

Ripmax EP Alliance

I visited the electric day at Old Warden in May and came away with one of these, feeling flushed with success with the Zagi and Pico Jet this looked like a good performer. The flying at Old Warden was impressive from a myriad of small 400 powered deltas through high-powered gliders to the 4 engine B29 - there was even an electric Rapier delta there. The flight line did contain an Alliance but the pinion had come off the motor so we didn't get to see it fly. It was also apparent that the recommended gearbox wasn't actually available so I obtained a MFA geared unit, complete with motor and prop, that was being offered at a good price.

The first thing you notice on opening the box is how substantial the packaging is - the reason is apparent as soon as you start handling the styrofoam parts! There are a couple of bulkheads and longerons but other than that it's all pre-moulded 5mm foam. I encountered many irritating problems assembling things. The ply horns are all the same but you really need different sizes, some of the recommended positions are poor as well. The incorrectly formed control rods are 18g piano wire and of course bow considerably - I stuck them to a length of balsa to prevent this after correcting the z bends.

The instructions omit to mention that glue only sticks to the foam if you remove the skin first - no doubt everyone else knows that. This proved fortunate in the first instance as I couldn't get the tail and wing alignment correct initially - fortunately the tail proved not to be stuck in and could be easily adjusted!

The model is also designed for 9mm wide micro servos - not all micro servos are that small, mine are 11mm and this caused a problem with the aileron servo positioning. In the end I made up some 1/64" ply mounting units to overcome the problem.

Balance also proved a problem. There is no suggested position for battery etc but putting things in the logical places showed that the battery needed to be about 1/2" further back than I could put it to balance without needing to add weight anywhere. However, the servos were in the way, in fact if the wood had been cut to allow it they could have been further back without a problem.

All these overcome it was time for first flight. Launched into a gentle breeze it soon showed that it performed well and was very responsive, but after a couple of minutes the power began to fade and a few gentle circuits later it was time to land. It seemed that the 9x6 prop I'd been supplied with was just too much for the motor. There is no mention of any recommended motors, gearboxes or props in the instructions by the way.

I tried an 8x6 on the next flight - powered glide to terra ferma and the fuselage snaps in half. I then did some tests and found that a 9x4 gave the best thrust and rpm, but again a powered glide and this time the nose comes off. It's also apparent that the nice, soft, long grass is taking its toll on the foam, which now displays many gouges. Thought I'd better go back to the 9x6 and experiment a bit - launched OK but fades quickly and this time both nose and fuselage snap.

Back at home a little bit of experimentation soon found the problem. Connecting the motor direct to the battery produced a slight squeal from the gearbox and very little thrust. The pinion was not gripping the motor shaft under high load - of course you didn't get this with the relatively soft start of a speed control, only after a few seconds run (when far enough away so you couldn't hear it) it would seem. Grinding some small flats on the shaft for the set-screws has sorted that, had I not got a ready assembled unit maybe MFA's instructions would have mentioned this.

The fuselage snaps where the rear bulkhead is, not only because it's the maximum moment arm of the tail but also because the foam is only 3MM thick due to the recess moulded in for the bulkhead. This

needs reinforcing well. A folding prop is really required to stop the nose coming off but would need a guide to push the blade away from the fuselage on starting.

It currently languishes in a dark corner whilst I decide whether to give up or pour good money after bad. Overall the model is disappointing value for money, from the poor quality of the kit to the fundamental flaw of its fuselage construction and its propensity to accumulate 'hanger rash'. I would point out that the terra firma contacts that broke the fuselage are nothing that a balsa model would not have withstood - and in many ways were no more than an overshoot into the long grass, and surviving that has to be a prerequisite at our field.

If you want a good performing, robust, acrobatic model I'd recommend a Multiplex Twin Jet - about the same price but it includes the motors and with a more capacious battery bay owners seem to be getting 10min flights easily.