

# SOME NOTES ON THE P-51, THE ALLISON & MERLIN ENGINES.

From the papers of our late ace, Kit Carson. Note: Kindelberger, Horkey, and Larry Waite mentioned herein were all high level employees of North American, and heavily involved in design of the Mustang.

## Merle Olmsted

The piston aero-engine for military purposes is a thing of the past and it's life span has been barely 50 years .. but there are still a few Merlines thundering around, being driven around the sky by a few people who can afford them and a lot more who can't but who are hooked on the habit. The best way to get into the Merlin story is to ignore the Allison, which really isn't a part of the Mustang story, except in a limited way. By the time we had gone thru our P-40 and P-39 flying phases in 1943 and had swapped notes with a few P-38 jockeys, the Allison engine had come to mean our thing to most pilots - grief. The pilot psychology with respect to that engine ranged from apprehension to "bad news". There is, in fact, a real life anecdote involving Dutch Kindelberger, and the Allison, the details of which are due to Ed Horkey who originally suggested the laminar flow wing for the P-51.

Kindelberger, Horkey and Waite were in Dayton on business at Wright Field. They were staying at the Biltmore hotel and at about 11:00 one night, Horkey and Waite were roused out of their sleep by Ron Burla, North American representative in Dayton, saying that Kindelberger was in a late meeting upstairs with W.O. Hunt, and executive vice president of General Motors, of which Allison was a division. Horkey and Waite pulled on their pants and shirts and went up.

The discussion was revolving around the question of why North American was staying with the Packard Merlin and why weren't they using Allison engines. Kindelberger was explaining to Hunt how the heat transfer and balances of the Merlin were much more adaptable to the radiator and cooling scheme of the P-51, producing better performance. Also, the gear ratios, supercharger and performance of the Merlin were better than the Allison by a significant amount. Hunt allowed as how they could go to the P-40 arrangement with the radiators up front, which would be about three steps backward, because it would forfeit completely the large increment of performance gained by having the air scoop where it was. Kindelberger wanted Horkey and Waite to verify what the sacrifice in speed would be (top speed of the P-40 was 352 mph as compared to the P-51B top of at least 437 mph).

Kindelberger mentioned other aspects, such as the fact that the Merlin manufacturer, Packard, would always work with them in terms of anything they requested to help in devising the smallest power plant package possible to cut down the area of drag. In contrast, at one time Allison had a spark plug wiring problem that required bulging the cowl around the engine of the early Mustangs and destroying the ideal 2nd degree curve streamlining and the minimum drag profile. Packard and Rolls Royce willingly worked out the changes and helped to get down to minimum drag frontal area, whereas Allison would not.

Those were two of the points discussed at the meeting. At the conclusion, Kindelberger told Hunt, "We can't do it". We are out to build the best performing fighter in the world and we just can't go back to the Allison. We are going to stay with the Merlin."

End of this section

Carson on the Allison and Merlin, page 2

As a matter of historical interest and just for the record, while researching the flight test reports I found the following data which I believe to be the real peak performance for the P-51B.

Report # NA-5798  
 Title: Flight test performance for the P-51B-1"  
 Date: January, 1944  
 Test Weight: 8,460 lbs.  
 High Speed: 453 mph true airspeed at 28,000 feet at 67"  
 HG manifold pressure and 1298 Horsepower.  
 Maximum rate of climb, war emergency power: 3900 feet per minute at 12,800 foot altitude.  
 Service ceiling: 44,200 feet  
 Time to 20,000 feet, war emergency power: 5.5 minutes, averaging 3,636 feet per minute.

Note by MCO. For those who do not know it, Kit Carson was an aeronautical and mechanical engineer.

This material appeared in Carson's fine book PURSUE AND DESTROY, which is now a rare book, and hard to find.

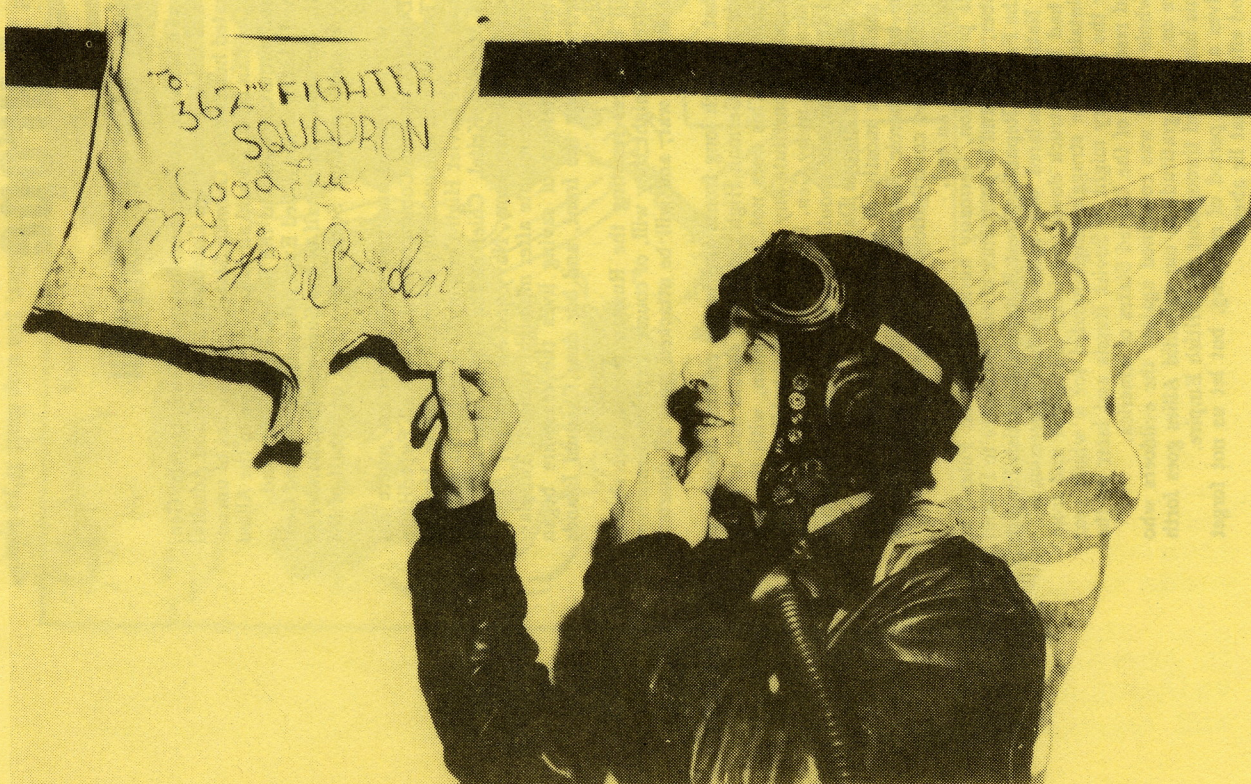
#### A FIGHTER SQUADRON HOBBY

This was probably the first piece of Movie Star Underwear received by the Squadron. This item is from Marjorie Riorden who was fairly well known then, but never a big star.

Other more famous underwear arrived later. The pilot is the Group's top Ace Leonard "Kit" Carson.

The lovely nude on the wall was carved into the wall by pilot Tom Beemer.

Photo from Merle Olmsted



A WALK IN FRANCE -  
SUMMER OF '44



Don W. Vogel  
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The bird is dead,  
Lying there in a field of wheat,  
Wings akimbo  
In the muggy well of Summer's heat.

I am alive,  
A meaningful thing in Death's view,  
My heart beating  
While the song of the bird is through.

So shall I walk  
And the bird who was a sometime thing,  
And now supine,  
Will never again soar and sing.

If I shall mourn,  
'Tis that I felt the bird and I were one,  
And now the end,  
We are severed and its day is done.

escort

On 1 July, 1944, the 357th Group bomber/mission was scrubbed.  
Later in the day, our squadron was sent out on a fighter  
sweep north of Paris.

We tangled with a gaggle of German Me-109's near St. Quentin  
and I took a cannon shell in the engine of my P51-B. A belly  
landing was made in a wheat field near Laon. Overhead I saw  
a P-51 nail a 109. Another P-51 came in low and I waved my Mae West  
to signify that I was OK. A nearby hedgerow provided  
temporary cover.

There was no enemy activity about. The front (between St. Lo  
and Caen) was about 200 miles away. I removed my flying boots  
and stuffed them and my Mae West into a clump of bushes. Fort-  
unately, I was wearing my GI brogans inside the boots. It was  
darkening fast. Another quick look around showed no activity  
so the walk began.

Rain started falling a short time later and the dark night  
got darker. Luckily, a railroad crossed my path so I latched  
onto it. At dawn, a line of railway coaches on a siding came  
into view and provided me with a bedroom.

A slamming door woke me. A pair of German soldiers were com-  
ing down the line of cars looking into each compartment. One  
car short of mine, they broke off their search and went back  
down the line. When they had disappeared, I ducked into the  
woods nearby.

In the woods, I nearly bumped into another soldier who was  
walking through the woods with rifle slung. I hit the deck  
and he walked by.

The rest of the day I walked in the wooded areas trying to parallel the railroad. After getting lost a few times and catching a cat-nap here and there, it became evident that civilian clothing was needed. Besides I was getting tired of raw potatoes, little green apples and wild berries.

On the morning of the 4th, I was napping in a pile of hay when I heard voices. They were French. At my call, they came to the vocal hay-pile and I explained my situation, using the phrase card.

About a dozen men and women came out and I had my pick of pants and jackets. I went on my way wearing a flat cap a pair of brown pants, a dungaree jacket and a shirt off the back of one of the men. He had felt my shirt and shook his head. A bag containing bread, jam and fresh cherries hung from my shoulder. The people bid me "bon chance."

I got back on the railroad to Soisson where I took a wrong turn to the north. Approaching a small town, I hoped to confirm the wrong direction before wasting more time. The tracks expanded into a railyard and a work group in the yard turned out to be German soldiers. I lowered my head, plodded on and watched them out of the corner of my eye. That was a mistake. A pair of boots suddenly appeared in front of me. I stopped dead. There was a fence across the railyard and in front of it and me was a sentry with his rifle at port and a big grin on his face. The work party had stopped working and were looking at us. I grinned back, shrugged and reversed course. There was no challenge. Noting that the work party was still looking at me, I veered to to my right, away from them, and went down a path into the town. There seemed to be only Germans in town, no civilians. I kept veering until I was back on the railroad track and went back the way I had come.

Back at Soisson, I picked up the Aisne River and followed it to Compiègne, then the Oise River to Creil. It seemed safer along the footpaths by the rivers.

It was hot. With blisters on both feet and the cool water nearby, I stripped to my GI underwear and dove in. It felt good. My whole being relaxed and I realized that the hike was having an impact. It took quite an effort to get back to the bank.

At Creil, the rivers were put behind and I headed for Vernon as a likely place to cross the Seine. In the vicinity of Nucourt, under a solid overcast, aircraft engines could be heard. A shower of sparks suddenly came down through the clouds. This was followed by the bombs. After the bombing, I got up off the dusty road and moved quickly through the area. A German camp in the vicinity had been the target and they were milling about. Someone seemed to be shouting orders. I was concerned that they might grab civilians for work details but they were too disorganized at the time.

The bridge across the Seine at Vernon was for foot traffic only, having been bent in the middle by some past bombing. There were no guards. Hunger was up and a bakery came into view. A request for bread was met with a request for "tickee. " I told him I was an American and was hungry. He chopped a two-foot loaf of bread in half, gave it to me and shoved me out of the door. With bread there should be wine.

A cafe down the street seemed appropriate but curtains blocked the view inside. I went in anyway. There were two German soldiers sitting at a table drinking beer. At the bar, "Beer sil vous plais" got me a beer and a bar rag was dropped on my 100 Franc note. I nursed the beer until the Germans left and then negotiated a bottle of wine. The bar lady held up my 100 Franc note and said, "Non." My change was in ersatz money, money being printed by the Germans.

After leaving Vernon, I found a shady tree and sat down to enjoy my loaf of bread and jug of wine and recalled the words of Omar. Without "a book of verse" and "thou beside me", I was enjoying at least half of paradise and at the moment I considered it the best half.

I reached the town of Acquigny on July 11 and found a shed that would do for a night's lodging. I was spotted going in by a couple of young Frenchmen who followed me in. After a discussion, which included gestures and the use of my map, they concluded that the Germans were not in hot pursuit. I had put about a hundred and fifty miles between me and my start point. They took me to a priest who organized my ID card and doctored my feet. Other members of the local group arrived and we had a celebration feast. It seemed I was only the second airman to come their way so it called for champagne. I slept in a bed that night.

The next day, Pierre (my new name) and another Frenchman rode bicycles to a nearby village and from there it was horse and buggy to yet another. There I was turned over to Rene who had three RAF guys living in his house and a Russian hiding in his barn. Then there was Tex, an American B-17 crew member.

Tex took me to a nearby farm where I was to join him in residence. Several days later, he left to operate a radio for the French. He was replaced by a wounded Canadian pilot who arrived at the farm in a German staff car. Since he was able to speak French, he had been put in a hospital for care of a hole in his leg.

I think we were in the Falaise pocket. The Germans retreated through our area towards the end of August. They were on the farm one night and we hid in the attic of a storage shed until they left. The next day we spent a lot of time flat on our faces or at the bottom of a slit trench as rocket batteries to our west fired missiles over our heads. Finally an American recon unit came up the road.

We found that Paris had been liberated about the same time. We were taken to a HQ unit by our French friends, then by truck to a hospital facility near an airfield. A C-47 took us to England.

## TRACING OUR MISSING IN ACTION.

BY MERLE OLMSTED

In December of 1993, I wrote to an army personnel agency in Washington D.C, requesting information on four of our 357th casualties. There was little information on what happened to them in my available records. Since we know, of course, that they are dead, it was bound to be a sad trail to follow, but I felt it was worth doing, if for no other reason, as a memorial to them.

We know that one of our pilots, Fletcher Adams, was murdered by German civilians and a policeman. There was some indications that this may have happened to James Browning, Edward Simpson, Alva Murphy, and William Mooney, the four I was trying to trace.

There was no response from the army, a not uncommon occurrence. 15 or 20 years ago, government agencies always responded to letters of inquiry, but it is no longer true. The probable reason is the heavy personnel cuts all agencies have taken in recent years. However, the army did come through - one year later. In December 1994 I recieved a large package of papers, about 50 pages on each man that I had asked for.

They contained the records of the army's efforts to identify the many unknown casualties in Europe, including reports of investigating teams, eyewitness reports, medical reports and even dental charts of the unk, along with dental charts from their cadet days.

What follows is the story of what happened to one of our comrades about which we had known nothing for 50 years. The other three men will be dealt with in future articles.

Captain James W. Browning, 363rd Sqdn, was one of the gung-ho types who had come back to the group for a 2nd combat tour. An ace with 5 victories before he departed to the ZI in mid year, he returned near the end of 1944, and scored two more vistories.

The mission on 9 February 1945 was the usual heavy bomber escort, the 357th providing 62 Mustangs in two groups, led by Colonel Dregne, and Major Peterson.

Luftwaffe opposition was in the form of the formidable Me 262 jets, one group of 3 which used their superior speed to evade Greenhouse squadron.

15 minutes prior to that, at 1140 hours, Cement Sqdn, (363rd) engaged 9 Me 262s. From the mission report: "The squadron dropped tanks and dived on the jets which broke into elements of two and scattered. The lead jet, although under attack, turned into the bomber formation and made an attack through the box, one of our elements in pursuit. The remainder were driven away from the bombers with above results." (this refers to Me 262s destroyed by Bochkay and Carter, and a probable by Foy.)

The mission report also states: "One NYR (Not Yet Returned), Captain Browning, last seen vicinity of Fulda."

Captain Don Bochkay was flying Jim Browning's wing that day, both however were spares and were not required to accompany the mission. Both being eager fighter pilots, pressed on regardless.

Bochkay's later statement: "At 1145 hrs, Capt. Browning was on the tail of two Me 262s and was chasing them. I was covering Capt. Browning at the time and continued to cover him until it was in our favor for me to be the attacker. I then called Capt. Browning and told him that I was cutting him off and for him to cover me. As I was making the attack on the last Me 262, Capt. Browning called me and told me to keep going as he had me covered. That was the last I heard or saw of Capt Browning. This happened at 24,000 feet over Fulda, Germany. There were a large number of P-51s in the area at that time."

So there the matter rested, there was no further information forthcoming on Browning - he had simply disappeared.

There are German documents attached to Browning's Missing Aircrew Report in the National Archives, but they merely indicate: "1140 hrs, one mustang shot down 3 km SW Wuerger, 20 km SW Limburg after fighting with German day fighters. Pilot Capt. James Willey Browning, s/n 0-740361 and aircraft totally burned."

The army's efforts to identify and recover the remains of it's dead were very thorough and painstaking. Investigating teams had fanned out throughout Europe even before the end of the war. German police and town officials were interviewed and many statements of eye witnesses taken. After complete analysis, a board then decided if the remains were recoverable, and if so, they were moved to one of several military cemeteries, and then to the ZI if next of kin desired it.

The investigation in this case, did solve the mystery of what happened to Jim Browning.

In a statement dated 5 August, 1947, one Adolf Keller, Burgermeister of the town of Woersdorf says: "on 9 Feb, 1945, at noontime I saw a dogfight in the vicinity of Wuerger, besides a German fighter which was engaged in the fight there were several other planes in the air. The German fighter rammed an airplane and both of them caught fire and crashed down."

Keller goes on to say a German sergeant in charge of Russian prisoners later brought him several items from the wreck which included a gold ring, and ID tag with Browning's name, a photo with his name on it, and some currency.

That afternoon, Keller went to the wreck site, and saw the remains of both aircraft. "The body of the German pilot, Freiherr Von Riedesel, Oberstleutnant (LTCOL), was evacuated already."

The following comments are extracted from a statement dated 6 August, 1947, by one Wilhelm Manrer: "I am a railway employee. On 9 Feb, 1945, I was in my office when I heard firing from weapons of a plane, followed by an explosion. I went outside and saw a cloud of smoke about 600 meters from the station."

"When I was relieved at 1800 hours, I went to the place of the crash. There I saw the wreckage of a plane scattered over an area of 400 meters. I could not recognize the planes type.. On one part I found printed the letters "ZANKE". The plane was burnt. I did not see any remains or parts of a body. Approx. 600 meters from the place of the crash, a German plane had crashed. I however, did not see that crash."

The ZANKE reported was undoubtedly the canopy rim and the name was "ZARNKE, since Browning was flying Glen Zarnke's P-51 JUNIOR MISS II on that date.

At some point then, after Bochkay had taken the lead on the attack, Browning had collided with one of the jets, both pilots dying as described.

Of interest is the high rank and title of the German pilot. (Freiherr means Baron). My contacts in Germany and the U.S. have identified Riedesel as the commander of KG(J) 54, flying Me 262 Werk Nr (serial number) 500042. This unit was a former bomber Gruppe (same as our wing), as shown the KG designation, which had been re-equipped as a fighter unit (J) at a time when the Luftwaffe needed fighters much more than bombers. KG(J) 54 lost five Me 262s this date to the 78th and 357th Groups.

Jim Browning knew the risks of returning for a 2nd combat tour, when he could have remained in the states, but he came back to "the old outfit" (as many soldiers have a way of doing). The odds caught up with him however, and now after 50 years we know what happened to him. .

In May, 1949, Hdqers, American Graves Registration Command, Europe, issued a synopsis of his case, and recommended that his remains be declared non-recoverable, one of 26 in the European area as of that date.

Because there were no recoverable remains, James Browning's name is listed on The Wall of the Missing" at the American Military Cemetery in Luxembourg.

Merle Olmsted, March 1995

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#### IF

If you are interested in aviation and care to read about it, try reading the book "The Highs and Lows of Flying" by our own 362nd Fighter Squadron Pilot, Harvey Mace.

Joe De Shay read it from cover to cover in four evenings non-stop. Joe's co-pilot Ellen, snatched it and read it at full throttle. How come?? Because Mace's co-pilot Helen Mace, was a pilot in her own right and they enjoyed the airspace together. Some of the time, each had an aircraft of their own to fly. Try it, you'll like it!

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