

ELI-PAD

by John Heaton

THE ENSTROM F28A from the Schluter kit has taken shape really well in the last few weeks. I took a trip to Norman Bailey's Helicopters at Eastleigh Airport and took some details and photos of a specific example (G-BAAU) and cellulose-finished the model in its yellow, white and orange scheme. I asked a friend to signwrite the letters, and a coat of fuel proofer just about finished the job.

A word of warning here. I used two part car finish lacquer containing isocyanates and chose to ignore the warning about spray inhalation. I was ill for a week with difficult breathing, so be warned.

It would be nice to be able to say that test flying went without a hitch, but I couldn't get a decent flight performance with the three-bladed head. I had tucked the servos out of sight behind the dashboard and the long and complicated linkage caused too much collective slop at the swashplate, which caused the rotor rpm to fluctuate. Being short of time I just fitted the standard Schluter non-collective head, flapping hinges and all, and hey presto — instant success. Everything, up and down, cyclic and tail rotor is a bit vague but given a calmish day, the realism is outstanding. In fact I rather enjoy flying the model and having to anticipate its action and will probably leave the non-collective head on for the year as a bit of novelty.

Hughes and things

Tony Price came into the workshop to have a GS22 petrol *Baron* fitted with a *Hughes 500* body shell, which when set up flew very well. A gyro was fitted and did an excellent job, and frankly I was impressed, for I was able to handle the model well despite a different transmitter mode. Mind you, with an all-up weight of 14½lb. the power was marginal.

Graham Dean, a local flyer of a 707, brought one of the new Morley *Hughes 300s* in for me to have a go. He said he had difficulty keeping it over a spot and he seemed to have to fight with it. On having a go, I realised he was understating things, it

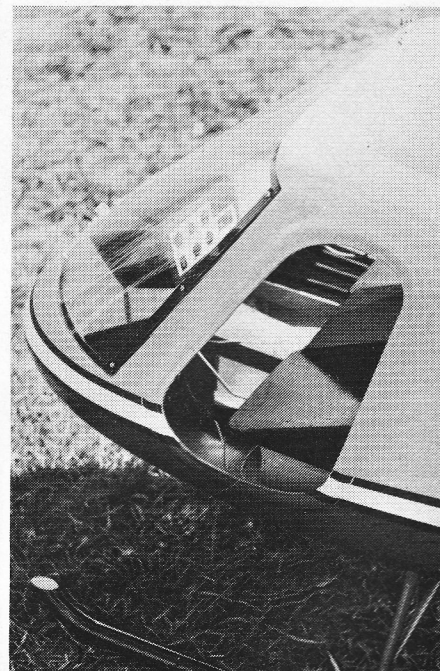


was totally unmanageable. Close examination revealed stiffness in the flybar due to a number of reasons. With everything freed up the flight characteristics were much better. In view of the short tail boom, tail rotor response was surprisingly quite docile, far more so than a *Baron 20* I thought, whilst cyclic control was less stable. I couldn't understand the reason why the control paddles changed pitch with flybar tilt and certainly would not have said cyclic response was any better than any other paddle-steered system. Any answer, Jim? All in all I was impressed with this smooth little scale job. Several people have mentioned that construction is not that easy, especially without previous experience, but then again realism is good.

Top of page: a full size *Enstrom F28* of Norman Bailey's fleet provides an alternative finish to BAAU which John has modelled. Below: the modified Schluter *DS22* with three-bladed flybarless head and scale undercarriage. On the right is the finished cockpit.

Cheltenham trio

I have had some interesting correspondence and details from Jim Davey, Graham Booker and Tony Spooner. Jim flies a *Hirobo Enstrom* and a *Lark 'bitsa'*; Graham a 707 and *Baron* trainer; whilst Tony flies a *Lama*. Readers may find the Cheltenham trio's findings of interest. The *Enstrom* has longer main blades and tail boom extension, an O.S. 50 engine and Century radio with tail rotor mixing, but as Jim says, no attempt has been made to get it perfect as it is always changing. The pitch trim facility on the five servo system is handy, however. Like myself, Jim finds he likes quite a flexible teeter restraint and says he has softened the *Hirobo* teeter damping.



He didn't reveal his method but I just shorten the rubbers. Metal paddles have been increased in area by 40% (with balsa wood I presume) and this is how Jim likes it, responsive without being aerobatic, and stable enough to fly hands off.

On to Graham's models, the 707 first. Century radio is again used with an O.S. 50. The model flies quite well but apparently eats clutches, although Jim says his *Enstrom* has done 50 flights on one clutch. This is a problem that seems peculiar to 707s, and does not seem to happen on 505s or Mk. 2 *Falcons*. My solution is to fit weights to the throw-out segments of the plastic clutch, which reduces slip and subsequent wear. The freewheel doesn't, they say, again not an uncommon problem but not inherent, and wheel collets were added to the flybar which makes learning much easier.

The most interesting part of the letter is perhaps about Graham's *Baron* trainer with an O.S. 45, for he found the cyclic delay unnerving and ran it fast with a lot of control throw to reduce the effect. Jim says he hated it! It looks to me like some home brewed mixing levers are used to introduce some direct cyclic steering and the next mod is going to be a longer flybar with some extra weights, which they hope will give stability with response. (I would agree with that). Finally, they are going to soften the teeter as the machine nods if rpm is slowed down. Jim goes on to mention that cyclic lag or delay affects some people more than others and explains that he learned on a *Lark* but found it difficult due to



Jim Davey of Cheltenham hovers his Hirobo *Enstrom* for the camera.

the soft control; but nor he likes flying them saying that control is always there. Again I would agree with all that.

Beaulieu

The Southampton boys did us proud with an excellent helicopter fly-in, with getting on for a hundred models present. Unfortunately the weather was fairly unpleasant, wet and blustery, especially in the afternoon which rather dampened enthusiasm, but I hope the lads make this an annual event and I'm sure

everyone thanks the organisers for a good day.

Models that caught my eye included two *Sea Kings*, one by Gerry Cross from Poole with *Falcon* mechanism, which flew very nicely but was not exactly concours. It is said to have flown from the water and I understand has also been upside-down in it! The other one was from John Griffiths of Slough Radio Control and looked smart. The very nice lining on the fuselage was noteworthy, he wouldn't tell me how he did it, but I shall find out and use it on my next scale job. John Barrow excelled himself again with a Morley *Hughes 300* complete with three bladed head, which flew very nicely. I thought the best flight performance came from Pete Reay with his Hirobo *Jet Ranger*. He had mothballed this model for a year or so whilst he has been flying his petrol Hughes, but got it out of the loft on finding that he would not be able to fly the KKK due to Beaulieu having a 10cc two-stroke limit. It would be nice to see that rule relaxed next time.

Competition results

Scale

1. J. Griffiths — *Sea King*
2. J. Barrow — *Morley Hughes 300*
3. P. Raey — *Jet Ranger*

Novelty

1. C. Ewer
2. P. Stevens
3. C. Bliss.



Above: John's *Enstrom* finished in the yellow, white and orange scale markings. Below and right: two views of the new Morley *Hughes 300*. Docile flying characteristics and good scale appearance in the air, but said to be constructionally awkward for novices.

