FORGOTTEN HERO

DOUG MATTHEWS AND THE TEAM AT CLASSIC FIGHTERS OF AMERICA HAVE CREATED THE WORLD'S BEST F-86 SABRE RESTORATION. THE SWEPT-WING FIGHTER HONORS AMERICA'S TRIPLE JET ACE

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On 1 October 1947, American fighter aircraft development would change forever. On the bleak wind-swept surface of Muroc Dry Lake in California's sprawling Mojave Desert, North American test pilot George Welch — a Pearl Harbor hero — advanced the XP-86's throttle. The futuristic prototype was powered by a J35-C-3 turbojet built under license by Chevrolet and capable of 3750 pounds of static thrust. Typical of this generation of jet engine, acceleration was slow and Welch carefully monitored the airspeed before raising the nose and letting the swept-wing prototype fighter take to the sky. "Against that bright blue desert sky," recalled one North American employee, "the plane looked like a beautifully polished arrowhead." Its turbojet crackling in the crystal-clear desert air, Welch put the aircraft through a series of tests.

What made the plane so distinctive was that it had a swept-wing and tail, developed from the literal tons of captured German aeronautical data shipped to the USA as part of Operation *Paperclip* — the rush to capture aircraft, data, and engineers/scientists (over 1600 of them) and keep them out of the hands of Soviet forces. Americans discovered the Germans had done extensive research into swept-wings and found that such a configuration offered distinct advantages at speeds above Mach .90.

Our intent is not to present a full history of the Sabre series but let us just say that with the XP-86 prototypes came numerous changes as the basic design — one of the all-time great fighter concepts — needed to be tweaked in numerous ways to create an effective jet warplane. Also, the sleek shape of the swept-wing Sabre coincided with the creation of an independent United States Air Force on 17 September 1947.

After a period of gestation and improvement, Sabres began entering operational squadrons in 1949 but there were still many things to be done to the basic F-86A in order to make it an effective warplane. The massed six .50-caliber Browning M3 machine guns in the nose proved capable of destroying most targets but these weapons became much more effective when mated with the later APG-30 gunsight. The F-86E introduced an all-moving tail plane that greatly improved maneuverability at high speeds while the addition of wing slats (another concept original developed by the Germans) was also a step forward. The design progressed to a fully power-operated control system that had what was called an "artificial" feel" built into the Sabre's controls to give stick forces that were light enough for superior combat control and high-speed maneuverability.

The F-86F (introduced in 1951) was produced in very large numbers and was also license-built by other nations. Through various modifications, the F series had more power, improved high-speed maneuverability and the airframe was modified to carry tactical nuclear weapons (with the F-30 series). With the F, the Sabre had really come into its own as an advanced swept-wing jet-powered fighter.

When communist forces comprising 75,000 troops poured into South Korea on 25 June 1950, the USAF was a former shadow of its WWII greatness and the Americans were completely caught by surprise. Initial aerial combat against the enemy was handled by F-51D Mustangs, F-82 Twin Mustangs, F-80 Shooting Stars, and F-84 Thunderjets. In November of that year, a new threat was introduced — the MiG 15 and it seemed this Russian fighter was unstoppable. Three squadrons of F-86s were rushed to the Far East and this would lead to a rapid build-up of Sabres but the MiG 15 had high performance combined with an all-cannon armament. North Korean pilots lacked the superior training received by Americans and the Sabres were soon shooting the MiGs (which were superior aircraft