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The Art Of Dogfighting

No, this is not an article about the illegal sport of pitting two dogs against each other in a fight to the death. This is the pitting of two fighter pilots against each other in a fight to the death. From World War One biplanes whose pilots threw bricks at enemy aircraft to the most intense, fast-moving engagements of modern warfare, read the dramatic and fascinating history of one-on-one aerial combat, which has created an entire cadre of legendary figures.

The term *dogfighting* was once used to refer to any aggressive, fast-paced fight. As aerial warfare began to follow that script during World War I, it came to be associated with that as well. Some more fanciful historians believe that this name was adopted because close aerial combat reminded observers of the sport of real dog fighting, or because the sounds of the propeller-driven airplanes recalled the bark of dogs.

Regardless of the origin of its other name, air combat maneuvering was a feature of all major battles for over half a century. It took on legendary significance during World War I when the first fighter aces became widely viewed as modern cavalry, the successors to medieval knights. The larger-than-life image that grew up around fighter pilots persists to this day, even though it is a very rare modern fighter pilot who has ever seen actual combat.

Beginnings and Synchronization Gear

Aerial warfare began with planes that were used to scout out enemy locations and movements. Even before the outbreak of World War I, German tacticians recognized the need to bring down enemy observer planes. The first "fighter" pilots threw bricks, ropes to entangle the propeller, or even rammed enemy aircraft with their own... anything that would knock that enemy plane down. Eventually, pistols and carbines were used. The goal was less to destroy the replaceable aircraft and more to kill the irreplaceable pilot—which would anyway result in the destruction of the airplane.

The extremely short range of pistols made them very inefficient, however. Rifles offered a much greater range of accuracy but they proved difficult to employ while flying. As soon as light machine guns were developed it became obvious that this would be the weapon of choice for mounting on airplanes. At first it was placed in front of the pilot. When the nose of his plane pointed straight at the enemy, the pilot knew his gun was aimed correctly.

There was one major obstacle however: the propeller. In most early aircraft, a single propeller in front of the pilot powered the aircraft. Shooting straight ahead meant likely chopping apart one's own propeller, and that meant imminent death. (Parachutes did not become standard equipment until World War II.)

Images of World War I aerial battles are extremely rare. This photo of British Sopwith Camels battling with German Fokkers comes from a set that came to exemplify the WWI dogfighting scene, allegedly taken by an English pilot "whose identity cannot be revealed" because he violated regulations by taking a camera with him. Decades later the entire series was found to be a hoax, having been made indoors by dangling model planes with strings.

French pilot Roland Garros flew a plane with metal deflectors on the back of the propellers at the level of the machine gun's barrel. This solution was less than ideal, though. Not only were the propellers weakened by the pounding they received every once in a while, but the ricocheting bullets would likely injure the pilot sooner or later.

On April 8, 1915, Garros was forced to land behind German lines (some accounts blame this on a mechanical failure while others attribute it to ground fire). Despite Garros' attempt to burn his plane, he and the aircraft were captured. The novel deflectors on his propellers were presented to German aircraft manufacturer Anthony Fokker. Fokker was inspired to work harder on developing a synchronization gear which would regulate the gun so that bullets were fired when the propellers did not block them.

By July 1915, Fokker's first successful design reached the battlefront, and the six month period beginning August 1 became known as the Fokker Scourge. German planes enjoyed an unparalleled advantage over their French and British counterparts. By the beginning of 1916, newer French and British planes took the advantage away from the Germans. Matters swung back in favor of the Germans when they introduced the Albatros in 1917, but the Allies quickly rebounded.

Britain's Sopwith Camel was probably the most famous aircraft of the war. A biplane, it was so idiosyncratic that many novice pilots were killed on takeoff or landing. Turning left was particularly tricky, so some pilots just spun 270° to the right instead. In the hands of an experienced pilot, however, it was a fantastic dogfighter. Introduced in 1917, the Camel fought for the last 17 months of the war. During that time it achieved 1,294 kills, more than any other aircraft used in the war.

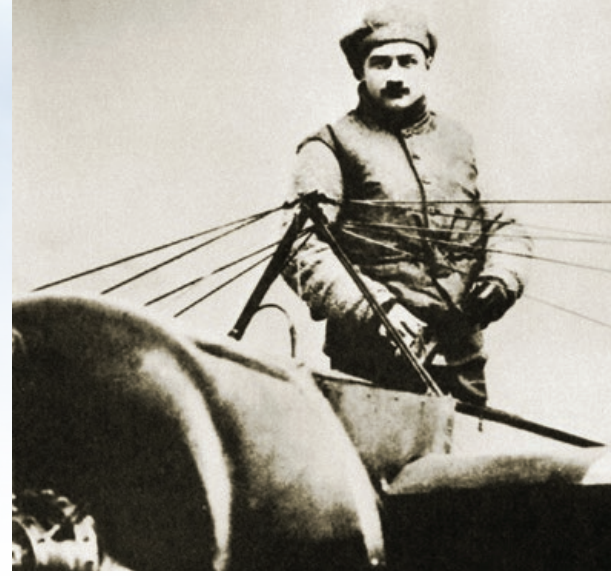
The final years of the war saw frantic and massive air battles as both sides struggled to maintain their air superiority. At the first major US engagement of the war, the four day Battle of St. Mihiel fought from September 12-16, 1918, the Allies massed nearly 1,500 aircraft to counter the 500 which the Germans had at the front. Ultimately, Germany lost control of the skies to the more powerful and numerous Allied aircraft.

Era of the Flying Aces

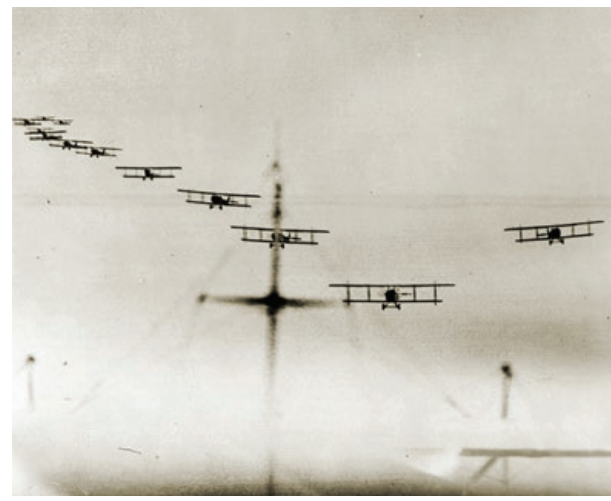
During the war a trend quickly emerged: Most of the aerial victories were concentrated in the hands of an exceptional few. To the Germans these aerial warriors were known as *Uberkanonen* (literally "Top guns") while the French called them "aces," a name which English speakers adopted as well. The exact definition of an ace varied over time and country, but for English readers it is a pilot with five or more enemy kills.

At a time when ground fighting made little progress for months or years on end, the aces with their quick-paced battles captured the public imagination. Their daring antics were widely touted due to their propaganda value, and when an ace was killed he was widely mourned.

During the period of the Fokker Scourge the skies were dominated by two daring German aviators, Oswald Boelcke and Max



French aviator Rolland Garros after becoming the first pilot to fly across the Mediterranean.



US biplanes flying in formation during World War I.

England's Sopwith Camel: the image of the World War I fighter plane. A tricky plane to fly, it made a superb dogfighter.