
BUCKER JUNGMEISTER
by
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Design by
Nexus Plans Service, Nexus House, Boundary Way, Hemel Hempstead, Herts, HP2 7ST
PRICE CODE
A 1098mm wingspan fully aerobatic, scale bi-plane for four function R/C & 0.40 cu. in. motors.
All wood is balsa unless otherwise stated
Aileron pushrod - 16 swg wire. Movement 7-9mm each way
Elevator —"— 9mm balsa dowel. Movement 25mm up & down.
Rudder - 20lb fishing line (push-pull) Movement 37mm each way.
Top decking rolled 0,8mm ply
Acetate screen
0,8mm ply between F4 & F5 L.H. side only
Chine stringer is 3mm × 9mm at F4 taper to 3mm sq at rear & 4,5mm thick at rear of front sheet
3mm × 20mm top strip - taper to 10mm wide at rear
Fin & rudder from 6mm sheet - sand to section & add scrap ply (let in flush) for bracing wire (24swg pianowire)
Fill in aft of F8 with thin card fairing
Cowling is cut down from suitable aluminium teapot or saucepan with pressed blisters. Alternatively make from glass fibre & epoxy resin over a foam master
Bind & solder
3mm × 6mm stringers shown chain dotted. Note upper stringer goes from F4 to F6 on RH side & F5 to F6 on LH side
Fill fuselage sides with 4,5mm sheet
Main fuselage frame is made from 4,5mm sq spruce longerons with 4,5mm sq balsa uprights & spacers. Diagonal braces are 4,5mm × 3mm balsa
Commercial nylon hinges
4,5mm × 12mm sternpost
Mount motor on nylon or aluminium mounting secured to F1 There is no down or side-thrust
F1
F2
F3
F4
F5
F6
F7
F8
Rx & Nicad area
Fuel tank area
Servos - three abreast
12mm × 9mm engine bearer
to rudder servo
Pushrod to tailwheel
Small spring
Soft block top - hollow to clear fuel tank
12mm bottom sheet
18mm × 45° to allow for nose contour when carving
4,5mm sheet
4,5mm wing saddle
6mm dia wing dowels
0,8mm ply doubler to extent shown by arrows
6mm × 3mm bottom stringer runs along centre line - taper towards rear as shown
Sprung, steerable tailwheel from 14swg piano wire running in brass tube. Tiller arm adapted from commercial nylon crank
Rigid pushrod linkage to rudder horn.
Support tailwheel assy on cross braces of scrap 4,5mm sq. spruce
12mm tailwheel
Top view of rudder horn 1,5mm paxolin
14 swg pianowire upper U/C frame U/C is retained by wing bands
Fairing is 3mm ply held on by small brass straps. Face both sides with 3mm balsa & sand to aerofoil section
TOP & BOTTOM OUTER WING PANELS ARE IDENTICAL
68mm PB Aeroscale wheels (plain side outwards) - retain with collets.
10 swg collets.
Dihedral - Upper 37mm Lower 43mm
Upper frame all from 14swg pianowire
Crimp ends
Bind & solder
Solder
Spring-in-tube main legs.
Cut bracket from 1,5 brass bend as shown.
Track struts
Make four from 16swg pianowire. Drill 10swg brass collets transversely with 1,5mm dia drill. Fit wires face to face in pairs (trapping collets), bind with fusewire & solder.
10swg piano wire leg
Cross section of typical oleo construction.
8swg brass tube with 10swg brass tube soldered inside
Spring
Short piece of 10 swg tube soldered to wire leg
Solder small piece of 10swg brass tube inside, crimp flat in vise and drill pivot hole
12mm sq L.E.
4,5mm sq spruce
Trim rear of R3's to suit
False L.E. (top & bottom) from 3mm×6mm spruce or hard balsa.
9mm × 3mm spruce rear spar
3mm tips - pack up 6mm when building
R1
R1A
R2
R3
R4
3mm gusset
1,5mm ply brace
Entire T.E. (inc ailerons) from 9mm × 37mm sheet.
Cut false T.E. from 6mm sheet.
Taper top & bottom equally from here out to 2,5mm thick at tip
These two ribs are 3mm - adjust spacing to suit servo width
LOWER WING CENTRE SECTION
Underside faced with 1,5mm ply let in flush with surface
Top sheeted with 2,5mm balsa.
Optional holes in ply to assist grip for hand-launching
Holes (top & bottom) to allow wing/u/c retaining bands to pass thro.
4,5mm sq spruce
Flying wire hooks - fit as shown.
Cabane struts viewed front - bend from 12 s.w.g. pianowire. Note that front strut is bent up between bearers to clear fuel tank. Diagonal strut is U shaped & is bound to cross member of rear strut. Struts are fixed to bearers with nylon saddle clamps. Flying wire hooks are 24swg & are bound to struts with fuse-wire & soldered
Tailpane & elevators from 1,5mm sheet core. Add 3mm ×4,5mm (l.e. & t.e.), ribs from 1,5mm sheet and tips from 1,5mm sheet to both top & bottom of core. Fit scrap ply reinforcement for bracing wires as shown.
0,8mm ply
Ply reinforcement for elevator horn
0,8mm steel bracket - bend & fit as shown.
Inter-wing struts cut from 9mm × 6mm spruce. Drill all mounting holes after reinforcing ends to avoid splitting. Either bind with thread & smear with epoxy or use flattened aluminium tube as shown.
Front strut
Rear strut.
Strut rigging diagram. Nylon kite string used for rigging Seal all knots with "cyano" type adhesive
Aileron linkage (shown chain-dotted) is in lower wing only. Couple upper & lower ailerons with mini snap links on threaded rods
Use commercial nylon cranks
Typical pos'n of strut fixing hooks & blocks.
Commercial nylon hinges.
Note chamfer
F1 3mm plywood
Hollow to clear fuel tank.
6mm sq
Covering line
Detail of concealed elevator hinge. Make from 14swg pianowire & small washer. Pivot on scrap of brass tube. Epoxy hinge flush with core.
ALL FUSELAGE FORMERS ARE 3mm BALSA UNLESS STATED
Strut fixing holes - top wing only.
R1A - 4off - 3mm ply
All wing ribs are 2,5mm except where specified
Pos'n of wing tip
hinge line
bottom edge of aileron
underside of top aileron.
aileron horns - make from 1,5mm paxolin or G.R.P.
Scrap view of inboard end of rear spar
Detail of spruce block & pianowire hook used to retain wing struts.
Produced, drawn & traced for R C M & E by Ian Peacock
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