

## A 28-in. SPAN SCALE MODEL H. P. HAMPDEN

By D. R. MURRIN

*The heading photograph shows the Handley Page Hereford which is essentially the same as the Hampden but with Napier "Dagger" engines in place of Bristol Pegasus.*



*Photograph by courtesy of the Air Ministry*

### General description.

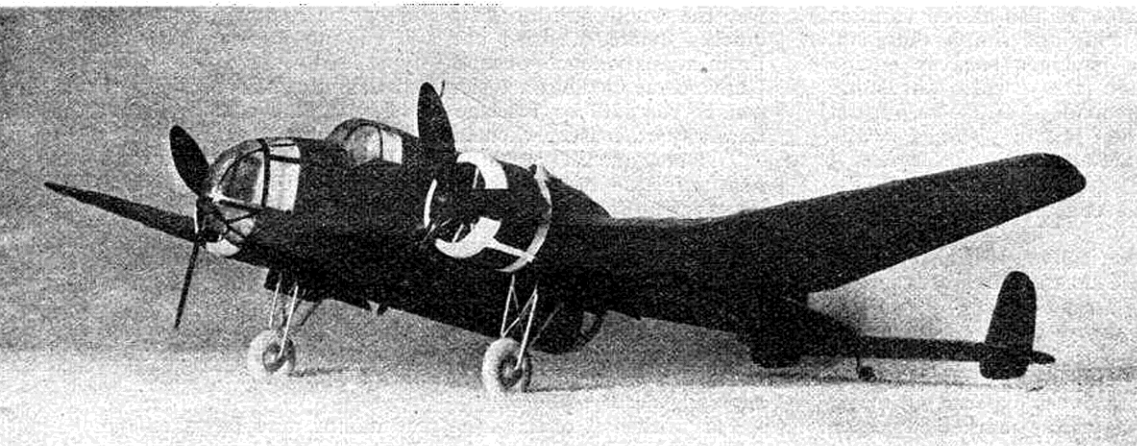
The model is built of balsa throughout with the exception of the 1/16th square stringers which are of bass. The fuselage is built up on a 1/16th sheet balsa keel to which the formers are first of all attached. This keel is broken in three positions by the cabin and gun positions and the necessary portions should be cut out when the fuselage assembly is almost completed.

The stringers are cemented to the outside of each former, not slotted in, and spaced as shown on the plan. A slit must be cut in the rear end of the keel to accommodate the tailplane, this being secured by cement, and the tailwheel fixing bound and cemented to the keel.

All the gun positions and the cabin are then filled in with 1/16th sheet and painted matt grey. The two fins and rudders are cut from two laminations of 3/32 in. sheet and the position of the rudder hinge line and the trimming tab should be scored on the wood. They are then cemented in their correct position on the tailplane.

built up. The engine push rods are painted silver, with the interior details of the engine black and the collector ring, exhausts and air intakes matt grey. The cowlings themselves are cut from cartridge paper with the gills cut or scored at the trailing edge.

The cockpit covers are the most difficult part of the model. To make these a wooden former of the required shape is first of all necessary, and this should be lightly greased. Each former must be slightly longer than the required cover and a small notch is cut near the back. A sheet of gelatine is then taken and placed in water, removing before it commences to dissolve. The water is gently shaken off the sheet which is then moulded over the form with the fingers, taking care to remove all wrinkles, etc., Hold in place with a rubber band and leave to dry overnight. It will then slide off the block quite easily. The covers may then be lined with Indian ink to represent the framework, but this must be used sparingly or the gelatine will soften and lose its shape. As a final precaution the finished cover should be varnished.



*The photographs of the finished model show the particularly good finish which was obtained by covering the whole model with white tissue, water spraying to tauten, and then clear doping. Camouflage dopes were then applied and the control hinge lines and other details marked in with Indian ink.*

HALF SIZE, FULLY DETAILED WORKING DRAWINGS ARE GIVEN ON PAGES 304 & 305.

The wings are built in two parts and the dihedral set on the outer sections. The fuselage is set on an even keel and the wings are raised to the correct level, cemented in place and left to set. The leading edge and the main spar are cemented to formers 5 and 6 respectively. The 1/8th sheeting at the centre section may then be added and also the 1/16th sheet fill-in between the stringers around the wing centre section. Finally add the wing fillets of cartridge paper.

The undercarriage legs are bound and cemented to the wings. The engines are mounted on 1/4 in. square strips and the nacelles

