



RARA AVIS

**Fun Fly Specialist Mode
of Outstanding
Performance**

RAINA AIRS

Bob Ryan's bobby-dazzler of a 'rare bird' sports model. Designed for Fun-Fly contests, this 54in. span lightweight will outfly all the opposition. For 30-45 engines and four function radio

BEFORE COMMENCING A description of the model a little background history may be of use:- In 1975 I restarted my modelling career after a few years lay-off for college, courting and marriage I joined the local Gravesend Aeromodelling Club who had always been at the forefront at organising club and inter-club fun fly competitions. At that time our most competitive flier was a chap named Brian Patterson (are you still modelling, Brian?) who generally flew two types of model in fun fly competition, the first an Aeromaster biplane and secondly a 'Wot-Not', being a 25-40 powered monoplane designed by Chris Foss. Both models were built as lightly as possible and powered by the most powerful and tractable engines available at the time. The Aeromaster used an OS 60FSR the Wot Not an OS 45FSR both used tuned pipes.

These were very competitive but nonetheless both had there limitations.

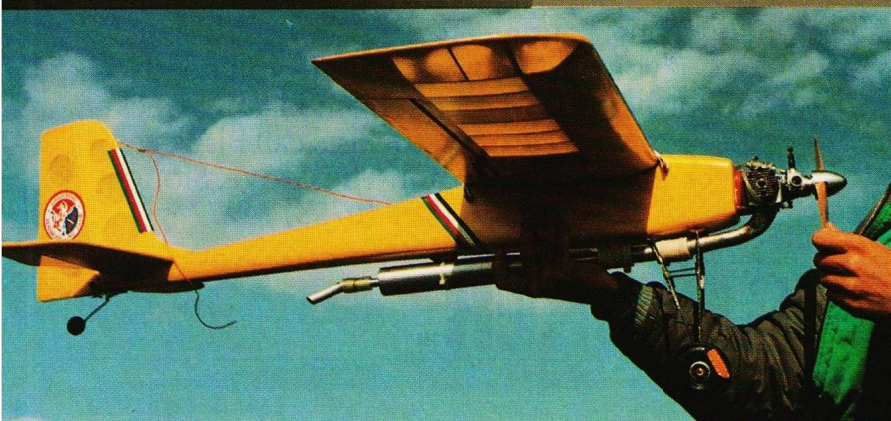
The Aeromaster was large and light, but not light enough and slightly underpowered for my needs. The Wot Not was a 48in. span fast monoplane. It could be built with a very high power to weight ratio but difficult to slow down due to its slippery form, this made touch and goes and limbo comp's very interesting on calm days!

Having built both these models, many others besides and practiced for many hours, I became reasonably successful in our local fun fly competitions. However, it became increasingly clear to me that no model had yet been designed that fulfilled all my requirements for competitive fun fly models.

Those requirements were as follows:-

1. Reasonably compact so that it fits in the boot of the car. This leaves room in the car for wife and family. This is very important if I am to be allowed out as often as I wish. 40-45 size models are usually more agile in

No apologies for featuring our cover girl, Karina, again. Bob Ryan, right, is nearly as lovely!

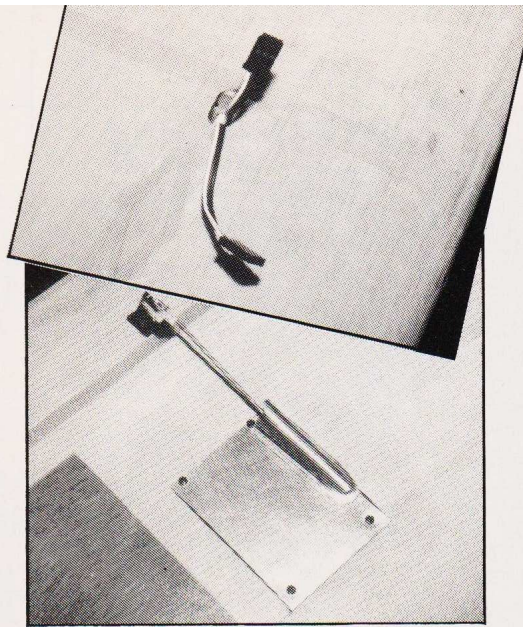


Rara Avis

Bob uses separate servos in each wing and a 'Y' lead to the receiver. Tuned pipe will increase performance and could quieten model.

Construction of the model is basically very simple so I will restrict my comments to a few notes. Firstly, never forget the golden rule and *keep it light*. Avoid beefing it up use good quality and light balsa. Use cyano glue wherever possible. Note there is no ply in the wing construction except two twin doublers to avoid the elastic bands crushing the wings. If you're faint-hearted you could add a 1/16in. wing brace but don't add anything else. I use one servo in each wing, I find this much more positive than the usual linkages and just as light. With the advent of the cheap standard servo the cost should not be too prohibitive. I don't recommend you use foam wings unless you are able to construct them very lightly (I doubt if, even then, they will be as light and strong as a built-up wing. My wind weighs 12oz. when totally complete including all covering and servo etc.)

I covered my model with Solartex on the stabiliser and elevator - to reduce the risk of damage caused by dried sheep's droppings at the local field during the summer. These fly off the



wheels and damage the tail during the summer months!

The rest of the model is covered with Mica film. This is very light but adds quite a bit of strength to the model. Whatever you decide to cover your model with use something that adds strength to the model without adding too much weight.

I set the controls as follows -
Ailerons 1/2in. up 1/2in. down
Elevator 1 1/2in. up 1/2in. down
Rudder 2 1/4in. left 2 1/4in. right
Set-up like this, the model will produce 60 rolls in one minute (about 30 loops). There is absolutely no point in having your model so sensitive that it is difficult to control. This will only be a hindrance not a help. Even with these

controls the model is quite docile, and is very easy to handle. With my engine set up my model takes-off in about four feet, using full throttle, and climbing vertically for 25 seconds it will disappear from view. From any good height you can point the nose straight down and using the prop as an airbrake, you can adjust the descent rate and avoid unnecessary speed build-up. It handles very well in strong winds, this came in very handy at last year's Nationals especially in the limbo, touch and go (you have to land in a 10ft. target square) and time and spot landing - with a two foot square centre 'spot'.

The best results I have achieved so far in competitions are as follows:-
Limbo 23 passes in 2 minutes
Touch and goes 22 in 2 minutes
Climb for 25 seconds and glide
6 minutes 20 seconds

Triple thrash (3 rolls, 3 loops
3 touch and goes and land) 29 secs.

So if you fancy a go at some fun fly competition or simply some spirited sport flying build a 'Rara Avis' and whatever model you launch remember the golden rule is *KEEP IT LIGHT* and have fun.

