

## A Bell That Didn't Ring

Turns out that jets are like waffles: The U.S. Army Air Forces was tempted to throw its first one away.

*Air & Space Magazine*

*William E. Burrows*



***Ed Maloney (in checkered shirt) says the P-59 is "the Wright brothers airplane of the Jet Age." (Caroline Sheen)***

DURING THE WINTER OF 1939, with the Second World War under way and U.S. participation a distinct possibility, the Army Air Corps held a competition for a new souped-up pursuit aircraft. Among the 50 entries was the Model 16, submitted by the Bell Aircraft Corporation in Buffalo, New York. With a barrel-shaped fuselage and wing leading edges slightly swept, it was powered by a 1,250-horsepower Continental pusher engine with counter-rotating propellers behind the cockpit.

Six competitors made the first cut, including the Model 16, which the Army designated the XP-52. But it was cancelled in November 1941, replaced by another Bell design, a propeller-driven follow-on with a Pratt & Whitney R-2800 engine that delivered twice the horsepower. The Army called it the XP-59.

The XP-59 was also not to be. Seven months earlier, Army Air Corps Major General Henry H. Arnold had peered into the future and seen jets. The occasion was a visit to Great Britain, where he got his first look at the top-secret Gloster E-28/39 Pioneer, powered by the newly invented turbojet engine. Arnold promptly asked for, and received, permission to build the

centrifugal-flow jet engine under license in the United States. Arnold asked the General Electric Company of Schenectady, New York, to be the prime contractor for 15 of the radical engines. The next day he asked Bell to develop a pursuit aircraft to attach them to.

Security was extreme. Instead of building the aircraft at its main plant, Bell bought an old automobile factory in Buffalo, swore a handful of engineers to secrecy, and put them to work behind blacked-out windows and guards.

The first XP-59A Airacomet was sent to Muroc Army Air Forces Base in California (later Edwards) by rail on September 12, 1942, under top-secret conditions. When it got there, the shrouded airplane was fitted with a dummy wooden propeller to prevent pointed questions. (The first XP-59A now hangs in the Milestones of Flight gallery at the National Air and Space Museum.)

Bell chief test pilot Robert Stanley flew the XP-59A to a cautious 100 feet on October 1 and to 10,000 feet the next day. A total of 66 Airacomets were built, but they were plagued with problems. The first engines, GE's I-As, produced less thrust than they weighed, and the airplane's top speed was a disappointing 404 mph at 25,000 feet. The Army was ambivalent about its new jet fighter. Performance improved a bit with the new General Electric I-16/J31 turbojet, which provided another 400 pounds of thrust, but the Airacomet did not perform that much better than the fastest piston-powered fighters: Lockheed's P-38 Lightning and North American's P-51 Mustang.

During the winter of 1943-44, the Army Air Forces reluctantly decided that nothing could turn the Airacomet into an outstanding high-performance fighter, so the single-engine, low-wing XP-59B follow-on was gradually abandoned. Lawrence D. Bell, the president of the company that had built it, did not lack for contracts. But he fumed when the contract for the B model was reassigned to Lockheed, where it morphed into the P-80 Shooting Star jet fighter.

Some survivors of the 66 P-59As were donated to technical schools to educate aspiring engineers and mechanics in the ways of jet aircraft. One recipient was California State University at San Luis Obispo, which got the seventh production model, a YP-59A numbered 42-108777. In the mid-1950s, the university put it up for sale. Edward Maloney, a historic-airplane buff, put in the winning bid. In 1957, Maloney founded the Planes of Fame air museum, now in Chino, California, and Valle-Williams, Arizona.

"This is the Wright brothers airplane of the Jet Age," Maloney says, "and the universities that got the other ones were turning them in for scrap." Only six Airacomets survived.

The Airacomet was parked outside at Claremont, the original location of the museum, for 36 years. In early 1991 it was put into the Fighter Rebuilders shop at Chino, owned by Steve Hinton, a renowned flier of vintage military aircraft. Fighter Rebuilders worked on the derelict fighter until late 1992, when the company was redirected to another project.

The following year, a small group of volunteers began turning out on Saturdays to restore the Airacomet. That deeply pleased its savior, who has also saved the world's only flyable Mitsubishi A6M5 Zero and Northrop N9MB Flying Wing, a Lockheed P-38J Lightning, and

hundreds of other Planes of Fame treasures. "I'd like to be remembered for preserving these planes for future generations," says Maloney.

"When we got to it, a lot of parts were missing," says John A. Benjamin, an executive headhunter who works on the restoration in his free time. "We were missing the landing gear motor, the flap motor," and much else, including the canopy, Benjamin says. Worse, the I-16 engines were gone. Benjamin eventually found three I-16s in crates at a parts depot in Texas, where they had been sent to be installed in piston/jet engine Ryan FR-1 Fireballs. Other items were donated by aerospace companies, manufactured on the premises, or scrounged.

The Saturday morning irregulars have no blueprints for the P-59A because those were destroyed in a fire at the Bell plant in the 1960s. But they do have an Airacomet manual, which was used to put the airplanes together out of their crates. A lot of it, Benjamin says, is "just common sense."

And patience. "We're in our 11th year now," he continues. On nearby scaffolding lie the wings, stripped down to epoxy primer. "You put the engines in and it's downhill from there." Steve Hinton will fly the Airacomet next year and then take it on the airshow circuit. "It will be the oldest flying jet in the world," Benjamin adds with a trace of wonder. "Think about that."