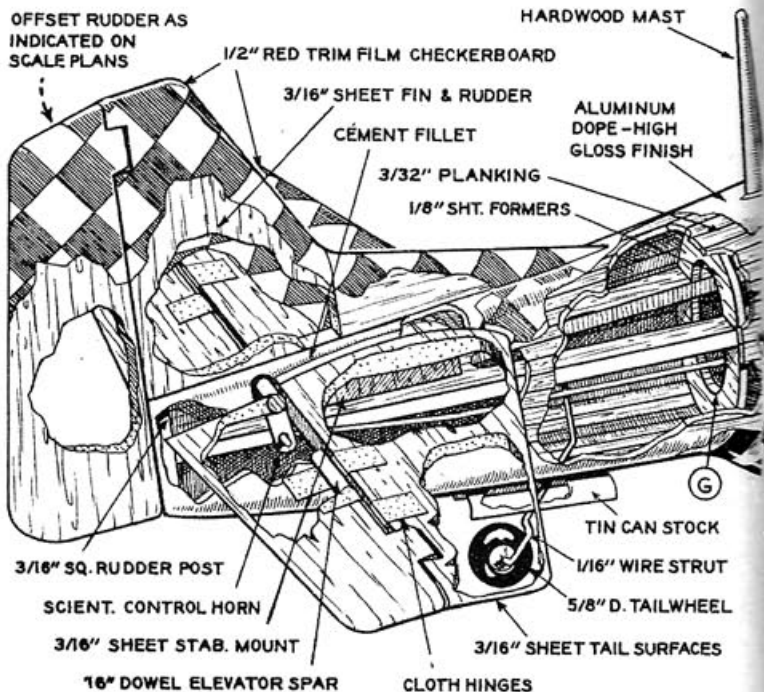


### American P-51 Mustang



Full-size plans speed your building time. Plan # 1252 from Air Trails has working drawings of Mustang, Spitfire and Messerschmitt-35.

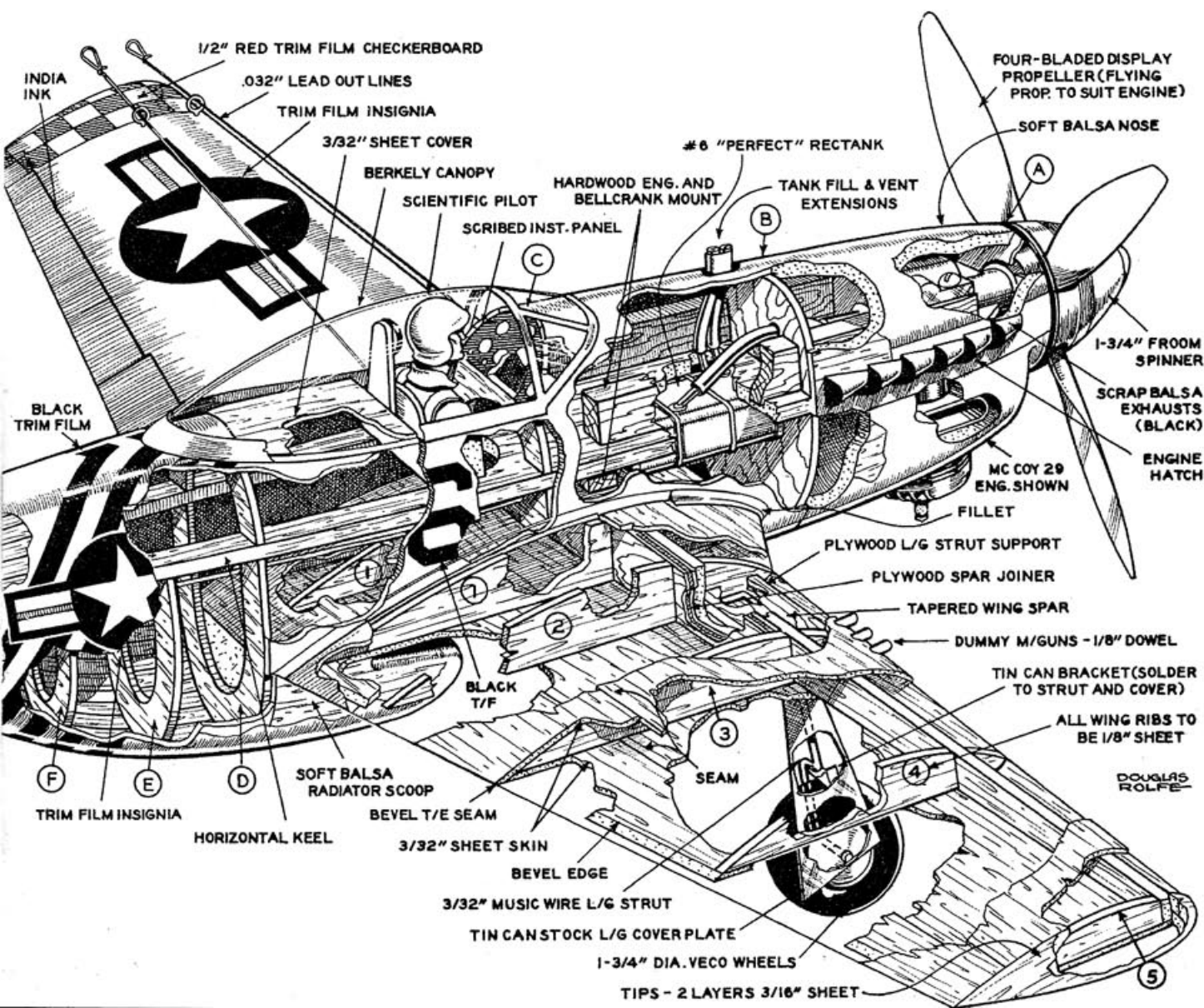


# Triple-Threat Treat for Scale Fans:

**1**—North American P-51 Mustang

**2**—Vickers Supermarine Spitfire Mk II

**3**—Messerschmitt 109E



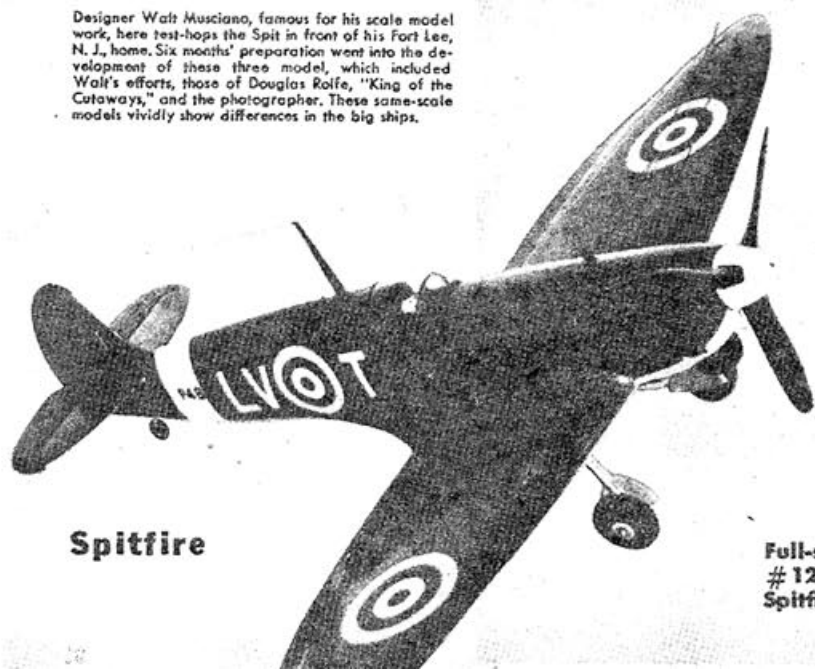


## Triple-Threat Treat (Cont.)

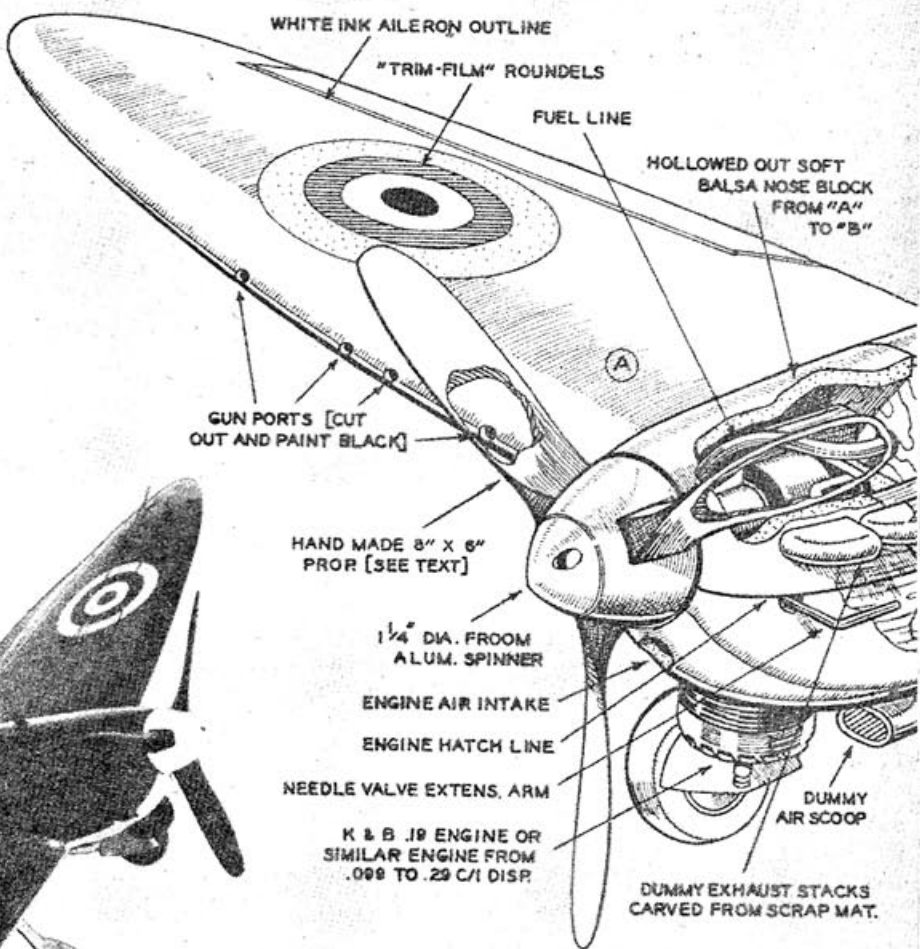


Designer Walt Musciano, famous for his scale model work, here test-hops the Spit in front of his Fort Lee, N. J., home. Six months' preparation went into the development of these three models, which included Walt's efforts, those of Douglas Rolfe, "King of the Cutaways," and the photographer. These same-scale models vividly show differences in the big ships.

For the first time you can build same-scale control line flying replicas of three top-notch World War II fighters; this trio will make a fascinating project for your club or contest flying.



**Spitfire**



Full-size plans speed your building time. Plan #1252 from Air Trails has working drawings of Spitfire, Mustang and Messerschmitt—35¢.

## By WALTER A. MUSCIANO

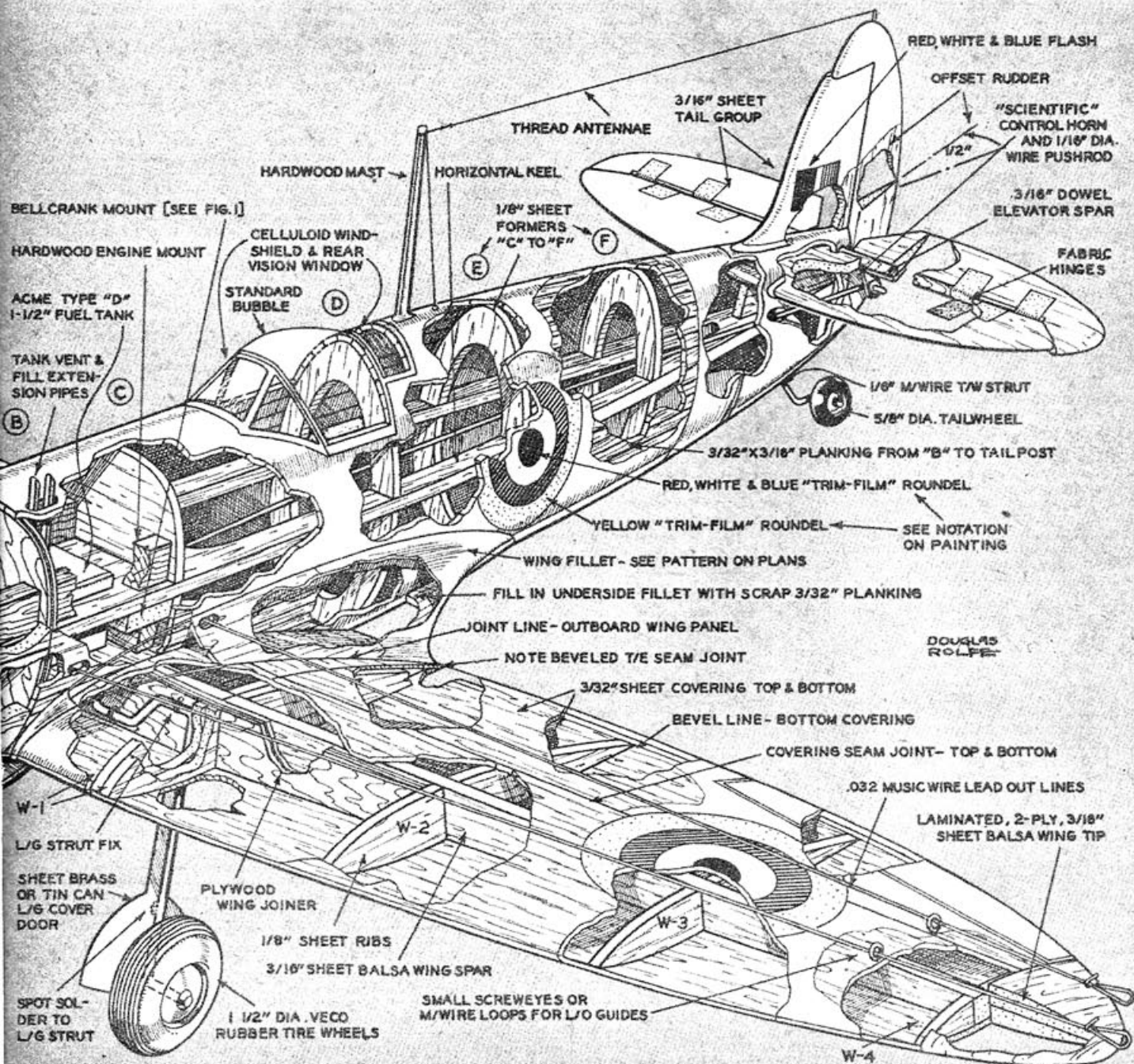
**Messerschmitt Me-109E.** Contrary to popular belief, the Messerschmitt fighters were not slipshod jobs. The Me-109 was designed in accordance with Ernst Udet's theory of the ideal fighter plane. This included: high speed, light weight, no armor, self-sealing tanks and moderate fire power with good climbing and diving ability. Although the first Me-109 was inspired by the Me-108 high-performance sport plane (1937 Isle of Man Race winner), it was built by the Bavarian Airplane Works (B.F.W.) and designated BF-113. This prototype astounded witnesses

at the Zurich Air Competition by its high performance in the climb and dive division as well as in other classes.

Subsequent modifications ranged from 109A to 109D. All of these were powered by Junkers Jumo 210 engines ranging from 610 to 750 horsepower which required only the fuselage radiator (see plans) and began with a service speed of approx. 280 mph. The original three machine guns were increased to four. In the fall of 1938 the Me-109E was born. A large Daimler-Benz 1150 hp fuel injection engine was installed

and the wing radiators were added to adequately cool this powerplant. Two wing cannons were added. Service speed jumped to 360 mph. Escort radius of the "E" was 75 miles which could be increased to 150 miles with a 66-gallon jettisonable tank. This model became the fighter backbone of the German Air Force throughout World War II. Some minor modifications were made here and there such as the sporadic use of armor plate.

Piloting a racing version of 109, Fritz Wendel in April 1939 broke world speed record with 481.4 mph.



**Vickers Spitfire Mk-2.** This hero of the "Battle for Britain" was the result of many years of research and experience with high-speed aircraft. Reginald J. Mitchell, who designed such famous planes as the Supermarine S-6B, literally gave his life in designing the Spitfire. So certain was this engineer of the war to come that he realized the urgent need for a super fighting plane and therefore spent countless sleepless nights at his drawing board in order to complete the design. This effort so undermined his health that he never lived to see the plane in action.

Even though the number of Spitfires available at the "Battle" were few, they were sufficient to occupy the Messerschmitt protection and thereby allowed the older Hurricanes to get at the German bombers.

Power of this fighter ranges from the 1050 hp Rolls-Royce Merlin to Rolls-Royce Griffon of over 2000 hp in the latest models including "Mark Twenty-five." The "Mark Two" is probably the most famous and was used in the Battle and throughout the war in all theaters. These and subsequent modifications were utilized as desert fighters (see plans for desert fighter air filter nose modifications), ground attack planes, carrier fighters, catapults (without landing gear), high altitude interceptors and on reconnaissance missions as well as for bomber escort.

Speed is generally considered to be in the neighborhood of 365 mph and up and, although the ceiling is considered to be not more than 45,000 feet, the records show that a Spitfire once reached 50,000 feet in an attempt to down a German high-altitude reconnaissance plane! Just think, this plane was on the drawing boards in 1934! Armament began with eight machine guns. This has been altered to two cannon and four guns and then to four cannon. It can also carry two 250-pound bombs. In both performance and appearance the Spitfire is one of the world's most beautiful airplanes.

Our  $\frac{3}{4}$ "-to-the-foot scale model is perfect with engines from .099" to .19 for sport, and will take a .29 for some speedy flying. Construction is rugged and the model will fall together with ease if instructions are followed.

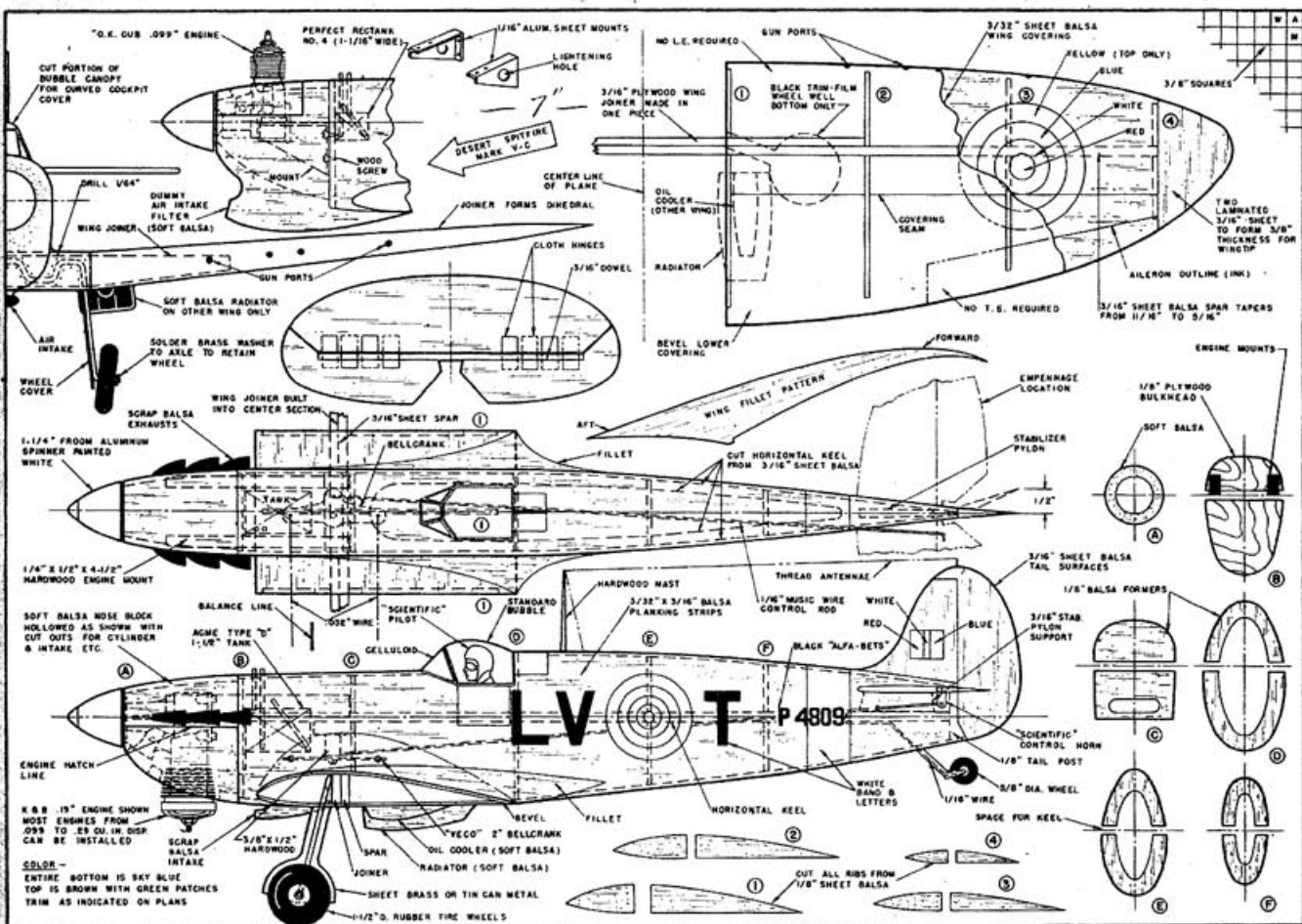
**North American Mustang.** While our Lightnings and Thunderbolts were tangling with the Messerschmitts and Zeros, a new U. S. fighter was in the

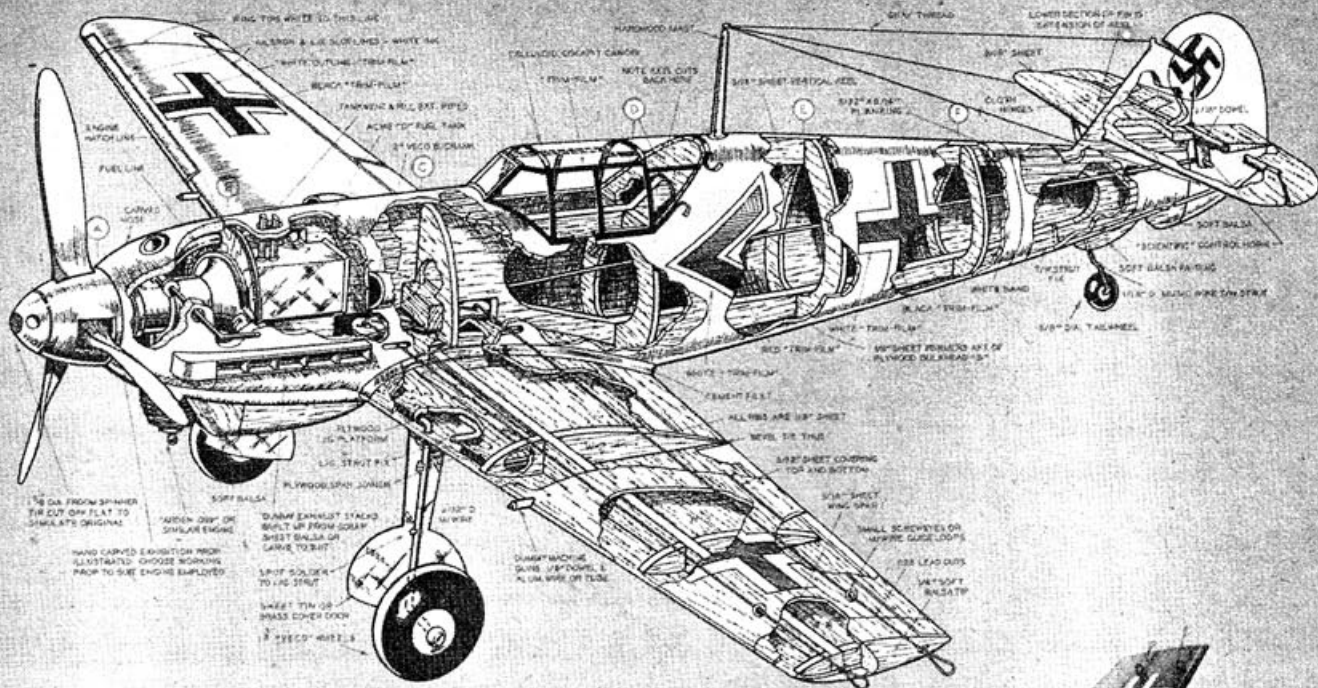
process of development. Originally built for the British as a fast reconnaissance plane, the Mustang was first called the NA-73 "Apache." It was then converted for ground attack use and we designated it A-36a. (See plans.) Both these models were powered with the 1050 hp Allison engine. The A-36a planes were camouflaged with grey-blue bottoms and olive drab tops. The change which did most for this craft was the installation of the Rolls-Royce Merlin engine of 1500 hp. The P-51 then became the "fastest fighter in the world" and still maintained its excellent maneuverability.

This plane is still the proud owner of the title "world's fastest propeller-driven plane" and has performed with excellence in the Korean conflict. Countless speed records have been shattered and air races won by war-surplus Mustangs.

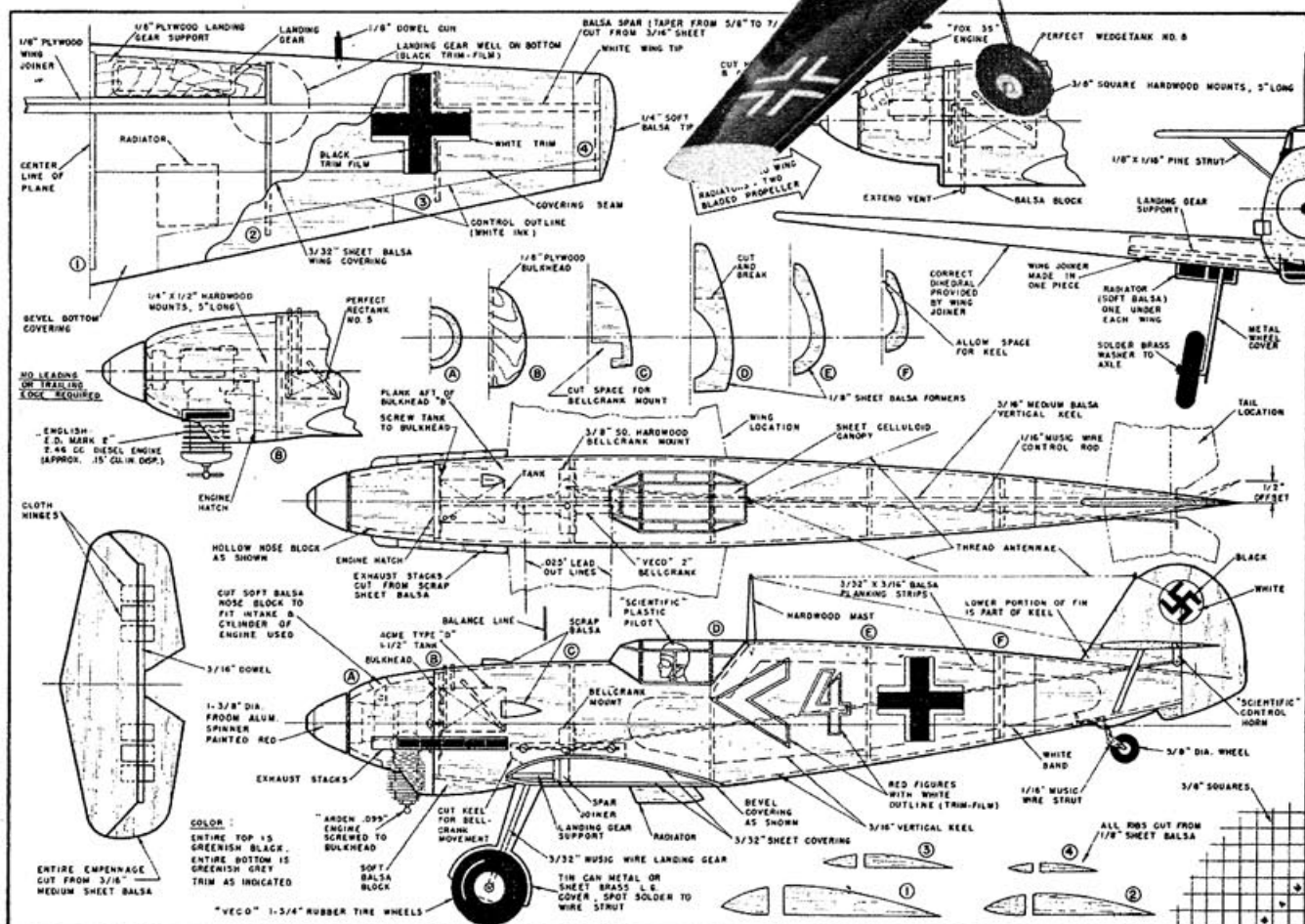
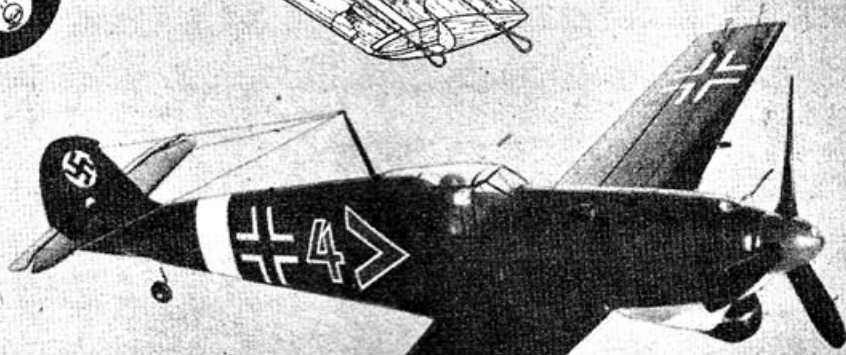
Our model is a replica of the P-51K-10-NT and is built to  $\frac{3}{4}$ "-to-the-foot scale.

Procured during 1944-45, 1337 P-51K airplanes were built. The Packard V-1650-7 engine of 1490 hp, swinging an Aeroquip propeller, pulled the craft through the air at 465 mph! Gross weight is 11,000 lbs.





Full-size plans speed your building time. Plan #1252 from Air Trails has working drawings of Messerschmitt, Mustang and Spitfire—and the cost is but 35¢.



Messerschmitt