



Flight artist's sectional perspective drawing of Harry York's replica.

The removable hollow motor stick of the original only weighed .475 of an ounce. A small price to pay for the complete peace of mind it gave when applying full turns - no winding tubes then!

THE MODEL

Gordon Light fully described the construction of his model in April 1936 *Air Trails* and the attached composite drawing has been assembled from his own dimensioned sketches. Bunny Ross compiled an article on the model with drawings that appeared in *English Mechanics* (13 December 1935) and the model was also described by M R Knight in *Flight* (5 March 1936). However, there are some detail differences and discrepancies between these descriptions and the brief notes given here are taken from Gordon Light's own article. After his success Tommy Ives wrote to Gordon Light and related that he was handed the model in its box at 3.30 p.m., had little time to absorb the enclosed instructions, hand-launched the model twice on low turns (100 and 200), and did an ROG flight with 400 turns. All these flights showed that the model was 'in perfect trim' so no adjustments were necessary. When flown in the competition 600 turns were applied and this power

was sufficient to get the model high enough to come within the influence of the thermals. 'The model soared almost vertically, and we were able to watch it until it finally disappeared in the clouds'. The fact that Tommy Ives commented in his letter - 'It is simply amazing that a model could be constructed which would weather an Atlantic crossing in a ship's hold and fly straight out of the box, so to speak' - shows that he was unaware of (or did not wish to mention) the model's arrival condition and the repair work already quoted by Harry York. According to Gordon Light's article the fuselage structure was built of 1/8 inch square, the nose forward of the windscreen was covered with 1/32 inch sheet over semi-circular bamboo formers and both the bamboo undercarriage legs and the rudder dowel were plugged into balsa boxes. The hollow motor stick was reinforced with rectangular 1/16 inch partitions every two inches over its length, located with a wire clip at the rear and retained by a press stud at the top of the nose piece which was

glued to the stick with some 4 degrees of down-thrust. The motor composition is not given but a replica model owned by Harry York of Model Aircraft Supplies Ltd used 20 strands of 1/8 inch flat rubber. A Garami swivelling latch type free-wheel was fitted to the 16.1/2 inch diameter propeller. The wing area was 197 square inches and the complete model weighed 4.07 ounces of which 1.2 ounces were rubber. Covered in 'superfine' white tissue affixed with banana oil, the covering, after water tautening was given one coat of banana oil. Incidence settings were 3.1/4 degrees positive on the wing and 2.3/4 degrees negative on the tailplane, the rudder was set at neutral. Centre of gravity range given as between 2.3/4 to 3.1/4 inches aft of the wing leading edge. A 'trifle' of wash-in was used on the left wing to compensate for propeller torque. On full power the model climbed very steeply in tight left hand turns, whose diameter increased as the power ran down to be replaced by a right hand circling glide.

