

A beginner's kit - in the hands of a novice

Barry King wanted a start in radio heli's. So we gave him a kit and told him to get on with it.

AS a complete novice it was suggested that I was the ideal candidate to build the MFA Sport 500.

In fact the last model that I built was an Airfix Spitfire, which was some 20 years ago. Models sure have changed in that time.

Price and ease of build must be the secret combination that all manufacturers must strive for. In fact RHI has received various letters with comments such as, why can't somebody bring out a model that the average man can afford?

It looks like that is the market MFA are gunning for with the Sport 500. With a kit

price of under £120 this gives it the lowest price tag in the shops. Being all British made this should make spare parts readily available and MFA boast of FREE technical assistance.

On opening the box I was surprised to see the amount of parts which go together to make the Sport 500. It was a relief to find the instructions.

It's worth reading through the instructions a couple of times before you commence to build, even if you aren't a complete beginner like myself.

First step is to assemble the main chassis which is of a pressed metal material and

the four leg/skid joiners to the skids. The next is to fit the clutch springs to the shoes and to glue the clutch lining into the clutch drum.

The only problem encountered was in assembly note 2 where it says 'simply grind/file the excess protruding springs'. I don't have a grinder and I found it very awkward to file the springs once in situ.

After the glue had dried on the lining the clutch drum had to be slid onto the main gear shaft which is mounted to the chassis by two bearing blocks.

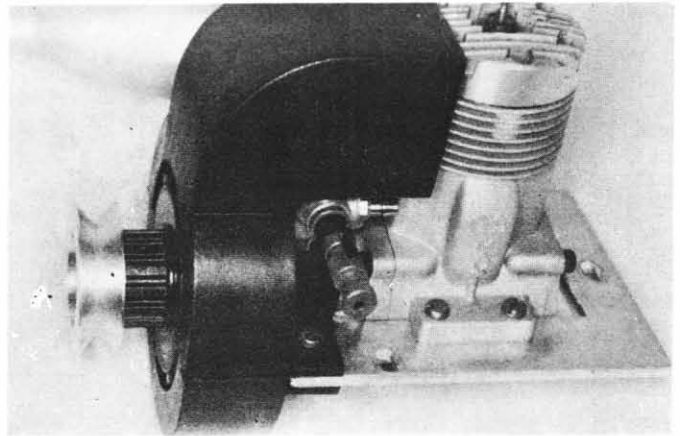
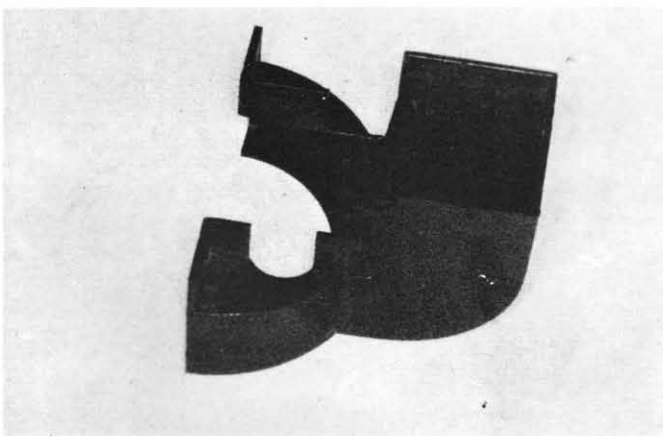
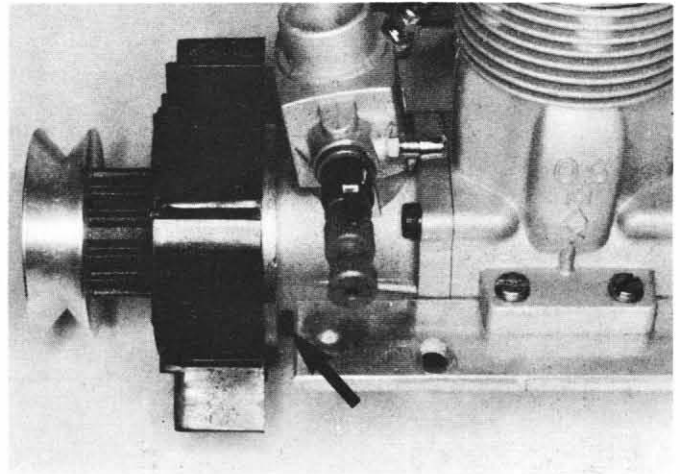
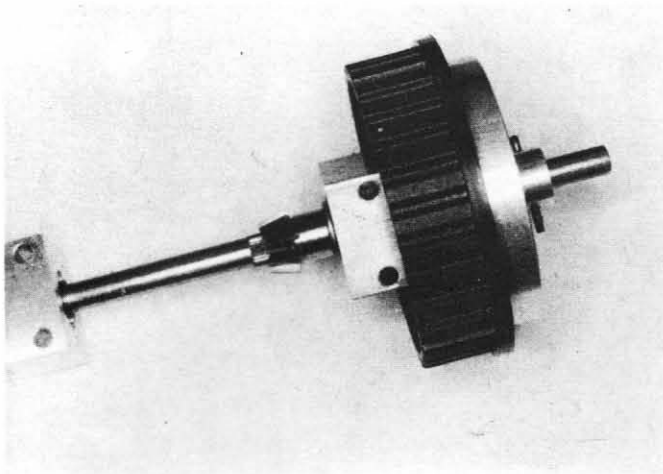
I then had to put the fly-wheel onto the engine. MFA

suggest an OS 40 FSR or 45 FSR. I had a Super Tigre S29 and because of the engines versatility I thought I would give it a go.

Making sure the toothed pulleys are in line for the drive belt, I secured the engine and mounting plate in position. The belt has to have approx 6-8mm movement with 5kg of pressure applied.

As I said earlier the chassis is manufactured from pressed metal. Therefore because of possible distortion great care must be taken when fixing the mast with the upper and

Continued over



Left: The completed model, after a fashion. It's all very well posing for pictures, but it needs a thorough check over from an expert before getting any further off the ground. Above: Tackling the engine mounting

lower bearing blocks. It could cause the mast to run out of true. MFA suggest bending the chassis with an adjustable spanner to realign.

The fuel tank is mounted to the side by two clips. The fuel lines are then cut to give one main feed and two vents. The latter can be plugged by using two short pieces of dowel or screws when the model is not being used.

After I attached the tail boom my model was at last beginning to resemble a helicopter.

My next step was to assemble the tail rotor gear box. This is made up of a split casing, two tail gear box shafts, two 5mm ball races

and two 5mm Oilite bearings. I made sure there was no moulding flash on either part of the casing and lightly greased the gears. The two parts of the casing are held together by nine M2 screws.

Once the gearbox is complete the next step was to mount the rotor blade holders to the rotor hub. The hub is then connected to the output end of the gearbox. A steel rod bent at a 90 degree angle controls the pitch of the rotors. These are set at 15 degrees when the pitch crank handle is straight.

Drill and cut out the fin and the rotor blades from the marked ply, in that order. I

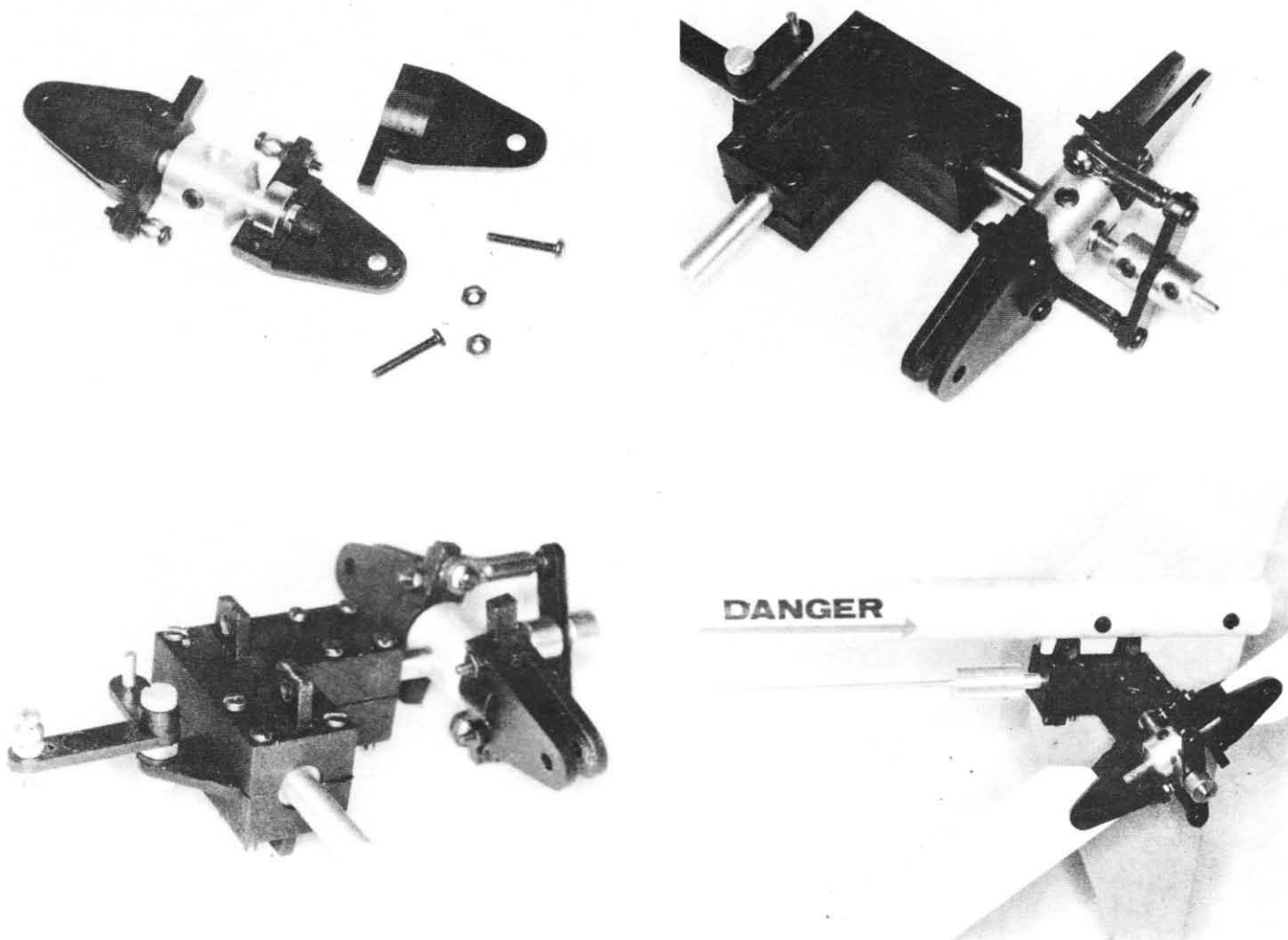
would suggest all the drilling work is carried out now as it makes it a lot easier handling the wood in larger pieces. Smooth off all the sharp edges with a fine sandpaper. This was to prepare before painting.

I chose to paint the fin in a bright red and the rotor blades in Daytone Yellow with red pinstriping.

When the paint is totally dry fit the blades into their holders. I was careful not to over-tighten these, for the blades must be able to pivot freely.

The tail rotor assembly is then attached to the boom by two x M3 screws.

Phew - I've made it this far. Next issue I'll tell you how I completed the job and if I get the machine in the air.



Above: Tail rotor assembly. Right: the components straight out of the box

