CAF RISE ABOVE®

Triumph Over Adversity

History of the CAF Red Tail Squadron and the P-51C Mustang *Tuskegee Airmen*

This signature aircraft of the Tuskegee Airmen painted with the recognizable "red tail" is a museum without walls, bringing the story of the Tuskegee Airmen to audience's coast to coast. It is a tangible piece of history to help people – particularly young people – understand and appreciate the importance and legacy the Tuskegee Airmen as they fought the Nazis overseas and racism at home.

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CAF

COMMEMORATIVE AIR FORCE®

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About the CAF Red Tail Squadron

America's Tribute to the Tuskegee Airmen

The CAF Red Tail Project (know called the CAF Red Tail Squadron) was started in the 1990s by a group of volunteer members of the Minnesota Wing of the Commemorative Air Force. As they were getting ready to restore a WWII-vintage P-51C Mustang fighter.

What they needed was a plan to accomplish this task.

In the spring of 1992 Robert Granvin, John Schuck, Jeff Keopp and Douglas Olson solved the problem of the restoration and dedication of the aircraft. They determined that they would dedicate the aircraft to the "Tuskegee Airmen" to honor all who served in the Tuskegee Experiment: Pilots, Bombardiers, and all Ground Support personnel.

Their remarkable story of vision, hope, hard work and discipline proved that individuals can accomplish the remarkable, regardless of the obstacles, and remains as relevant today as it was seventy years ago.

Don Hinz, a retired Navy pilot and entrepreneur was the driving force who oversaw the creation of the "Rise Above" program of bringing the story and the aircraft to any and all venues supporting Black Heritage Education.

A Brief History of the P-51 Mustang

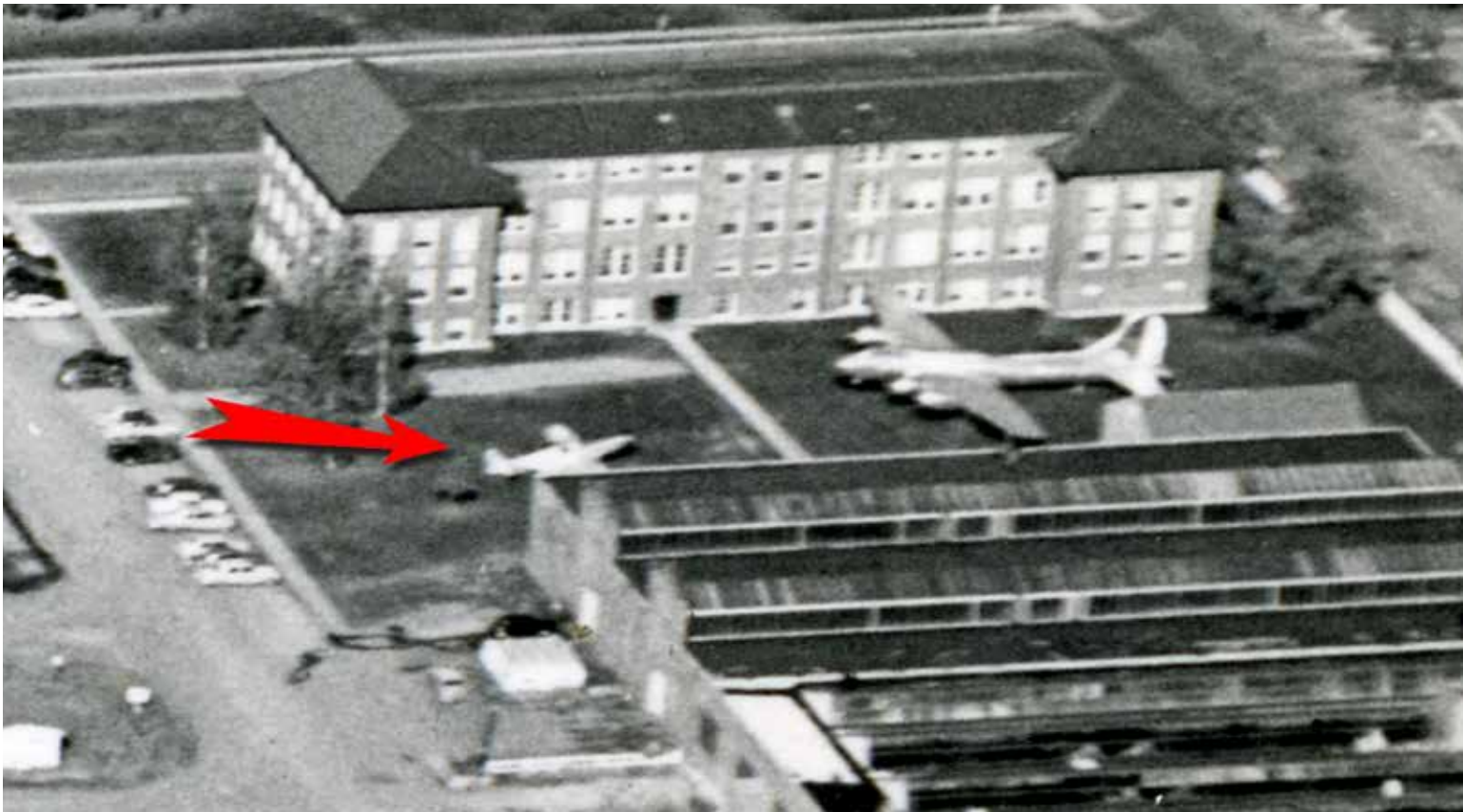
The P-51 Mustang was developed by North American Aviation in Dallas, Texas as a contract for the British Royal Air Force. The original model, the P-51A, was an effective ground support aircraft, but it wasn't until it was fitted with the Merlin engine, first appearing on the B and C models, that the aircraft became an effective interceptor. It is of interest to note that the only difference between the "B' and "C' model P51s was point of origin. The "B" model was built in Inglewood, California while the "C" model was built in Dallas, Texas.

The Mustang first flew in October 1940 and went into service in July 1942 with the RAF and later in 1942 with the U.S. Army Air Force. The Mustang served with distinction well into the 1960's with the Dominican Republic flying them in active service until 1984!

The P-51C, "Tuskegee Airmen" aircraft, like others in the Commemorative Air Force Wing's fleet, had a long history before arriving in Minnesota.

Restoration History

Manufactured:	North American Aviation, Dallas TX.
April 11, 1944	The Mustang was delivered United States Army Air Corps as 42-103645, and a week later was sent to 341st AAF Base Unit Pinellas, Florida for combat pilot training. Flown to Clearwater, FL, 3rd Air Force, via Love Army Air Field, TX, Jackson AAFld MS, and Dale Mabry AAFld, FL
December 1944	It was then transferred to the 378th AAF Base Unit, Venice, Florida. Where it was flown as trainer.
June 1945	It moved to the 339th AAF Base Unit (Third Air Force) Thomasville AAF, Georgia. Flown as trainer.
August of 1945	With the cessation of hostilities, P51-C 42-64129 was declared surplus of the USAAF.
September 27, 1945	Assigned to the Reconstruction Finance Corporation in Cincinnati, Ohio for disposition. It was dropped from military inventory in October of 1945.
October 3, 1945	Mustang 645 was purchased for a nominal legal charge of $1.00 by the Aeronautics Department of Montana State College (now Montana State University) in Bozeman, Montana.
1946	In 1946 the Mustang 645 was landed at Gallatin Field, Belgrade, Mt (now Yellowstone International Airport) and towed along 8 miles of back roads to Montana State College and placed near Ryon Laboratory and the college's B17G; both there for the Aviation Engineering degree students. The B17 was hauled in pieces from Gallatin Field. The Mustang was at MSC for 19 years. The B17 was there for 12 years and returned to flying service as an air freighter in South America. A P80 Lockheed joined the Mustang on display and utilized for Vocational training.



June of 1965

The Mustang languished at that location until the college auctioned it off, it sold for $350 in June of 1965 to Lloyd Creek. The low-winning bid did not "sit well" with the college. So, the college stated that he needed to get the aircraft off the college property in 24 hours or he couldn't have it.

Lloyd sawed off the wings outboard of the landing gear (after attempting to get the wings off by destroying the wing/fuselage fairings). He maintained if the wings didn't get sawed off and he towed it away that day, the aircraft would have been scrapped. He lashed the Mustang's tail to the bed of a pickup, placed a pipe brace between the wheel struts and headed down the highway from Bozeman to Billings - a distance of 140 miles. The aircraft was then stored in a junk yard at Billings Airport.

1965 - 1970

Of further note, Mustang 645 was re-assembled in front of the Billings, Montana VFW for a number of years until the Confederate Air Force in Harlingen Texas acquired it. The sawn-off wings were crudely bolted back together with angle iron.

1970

Donated to Confederate Air Force, Harlingen Texas
Registered as N215CA, the airframe traveled to Minneapolis Minnesota, back to Harlingen, Texas, and then to the Great Planes Wing of CAF in Council Bluffs, Iowa, 1983.

Trucked from Montana to Texas. There workers found the plane's original markings, including the stenciling under the cockpit: U.S. ARMY P-51C-5-NT. SERIAL NO. 42-103645. Registered as N9288.

November 2, 1970 — An application for FAA registration number N51CAF was requested. The majority of the aircraft was transferred from Montana to Houston, Texas where it awaited its share of scarce resources for restoration. While there it unfortunately was given a rather thorough salt water bath by Hurricane Beulah which began its insidious corrosion attack on what had once been a relatively pristine structure.

1974 — Randy Sohn and Jack Sandberg joined forces to restore the increasingly neglected conglomeration of parts to not only flyable condition. Registered as N215CA, the airframe traveled to Minneapolis, Minnesota, back to Harlingen, Texas, and then in October, 1983 the plane was trucked to the CAF Great Plains Wing in Council Bluffs, Iowa.

Randy Sohn and Jack Sandberg donate the P5-1 Mustang to the Confederate Air Force (now known as the Commemorative Air Force).

1983 — The restoration began in Texas in 1983, and involved mostly a collection of parts. The plane was trucked up to Omaha. While it was in Omaha, the fuselage paint was stripped and primed, and all new glass was installed. When the engine was pulled, there was a pleasant surprise: Research indicated that it had less than 25 hours on it. The engine was removed and sent to a Minnesota company, JRS Enterprise, for an overhaul.

Many of the hydraulic components still had hydraulic fluid in them. The gear doors had been shut for so long that they had to be pried open.

The restoration meanwhile offered a glimpse into the plane's past – going back to the days when its fuselage was used as a piece of playground equipment in Montana.

1988 – 1990's

Transferred to CAF Southern Minnesota Wing, Fleming Field, South Saint Paul, Minnesota. The group then formed the CAF Red Tail Project, named by John Schuck, to fundraise for restoration expenses.

The plane's airframe was brought to CAF Southern Minnesota Wing and stored. The aircraft was in pieces, with the wings removed from the fuselage. Registered as N215CA

Wing member Chuck Schiller recalled the aircraft was in pieces, with the wings removed from the fuselage. (the wings were not joined at the but rib) It arrived in Minnesota on two trucks.

Lloyd Crary remembered the first time seeing it. "It was sort of a sickening thing. It was in pretty bad shape," he said. "We were expecting to find a whole airplane" but the wings were in two halves not joined at the root rib. "It took us two days to pick everything up - the engine, all the parts,"

CAF MN Wing members who determined how to fund the restoration of the aircraft:
Doug Olson, Maintenance Officer
John Schuck, PIO/PR officer
Jeff Koepp, Finance Officer
Kent Smith, Wing Leader
Robert Granvin, Executive Officer
Reggie Urshler, sponsor
Doug Rozendaal, sponsor
Don Hinz, sponsor, visionary of the educational development for the program
Tim Barzen, sponsor
Scott Romuld, sponsor
Malcom "Spook" Johns, sponsor
Jason McNeal, Crew Chief
Larry Utter, active member
Marge Olson, active member
Chuck Schiller, active member

1992	The decision was made to dedicate the restored Mustang named the "Tuskegee Airmen" to honor all who served in the Tuskegee Experiment: Pilots, Bombardiers, and all Ground Support personnel.

November 15, 1993	John Schuck received a letter from Roger C. "Bill" Terry, President TUSKEGEE AIRMEN, INC. stating we were approved to restore the North American P51C aircraft in the colors of the "Red Tails".
1997	The Wing named singer and actress Lena Horne honorary chairperson of the Red Tail Project. The state of Minnesota had "pledged $100,000 to the project if the CAF can raise the same amount." John Schuck, a key Wing member who helped lead the Red Tail project recalled, "I wrote the letters [asking for money], and Lena Horne signed them."
1991	Bill of Sale from CAF to American Airpower Heritage Flying Museum, Inc., Midland, TX, for P-51 N215CA.
1996 – 2001	Started 1996. Completed May 2001. April 26, 2001 Registered as NL61429 Wings restoration: Robert Odegaard, Odegaard Aviation, Kindred, North Dakota On September 6, 1991. A contract was signed to Robert "Bob" Odegaard for the rebuilding of the wings. Airplane rebuild: Tri-State Aviation: Gerry Beck, Wahpeton, North Dakota On December 21, 1993. A contract was signed to Gerald S. Beck for rebuilding the fuselage.
February 12, 2001	Engine Restoration: Engine delivered from Mike Nixon, Vintage V-12s Tehachapi, California
April 26, 2001 – Present	The Mustang is assigned to the CAF Red Tail Project (now known as the CAF Red Tail Squadron)

May 10, 2001 First flight, the restored plane, now registered as N61429, was piloted by Gerry Beck, further flights by Bob Odegaard.
Registered as N61429
USAAF/A4-2/ *Tuskegee Airmen / By ReQuest*

July 2, 2001 "Unveiling" of aircraft at Fleming Field, South Saint Paul, Minnesota

May 29, 2004 *Tuskegee Airmen* unfortunately suffered an unavoidable engine failure and crashed near Red Wing, Minnesota while performing during an air show. The pilot, Don Hinz, was credited with avoiding injuries on the ground and avoiding a post-crash fire. Don survived the accident only to succumb to his injuries the next day. The aircraft was totaled.

CAF members pledged that the "Red Tail Project," which received national attention for its' two-year educational mission, will continue. In 2005 a national fundraising campaign was launched to raise the funds necessary to restore Tuskegee *Airmen* to the air to continue its mission.

2004 – 2009 Started 2004. Completed July 2009
Restoration by Tri-State Aviation: Gerry Beck, Wahpeton, North Dakota

CAF volunteer mechanics:
John Beyl, Steve Kaminsen, Mark Tisler, Pete Beyl, Tom Goodwill, Bryan Darnell, Greg Benson, Anthony Peña.

2005 Red Wing, MN airshow to show attendees how much progress had been made since the prior year's crash.
L-R: Mike Devine, Tony Pena, John Beyl, Dave Gehrke, Steve Kaminsen, Mark Tisler, Neal Petik
(Visiting Tri-State Employee) and Bryan Darnell.

2005	Launched a national fundraising campaign for restoration costs under the direction of LaVone Kay. Cohesive branding and marketing collateral developed.
July 22, 2009	First flight was flown by pilot Doug Rozendaal, the Mustang did two excellent flights that evening.

August 5, 2009	Resumes air show circuit
February 3, 2016	Pilot error - fail to deploy landing gear, Dallas, Texas
February – November 2016	Restoration by AirCorps, Bemidji, Minnesota

December 1, 2016 Resumes air show circuit.

This signature aircraft of the Tuskegee Airmen painted with the recognizable “red tail” draws crowds and media attention. It is a museum without walls, bringing the story of the Tuskegee Airmen to audience’s coast to coast, and is one of only a few like it still flying. It is a tangible piece of history to help people - particularly young people - understand and appreciate the importance and legacy the Tuskegee Airmen as they fought the Nazis overseas and racism at home.

Name & Color of the restored P51-C Mustang *Tuskegee Airmen*

The "Tuskegee Airmen" airplane represents all the personnel that served in the Tuskegee Experiment: Pilots, Bombardiers, and all Ground Support personnel. The name "By Request" was the name of Col. B.O. Davis' plane. He named his plane this because white pilots would request the Tuskegee Airmen to escort them due to their excellence. The colors represent the four fighter squadrons in the 332nd Group. The red and yellow cowling represents the 302nd Fighter Squadron. The A on the side represents the 99th Fighter Squadron. The yellow banding on the wings represents the 301st Fighter Squadron. The red wing tips on the wings represents the 100th Fighter Squadron. * note the elevator and rudder trim tabs are yellow which at some point in time was representative of the 302nd Fighter Squadron.	Serial #: 42-103645 Construction #: 103-26199 Civil Registration: N9288 N215CA NL61429 **N61429**

What the 4, 2, and A stand for on the Mustang

According to the limited information we could locate, these letters and numbers are the squadron identification for specific aircraft of the 99th Fighter Squadron. All 99th Fighter Squadron identifications begin with the letter 'A,' followed by a number from 1 to 4.
The last number identifies specific aircraft within the squadron. It appears that only the 99th within the 332nd Fighter Group used this letter and number combination code. The remaining three squadrons use a two-digit number, which is the norm for aircraft operated by the Fifteenth Air Force.
I was not able to locate an explanation for this variation.
We hope this information is of some value to you.

Sincerely
ARCHIE DiFANTE, Archivist
AFHRA/RSA
600 Chennault Circle

Technical Specifications

Type:	Single seat, long-range escort fighter Note: this aircraft has been modified to include a rear seat in what was the radio compartment.	
Engine:	One Rolls-Royce (Packard) Merlin liquid-cooled V-1650-7 engine developing 1,490 HP	
Armament:	Four Colt-Browning M2 .50 cal. machine guns with a total capacity of 1,000 rounds. External mounts up to 1,000 pounds (454 kg) of bombs or six High Velocity Aerial Rockets.	
Dimensions:	Length:	32 feet 3 inches (9.83 meters)
	Wingspan:	37 feet (11.27 meters)
	Height:	12 feet 2 inches (3.71 meters)
Weight:	Empty:	7,635 pounds (3,463 kg)
	Maximum:	12,100 lbs (5,488 kg)
Performance:	Max. Speed:	505 mph (439 knots, 813 kph)
	Cruise Speed:	362 mph (315 knots, 583 kph)
	Ceiling:	41,600 feet (12,680 meters)
	Range:	1,000 miles (869 nm, 1609 km)

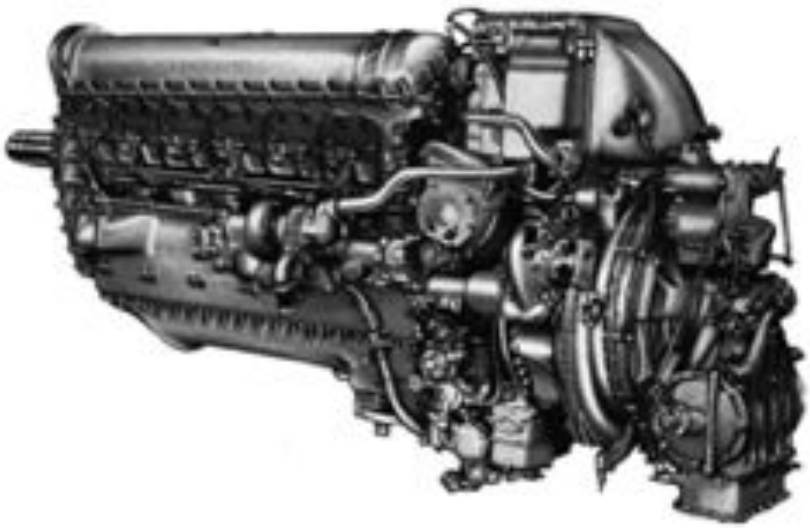
History of the Rolls Royce Merlin Engine

Aviation enthusiasts are aware of the incredible story of the Rolls Royce Merlin Engine marriage with the North American P51 Mustang. But it is worth nothing that although it is tempting to dismiss in one sentence the entire process akin to a hot rodder swapping a Chevy V8 into a 1932 Ford, in reality the whole complex process required over 223,000 engineering hours, almost three times the 78,000 hours to design the original Prototype Mustang! Remember, this was in an era when design work was accomplished without cad cams, e-mail, computers, etc. but with slide rules, T-squares and 2H size pencils. It is, however, perhaps worthwhile to reflect on the circumstances that allowed this marriage to be consummated.

The New York Herald Tribune, commenting on the New Mustang said "Many have long regarded it as the best fighter plane produced in the states, but it remained for the British to discover it." If it had not been for the initial British orders it would not have been developed at all. Its full potentialities were brought out only when the British designed Rolls Royce Merlin was installed.

The gestation of the Merlin began with the famous R type engine of the Supermarine SG Schnieder Cup Seaplane racers in 1929 with the ultimate goal of developing a reliable engine suitable for military application developing 1000 horsepower. Succeed they did, with at least eleven major manifestations designed for various mission applications and/or improvements in power or reliability culminating in a tribute to the genius of the basic design with the Reno Air Race Merlin Mustangs ultimately producing over 3000 h.p. at 3800 rpm!

Besides its use in the Mustang, the Merlin was used extensively in many other British Designs. Most notably, the Spitfire, Hurricane, Mosquito, and Lancaster, as well as the Halifax, Whitely, Wellington, Barracuda, Beaufighter, Lincoln, and Battle. It even had civil application following the war in the Avro York and Douglas De-4m before the jet engine brought an end to further development.



Of the total of 150,000 total Merlin engines produced, 60,000 were built under license in Detroit, Michigan at the Packard Motor Company, a grand old name in the annals of the motor city famous for its slogan "Ask the Man Who Owns One". Packard, of course was a famous builder of V-12 powered classic luxury automobiles that in all probability had not produced 60,000 cars in all of its previous history. It must have been with some trepidation that the proprietary engineering secrets of the Rolls Royce Co would be relegated to one of their primary competitors in the "Glory Days' of the pre-war auto industry. Fortunately, the urgent realities of the war prevailed and under the 24 hours a day 7 days a week regiment that ensued, Merlin engines were soon being produced at an unprecedented rate.

Consider that not only the ability to cast, forge, and machine the hundreds of parts required to assemble the Merlin was rapidly developed but that it was necessary to adapt the basic design to American Standard Fasteners, splines, gearing etc. Further, that both major and minor innovations and improvements were ongoing throughout its production life - items ranging from the two-piece engine block to improved alloys and various machining techniques to continually improve the reliability of this magnificent power plant. It is, after all, one thing for an incredibly complex piece of machinery to be developed and assembled by a team of highly skilled engineers and technicians - and pampered by same under controlled conditions. But it is truly one of the great unappreciated feats of the Rolls Royce/Packard Partnership that the Merlin engine could be assembled by "the butcher, the baker, and the candlestick maker" and, not to be forgotten, scores of former housewives who became highly skilled workers in response to their country's call. The result of their efforts was then sent to perform flawlessly under life/death conditions in climate conditions ranging from the numbing cold of the skies over Europe to the blowing sands of the North African Deserts, to the steaming tropics of the South Pacific.

Nineteen Years in Montana

by David Swingle

The following is some further information on the P-51C Mustang that was restored by the Southern Minnesota Wing of the Commemorative Air Force. I am a curator of history at the Museum of the Rockies and have 18 years of first-hand knowledge of this aircraft before it was acquired by the CAF.

The Mustang was purchased (for a reported $1 fee) by the Aeronautics Department of Montana State College (now Montana State University) in 1946 or early 1947. It was flown from a surplus depot near Salt Lake City, probably Hill AFB, and landed in a field near the campus then towed to a permanent tie-down near the Ryon Laboratory Engineering Building.

It languished at that location until suddenly sold for $350 in June 1965 to two obviously unskilled civilian owners whom I personally witnessed saw off the wings outboard of the landing gear (after attempting to get the wings off by destroying the wing/fuselage fairings).

The new owners lashed the Mustang's tail to the bed of a pickup, placed a pipe brace between the wheel struts and headed down the highway from Bozeman to Billings - a distance of 140 miles. The aircraft was then abandoned at that location. I visited the Mustangs several times, noting that the tires were virtually worn bare from the highway trip but there was no other damage than that inflicted by the new owners.

This Mustang was of personal interest to me and began my interest in history. As a child, I often played on the aircraft and an adjoining B-17G which was also part of the campus airplane inventory (it was eventually bought and became a cargo plan in South America and has also been recovered and restored).

During its tenure at Montana State, the Mustang was outside but fairly well cared for by the maintenance department. After vandalism to the canopy, sheet metal workers completely encased the cockpit. Just before the plane was attacked by its new incompetent owners, the sheet metal was removed and I again sat in the cockpit and noted that most flight instruments were intact, controls still worked, most glass, including the armored windscreen was intact, and the fold-over section of the canopy frame was good but the Plexiglas was missing.

The fuselage tank was intact and still smelled of av gas. One night, when I was about nine, there was a terrible roar in the neighborhood when some alcohol-fueled ex-airman fired up the Merlin and taxied the Mustang around the campus. Thereafter, it was firmly staked to two concrete pads with rebar looped around each axle.

As a teen and young pilot, I was aware that the engine might seize even in our dry climate so several of us would pull the prop over a full turn every month or so and manipulate the flight controls as much as possible. The reduction housing and engine very slowly leaked oil, so we topped it up with #30 non- detergent every few years. We wanted to buy it as did several other local fliers, but the campus administration abruptly decided to get it out of the way of an engineering building expansion and simply sold it to the two previously mentioned men for $350. No bids, no advertising, nothing.

Over the years, we tried to locate the Mustang - hoping it had not been completely destroyed. I heard rumors that a wing had been found for it in Israel some years ago, but not much else could be determined. Last Spring, just before the opening of our very large exhibit titled "Weapons that Changed the West," we learned that the plane was in Minnesota and nearly complete. We would love to have had it hear for our large Veterans' Parade but could not make contact.

David Swingle
Teaching Professor [Ret], Museum of the Rockies
Bozeman, Montana

Photo courtesy: Arlins Aircraft Service Inc.
via Scott Thompson

Learn more at www.cafriseabove.org