P-51B SHILLELAGH SUMMER UPDATE

AIRCORPS AVIATION

Dakota Territory Air Museum's P-51B Mustang

by Chuck Cravens

Shillelagh's fuselage is on a rollable jig as work progresses.

Work on the fuselage systems was a focus this month. Cooling and induction, cockpit, and firewall forward systems all received attention as the restoration progressed. The wing construction also proceeded. Finally, a research mystery was solved when the family of Fred Osborne, Shillelagh's crew chief, was located.

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Fuselage

Most of the recent fuselage work isn't visible externally because Aaron and the rest of the guys spent their time on systems, cockpit electrical, and hydraulic installations.

Cooling and Induction Systems

Despite being new old stock, the doghouse still had to be disassembled, inspected, and painted. Here it is shown in the fixture as it is reassembled.

Theo is in the process of making a new skin for the doghouse.

Shillelagh's airscoop mounts to the front of the doghouse under the wing and takes in air for both the radiator and oil cooler.

Potential components of the carburetor air induction system are organized on a table for inspection as the time for their fitting and installation nears.

Jacob checks a newly repaired and painted part for Shillelagh's airscoop.

Cockpit Systems

The frame for the instrument panel has been installed, along with the pilot's switch panel and the throttle quadrant.

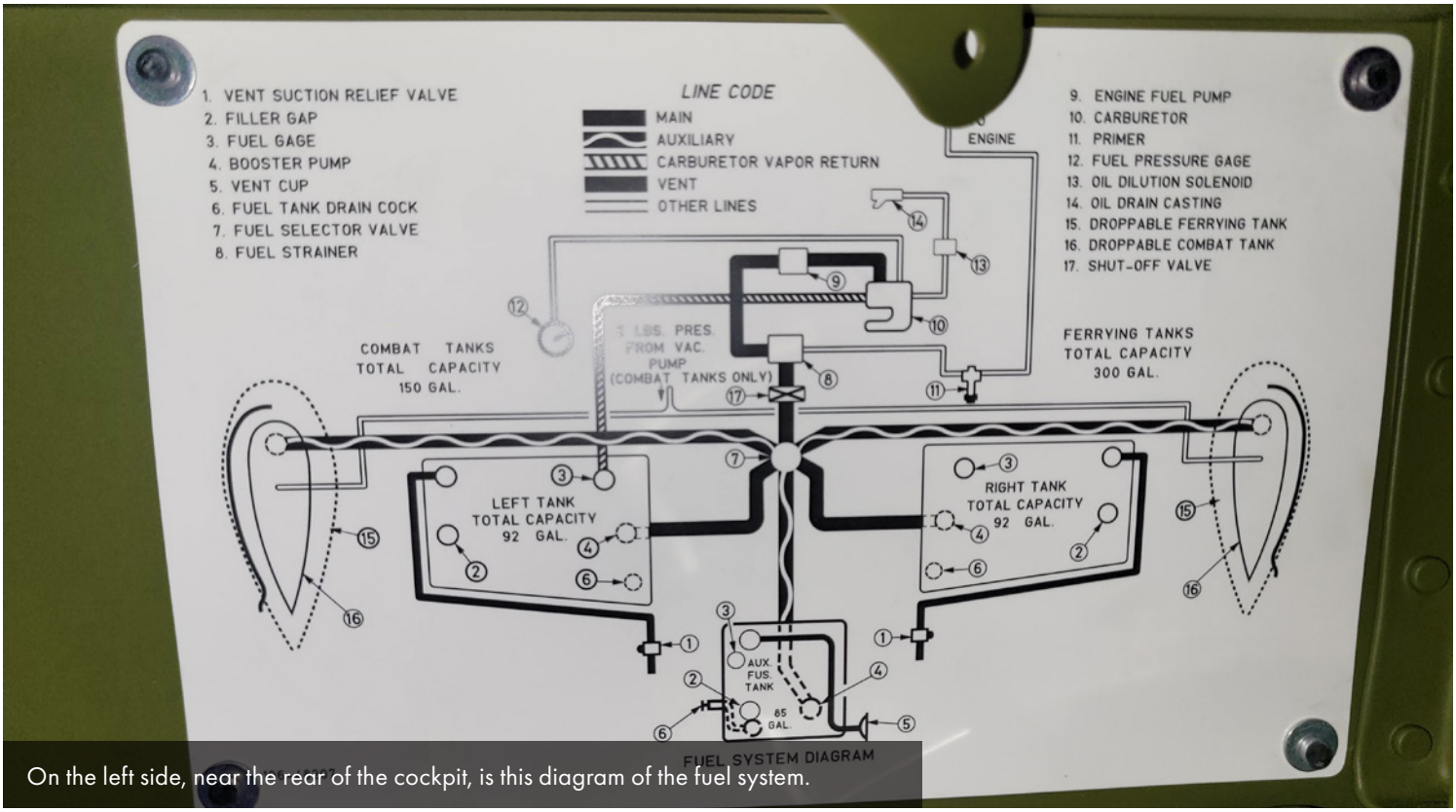
A closer view of the throttle quadrant reveals stenciling detail and Col. "Bud" Anderson's signature.

The main electrical panel is on the right of the cockpit.

The starter and battery relays are mounted on the rollover structure behind the pilot's head.

The trim console is in place.

The flap control lever is at the rear of the trim console.



On the left side, near the rear of the cockpit, is this diagram of the fuel system.

The oxygen dilution control is mounted just behind and to the right of the instrument panel.

The bomb control sector mounts on the lower left cockpit side near the bottom of the instrument panel. The gun switches are on the panel seen in the center right edge of the photo.

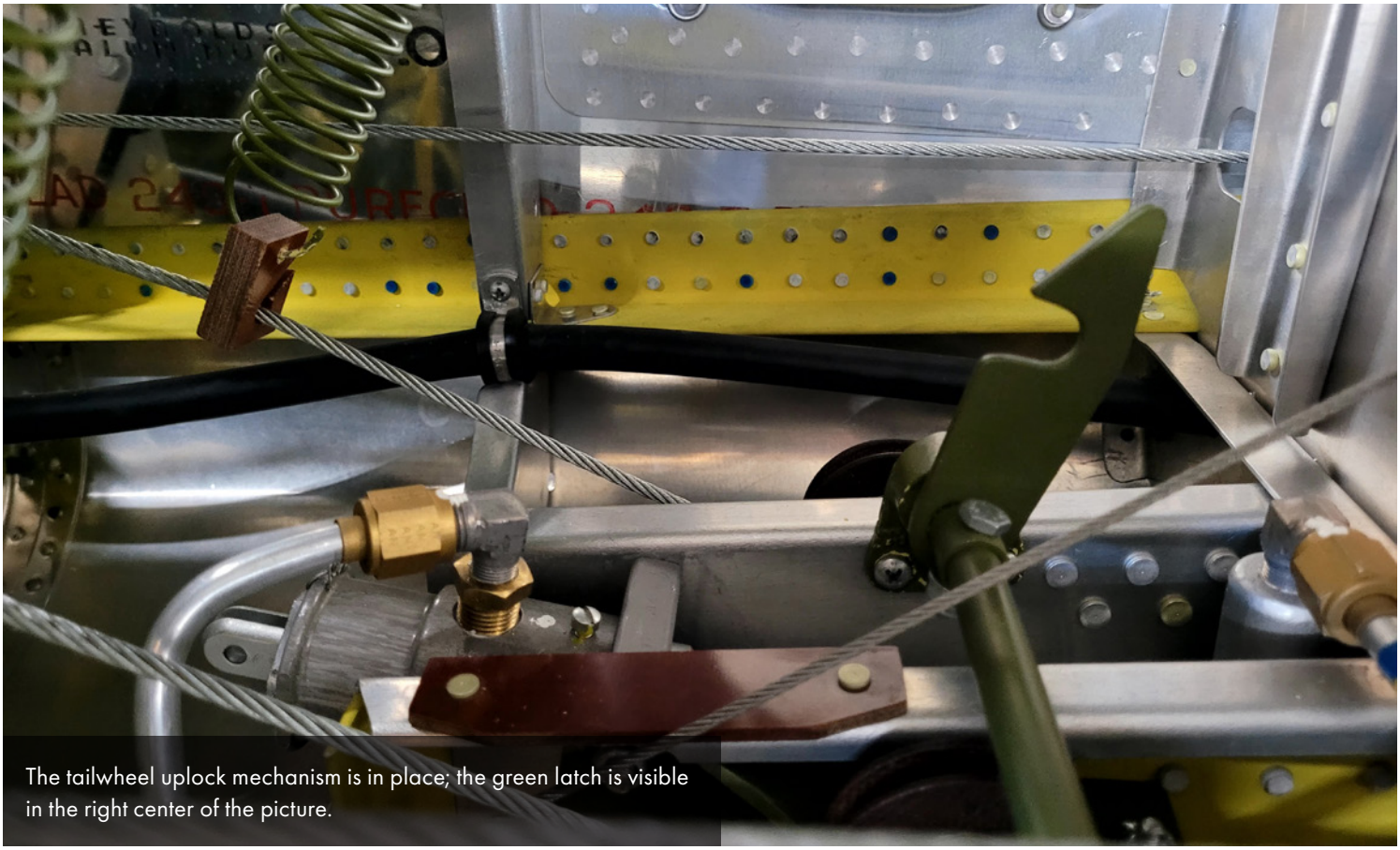
A more detailed view of the armament control panel shows the switch labels. The "heater" switch kept the guns functional in the extreme cold of high-altitude operations.

Cabin heat is a system that keeps the pilot functional at altitude, and is controlled by a handle mounted on the floor. Gun heat is provided electrically, while cabin heat uses warm air ducted from the radiator.

This lever at the front of the bomb control sector selects dropping the bombs together in a salvo.

The pilot's main switch panel is installed and awaits the ignition switch wiring and installation.

Warning placard on a landing gear hydraulic check valve.



The tailwheel uplock mechanism is in place; the green latch is visible in the right center of the picture.

Firewall Forward

This shaft and bellcrank are part of the carburetor control linkage.

The forward Lord mounts for the Merlin are visible in this photo.

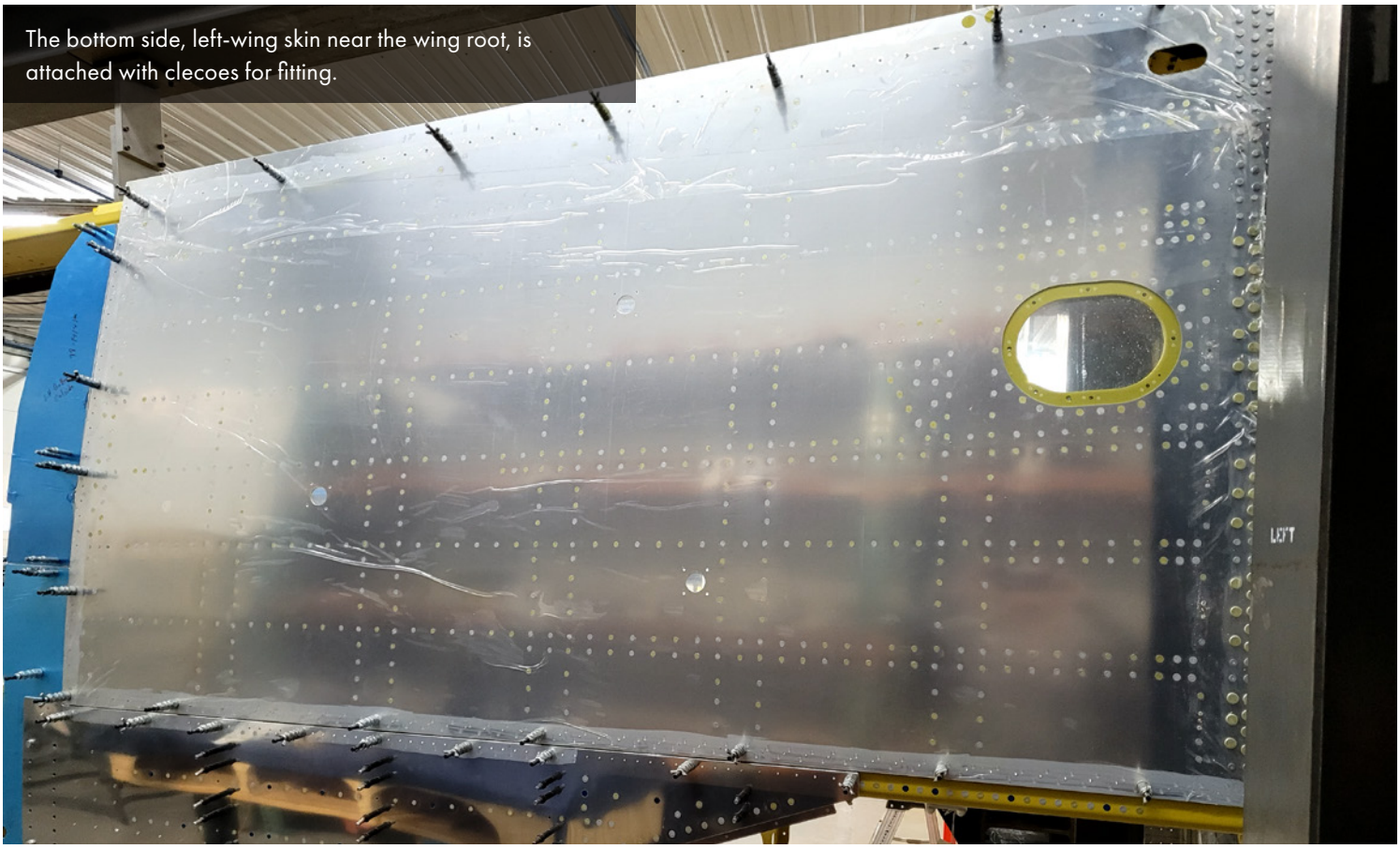
The newly overhauled Merlin engine has arrived from Vintage V-12s.

Wings

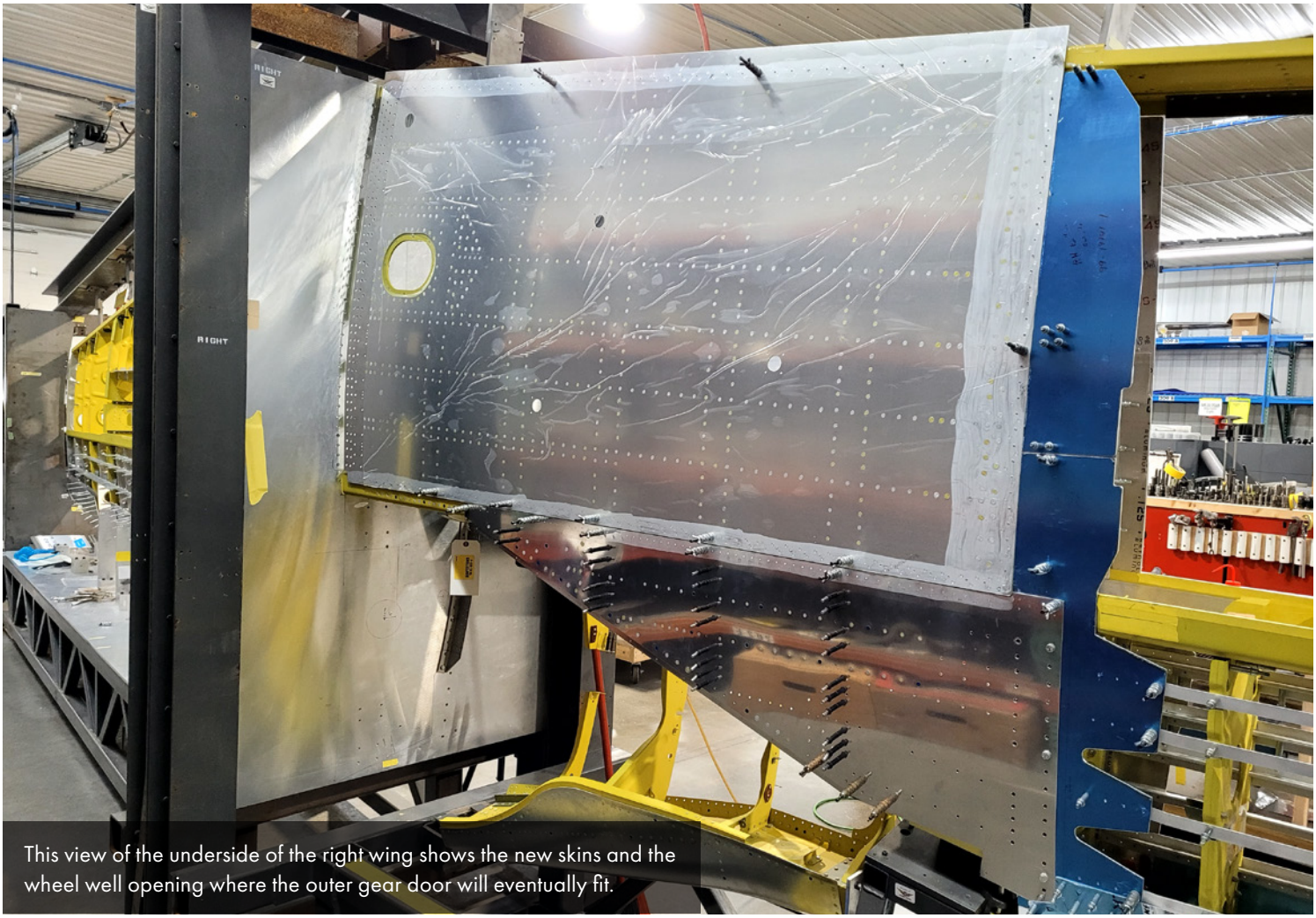
Construction of the wings is progressing nicely. The ribs, stringers, and spars have all been painted as necessary and assembled into the wing framework. The fitting of the wing skins to the frame is underway.

Wing support stringers have been added.

The center part of the leading edge skin, and a section of the tip skin, are checked for fit.



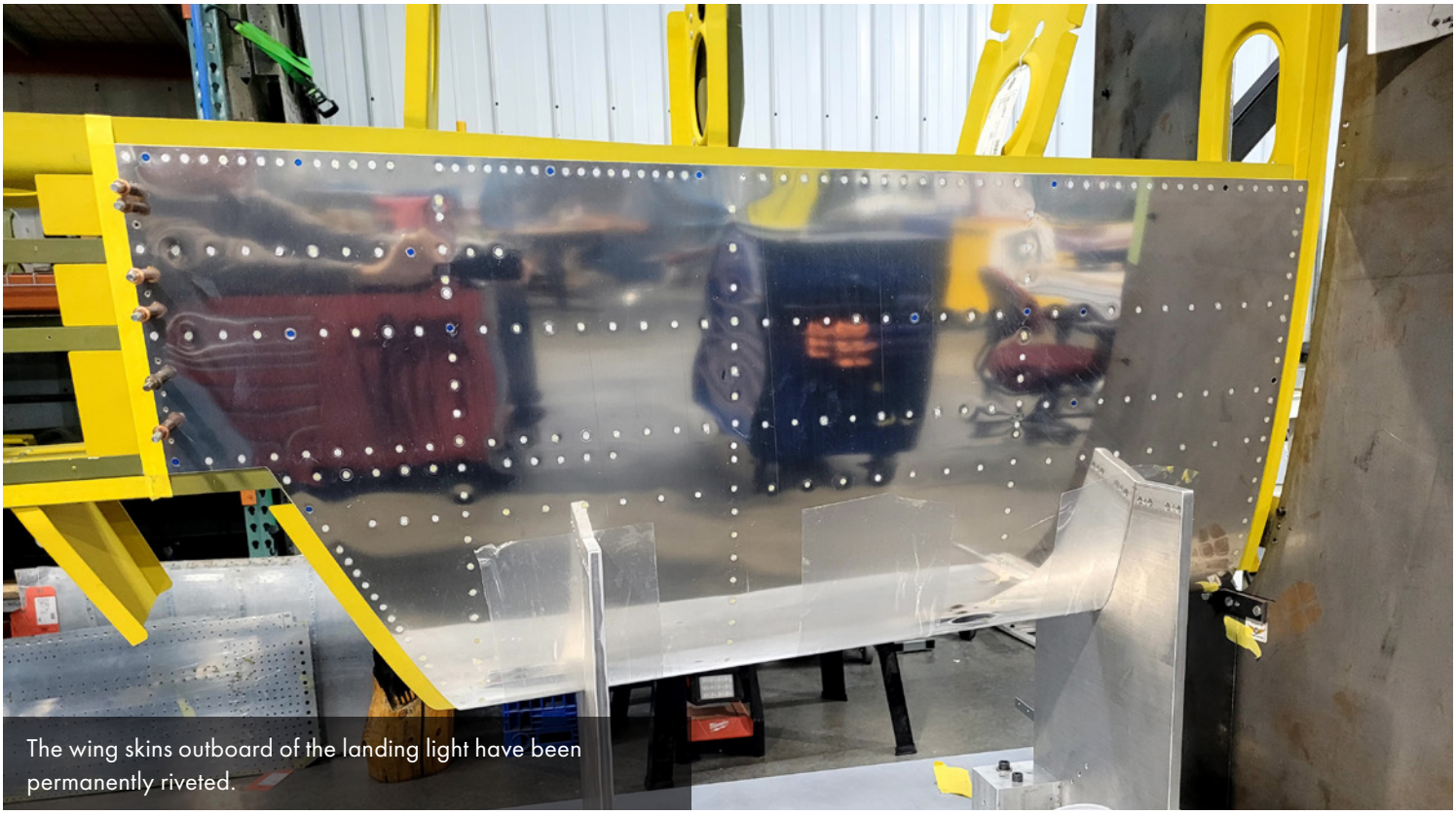
The bottom side, left-wing skin near the wing root, is attached with clecoes for fitting.



This view of the underside of the right wing shows the new skins and the wheel well opening where the outer gear door will eventually fit.

The upper landing gear bay skin sections are fitted.

The leading-edge skins in front of the gun and ammo bays are spot-welded in place.

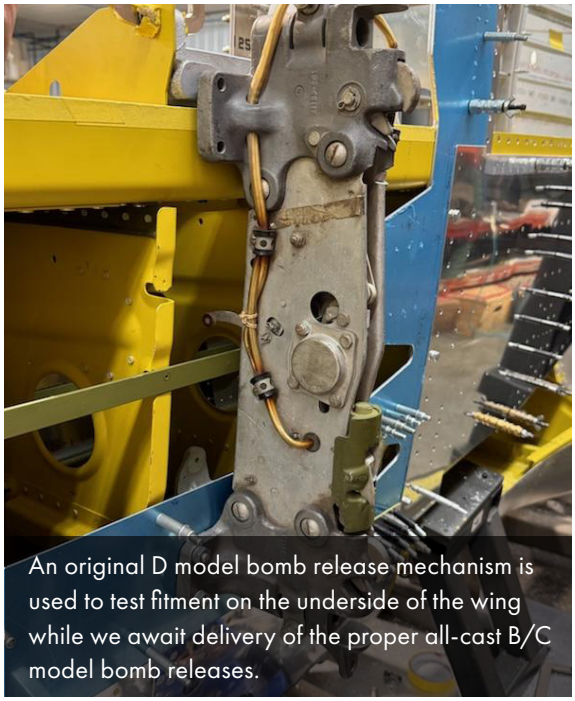


The wing skins outboard of the landing light have been permanently riveted.

The relative position of the opening for the B/C model Mustang landing light is apparent in this image.

One method helpful in locating where to drill the skins for riveting is to temporarily mark the underlying structure on the outside of a new skin panel.

Neil clecoes another skin section in place as part of the process of fitting the wing skins.



An original D model bomb release mechanism is used to test fitment on the underside of the wing while we await delivery of the proper all-cast B/C model bomb releases.

In this close-up view of the D model bomb release, the sheet metal mid-section construction is evident. An accurate B/C model bomb release would be all cast.

A historically accurate all-cast B/C model bomb release on Lope's Hope 3rd. Photo by Scott Slocum from Lope's Hope 3rd judging book.

Ken Dahlberg on the wing of Shillelagh III, the locomotive and cow are visible below the two swastika markings.
Photo courtesy of the Dahlberg family.

What are a cow and a locomotive doing on the side of Shillelagh?

In photos of the original Shillelagh III, there are two rather strange markings in the area where victory markings are customarily painted on a P-51 - a cow and a locomotive. The reason for the cow and locomotive remained a mystery until the author was able to locate the family of Shillelagh's crew chief: Fred Osborne. Fred's daughter, Kathy (Osborne) Brookside, and her husband Steve were kind enough to explain the meaning during a phone interview.

This enlarged area of the Shillelagh III profile rendering by Bertrand Brown clearly shows the strange locomotive and cow markings.

[1] Cow story as related by Fred Osborne, Shillelaugh/Shillelagh crew chief to Steve Brookside, (Fred Osborne's son-in-law) as retold to author in a phone conversation on 4/18/2025

Steve recalled his father-in-law telling the story about the odd markings. It seems a relatively new pilot in the 353rd Fighter Squadron had a habit of letting the squadron get ahead after takeoff and then aborting, claiming something was wrong with the airplane he was flying (not necessarily 42-106602). (The pilot in question was not David O'Hara or Ken Dahlberg).

However, after the pilot returned to base, the squadron mechanics would find nothing wrong with whichever Mustang the new pilot had claimed had mechanical trouble before aborting.

Naturally, this tendency to abort missions came to the attention of the Commanding Officer of the 353rd Fighter Squadron, Major Jack T. Bradley. So Bradley first sent Bruce Carr, a recent transfer pilot, but a veteran of many combat missions in other squadrons, up in 42-106602 to verify that the airplane was fine. Carr had been transferred to the 353rd on May 27, 1944, having made his immediate superiors unhappy at the 363rd or 380th FS. After flying 42-106602, Carr confirmed that Shillelagh III was in top shape.

Then Bradley assigned the pilot with the mission abort history to an upcoming mission in 42-106602 and told him, "Don't return without exposed film in the gun camera."

The new pilot did as Bradley commanded and returned to base with exposed gun camera film. The film showed a locomotive getting shot up and a cow being killed. It is unlikely that the cow was shot purposely; it was probably just in the line of fire at the end of the locomotive or some other pass. Allegedly, Shillelaugh had half a head of cabbage stuck in the air scoop when it returned to base.

Earl and Fred Osborne work on David O'Hara's second P-51B [s/n 43-12319 FT+P Shillalah the 2nd, lost 4-11-44 when flown by Ralph A. Brown (Brown ended up as POW and survived the war).

Squadron records indicate that Bradley's strategy to eliminate unnecessary mission aborts worked, and the offending pilot went on to participate fully in subsequent missions without early returns.

Fred Osborne painted the cow and locomotive on Shillelagh III to commemorate the event. Most likely, they also enjoyed needling the poor guy who hit the cow and had it recorded for posterity on the gun camera film.