

HAWKER HURRICANE



Not As Well Known As The Spitfire, The Hurricane Was Actually The "Hero" Of The Battle Of Britain.

This plane was built from Bob Holman Plans of Brian Taylor's 65-inch model. Bob also has blown-up 80-inch plans available.

By Norm Goyer, With Plans By Brian Taylor, Via
Bob Holman Plans, With 3-Views By Arthur Bentley

It's not unusual for the "pretty" sister to get all the dates, have all the pictures taken, and in general, be the belle of the ball. And nobody can dispute the beautiful, flowing lines of England's World War Two Spitfire or deny that it earned all the publicity it received as a mighty "warrior" of the Royal Air Force. Even Hollywood and the European movie-makers have most often chosen the "Spits" to be flown by the heroes of their celluloid air battles; after all, who can resist the graceful, elliptical wings designed by Mitchell in the early thirties?

However, the ugly sister who never had her picture taken, or been featured in the movies much, actually did more work, and had more "firsts" to her credit than the mighty "Spit." We're talking about the ugly (but not to me) Hawker Hurricane . . . an easy to build, easy to fly, easy to maintain, easy to repair, but very difficult to knock out of the skies . . . fighter aircraft! Its thick wing might have kept the top speed down slightly, but it enabled the plane to turn on a dime, and make slow, gentle landings, sometimes with a wounded pilot aboard.

The Hurricane, or the "Hurri," as it was nicknamed, should have received greater acclaim for its part in the successful outcome of the Battle of Britain, because it was the first aircraft equipped with *eight* machine guns, and the first fighter capable of speeds over 300 mph. And in the medium altitudes at which most air battles were fought, its handling was excellent. Its wide landing gear made it easy for the very "green" fighter pilots, many of whom were pressed into service with less than 100 hours, to get their bird home in one piece. Both the Spitfire, and the ME 109 had poor landing gear arrangements, and questionable handling capabilities, especially just before touchdown, but not the *Hurricane* . . . it was just plain easy to land and to taxi. The pilots and

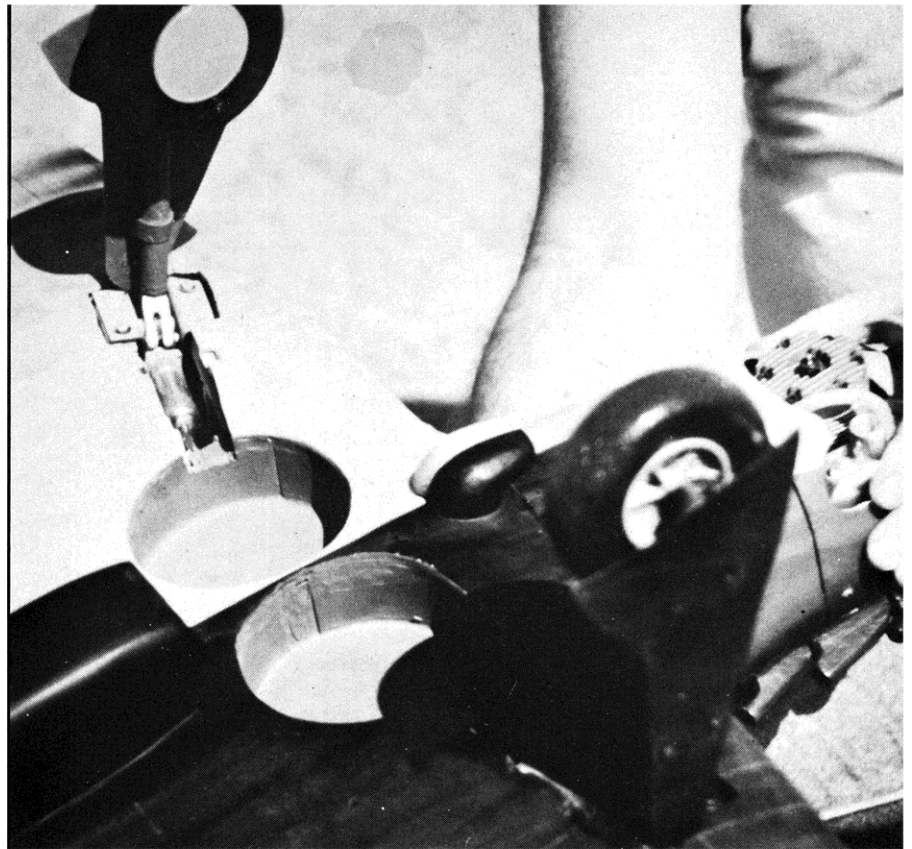
instructors soon came to love the "Hurri."

The origins of the Hurricane can be traced back to Sydney Camm's project for a "Fury Monoplane," powered by a Rolls-Royce Goshawk engine, in October 1933. This project was shelved at the beginning of 1934 in favor of a revised version powered by a Rolls-Royce PV 12 (later the Merlin), renamed "Interceptor Monoplane." The Air Ministry soon became interested in the new type, and a prototype was ordered to two 1934 specifications early in 1935.

This flew for the first time in November 1935, and immediately displayed excellent performance and handling characteristics. An order for 600 of the new fighters was placed in June 1936, and raised to 1,000 in November 1938. The Hurricane was originally to be armed with four machine guns, but this was altered to the eight guns in July of 1935. Experiments and assessments by the armaments branch of the Air Ministry had shown that the concentrated firepower of such an armament would be required to destroy the latest aircraft which, with their high speed, would only be in the fighter's gun sights for a very short time.

Deliveries of production Hurricane I fighters started in October 1937, entering squadron service in December of the same year. These first machines had Merlin II engines, improved cockpit and exhausts, and modified under-carriage leg fairings. A small strake was subsequently fitted to the underneath of the rear fuselage to aid recovery from spins. As with the later Spitfire, the original fixed-pitch two-bladed wooden propeller was replaced first with a two-pitch three-bladed metal propeller and finally with a constant-speed three-bladed unit as they became available. The later propellers greatly aided the aircraft's rate of climb.

In comparison with other monoplane fighters of the World War Two period, which were all-metal with a stressed-skin covering, the structure of the Hurricane was somewhat antiquated. A basic metal tube construction covered with fabric was used, as the makers were very experienced in it, and thus the Hurricane could be brought into service more quickly and in greater numbers than would have otherwise been possible up to the early stages of the war. It is interesting to note that by the outbreak of war, 497 Hurricanes had been delivered, compared with 310 Spitfires. By August 1940, deliveries were 2,309 and 1,400 re-



The Hurricane, with its wide landing gear, was an easy-to-land World War Two fighter. Many think that the "Hurri" was the true hero of the Battle of Britain.

spectively. The fabric-covered fuselage stayed with the Hurricane all its life, but later production examples had metal-skinned wings, which allowed a heavier armament to be carried, and much higher diving speeds to be attained.

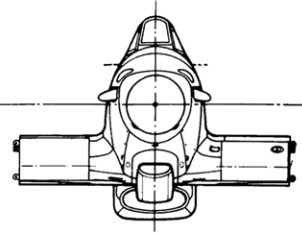
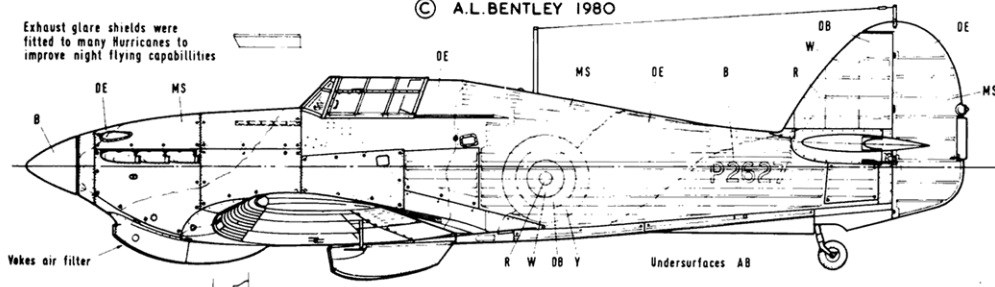
Much valuable combat experience was gained with the Hurricane during the "Phony War" period, and the type was the mainstay of the RAF fighter units in France after the invasion by Germany in May 1940, while the Spitfire was kept in Great Britain for metropolitan defense. During the Battle of Britain, the primary role of the Hurricane squadrons was the destruction of German bombers, while the Spitfires engaged the German fighters; the Hurricane was extremely successful, inflicting very heavy losses at a rate favorable to themselves.

Meanwhile, the next model of the Hurricane, the Mark II, was under development. This had the 1280 hp Merlin XX engine instead of the Mark I's 1030 hp Merlin I or II, and also had a two-stage supercharger, giving a better performance at all altitudes. The armament, too, was revised. The first production Hurricane IIs, delivered in September 1940, retained the eight-gun armament of the Mark I, and were designated Hurricane IIA. But from

April 1941, there appeared the Hurricane IIB, which had twelve 0.303-inch (7.7mm) machine guns in the wings. In June 1941, there followed the Hurricane IIC, armed with four 20mm cannon in place of the machine guns. Other modifications of the period included provision of tropical equipment for use in the Middle Eastern and Mediterranean Theaters, drop-tanks, and the ability to carry 250- or 500-lb bombs under the wings. Armed with bombs, the Hurricane became itself the "Hurri-bomber," and as such, soon proved itself an admirable fighter-bomber. It first went into service in Malta in September 1941, in Great Britain in October and in North Africa in November. The Hurricane's armament was further improved in 1942, first by the addition of eight 60-lb. rockets on underwing rails, and then by the fitting of 40mm cannon. Rocket-armed Hurricanes entered service in the autumn of 1943, being preceded by the "tank-busting" Hurricane IID. This mark was armed with a pair of 40mm cannon, and entered service in North Africa during June of 1942.

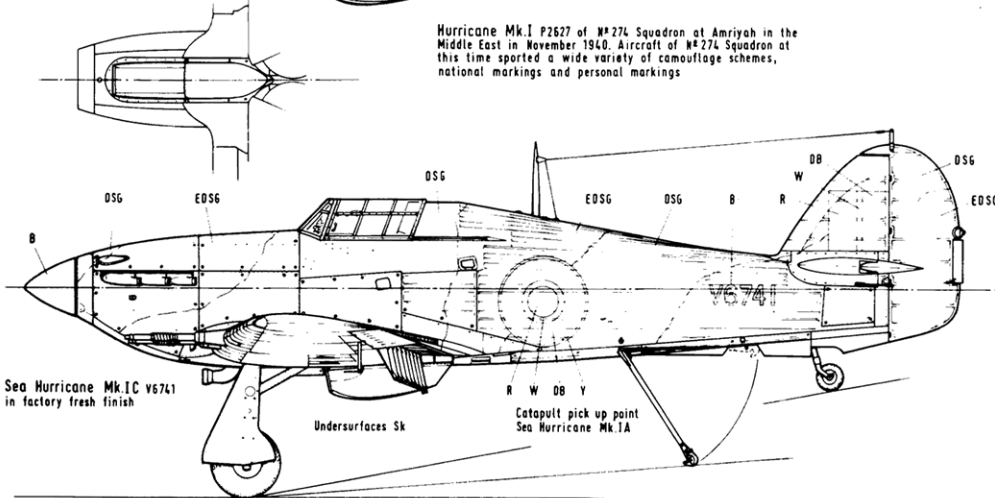
No Hurricane IIs, intended to use Packard-built Merlins, were built, and thus the next model was the Mark IV. This had a Universal wing which could carry 40mm cannon,

Exhaust glare shields were fitted to many Hurricanes to improve night flying capabilities

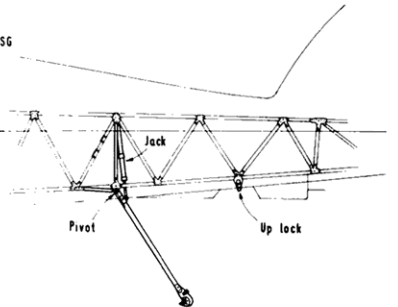


Front view of Hurricane Mk.I with Vokes air filter

Hurricane Mk.I P2627 of No 274 Squadron at Amriyah in the Middle East in November 1940. Aircraft of No 274 Squadron at this time sported a wide variety of camouflage schemes, national markings and personal markings



Sea Hurricane Mk.IC v6741 in factory fresh finish

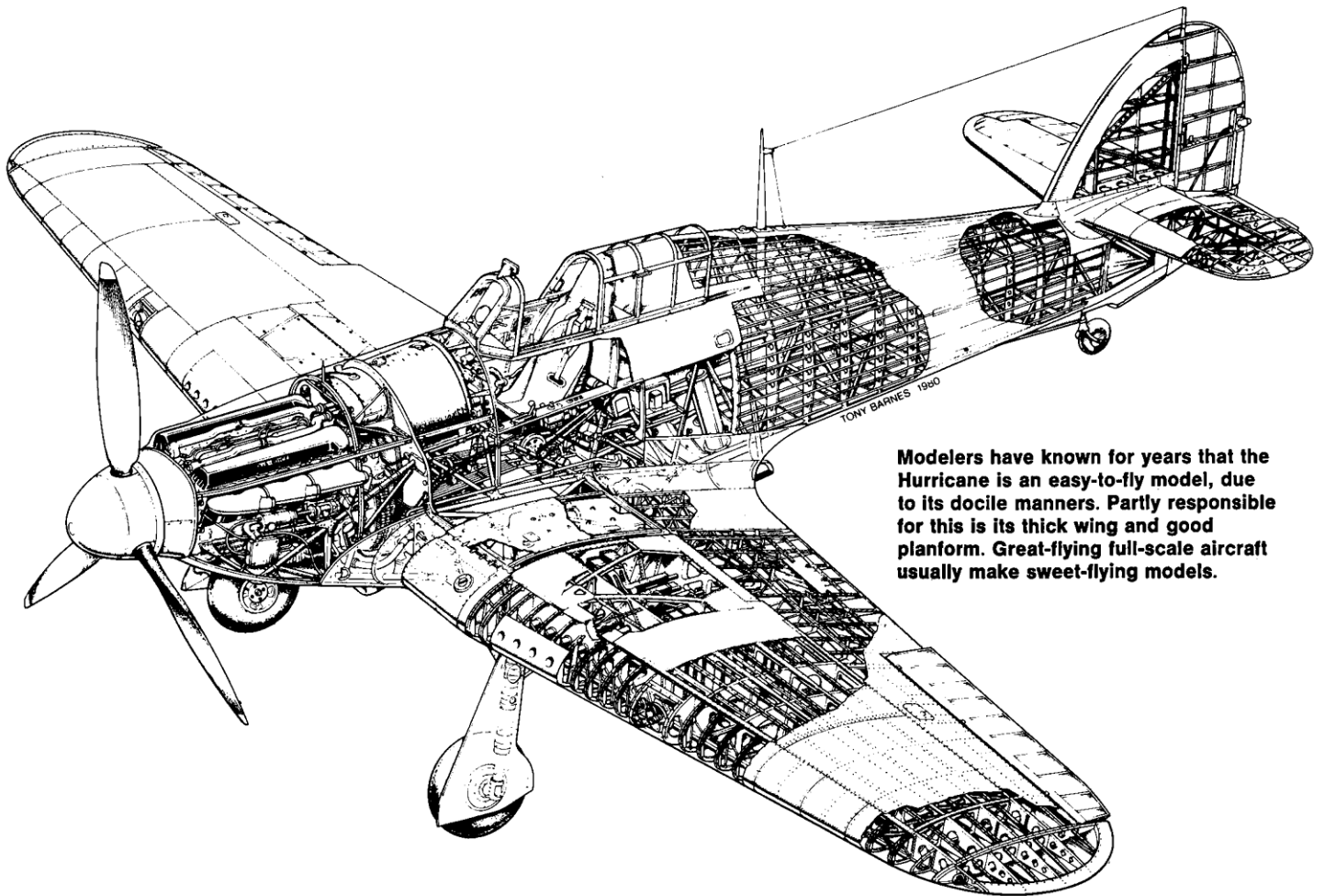


Details of arrestor hook and actuating mechanism

- Sea Hurricane Mk IA. 8 x .303 Machine guns. No hook-catapult fittings only.
- Sea Hurricane Mk IB. 8 x .303 Machine guns. Arrestor hook.
- Sea Hurricane Mk IC. 4 x 20mm Cannons. Arrestor hook.



Details of the lower rear fuselage panels of the Sea Hurricane Mk's IB & IC



Modelers have known for years that the Hurricane is an easy-to-fly model, due to its docile manners. Partly responsible for this is its thick wing and good platform. Great-flying full-scale aircraft usually make sweet-flying models.



With its fabric-covered fuselage, bird-cage canopy, and the many variations flying, the Hurricane builder will not be lacking in choices of paint schemes.

bombs, drop-tanks or rockets. It was at first designated the Hurricane IIE. The final version of the Hurricane was the Mark V, of which only two were ever built. The Hurricane was also used at sea, the first being "Hooked Hurricanes," converted from Mark II standard to carry an arrester hook. Full navalization led to the Sea Hurricane II, and later the Sea Hurricane XIIA, a carrier version of the Canadian Hurricane XIIA. Some 1,451 Hurricanes were built by the Canadian Car and Foundry Company, to a basic Mark II standard, as the Hurricanes X, XI, XII, and XIIA. British production of the Hurricane ended in September 1944, after a *grand total of 14,223 had been built!*

The Hurricane has never been a favorite of the modelers, probably because there were very few kits available for it, and most modelers would rather build from a kit than scratchbuild. Now, an award-winning kit is available from Hobby Barn; the plane built from this kit took First Place at the 1984 English Nationals. The wing is foam-covered at the factory, and today's modelers prefer its 1/6 scale size. (I believe that this kit is the work of Mick Reeves, another English World Champion.) (See the ad for Hobby Barn's Hurricane elsewhere in this issue!)

If you like to build your own "kits," picking your own balsa, employing *your* personal techniques, then Bob Holman Plans Service has the Brian Taylor drawings for you.

They feature all-balsa construction and will build into a very light fighter of 1/6 scale. I believe that Bob has the canopy and spinner for this aircraft available. What Bob Holman did was to blow up Brian Taylor's plan from its original 65 inches . . . up to 80 inches, giving it more appeal to the American modeler.

Some time ago, Ikon N'West also had a Hurricane kit, but I'm not sure of the heritage of this version, and I haven't seen Neeley advertise it for a while.

Recently, though, Marc Jensen of BYRON ORIGINALS called me, and we got into a discussion about the possibility of BYRON eventually putting out some "new" European Theater aircraft for their stupendous 1/5 Scale Airshow. It's not definite yet, but I sure hope that they seriously consider the FW-190; with the Hawker Hurricane as its adversary. Why, you might ask? Because they both fly great . . . and because I like them. In my opinion, the ME 109s and the Spits have been somewhat *over-modeled*, and they're both hard to land. Besides . . . remember! I march to a different drummer! If everybody else has a Spitfire, then I don't particularly want one. A Hurricane with a big old 2-stroker, either a Tigre or a chainsaw-type engine, would keep me interested.

We're presenting the plans by Brian Taylor, available from Bob Holman Plans Service. I'm sure that Bob can supply you with either the 65-inch version which would be great with a Fox Eagle II, diesel-ized,

swinging a nice three-bladed prop, or the 80-inch version.

Bob Holman Plans, P.O. Box 741-SM, San Bernardino, CA 92402. Fox Manufacturing Company, 5305 Towson Ave., Fort Smith, AR 72901, (501) 646-1656. Hobby Barn, P.O. Box 17856, Tucson, AZ 85731, (602) 747-3633. ●