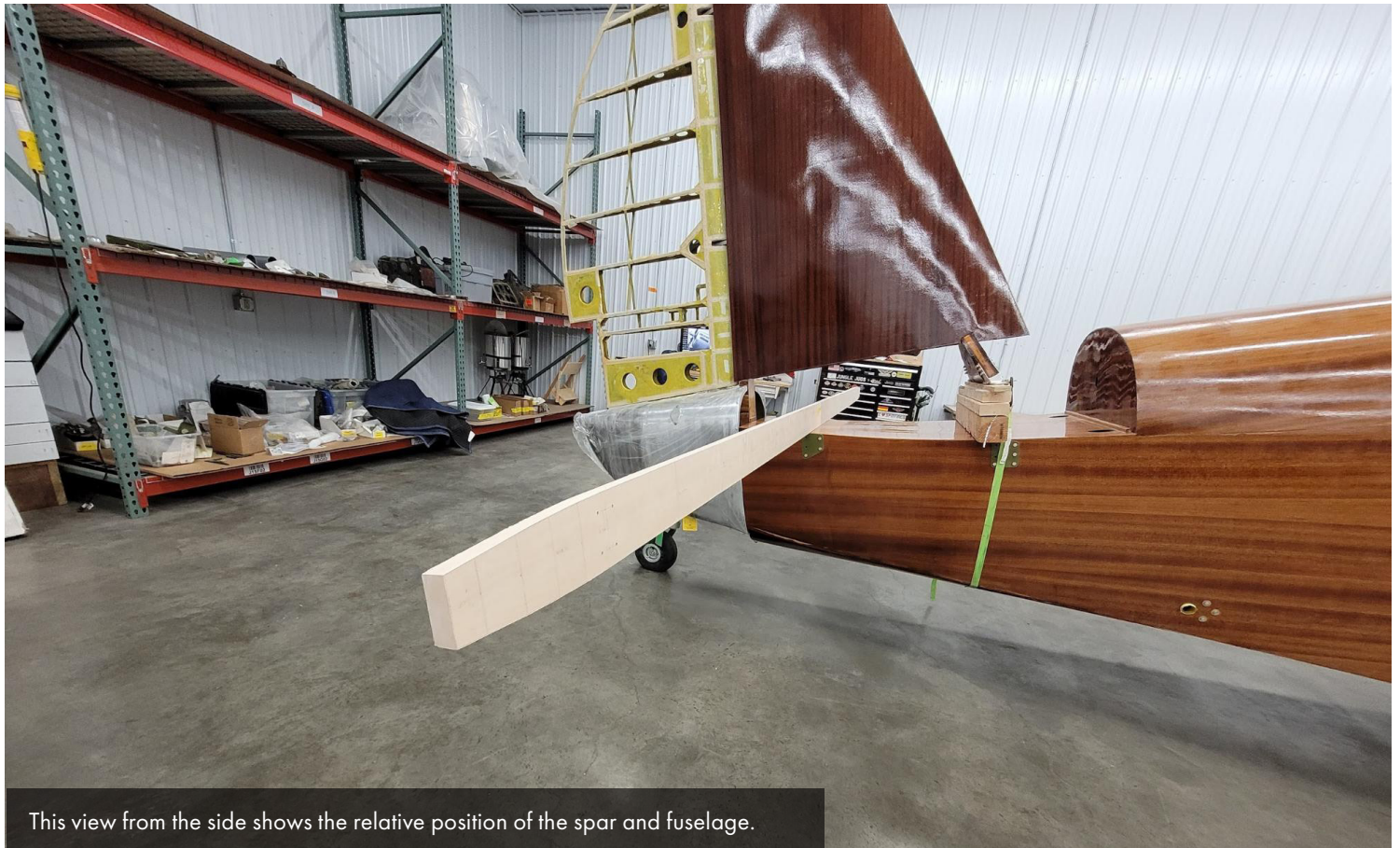
The curved part in the foreground is a cable guard.



The tail cone is covered in protective plastic.



Aaron has installed the rear horizontal stabilizer spar to test the fit.

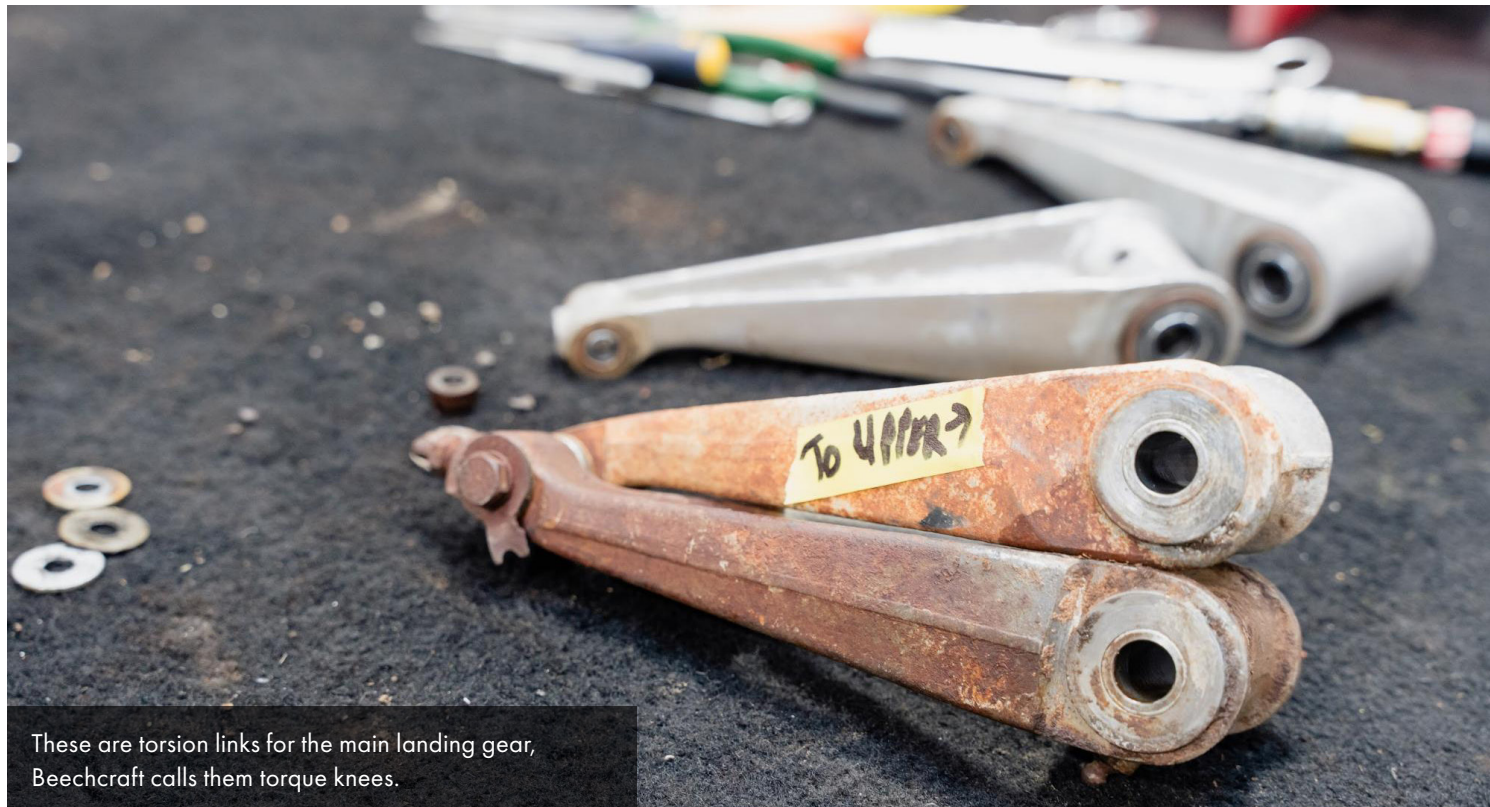


This view from the side shows the relative position of the spar and fuselage.



## Landing Gear

Initial inspection of some of the landing components was completed this month.



These are torsion links for the main landing gear, Beechcraft calls them torque knees.



The tail wheel strut.



Twin brace assemblies for the main landing gear are in the foreground, with struts in the background.



These are the main landing gear struts.



## Rudder Pedals

The rudder pedal assembly was completed.





Forward fuselage structural support.

**MARY ELEANOR MARTON SABOTA****.1999**

CLASS:

44-W-3

BASE ASSIGNMENT:

Dodge City Army Air Base  
Blytheville Army Air Field  
Laredo Army Air Base


PLANES FLOWN:

B-26, B-25, AT-10, P-36, P-40

**Mary Eleanor Martin Sabota from Bloomsburg, Pennsylvania.** Her pilot card (above) is courtesy of the official archive of the Women Airforce Service Pilots of Texas Woman's University.

In May 1944, Mary Eleanor Sabota became one of 10 Women Airforce Service Pilots (WASP) assigned to Blytheville Army Airfield, Arkansas. She is very likely to have flown 41-27322 while taking multi-engine transitional training to prepare to fly the B-26 Martin Marauder.

The following information on Mary Eleanor Sabota comes from Marilyn Laird and the Commemorative Air Force (CAF) *Rise Above* website, and all photos appear on the CAF Rise Above website. (Link noted in footnotes.)



Virtue: Amiability  
Fault: Day dreaming  
Hobby: Hiking  
**Ambition: To be an aviatrix**  
Philosophy: God made the world beautiful  
Fond of: Nature  
Aversion for: Petty misunderstandings  
Pet expression: I'll haunt you!  
Favorite quotation:  
Be noble! and the nobleness that lies  
In other men, sleeping  
but never dead,  
Will rise in majesty to meet thine own.

**Mary Eleanor Beckley**  
Bloomsburg, Pennsylvania  
♦  
Vice President: Class of '36

**High School yearbook entry for Mary Eleanor Beckley (later Sabota). Mary graduated from a girl's boarding school, the First Catholic Slovak High School in Danville, PA, known as St. Cyril's Academy.**

photo CAF Rise Above

Mary Eleanor Beckley, known as Eleanor to her family, was born on February 5, 1918, to Dr. and Mrs. Daniel W. Beckley in Bloomsburg, Pennsylvania, about 140 miles northwest of Philadelphia. To her friends Eleanor was often known to say "Just call me Tommy."<sup>[1]</sup>

Eleanor wanted to be an "aviatrix" as early as high school. Her love for flying blossomed in college through the Civilian Pilot Training (CPT) program at the Bloomsburg Municipal Airport.

<sup>1</sup> <https://cafriseabove.org/mary-eleanor-martin-sabota/>



This federally sponsored civilian pilot training program was designed to promote aviation and to train a cadre of pilots who could be quickly trained in military flying should the need arise. They allowed one woman per class, or one female for every ten male students. "This is where it all started," Eleanor would later write in her scrapbook.

In May of 1943, Eleanor married Johnny Martin just days before he was shipped to England to fly with the Eighth Air Force.

Sadly, Eleanor became a widow after only 39 days of marriage at age 25. Flak knocked the wing off the B-17 Johnny was piloting, and he was killed on his first combat mission.



**This was a WASP publicity photo, of Mary Eleanor Martin (Sabota) during twin-engine training in a Beechcraft AT-10.** photo CAF Rise Above

The tragedy made Eleanor only more determined to do her utmost in the war effort. So she applied to join the Women Airforce Service Pilots or WASP.

<sup>2</sup> <https://cafriseabove.org/mary-eleanor-martin-sabota/>



In September 1943 Mary Eleanor Beckley Martin was accepted into the WASP program, and received “orders” to report to the WASP training center in Sweetwater, Texas as a trainee, effective October 4, 1943. Eleanor was known as Mary Martin in the WASP program.



Hometown paper article published shortly after Mary Eleanor entered flight school at Avenger Field, Sweetwater, Texas. photo CAF Rise Above



Mary Eleanor Martin sits atop the wing of a BT-13 in another WASP publicity photo. photo CAF Rise Above

Mary, as she was known while in the WASP, was the subject of many promotional photos because of her confident demeanor and beauty.

In May 1944, Mary began transitional training to prepare to fly the B-26 bomber at Blytheville Army Airfield, Arkansas. While at Blytheville in the summer of 1944, she flew the Beechcraft AT-10 twin-engine trainer, the Curtis Wright AT-9, and the twin-engine Cessna UC-78.



**Mary Eleanor Martin and a B-26, probably at Laredo Army Air Field, photo CAF Rise Above**

In September 1944, after officer's training, Eleanor was transferred to Laredo Army Air Field in Laredo, Texas, where she began her operational duty, flying the Martin TB-26, nicknamed "The Widowmaker".

For more information on Mary Eleanor Martin Sabota or many other WASP and the Tuskegee Airman, visit the CAF Rise Above website dedicated to inspiring young people to RISE ABOVE adversity using the lessons and stories of the Tuskegee Airmen and the WASP.

<https://cafriseabove.org/>

## Want to get involved?

We are constantly looking for new technical material related to the AT-10. Due to the rarity of this aircraft, and the relatively low number that were produced, acquiring engineering drawings, parts catalogs, maintenance manuals, and other documentation has been much more difficult than with our past restorations. If you have any AT-10 material, or know someone who does, we'd like to hear from you!

### **Be a part of helping the AT-10 return to the skies!**

Contact Ester Aube, email or phone  
[estera@aircorpsaviation.com](mailto:estera@aircorpsaviation.com) or 218-444-4478



Should anyone wish to contribute to the Cadet Air Corps Museum's efforts, please contact board members Brooks Hurst at 816 244 6927, email at [wingnutsflyingcircus@yahoo.com](mailto:wingnutsflyingcircus@yahoo.com) or Todd Graves, [todd.graves@pobox.com](mailto:todd.graves@pobox.com). Contributions are tax deductible.