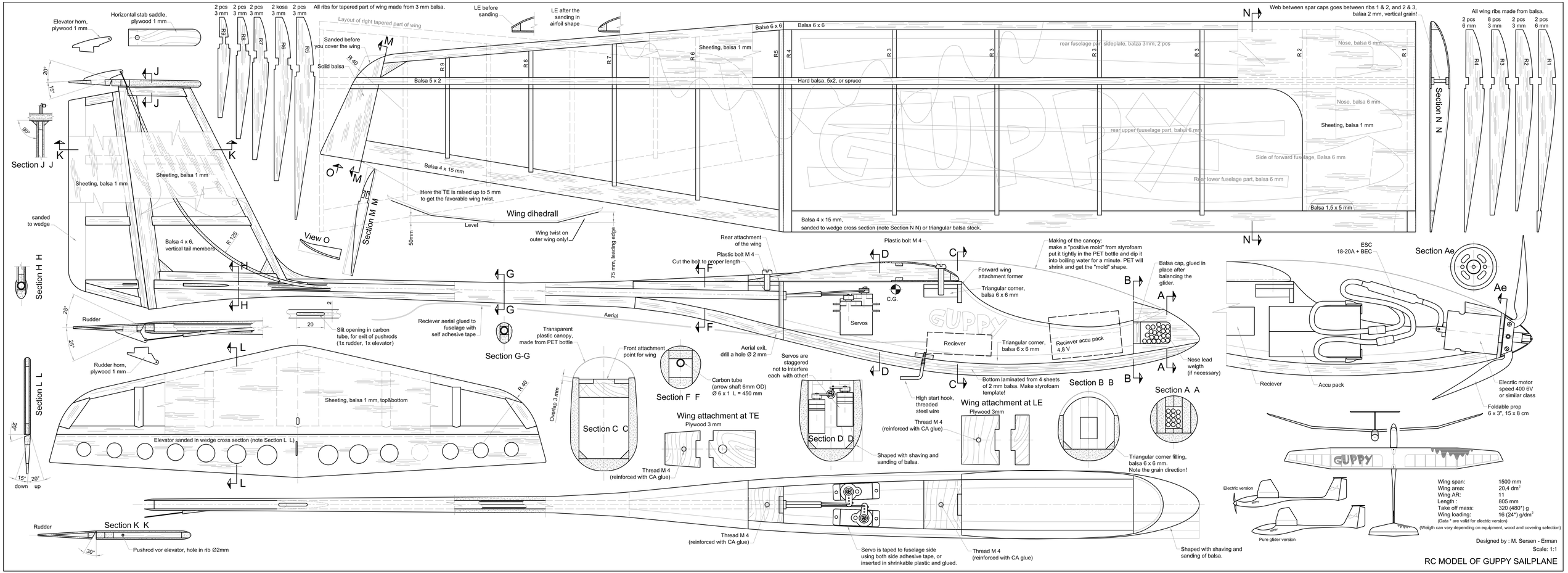
Elevator horn, plywood 1 mm
Horizontal stab saddle, plywood 1 mm
2 pcs 3 mm
2 pcs 3 mm
2 pcs 3 mm
2 kosa 3 mm
2 pcs 3 mm
All ribs for tapered part of wing made from 3 mm balsa.
Layout of right tapered part of wing
LE before sanding
LE after the sanding in airfoil shape
Sanded before you cover the wing
Solid balsa
R 40
Balsa 6 x 6
Balsa 6 x 6
Sheeting, balsa 1 mm
Balsa 5 x 2
Hard balsa 5x2, or spruce
Balsa 4 x 15 mm
Here the TE is raised up to 5 mm to get the favorable wing twist.
Wing dihedrall
Level
Wing twist on outer wing only!
50mm
75 mm, leading edge
View O
Section M M
Section J J
Sheeting, balsa 1 mm
Sheeting, balsa 1 mm
sanded to wedge
Balsa 4 x 6, vertical tail members
R 125
Section H H
Rudder
Rudder horn, plywood 1 mm
Section L L
Sheeting, balsa 1 mm, top&bottom
Elevator sanded in wedge cross section (note Section L L)
15° down
20° up
Rudder
Section K K
Pushrod vor elevator, hole in rib Ø2mm
30°
Slit opening in carbon tube, for exit of pushrods (1x rudder, 1x elevator)
Reciever aerial glued to fuselage with self adhesive tape
Section G-G
Aerial
Transparent plastic canopy, made from PET bottle
Front attachment point for wing
Overlap 3 mm
Section C C
Carbon tube (arrow shaft 6mm OD) Ø 6 x 1 L = 450 mm
Section F F
Wing attachment at TE
Plywood 3 mm
Thread M 4 (reinforced with CA glue)
Aerial exit, drill a hole Ø 2 mm
Servos are staggered not to interfere each with other!
Section D D
Rear attachment of the wing
Plastic bolt M 4
Cut the bolt to proper length
Plastic bolt M 4
Servos
C.G.
Forward wing attachment former
Triangular corner, balsa 6 x 6 mm
Reciever
Triangular corner, balsa 6 x 6 mm
Reciever accu pack 4,8 V
Bottom laminated from 4 sheets of 2 mm balsa. Make styrofoam template!
High start hook, threaded steel wire
Wing attachment at LE
Plywood 3mm
Thread M 4 (reinforced with CA glue)
Shaped with shaving and sanding of balsa.
Thread M 4 (reinforced with CA glue)
Servo is taped to fuselage side using both side adhesive tape, or inserted in shrinkable plastic and glued.
Thread M 4 (reinforced with CA glue)
Shaped with shaving and sanding of balsa.
Making of the canopy: make a "positive mold" from styrofoam put it tightly in the PET bottle and dip it into boiling water for a minute. PET will shrink and get the "mold" shape.
Balsa cap, glued in place after balancing the glider.
Section B B
Section A A
Nose lead weigth (if necessary)
Triangular corner filling, balsa 6 x 6 mm. Note the grain direction!
Web between spar caps goes between ribs 1 & 2, and 2 & 3, balaa 2 mm, vertical grain!
rear fuselage part sideplate, balza 3mm, 2 pcs
Nose, balza 6 mm
Nose, balza 6 mm
Sheeting, balza 1 mm
rear upper fuuselage part, balsa 6 mm
Side of forward fuselage, Balsa 6 mm
Rear lower fuselage part, balsa 6 mm
Balsa 1,5 x 5 mm
Balsa 4 x 15 mm, sanded to wedge cross section (note Section N N) or triangular balsa stock.
All wing ribs made from balsa.
2 pcs 6 mm
8 pcs 3 mm
2 pcs 3 mm
2 pcs 6 mm
Section N N
ESC 18-20A + BEC
Section Ae
Reciever
Accu pack
Electric motor speed 400 6V or similar class
Foldable prop 6 x 3", 15 x 8 cm
Electric version
Pure glider version
Wing span: 1500 mm
Wing area: 20,4 dm²
Wing AR: 11
Length : 805 mm
Take off mass: 320 (480*) g
Wing loading: 16 (24*) g/dm²
(Data * are valid for electric version)
(Weigth can vary depending on equipment, wood and covering selection)
Designed by : M. Sersen - Erman
Scale: 1:1
RC MODEL OF GUPPY SAILPLANE