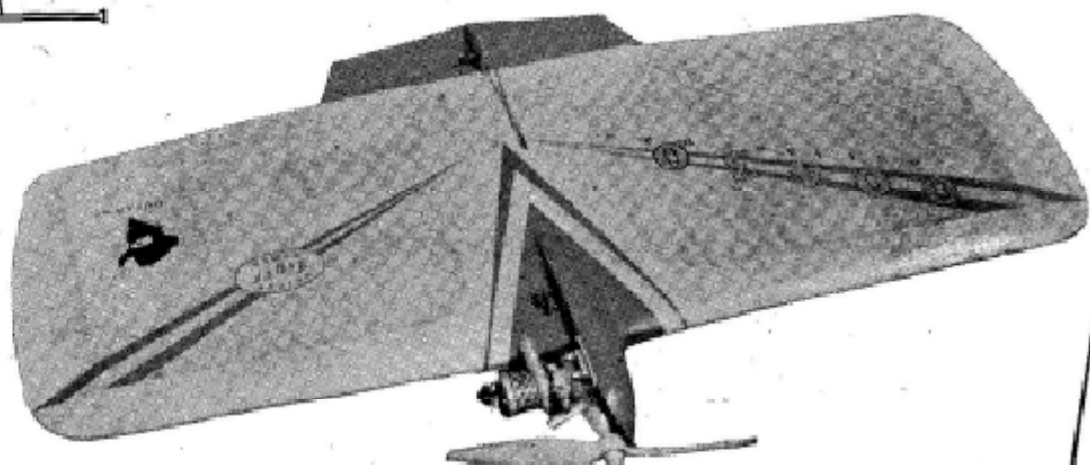


DOMINATOR 3 1/8

A 28" wingspan control line combat model
for 2.5 - 3.5cc engines. Designed by **Mike Davis**



Commence "Dominator" with the engine mounting pod so that it can dry whilst the wing is being assembled. Shape 1/4 in. sq. engine bearer and chamfer inside faces for Oliver Tiger crankcase. Then cut the 1/4 in. plywood and 1/2 in. sheet sides and white glue 1/4 in. plywood sheet to bearers, also nail in place with small panel pins. Drill 6 B.A. engine mounting bolt holes 1/4 in. and screw bolts in place with large washers under the heads to prevent them pulling through bearers. Next cut out 1/2 in. sheet cover to clear bolt heads, then glue in place and clamp in a vice until dry. Cut the tank from tinplate and solder vents and filler pipes as shown in sketch, accuracy is essential here. Make a 1/4 in. plywood rib template and cut the 1/4 in. sheet ribs, also two of 1/4 in. and 1/2 in. sheet 1/4 in. square and round to show in side view for centre section. Note cut outs for bellcrank support plate in centre ribs and leadout holes in inboard wing panel ribs. Cut 1/4 in. plywood bellcrank support to shape and lay over plan, also 1 in. x 1/2 in. lower leading edge strip. When cutting leading edge to length the piece of 1/4 in. x 1 in. strip left over is split and cemented to the tips to form fillers. White glue the 1 in. x 1/2 in. centre strip in place after cutting its leading edge to taper shown. Cut trailing edge from 1/2 in. sheet and mark rib positions, do not sand to section yet. Push ribs onto trailing edge, then pin and white (P.V.A.) glue trailing edge and rib assembly to leading edge. Add top 1 in. x 1/2 in. leading edge strip.

Make up the control system by using two short lengths of 20 s.w.g. piano wire and heavy weight Laystrate cable bound and soldered as shown, with a nylon or steel bellcrank. Curve engine mounting pod to shape and sand all over. When dry, lift wings from plan, install tank and 1/4 s.w.g. piano wire pushrod. Cover centre section with 1/4 in. sheet 4 in. wide and chamfer to fit on 1/2 in. sheet trailing edge. Cement all gussets in place. Mark the engine mounting pod position on centre section sheeting and attach with white glue. When dry drill two 1/4 in. diameter holes as shown for dowel rods, making sure rear dowel passes through plywood bellcrank platform.

Shape leading and trailing edge with a Surform Plane and sand entire model smooth. Apply two coats of clear dope and then sand again. Cover with medium weight nylon, starting with top surface, then apply two coats of 25 per cent thinned clear dope. Cover engine mounting pod with cement, then nylon. Cut 1/2 in. sheet elevator and 1/2 in. plywood horn to shape and using linen tape cement elevator to trailing edge, sliding elevator horn to obtain neutral, lastly face engine bearers with 1/2 in. Dural for firm mounting, colour dope to desired scheme, and fuel proof.

Check centre of gravity position with pins pushed into tips as shown and if slightly nose heavy, apply a thick coat of fuel proof to the elevator.

NOSE DETAIL
add to plan
view

1/8" Dural bearer facing

1/8" sheet elevator
with horn cutout

Feed pipe

TANK DETAIL

Sand sheeting to blend
with trailing edge

1/8" plywood elevator
horn

Holes for 14 s.w.g.
pushrod

Celloidin reinforcing

1/8" plywood bellcrank
mounting platform.
6 B.A. pivot bolt

3/16" dowel rod

Cut out for Oliver Tiger
crankcase

1/8" sheet gussets

Round off

1/4" sheet

1/4" sq. hardwood
engine bearers

Centre-section
rib 2 off 1/8" and
1/2" sheet.

1/16" sheeting

2" Nylon or steel
bellcrank

14 s.w.g. piano wire pushrod

Tank

Engine mounting pod
sides. One off 1/16"
plywood, one off 1/2"
balsa

6 B.A. mounting bolt holes

Fill in centre of tip
L.E. with block above
and under 1/2" sheet
tip plate

Use pins in this position
for checking centre of
gravity

1" x 1/4" strip

1/2" x 1/4" strip

1" x 1/8" strip

1/16" plywood*

1/2" sheet

Note. Push rod hooks down-
wards through bellcrank hole
and bellcrank is packed up to
height with a hardwood block.

Bind and solder

20 s.w.g.
piano wire

1/8" Sheet tip

Heavy Laystrate leadouts

1/8" Brass tube

Leading edge made up from strip, centre 1" x 1/2" strip has two strips
1/2" x 1/4" and 1/2" x 1" above and below as shown in side view.

1/8" sheet elevator

Fuel tubing
pushrod retainer

Tape elevator hinges