







- 19. The wheel has a flat surface cast in. After the tailwheel is attached rotate the wheel on its axle until the flat is aligned at the correct ground angle.
- The propellers are of opposite rotation going towards the fuselage at the top. They can be loosely attached with rubber cement (Cow, Carters etc) or the plastic shaft can be heat formed over with a hot blade or warm soldering iron. The spinners should be a slight friction fit. Do not use force.

FINAL DETAILS

- 21. Locate the pitot head to just inboard of the port wing tip light.
- 23. Bomb carriers or long range tanks can be fitted in the inner locating holes. Four outer locating holes are for rocket rails (not provided).
- The canopy may require slight trimming. Press gently into the grooves in the canopy rails and hold whilst (CA) is flowed around the rear and windscreen. Do this in stages and wipe off excess immediately with a damp cloth. Do not allow it to fill the groove. (CA) will not attack the canopy material. It is recommended that you use a thin (CA) with a long nozzle such as Loctite Superglue 3. The canopy slid in a 'U' shaped rail and did not fit over the outside of the rail as shown frequently on drawings.

ADDITIONAL DETAILS WHICH YOU CAN ADD

Four ammunition tanks were fitted in the cockpit on the rear decking. Stowed behind the seat was a black ladder, in three sections, for the pilot to use when the standard ground equipment ladder (which is hooked on to the lower lip of this air intake) was not available. Tow bars were attached to lugs on the front of the U/C legs. A detailed cutaway drawing of the Sea Hornet F.Mk.20 appeared in the October 1982 issue of 'Air International'.

ACKNOWLEDGEMENTS

The assistance and support of the following is acknowledged:-

Graham Mottram and Len Lovell of the FAA Museum, Yeovilton for photographs and technical information.

Mike Stagg and Helen Goodland of Brookside Packaging, Yeovil for canopy vacuforms.

Fosse Bureau, Yeovil for typesetting.

Mike Keep for the box top art.

Sqn.Ldr. C.J.D. Schofield, Rtd., for details and colour information on RAF Hornets.

Bob Banfield of Modelkits, Yeovil and members of the Yeovil Plastic Model Aircraft Society.

This kit is produced by and available by mail-order only, from Skybirds '86, Orchard House, Chetnole, Sherborne, Dorset DT9 6PE. Phone (0935) 872182.

Sept. 1987

THE DE HAVILLAND HORNET F.MK.I and F.MK.3

The De Havilland D.H. 103 Hornet was one of the most elegant aircraft ever designed. Originally it was conceived as a private venture to develop a single seat long range fighter based on the Mosquito for island hopping operations in the Pacific. Specification 12/43 was issued and the first prototype flew on July 28th 1944. The RAF had received some aircraft before the end of the war but it was too late to be used on operations.

The Hornet F. Mk. I was issued to Nos 19,41, 65 and 65 Squadrons in 1946 but was replaced in 1948 by the F. Mk. 3. The original F. Mk. I's carried no underwing stores and the new version was equipped to carry external long range tanks, bombs or rockets and the internal fuel capacity was increased. Aerodynamic qualities were also improved with the span of the tailplane and elevator balances being increased and a dorsal fin added. It is reported that some F. Mk. I aircraft had the dorsal fin added retrospectively, but this is not confirmed in photographs.

As the RAF Squadrons were re-equipped with jet fighters the F. Mk. 3 Hornets were transferred to No. 80 Squadron, Kai Tak, Hong Kong, No. 33 Squadron, Butterworth, North Malaya and No. 45 Squadron, Tengah, Singapore, where they remained in service until 1955-6. No. 33 and 45 Squadron aircraft were used operationally against communist insurgents in Malaya, some retaining the colours of the home-based squadrons from which they were transferred.

The subjects of the Skybirds '86 kits flew with No's 19, 41 and 65 Squadrons.

Dimensions:

Span 45'0" (13.72m) Length 36'8" (11.18m)

Height 14'2" (4.32)

Wing Area 361 sq.ft. (33.54 sq.m)

Power Plant:

2 R.R. Merlin 30 Series (Opposite Rotation)

Weight Empty:

(F.Mk.1) 12502lb (5670kg), (F.Mk.3) 12880lb (5842kg)

A.U.W.

(F.Mk.1) 17700lb (8028kg), (F.Mk.3) 20900lb (9490kg)

Max. Speed:

472 mph (759 kmh) at 37500 ft (11430 m)

Ceiling:

35000 ft (10668 m)

Range:

(F.Mk.1) 2500 miles (4022 km), (F.Mk.3) 3000 miles (4827 km)

Armament:

4 x 20 mm Cannon

8 x 60 lb (27.2 kg) Rockets, 7 F.Mk.3 only

2 x 1000 lb (454 kg) Bombs

REFERENCE SOURCES

Unfortunately most of the best photographs available are of the prototype or early production aircraft and do not show service colour schemes.

Reference sources for both RAF and FAA Hornets include:-

Profile No. 174 Aviation News, Vol.6, No.26 Air International Oct 1982 Aeroplane Monthly, Dec 1974, Jan 1975, Sept 1987 Pilots Notes for Hornet F.111 (cockpit photographs)

Flypast August 1987 (Operations in Malaya).

GUIDANCE ON HOW TO - AND HOW NOT TO - ASSEMBLE THIS KIT

The plastic parts are moulded in polystyrene and should be bonded with one of the better solvent adhesives - DBI Superweld. MEK or Mekpak, flowed into the joints rather than applied to the joint faces. No mould release has been used which could cause paint adhesion problems. The plastic used in slightly brittle.

The castings contain some lead and should be kept away from children. They are ductile and can be bent slightly without cracking. They should be gently scrubbed in detergent with an old toothbrush to remove any residual talc and can be assembled to themselves or plastic with 5-minute Epoxy (5E) or Cyanacrylate (CA). (Locktite Superglue 3 is suggested as it is of low viscosity and the tube has a long nozzle.)

Locating holes are provided where possible, elsewhere surfaces to be aligned before bonding are referenced.

FUSELAGE ASSEMBLY

- 1. Before assembling the fuselage halves grooves have to be scored in the top of the canopy rails which help in aligning the canopy. Use an Xactotype craftknife blade, as a scalpel blade is too flexible. The slot has to be carefully positioned on the narrow rail and an accurate rest for the blade can be made by laying the blade on the sloping inside face of half a spring clothes peg/pin, raised on a piece of 1/8" (3mm) material. Slide each fuselage half past the back edge of the blade to score a groove along the entire length of the canopy rail.
- The instrument panel (see note 7) locates in the fuselage with the gunsight platform level with the front of the cockpit. Excess material will have to have been removed from the inside top of the fuselage, but do not thin the sides.
- 3. The basic plastic mouldings were produced for the Sea Hornet, and it will be necessary to 'de-navalise' them to make the RAF version of the Hornet. Remove attachment points and fill the hole provided for the arrestor hook under the rear fuselage.
- 4. Align the rear fuselage with a piece of 1/16" (1.5mm) material through the tail plane slots and support the front fuselage on the flat edges of the belly. Align the cockpit and bond. Do not attach the nose or belly mouldings until the cockpit details have been installed and painted generally in matt black.
- 5. The seat was a moulded phenolic laminate, orange/brown in colour similar to Tufnol or Paxolin. A detachable black quilted leather cushion fitted over the top of the seat back. The seat harness straps were light blue with the central snap fastening gold.
- Attach the 'seat to the armoured bulkhead with the top slightly below the head rest. Bend the seat elevating lever forward (on the RH side) and paint a glossy black hand grip. Locate under the top rear decking.
- 7. The instrument panel is coated with a soft black finish. You can scratch through this to expose the metal on the instrument dial faces and simulate glass with a drop of clear varnish. The outer throttle control levers on the LH side had large glossy black knobs, the inner pitch control levers were white. The flat top of the gunsight should have the metal exposed and a small square of clear plastic, inclined at 45°, attached at the front. Bend the casting slightly to grip the fuselage walls.

A projection is provided on the forward face of the panel to allow you to move it into position with a pair of tweezers through the nose. A notch in the top is for locating the rudder bar, which also has a centre projection for holding with tweezers and need not be removed. Assemble the panel and rudder bar with (5E) to allow time to correctly position so that the latter is visible from the cockpit.

- 8. The stick is located in the belly moulding with the handle rearwards. If you wish to add a cockpit floor it should be painted to simulate a brown rubber.
- 10. The nose, belly and tailplane can now be assembled. Before the fin is attached the fuselage should be blended around the tailplane to remove excess material.

The Hornet F.I was fitted with the small span tailplane. Originally they flew without the dorsal fin, but it is reported that some had it retro-fitted.

WING AND NACELLE ASSEMBLY

- Assemble the upper and lower wing mouldings locating at the root end.
 Ensure that there is no gap in the front nacelle area. The joint inboard of the ailerons is not a panel line.
- 12. Blend the outer contours of the radiator air intake and the carburettor intake slots in the leading edge. Remove blisters from the top surface of the wing and fill the wing folding joint lines.
- 13. Each pair of Nacelle halves are identified by marks on the inside rear. Support them on the wing attachment edges. Align the spinner face and bond the forward end, then the rear. Thin the edges of the U/C cutout so that they are of uniform thickness and bond to the wing.

Remove flash from the inside of the Nacelle, but do not enlarge the exhaust slots.

- 14. The rear end will require slight blending and there will be a slight mismatch on top of the nacelle which should be corrected by removing plastic rather than building up with filler.
- 15. The Hornet F.I carried no underwing stores, fill six holes under each outer wing.

FINAL ASSEMBLY

- 16. The wing tongue locates on the top face of the belly.
- 17. The undercarriage doors swing up outside the nacelle and on the real aircraft oil and dirt thrown up between them gives the impression of a contoured joint line as shown on many Hornet drawings. In reality the joint line was straight in the side view. If you assemble the model with the U/C doors closed this area should be stained. Attach with (5E).
- 18. Some of the undercarriage legs are slightly twisted and, if so, the rear locating pin should be cut off. The leg is inclined inwards so that the tyre contact point is below the propeller axis. Assemble with (5E) to the wing underside only. Paint silver.

