



RM TEST REPORT

the

CHEVRON

**multi aerobatic
model, kitted by
Model Flight
Accessories**

**built and flown by
MIKE YOUNG**

WHEN I first joined the Reading Club, I was impressed by the striking appearance and smooth flying qualities of the *Chevrons* then being flown by several of the members. These were all-balsa prototypes and, when I obtained one of them, I soon found that the flying ability of the design was only limited by my own as a pilot.

Eventually a mid-air resulted in a write-off for this machine, so I was glad that it had been decided to produce a kit, and this with a time-saving fibreglass fuselage. I decided I would use one of the new K.D.H. twin nose-leg assemblies, and an Enya 61 on the new model.

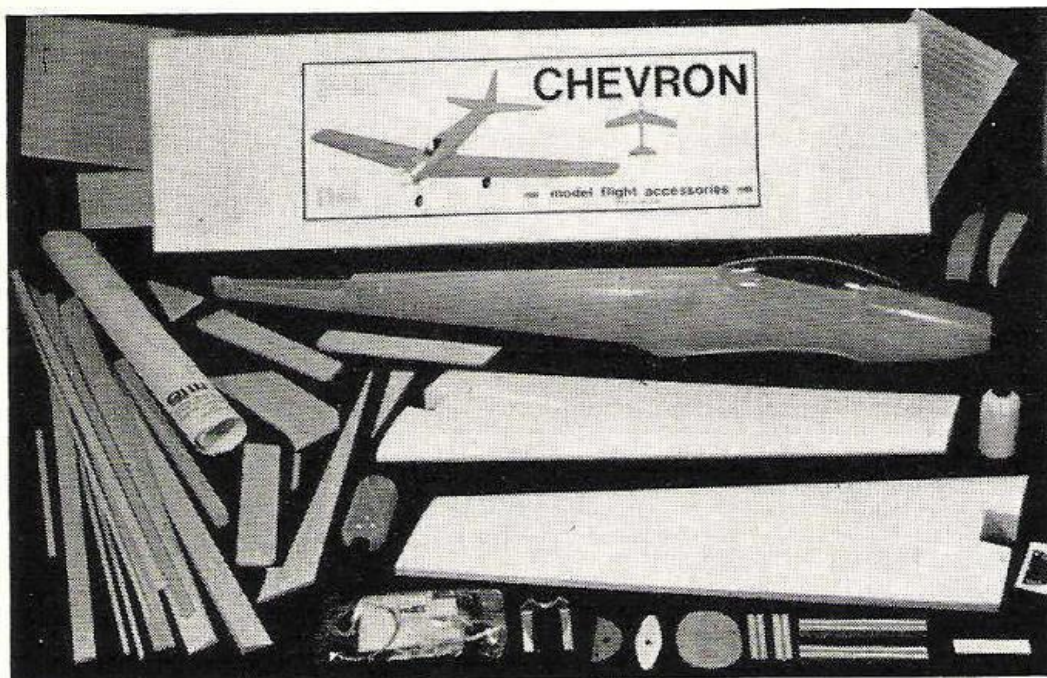
The Kit . . .

Designed by Ray Brown, this striking looking swept wing model came in kit form, in a gigantic box measuring 50 x 13½ x 7in. of which, of course, the main bulk was occupied by the ready made specially lightweight, fibreglass moulded fuselage, and ready cut foam wing cores. The fuselage weighed only 14oz. bare, yet seemed amply strong, especially around the nose area, where strength is needed. It had good broad wing seatings and—an unusual and clever feature—a moulded-in seating for the bubble canopy.

A full-size plan is supplied, despite all this prefabrication, and

this shows all the various details of installation, nose and main u/c leg attachments, cable-runs for controls, and so on. It also has a sequence showing the stages in covering the foam wing cores with the obechi sheet provided. The ailerons are of the semi-strip type, in that they are from solid wood, which forms the trailing edge, but do not continue to the root, being, in fact, some two-thirds of the span. The tailplane, which has a rather unusual plan-form (you either like it or hate it!) is a built-up structure of 1 x ¼in. balsa, covered with 1/16in. sheet and having solid sheet elevators. The fin and rudder are cut from ¼in. sheet, and only have to be streamlined off a little.

Glassfibre fuselage and foam wing cores are clearly seen in this photo.



The hardware provided in this very comprehensive kit, includes a cast alloy engine mount, a polythene clunk tank, steerable nose-leg, formed main u/c legs, special M.F.A. blind nuts and wing retaining bolts, M.F.A. streamlined control horns, nylon hinges, length of glass-fibre bandage for joining the wings and even two specially turned brass tank-filling unions, to be fitted through the side of the fuselage. A bottle of special adhesive for covering the foam wings is also included and, attached to the instruction sheet, is the finishing touch—a printed instrument panel!

The assembly . . .

From previous experience, I decided to make up two ¼in. ply formers to the shape of the fuselage, mounting the servo rails and switch as shown in the photo-

graph. The tailplane, elevator, fin and rudder were made up and tissue covered before fitting to the fuselage. After fitting the u/c blocks and cables, the obechi covering had to be "adhered," and I had some trepidation about this, as the sheets of veneer at the bottom of the kit box looked very fragile, and I feared might split easily. However, they virtually "fell on," that is, with a little care, the special adhesive, and the maker's instructions!

When joining the wings, I prefer to use $\frac{1}{8}$ in. ply "dihedral braces" fitted to front and rear of the servo compartment, and a $\frac{1}{8}$ in. ply base for my Orbit aileron servo. The centre-section was then bandaged with fibreglass matting and resined in the usual way, and wingtips and ailerons added last, after tissue covering and generally preparing for the paint finish, which I prefer.

Using "U-Spray," which is a fuel-proof aerosol enamel, I finished my *Chevron* in basic white, with red fin; rudder, ailerons and tips lined with black Trim-strip.

With radio gear fitted, the all-up weight of my *Chevron* came out at 6lb. 10oz. and—for once!—the c.g. was actually a fraction in front of the indicated position.

Flight performance

When the time came for the first flights, the model was tanked up, engine idling adjusted, and all controls checked with the engine running. The same procedure was repeated, with some distance between Tx and model. Tank position, fuel feed and so on seemed to be O.K., so the model was loaded into the car and off to the airfield. With the *Chevron* on the tarmac, the ground handling was found to be O.K. This was "unfortunate" as it left me no further excuses for delay. So the model was pointed into the wind and the throttle opened. The nose was kept down for 30-40 yards to gain plenty of flying speed (didn't want to risk a stall by heaving it off before it was really ready!). Then the stick was eased back and rotation was achieved easily and smoothly, and the model tooled to a plentiful altitude before checking out the trim. Hands off—no trimming required; perfect straight and level flight!

Whilst at altitude, the motor was throttled back, to check for any vices at low speed. Once again, A-O.K. No sign of any-



These views of Mike Young's "CHEVRON" show the fighter-ish lines of this racy looking model. Note side-mounted engine.



thing vicious, nor even the slightest tendency to drop a wing. The model was then put through its paces, the ease and smoothness of the manoeuvres being most impressive. In particular, my speciality—a double flick-roll on the top of a loop—seemed to present no problems to the *Chevron*, which just took it in its stride.

Because of the rather high wind, several landing approaches were

tried, before finally committing. The best way, I found, was to slow the machine right down, in a nose-high attitude, until it was just mushing along, and sinking, when it comes to earth very nicely.

Summing up, this is a fast-flying, different-looking model, with no low-speed vices. It is easy to fly—ask my young son, he flew it second time out.

Installation view shows side-by-side mounting of three Orbit servos, using linear outputs on rudder/noseleg, elevator and throttle.

