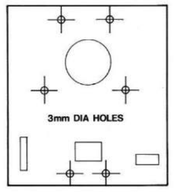
AEROFLYTE

Gemini Mk II

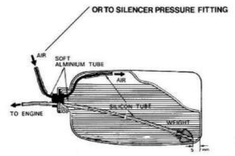
KIT No. 246

MANUFACTURED AND DESIGNED IN AUSTRALIA BY THE AEROFLYTE DIVISION OF SOUTHERN MODEL SUPPLIES, ADELAIDE, SOUTH AUSTRALIA

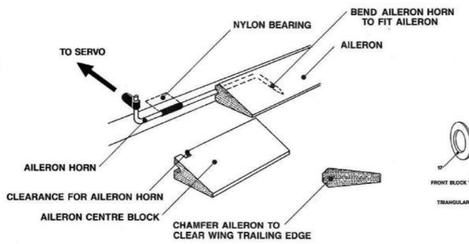
Australian Made



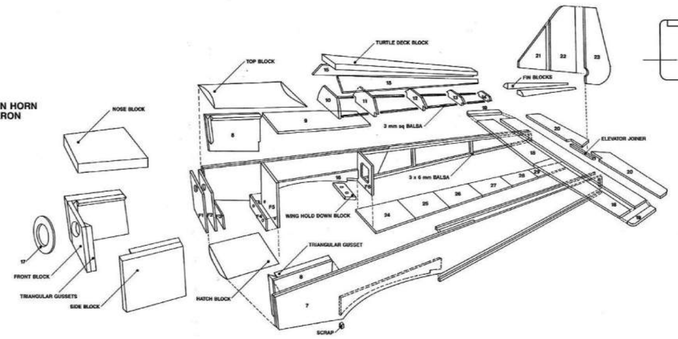
F1/F2/F3 DRILLING TEMPLATE



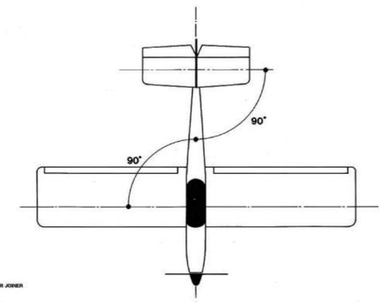
FUEL TANK ASSEMBLY



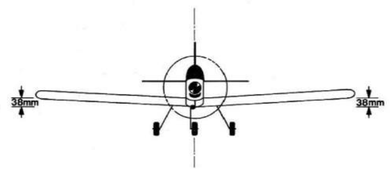
AILERON ASSEMBLY



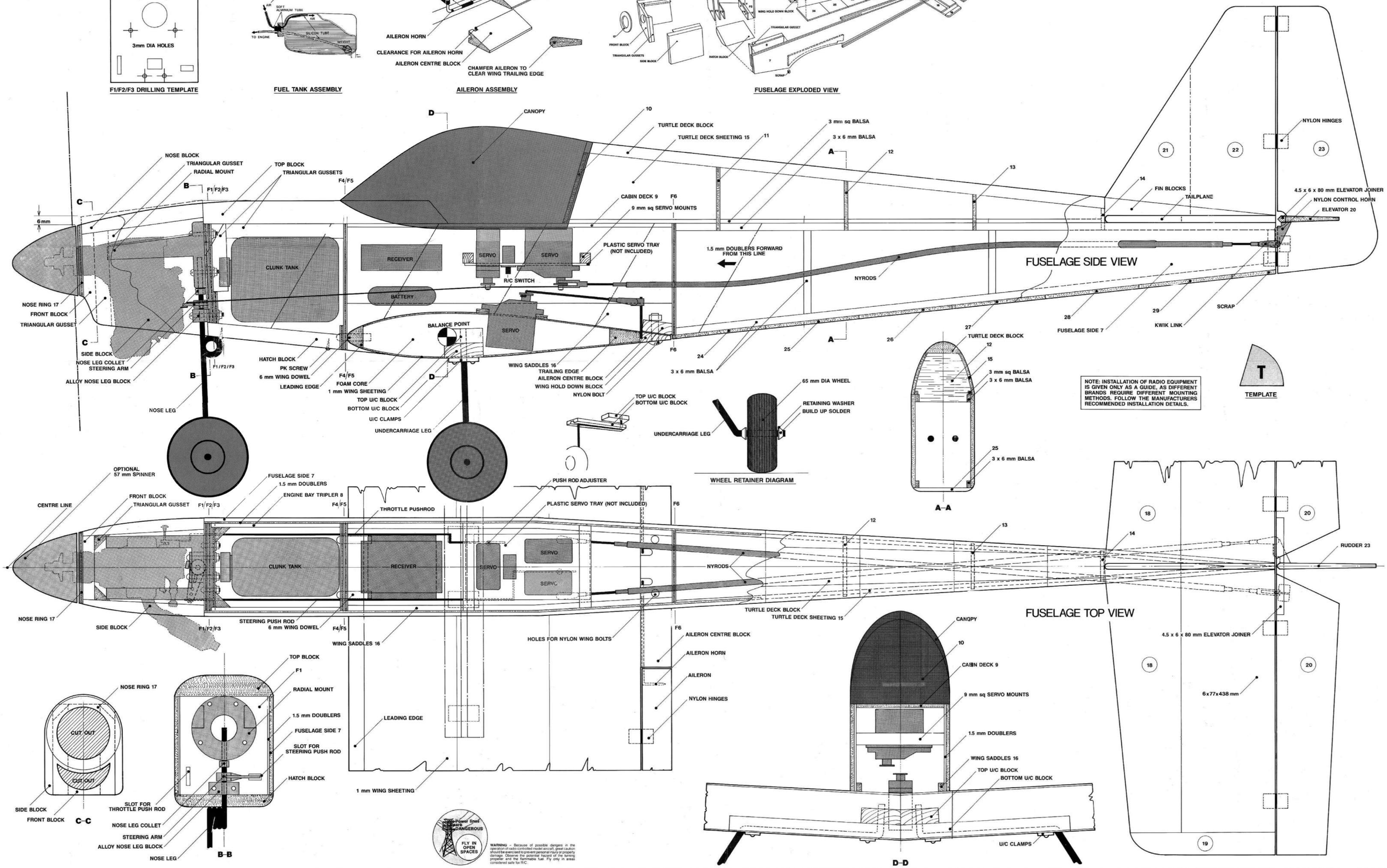
FUSELAGE EXPLODED VIEW



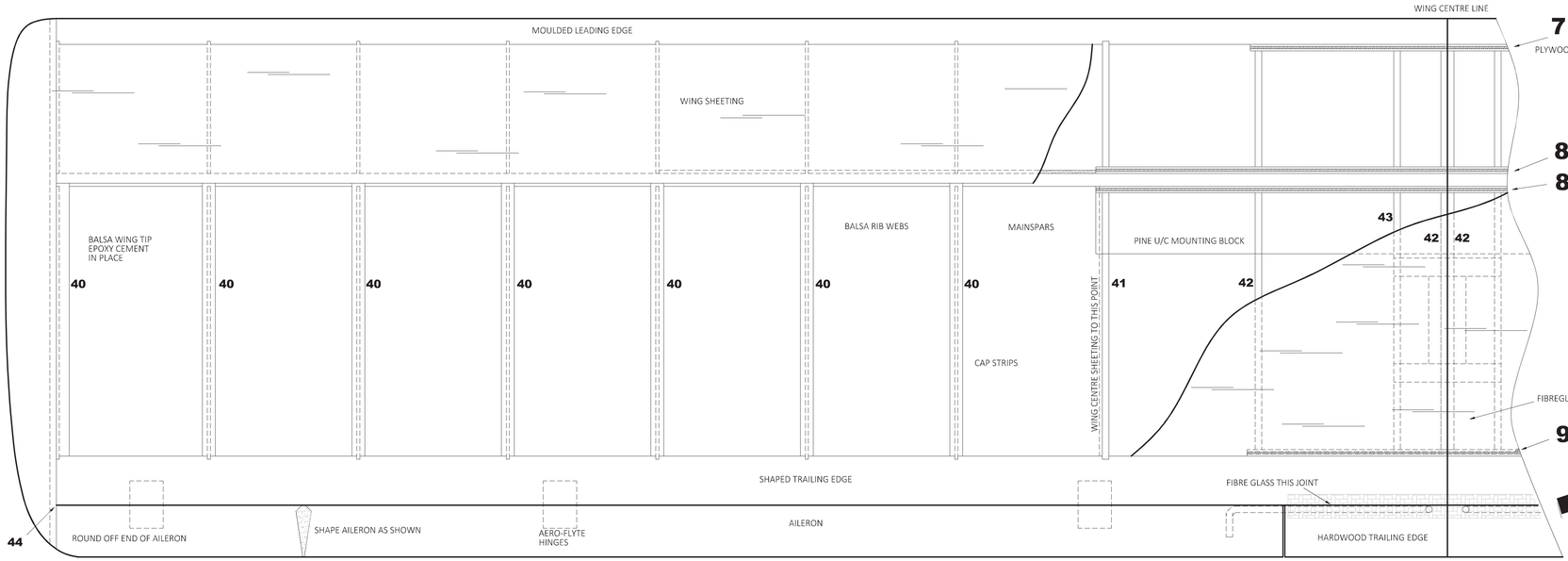
WING AND TAILPLANE ALIGNMENT



DIEHEDRAL ANGLE



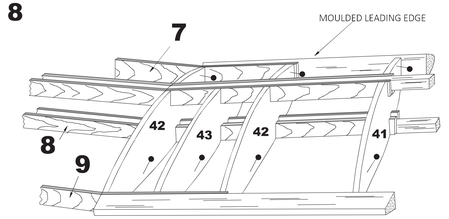
WARNING – Because of possible dangers in the operation of radio controlled model aircraft, great caution should be exercised to prevent personal injury or property damage. Observe the potential hazard of the turning propeller and the flammable fuel. Fly only in areas considered safe for R/C.

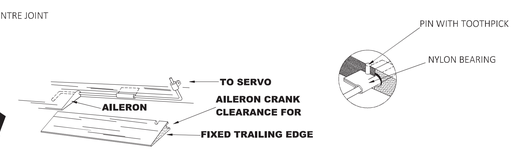


THE WING IS THE MOST IMPORTANT PART OF YOUR MODEL - AN EFFICIENT WING MAKES AN EFFICIENT MODEL. BUILD NEATLY AND ACCURATELY.

Note: This wing plan is from a GEMINI Mkl and has been resized slightly to fit the GEMINI MkII. The Chord is about 6mm wider.

It has been provided with the GEMINI MkII plan as an option for those who wish to build a built-up wing instead of a foam wing.





OPTION 2 BUILT-UP WINGS.

1

Glue all braces and centre ribs with white glue. - C17 balsa cement all other joints. All ribs are fitted with building lugs to ease wing construction by giving a flat surface for building. Pin the bottom 1/4" x 1/4" mainspar over the plan and pin ribs numbered 40, the moulded leading edge and the shaped trailing edge into place, pushing the ribs into the slots provided. Next assemble ribs 41 & 42 and braces 7,8,9, using the centre rib template to get the correct angle on centre rib 42. Thoroughly cement all joints. Before removing the left hand wing from the plan and building board, fit the top leading edge sheeting, the 3 rib webs and the cap strips. Do not fit the wing centre sheeting at this stage. Remove from the building board and carefully snap off the building lugs.

Rub an oily wad over the plan so that it is visible on the reverse side. Now place the centre rib of the partly assembled left hand wing on the wing centre line, Block up the wingtip 3" and build the right hand wing in the same sequence as the left hand wing.

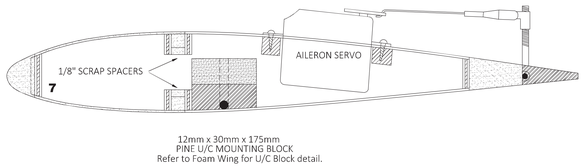
2

To complete the wings fit top centre sheeting and bottom cap strips. Position ribs 43 to suit your aileron servo, cut out centre rib 42 on the bottom as needed and fit the servo mounts. Sheet cover the wing bottom section. Cement ribs 44 into the plastic wing tip mouldings, allow to dry and trim off the excess plastic. Cement the wing tips to the end of each wing.

Groove out the hardwood trailing edge to allow free movement of the aileron cranks as shown. Using epoxy cement, fit the trailing edges to the wing with the aileron horns in place. Ensure that excess cement does not effect movement of the aileron horn. Fibreglass this joint and the wing centre section with 2" fibreglass cloth. Thisis essential for maximum strength.

3

Complete the wing by attaching the ailerons with the nylon hinges supplied, but do not cement the hinges at this stage. Before fitting the ailerons it is necessary to chamfer off the leading edge as shown. Sand the wing lightly all over and prepare for covering. Fit hinges finally after covering.

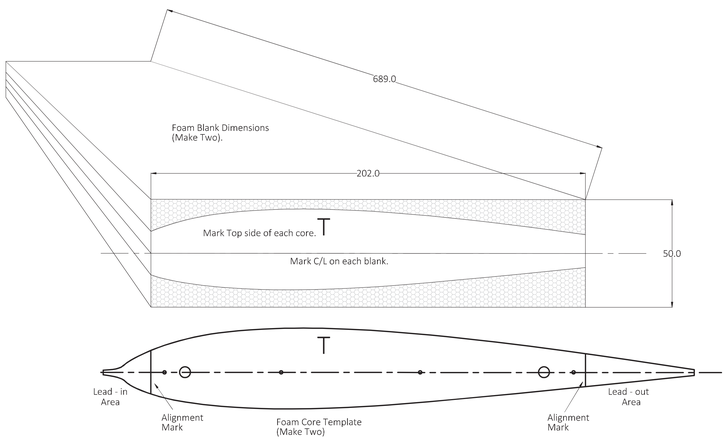


4

When servo is mounted (on topside of wing), ensure ailerons move freely, and with servo and ailerons in neutral positions, make up the kwik links supplied so that the threaded adjustment is half used, and the other end of the kwik link is firmly fitted to the servo output arms, one on each side (a double bend on the end will prevent these links coming loose). Ensure that when the transmitter stick is moved to the right, the left hand aileron (viewed from behind wing) goes down.

OPTION 1 FOAM CORE WINGS

To be read in conjunction with GEMINI MkII kit plan # 246 and Instruction Sheets.



Making The Foam Cores

For detailled instructions on making foam wings, refer to suitable documentation available on the WWW.

It is assumed the builder has prior knowlege of making foam wings, so these instructions are intentionally kept brief.

Cut two foam core blanks to the size shown at left. Mark a centre-line along each end for aligning the airfoil templates.

Make two airfoil templates using the full size template below. Drill two 5mm sighting holes and four fixing holes where shown. Ensure the transition to the lead-in and lead-out areas are smooth to prevent the cutting wire from catching.

Position the templates by sighting the C/L of the foam blank throught the 5mm holes. Also ensure the Fore and Aft Alignment
Marks align with the edges of the Foam Blank. Secure the templates by inserting suitable size nails through the 4 small holes.
Using a hot wire, cut out two foam cores and mark the top location on each (T). Follow the directions given in the Instruction
Sheets.

GEMINI MkII

AERO-FLYTE MODEL PRODUCTS Reg. Trade Mark

John Moody, 12/05/2014