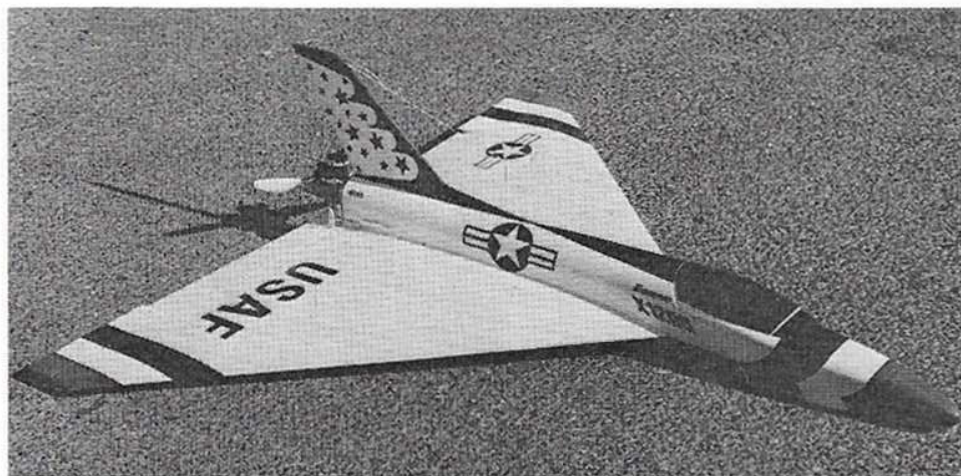




GRAUPNER DELTA X1200



RM TEST REPORT

an exciting and attractive new model—built and flown by DAVE CRONIN

Graupner's DELTA X1200

AS READERS will have seen from this month's cover, this new model from Graupner is a very impressive-looking creation. Its performance is certainly no less impressive—but let's take first things first.

The main items in the kit are the wing-halves—foam cores covered with 3/32in. balsa, beautifully finished. When joined, these give a span of 45½in. (or 1660mm—if this means anything to you yet!) The control cables are already in place and the control surfaces,

made integrally with the wings, are simply released from them by cutting through a couple of holding 'tags'. The fuselage sides are pre-cut and a nicely made "moulded sheet" rear decking is another interesting feature. A translucent blue canopy is provided, as well as all the clamps, clevises and horns required.

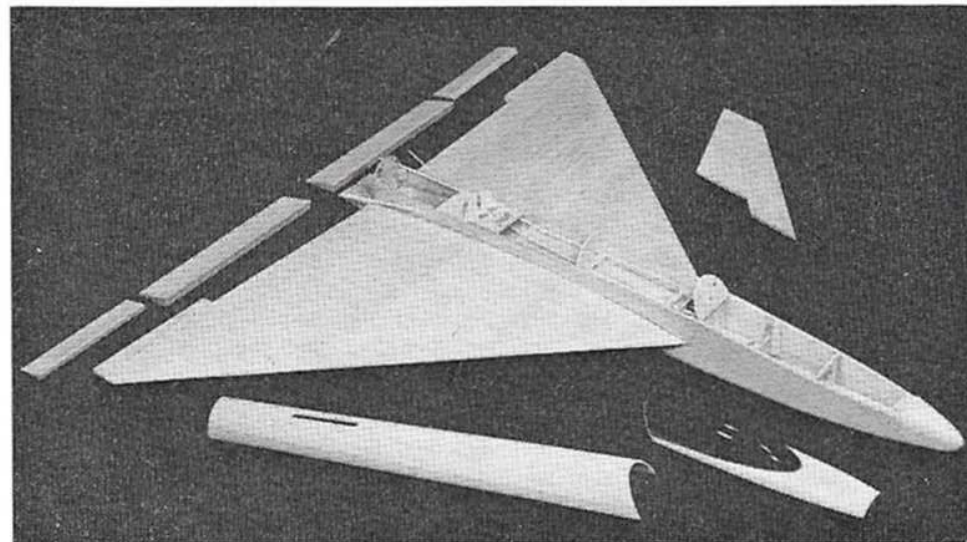
Getting it together

Putting this model together was very rapid and quite easy, I would think, even for the not so experienced

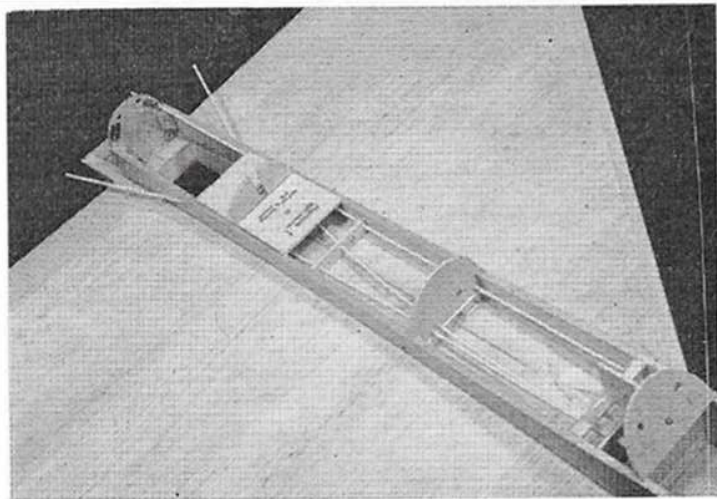
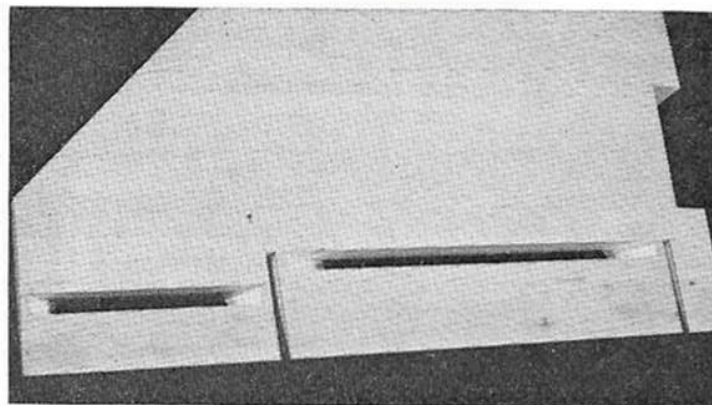
modeller (though this would not apply to the flying, but more anon). The only work to be done on the wings after removing the control surfaces (elevators inboard, ailerons outboard) was the addition of the balsa leading edges, and capping around the control-surfaces—these having balsa mouldings, tapered for top-hinging. I was surprised to find tape hinges supplied in the kit (back to control-line days!—though I must say that this type is particularly good in that it keeps the surface-to-hinge gap to a minimum, giving more positive control).

Having glued all the wing components, one is left with a triangle, which looks nothing like an aeroplane.

The fuselage assembly is a little more time-consuming, as the formers have to be sawn from a very hard piece of ½in. plywood. There are alternative engine bulkheads printed on this—one for the Wankel motor and the other for more run-of-the-mill mills. All other formers are die-cut balsa, with holes marked out for control cable runs. The fuselage sides are of ½in. balsa—with veneer doublers already bonded to them. I did not like the grain direction, which was going to make bending the nose in



"Exploded view," above, shows the built-up fuselage and its ready-curved decking. Also the control surfaces detached from their tags—they come as shown below. Right: cable runs installed.





very difficult. I therefore built the fuselage box from the rear, up to the last parallel nose former, and allowed this to set well. I then epoxied the fuselage to the wing, leaving the nose open until the whole thing was set. Now, with the nose former offered up, I found that the sides had to be pulled in $\frac{1}{2}$ in.—which they could not without cracking the wood. I therefore decided to damp the wood until the sides, with some coaxing, agreed to come together on the nose-former. (I am sure that, had I not glued the rear of the fuselage to the wing first, those formers would have parted under this stress.)

The rest went pretty smoothly, as per instructions, and without



further head or chin scratching. *Bare weight of uncovered airframe: 2lb.3oz.*

Finishing

I gave the whole model two coats of sanding sealer followed by a covering of medium tissue, more sealer—and then a colour scheme I borrowed from the USAF Thunderbirds aerobatic team. (Now it it definitely looked like an aeroplane!)

Engine and radio

The engine used is an OS40FS-R, with 10 x 6 pusher prop, mounted on the Graupner flat plate via its backplate screws.

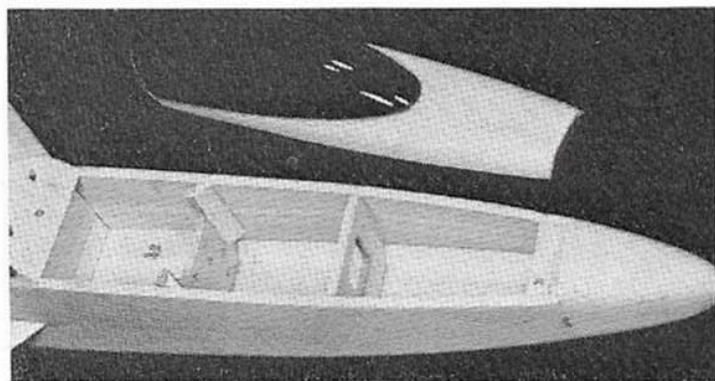
Radio is 3-functions—two servos being linear action, and one (aileron)



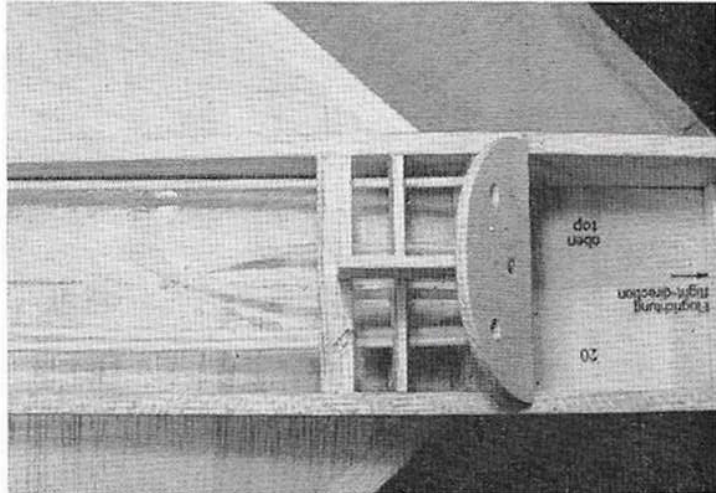
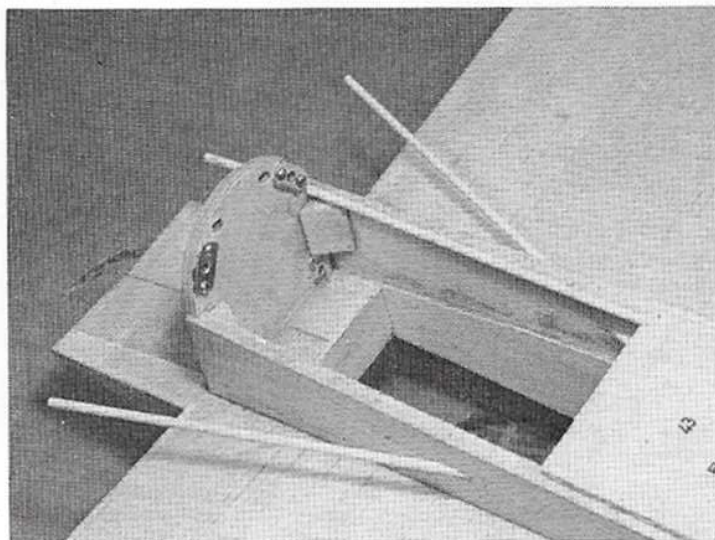
rotary. Cable installation was no problem, apart from the elevators each having a separate cable, so that one has to be certain they really do move together accurately—four ailerons wouldn't be very funny! *All-up weight: 5 lb. 1 oz.*

Flying—perphew!

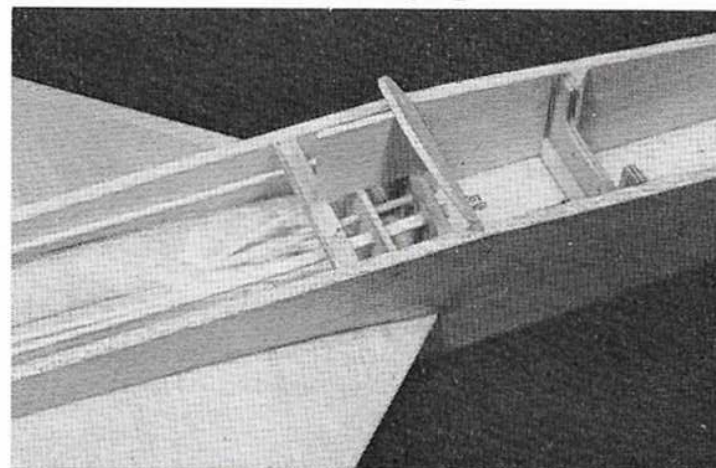
My son Steve had the task of hand-launching the beast, and the hand-hold is quite small, allowing no really good grip. So, using two hands, he had to try to run crab-fashion, as a result of which the nose dropped on release. This was no doubt due to a lack of speed,

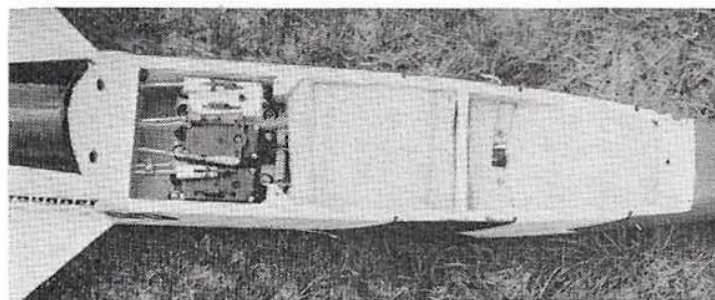


Nose section took some effort to pull in. Below: rear-end, with elevator and throttle 'outers' emerging. Note the metal blind-nuts for engine mounting.



Our reviewer glued fuselage side to wing before pulling nose in—found this helped.





As you have seen from our cover, the model is finished in red, white and blue—but the undersurface (right) is the surprise! Dave proudly displays his USAF 'Thunderbirds' motif. Left: three servos side-by-side, just go. Receiver and nicads are buried in that foam!

Summary

A well produced kit which, as shown in the April Trade News, supplies everything but tank and undercarriage. (I would have thought however, that for a kit of this price—around £74—that these two items could have been thrown in). Performance is nothing less than thrilling, for pilot and watchers.

My only real criticism is in the way that the model has to be hand-launched, if one is not using an undercarriage. "Not fast enough" can result in the model's not getting away, while "too fast" can cause the motor to cut. (And the launcher has to be very careful of the pusher-prop when he lets go.)

An undercarriage would have avoided the hand-launch problems, but—unless a "dolly" could be arranged—would have spoilt the in-flight appearance. I have now modified the hand-grip by fitting a flat plate to the fuselage bottom, giving an inverted T-shape.

Manufacturer: Johannes Graupner, West Germany.

Importer: Ripmax Models, Green Street, Enfield, Middlesex.

but we got away with it and the *Delta* climbed away quite smoothly. It was highly sensitive on the ailerons, though, as the first turns showed. Elevator I had to trim up just slightly, as the nose was inclined to drop a little—and that was all the trimming required.

Having got the feel of the model, I brought her down low for a flat run near the ground. At the far end of the field, the *Delta* seemed to be taking its time coming towards me; then, suddenly—whoosh!—it streaked past. Very impressive. I tried a few rolls... the first was a bit of a barrel, but the rest were axial enough—and very fast. A little later I tried a few "slow" type runs—but these were still too

fast for your Editor's camera, he reckoned. Suddenly, I'd run the tank dry, and I made a normal landing approach—mistake No. 1. By holding the nose down, my *Delta* just went on... and on!

Next flight, I found that the only way to slow the model up was to shut down the motor early, high up, and do a circuit or so ticking over. If you put the nose down, the model accelerates rapidly, however. Putting the *Delta* through her paces, after this, I found that it performed nearly all the usual aerobatic tricks—not with the finesse of the pattern model perhaps, but enough to satisfy most fun flyers. I have enjoyed flying it immensely.