



June/July 2022

JUNE/JULY

Dakota Territory Air Museum's P-47 Update

by Chuck Cravens



AIRCORPS AVIATION



The Thunderbolt is in the restoration shop as the various systems are finished.



www.dakotaterritoryairmuseum.com



Update

This month, work on the final wing systems, fuselage details, and control surfaces continued. The shape of the cowlings is becoming complete, and the windshield has been attached permanently.



The P-47 sits on its gear without jacks for the first time.



The sheer size of the DTAM Thunderbolt is impressive.



Acid Wash

It was a common practice for factories to use an acid wash on areas of aluminum that were to be spot welded. Part of an accurate restoration includes duplicating this acid wash since it was very visible on the airplane.



Neil wears safety glasses and rubber gloves to protect his eyes and skin as he applies the acid wash with a paintbrush.



Neil brushes on the acid wash near the edge of the ammunition bay door.



The last part of the acid wash process is flushing off the acid with water.



The ammunition bay cover is one of the places with a lot of acid wash because of the many spot welds used in its construction.



Control Surfaces

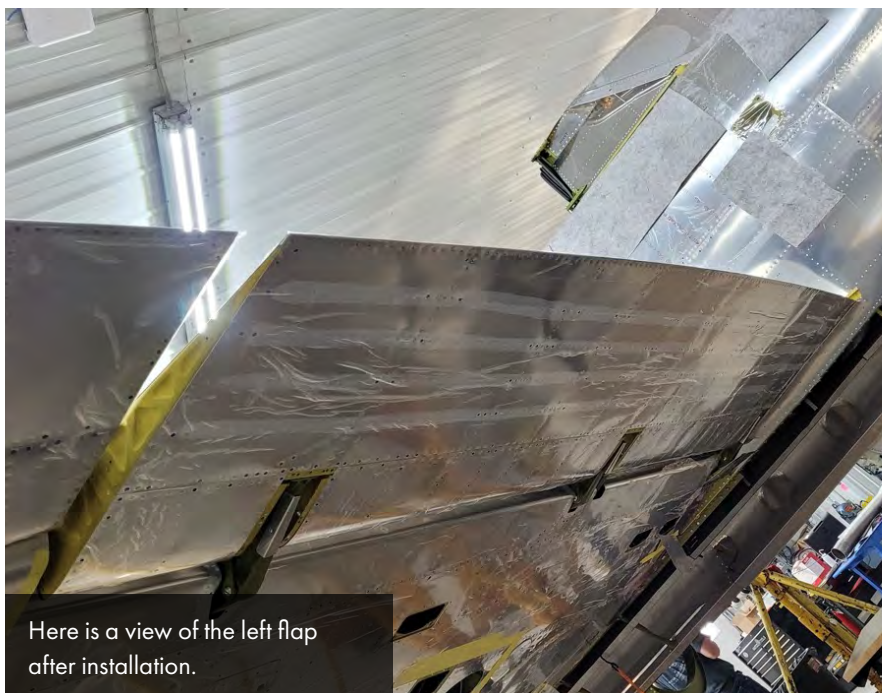
The left flap and elevators were the final control surfaces to be finished.



Randy and Cory prepare to remove the finished left flap from its fixture.



The left flap is ready to install.



Here is a view of the left flap after installation.



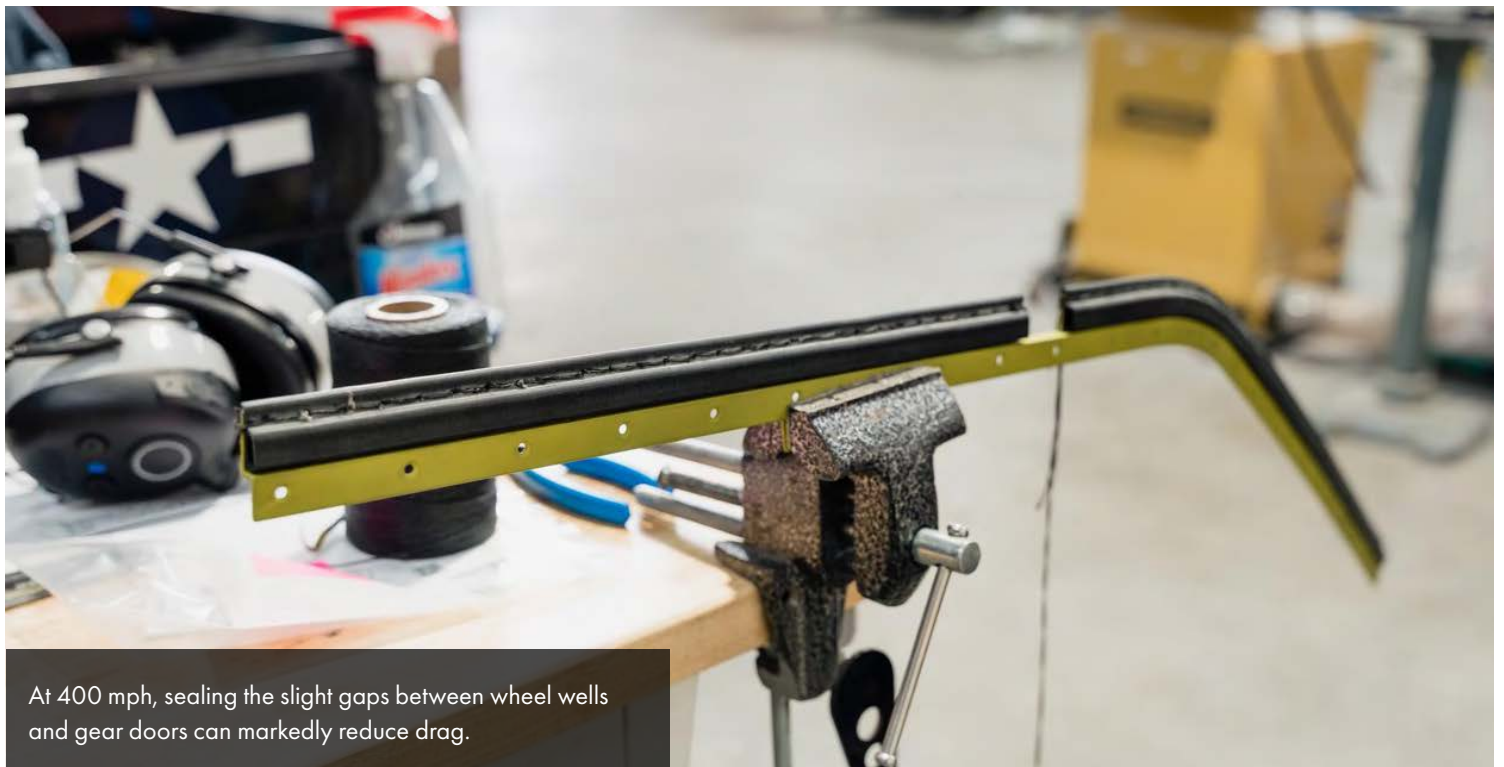
The elevators are ready to install.

Wings

Work on the wings was primarily centered on the ammunition and gun bay doors and the landing gear. Landing gear gap seals were installed as the fitting on the gear doors was completed.



Cory works on wheel well seals.



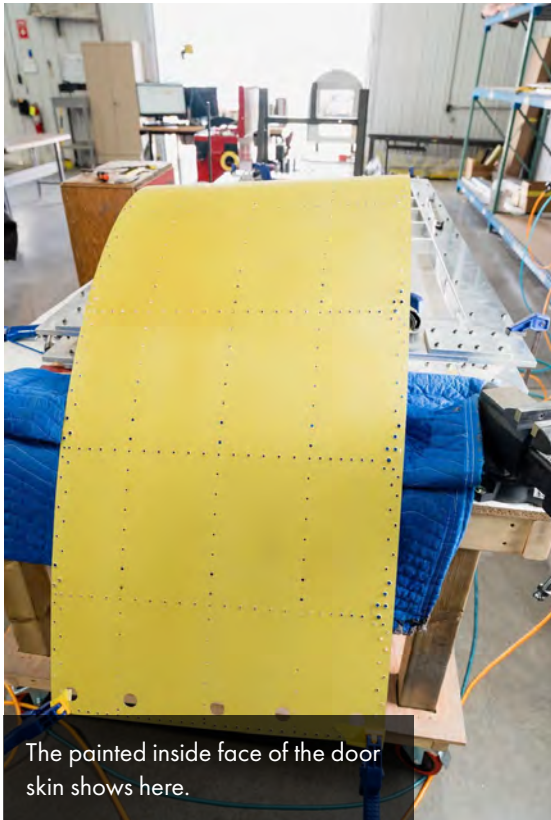
At 400 mph, sealing the slight gaps between wheel wells and gear doors can markedly reduce drag.



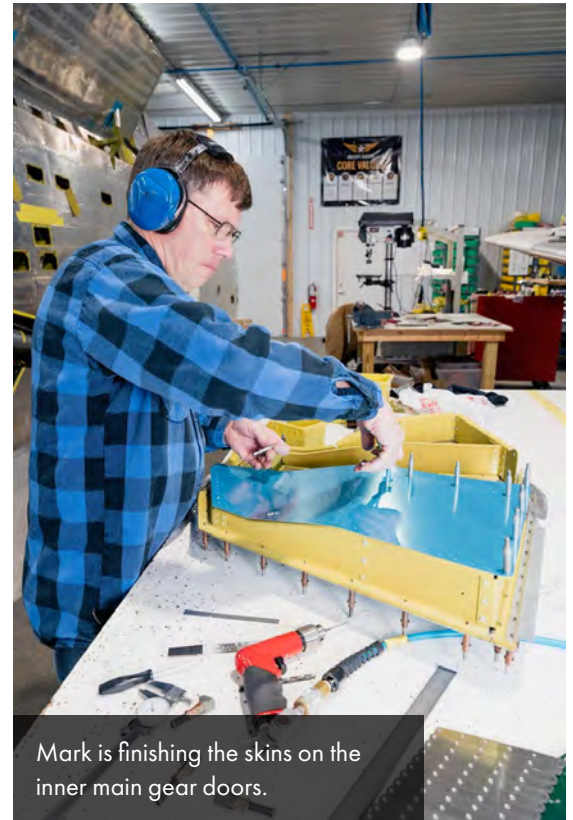
The wheel well seals have been installed around the exterior of the wheel well opening.



The ammunition bay covers have been painted internally and the skin is being riveted on.



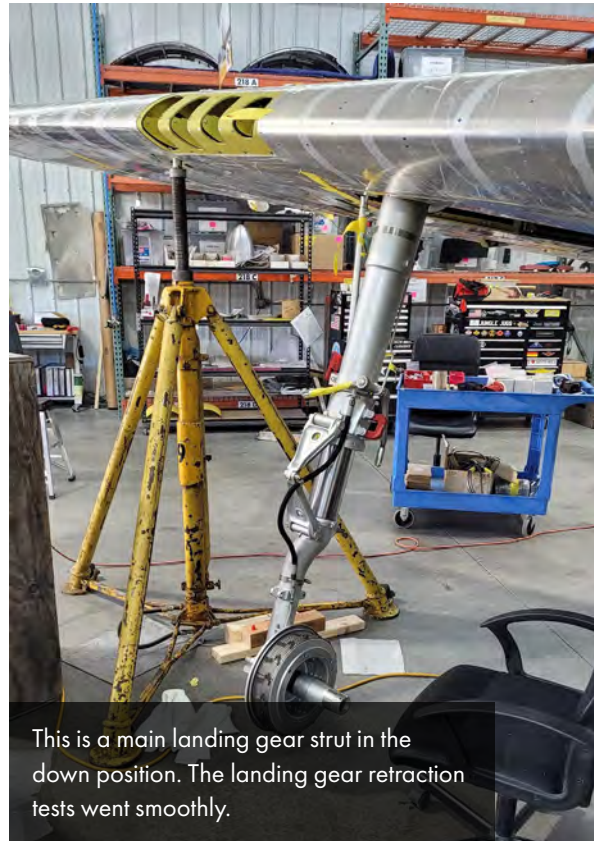
The painted inside face of the door skin shows here.



Mark is finishing the skins on the inner main gear doors.



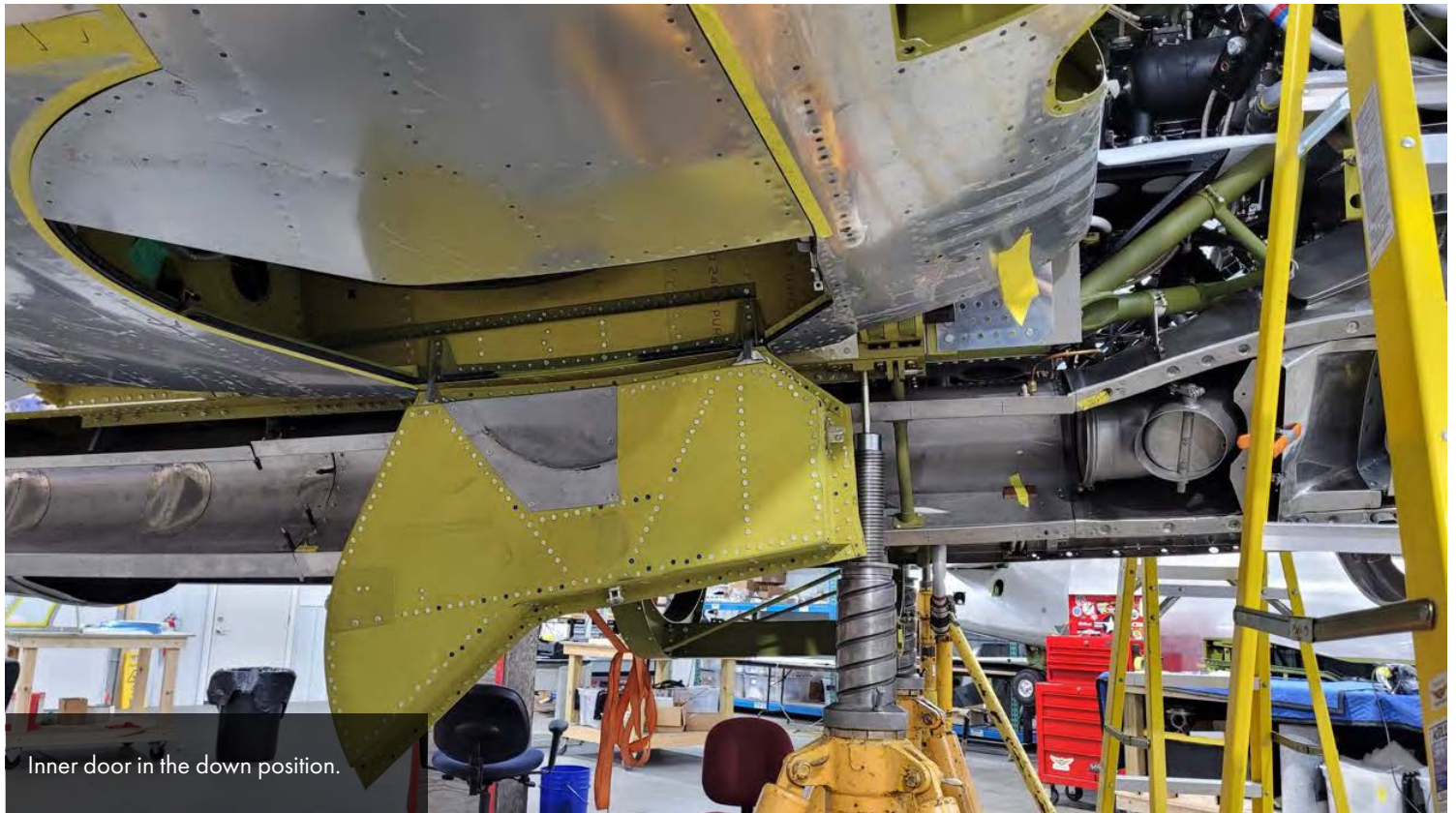
The outer skin has to be curled up, then gradually uncurled as each line of rivets is driven, because it would be nearly impossible to reach inside to buck the rivets without this technique.



This is a main landing gear strut in the down position. The landing gear retraction tests went smoothly.



Neil works on a perfect fit for the inner gear door.



Inner door in the down position.



The gear doors are fully retracted here, showing the tight fit that has been achieved.

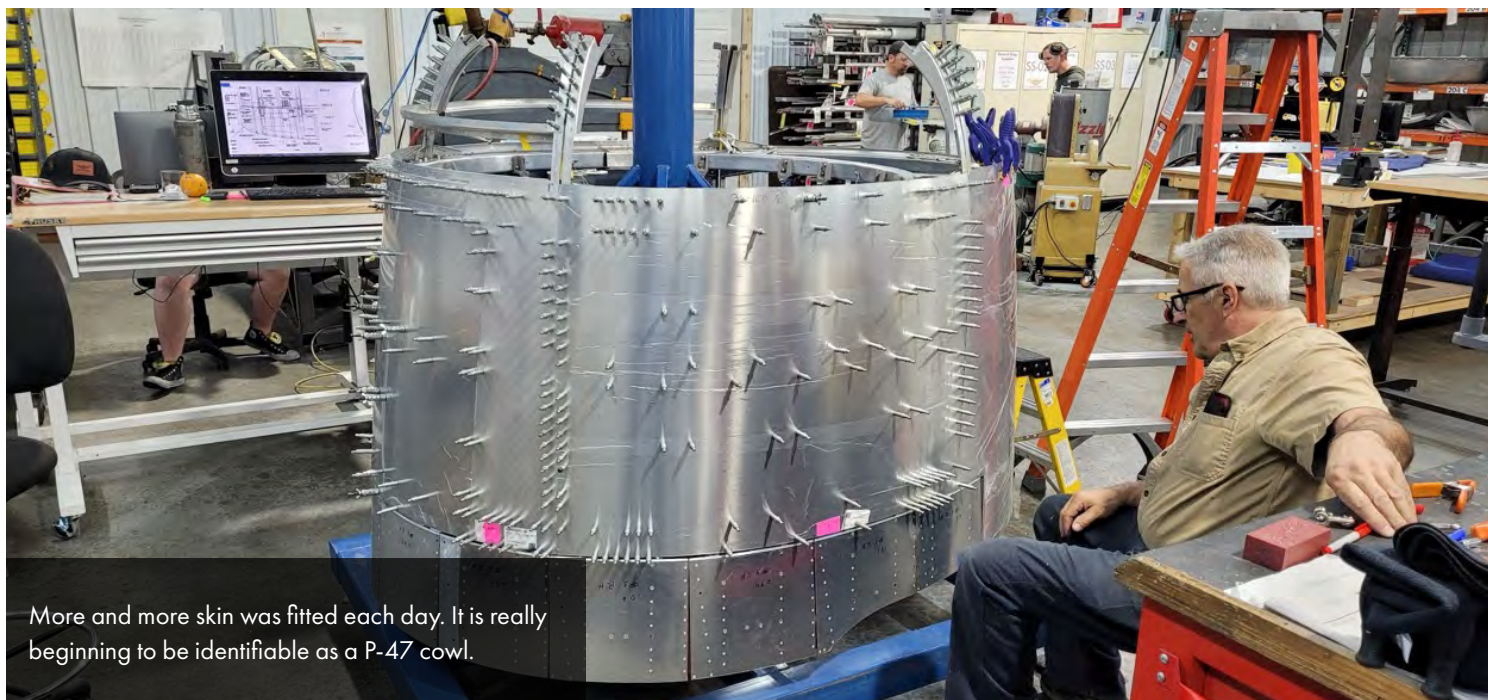


Cowling

The complex shapes of the cowling make the assembly a difficult job, but Mike has made remarkable progress. Much of the outer skin was fitted this month.



Some of the first cowl skin has been riveted in place in this image.



More and more skin was fitted each day. It is really beginning to be identifiable as a P-47 cowl.

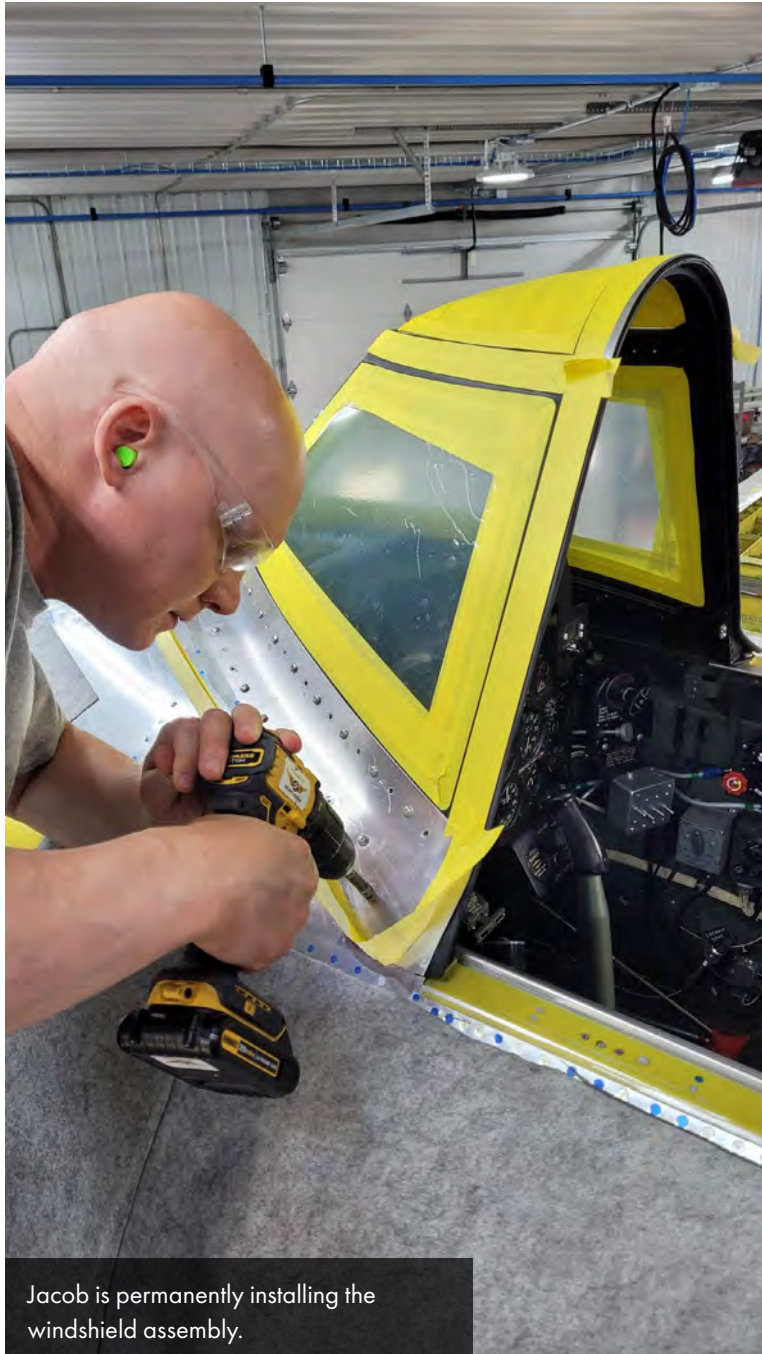


The ovoid opening in the front of the cowling is one of the most identifiable characteristics of a P-47.



Cockpit

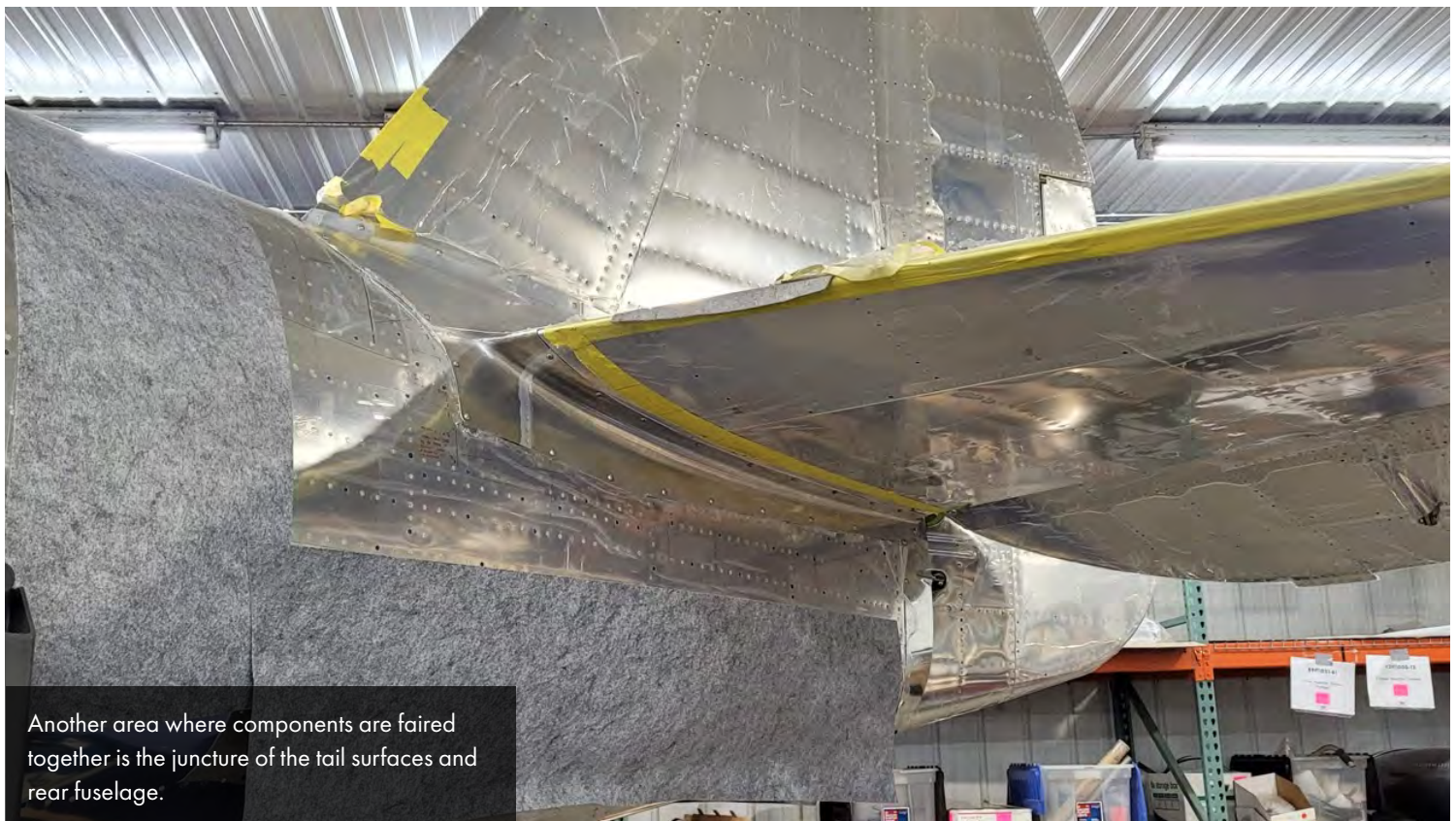
This month the windshield was installed and bulletproof glass was also installed behind the windshield. This installation is interesting in that, unlike most bubble canopy fighters, the armored glass is a separate part from the windshield itself. It mounts inside the windshield on top of the instrument panel.



Jacob is permanently installing the windshield assembly.



The windshield assembly fairs smoothly into the upper fuselage.



Another area where components are faired together is the juncture of the tail surfaces and rear fuselage.



Here is the pilot's view from inside the cockpit. This was before the bulletproof glass was installed.



The windshield helps define the characteristic look of a razorback P-47.



The cockpit enclosure is about ready to install.



The armored glass mounts between the gunsight and the windshield. The armored glass panel can be seen installed inside the windscreen in this photo.



The resto guys added a pin-up photo of Rita Hayworth to the instrument panel. (Lower left center)



The pilot seat has been installed.



Fuselage

During the period from late May through mid-July, much of the work focused on the underside of the fuselage where the turbosupercharger and ducting are located.



Cory works on a section of lower fuselage skin from just aft of the cowl.



Work continues on the turbo.



The turbosupercharger exhaust hood will eventually be covered with a rear-facing exhaust fairing.



Randy is assembling a bottom skin section.



Each cross brace stiffener has to be individually fitted.



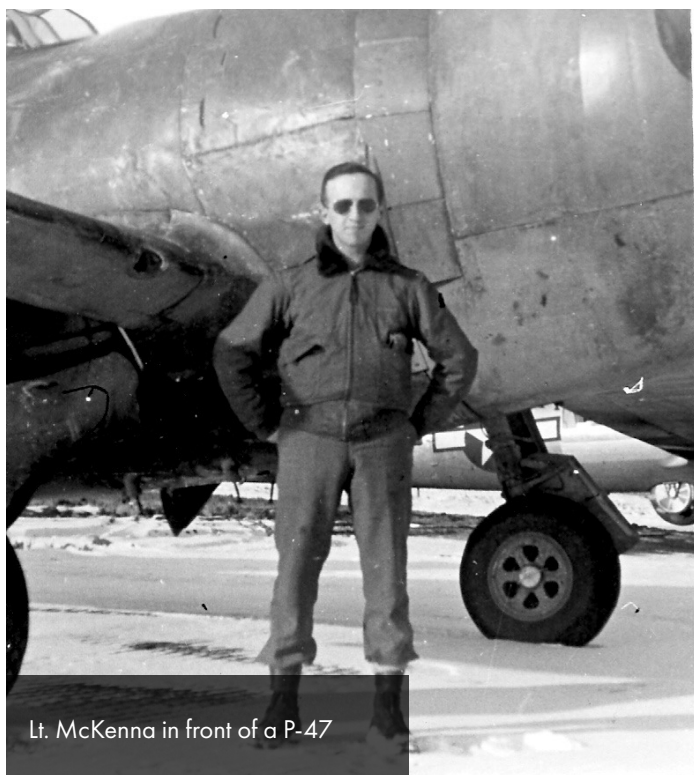
Back in the September/October update, this same photo was captioned: *This section of the turbosupercharger system has been nicknamed “the pants” by the guys for its resemblance to a pair of trousers. These passages carry exhaust gases back to the turbine section of the turbosupercharger.*



Randy couldn't resist trying out the ducting assembly to see how well it fits its nickname.



Lieutenant Donald McKenna



Don McKenna grew up in Storm Lake, Iowa. He graduated from St. Mary's High school in 1939 and then attended Buena Vista College (now Buena Vista University) in Storm Lake for a year.

Before enlisting in the Army on December 3, 1942, Don had worked for a time as a railroad clerk for the Southern Pacific Railroad in San Francisco.

Four of Mr. and Mrs. Joe McKenna's sons enlisted. One of Don's brothers, J. Orton McKenna also joined the Army Air Force. Brothers Raphael and Robert served with the army in the Pacific theater.

Dan Sokolowski, Don McKenna's nephew, generously shared information and photos about his uncle to make this article possible.

Flight Training



Basic military and flight training during the war could take a considerable amount of time. In Don McKenna's case, it would be almost 1 ½ years before he was ready to ship overseas to join the fight in May of 1944

The first step after basic army training was primary flight training at Corsicana, Texas. At Corsicana, Don flew Fairchild PT-19s.

Cadet Don McKenna stands in front of a PT-19 during primary flight training.



Cadet McKenna and a flight instructor.
Photo courtesy of Dan Sokolowski

Foster Army Air Field Base near Victoria, Texas was the next stop for Don. The cadets were introduced to even faster, more complex airplanes in Advanced training. At Foster, they flew the North American AT-6 Texan. Commonly referred to as the T-6, this trainer was a much more complex aircraft, with features such as retractable landing gear, a larger engine, a variable-pitch propeller, and hydraulics. Those who mastered the AT-6 would then go on to specialized training in fighters, bombers, transports, etc.

One of the resources that would have been used at Foster just happens to have been added to AirCorps Library this week. It's a manual called "Instructors Manual for Advanced Single-Engine Flying" and heavily features the T-6.

The next stage in Army Air Force flight training was basic training. For this Cadet McKenna moved to Enid, Oklahoma. Basic was the stage where pilots were introduced to more advanced aircraft like the BT-13. The Vultee aircraft was larger and faster than the primary trainers. Instrument and night flying were also part of the basic training program.



Formation of 12 AT-6 trainers over the Guadalupe River near Foster Field, Summer 1942, USAAF photo



Lt. McKenna on the wing of a P-47

After winning his wings at the conclusion of advanced training, Cadet McKenna became Second Lieutenant McKenna. Now officially a pilot, he was assigned to single-engine fighters. Specialized P-47 transition training took him to Bruning Army Air Field near Bruning, Nebraska.

While there, Don experienced an incident. Forced to hold off landing because of a busy traffic pattern during a night flight, he ran out of fuel and had to belly land the Thunderbolt in a field. The tough P-47 kept him safe from injury and his training proceeded until he was ready for combat.

At Bruning, Don met Billie Snell, who was to become his best friend and fellow pilot, whom he fought alongside throughout the war.



During training at Bruning field, Don was doing night circuits and the pattern was busy. He had to hold and ran out of gas, subsequently, he belly-landed in the dark. USAAF photo courtesy of Dan Sokolowski

(RESTRICTED)



USAAF Photo courtesy of Dan Sokolowski

171 (LT. McKENNA) (RESTRICTED)

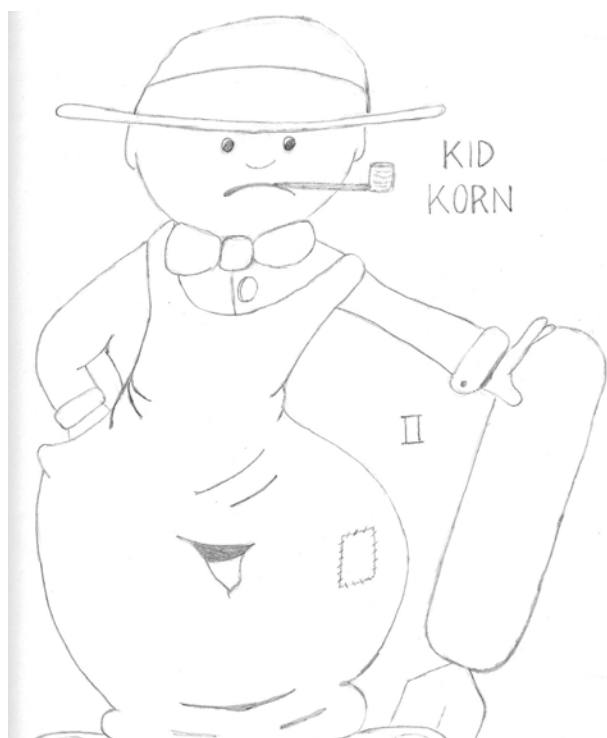
Donald was sent overseas in May of 1944.

He crossed the Atlantic on the RMS Queen Mary along with his friend, Billie Snell. Both men fought together in Europe and coincidentally came back home after the war on the Queen Mary, the very same ship they went to war on.

Both men were assigned to a P-47 group in the 9th Air Force, the 358th Fighter Group.

Don and Billie were even assigned to the same squadron, the 367th Fighter Squadron. Eventually, they were each assigned a P-47 and could add their own personal identifying nose art to them.

The two men chose art that related to their background, in Don's case the cornfields of Iowa, and in Billie's case, his native American heritage.



Preliminary sketch for the nose art on Kid Korn, Don McKenna's P-47. Photo courtesy of Dan Sokolowski



Republic P-47D-28-RA (USAAF serial number 42-28928) Kid Korn II, Lt. McKenna's Thunderbolt. This was his 2nd Kid Korn, the first had battle damage resulting in a belly landing. Photo courtesy of Dan Sokolowski



The nose art as it was painted on Billie's P-47, Lon Sum. Photo courtesy of Dan Sokolowski



Though many would consider the painted image politically incorrect these days, the nose art on Billie Snell's P-47 reflected his Native American heritage in a way that was completely acceptable in 1944. Photo courtesy of Dan Sokolowski

The 358th Fighter Group P-47s were originally part of the 8th Air Force, but when it became clear that the P-51 would be the primary escort fighter because of its superior range, the 358th was transferred to the 9th Air Force in exchange for a 9th P-51 unit, the 357th Fighter Group.



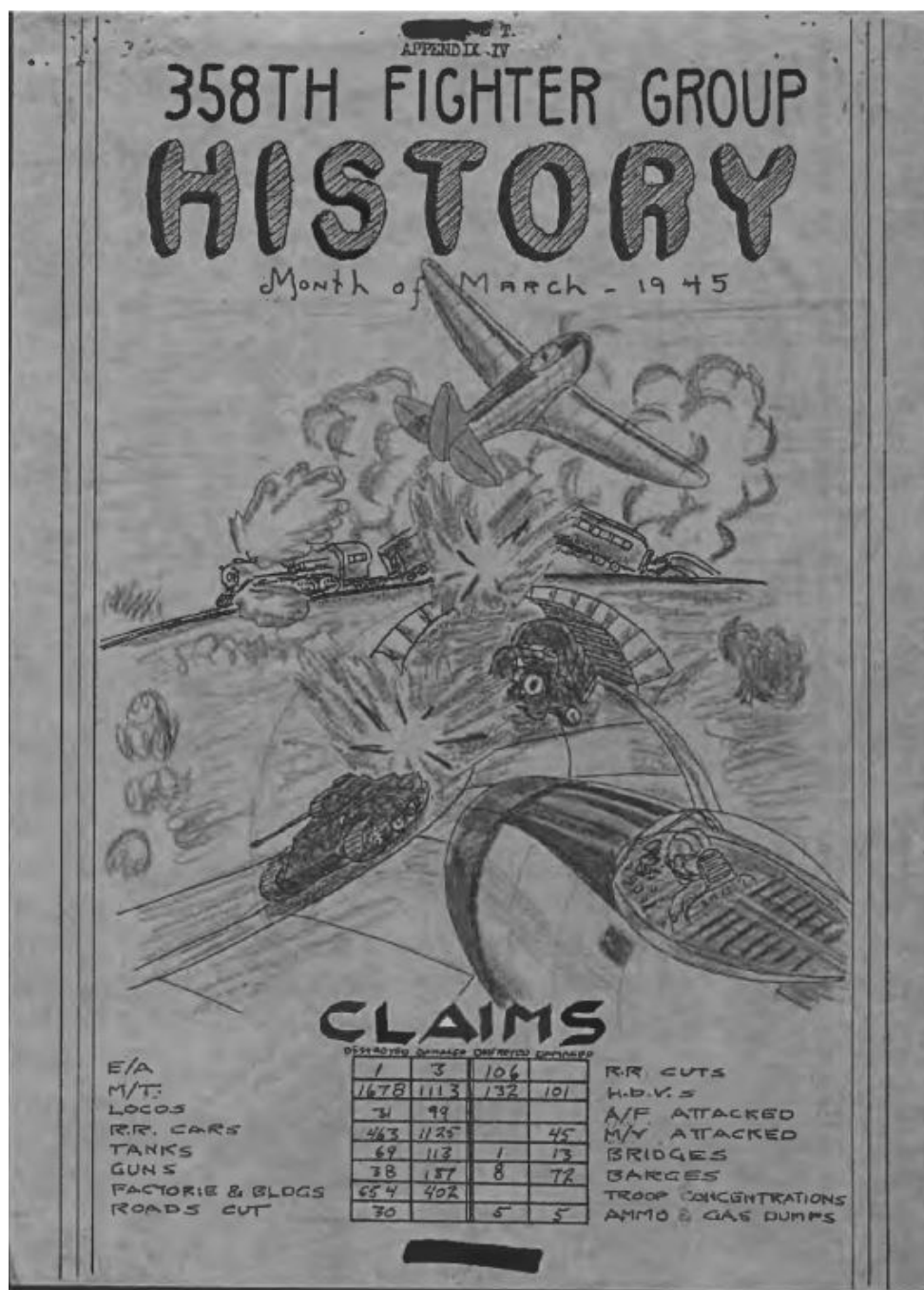
367th Fighter Squadron emblem. Photo courtesy of Dan Sokolowski

With the 9th Air Force, the 358th FG was awarded three Distinguished Unit Citations, and the French Croix de Guerre with Palm for the part they played in the liberation of France and their support in pushing the German armed forces back across the Rhine River.

After D-Day and throughout 1945, P-47 groups in the 9th AF were primarily engaged in tactical support of the advancing Allied Armies. They were incorporated into the First Tactical Air Force. The First Tactical Air Force was an ad-hoc multinational force established in November 1944 in south east France to provide air support to the Franco-American Sixth Army Group. It operated until May 1945. The force was made up of bomber and fighter units from the American 9th and 12th Air Forces, and French First French Air Corps and Western French Air Forces."

¹William H. Hess, P-47 Thunderbolt at War, 1976, Doubleday & Company New York City, NY p. 66

²American Air Museum in Britain website, <https://www.americanairmuseum.com/unit/4217>, accessed 07/12/2022



From the final page of the March 1945 358th Fighter Group History, the destruction wrought by the P-47s of the 358th is remarkably chronicled in this fascinating drawing and list.



The group's ground attack support of the 6th Army was memorialized by a commendation

1st Ind.
HQ, FIRST TACTICAL AIR FORCE (PROV), APO 374, U. S. Army, 23 Jan 45.

TO: Commanding Officer, 358th Fighter Group, APO 374, U. S. Army.

1. It is indeed with pleasure that I forward this splendid commendation from the Commanding General, Sixth Army Group. The First Tactical Air Force (Prov) which furnishes the air effort for the Sixth Army Group keeps a close watch on the efforts and results of all its subordinate units. The outstanding achievements of the 358th Fighter Group has been exceptionally gratifying to me and an example for all organizations to strive to emulate.

/s/ Ralph Royce
/t/ RALPH ROYCE
Major General, USA
Commanding.

2nd Ind.
HEADQUARTERS, 358TH FIGHTER GROUP, APO 374, U. S. ARMY, 25 January 1945.

TO: 1st Lt. Donald F. McKenna, O-701781

1. To reiterate, each officer and enlisted man of this organization and ancillary units should feel that the contents of the basic communication and indorsement are directed to his individual attention.

2. That we were commended by the army group with which our attacks against the enemy are coordinated, is a tribute to your personal efforts which have created an efficient tactical organization.

3. Such a commendation represents not only past performance with a high degree of tactical and technical skill, but also the kind of efficiency which is a prerequisite for achieving even greater successes.

James B. Tipton
JAMES B. TIPTON,
Colonel, Air Corps,
Commanding.

Commendation for ground support by the 368th Fighter Group forwarded from the Commanding General, 6th Army Group. Document courtesy of Dan Sokolowski



Donald was awarded the Distinguished Flying Cross for leading a successful and dangerous ground attack mission to the area around Heilbronn, Germany on March 13, 1945.

DONALD F. MC KENNA, 0701781, First Lieutenant, 367th Ftr. Sq., 358th Ftr. Gp. For extraordinary achievement in aerial operations against the enemy in the European Theater of Operations. On 13 March 1945, Lt. MC KENNA led his flight on a mission of armed reconnaissance and observed a small marshalling yard in the Heilbronn area which had 45 box and tank cars in it. He led his flight in a bombing attack and then returned to strafe the railroad cars. The marshalling yard was damaged, two tank cars destroyed and 20 box cars damaged. A anti-aircraft position was silenced by strafing. Eight large motor transports were observed nearby and Lt. MC KENNA immediately attacked them, destroying four and damaging two. The great courage and deep devotion to duty displayed by Lt. MC KENNA in the face of intense enemy fire reflects great credit upon himself and the Army Air Forces. Storm Lake, Iowa.

Document courtesy of Dan Sokolowski

On April 2, 1945, the 358th FG moved to a captured Luftwaffe base at Sandhofen, Germany. On the third day of operations from that base, (April 8, 1945 according to his Army Officer Notebook) , Lt. McKenna shot down an Mf 109. He described the event to U.S. War correspondent Sgt, Jerry Peterson:

"I was leading one of the flights. We were briefed to dive-bomb Munich, when we saw four German planes in the vicinity of Crailsheim. The Jerries split up, and I chased one that started climbing.

He made meager attempts at evasion and then leveled out in a straight climb.

I closed in to 300 yards, firing short bursts. He smoked a little on the first, and on the third burst, his engine exploded and poured black smoke.

The canopy flew off as I continued firing. The pilot bailed out and the plane started spinning down from 19,000 feet. The German's parachute didn't open."

During his time in combat, Don McKenna had two victories confirmed, both Bf 109s and a confirmed damage claim for an ME 262.

³Dan Sokolowski, personal correspondence



June/July 2022

DATE 1944	AIRCRAFT FLOWN						REMARKS OR INSPECTOR'S SIGNATURE CERTIFICATION NUMBER AND RATING	CROSS COUNTRY		INSTRUMENT RADIO OR HOOD	D U A	
	MAKE OF AIRCRAFT	CLASS	TYPE	CERTIFICATE NUMBER	MAKE OF ENGINE	H. P.		FROM	TO		AS INSTRUCTOR	
Nov. 3	P-47-D			ARMY	P+W	2000	ES. TRIER NIL	A-80	COMBAT			
8							A.R. NANCY Woods					
9							A.R. HERNY TOWN- AA.GUNS					
9									ENG.			
10							A.R. NANCY RIPSAW		COMBAT			
12									ENG.			
16								A-90	A-80			
16							D.B. STRASBOURG MARSH YDS.	A-90	COMBAT			
17							D.B. SAARBOURG GUNS					
18							D.B. STRASBOURG DUMP					
18							D.B. OFFENBURG MARSH YDS					
21							ES. - NO RDVZ.	A-96	A-90			
22							↓	A-90	COMBAT			
25							D.B. SAARBOURG Woods					
27							D.B. RHINE BRIDGE					
I HEREBY CERTIFY THAT THE FOREGOING ENTRIES ARE TRUE AND CORRECT.								TOTAL				
SIGNED								AMT. FORWARD		31 36		3 30
								TOTAL TO DATE				

NOV. 24.0
SORTIES 123

DATE 1945	AIRCRAFT FLOWN						REMARKS OR INSPECTOR'S SIGNATURE CERTIFICATION NUMBER AND RATING	CROSS COUNTRY		INSTRUMENT RADIO OR HOOD	D U A	
	MAKE OF AIRCRAFT	CLASS	TYPE	CERTIFICATE NUMBER	MAKE OF ENGINE	H. P.		FROM	TO		AS INSTRUCTOR	
APRIL 1	P-47-D			ARMY	P+W	2000	ES. STUTTGART NIL	A-90	COMBAT			
2							EGG. LOHR ?					
4							D.B. STUTTGART TRAINS					
5							D.B. ZWINGERT TOWN & TRAIN					
6							- - -		Y-79			
6							- - -	Y-79	A-90			
7							- - -	A-90	Y-79			
8							F.S.W. MUNICH 710 262 ?	Y-79	COMBAT			
9							ES. STUTTGART NIL					
9							ES. 700 RT					
10							D.B. MUNICH M.O. 107					
11							D.B. BALEN CUMSB					
12							D.B. NURNBERG GRAVE PIT					
14							D.B. CRAINSHAM M-YD					
15							SPIN ABRT					
16							D.B. RANSBACH RE. CUTS					
I HEREBY CERTIFY THAT THE FOREGOING ENTRIES ARE TRUE AND CORRECT.								TOTAL				
								AMT. FORWARD		31 36		3 30
								TOTAL TO DATE				

Two pages from Lt Don McKenna's logbooks for late 1944 and 1945. Document courtesy of Dan Sokolowski



Lt Donald F. McKenna in front of a P-47.
Photo courtesy of Dan Sokolowski



ARMY SEPARATION QUALIFICATION RECORD									
LAST NAME - FIRST NAME - MIDDLE INITIAL McKENNA DONALD F			ARMY SERIAL NUMBER 0 701 781		GRADE 1stLt	DATE OF ENTRY INTO ACTIVE SERVICE 5 Dec 43	SEX M	DATE OF BIRTH 29 Jun 22	
PERMANENT ADDRESS FOR MAILING PURPOSES (Street and Number - City - County - State) 831 COLLEGE AVE., STORM LAKE, BUENA VISTA COUNTY, IOWA									
HIGHEST GRADE COMPLETED 135		LAST YEAR OF ATTENDANCE 1941		HIGHEST DEGREE RECEIVED Commercial		NAME AND ADDRESS OF LAST SCHOOL ATTENDED Heald's Business College,			
CIVILIAN EDUCATION									
COURSE		NO. HRS.		COURSE		NO. HRS.		COURSE	
NONE									
SERVICE EDUCATION									
SERVICE SCHOOL		COURSE		VAL. RATING		ARMY SPECIALIZED TRAINING PROGRAM			
PFS San Antonio, Tex		Fre Flt.		9 Cmp		INSTITUTION WHERE ENROLLED			
FTD Corsicana, Tex		Primary		9 Cmp		NONE			
PFS Enid, Okla		Basic		9 Cmp					
AFS Foster Flt		Adv. SE Tng.		9 Cmp					
Texas									
CIVILIAN OCCUPATIONS									
MAIN OCCUPATION (Typed) TRAFFIC RATE CLERK					SECONDARY OCCUPATION NONE				
JOB SUMMARY Figured rates on freight shipments in main office.					JOB SUMMARY				
NO. OF LAST DATE OF EMPLOY- YEARS NEXT 1 Dec 1942					NAME AND ADDRESS OF EMPLOYER Southern Pacific Railroad, San Francisco, Calif.				
MILITARY SPECIALTIES									
YEARS		MONTHS		GRADE		PRINCIPAL DUTY		ARMY CODE NO.	
0		3		2dLt		Pilot SE		1054	
0		11		1stLt		Fighter Pilot SE		1055	
SUMMARY OF MILITARY OCCUPATION AND CIVILIAN CONVERSIONS (Shown by title) PILOT, P-47: Operated P-47 (single engine fighter) airplane to obtain air superiority over the enemy. Supervised servicing of airplane and checked fuel supply and guns prior to mission. Flew day and night missions, operating under varying flying conditions. Was own navigator, doing pilotage and dead reckoning navigation. Has knowledge of general and local flying regulations and meteorology. Flew 135 missions in European Theatre of Operations. Has approximately 700 flying hours.									
SUMMARY OF MILITARY OCCUPATION AND CIVILIAN CONVERSIONS (Shown by title) NONE									
* THIS INFORMATION BASED ON SOLDIER'S STATEMENT. (Indicate by * any items not supported by military records)									
DATE OF SEPARATION 19 Oct 45		SIGNATURE OF SOLDIER <i>Donald F. McKenna</i>				SIGNATURE OF SEPARATION CLASSIFICATION OFFICER <i>Stanley A. Smith</i>			
W.D., A.G.O. FORM NO. 100 15 July 1944		Donald F. McKenna, 1stLt, AC				Jefferson Barracks, Mo.			

Donald McKenna's official Army Separation Qualification Record, Photo courtesy of Dan Sokolowski

Lt. McKenna completed 135 combat missions during the war, his last on April 28, 1945, according to his Army Officer Notebook.

He wasn't an ace or a well-known name in the news, just another American doing his duty to keep the world safe from tyranny. We were lucky to have so many like him during WWII. 16 million men and women served in WWII, and like Donald F. McKenna truly earned the honorific "the greatest generation".