

# BOXCAR BULLETIN

EDITION

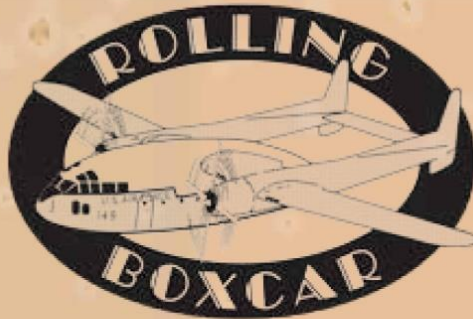
APRIL, MAY, JUNE 2023

PRICE 5¢

## ☆☆ Rolling Boxcar Updates ☆☆

### The Eyes Can See YOU!

Rolling Boxcar is a large aircraft fuselage at 11.5 feet wide, 60 feet long and just over 15 feet at her high point. And with the average road lane being 12 feet wide, things will be a little tight going down the road. So, with help from Diesel Boss out of Albany OR, RBC will have an array of exterior cameras to help us



Rolling History to the Vets  
Who Helped Make It

navigate with an eight channel Mobile DVR and a split screen monitor. In addition to heated side mirrors, there will be one camera on either end of RBC's front bumper looking low and down both sides to assist in lane changes. One will be looking directly aft to see who might be drafting us.

Cont. Page 2 "Eyes"

### Honor Flight

On Saturday April 22nd, we had the privilege of having a small group of representatives at the Anchorage International Airport for the return of the annual honor flight group from Washington DC. This was the 16th Last Frontier Honor Flight mission. The flights honor Alaska's veteran's form World War 2, Korean war, Vietnam was and the cold war by taking them and a

Cont. Page 2 "Honor"



Eyes from pg 1

One will be looking directly forward off the front bumper to see who might be out of sight and just under our nose. Another will be at the very highest point on RBC to help us check for low wires and bridge clearance. And one in the cargo bay to quickly see what the crashing sound came from. The location of the other two cameras is a secret.

All these “eyes” will be recording and can be later reviewed in case of a fender/fuselage bender. The 8 split screen monitor can, with a touch, zoom to one of the cameras in full screen. And the system will run 24/7 for security purposes to see who might be combing their hair in our shinny aluminum skin while parked. So if you see RBC in your lane just ahead,

smile and know that we see you too.

☆☆☆☆☆☆☆☆



### **Trade Show under the Midnight Sun**

Rolling Boxcar took part in the “Music in the Park” event in Wasilla Alaska recently. This event happens every summer for several weekends. There are vendors, food trucks, and of course music. The week we were there the 11th Airborne Division Band of the Army, and the incomparable Lulu Small Band played. What a treat. We had our booth setup in plenty of

time for the 12 o'clock opening and we stayed the end at 9 P.M.

We had a great day, talked to lots of folks about our project. Took many donations and gave out many donation rewards.

Our next outing will be at the “Alaska Fest 9” on July 22nd at the American Legion Post 28 in Anchorage.

“Alaska Fest 9” is very similar to “Music in the Park” except that all the

Cont. Page 3 “Sun”

☆☆☆☆☆☆☆☆

Honor from pg 1

guardian to Washington DC to visit Memorial's in the area.

From all of us here at Rolling Boxcar welcome home and thank you for your service.



“Sun” funds raised by Post 28 are used in service to our US Armed Forces Veterans, Active Duty personnel, and their families. They are a private, not-for-profit entity always welcoming new eligible members. So come out to support Rolling Boxcar, the post, hear some music, and have some fun. We are looking forward to seeing you.



## **The Shape of Airborne Things**

Let's take a look at why a boxcar looks the way it does. Way back at the beginning of the design process, the customer told us what it has to carry (how heavy, how big, etc.) and how far. There will be more - a lot more - of requirements that you had better

be able to meet. With that, we have determined how much the airplane will weigh when fully loaded, how much wing area and horsepower it needs, and a good idea of its empty weight. But exactly how will this particular flying machine be arranged? Since part of the specification requirement included a pretty long range, we will need a good low drag wing. That means a high aspect ratio - that is, long and skinny. That's good for low drag, but to make it strong enough, it gets heavy. About the Boxcar's configuration. Back early in the design process, we decided to mount the wing on top of the fuselage so the cargo deck could

be at a more convenient height for rapid loading. That's all well and good, but now that landing gear is going to be rather longer than we might prefer. Long landing gear legs are heavy, and hard to construct with adequate stiffness. We could install the main gear in pods at the sides of the fuselage (think C-123, C-130, CASA 212, C-141, C-5, and many others). The gear itself gets lighter, but now the

Honor from pg 1

guardian to Washington DC to visit Memorial's in the area.

From all of us here at Rolling Boxcar welcome home and thank you for your service.

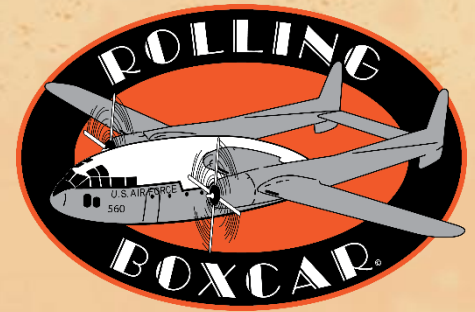
landing loads have to be passed through the lower fuselage structure to the wing. And that load path structure is heavy. Also pod mounted mains have to be narrow, leading to unintended excitement in crosswind landings. So Fairchild elected to use nacelle mounted mains, although longer than might be desired, saved some weight in the lower fuselage. To help the situation the wing center section was given a pronounced anhedral, that is, sloping downward as we move outboard.

This moves the nacelles closer to the ground, helping reduce the weight of the landing gear and also makes engine maintenance more convenient. For lateral stability, the outer wing panels were given dihedral, making the C-119 a true (inverted) gull-wing airplane.

So now you have a better idea of why a Boxcar looks the way it does.



**Need a conversation piece? This prop blade would get it started. In your private office, restaurant, or lobby. We have several, and some have artwork on them. contact [john@rollingboxcar.com](mailto:john@rollingboxcar.com)**



Beauty is in the ability to do the job effectively. So that makes the C-119 kinda pretty to me.



Scan the code for "Ride in the Boxcar" information.

