

# DICK EDMONDS

(Partners: R. J & M.W.Edmonds)

# MODEL SUPPLIES

UNIT 20, VERNON BUILDINGS, WESTBOURNE STREET,  
HIGH WYCOMBE, BUCKS. Phone: 0494 528214

HP11 2PX

## MULTI ROLE CONTEST AIRCRAFT

This model was designed right from the word go to fulfill a multi-role, that is to be competitive on the slope and from the tow line. a 100" model is an ideal size for this, models of smaller span tend to lack the ability to thermal soar really well and the larger ones are rather cumbersome and difficult to manoeuvre on many of our slopes as the roll rate is usually slow. One of the most important features of any model is the wing section, there is now a choice of sections, for thermal soaring or sport slope soaring there is the Selig 3021, for slope racing or tow-line multi-task events there is the Girsberger RG14. The S3021 is based on the E205, Michael Selig became skilled in using the Eppler airfoil design programme and he reworked the 205 to give improved performance at high lift while the integrity of the E205 is maintained at low lift. It has proved excellent for thermal soaring in light conditions where it has the ability to make good use of very weak lift, also due to low drag it does not require as much ballast as some sections do when the wind freshens, so is very competitive in windy conditions. It has had many contest successes in both the calm and windy conditions. The roll rate is good for a model of this span and A.R. particularly if fitted with the gapless aileron hinges. Girsberger RG14 - Polf Girsberger of Switzerland has also done much work on improving wing sections, particularly for use in F3B, this is a most demanding event as the model must be competitive at duration, distance and above all speed. Many of the worlds top pilots have used Girsberger sections with outstanding success, The RG14 was chosen for its low drag, having only .006 Cd at RE400000. This has made the Algebra Racer a very fast aeroplane which should prove competitive in racing events where its ability to turn tight and accelerate must be an advantage. It is also potent in slope cross country having the ability to quickly move across areas of sink back into the lift and quickly gain height. Its aerobatic performance is very respectable and is always exhilarating to fly. There is provision for ballast but full ballasting will rarely be required.

Altogether there are six versions of this model; there are two fuselages, one glassfibre one plywood. The glassfibre is exactly the same as used for the 3M and 4M which has been highly developed using a combination of cloth and matt, there is plenty of room to take three servos as well as being able to accommodate a 500mha nicad right up in the nose which means little nose weight. The ply fuselage is again as 3M and 4M the 1/32" ply is cut to shape and 1/8th ply doublers for good strength and lightweight, again enough space inside for three servos. The elevators and rudder are all balsa sheet. The wings are our normal white foam covered in obechi veneer main spar slots are pre-cut, the main spars are extra long 24" to give the wing greater strength. Again there are two wing versions, one with ailerons and one without. The wing without ailerons can be made with straight dihedral or polyhedral, the panels are supplied 48" tip dihedral version, the panel is cut in the appropriate place and reglued at angle. The aileron version is supplied with balsa ailerons, aileron spars and ply braces for servo box. The ailerons are operated by a servo in each wing, the wiring for servos fits neatly behind the leading edge. We can also supply the Micro Star servo with ballraces and all metal gears, it also has lugs for mounting it flat inside the wing, ideal for ailerons. There are details on the plan for low drag gapless hinges as well as conventional hinges, also on plan are details of airbrakes. The wings are held in place by two sturdy 5mm steel rods, which pass right through the fuselage and the wings are positively retained by tapered obechi shear pins. The elevator is a conventional all-moving type and the rudder is operated by the closed loop system. All snap links, pushrods, closed loop, ballast tubes and rudder hinges are supplied. The gapless aileron hinges are supplied as a separate item and are not included in the kit, it is suggested any-one entering competitive events and those who require the best possible performance should go to the extra effort and fit them. The wings/fuselages are interchangeable with the 3M and 4M. Separate wing and elevator kits are available as well as fuselages for all our Algebra models, so one model can be easily converted into another.