Mid-air collision over the Mojave

Two Bell P-59A Airacomet jets collide over the desert



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The skies over American in early 1945 were filled with all kinds of aircraft, but very few jet powered aircraft. So how could two jet powered aircraft in a clear blue sky collide into each other? This story is about how early jet age technology still relied on old radio procedures.

On March 1st, 1945 at approximately 0846 PST, 2nd Lt. Howard L. Wilson, and pilot Lt. Robert W. Murdock, took off from Palmdale Army Airfield California in two Bell P-59A Airacomet twin jet engine fighter aircraft. Bell P-59A #44-22620 was piloted by 2nd Lt. Robert W. Murdock and Bell P-59A #44-22626 was flown by 2nd Lt. Howard L. Wilson. The mission for the day was a scheduled low-level tracking mission over Victorville Auxiliary Field #4. The mission was in cooperation with anti-aircraft (AA) units stationed near and around Victorville Airport, to give the AA units practice in tracking fast low-flying jet-propelled aircraft. Lt. Wilson, who was the flight leader, had run this same type mission the day before at the same location. The Bell P-59A Airacomet jets involved in the day training exercise were both assigned to the 29th Fighter Squadron, 412th Fighter Group based at Muroc Army Airfield, (Edwards AFB), in the high desert north of Los Angeles, California. The open skies and good year round weather made the area ideal for testing new aircraft.

The Bell P-59A Airacomet



They were heavy, underpowered and unreliable, but they were jet engine powered and the vanguard of the jet age. Bell Aircraft Corporation produced twenty P-59A and thirty P-59B fighters along with 16 preproduction aircraft. The Airacomet was so outclassed by standard production fighters of the time that no more were ordered. The P-59 jet fighter was powered by two J31-GE-3 General Electric Type I-16 centrifugal-flow turbojet engines, producing 1,250 pounds of thrust each. These were copies of the British Whittle W.2B engine. Other than the engine, the airplane's design was quite conventional and its performance left much to be desired. It had the Bell trademark tricycle landing gear, a straight cantilever mid-wing of relatively low aspect ratio and conventional tail unit. The fuselage was a flush riveted monocoque construction with electric flaps and fabric covered control surfaces.



Rare color photo of a P-59 Airacomet

As might be expected for such a revolutionary system of aircraft propulsion, there were serious problems right from the start. The jet engines were too heavy in relation to the amount of power they could develop, and their exhaust was so hot that the turbine blades regularly overheated and often broke off with catastrophic results. The engine installation was found to result in an inordinate amount of aerodynamic interference, and the aircraft was subject to severe directional snaking, making it a poor gun platform. Nevertheless, work and testing on the P-59 continued unabated. Although the Airacomet never saw combat service, it provided the USAAF with valuable orientation experience in the use of jet aircraft and furnished a nucleus of trained jet pilots.

Details from the official accident report

Both pilots made contact with the Palmdale Air Traffic Control Tower on VHF channel "B" upon take-off. However, the Victorville #4 Air Field Controller was set to operate on VHF channel "A". At 0850, the Victorville Controller went on the air trying to contact both Lt. Wilson and Lt. Murdock on VHF and no contact was made with either pilot. Another pilot flying at the same time from Palmdale Army Air Field reported that he made contact with the Victorville Field #4 Controller using VHF channel "A", and had good reception and transmissions.

Witness reports state that both pilots made three or four individual passes over Victorville Field #4 at approximately 500 foot altitude. On the fourth or fifth pass, Lt. Murdock was making a pass at approximately 500 foot altitude from north to south across the airfield. Lt. Wilson was coming in from the opposite direction, southeast to northwest at approximately the same altitude.

The overall performance of the P-59A was disappointing with a maximum speed of 390 miles per hour (628 kilometers per hour), significantly slower than many piston-engine fighters of the time. However, the combined closing speed of the two aircraft was over 700 miles per hour as they raced towards each other and their fates. As the speeds of the jet age increased, the time between cause and consequence shortened. Neither pilot saw the other until it was too late to avoid a nearly head on collision.

The collision happened at approximately 0918 almost directly over a power line which is approximately two miles south of the airfield, and approximately 75 to 100 feet high. It was speculated that that both pilots might have been concentrating upon watching the power line, and failed to see the others small head on aircraft profile in time to avoid the collision.



Bell P-59 Airacomet head on view

Upon crashing into each other, Lt. Murdock's plane went down in flames and burned, completely demolishing the aircraft. Lt. Wilson's plane fuselage was cut in half and fluttered to the ground, landing upside down and completely demolishing his aircraft.

At approximately 0920 PST, Palmdale Operations was notified of a mid-air collision between two P-59s approximately two miles southwest of Victorville Auxiliary Field #4, and 20 miles west of Victorville California. Ambulances, Fire Trucks, and the 31st Fighter Squadron Flight Surgeon were immediately sent to the scene of the accident. Nothing could be done to rescue the pilots, neither attempted to bail out and the collision was fatal to both pilots.

It was determined that both pilots were properly briefed and instructed upon proper use of their radios and to contact the controller at Victorville Field #4 before they started the mission. In case of radio trouble and if no contact could be made with the Victorville Controller, they were instructed to return to Palmdale Army Air Field.

It was the conclusion of the accident investigation board that the accident was personnel pilot error on the part of both pilots. Both pilots failed to make radio contact with the Victorville Field #4 Controller. Furthermore, the pilots did not follow standard radio operating procedures, and neither was looking around and keeping the location of the other plane and pilot in mind.

The accident investigation board recommended that the standard operating procedure should be that each pilot not only have radio contact with controller and other aircraft in the vicinity, but that if he did not know the definite location of the other plane, not to make the pass until the other plane was located. If the verbal briefing immediately before the mission had been carried out using the proper radio procedures, the tragic accident would have been avoided.

Crash site visited 71 years later

The Mojave Desert still contains the scattered remains of two of America's first jet aircraft. The area where the crash site is located is very dusty from all the dust and dirt that is thrown up by a nearby dirt road. While searching the area, I could hear the hum of the high power electric towers that still stand adjacent the crash site and played an important part in the drama. At one of the impact points, not very much remained of the P-59A Airacomet. It is marked by an ugly grey area against the green- brown colored desert. Chunks of melted aluminum slag are strewn about as a testament to the burned aircraft.





I did discover a part with the correct manufacturer part number prefix of 27- at the site to confirm that I had found a P-59 Airacomet crash site. A few parts, rivet types and sheet metal also helped to identify the type. I could perceive from the parts the similarity with other Bell aircraft types of the time period such as the P-39 Airacobra.



I spent too little precious time examining the crash impact site before I rushed to explore further in search of the second impact point which I never found. I did find aircraft parts dispersed over a wide area due to the high speed impact. The second major impact point remains undiscovered for now. It is out there somewhere in the vast Mojave.



Parts discovered in the debris field

There are 15 major P-59A accidents listed in the AAIR database for only 20 P-59A aircraft produced and only six of the 66 Airacomets of all types originally built survive. They were an inferior aircraft by all accounts, but they were America's first jet powered fighter aircraft. Finding a piece of the first jet fighter was a challenge, but worth the trip into the Mojave Desert. I'm sure it was the close proximity of the power lines that were a major factor in the accident, but ultimately, it was simply the failure to communicate that did them in. Jet age operating procedures had to be learned, but standard radio procedures had to be remembered. Two of America's first jet pilots 2nd Lt. Robert W. Murdock and Howard L. Wilson still live in memory, and the memories of their families, they are not forgotten.



Bell YP-59 Airacomet and test pilot Jack Woolams circa 1943



Bell P-59 Airacomet with pilot



Bell P-59A-1-BE Airacomet 44-22610



Bell P-59A-1-BE Airacomet 44-22610



Bell YP-59A Airacomet in flight near Muroc cira 1943