



Jan/Feb-2017

JAN/FEB

Texas Flying Legends' P-47 Update
by Chuck Cravens



AIRCORPS AVIATION



The permanently riveted tail cone has been moved to its horizontal stand.



Update

It has been almost exactly two years since we began working on the P-47 on the shop floor. A great deal of that time has been spent on fixture fabrication, disassembly of the veteran airframe, inspection, and parts manufacturing. The tail cone, horizontal stabilizer, and vertical stabilizer are pretty much permanently completed, but this month an even more exciting part of the restoration began.

Fuselage Components

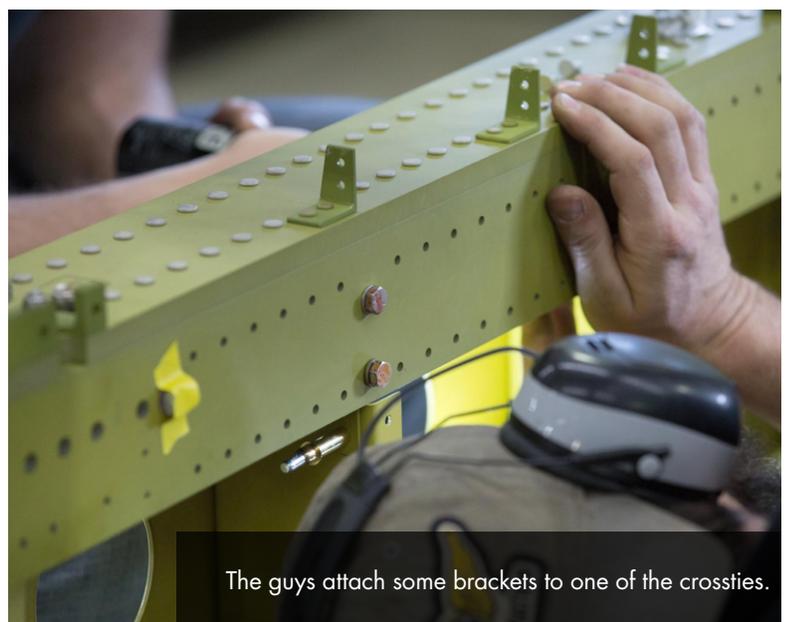
Fuselage longerons and ribs went into the fixture, so for the first time the forward fuselage is beyond the parts fitting stage and is being assembled.



Ryan works on readying the wing crosstie for assembly.



The wing crosstie and attach fittings are ready for use.



The guys attach some brackets to one of the crossties.

These massive components tie the wings together and carry the attachment fittings on each side of the P-47's fuselage.



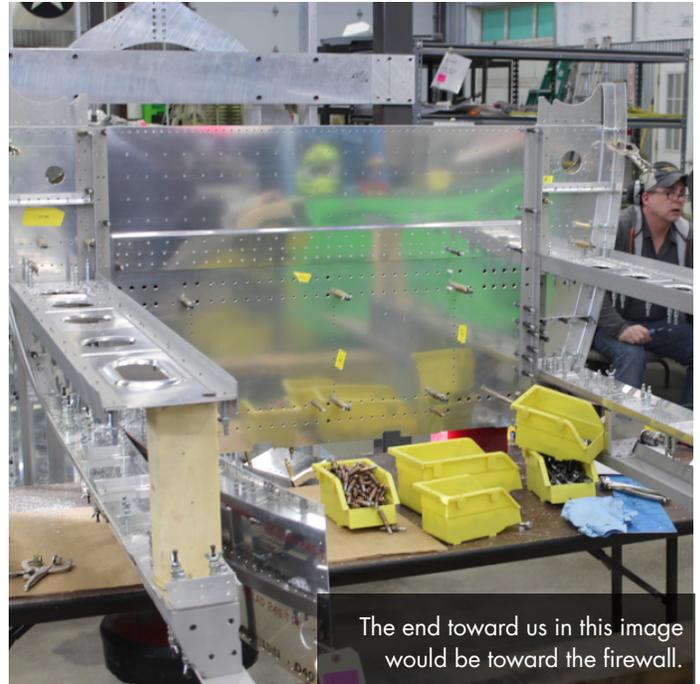
Hunter works on assembling one of the fuselage ribs.



Here we have another view of the same rib as Hunter puts the assembly together.



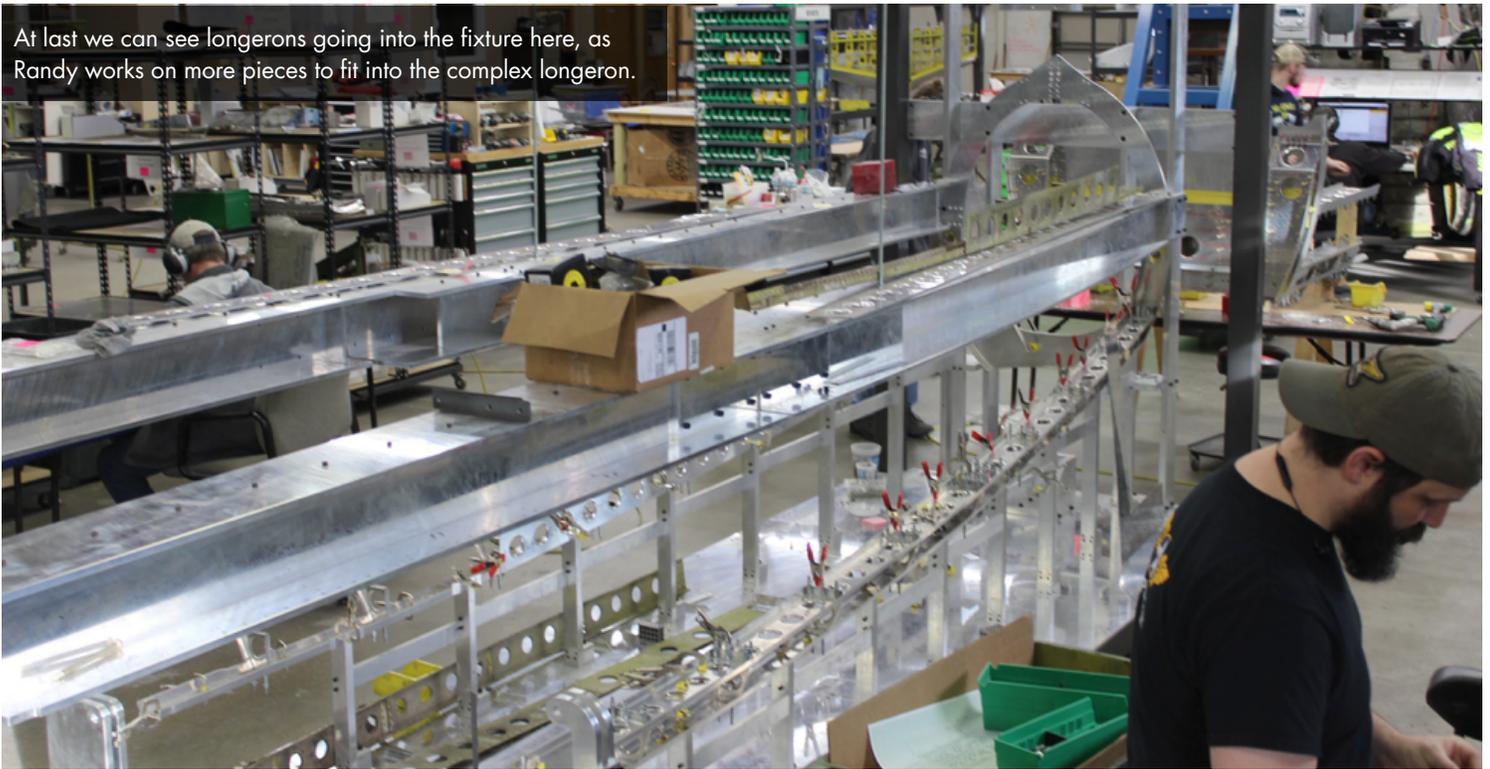
The rib and crossie are trial-assembled to sections of the lower longeron and crossie fittings.



The end toward us in this image would be toward the firewall.



At last we can see longerons going into the fixture here, as Randy works on more pieces to fit into the complex longeron.



A view from the forward end of the fuselage shows how the longeron sweeps upward.



Robb checks the longeron. These lower longerons form a compound curve as they extend back and they each have over 30 separate pieces that need to fit perfectly to make the assembled longeron conform to the Thunderbolt's beautiful lines.



Hunter and Randy work on the now painted fuselage cross tie rib assembly. It is mounted in the fixture by the wing attach points.



Another view as Randy and Hunter drive rivets.

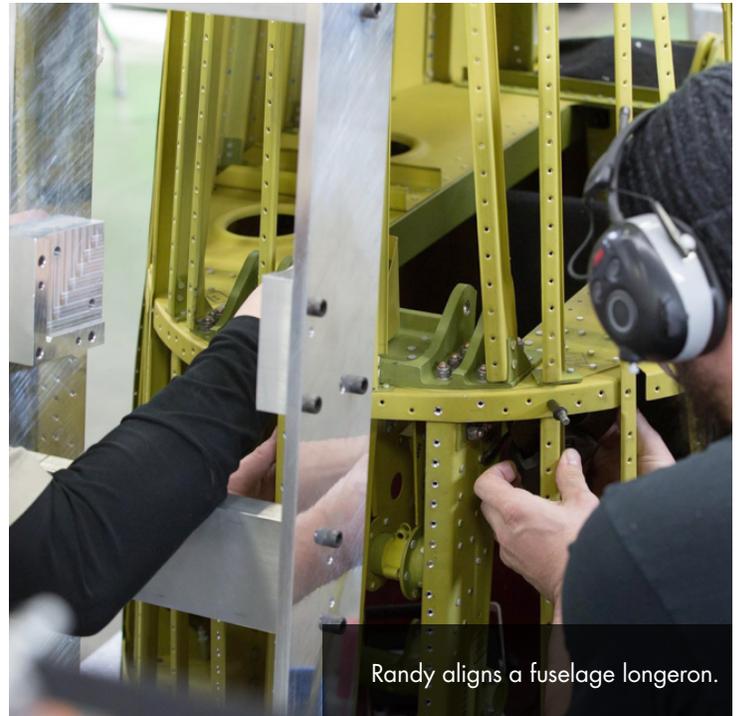


Tail Cone

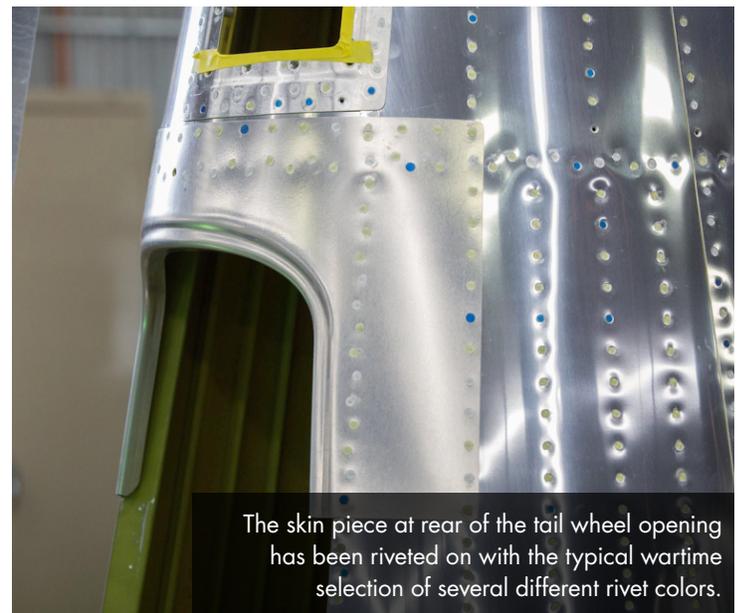
As the work on assembling the forward fuselage got underway, the finishing touches were put on the tail cone this month and the permanent riveting was done- other than a few that will be left off to facilitate later assembly. The whole assembly was removed from the vertical fixture and mounted on a horizontal stand that will make it easy to mate with the rest of the fuselage when that time comes.



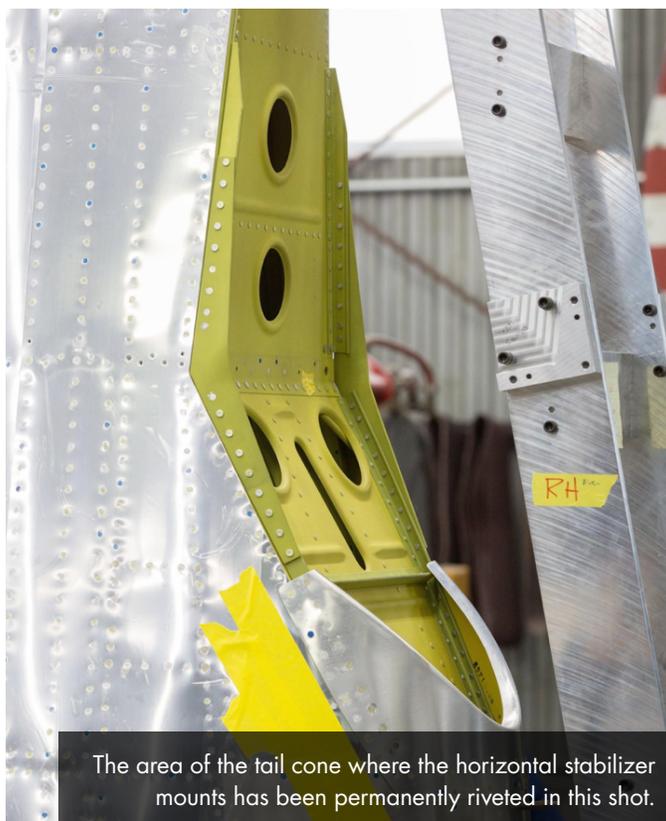
Robb clecoing a skin section to the tail cone.



Randy aligns a fuselage longeron.



The skin piece at rear of the tail wheel opening has been riveted on with the typical wartime selection of several different rivet colors.



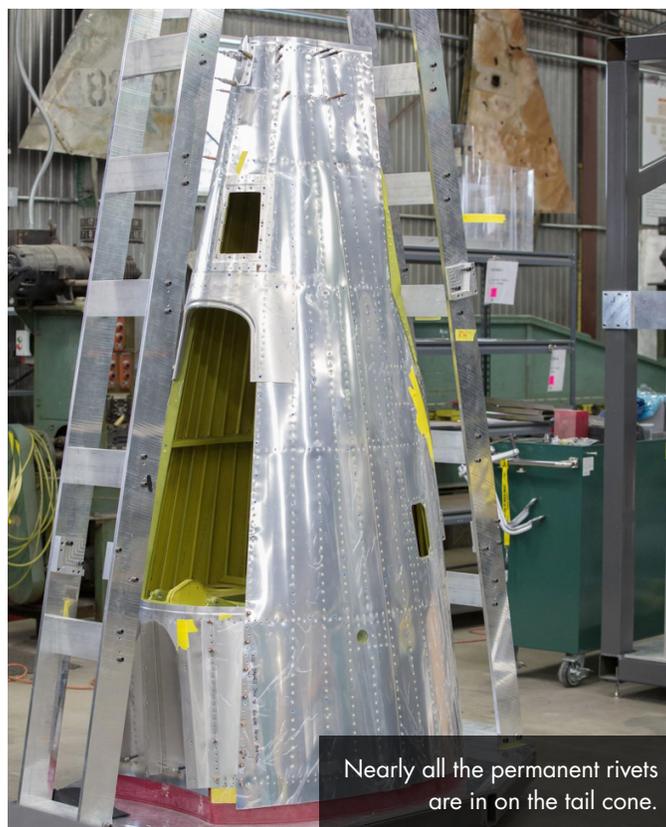
The area of the tail cone where the horizontal stabilizer mounts has been permanently riveted in this shot.



Randy looks over the completed assembly to make sure it is ready to remove from the fixture.



The tail cone has been removed from the vertical fixture and mounted in a stand on wheels. The stand will simplify moving it into alignment when the time comes to mount it to the forward fuselage.



Nearly all the permanent rivets are in on the tail cone.



The zinc chromate internal corrosion protection is prominent in this view from the front of the tail cone.



New Tech Institute Evansville P-47 Project

Finally I'd like to acknowledge a worthy project being done in Evansville, Indiana, home of the factory that produced 42-27609. The New Tech Institute is a Project Based School. Teacher Pat Carter's words below speak for themselves, but I am sure the group would welcome donations.

AirCorps Aviation thought so and felt the involved students, teachers, and consultants could benefit from membership in AirCorps Library which gives them access to the available engineering drawings, manuals, and other information on the P-47 and over 20 other warbirds.

Pat Carter can be contacted at 812-746-8796



"New Tech Institute opened in 2010 and is a Project Based Learning school that has also been certified by the State of Indiana as STEM High School. The school is located less than a half mile from the former Republic Aviation Plant in Evansville where over 5,000 men and women manufactured 6,242 P-47 Thunderbolts from 1942-1945. New Tech chose the Thunderbolt as our school mascot and has been actively promoting the aircraft in its historic role such as working to develop displays for Evansville Wartime Museum and one of the projects currently being built is a 1/3 scale reproduction of a P-47 Razorback. Our school has been blessed to meet Lt. Allen Sanderson a member of the 57th Fighter Group (First in the Blue) who flew 118 missions in his Lady Jane. In talking with Lt. Sanderson we asked if we could name this aircraft Lady Jane in his honor and he agreed. Our goal is to build two of these aircraft, one for display at our school and a second for the Evansville Wartime Museum."

<https://evansvillewartimemuseum.org/home/>