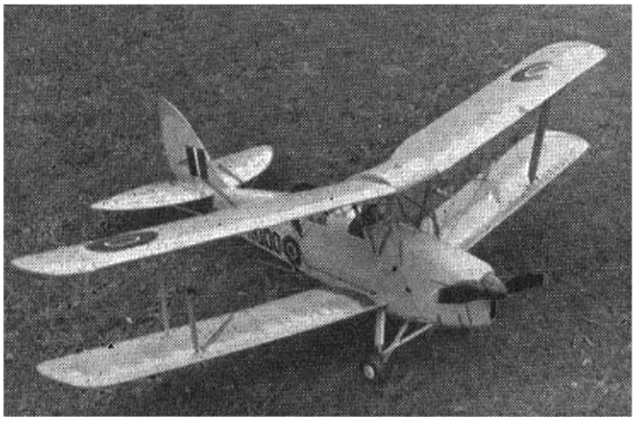
● **By request . . .**

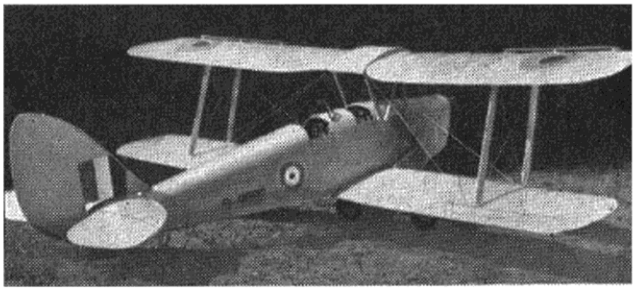
an accurate 1/8th scale free-flight model for 1c.c. or larger engines of the

DH. 82 Tiger Moth

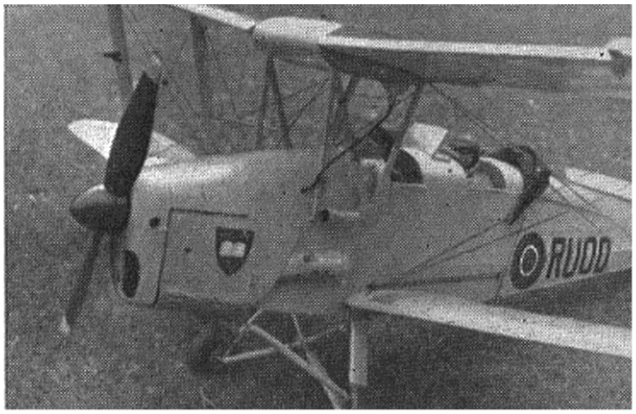
designed by Aeromodeller staff



Javelin version in '47 colouring is fitted with dummy pilots, uses KK 9½ × 4¾ plastic prop painted black with yellow tips.



E.D. Bee version built by M. G. Rose of Burslem is all-yellow. Alternative scheme is to camouflage top surfaces and upper fuselage.



Oxford University Squadron crest on cowling is blue shield with gold edged open book between three gold crowns.

OF ALL THE aircraft that have borne R.A.F. roundels, the one dearest to most hearts is the De Havilland 82 Tiger Moth. Thousands of pilots have received their aerial baptism in the rear cockpit of a "Tiggy" and such was its service versatility that, in case of dire necessity, it became an operational bomber in the cause of defending the British Isles in 1940. Fighter pilots delighted in throwing the squadron "relaxation" Tiger around the sky between duty calls for it was, and still is said, that the true sensation of flight is only felt when the wind roars about one's ears and the slipstream buffets the cheeks as an open cockpit Tiger is put through its paces.

Modellers, too, have a soft spot for this, the almost original of "swept-wing" aircraft, and for many years the A.P.S. plan for a rubber-driven accurate scale version by C. Rupert Moore has been one of the most popular *Aeromodeller* scale plans. Many were the conversions made for diesel power, and great the variety of engines used in such a modification. Requests for a special conversion plan have now been met with this latest introduction to the A.P.S. range of an entirely new drawing, type-tested with two prototypes, and made as accurately to scale as only the closest study of the full-size aircraft will permit.

One prototype has an E.D. Bee, the other an Allbon Javelin. Each has identical flight characteristics, and we have little doubt that the power could even be extended to include the 2.5 c.c. size of engine, so docile and automatically stable is the basic design. A typical flight pattern is a smooth left hand circle after take-off or handlaunch, with a slow rate of climb up to perhaps fifty feet in 20 seconds. With a pair of dummy pilots in the cockpits, the Tiger can hardly be distinguished from the real thing as it occasionally jerks its wings a fraction to correct the bank just as though a midget pilot was applying a spot of aileron. We've had the Javelin version holding altitude in a circuit no more than 50 feet across and flying like a Goodyear racer around imaginary pylons. We have also tried—for fun—to see how much elevator packing can be added for maximum range of trim, and as much as 3/8 inch can go under the trailing edge without

John Darnell built the Javelin version and flight tests required few trimming adjustments, all of which are incorporated on the plan. Flight speed is delightfully slow, the fixed "open" slats at the tips doubtless adding to the auto-stability of the design. Simple rudder alteration allows choice of turning radius, this prototype favouring a left turn of about 75 ft. diameter.

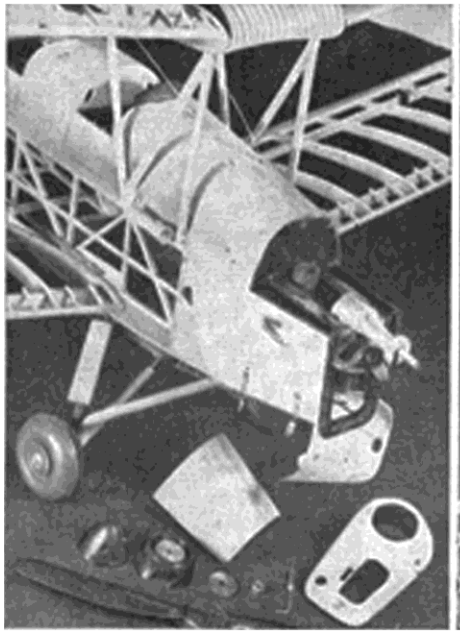
untoward effect. This, then, is a tried and tested design that is as flexible and as *in*sensitive to trim as any scale model of our knowledge. For the modeller with a little building experience, and a zest for making something accurate in detail with plenty of opportunity for a fine colour finish, the Tiger Moth should be an absolutely first choice.

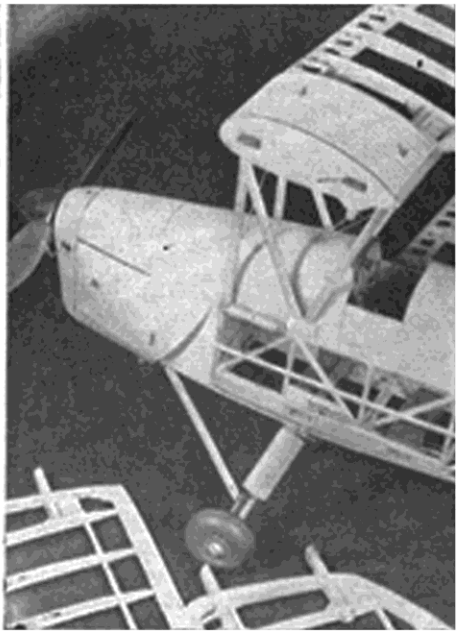
Constructional details are stencilled on the full-size plans to make it self-explanatory; but a few points of emphasis would not be amiss for the prospective builder.

Key unit of the fuselage structure, which is built in the customary sides-box-top former system, is the wing centre-section strutting, and every care should be taken to see that each important joint is securely bound or soldered as the case may be. Any movement here can nullify all the care and attention devoted to the rest of the model as dihedral sweep-back and incidence of the top wings depend on accuracy in centre-section assembly. Wings are of normal structure, the multiple false leading edge ribs adding scale detail as well as maintaining an important part of the scale aerofoil. Dihedral and sweep differs on top and bottom wings so that the sweep is built into the wing peg boxes and dihedral set by the shape of the pegs. Note the different angle required for setting T.1 and B.1 to match up with centre-section and fuselage. Interplane struts are hinged to aid transport, and each pair of wings will readily knock-off in the event of an awkward landing.

Tail, cowling and rigging details are explained in full on the A.P.S. drawing leaving only the final touches of realism to be added in the form of dummy venturi tubes, control wires, exhaust, etc., after covering with lightweight Modelspan.

Colouring the Tiger allows as wide a range as any modeller could desire, for apart from service aircraft, civilian D.H. 82's have appeared in décor varying from all-red to all-silver with intermediate combinations of blue and cream, green and silver, etc., according to the whims of club or private owners. Service colouring was used for the two test models and the Bee version bore the markings given on the plan which are for a 1939 vintage trainer, over an all trainer yellow scheme. The Javelin version was also all-yellow, but with the Oxford University Air Squadron insignia on the cowl, and 1947 type roundels plus the large registration and code lettering in black on the fuselage side. Strictly speaking, all aircraft with these markings should also carry the tailplane strakes fitted to all later Tigers, as seen on the Cover photo.





Constructional detail of the Javelin version shows a detachable nose-block modification that permits access to the engine if need be. Tests showed that additional sheeting was required in the forward fuselage, accounting for the difference between these photos and plan. At right, wing fixing pegs and boxes in fuselage and centre-section illustrate how wings can knock-off.

Full-size copies of the 1/5th scale plan opposite are obtainable, price 6/- post free from "AERO-MODELLER" Plans Service.