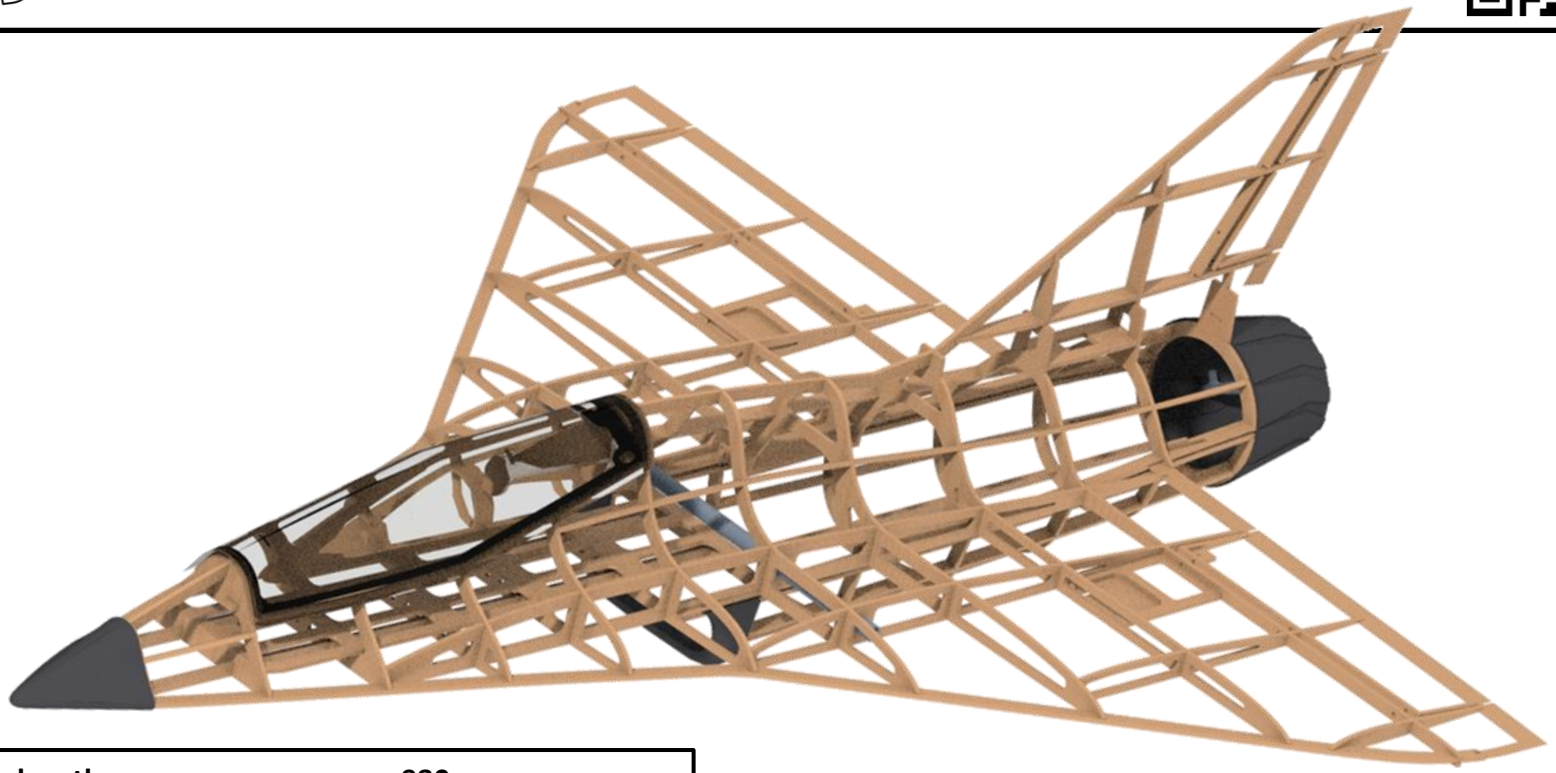
Squall70



length	**980mm**
wing span	**755mm**
weight	**1.7-2.5kg**
wing load	**100g/dm²**
recommended fan	**Ø70mm**
recommended LiPo	**6S 2200 - 4000mAh**

general Information

Thank you for choosing a kit from tomjets and thank you for your trust! Kits from tomjets are not only unique in their design and flight characteristics, but also focus on building as a new experience. Let yourself be surprised!

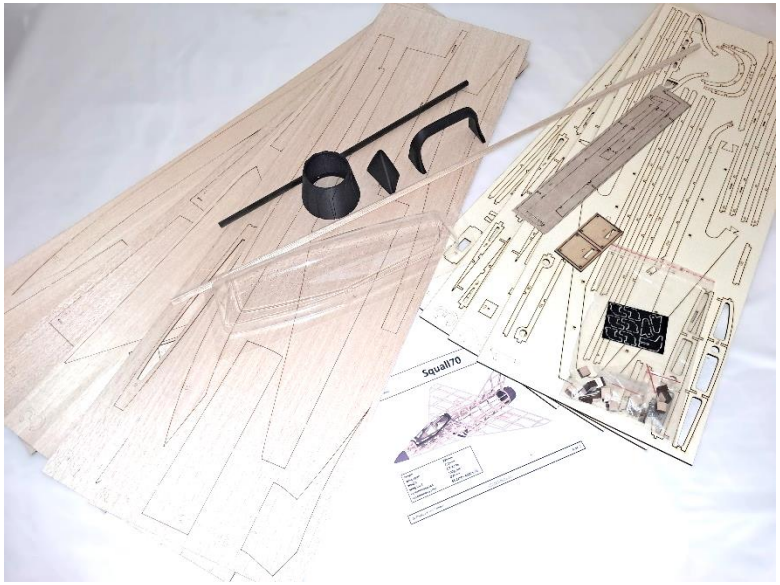
The Squall70 is the most affordable introduction into the tomjets revolution of scratcbuilding. Easy to hand launch and belly land and thus a perfect winter jet, which always fits in any trunk.
The delta shape provides a wide range of speed and with the included vector controls it guarantees a huge fun factor.

For the sake of order, it should be mentioned that it is by no means a toy and that careful construction and flight are required. The responsibility for ensuring safety is entirely with the builder or pilot.

The use of tools is limited to the following: Stanley knife, steel lineal, foil iron, multifunction tool (cutting, grinding, drilling), soldering iron, pins, clamps, brushes, cable ties, paper tape, sandpaper, superglue, white glue, 5min epoxy resin, glue on PU base, nail polish remover, etc….

jet kit content

description	comment	pcs.
poplar plywood 3mm	plate 1-4	1
balsa sheets 2mm	plate 1-5	1
fiberglass parts 1,5mm	control horns, canopy latch,…	1
aircraft plywood 0,4mm	trailing edges	1
birch plywood 2mm	servo covers	1
canopy	0,5mm PET-A	1
wing spar	CFRP 10x8x500	1
nozzle	3D print ABS	1
nose cone	3D print ABS	1
airintake	3D print ABS	1
canopy lock	neodymium magnet D10x3	4
rudder hinges	D2.5xL43xW10mm	8
balsa blocks	for hinge bonding	16
flat headed screw M2,2x10	for servo covers and 3D parts	20
triangular balsa strip 8mmx1m	for controll surface champfer	1



optional content

Squall70 EDF kit

description	comment	pcs.
thrust pipe	0,5mm PET foil 0,6x0,3m	1
vectorblade	3D printed ABS	3
vector star	3D printed ABS	1
hinge wire	1,5x100mm	1
velcro 20x300 mm	for battery mount	2
anti-slip pad ca. 10x20cm	for battery mount	1

Squall70 decals kit

description	comment	pcs.
high-quality fuel-resistant adhesive film	tomjets design	1

optional content

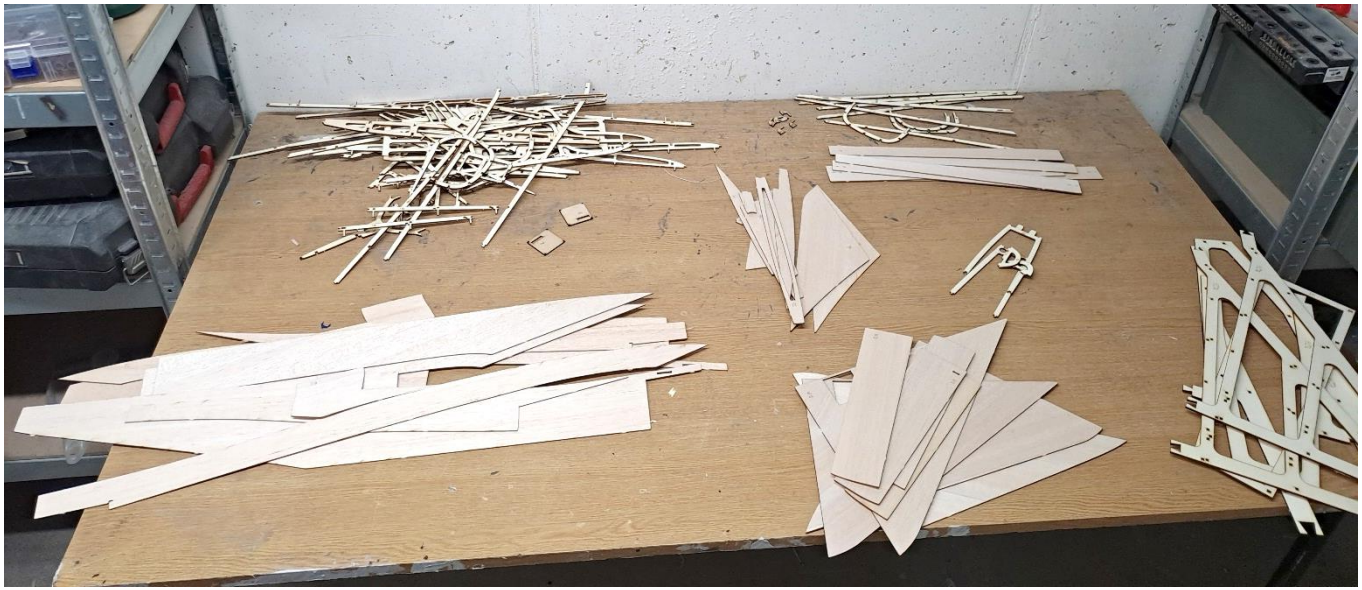
tomjets bungee launuch kit

description	comment	pcs.
20m rope (8m expander)	incl. anchor and spindle	1

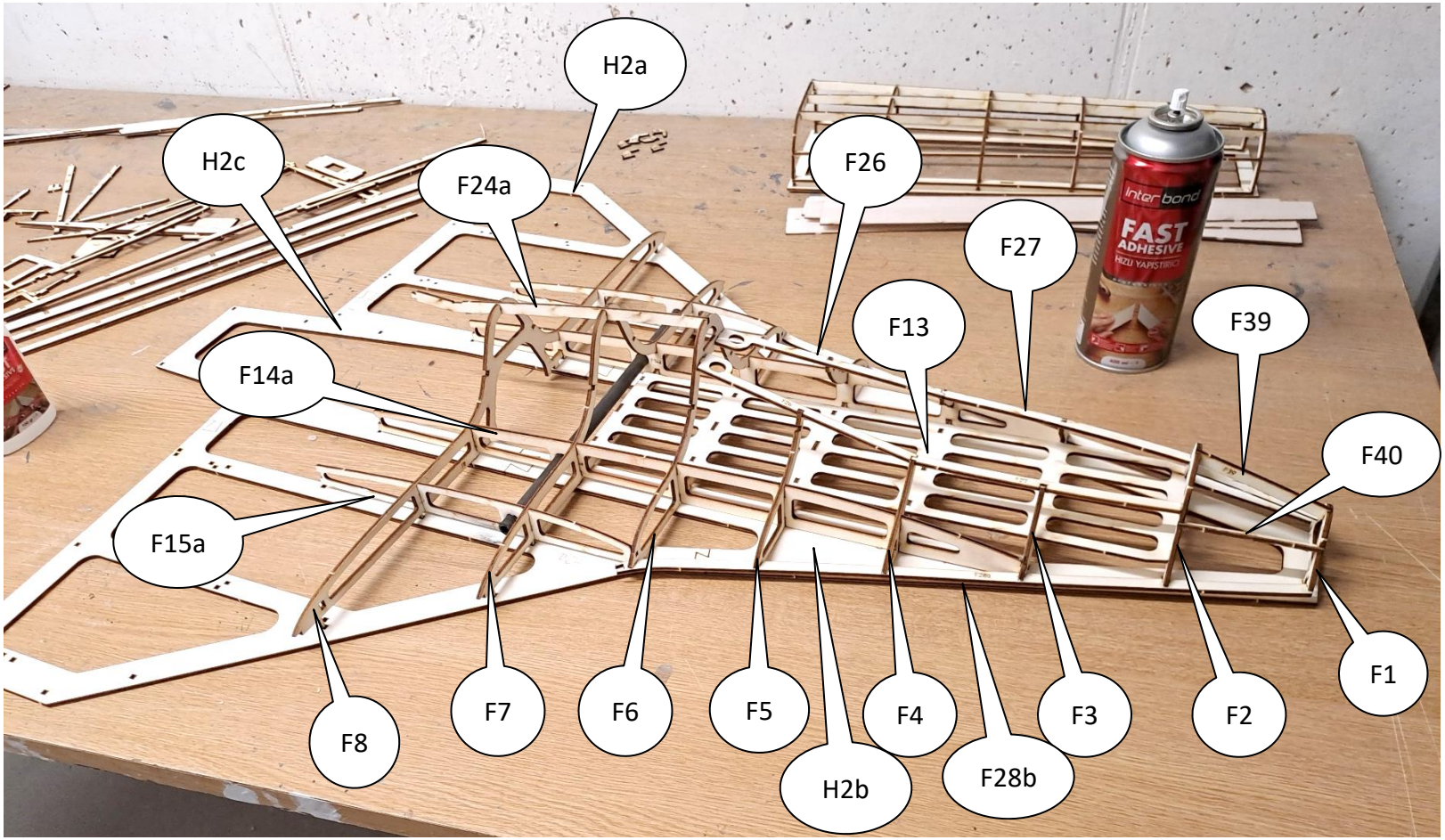
remove the wood parts

H=helling
F=fuselage
W=wing
R=rudder
C=canopoy

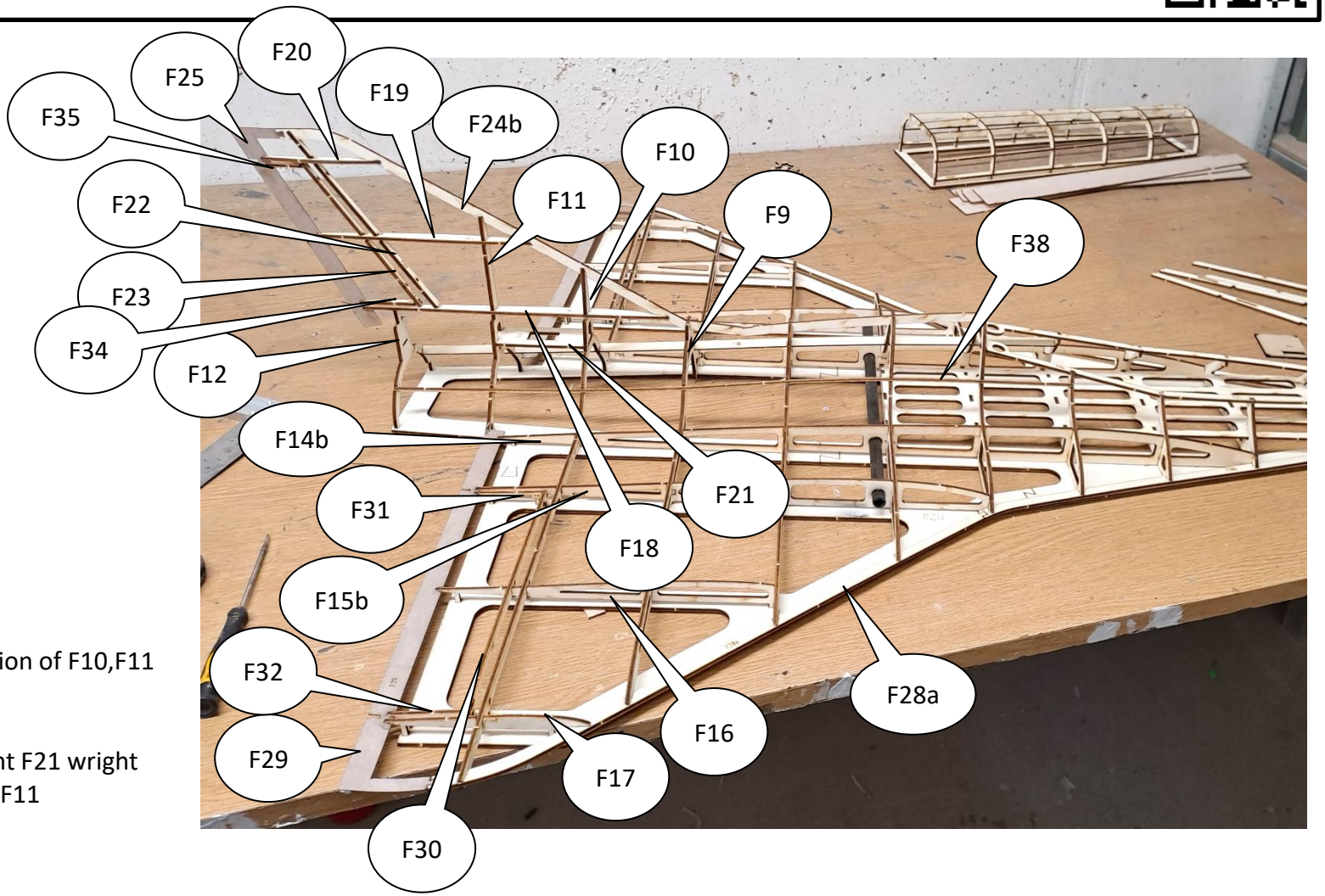
handle with care



fuselage front



fuselage rear

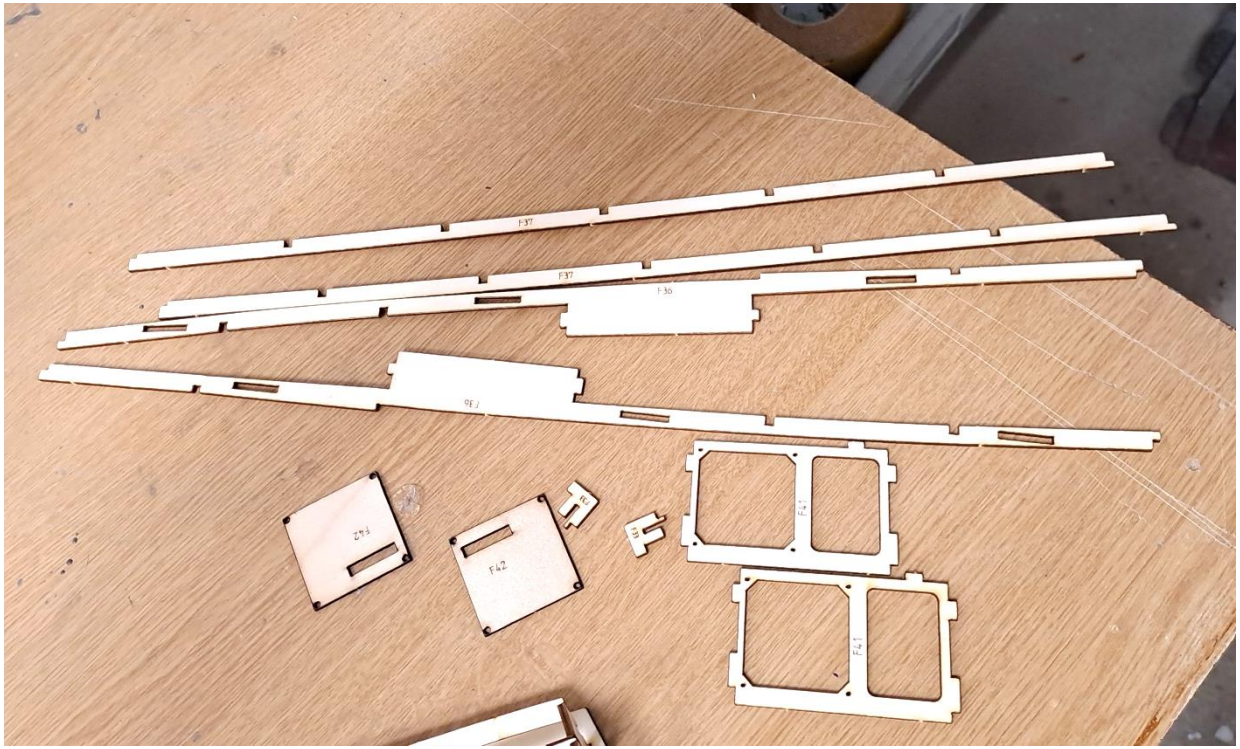


direction of F10,F11

mount F21 wright after F11

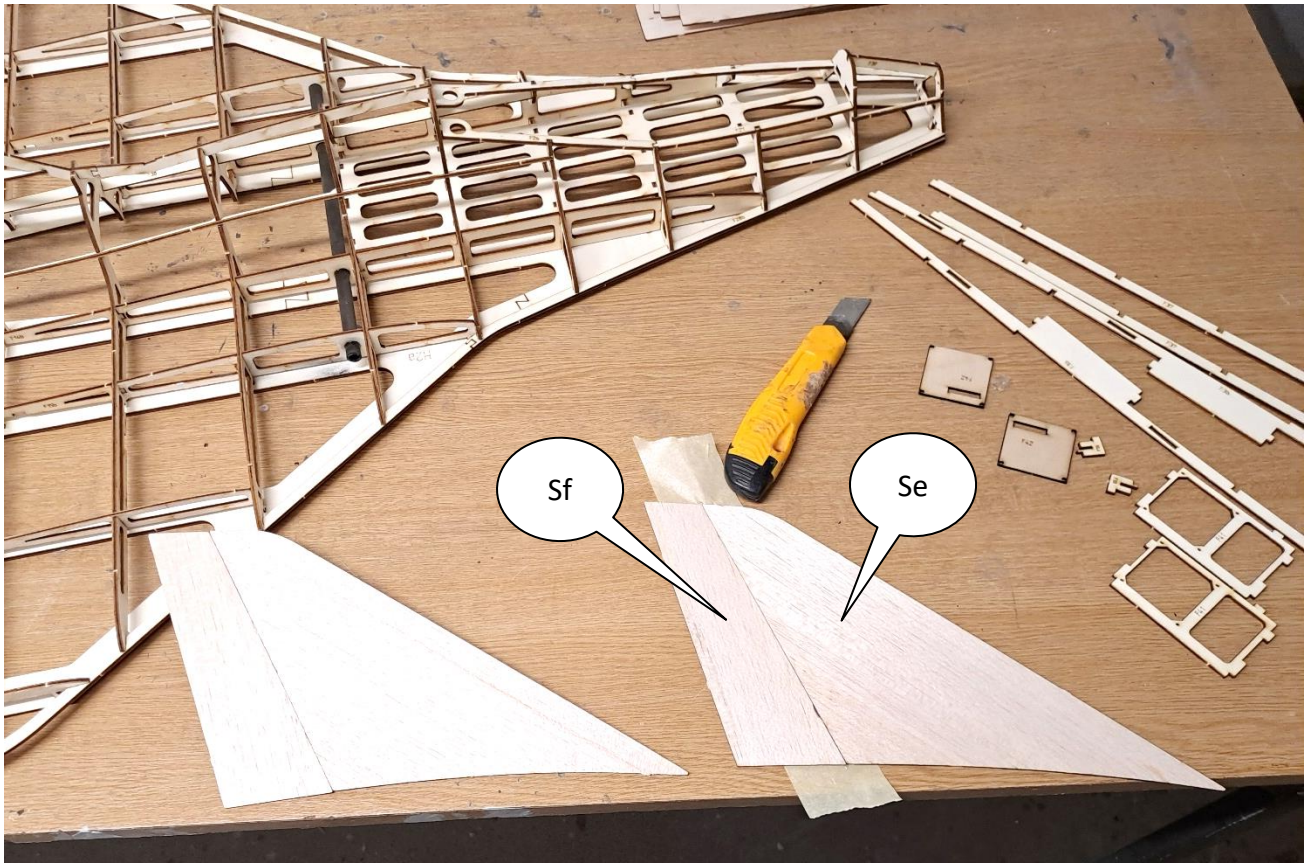
fuselage

F33, F36, F37, F41, F42 can be glued from the bottom, after the top is sheeted



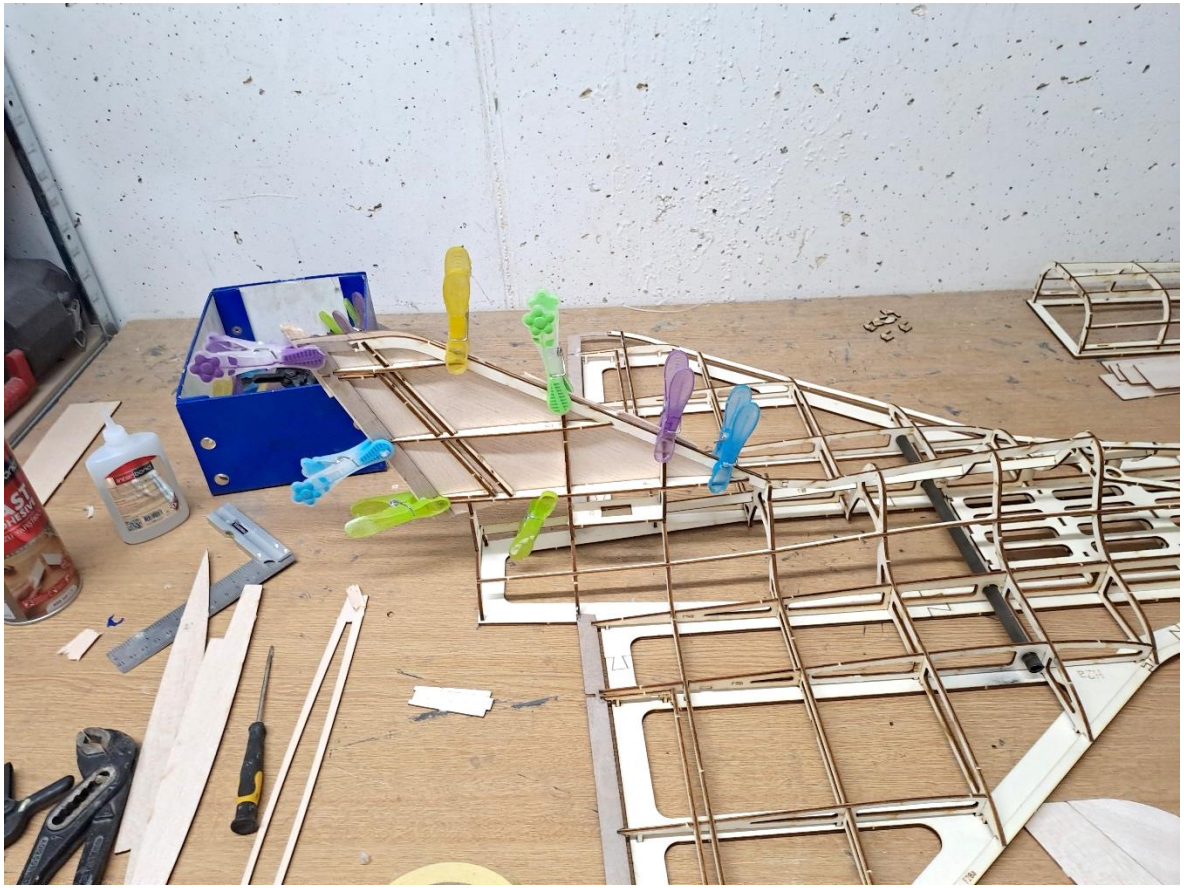
sheeting rudder

glue Se + Sf before



sheeting rudder

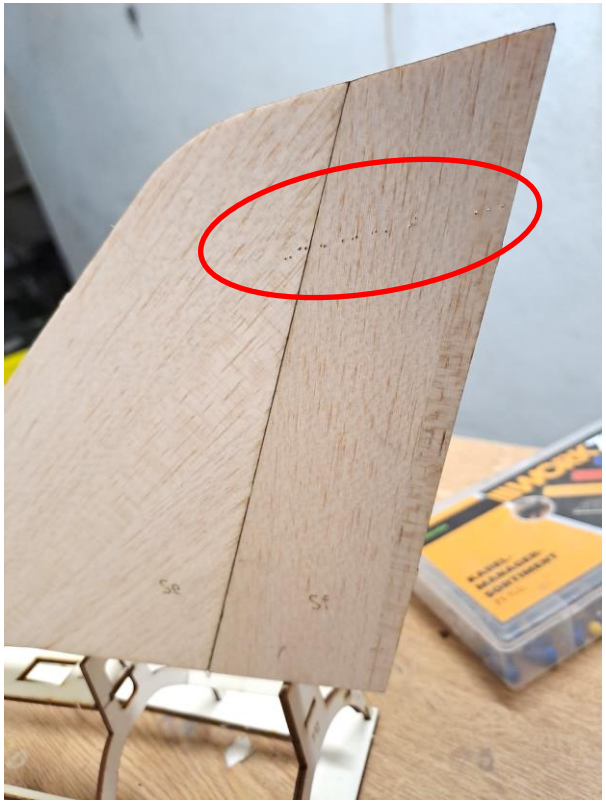
use CA Glue where a fast bonding is required



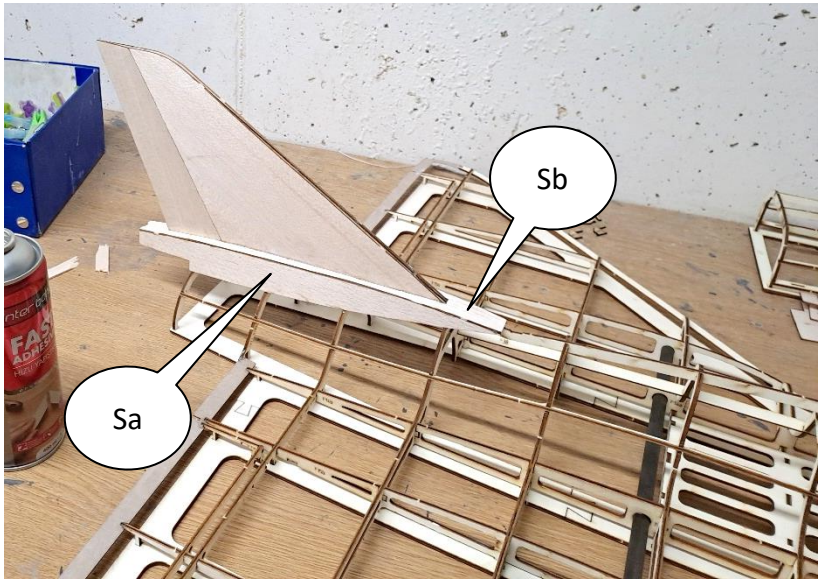
sheeting rudder

glue balsa blocks for the hinges and cut the material above

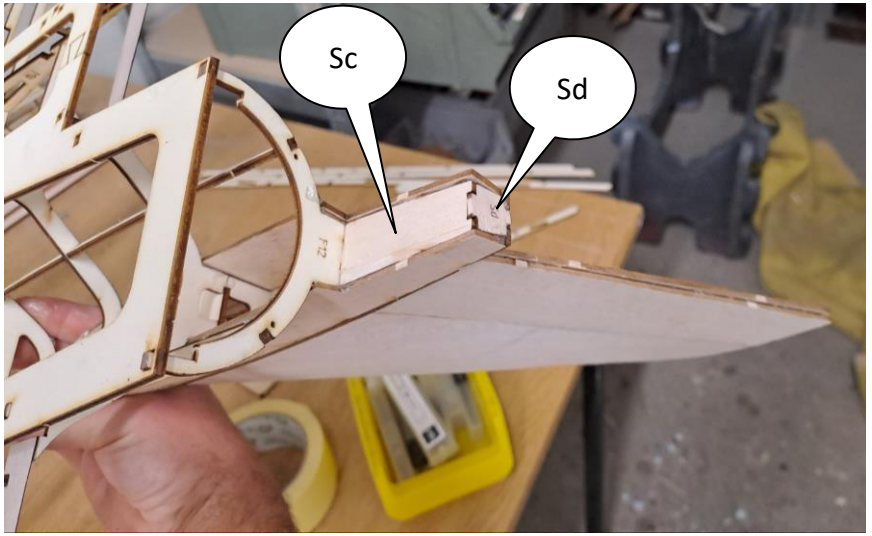
mark the cutting line by sticking a needle through



sheeting rudder

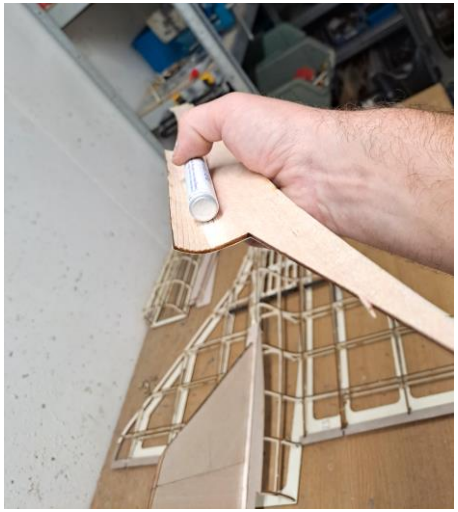


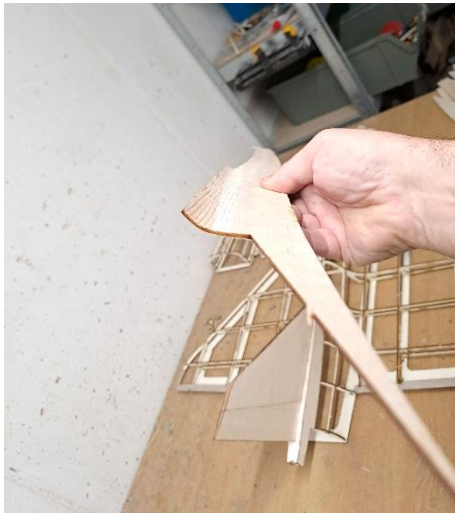
Flip the jet + helling when access is needed;
the helling is not deciding at this stage



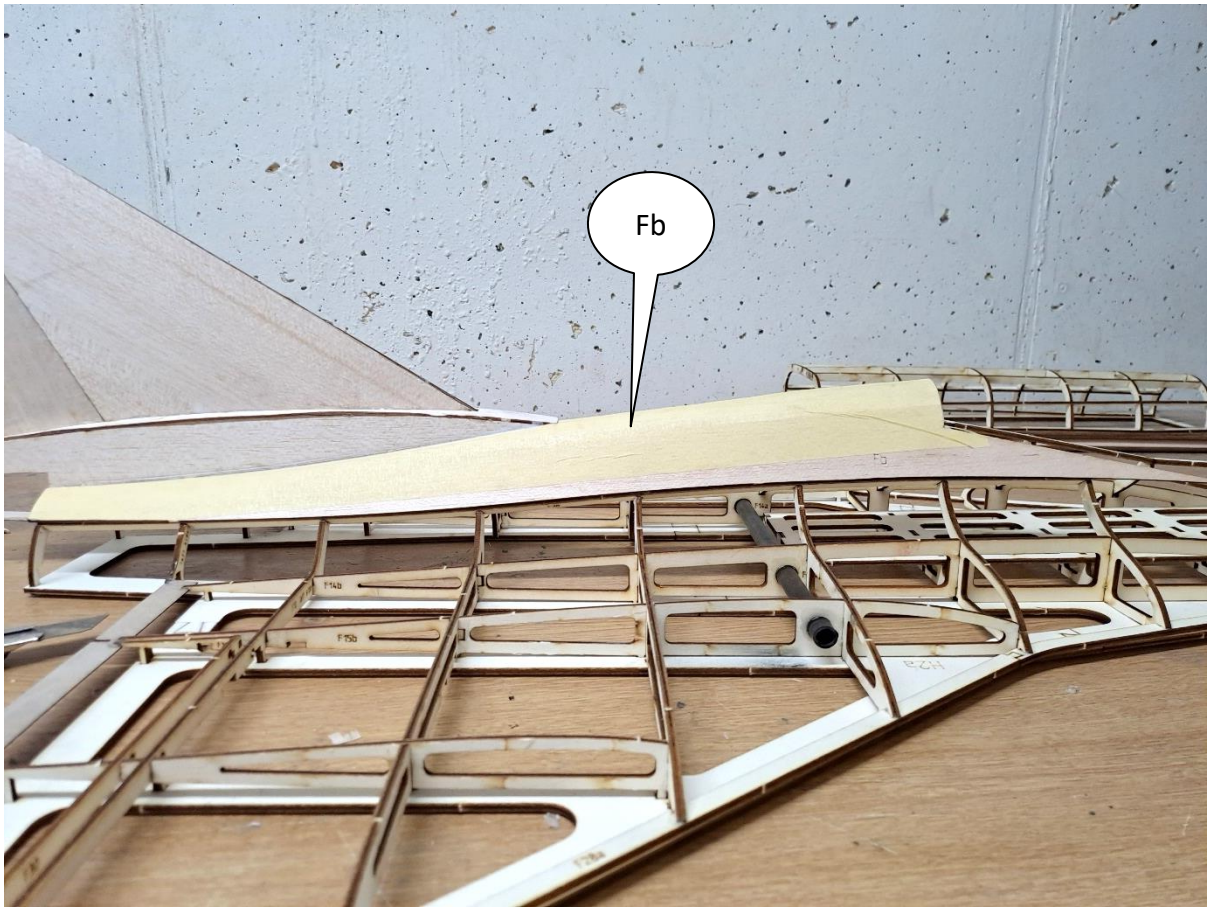
bending balsa sheets

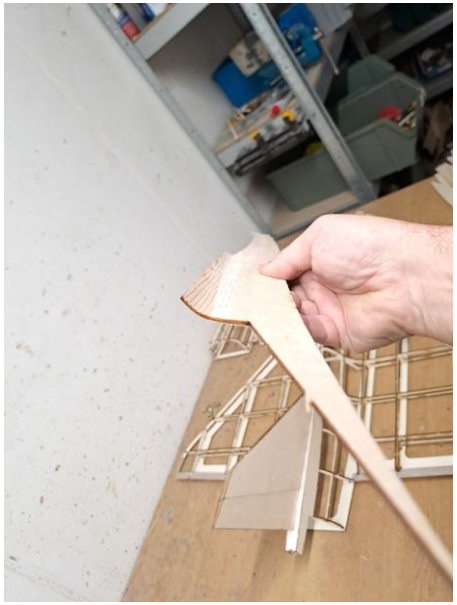
- use the *tomjets-balserroller* on the compressed fiber
- apply tape on the extended fiber
- use some mold and bend your sheet





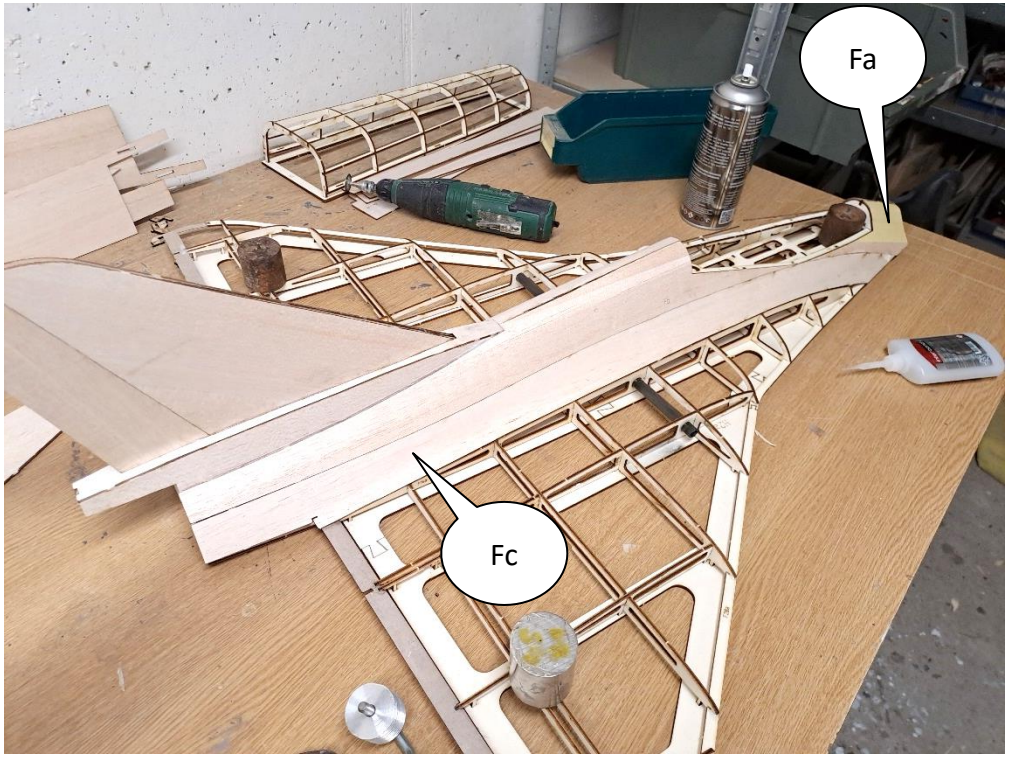
sheeting fuselage top side





use CA Glue where a fast bonding is required

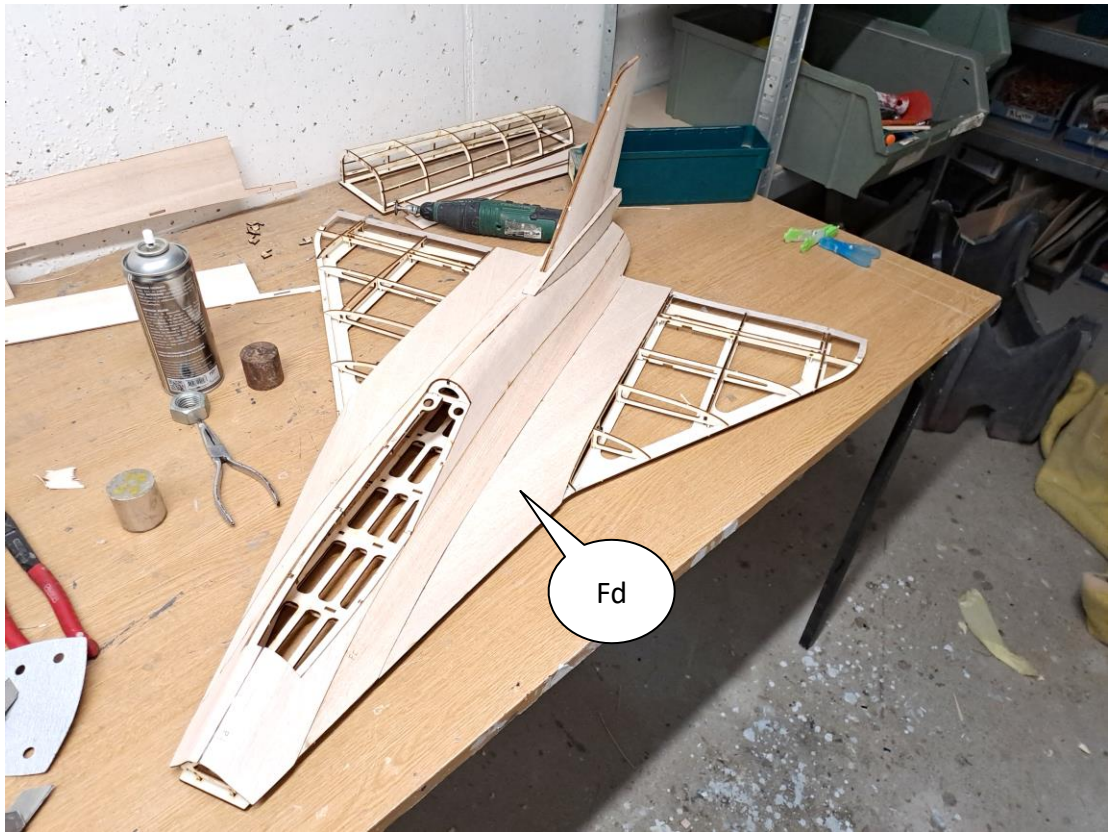
sheeting fuselage top side

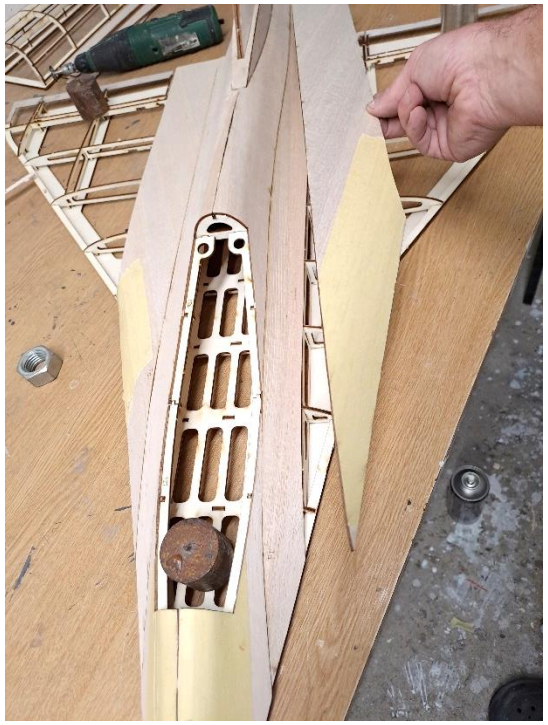


apply a sufficient amount of weight, and make sure that your fuselage is properly aligned on your building plate

prebend your balsa sheets

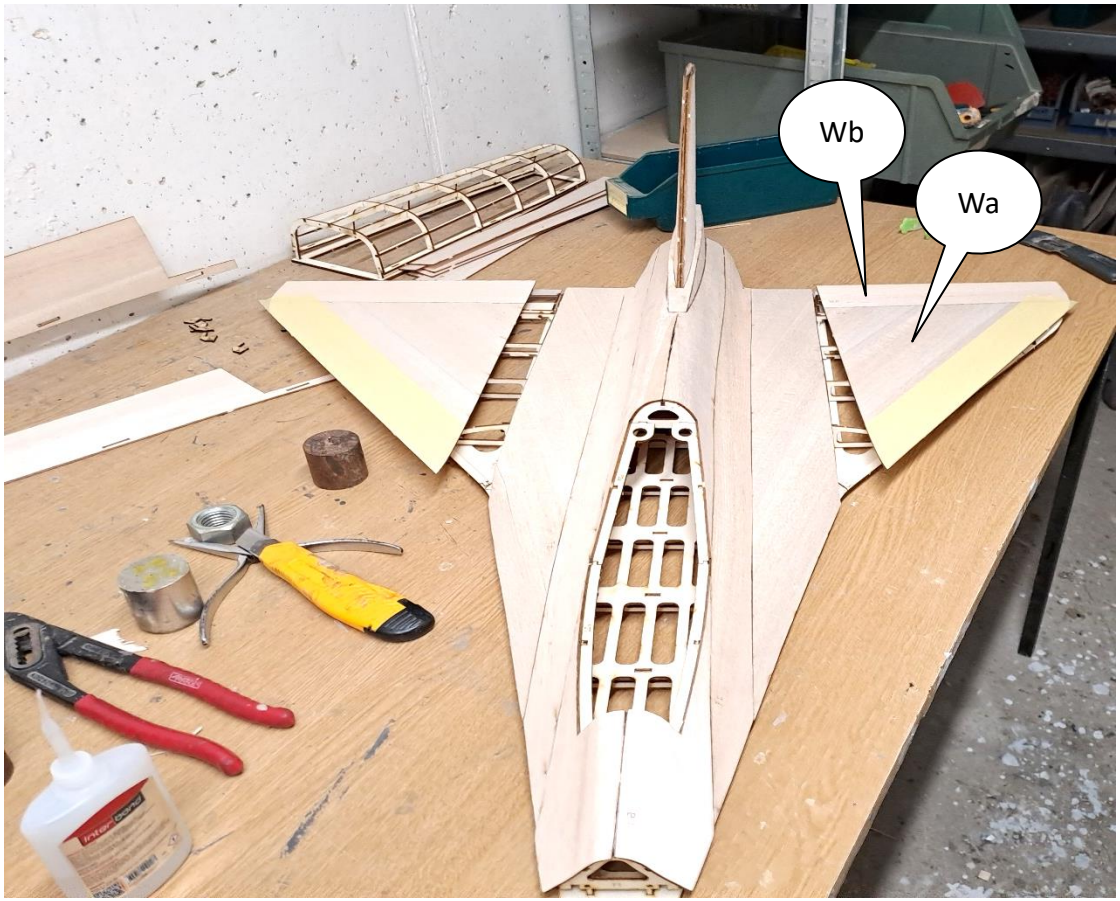
sheeting fuselage top side





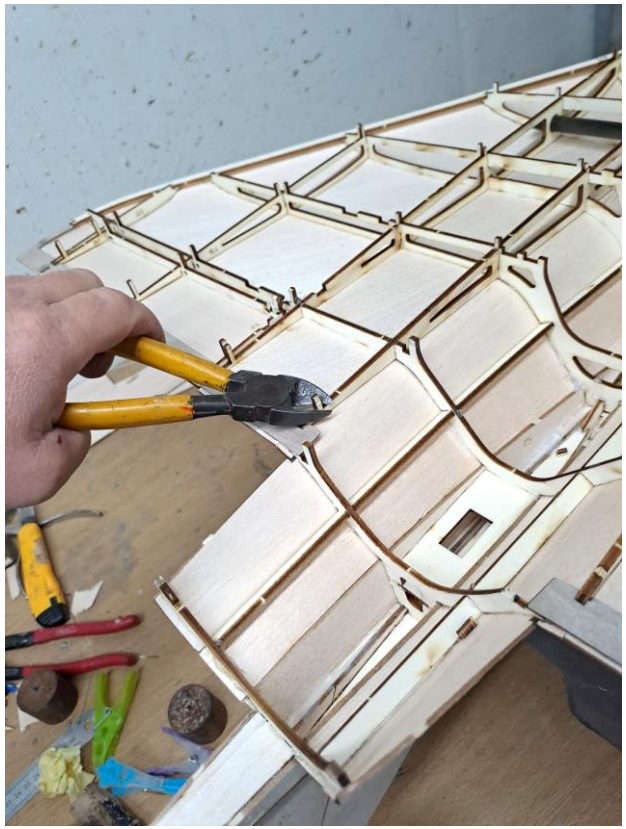
prebend your balsa sheets

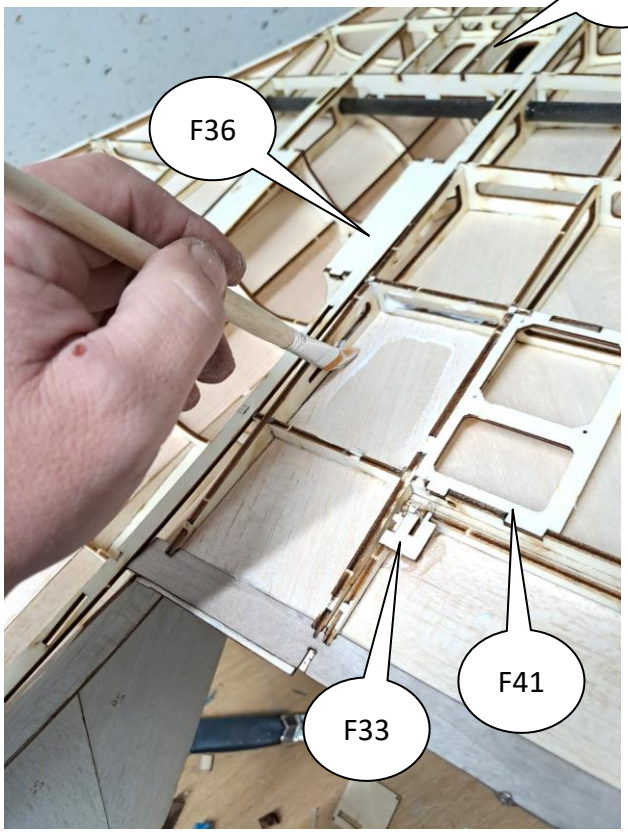
sheeting wing top side



glue Wa + Wb before

sheeting fuselage bottom side

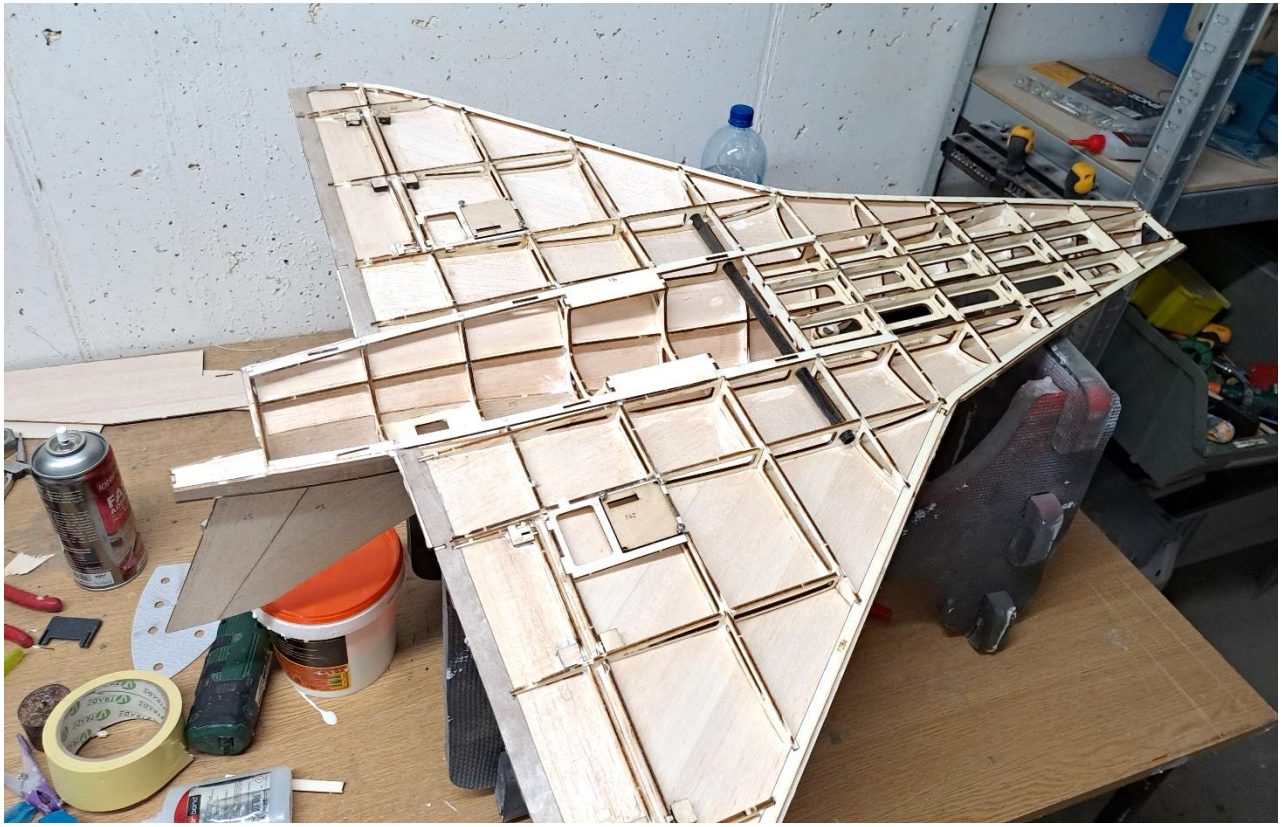




apply some white glue if needed

remove fuselage from helling, cut support the legs and assemble the parts which you couldn´t access from the top

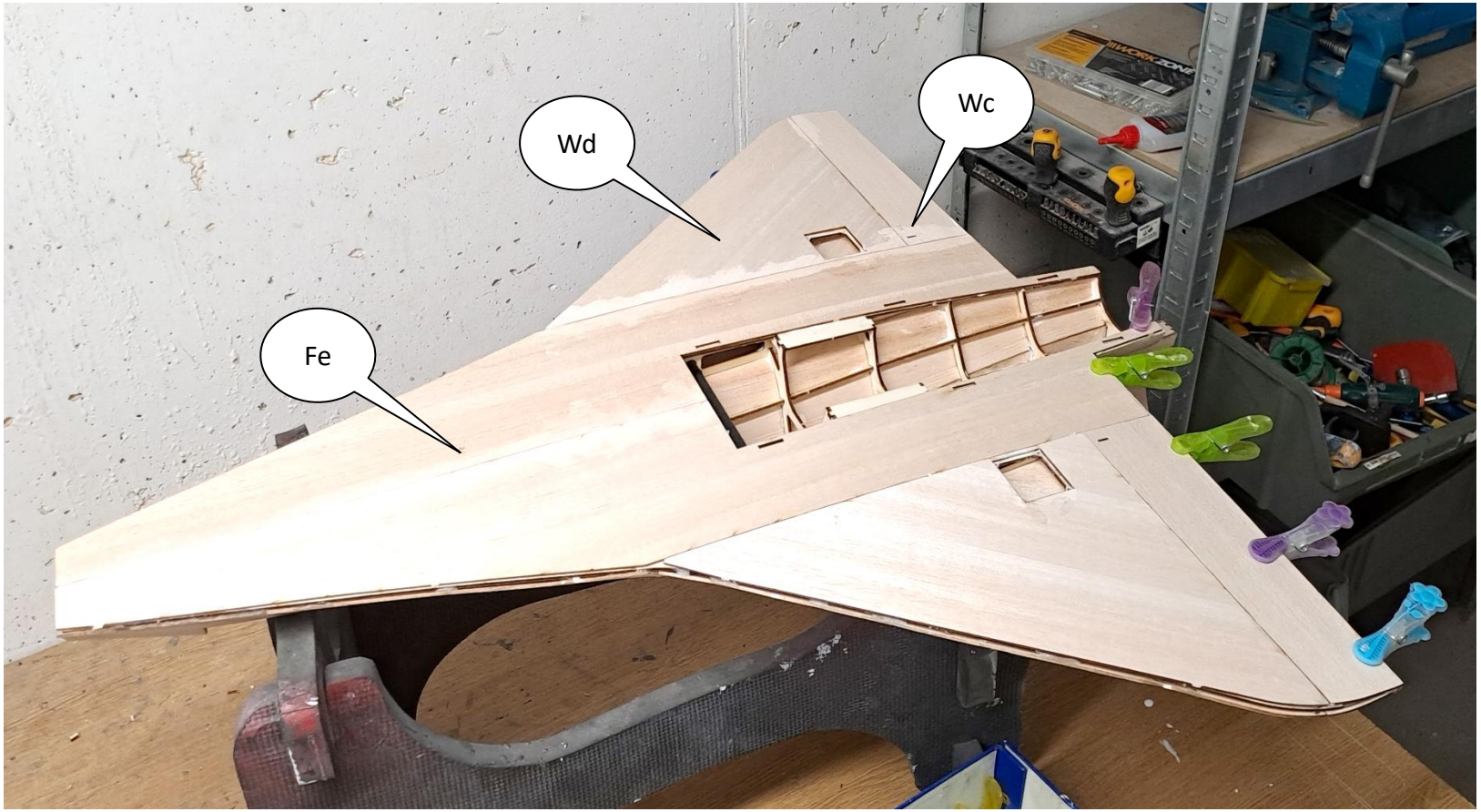
sheeting fuselage bottom side



glue the support blocks for the hinges and mark the cutting line of the ailerons

mount the servo covers for guiding

sheeting fuselage bottom side



glue Wd + Wc before

do not use weights in order to avoid distortion!

bungee hook

make sure that the bungee hook fits in position; but remove it again. the hook can be glued at the very end after the surface finish

close the leading edge

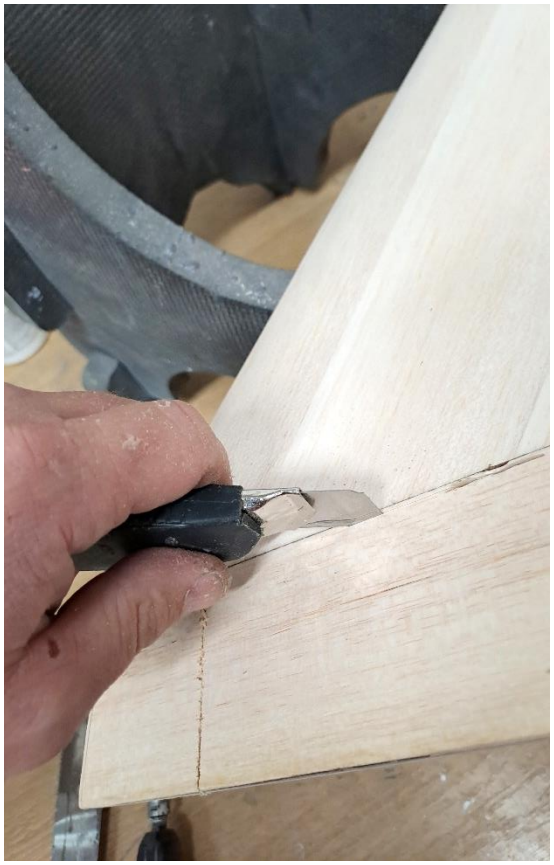
use balsa leftovers for closing the leading edge

apply some tape on the extended fiber

close the leading edge

close in the same way the leading edges of the wings and sand them

sepearat the controll surface



sepearat the controll surface

Mark the positions of the hinges before attaching the triangular balsa strip

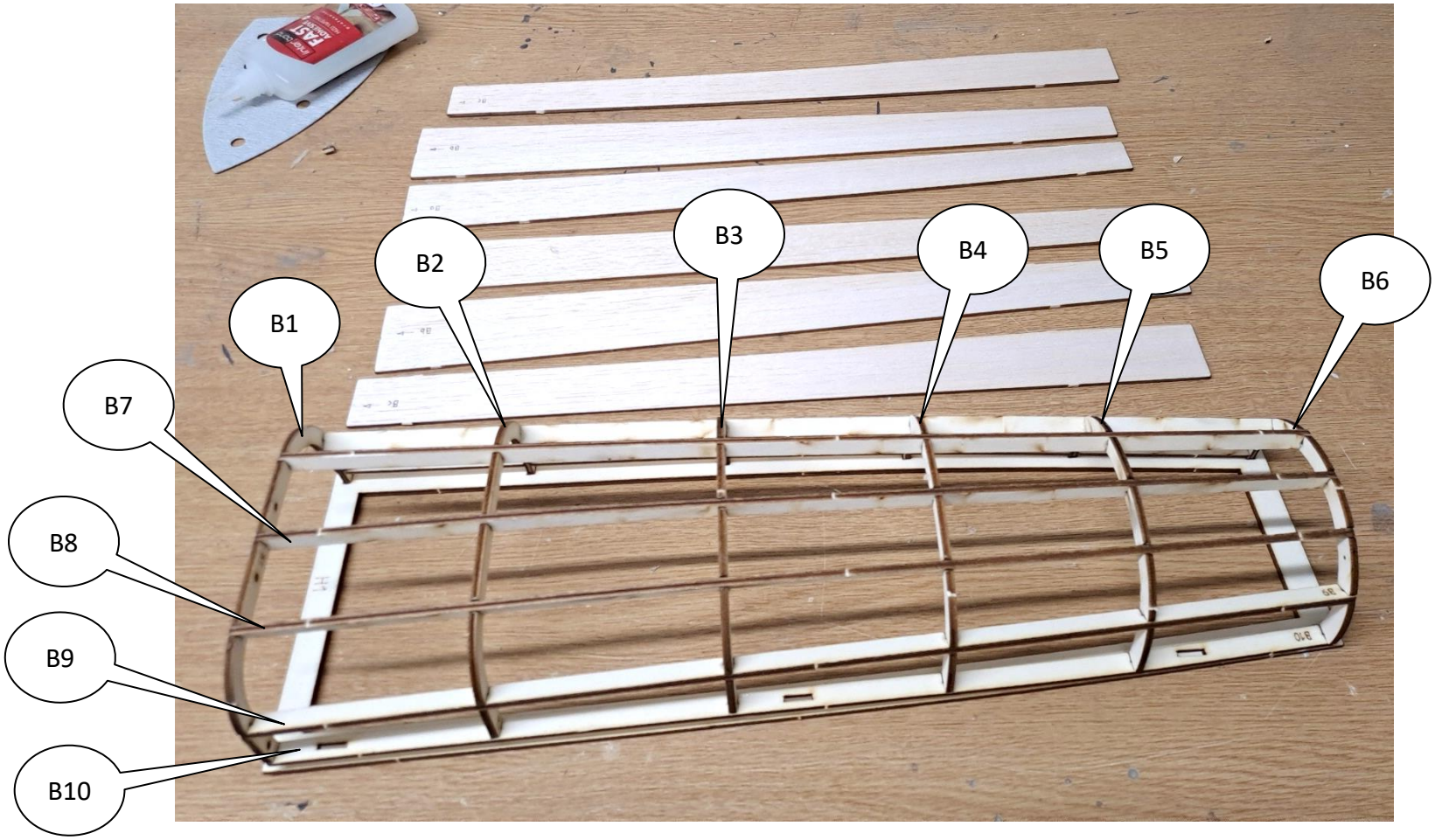
use a 3mm drill

sepearat the controll surface

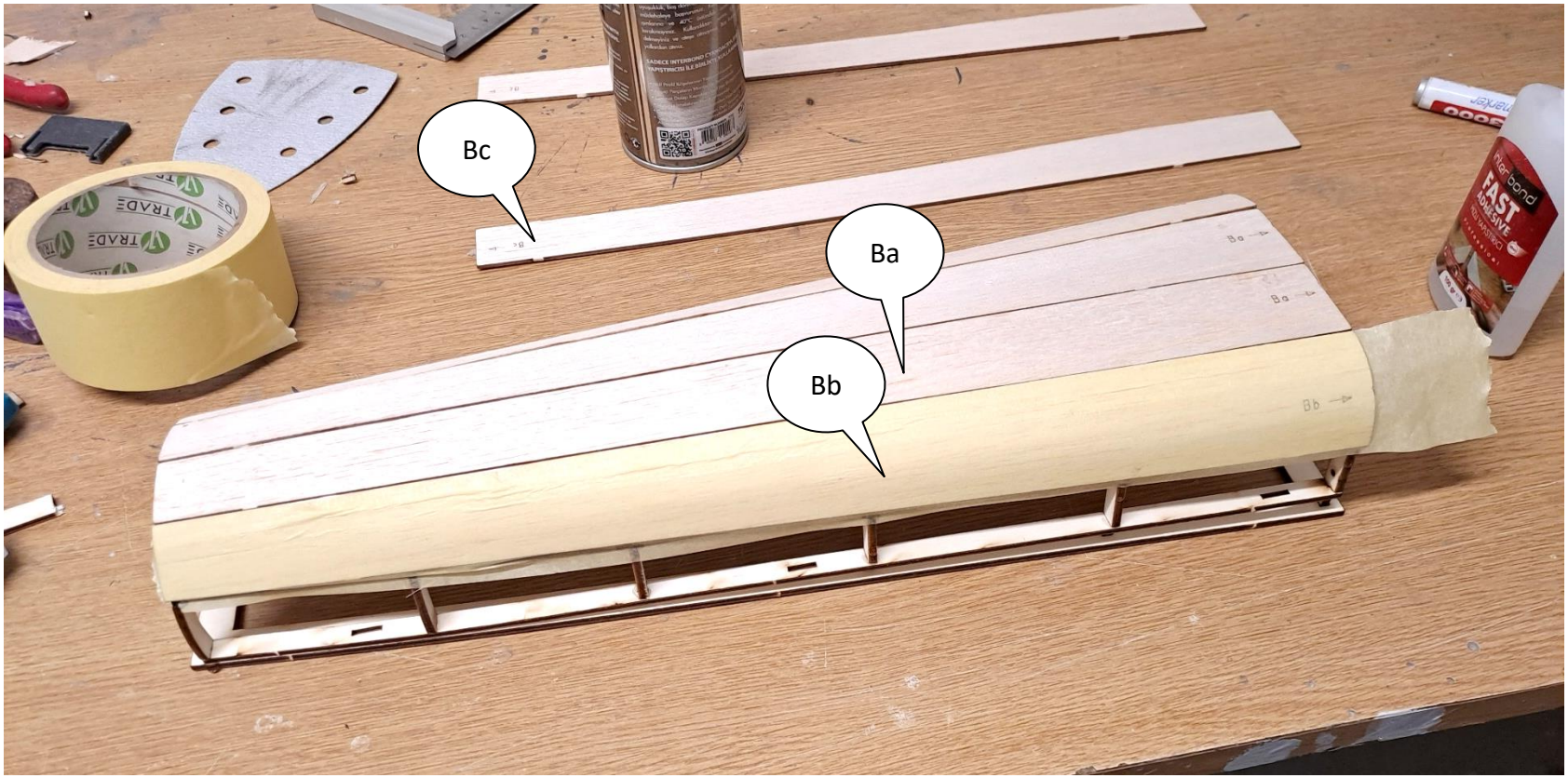
sink the hinges completely in the triangular balsa strip

do not yet bond the hinges and the ruder horns

bottom cover



bottom cover

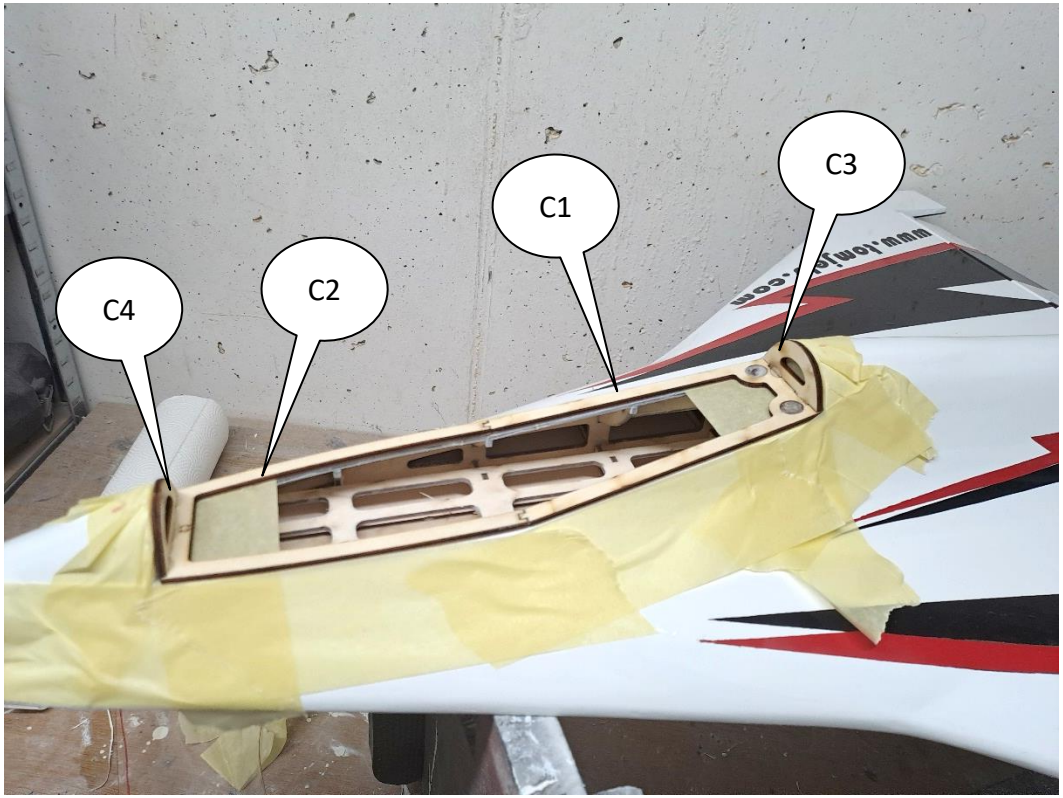


apply some tape on the extended fiber

surface finisch

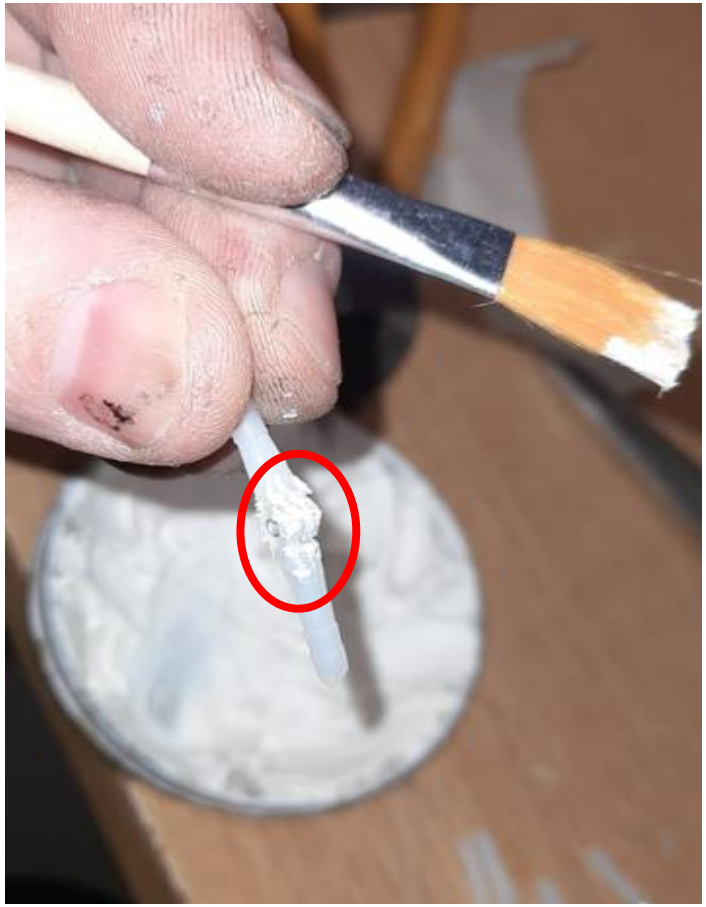
use 50g/m² glasfiber or heatshrink foil for covering

canopy frame



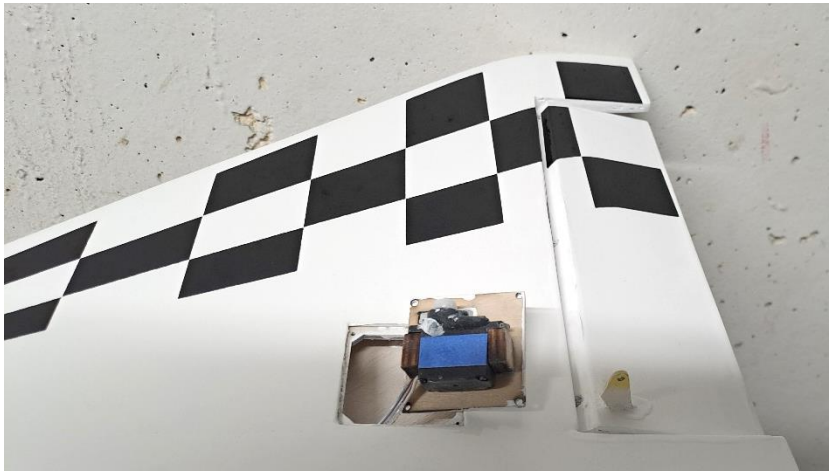
align the canopy frame in installed condition when gluing

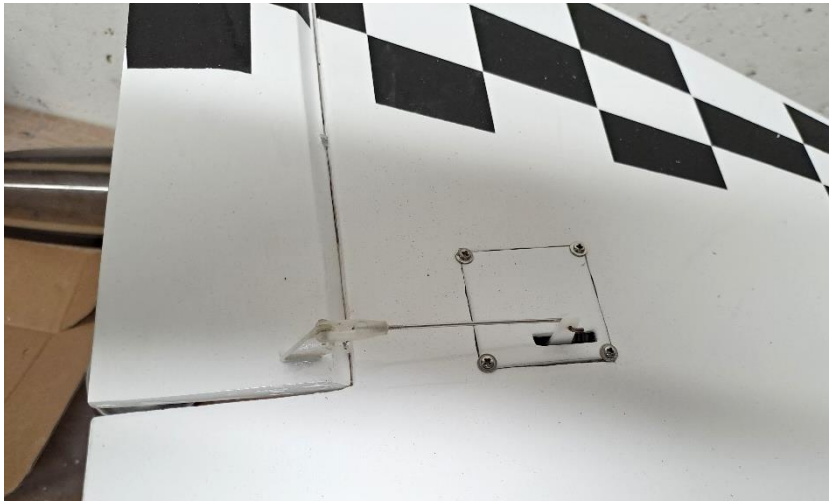
bonding the hinges



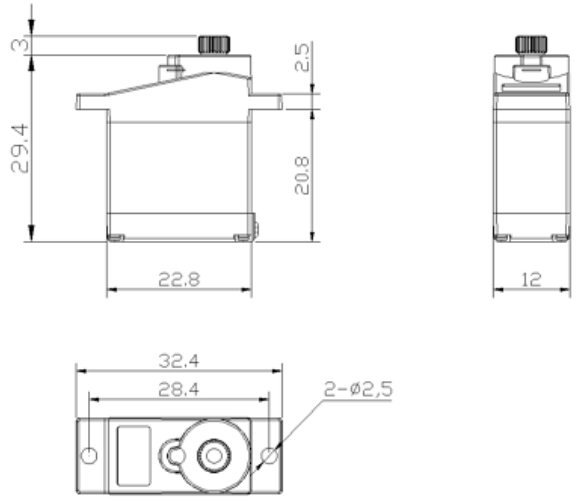
use grease to protect the hinges from glue

installation of the servos

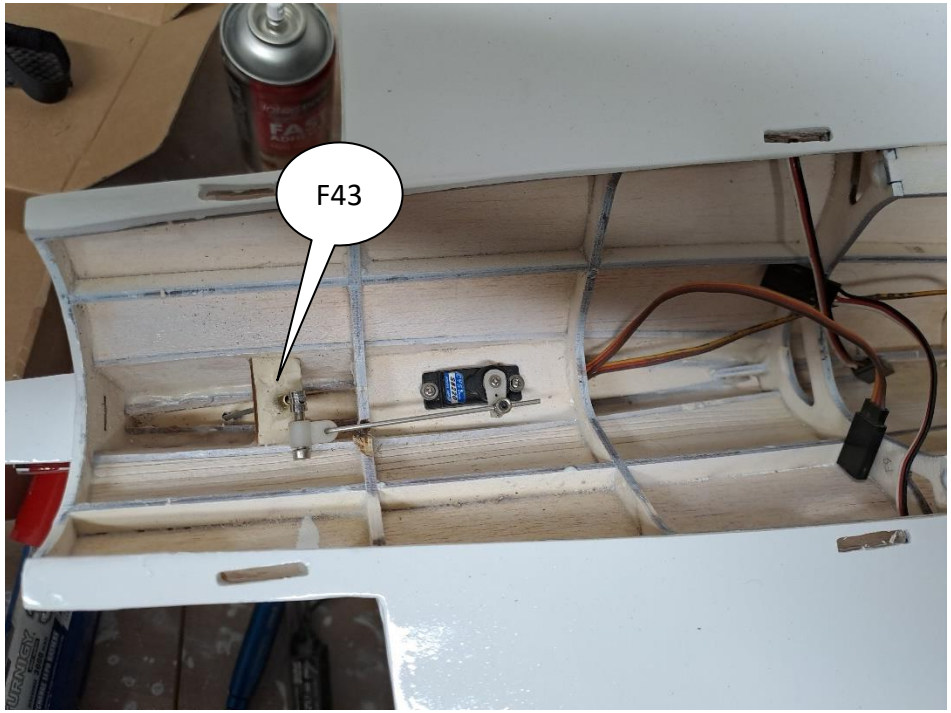




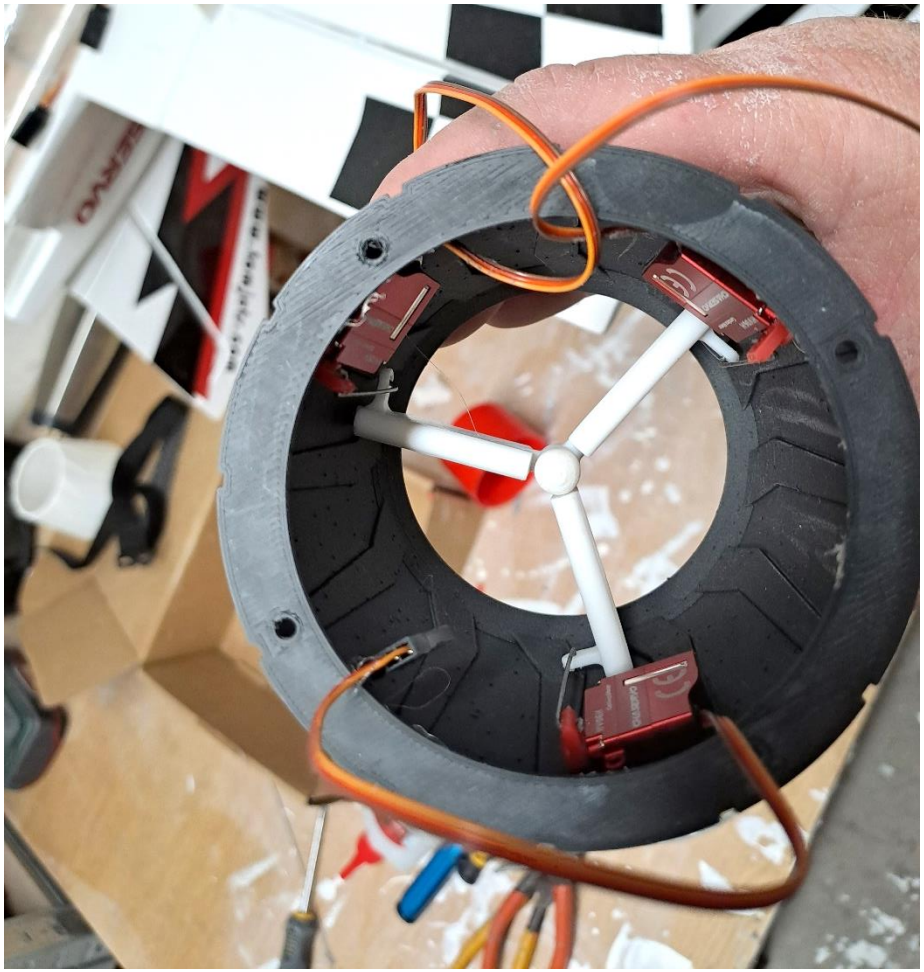
recommended dimensions



installation of the servos

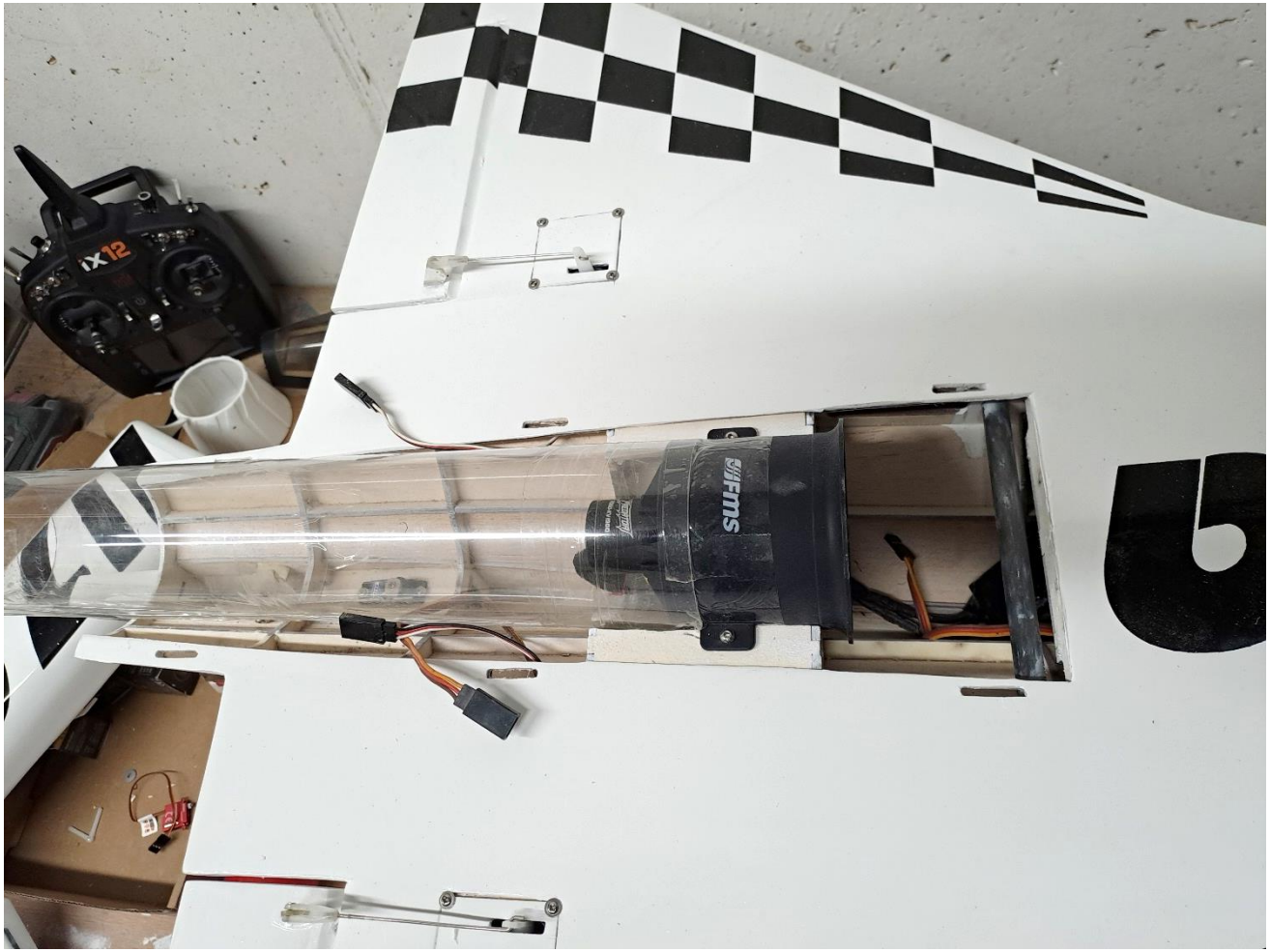


vector control



by choosing the right mounting position of your servos you can adapt the deflection of the vector blades according to the control surfaces, and therefore save channels on your transmitter

installing the edf



settings

elevator	± 20 mm + 30% expo
aileron	± 15 mm + 30% expo
Rudder	± 25 mm + 30% expo
CoG	7mm (behind the wood edge of the inlet)