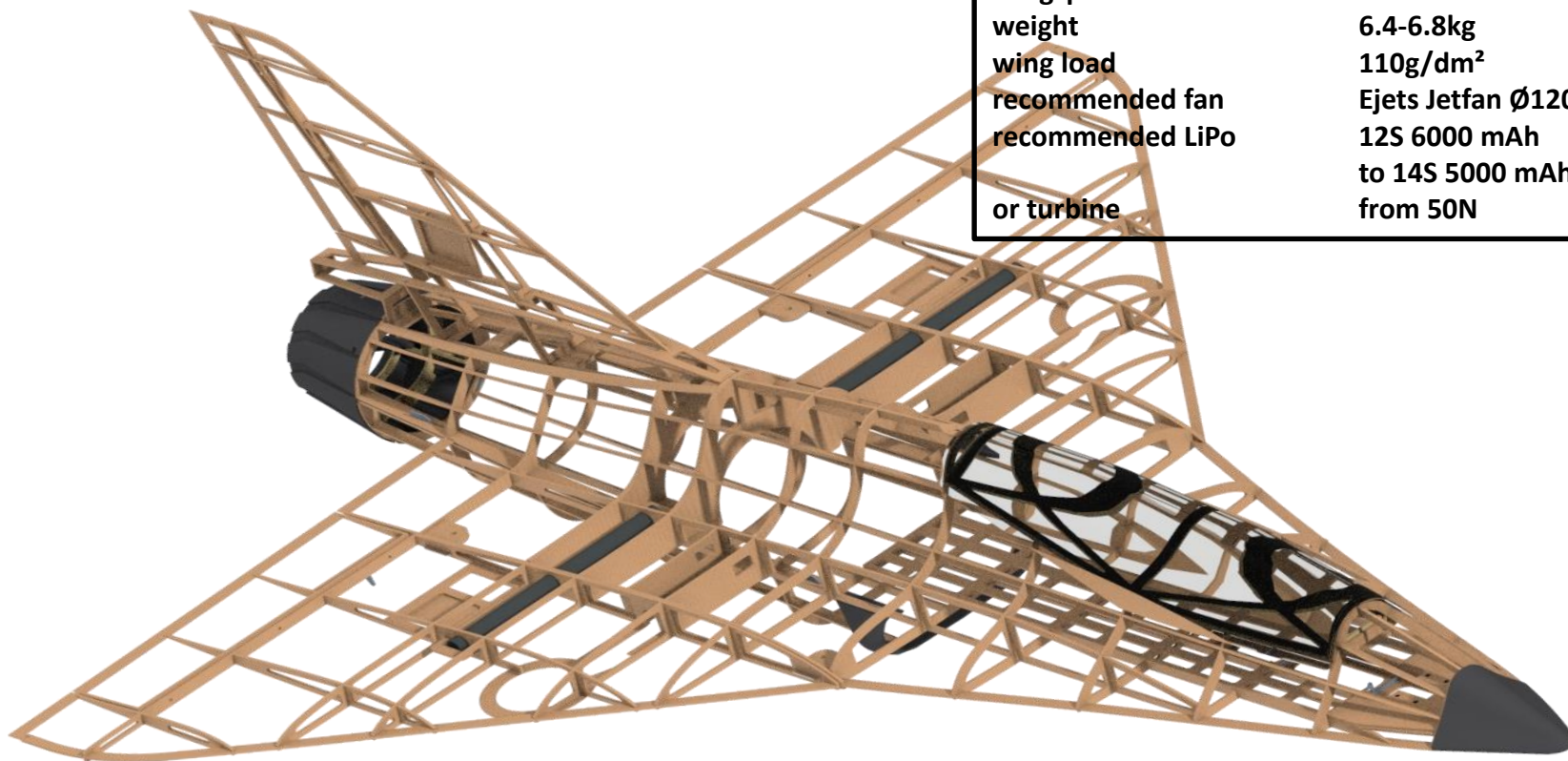




Squall120



length	1720mm
wingspan	1280mm
weight	6.4-6.8kg
wing load	110g/dm ²
recommended fan	Ejets Jetfan Ø120mm
recommended LiPo	12S 6000 mAh
or turbine	to 14S 5000 mAh
	from 50N





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!

Turning your delta into the curve, reducing speed without any flaps and riding with high angle of attack on the jet of air, only through targeted dosing of the thrust preparing for landing looks awesome, but has to be trained! Thanks to its good-natured behaviour, tomjets offers you the perfect trainer for this with the Squall120

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, balsa plane, 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



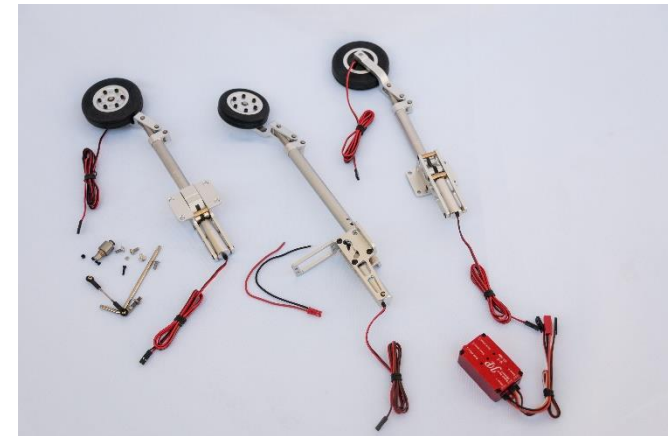
description	comment	pcs.
poplar plywood 3mm	plate 1-12	1
balsa sheets 2mm	plate 1-10	1
fiberglass parts 1,5mm	control horns, canopy latch,...	1
aircraft plywood 0,4mm	trailing edge, templates,...	1
birch plywood 2mm	servo covers	1
canopy	0,5mm PET-A	1
wing spar	Ø18 mm 500 mm	1
protection mesh	for airtake	1
nozzle	3D print PLA	1
nose cone	3D print PLA	1
airintake	3D print PLA	1
canopy lock	Ø3mm	1
rudder hinges	D2.5xL43xW10mm	9
balsa blocks	for hinge bonding	16
flat headed screw M4x12	for wing screwing	4
drive-in nut M4x6	for wing screwing and retracts	16
flat headed screw M2,2x10	for servo covers	28
drive-in nut M3x5	for retracts screwing	12
button head screw M4x12	for retracts screwing	12
triangular balsa strip 8mmx1m	for controll surface champfer	1





Squall120 gear kit

description	comment	pcs.
Metal Struts Set + Brakes + Controller	JP Hobby ER-120 (Tomjets Squall 110 1.28m)	1



Squall120 decals kit

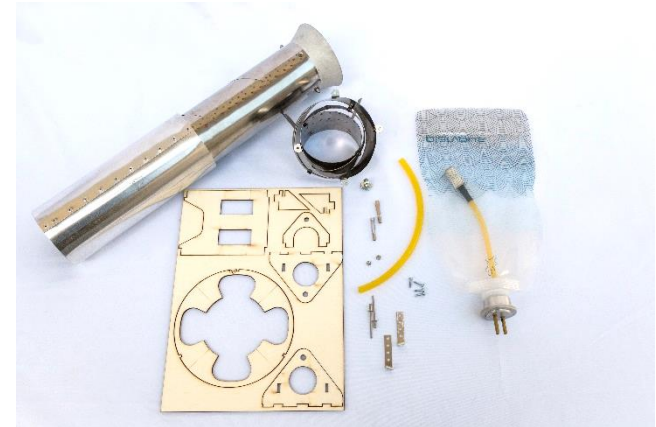
description	comment	pcs.
high-quality fuel-resistant adhesive film	tomjets design	1





Squall120 turbine kit

description	comment	pcs.
2l bagtank	fully assembled	1
thrust pipe	400mm D70	1
thrust vector unit	D75	1
poplar plywood 3mm	mounting brackets	1
drive-in nut M4x6	for tank mount	1
flat headed screw M4x10	for tank mount	1
8mm silicone hose	heat insulation	1



Squall120 EDF kit

description	comment	pcs.
thrust pipe	0,5mm PET foil 1x0,5m	1
poplar plywood 3mm	mounting bracket for controller	1
vectorblade	3D printed	3
vector star	3D printed	1
velcro 20x300 mm	for battery mount	2
anti-slip pad ca. 20x20cm	for battery mount	1





remove the wood parts



H=helling
F=fuselage
W=wing
R=rudder
C=canopoy
S=servo
G=gear door

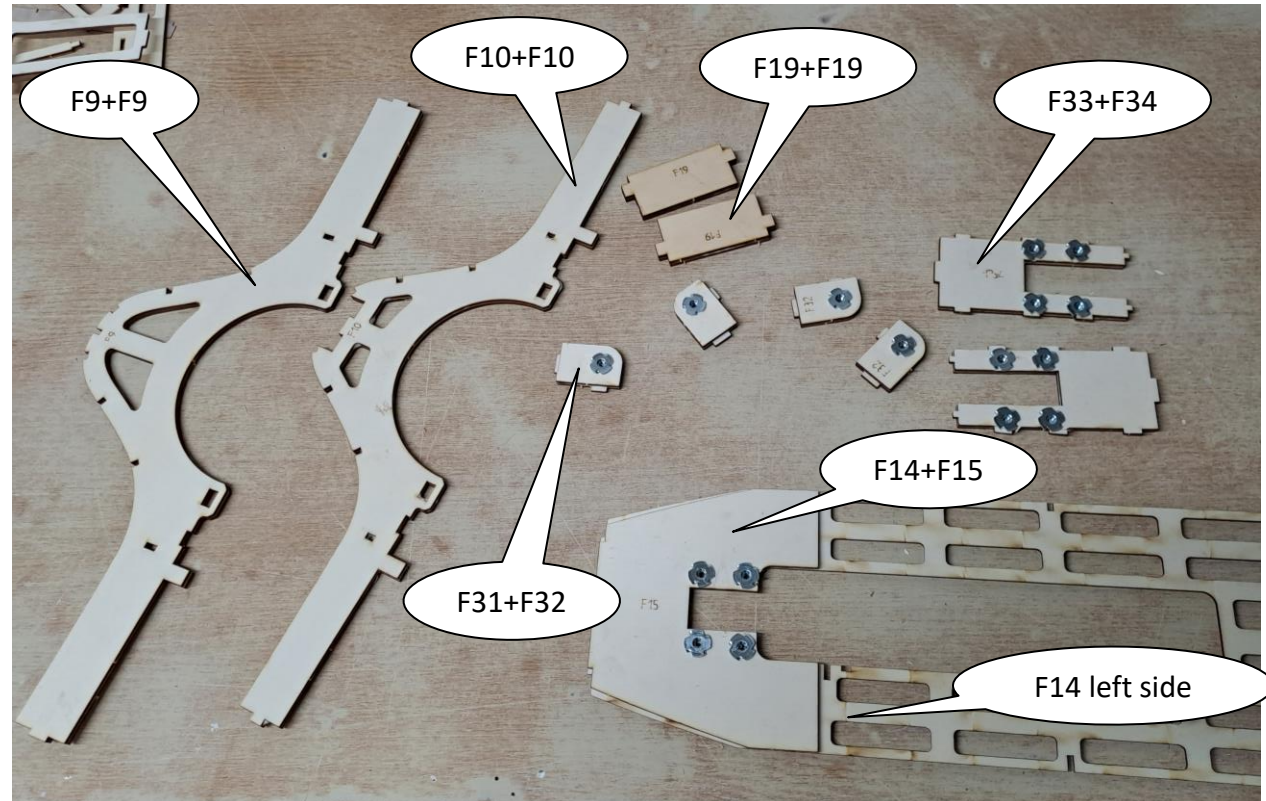


handle with care



i use F19 wide provided in the turbine kit in case of turbine use

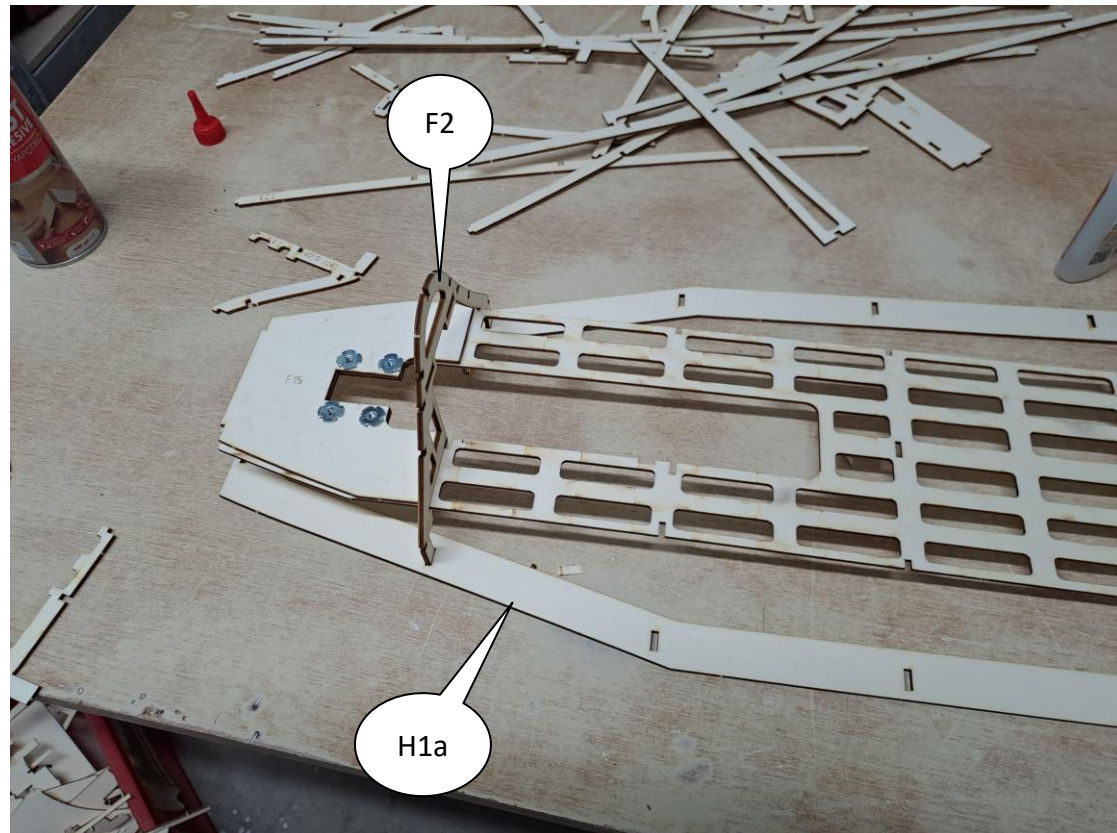
! watch carefully the mounting direction of the drive-in nuts



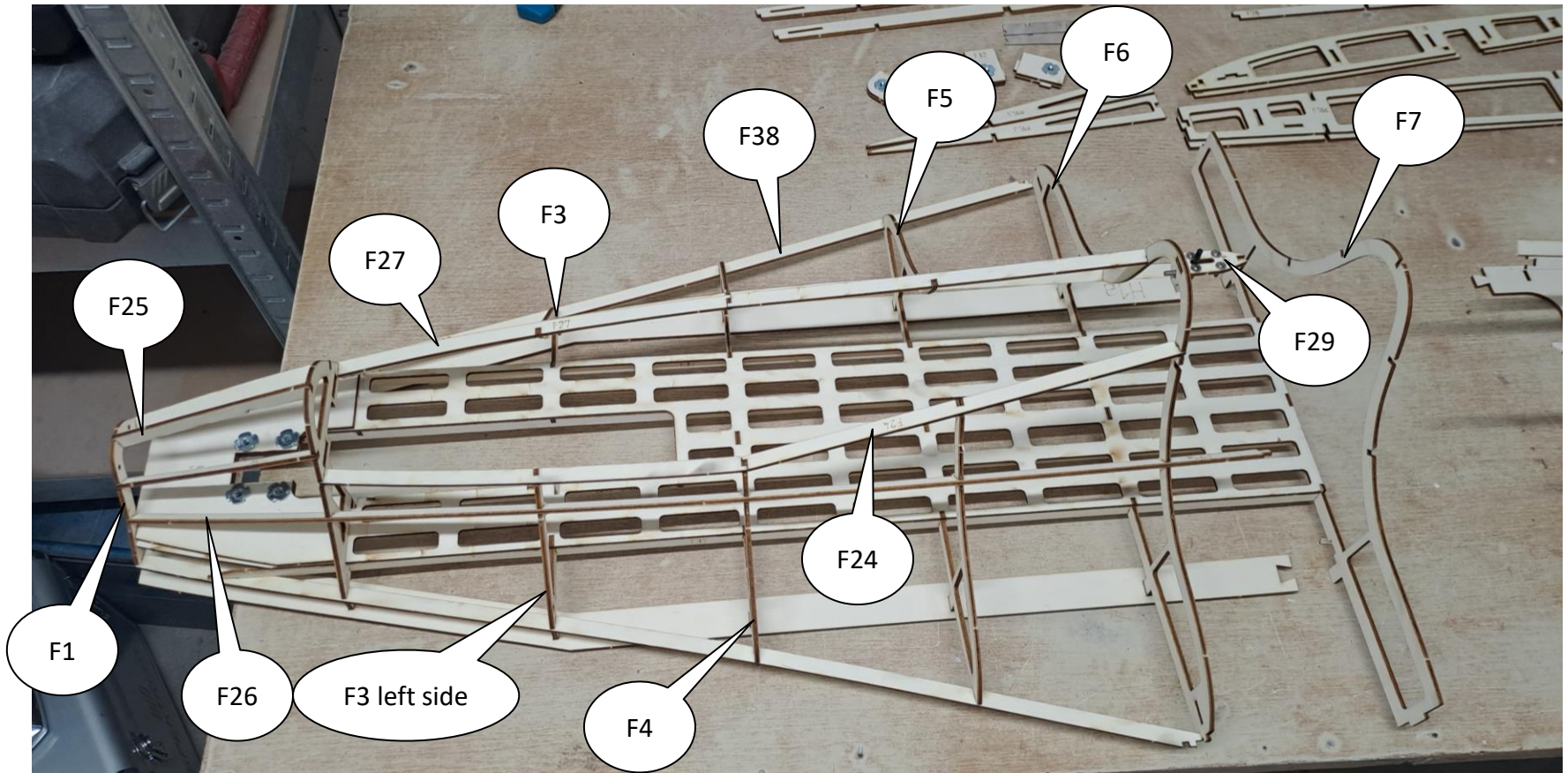
fuselage front




direction F2

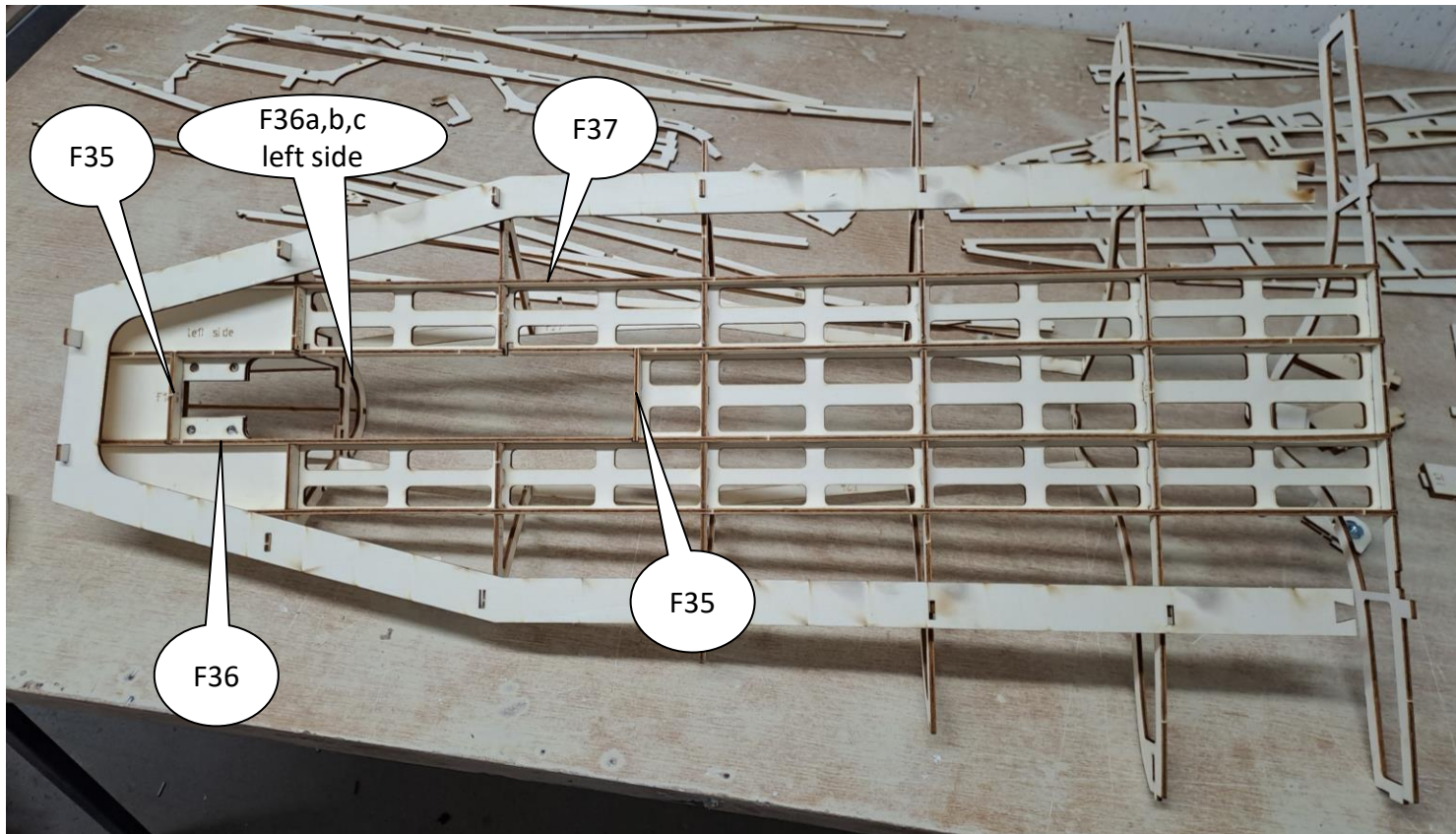


fuselage front



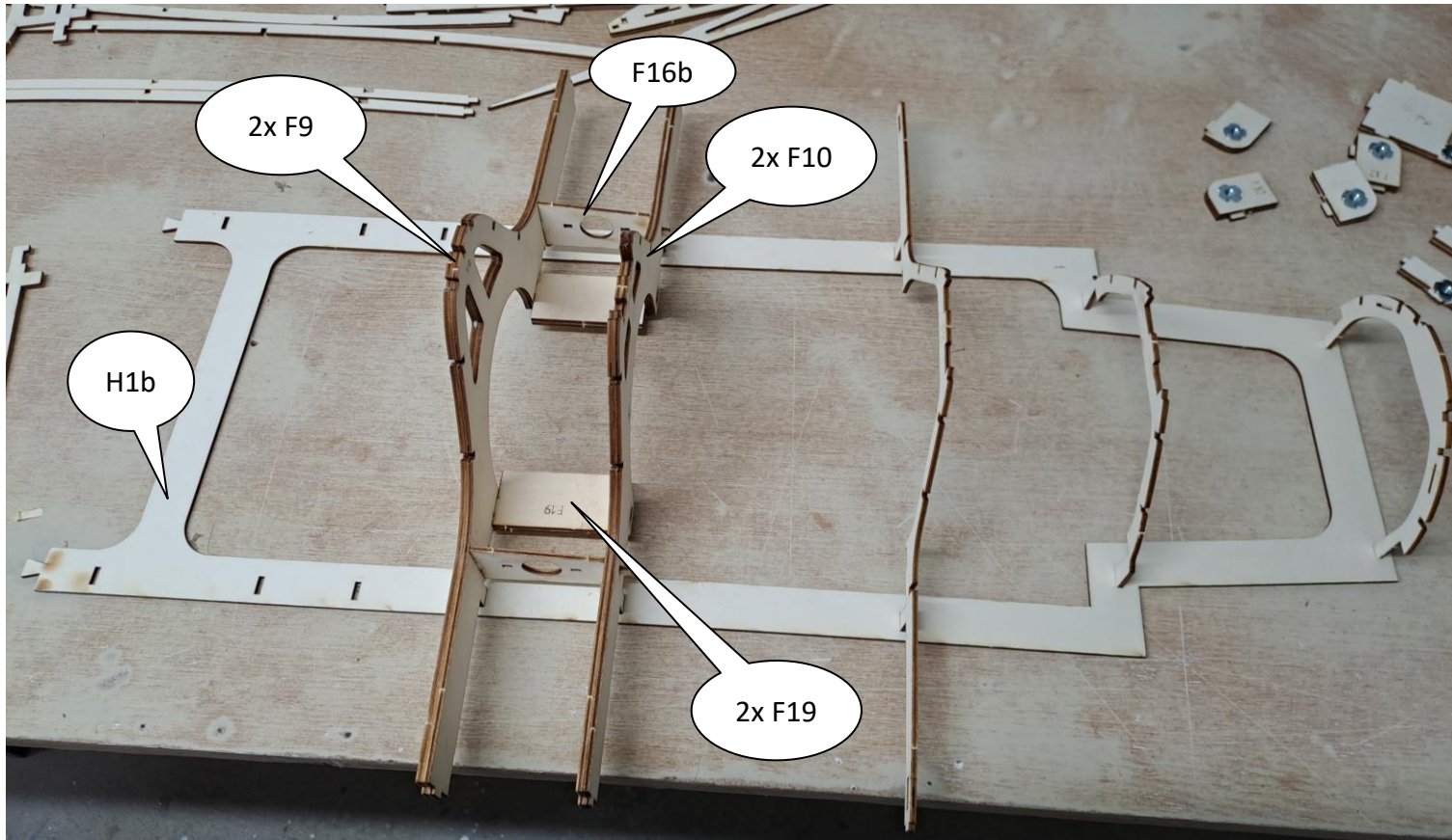
 mount canopy fastener

fuselage front

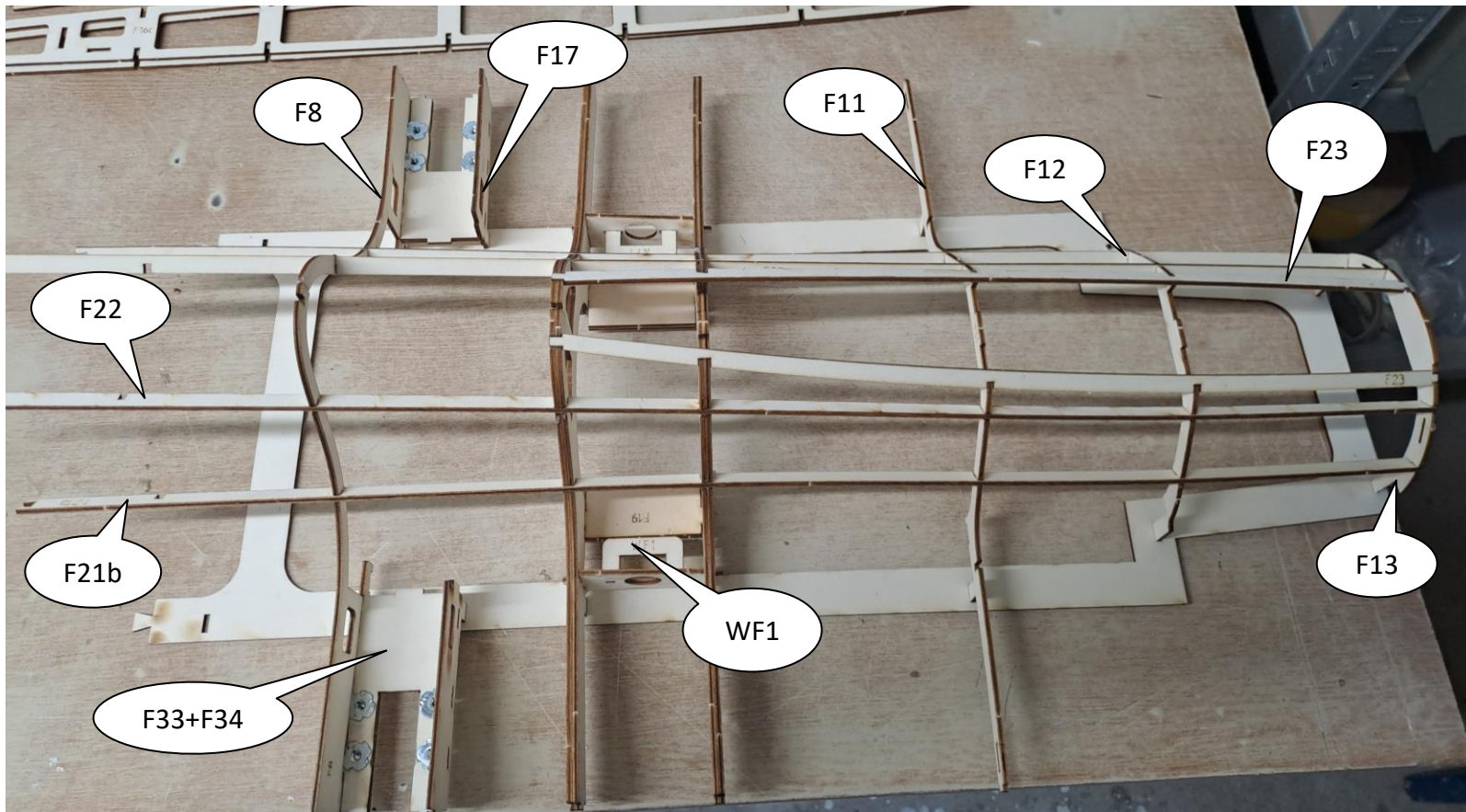


flip the frame; remove the helling when access needed; the helling is only deciding when balsa sheeting

fuselage rear



fuselage rear

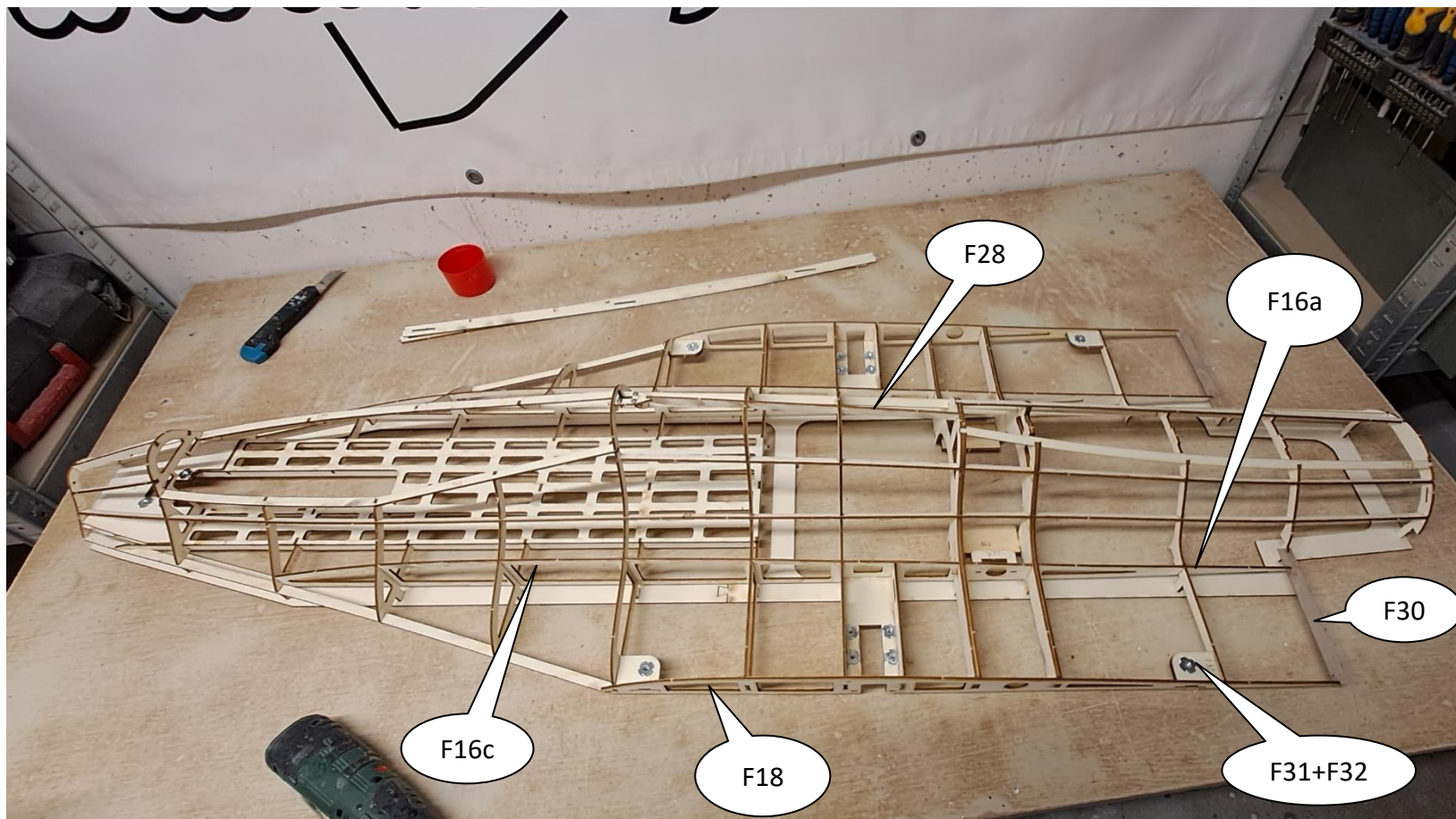


prefit F33+F34. You might have to remove some material from the drive in nuts



if the depicted parts remain, you have done everything right

front/rear connection





flip the frame; remove the helling when access needed; the helling is only deciding when balsa sheeting

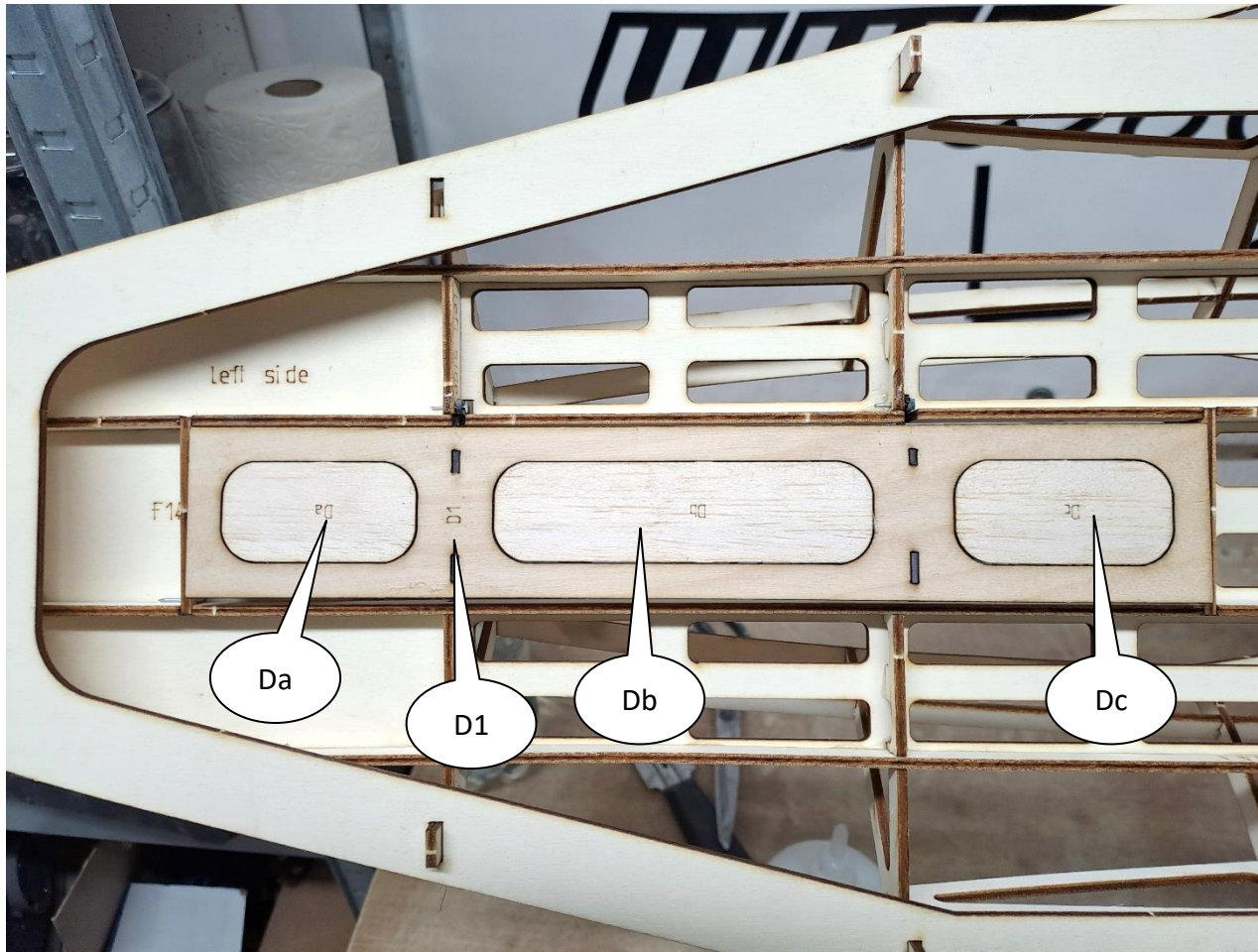
fuselage



cut the aluminium strut into two parts 2x25cm

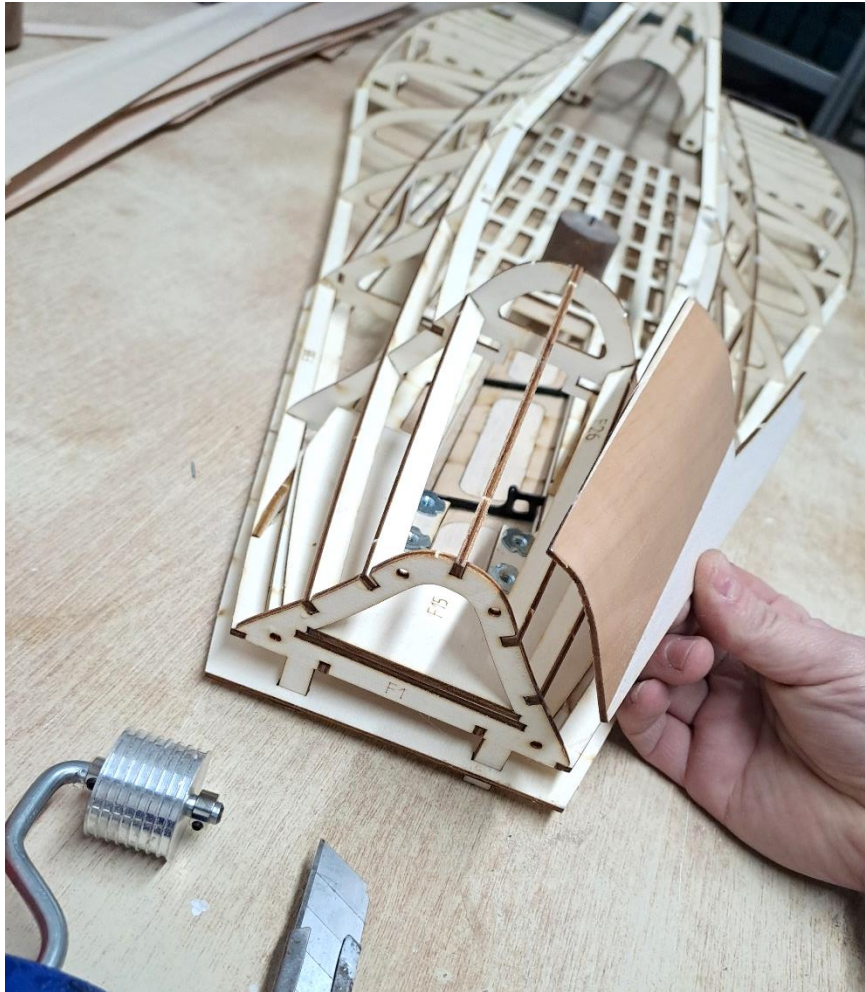
cut the sleeve into four parts 4x12,4cm

gear door

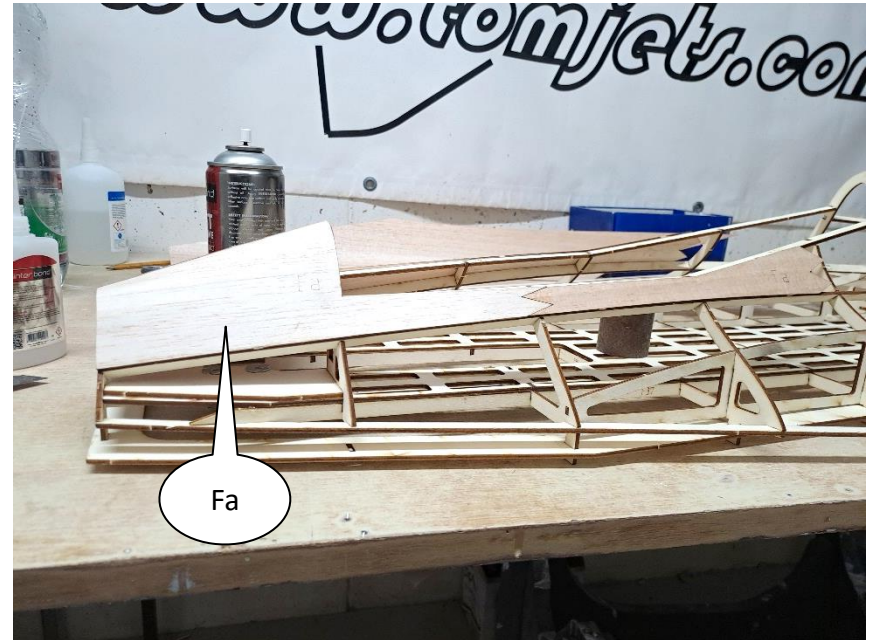


Use 1,5mm nails for the hinges

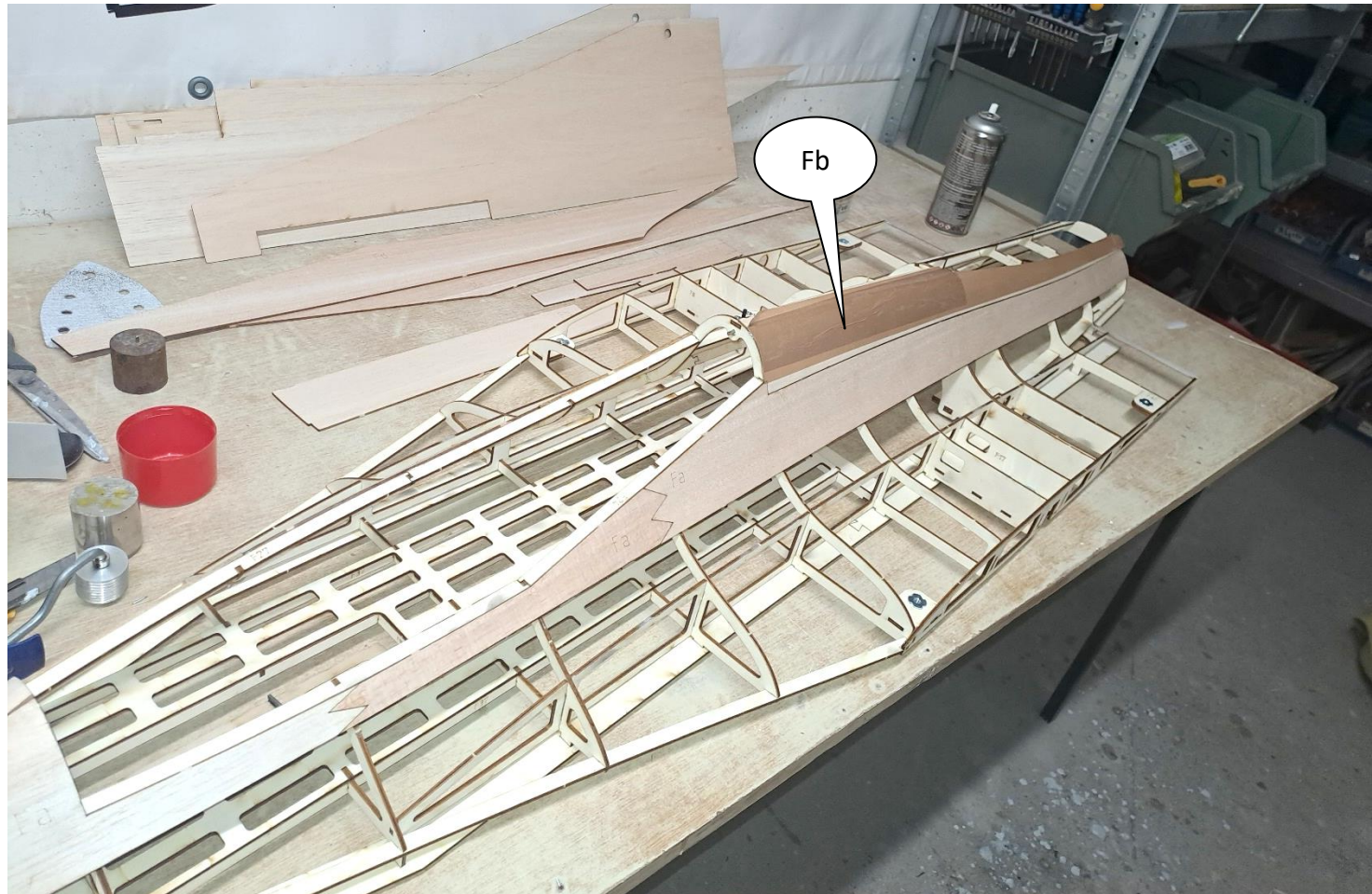
fuselage



prebend the balsa sheets, if necessary.
use the tomjets balsa roller on the compressed side.
add tape on the extended side.

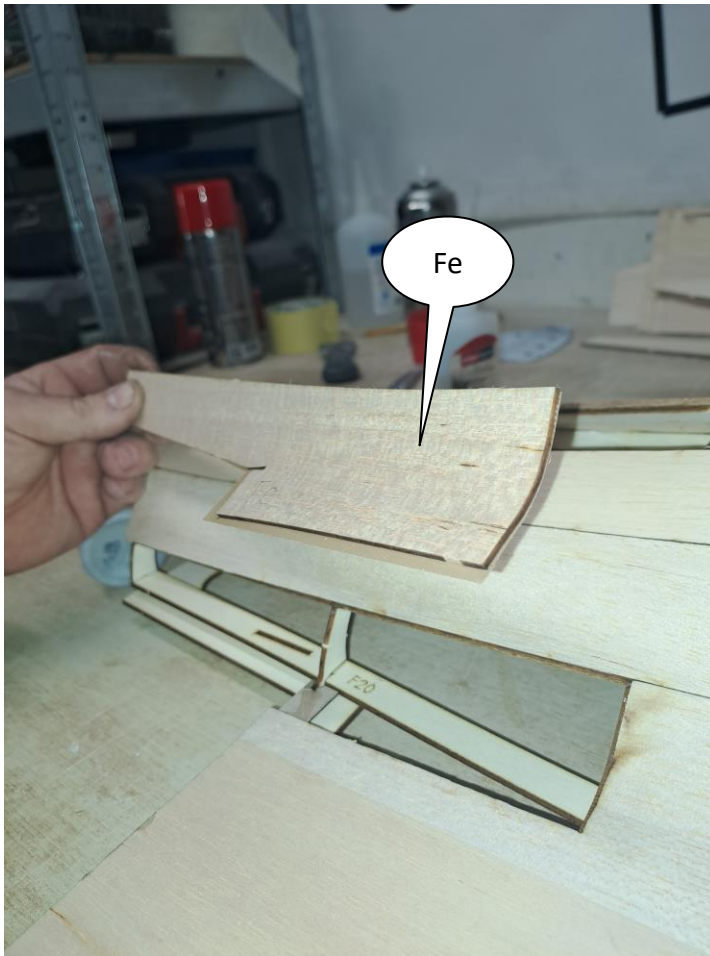


fuselage



fuselage





prebend the balsa sheets, if necessary.
add tape on the extended side, while bending

fuselage



flip fuselage, remove heling, cut support legs



don't forget to glue the wing connection sleeves



use some balsa leftovers to close the gap

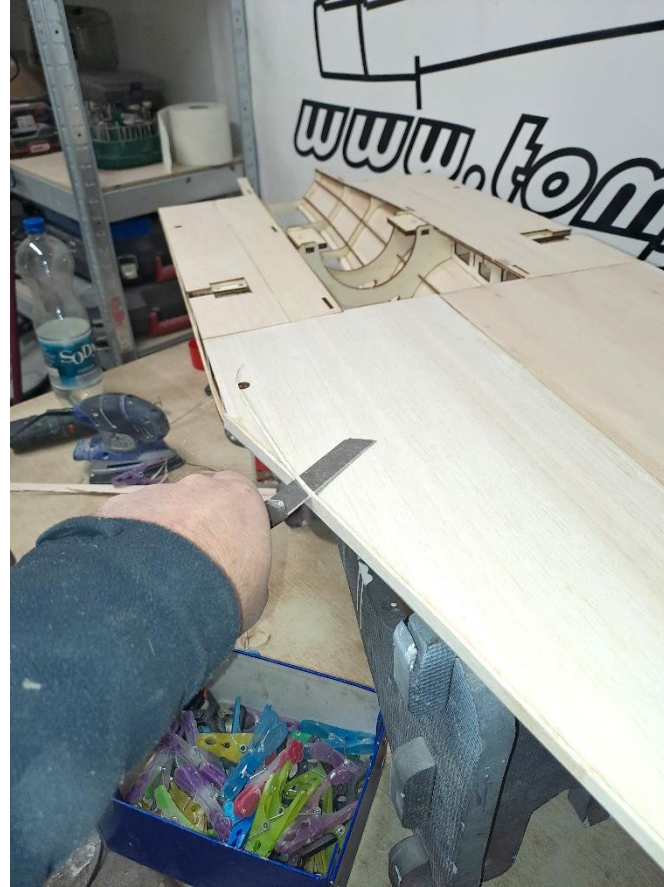






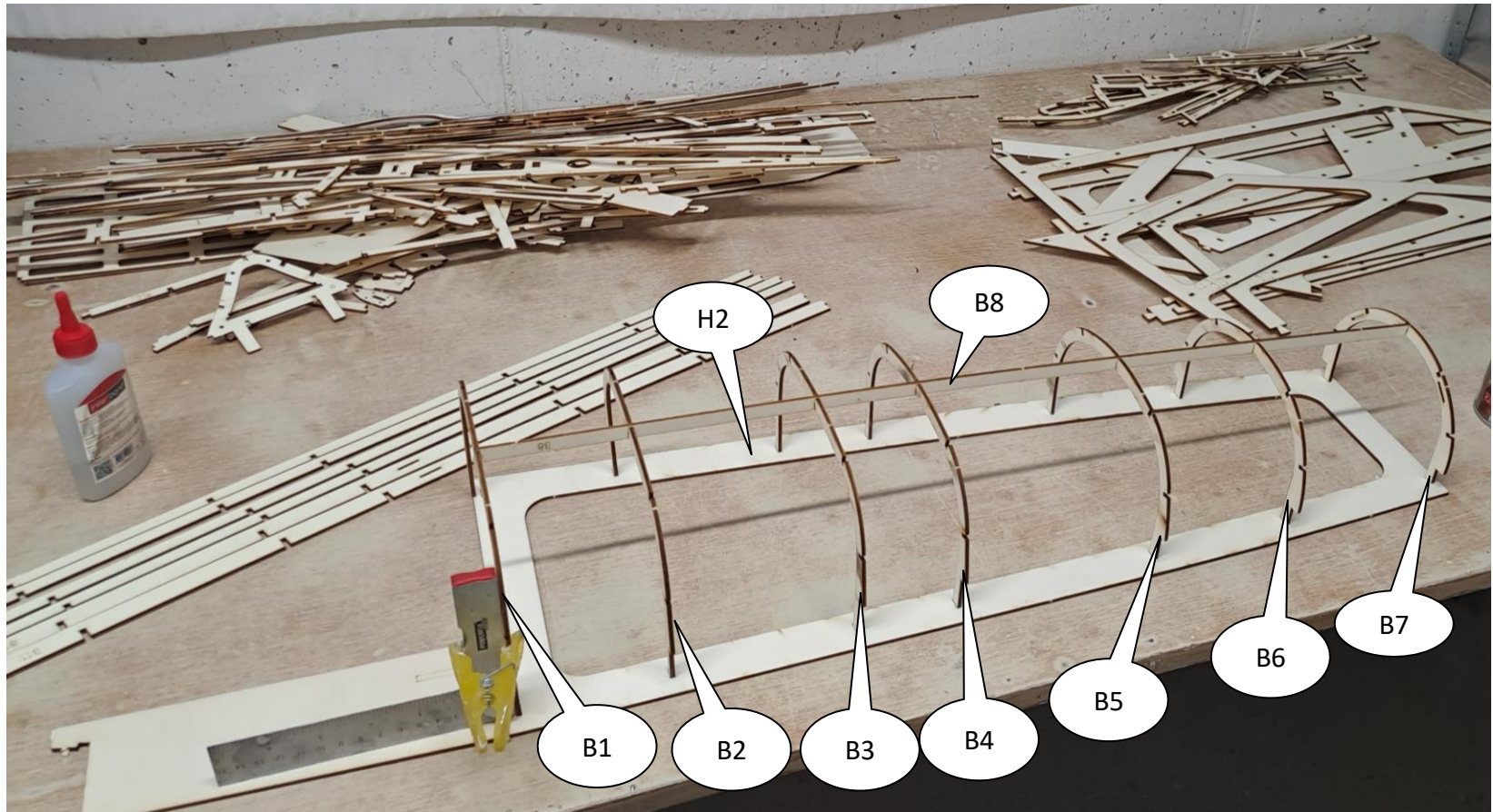


fuselage



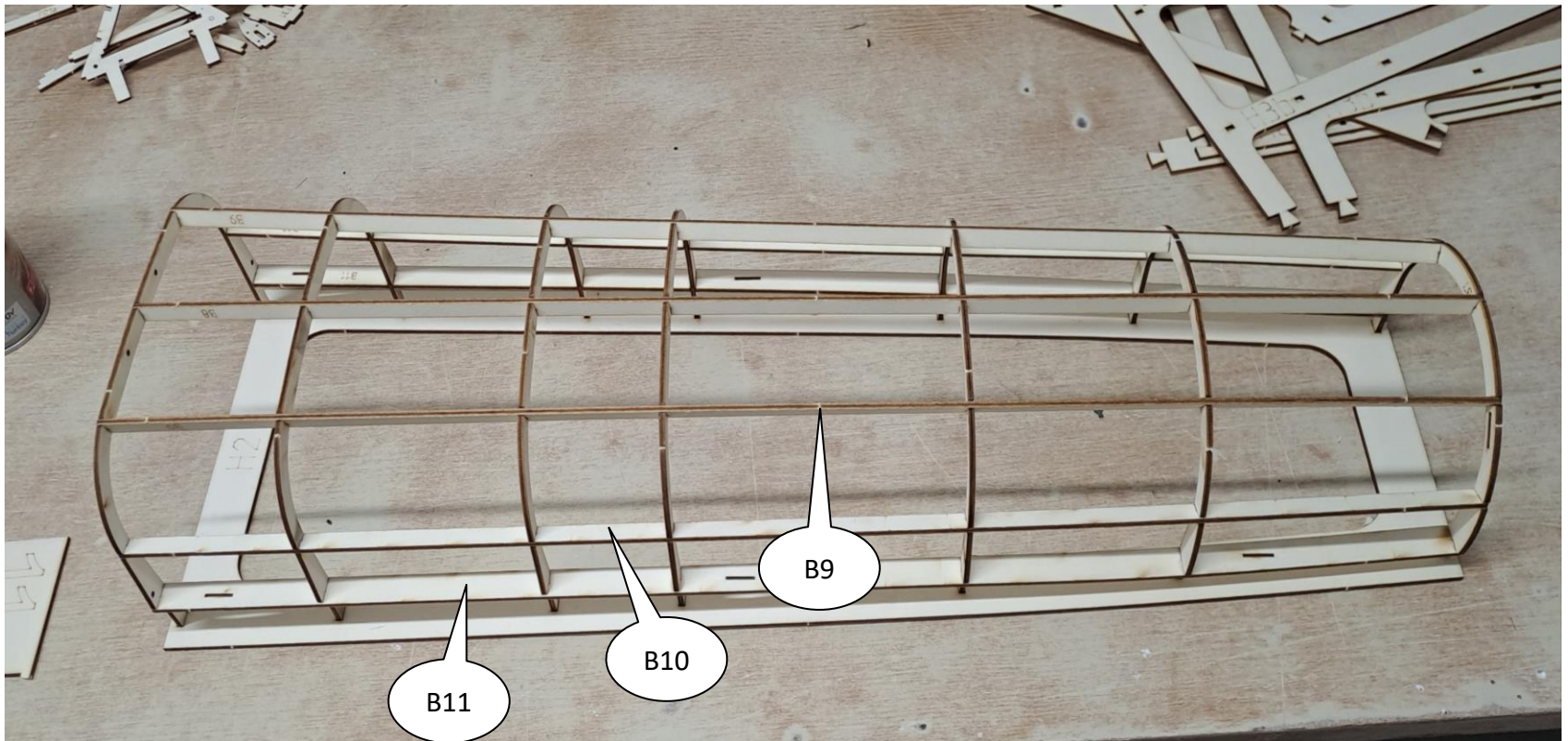
i use balsa leftovers to close the leading edge, and sand the surface

bottom cover

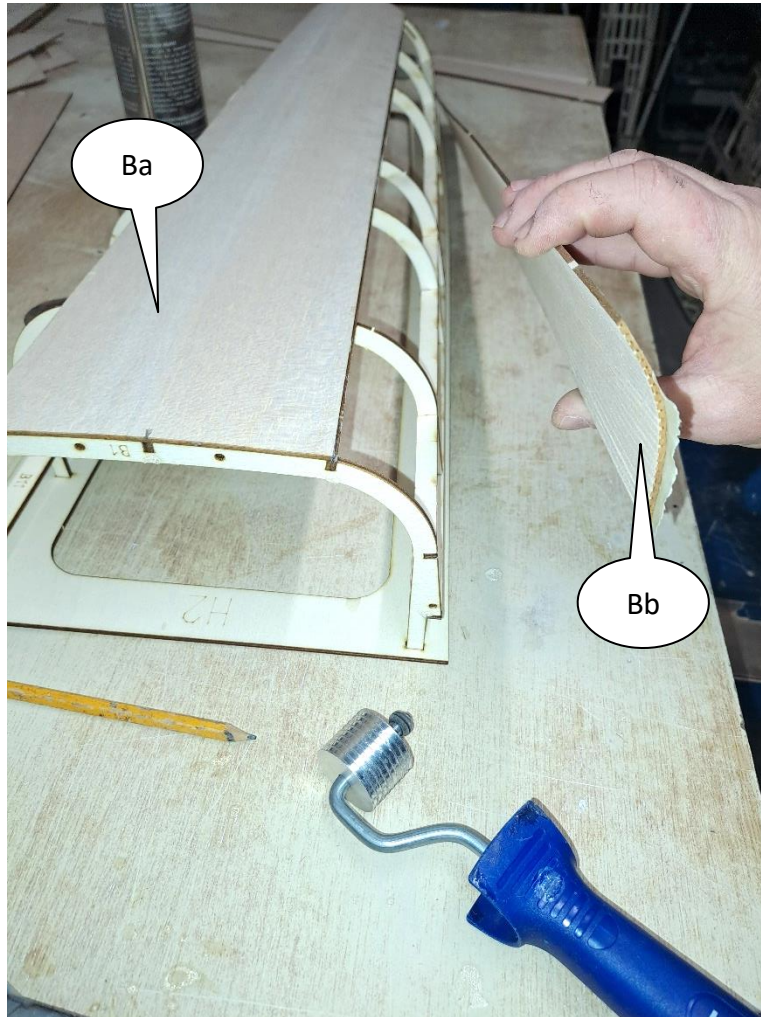


i align the ribs perpendicular to the building board

bottom cover



bottom cover



prebend the balsa sheets, if necessary.
use the tomjets balsa roller on the compressed side.
add tape on the extended side.



bottom cover



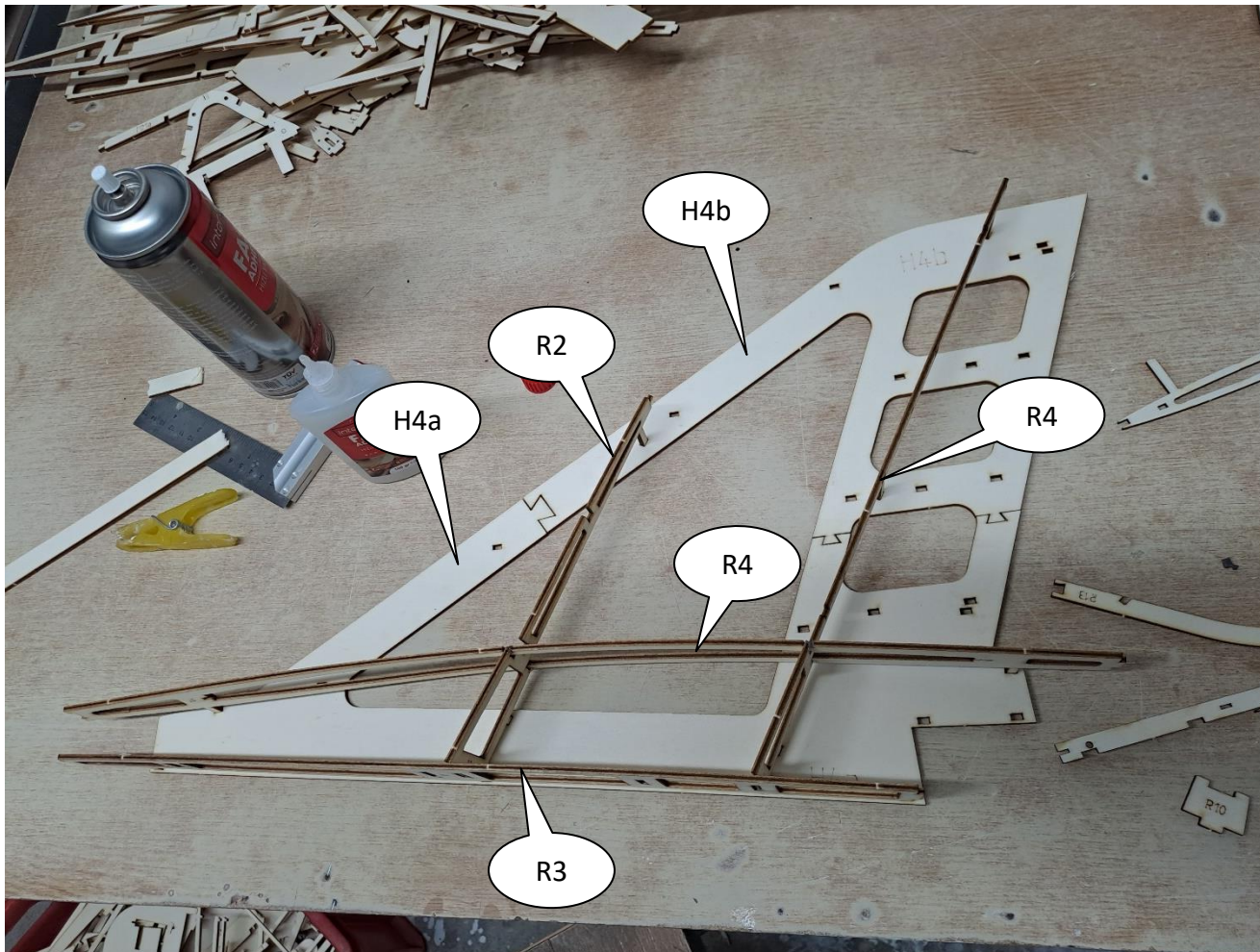
bottom cover



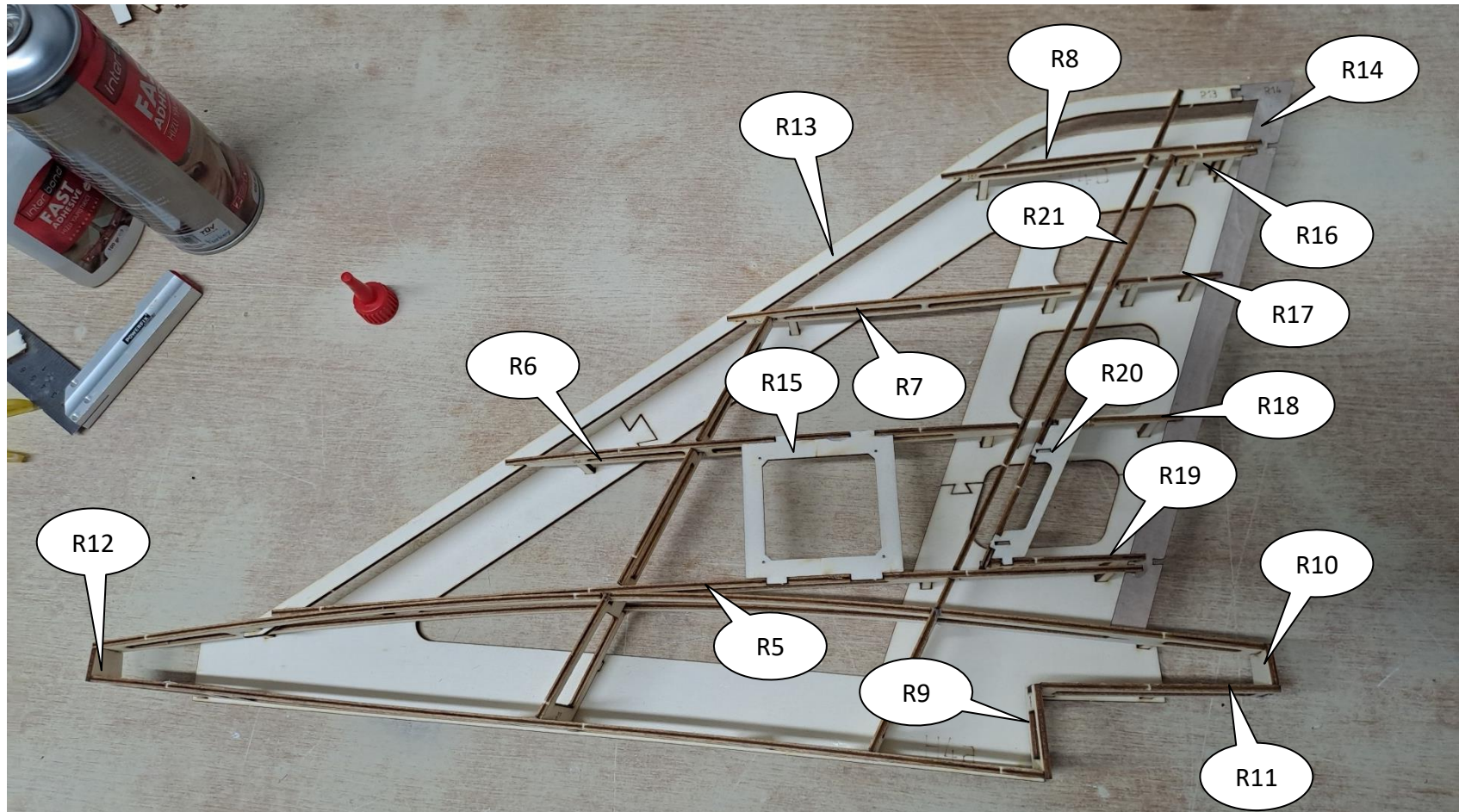
remove support legs, and sand the surface



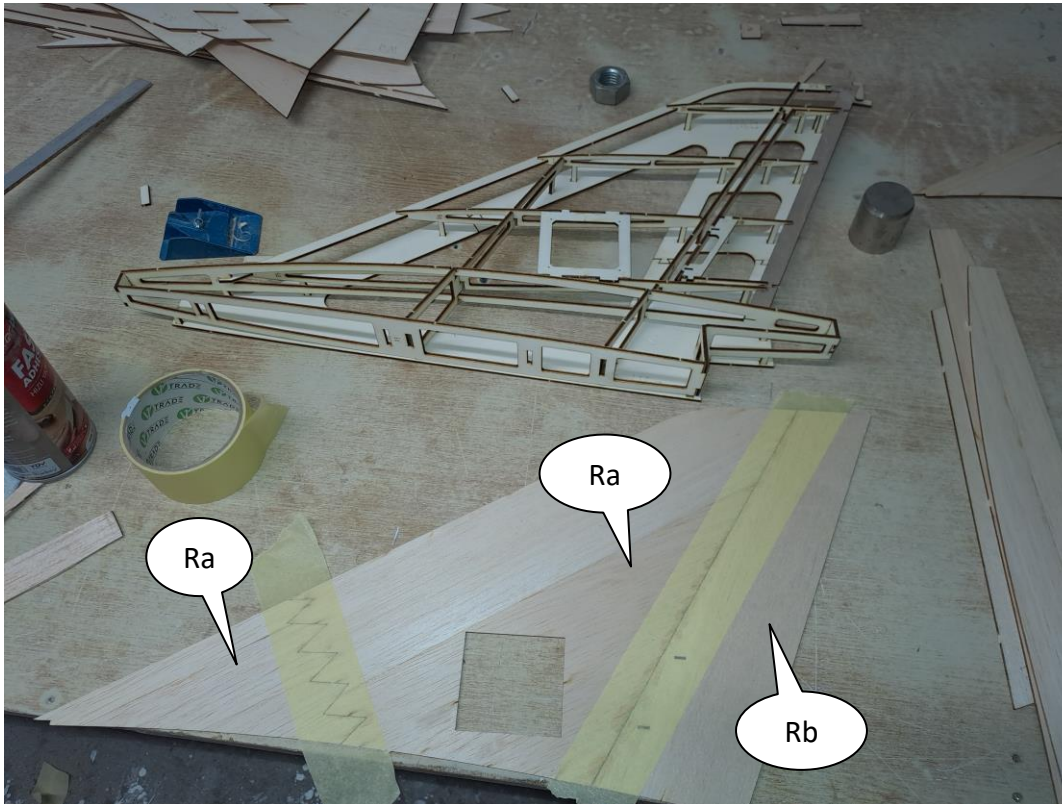
rudder



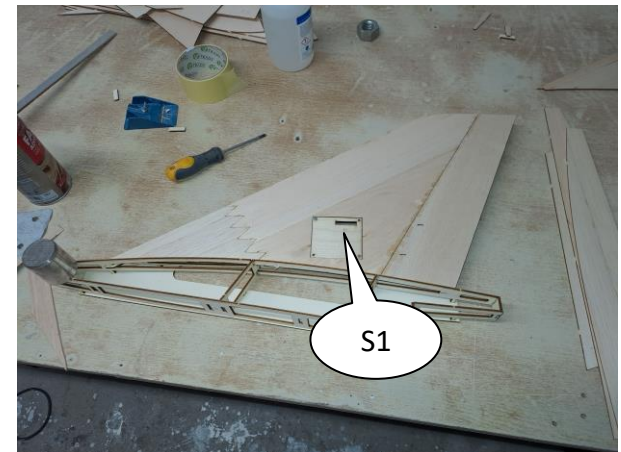
rudder



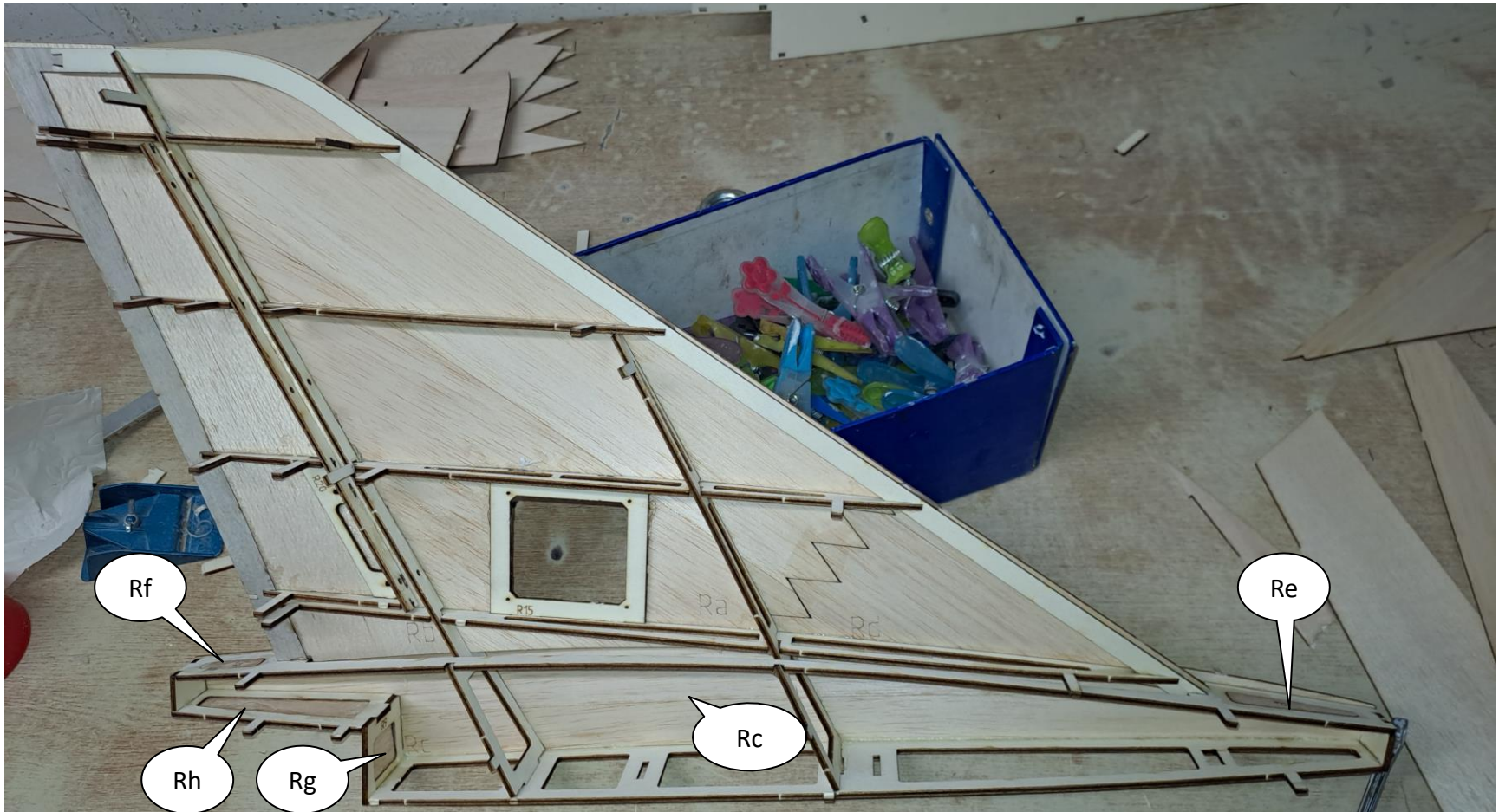
rudder



pre assemble the servo cover to ensure a proper alignment before sheeting



rudder



rudder



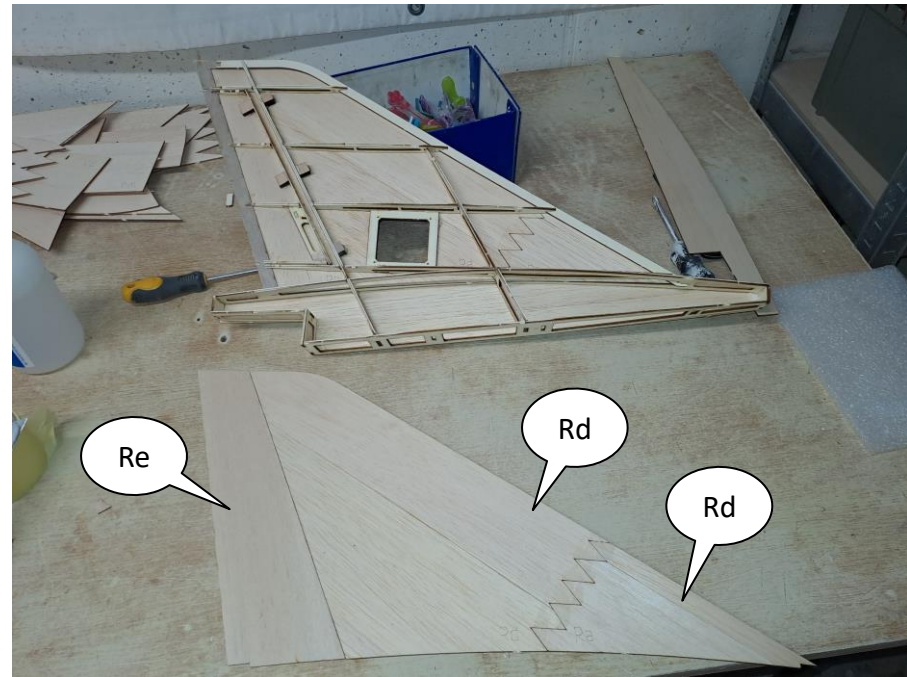
remove support legs



glue balsa blocks for the hinges and cut the material above



mark the cutline of the control surface before closing the rudder

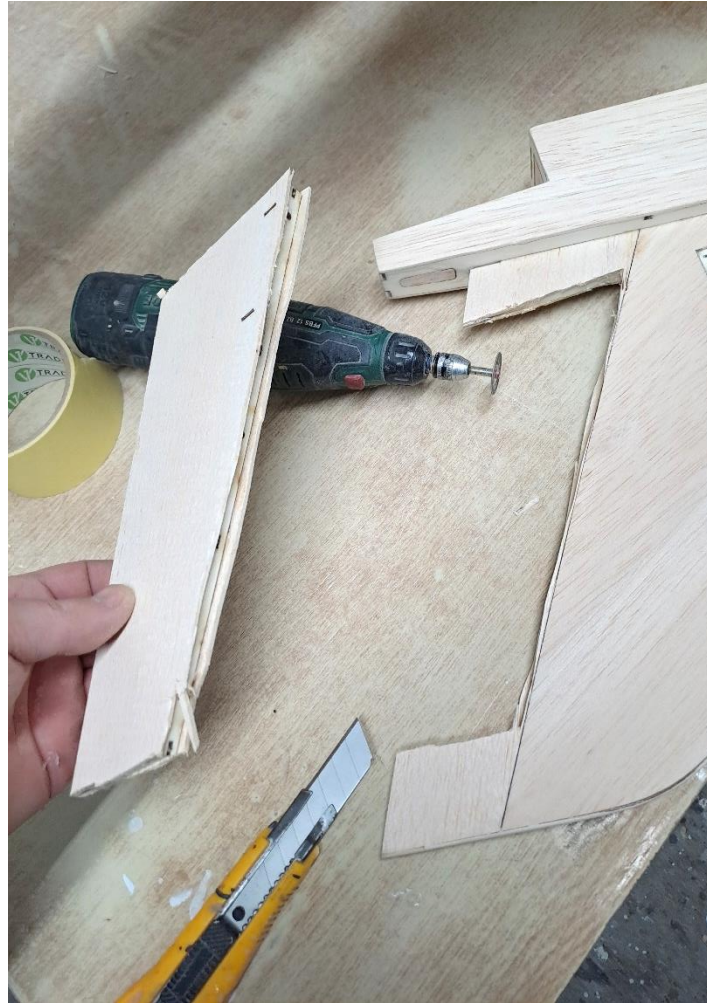
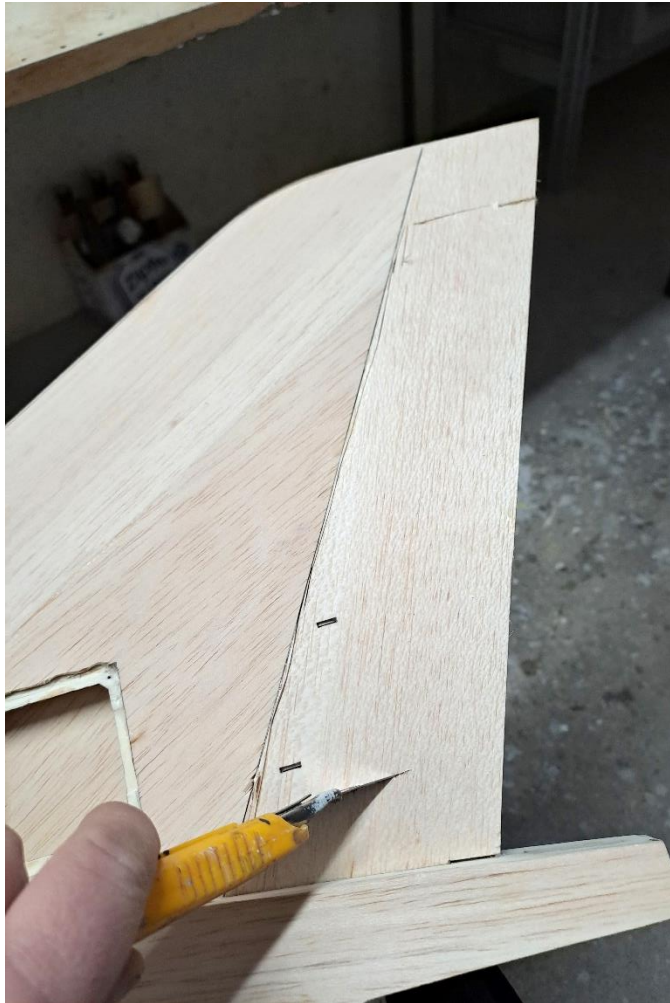



rudder



use balsa leftovers for closing the leading edge, and sand the surface


rudder



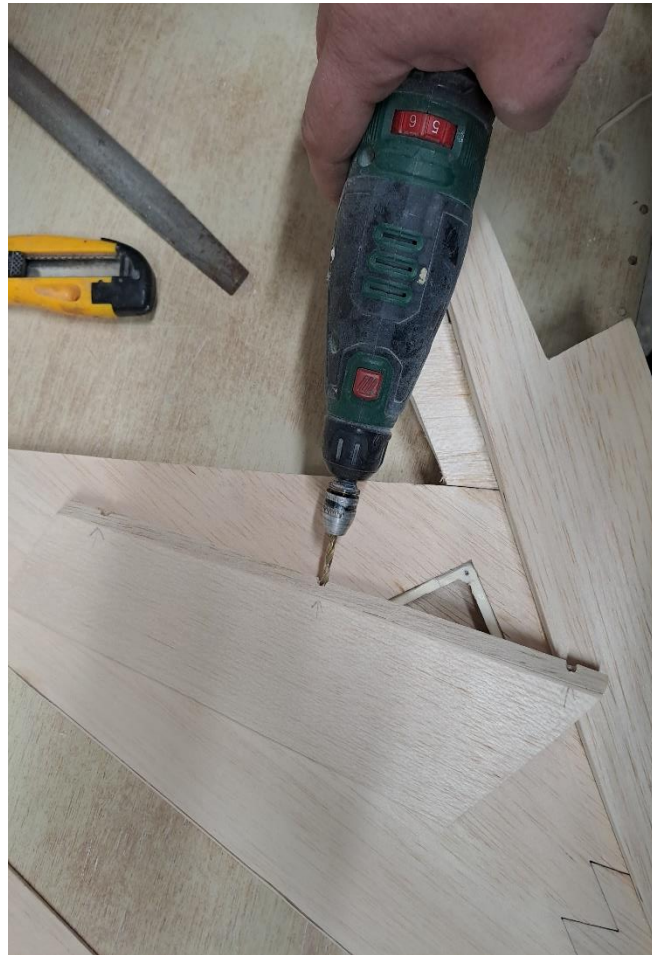
 remove the control surface


rudder




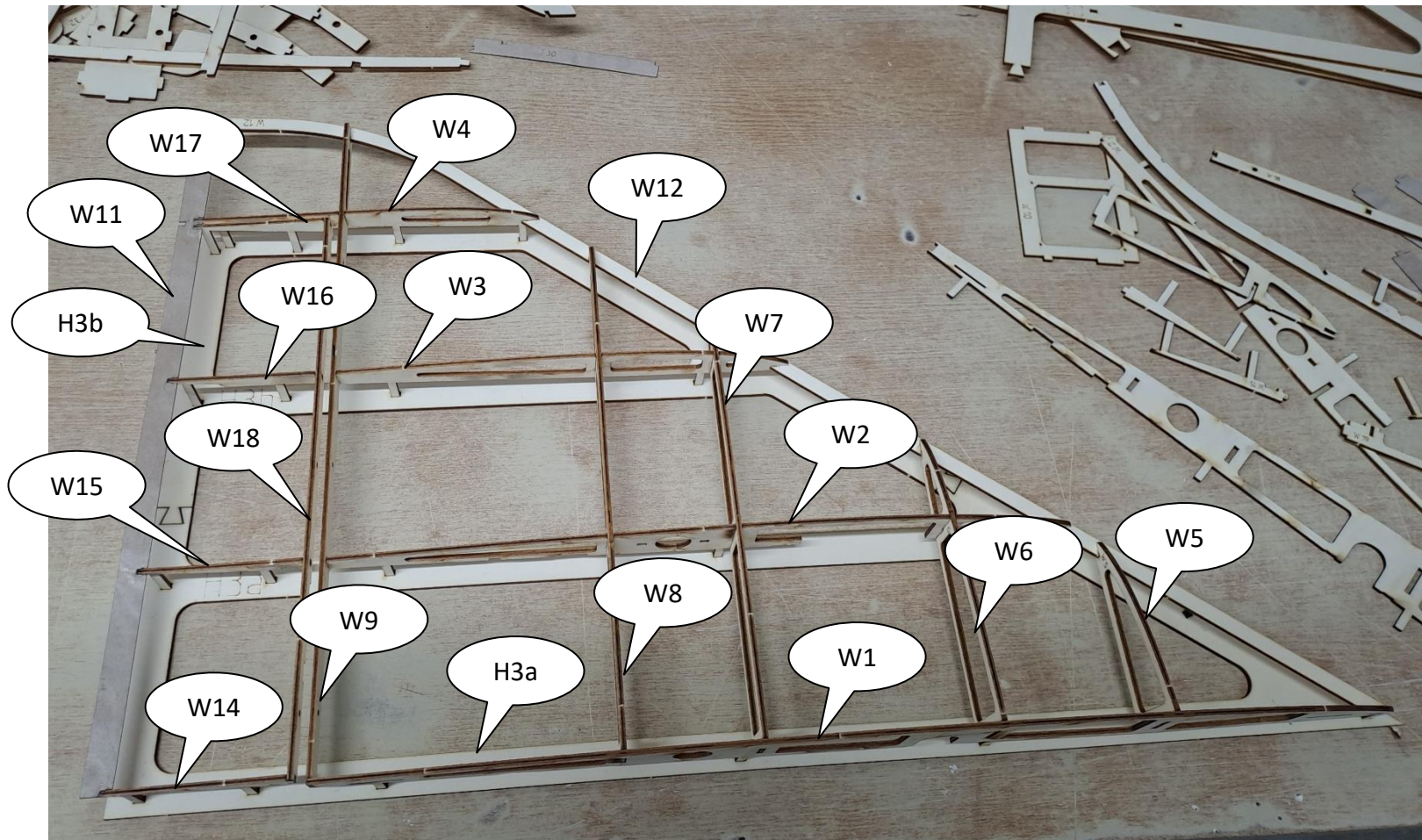
 mark the positions of the hinges before attaching the triangular balsa strip

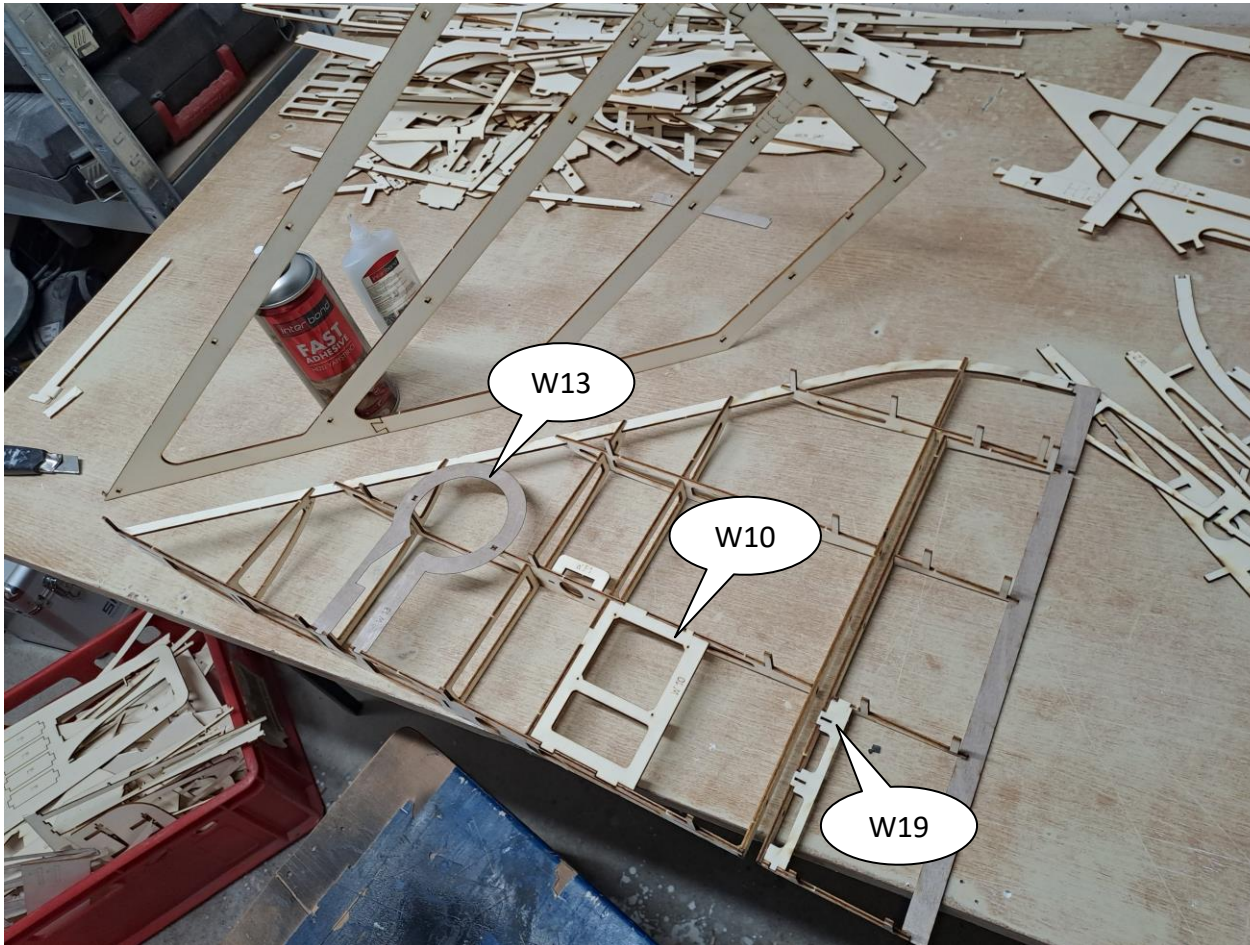
rudder



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

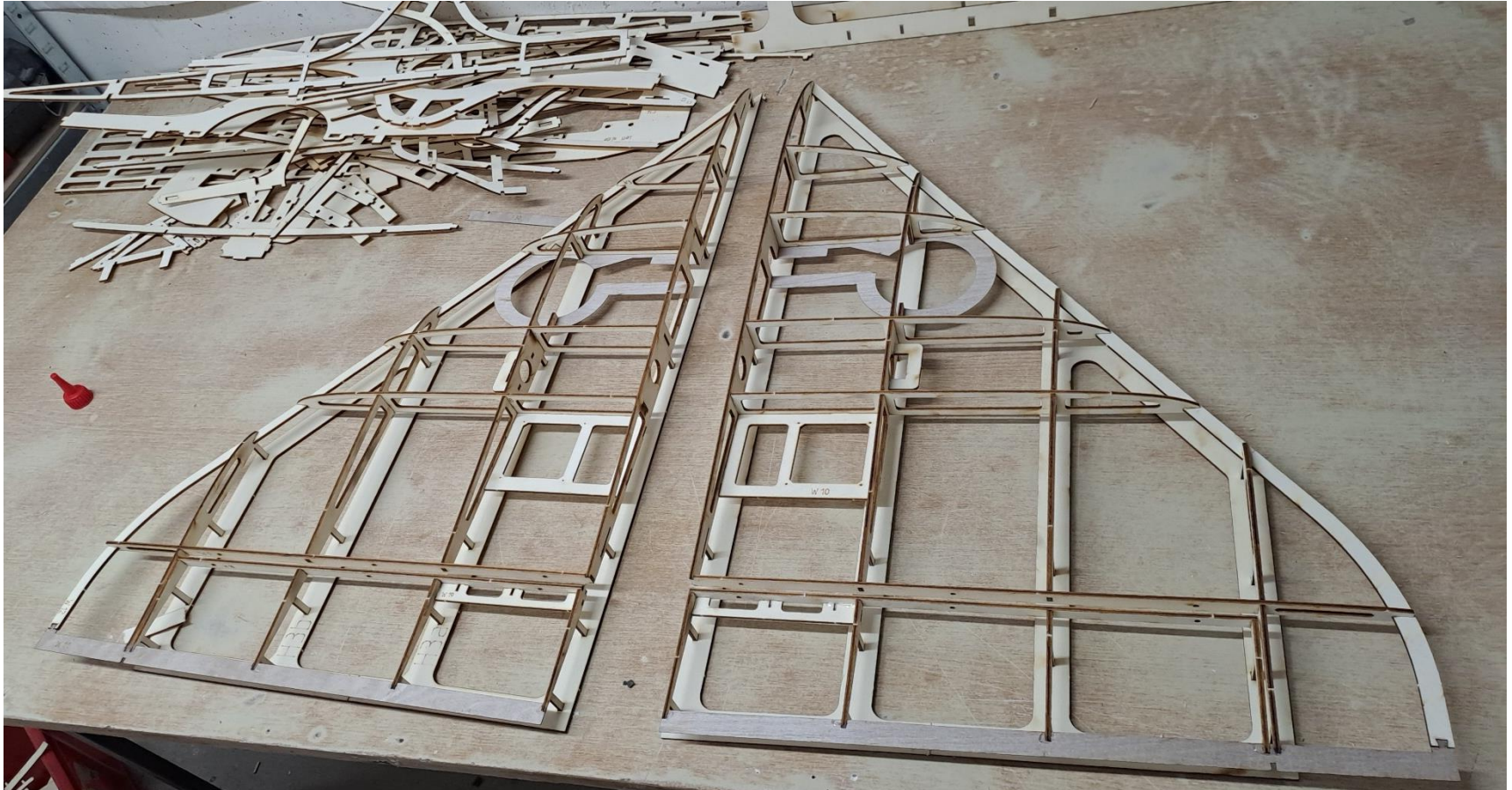
 use a 3mm drill





flip the frame; remove the helling when access needed; the helling is only deciding when balsa sheeting

wing



carefully mirror the second wing

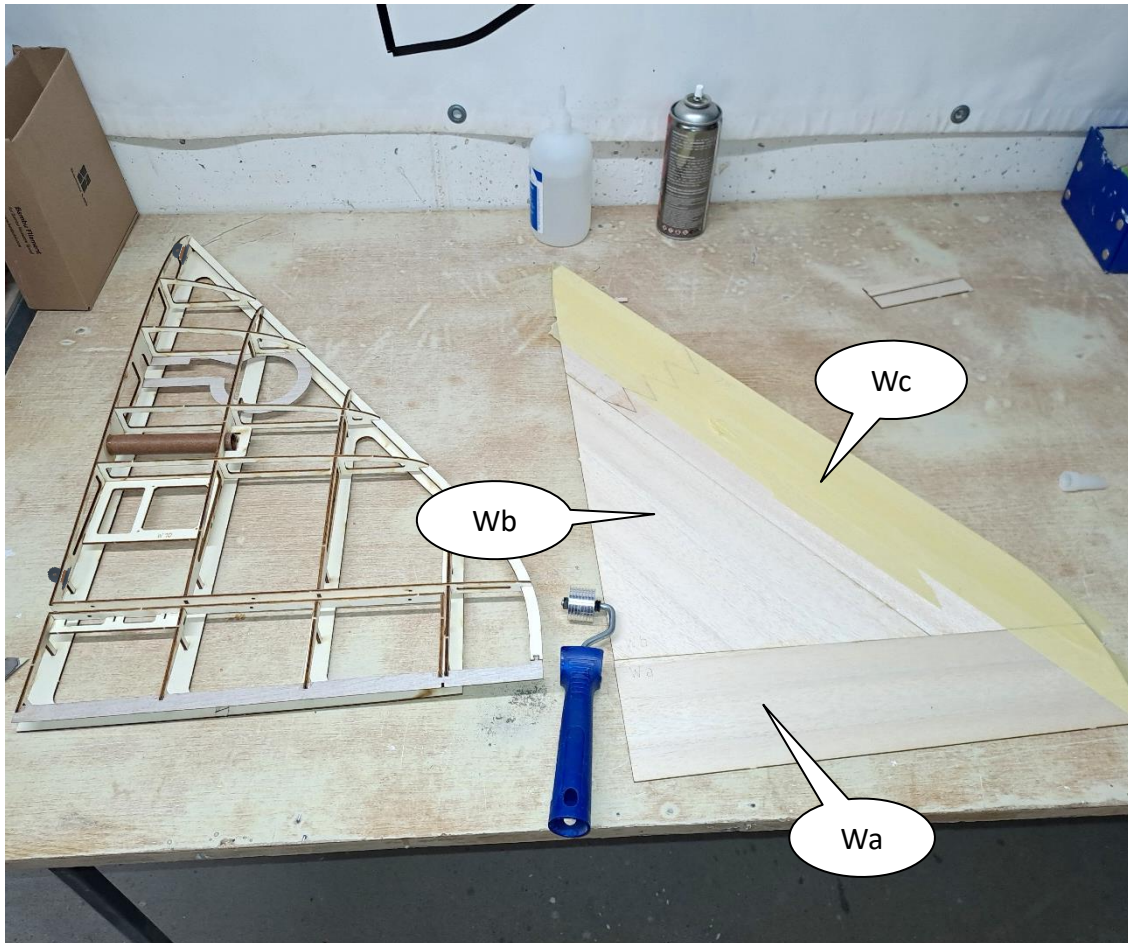
wing



cut the aluminium strut into two parts 2x25cm

cut the sleeve into four parts 4x12,4cm

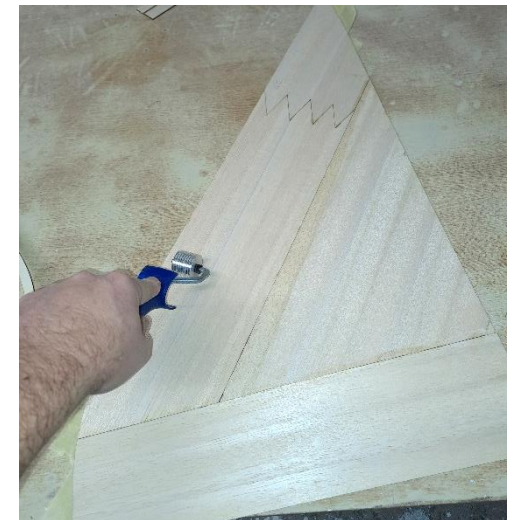
wing

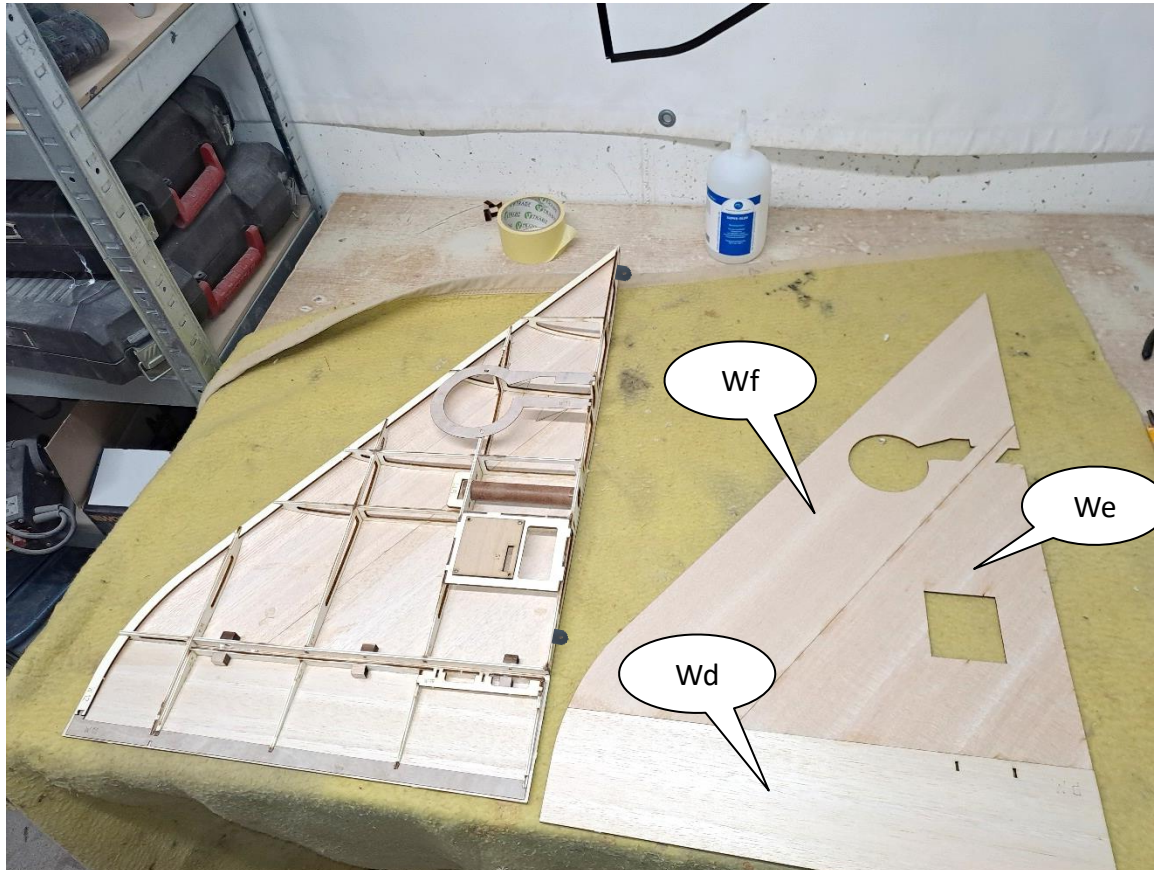


glue sleeve and wing mounting brackets



prebend the balsa sheets, if necessary.
use the tomjets balsa roller on the compressed side.
add tape on the extended side.





glue balsa blocks for the hinges and cut the material above

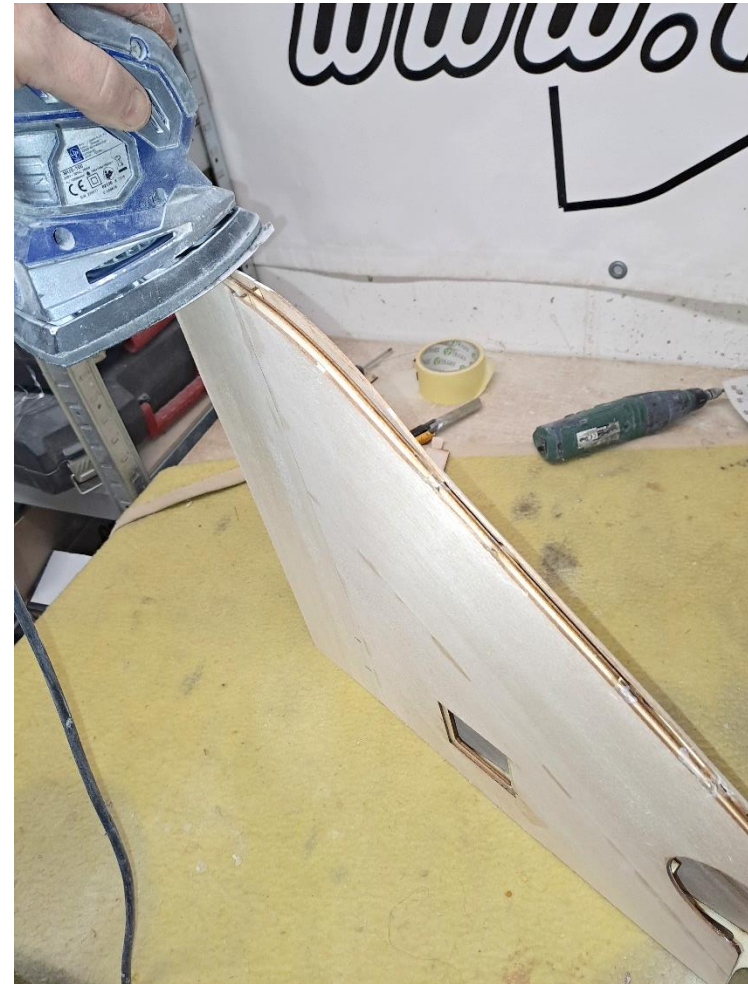
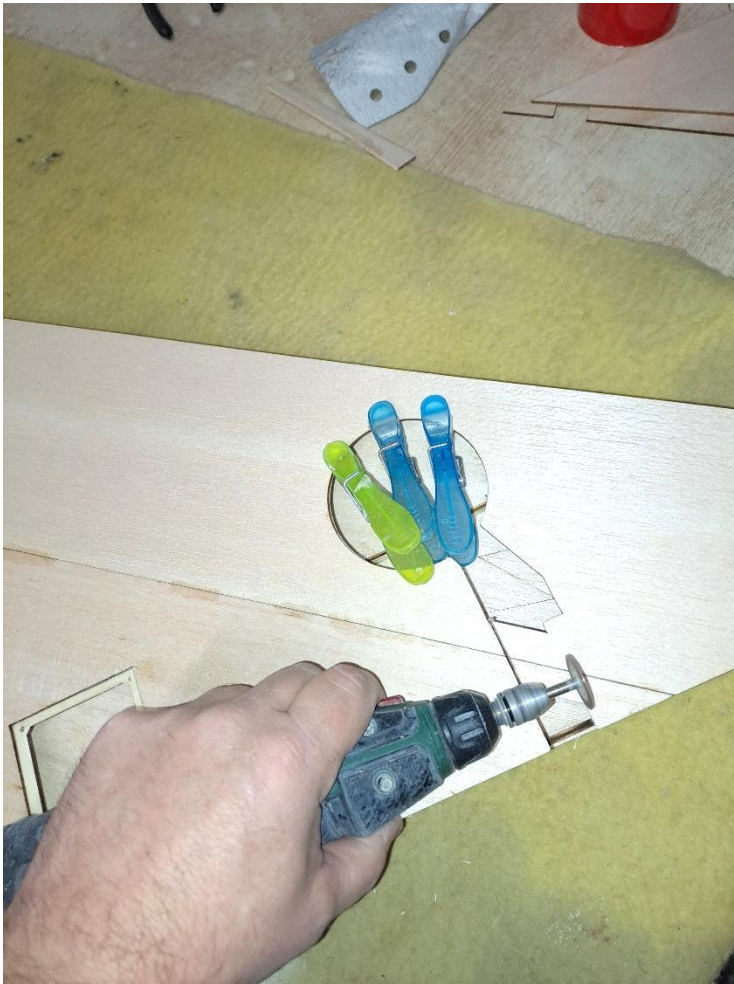


pre assemble the servo cover to ensure a proper alignment before sheeting




remove support legs







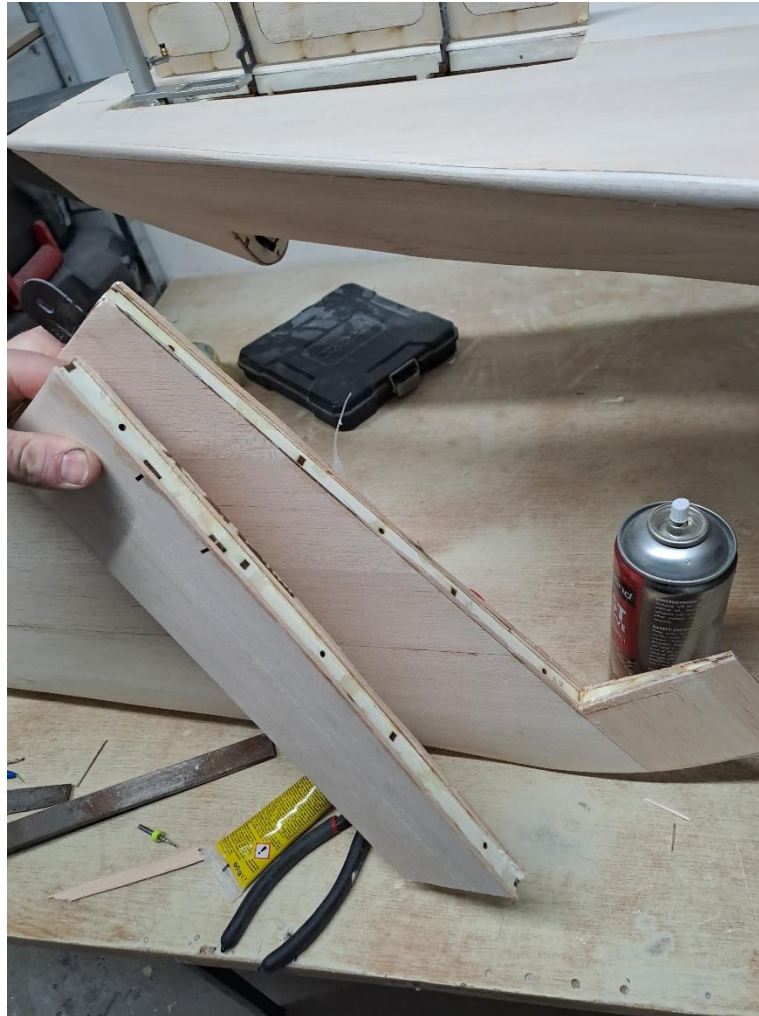
 use balsa leftovers for closing the leading edge, and sand the surface






wing



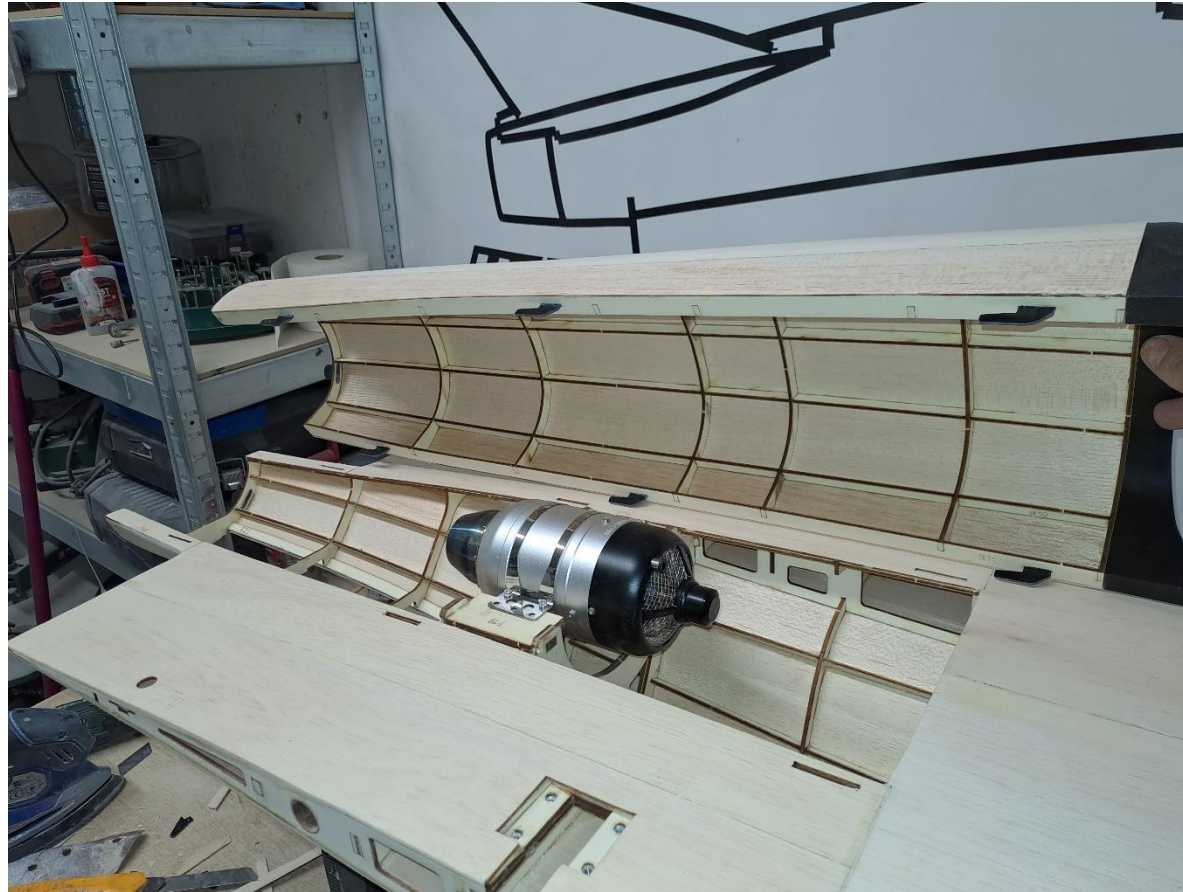
wing




-  remove the control surface
-  mark the positions of the hinges before attaching the triangular balsa strip
-  use a 3mm drill




dummy fitting



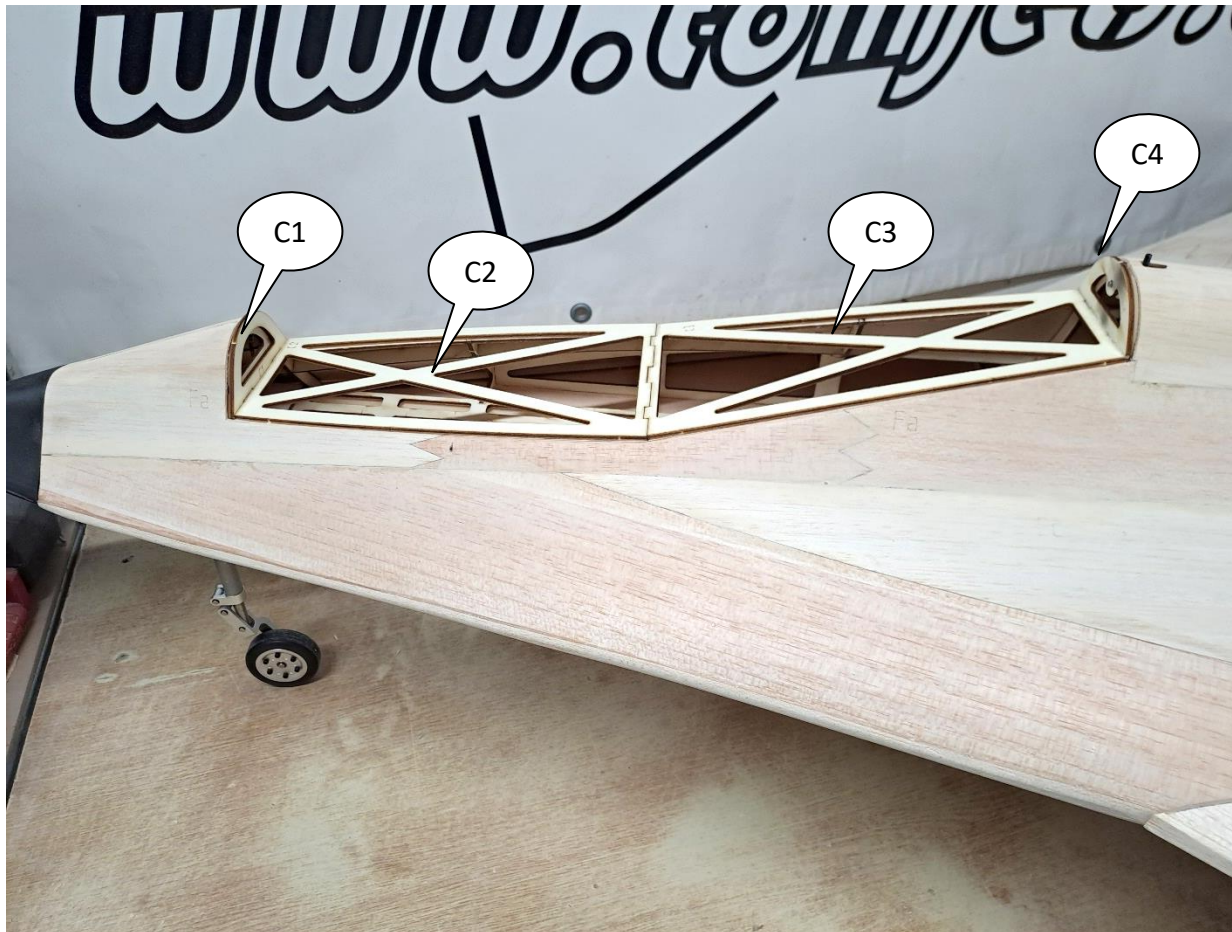
 glue the CFRP hooks and fit the bottomcover

dummy fitting





 mount retracts and fit the wings

canopy



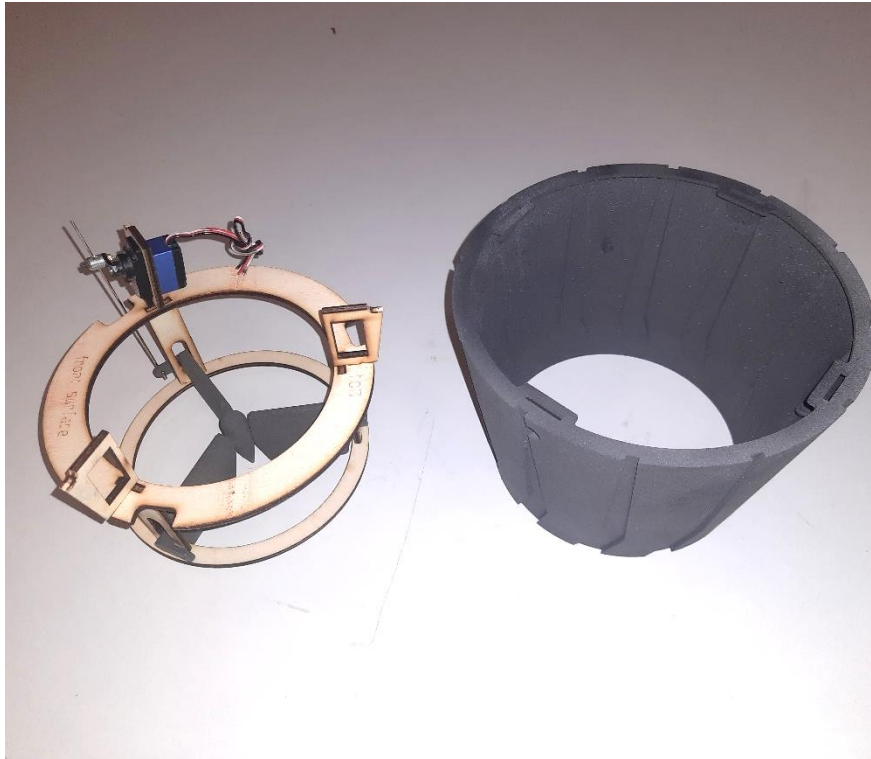
canopy




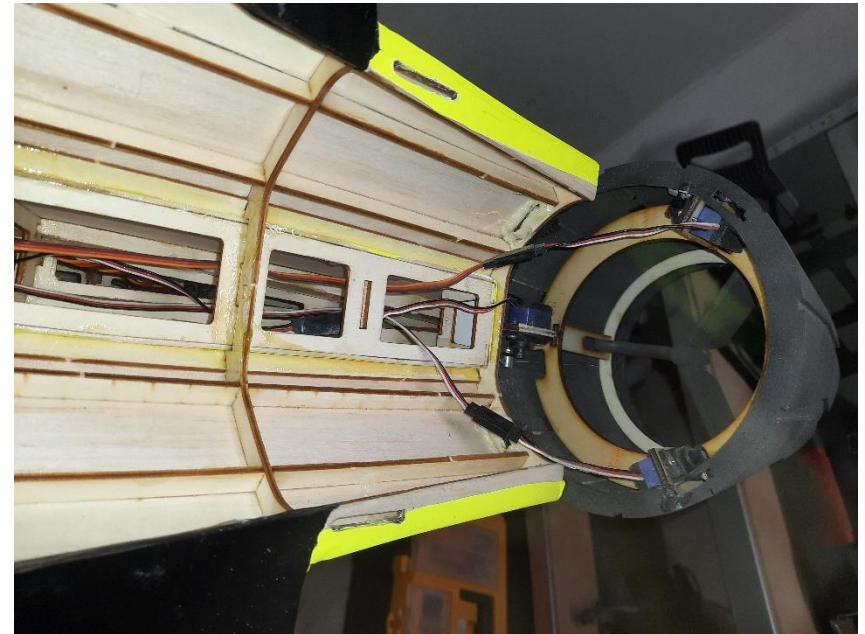
-  fit and glue the canopy
-  use particular canopy glue



EDF- setup




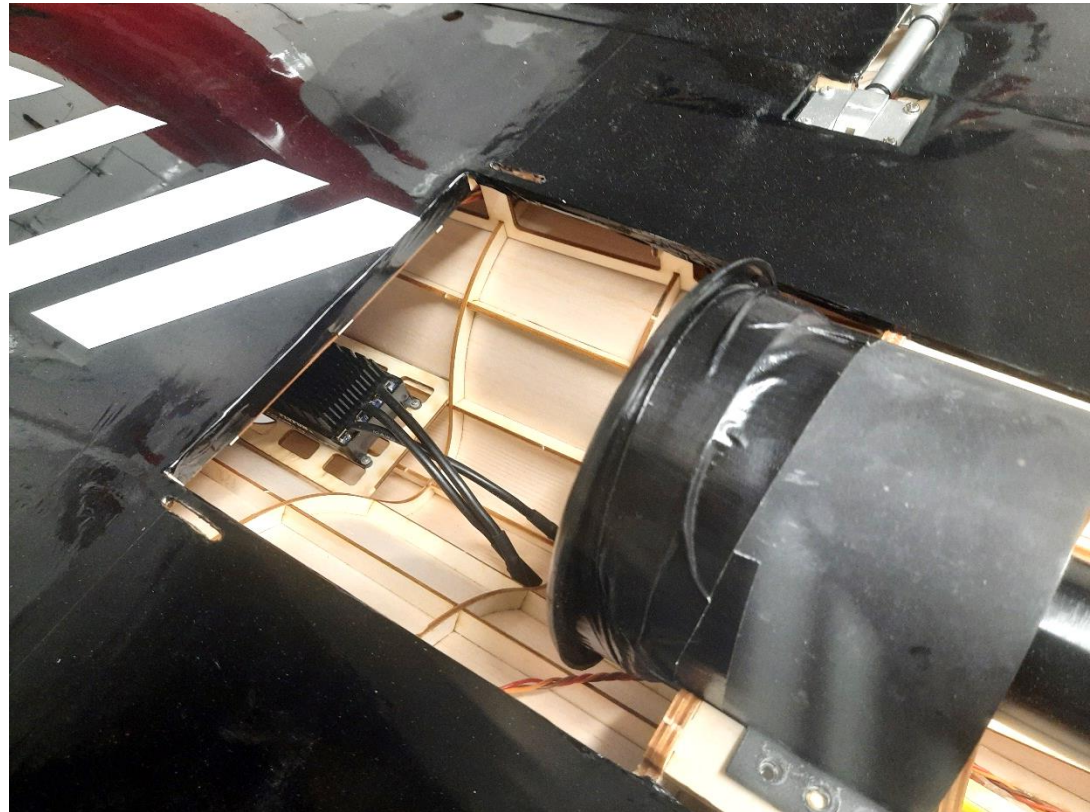
 assemble the vector control



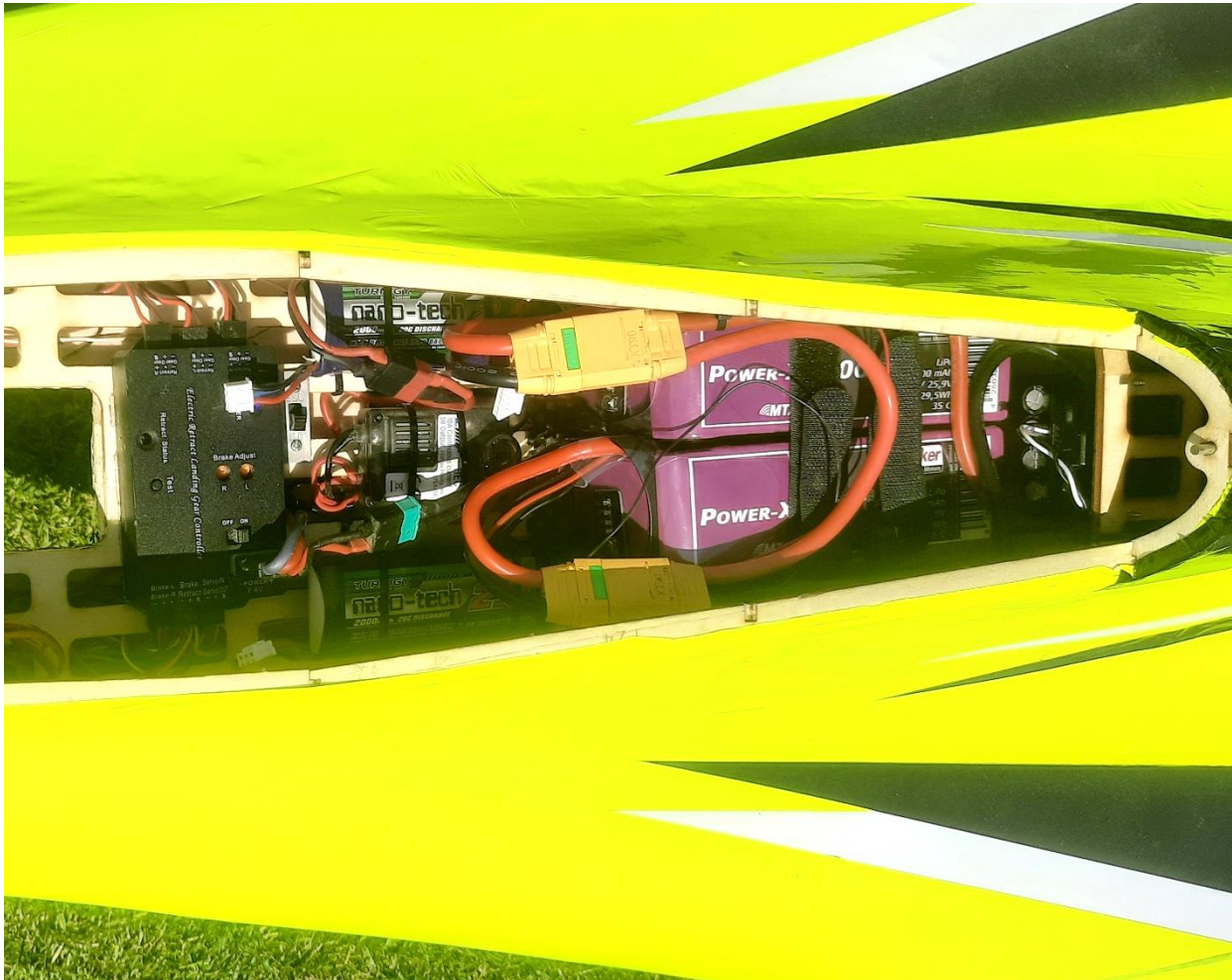
EDF- setup



 assemble EDF unit with thrustpipe and the ESC mount



EDF- setup



battery position of a 14S 5000mAh setup with 2pcs. 2s 1200mAh batteries for retracts and RX



turbine- setup





settings



Elevator	$\pm 20 \text{ mm} + 20\% \text{ expo}$
Aileron	$\pm 20 \text{ mm} + 30\% \text{ expo}$
Rudder	$\pm 30 \text{ mm} + 20\% \text{ expo}$
COG	30 mm behind air intake leading edge

