



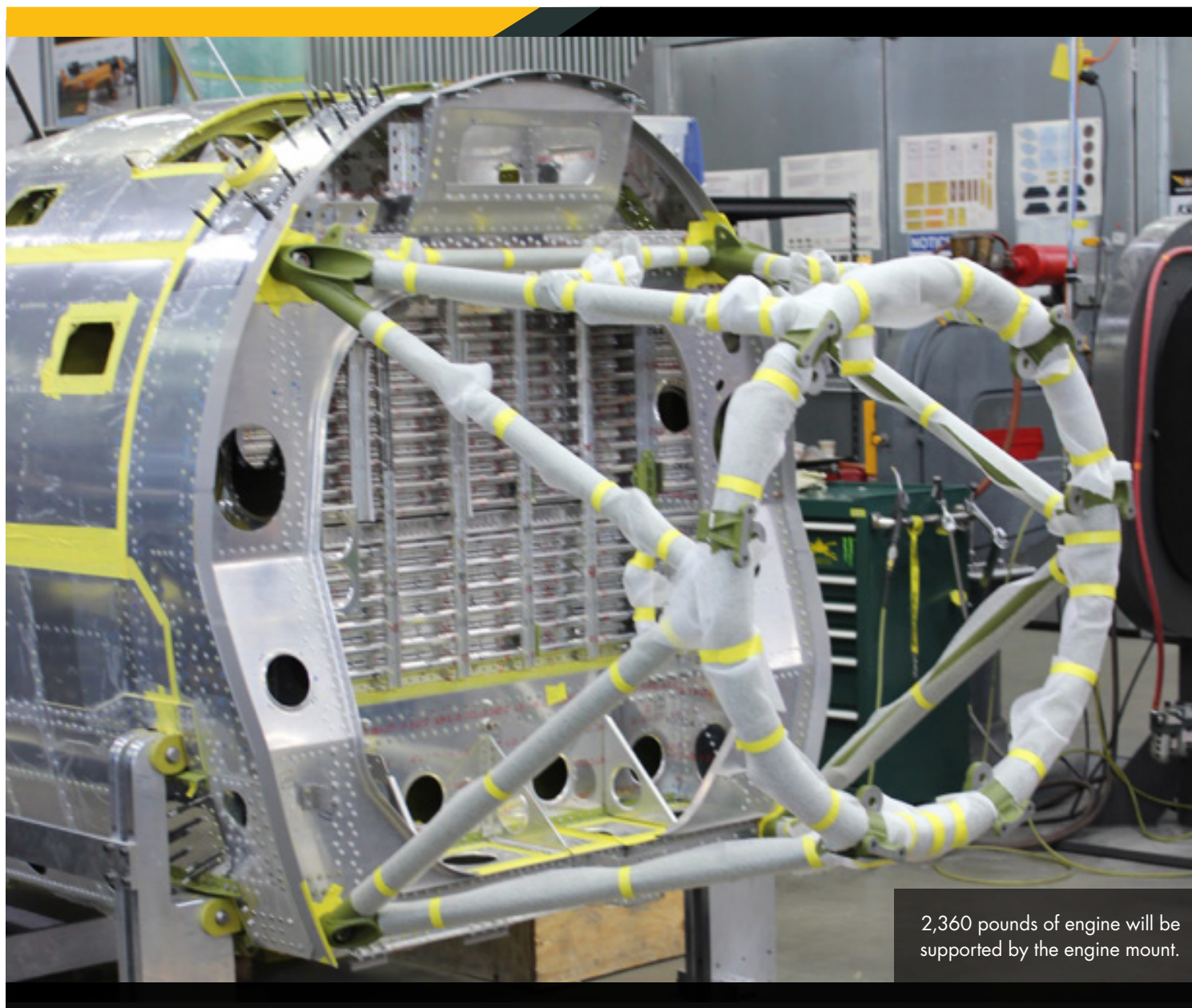
June/July 2019

JUNE/JULY

Dakota Territory Air Museum's P-47 Update
by Chuck Cravens



AIRCORPS AVIATION



2,360 pounds of engine will be supported by the engine mount.



www.dakotaterritoryairmuseum.com

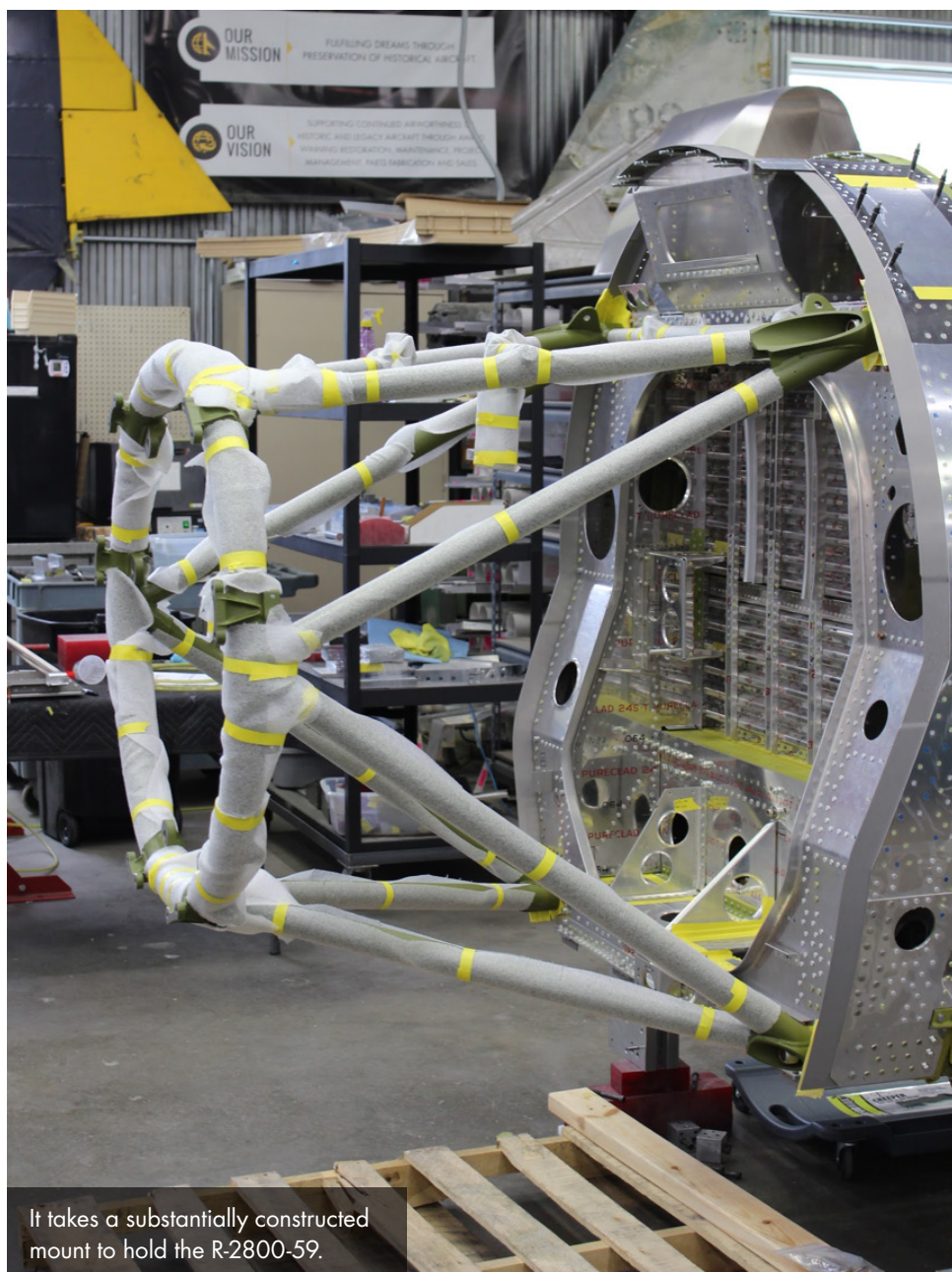


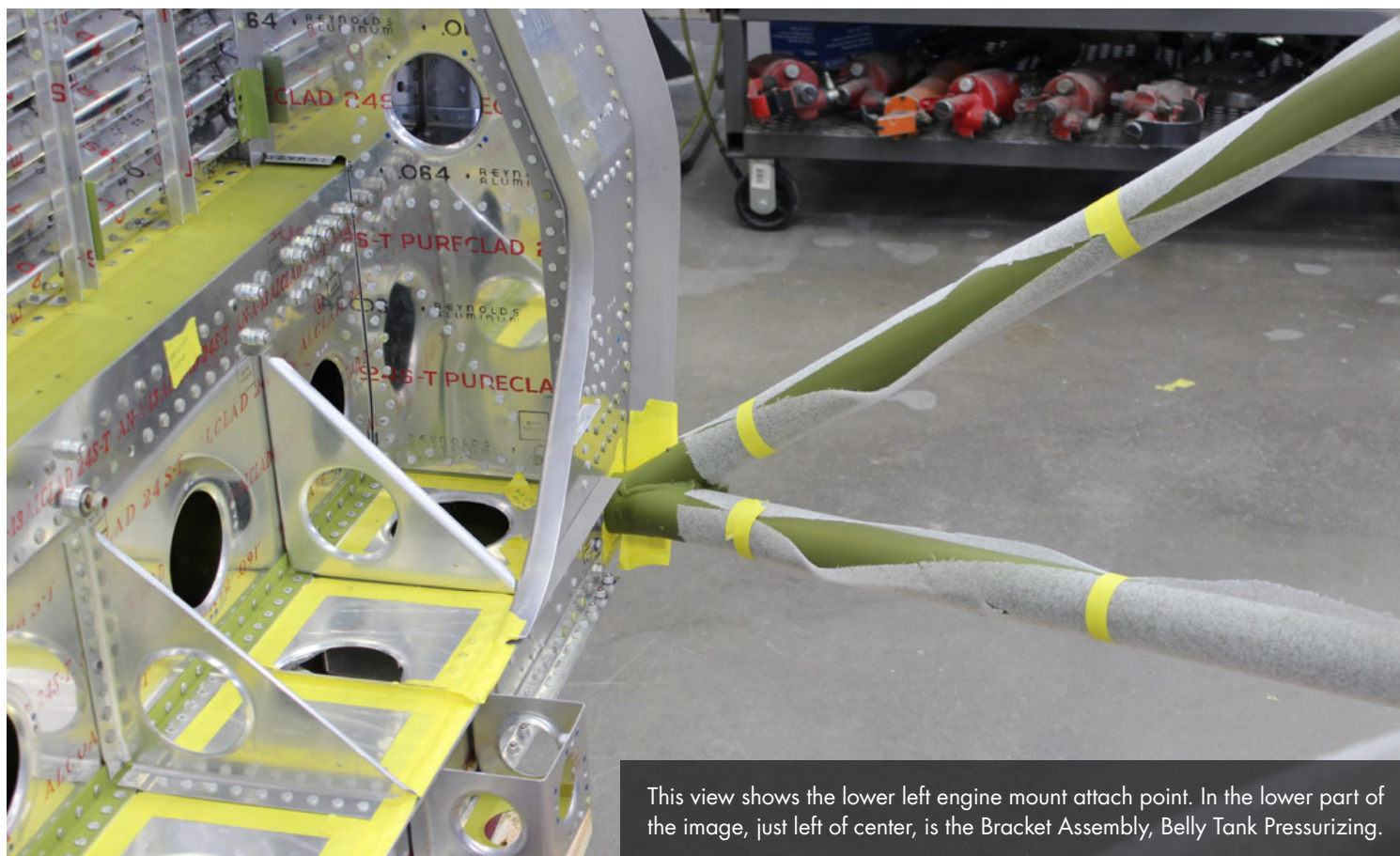
Update

This month the engine mount was fitted and work continued on the unique radio installation necessitated by the Christmas tree tank field modification. Wing structure was added to the fixture and parts fabrication continued. We will also examine the missions that were conducted during 42-27609's time in the Papua New Guinea combat zone.

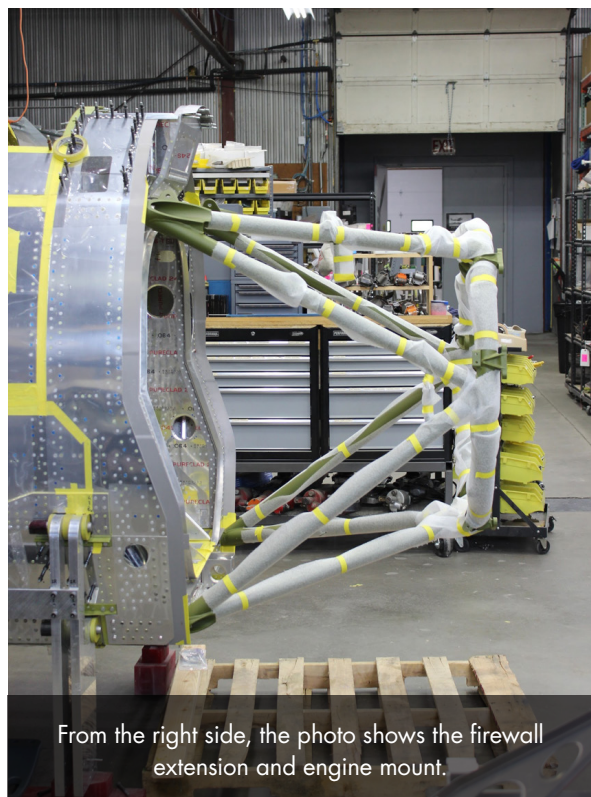
Engine Mount

An exciting and visible sign of progress is the motor mount attached to the firewall for trial fitting. It is still wrapped in protective plastic foam sheet.

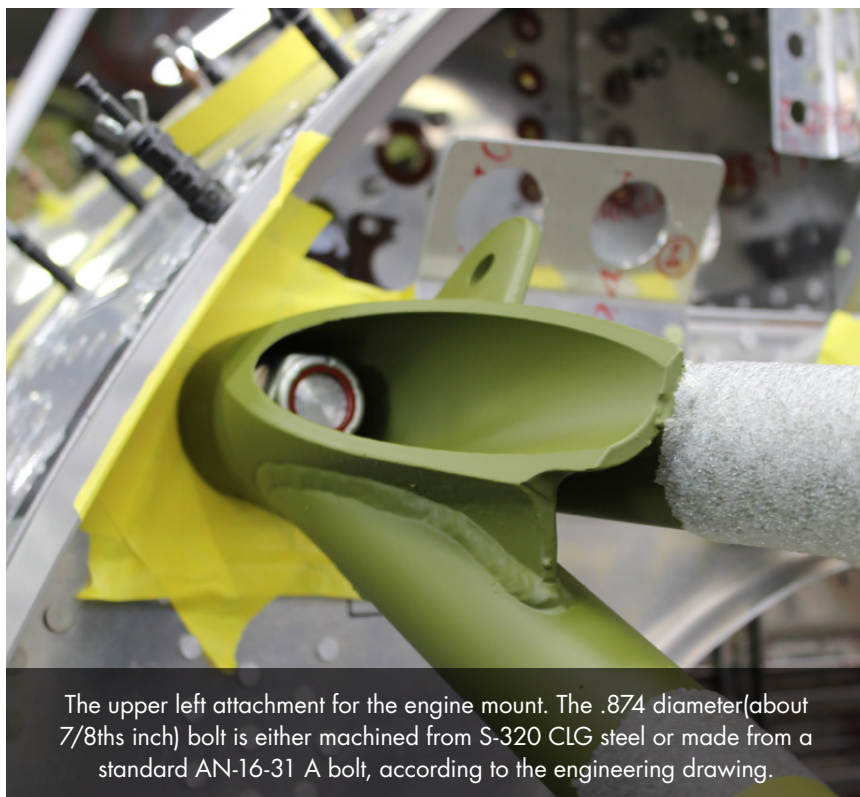




This view shows the lower left engine mount attach point. In the lower part of the image, just left of center, is the Bracket Assembly, Belly Tank Pressurizing.



From the right side, the photo shows the firewall extension and engine mount.



The upper left attachment for the engine mount. The .874 diameter (about 7/8ths inch) bolt is either machined from S-320 CLG steel or made from a standard AN-16-31 A bolt, according to the engineering drawing.



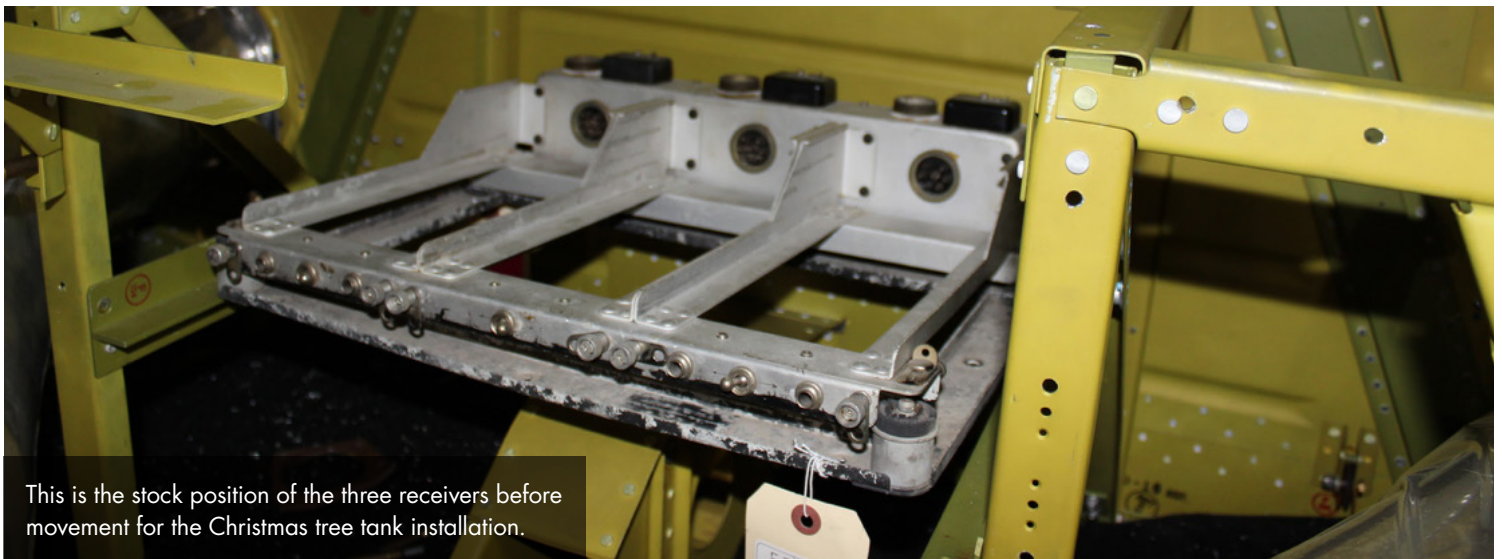
Christmas Tree Tank Radio Relocation

One of the unique features of this Thunderbolt is that it had a field modification by the 5th Air Force to increase range. The modification, called a Christmas tree tank because of its shape, was usually removed by late summer of 1944, but 42-27609 still had the tank.

The 42 gallon tank was placed right behind the pilot and occupied the space where the supercharger oil tank and the communication receiver were originally placed. Consequently, those installations had to be modified to make space available for the new tank.

Without having the original parts to either duplicate or repair and use, it would have been impossible to install this unique modification because engineering drawings aren't available for this field modification.

We'll take a look at how the original installation was configured and then show the modifications.

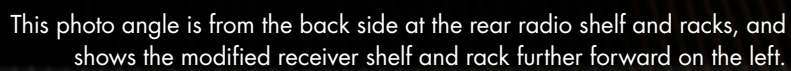
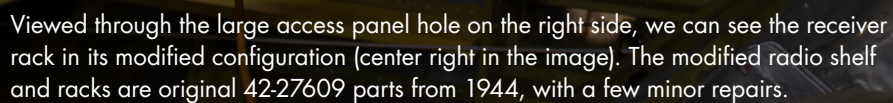


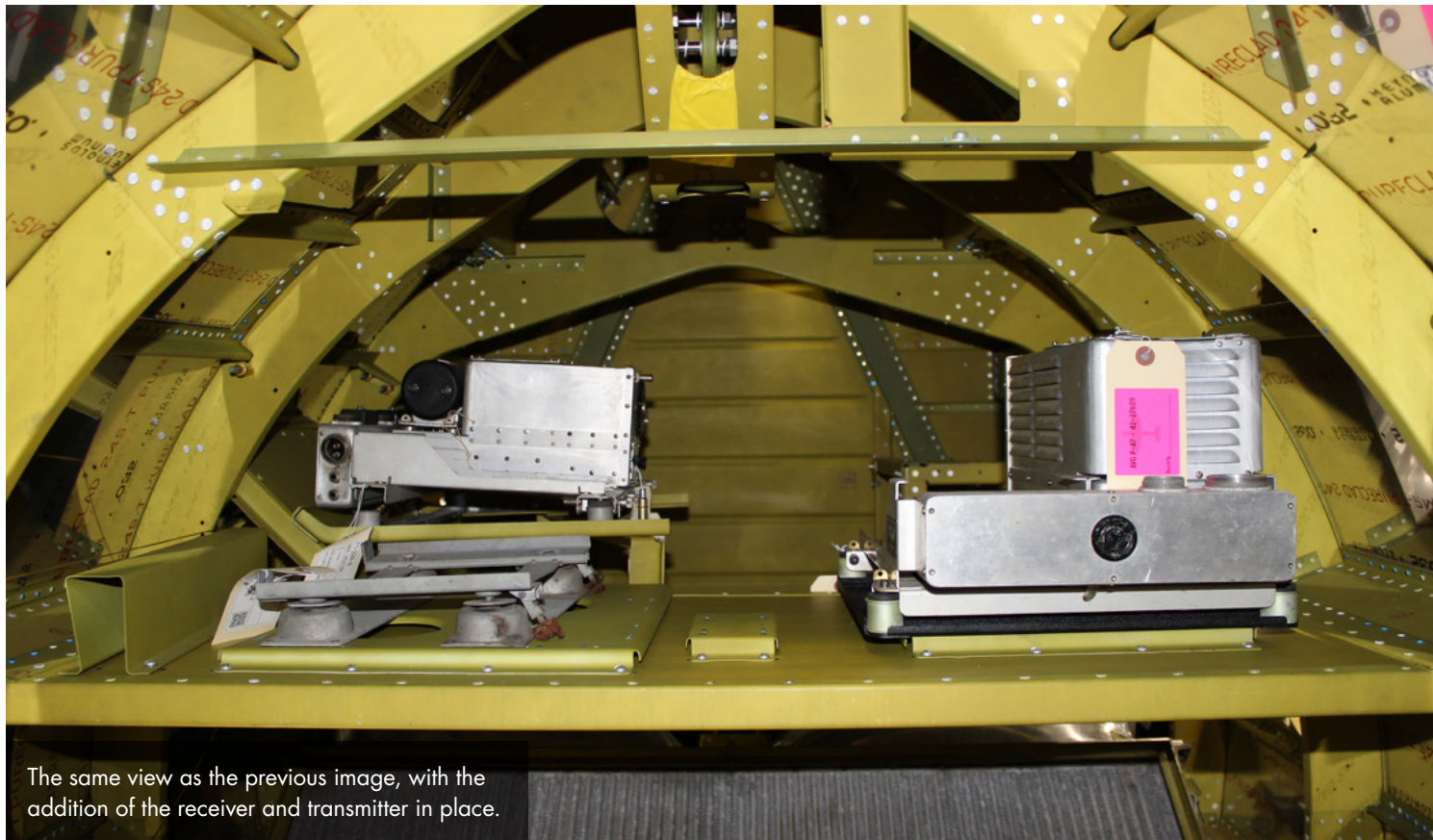


To move the three radio receivers out of the position the new tank would occupy, service units in the SW Pacific fabricated a mounting shelf to go aft of the tank and above the intercooler ducts.



The field modified radio mount structure had an added bracket that mounted a terminal frame that was moved from the A-frame bulkhead.





The same view as the previous image, with the addition of the receiver and transmitter in place.



The transmitter on the left and the receiver on the right, are set in place to show the modified installation.



Fabrication and Parts



This large REN plastic form was machined to stretch form the rear window cover, part of the cockpit enclosure.



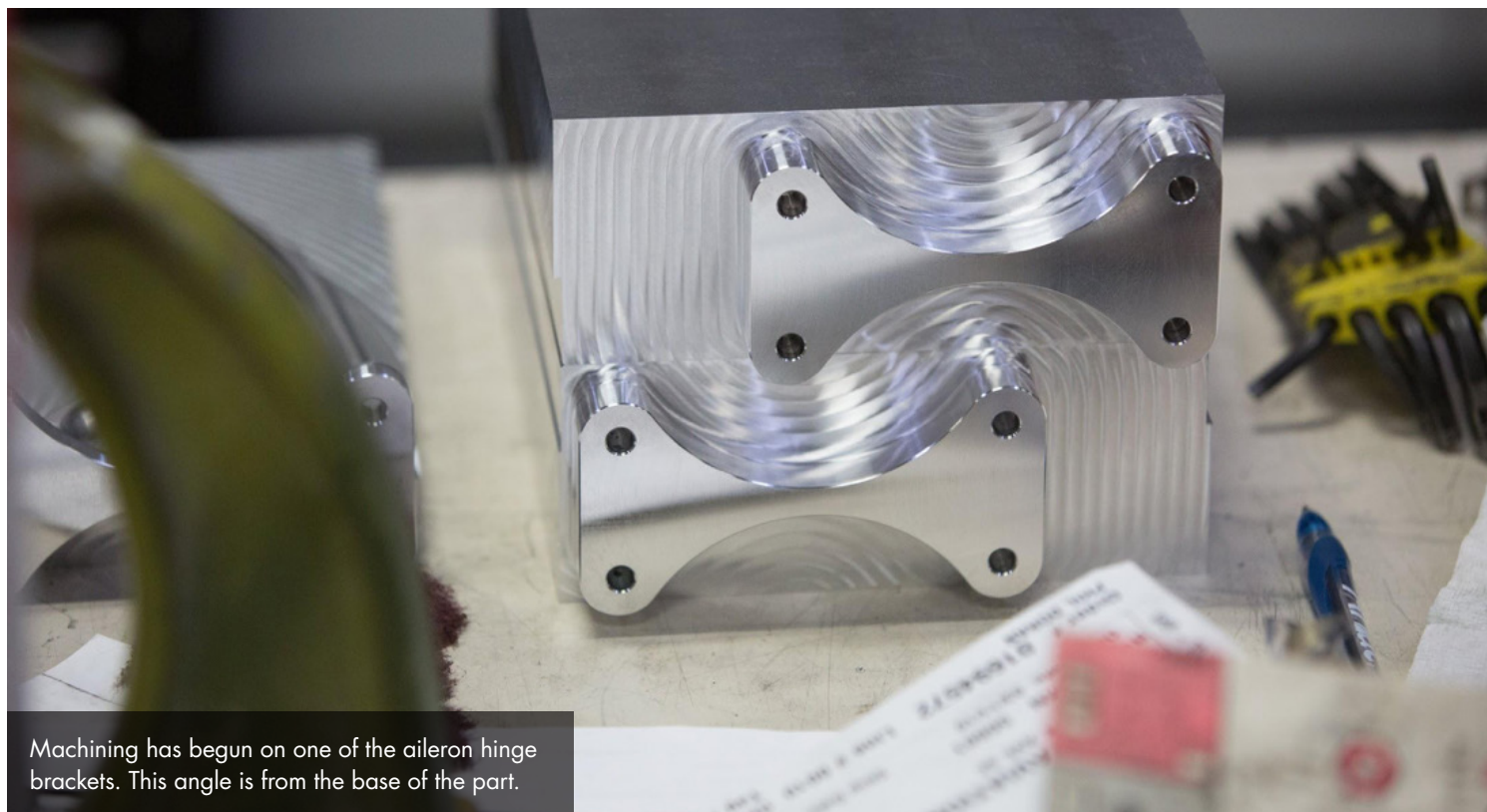
The skin stretched over this form transitions in shape from the rounded top of the cockpit enclosure to the peak of the razorback turtle deck.



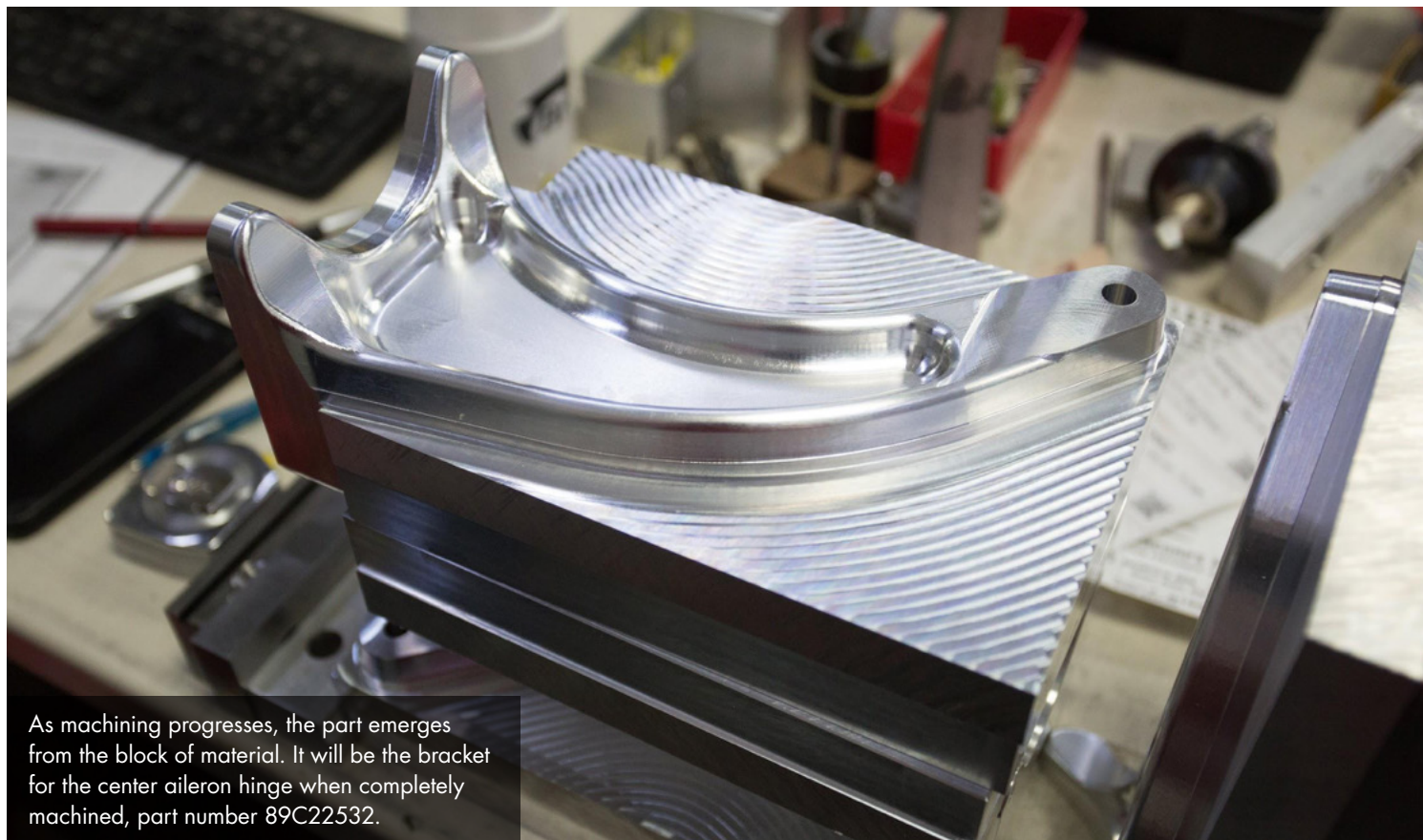
These are brackets back from anodizing.



A P-47 wheel that has been glass bead blasted sits on a protective cloth.



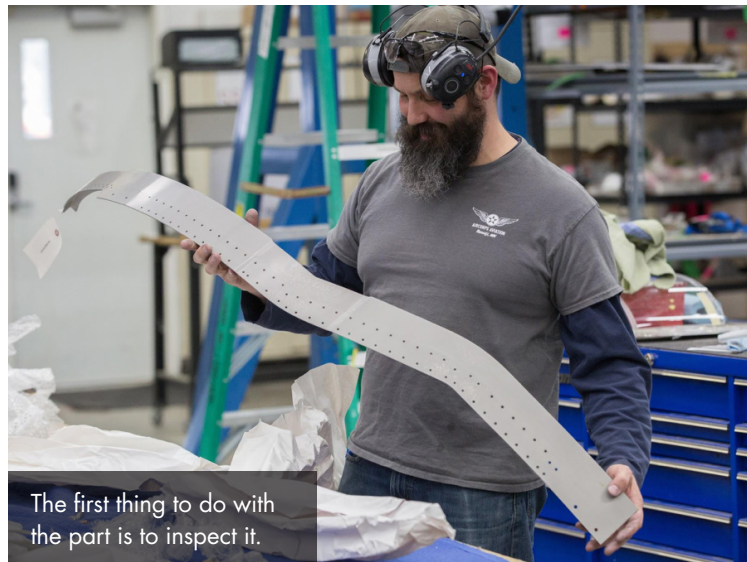
Machining has begun on one of the aileron hinge brackets. This angle is from the base of the part.



As machining progresses, the part emerges from the block of material. It will be the bracket for the center aileron hinge when completely machined, part number 89C22532.



Randy unwraps a fuselage extrusion that has returned from anodizing.



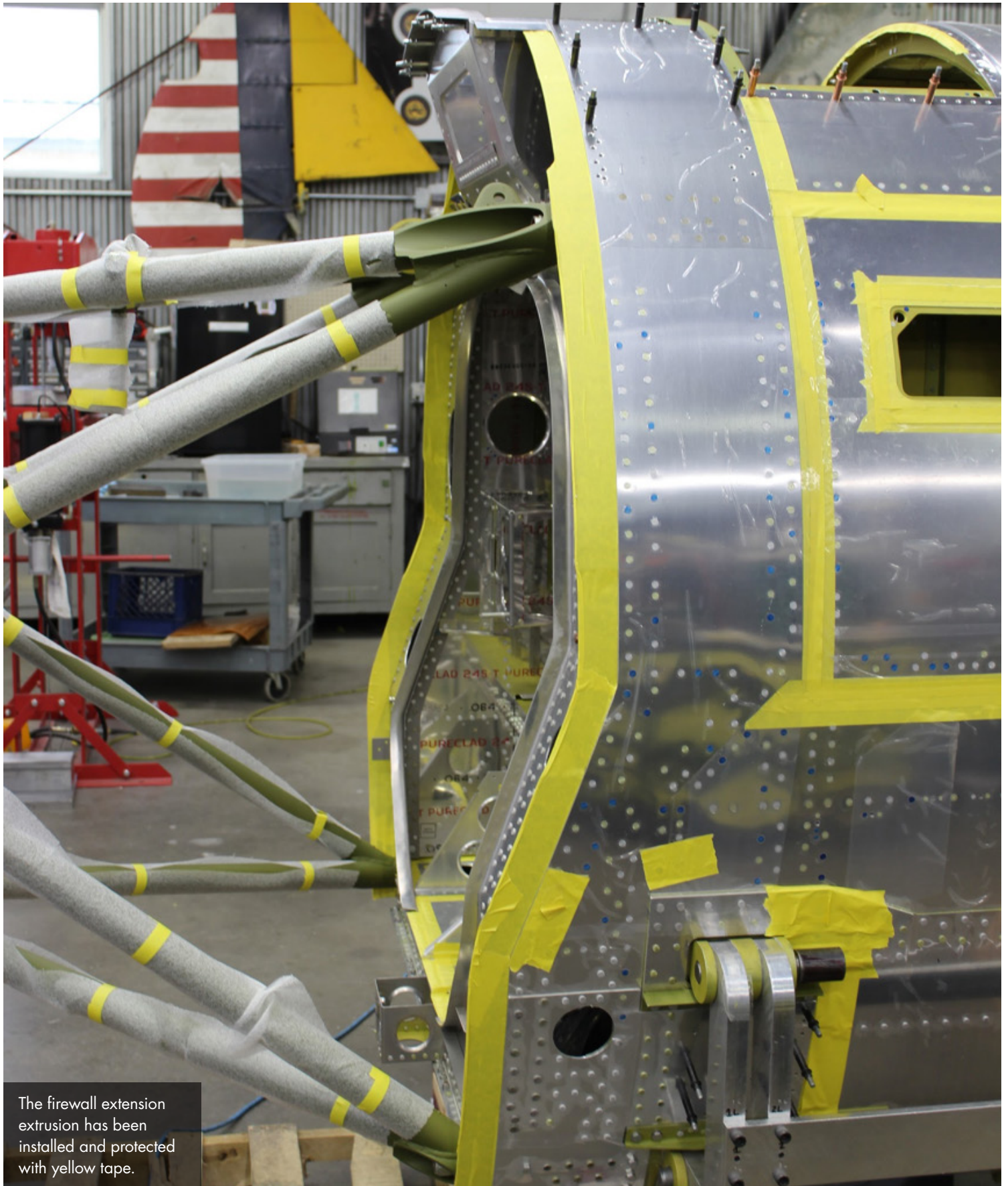
The first thing to do with the part is to inspect it.



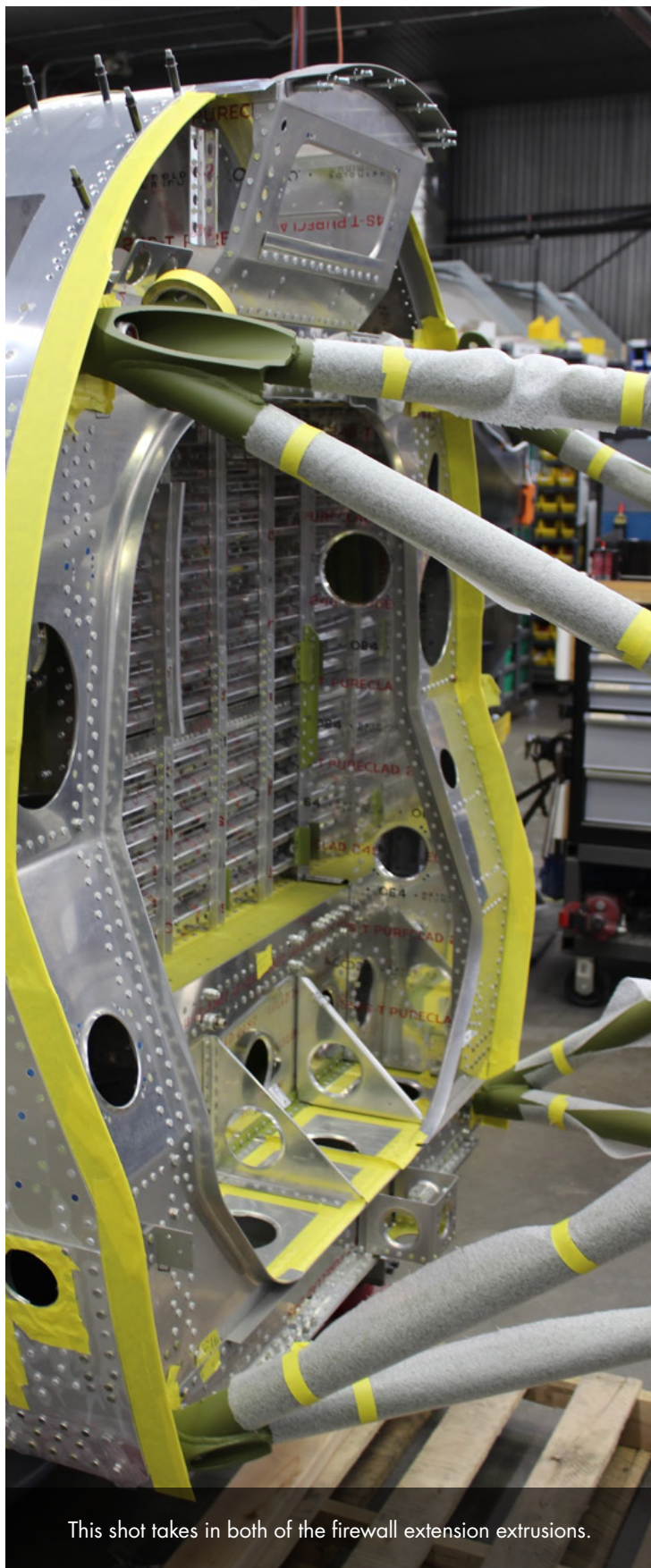
This extrusion is the front edge of the firewall extension and has a series of complicated bends that Randy made before sending it out.



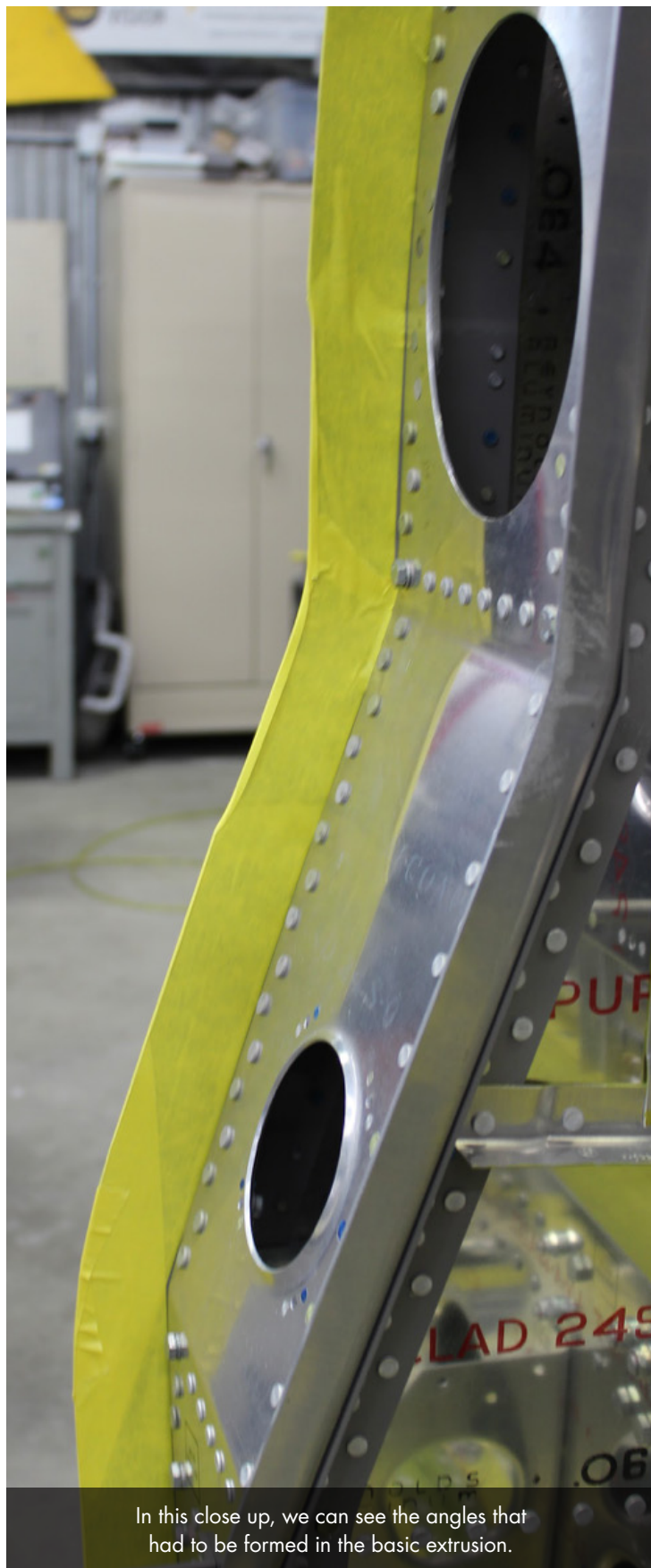
Randy looks pretty happy with it!



The firewall extension extrusion has been installed and protected with yellow tape.



This shot takes in both of the firewall extension extrusions.



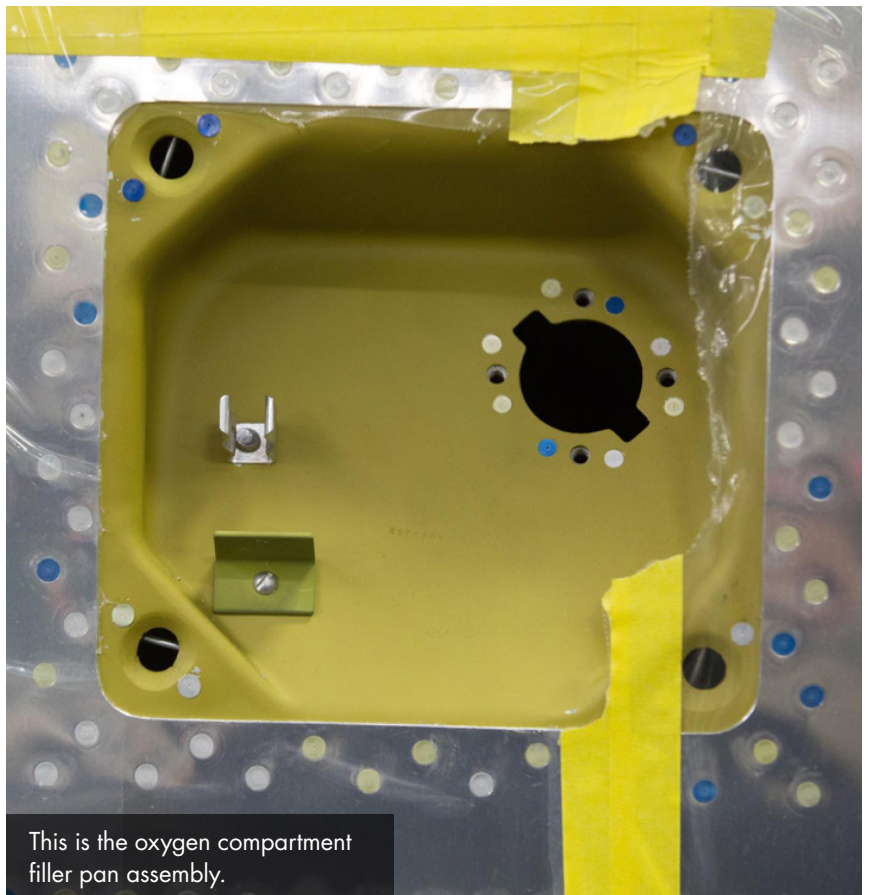
In this close up, we can see the angles that had to be formed in the basic extrusion.



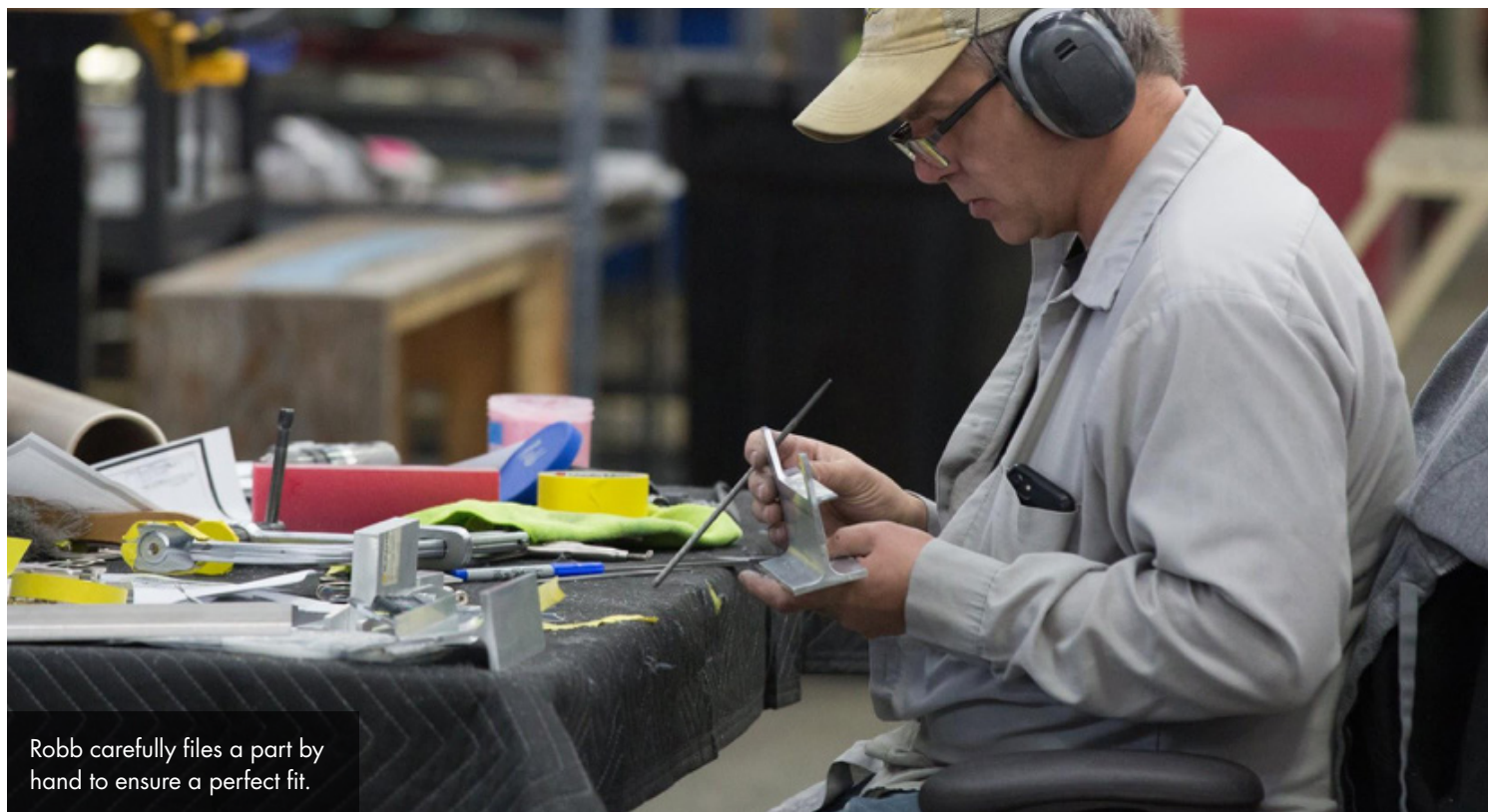
The rudder pedals are shown in detail here.



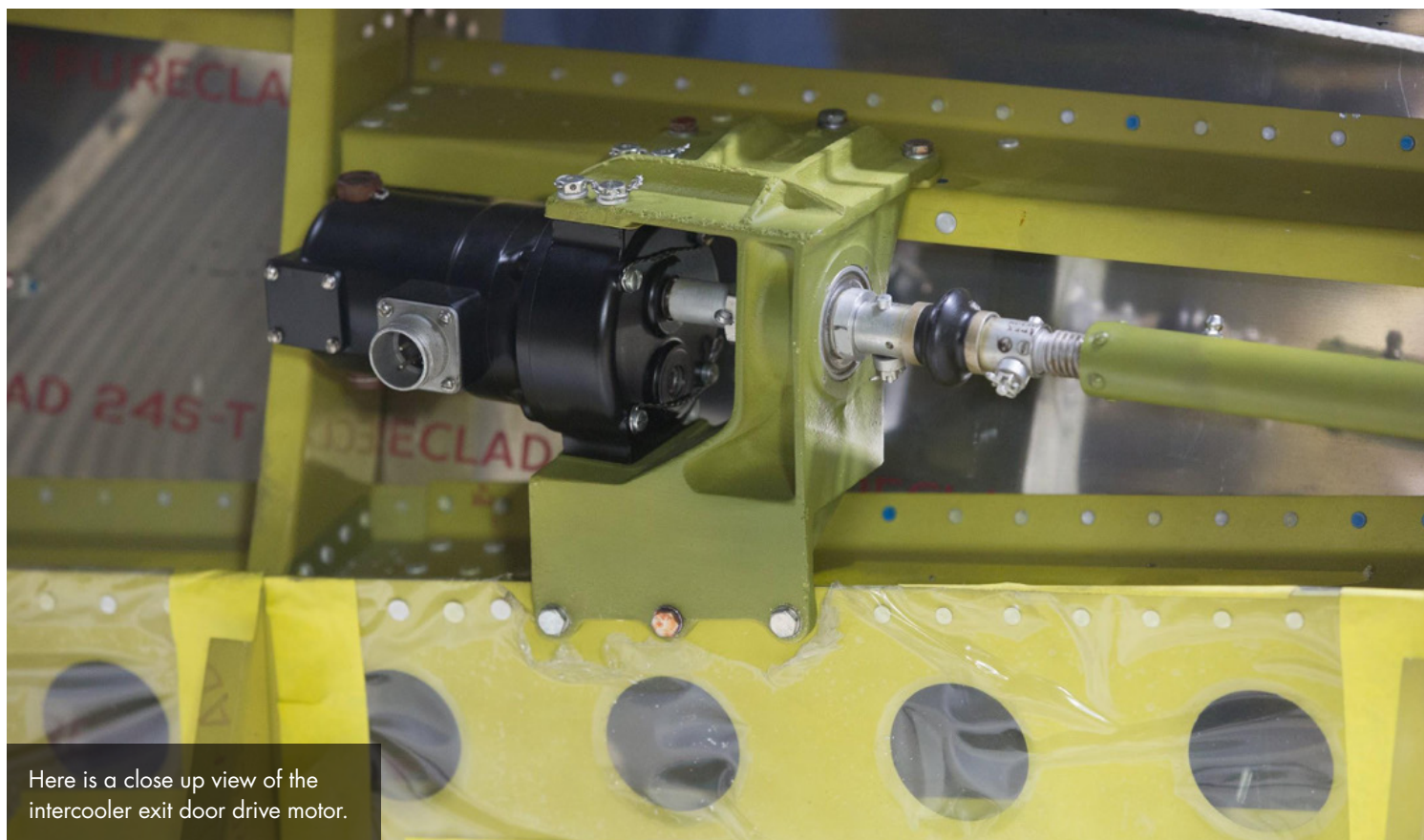
Here is a close up of the rear of the fuselage.



This is the oxygen compartment filler pan assembly.



Robb carefully files a part by hand to ensure a perfect fit.



Here is a close up view of the intercooler exit door drive motor.



Restoration shop manager Ryan Underwood is holding the main access panel near the opening it covers.

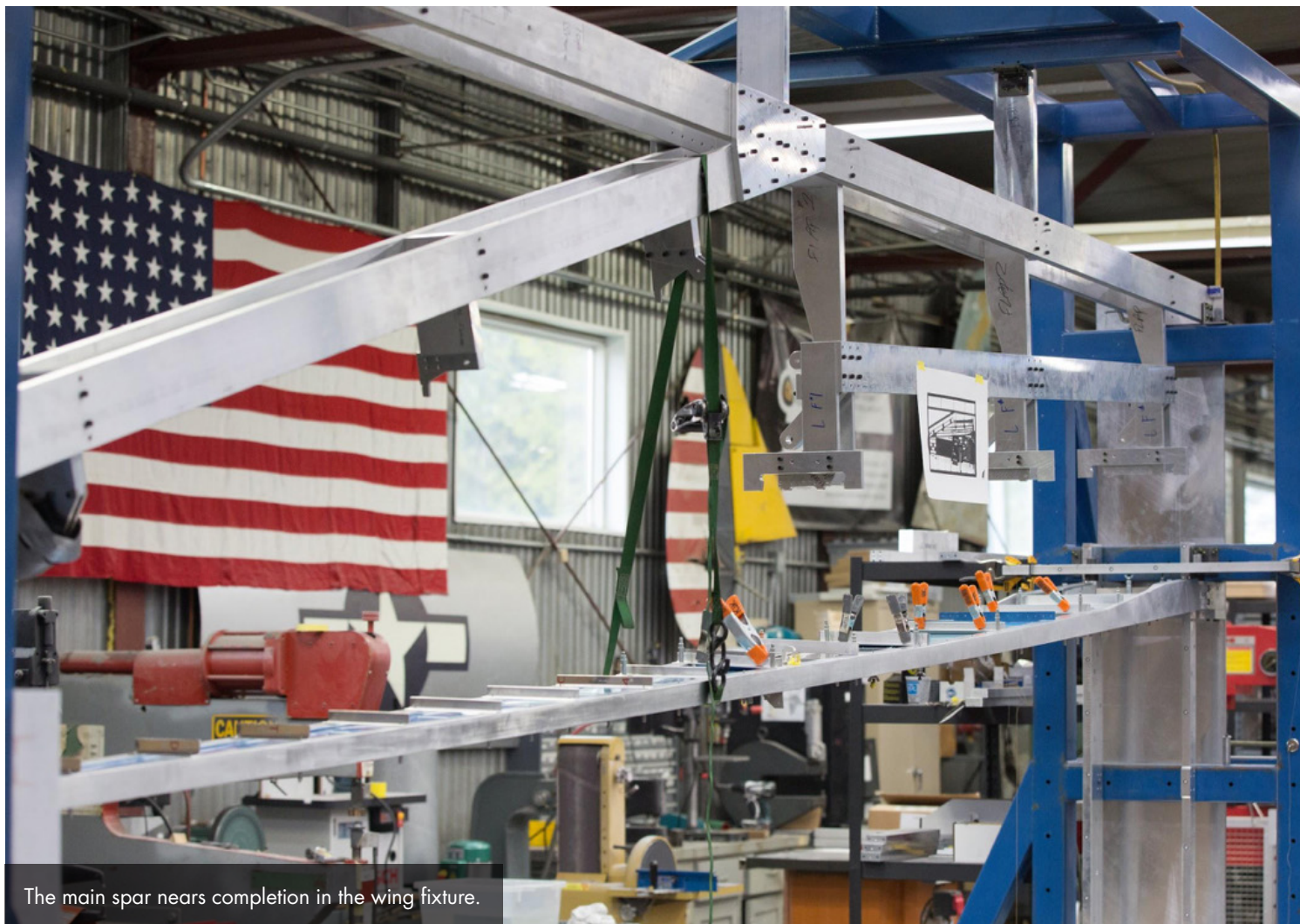


Ryan shows us the back side of the main access panel. We hope to have some WWII veteran P-47 pilots sign this panel.



Wings

Progress continues on both wings. This month, the work was mainly related to the spars.



The main spar nears completion in the wing fixture.



Dave inserts a cleco in the outboard #3 spar on the right wing. In the background the main spar and outboard spar #3 for the left wing are visible.



The aileron assembly attaches to spar #3.



The Southwest Pacific War, May and June, 1944

Early in the Papua New Guinea campaign, the US and Australian ground forces, the 5th Air Force, and RAAF had defeated the Japanese land attempt to take Port Moresby by attacks on the Kokoda Trail and amphibious landings at Milne Bay. The Kokoda Trail leads over the Owen Stanley Mountains from the northeast coast of Papua.

In 1943 the Army and its air arm went on the offensive and pushed the Japanese out of most of eastern Papua New Guinea. In the process, airfields at Dobodura, Finschaven and Nadzab were either captured from the Japanese or built to expand allied operations on the northeast part of Papua New Guinea.



Map of WWII airfields in Papua New Guinea, from *MILITARY AIRFIELDS IN AUSTRALIA AND THE WESTERN PACIFIC AREA DURING WORLD WAR 2*, <https://www.ozatwar.com/airfields.htm>, downloaded 7/12/2019

The early air operations for this period were designed to eliminate the Japanese air threat in the area from Wewak to Hollandia in western New Guinea. By March, Hollandia had been reinforced and had 250 Japanese aircraft. About half were combat ready at any one time. Allied air superiority had been attained in the Wewak area after months of pounding the Japanese stronghold with B-25s, A-20s and P-47s. However, the Japanese were still able to use it as a staging base.¹

¹ Thomas E. Griffith Jr., *MacArthur's Airmen*. Lawrence, Kansas, 1998, p.161



General Kenney ordered attacks on both Hollandia and Wewak. The attacks in late March eliminated the threat of Japanese air attacks on the coming invasion of the Hollandia area and allowed the use of carrier air forces to aid in the invasion.

Sunday April 16, 1944 was a bad day for the 5th Air Force. By this time the Japanese air resistance was eliminated, but weather hazards were not. 130 bombers and 40 fighters set out to attack Tadjil in the Hollandia area but bad weather contributed to the loss of 32 crewmen and 31 aircraft.²

42-27609 Arrives in the Southwest Pacific

On May 8th, 42-27609 arrived in Townsville, Australia on the carrier CVE 31, USS Prince William.

Escort Carrier USS Prince William

P-47 Thunderbolt ready to be unloaded in Townsville 7-8 May 1944

Breakwater

USS Prince William

The USS Prince William moored at Platypus Channel Eastern breakwater pier, Townsville, Australia.

Photo courtesy of Peter Dunn, Australia @ War" www.oza

² Thomas E. Griffith Jr., *MacArthur's Airmen*. Lawrence, Kansas, 1998, p.164



The 15 Thunderbolts, 17 P-38s, 16 A-20s, and 3 P-61s on the USS Prince William were all unloaded by the end of May 8, 1944 and they would have been readied for combat quickly and flown to Papua New Guinea.

It is interesting to note what missions the 5th Air Force was flying during 42-27609's combat career. From a publication of the Center for Air Force History, Kit Carter and Robert Mueller's, *Combat Chronology 1941-1945*, I have taken the 5th Air Force's missions for the dates that our P-47 could have been in combat.

Note that on 15 June, 1944 the 5th Air Force was incorporated into the Far East Air Force (FEAF). FEAF was formed with jurisdiction over the Fifth and Thirteenth AFs with General Kenney in overall command.

The following list of missions are those that either definitely included P-47s (by naming the type), or possibly included Thunderbolts because either the acronym FB for fighter bombers or fgtrs (fighters) was used. There were other missions in this busy period that only listed HB (heavy bombers) or MD (light bombers) as participating aircraft. Acronyms, punctuation, abbreviations, and grammatical choices in the listing are those of the original authors. The bolded dates are an addition by me, in the interest of visual clarity.

The mission list for 42-27609's active period is long, so this month we will list the missions that took place in May and June of 1944. Later updates will have missions from July through September 18, 1944; when 42-27609 was struck from flying status.

5th Air Force Missions of May and June 1944³

5/8/44 Fifth AF B-24's and P-40's operating in Geelvink Bay area attack Mokmer A/F and nearby shipping. A-20's and FBs continue to pound T/Os along NE New Guinea coast from Wewak to Hansa Bay and along Sepik.

5/9/44 Fifth AF More than 50 B-24's and B-25's bomb Langgoer and Faan airstrips, and Bosnik supply area and Mokmer A/F. 220-plus A-20's and FBs continue to blast numerous T/Os along NE New Guinea coastline from Wewak to Hansa Bay area. 12 B-24's of Thirteenth Air TF bomb Woleai.

5/10/44 Fifth AF 120-plus B-24's, A-20's, and FBs, along with RAAF airplanes, maintain attacks on T/Os along NE New Guinea coast from Hansa Bay area to Wewak. 2 B-24's hit Mokmer A/F. 45 B-24's of Thirteenth Air TF bomb A/F on Eten I and warehouse area at Dublon.

5/11/44 Fifth AF 130-plus B-24's and B-25's bomb gun emplacements and supply areas on Wakde and Mokmer A/F and T/Os on Biak. 220-plus FBs, A-20's, B-24's, and B-25's continue to pound coastal bridges and villages, fuel dumps, vehicles, gun positions, supply areas, bivouacs, and various tgts along the shoreline from Hansa Bay to Wewak.

5/12/44 Fifth AF B-24's bomb Mokmer A/F and attack tgts on Ceram, Amboina and Timor. A-20's, B-25's and FBs blast villages, coastal bridges and roads, vehicles, airstrip at Boram, and other tgts throughout WewakHansa Bay region.

³ Kit Carter, Robert Mueller, *Combat Chronology 1941-1945*, Center for Air Force History, Washington D.C., 1991



5/13/44 Fifth AF B-24's hit dispersal areas on Japen I, supply areas and AA guns at Bosnik, and A/Fs at Sorido, Namber, and near Moemi R. B-24's and B-25's hit A/Fs in the Wakde-Maffin-Sawar-Arare area. More than 200 FBs, A-20's, and B-25's thoroughly pound A/Fs, bridges, fuel dumps, vehicles, villages, AA guns, and supply areas in Wewak/Hansa area.

5/14/44 Fifth AF B-24's bomb Bosnik supply areas and Sorido runway. In Wakde-Sawar-Maffin Bay area, villages and AA positions are pounded by B-24's and B-25's. FBs, A-20's, B-24's, and B-25's maintain strikes against A/Fs, bridges, trucks, villages, and other tgts in Wewak-Hansa Bay area.

5/15/44 Fifth AF Wewak-Hansa Bay area is again hit by A-20's, B-24's, and FBs. B-24's and B-25's attack numerous tgts in Wakde-Sawar-Sarmi-Maffin Bay areas and on Biak I. Thirteenth Air TF B-24's from the Admiralties bomb supply and bivouac areas on Mariaon and Tagaulap Is and AA guns on Woleai and Paliau Is.

5/16/44 Fifth AF Fifth AF aircraft continue to pound a variety of tgts in Netherlands New Guinea and NE New Guinea. Tgts include A/Fs and supply areas on Noemfoor and Biak Is, AA guns, supplies, and occupied villages in Wakde I-Maffin-Sawar c.

5/17/44 Fifth AF Allied forces land without opposition near Arare after naval bombardment. Fifth AF B-24's and B-25's hit tgts in general vicinity at Sawar, Sarmi, and mouth of Orari R. More than 100 B-24's, with P-38 escort, pound AA positions on Bosnik, Sorido, and Mokmer, and supply areas and A/F on Noemfoor. 120 plus FBs, A-20's, B-25's, and B-24's continue to hit Wewak-Hansa Bay area.

5/18/44 Fifth AF More than 100 FBs, A-20's, B-25's, and B-24's pound T/Os in Wewak-Hansa Bay area throughout the day. B-24's hit T/Os on Halmahera I and bomb Bosnik. B-25's hit Larot and Saumlakki.

5/19/44 Fifth AF B-24's, A-20's and P-38's hit A/Fs and shipping in Manokwari-Noemfoor I area. Other B-24's pound beach defenses at Bosnik on Biak I and hit area between Bosnik and Mokmer. 270-plus A-20's, P-47's, P-38's, and B-2B's continue to blast Wewak, knocking out radar and radio stations, and attack T/Os from Wewak to Hansa Bay area.

5/20/44 Fifth AF B-24's, A-20's, and B-25's hit airstrips, revetments, supply areas, AA positions, and shipping at Manokwari, Noemfoor and Biak Is, and Mawi Bay. A-20's, B-25's, and FBs continue to pound A/Fs, coastal villages, bridges, supply dumps, trucks, and various other tgts at Wewak and from Wewak to shore of Hansa Bay.

5/22/44 Fifth AF B-24's and B-25's bomb Manokwari, shipping E of Cape Manggoear, and storage areas and Sorido village on Biak I. P-40's hit supply and fuel dumps, trucks, and other T/Os in area of Wakde Is. B-24's, B-25's, and FBs continue to bomb and strafe various tgts in Wewak-Hansa Bay area.

5/24/44 Fifth AF A-20's hit A/Fs at Namber and Kamiri. More than 200 A-20's, P-38's, P-47's P-39's, and B-25's continue to blast T/Os in Wewak-Hansa Bay area throughout the day coastal area, and bridges, villages, troop concentrations, and AA positions.

5/26/44 Fifth AF B-24's bomb Biak I while B-25's hit Wakde I and nearby coastal areas. Other B-25's bomb a variety of tgts in Aroe Is. 100-plus A-20's, B-25's and FBs continue to blast coastal region around Wewak. Villages and gun positions on Hansa Bay are also hit.



5/28/44 Fifth AF In spt of ground forces on Biak I, B-24's and B-25's hit villages, supply areas, troop concentrations, and gun positions on Biak, Noemfoor, and Japen Is. A-20's, B-25's, and FBs blast troop concentrations, AA positions, and supply dumps in Wewak area. A-20's supporting ground forces in heavy fighting in Sarmi area, hit positions with minimum-level strikes. B-24's bomb Boela. Thirteenth Air TF B24's bomb A/F on Woleai.

5/29/44 Fifth AF B-24's pound gun positions, defense areas, and troops, as first tank battle of SWPA is fought W of Parai on Biak I. Other B-24's pound A/Fs on nearby mainland at Timoeika and Babo. A-20's, B-25's, and P-47's, along with RAAF airplanes and a few HBs from the Biak strike, saturating Wewak area with continuous air strikes. In WakdeSarmi battle zone, B-25's and P-40's hit forces in Mount Saskin area. B-24's of Thirteenth Air TF bomb Woleai and other nearby islands in the Carolines.



5th Air Force P-47D's in formation, 35th Fighter Group, 39th Fighter Squadron

5/31/44 Fifth AF B-25's and A-20's hit Babo area, bomb A/F near Ransiki R, cover beachhead on Biak I, and attack fishing boats on shore of Japen I. P-47's and B-25's pound villages, barges, and gun positions in WakdeSarmi battle area. B-24's, P-39's, and RAAF airplanes continue to hit Wewak and Hansa Bay areas.

6/3/44 Fifth AF B-25's, A-20's, and B-24's hit Timoeika A/F and nearby villages, shipping off Manokwari, Seroei Village on Japen I, and positions N of Mokmer, and strafe Mokmer, Sorido and Kamiri A/Fs. P-38's and P-47's battle frs over Biak I and over Babo area. P-47's and P-40's hit Sawar A/F, supplies and fuel dumps in Sarmi and Orai R areas, and hideouts and occupied areas along coast. B-24's and FBs maintain consistent pounding of numerous tgts in Wewak-Hansa Bay coastal region. B-24's of Thirteenth Air TF bomb Eten and Dublon.



6/4/44 Fifth AF A-20's bomb town and harbor at Manokwari and shipping to the E in Geelvink Bay. B-24's bomb Namber and Borokoe A/Fs while ftrs battle enemy airplanes in general area. B-24's bomb area near Orai R mouth while A-20's hit Wewak and FBs pound Hansa Bay coast.

6/7/44 Fifth AF B-25's bomb Biak I, hitting gun positions near Bosnik, airstrip at Sorido, and Borokoe road. A-20's hit shipping in Manokwari area. B-25's blast supply areas near Orai R. FBs and A-20's continue pounding Wewak-Hansa Bay coast. Thirteenth Air TF B-24's hit various tgts on Truk Atoll (weather permits only 10 of 48-airplane force to reach tgt area).

6/11/44 Fifth AF B-24's bomb Sorido A/F and surrounding areas as US carrier forces attack Saipan, Tinian and Guam. B-25's, A-20's, and P-47's continue to saturate Wewak-Hansa Bay coastline with bombs. Other B-24's bomb Dublon and Peleliu A/F.

6/12/44 Fifth AF Fierce ground fighting continues on Biak I while Japanese airplanes attack Allied ground forces and shipping offshore; P-47's battle attacking aircraft, shooting down several. P-47's and A-20's hit troop concentrations, comm, and various other tgts in Wewak and Hansa Bay areas. B-24's bomb Peleliu A/F and Dublon I.

6/13/44 Fifth AF More than 100 A-20's and a few B-25's and P-39's attack miscellaneous tgts in Wewak area. P-39's hit area around Hollandia and P-47's bomb bridge over Orai R and fuel dumps near Sarmi. A-20's blast enemy positions N of Borokoe. B-24's bomb airstrip at Liang. B-24's from Admiralty Is bomb Woleai, Dublon, and Satawan.

6/15/44 FFAF, FFAF is formed with jurisdiction over Fifth and Thirteenth AFs. Gen Kenney becomes CG FFAF, with HQ in Brisbane. FFAF HBs, MBs, LBs, and ftrs attack barges in Manokwari area, village in Wakde area. Also bombed are A/Fs on Timor and Truk. Thirteenth AF airplanes still in Solomon-Bismarck area hit Tobera A/F and forces on Bougainville. Amphibious forces of US Marines land on Saipan.

6/16/44 FFAF Bmrs and ftrs hit widespread tgts in SWPA and in SOPAC. Personnel areas and barges along coast in Wewak and Hansa Bay areas are hit throughout the day. A/Fs and shipping at Efman and Samate Is and at Babo and Sorong are attacked. Dublon and Yap are bombed. HBs hit Vunakanau A/F at Rabaul. HBs, MBs, LBs and ftrs attack a large variety of T/Os on Gazelle Peninsula from Tobera A/F to Rabaul.

6/17/44 FFAF MBs, LBs, and ftrs hit shipping in Sorong harbor and airstrips in Babo area. In Wewak area, A-20's, B-25's, and ftrs continue to pound barges and villages. HBs again bomb Truk, hitting tgts on Eten and Dublon. HBs hit Lakunai A/F while A-20's, B-25's, and ftrs attack numerous tgts between Rapopo and Tobera.

6/18/44 FFAF A-20's, B-25's, and ftrs, along with RAAF airplanes, continue to pound supplies and occupied areas along coast in Wewak area. B-24's hit tgts in Truk. A variety of ftr and bmr aircraft unload 18 tons of bombs on numerous tgts around Rabaul. Ftrs continue sweeps against T/Os along coastal areas of Bougainville

6/19/44 FFAF Over 100 A-20's and FBs maintain strikes along coast around Wewak, hitting supply and bivouac areas, roads, personnel, and a coastal gun position. A-20's hit A/Fs at Manokwari, Noemfoor I, and Moemi. B-25's hit forces in Cape Orford region. HBs bomb Dublon and Eten.



6/20/44 FEAF A-20's, P-39's, and RAAF aircraft, pound areas along coast in general area of Wewak. B-24's bomb Kamiri A/F and attack Woleai and Dublon. B-25's, P-38's, and other Allied airplanes (including some of RNZAF) blast AA positions S and SW of Rapopo.

6/22/44 FEAF B-25's, A-20's, and P-47's hit shipping at Efman I and A/Fs and T/Os on Noemfoor, attack Manokwari, and hit villages in the Sarimi area. Attacks by A-20's and ftrs, along with RAAF airplanes, on wide coastal area around Wewak continue. B-24's bomb Yap, Sorol, and Woleai. B-25's join the Allied aircraft in pounding Nordup and Ralum.

6/23/44 FEAF Wewak area is again pounded throughout the day by A-20's, P-39's, P-47's, and RAAF airplanes. A few A-20's and A-26's on barge search bomb offshore islands near Manokwari. This marks SWPA debut of the A-26. P-47's on sweeps strafe areas E of Maffln. B-24's hit A/F at Yap and Woleai. HBs on armed rcn bomb Dublon, Koror, and Peleliu. B-24's bomb Tobera A/F. B-25's along with other Allied airplanes, hit AA positions S and SW of Rapopo.

6/24/44 FEAF Fifth AF and RAAF airplanes continue to blast stores, personnel areas, roads, and bridges in general area of Wewak. B-25's, A-26's, and A-20's hit enemy positions in caves E of Mokmer A/F, attack shipping in Babo area (on MacCluer Gulf), and bomb Kamiri and Kornasoren A/Fs. HBs, MBs, and ftrs, along with other Allied airplanes, hit Tobera A/F, AA guns at Wunapope, and buildings at Nordup.

6/25/44 FEAF Wewak area continues under attack of Fifth AF and RAAF aircraft. Personnel areas at But, Dagua, and Suain and barges at Mushu and Kairiru Is are hit. P-40's and B-24's strike Kamiri A/F while A20's, P-47's, and B-25's hit villages along Tor R and P-47's hit tanks along Wiske R. B-24's pound Yap and Sorol. MBs and ftrs, along with other Allied airplanes, hit AA positions near Wunapope and blast plantations along Wide Bay.

6/26/44 FEAF Wewak area is hit throughout the day by Fifth AF B-24's and P-39's, along with US Navy and RAAF airplanes: P-38's, P-47's, A-20's, A-26's, B-24's, and B-25's attack A/Fs, shipping, villages, town areas, roads, and numerous other tgts at Efman, Noemfoor, Japen, and Biak Is, at Manokwari and Ransiki, and near Sarimi. B-24's bomb tgts on Yap and Sorol Is; others on armed rcn bomb airstrips at Woleai and Peleliu. AAF and other Allied aircraft hit A/Fs, AA positions, and other tgts in Rabaul and Cape Orford areas.

6/27/44 FEAF Fifth AF and RAAF LBs and FBs continue to attack Wewak area, hitting troop concentrations, villages, ammo dumps, and warehouses. B-24's, B-25's, A-20's, A-26's, P40's and P-47's hit A/Fs, gun positions, and various other tgts in or near Babo, Manokwari, Biak I, Noemfoor I, Ransiki, Waren, and Moemi. B-24's bomb Yap and Sorol; others on photo rcn flight bomb Woleai and Ifalik Is. Thirteenth AF ftrs and bmrs join other Allied airplanes from the N Solomons in bombing AA positions at Ralum and other tgts in Rabaul area.

6/29/44 FEAF Japanese concentrations at Aitape and a variety of T/Os including barges, villages and bivouacs in Wewak area are hit by A-20's, B-25's, and FBs. B-24's, B-25's, A-20's, and FBs attack A/Fs and AA guns at Babo, Manokwari, Waren, and Moemi, barges at Noemfoor, and villages E of Maffln Bay. AA positions S of Ralum are bombed.