

E- Purito Holzmodellbau Schweiger construction manual

Some notes in advance:

Please read these assembly and safety instructions carefully before starting construction and proceed step by step when building. Make sure you understand the individual building steps. This kit is suitable for children from 14 years old. Construction and operation of the airplane should be under the supervision of an adult.

The flight model is suitable for E-RES competitions, slope and thermal flying in calm weather. Caution: high flight is not appropriated. At high altitudes and in windy conditions, it may not be possible to estimate the correct flight speed.

The manufacturer gives no liability for damage resulting from improper use.

A non-intended use is, among other things, to assemble the kit differently as described at the following construction manual or to use the flight model differently as described in the assembly instructions. Please also have a look at our website for further information's:

www.holzmodellbau-schweiger.de

When building the model, observe all safety regulations for handling tools and adhesives.

We use thick and thin superglue for assembling the model unless otherwise specified.

Particular care must be taken to ensure that the components are properly glued.

You can also find a very good build log at:

<https://www.rcgroups.com/forums/showthread.php?3656529-PURITO%21-New-F3RES-Sailplane>

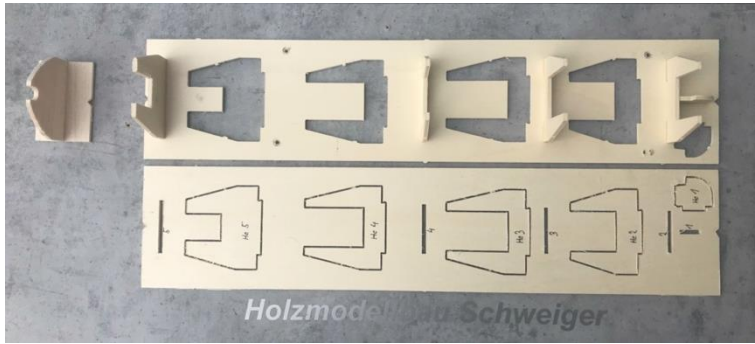
- The operation of model aircraft of this type requires model aircraft liability insurance
- Please check with your local authority, if you need a pilot registration. In the EU (beginning of 1st of January 2021) this is required.
- Do not operate the model in unfavorable weather conditions (thunderstorms, strong winds, etc.)
- Do not operate the model in the vicinity of high-voltage lines or close to urban structures.
- Do not operate the model, if it shows any signs of damages or failures in the remote control equipment.

We will be happy to answer any questions you might have, please contact via email:

holzmodellbau-schweiger@outlook.com

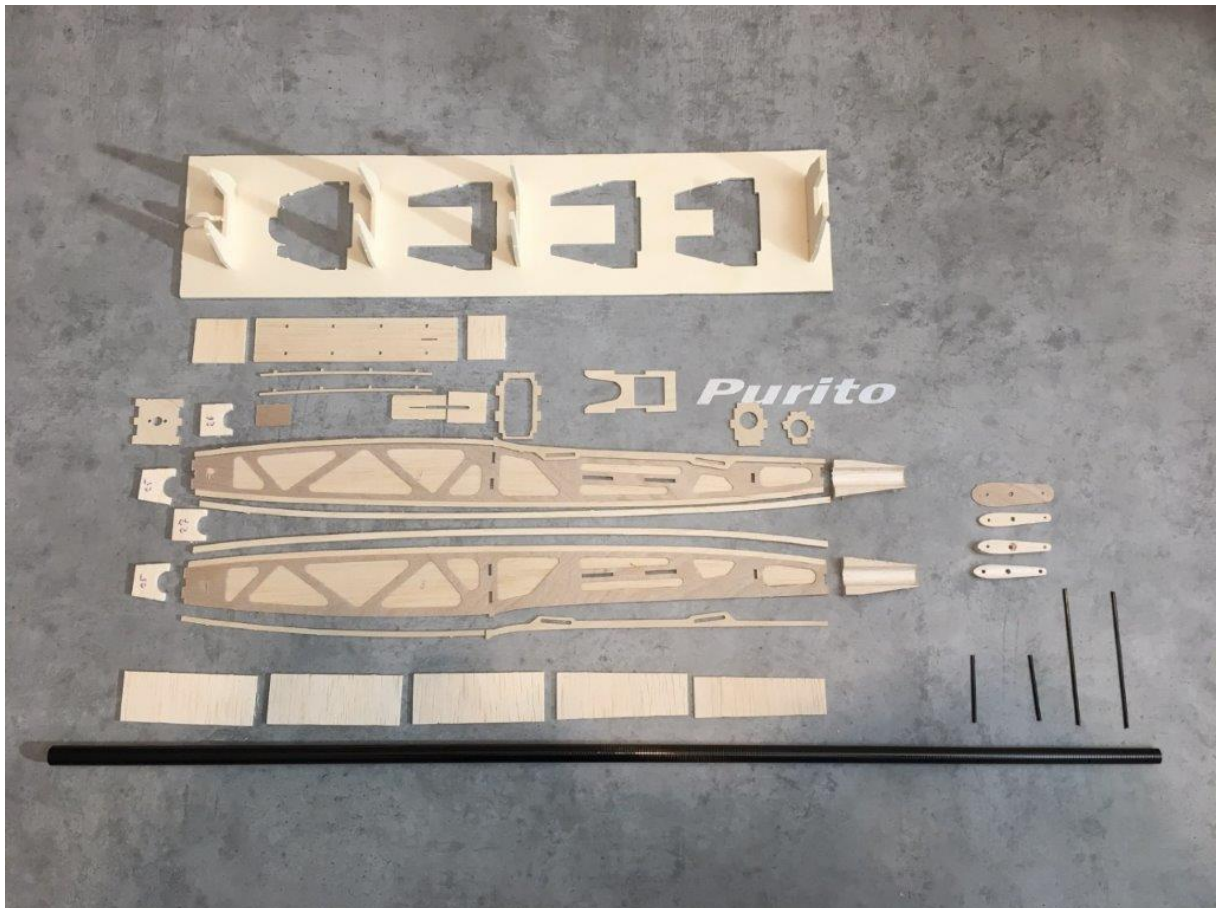
Errors and spelling mistakes reserved.

Description electric fuse:



We start with the fuselage slipway: the parts of the slipway are on a separate 3mm poplar plywood board. The stops are carefully cut out and glued into the slots provided. Stop 1 is provided for slot 1, stop 2 for slot 2, etc.

The slipway for the fuselage boom is on a 3mm balsa board and is glued as well. The directions L (left) and R (right) are in the direction of flight. For components R7 to R10, make sure that there is a left and a right part each, since the motor bulkhead is glued with side pull. The side pull in the motor bulkhead shortens the right side of the fuselage and lengthens the left side.



On the 2nd picture you can see all the parts that are needed for the construction. The parts are arranged in the picture as they will be assembled. The 0.6mm plywood reinforcement R10 is already glued to the balsa side R9 with white glue. The right half of the fuselage is the shorter side, so parts R7 and R8 are also shorter. They are glued together with R6 to the fuselage half as shown in the picture.



As shown in Fig. 3, we use a roller for gluing R9 and R10. This allows the glue to be applied in an evenly thin layer. Press the parts together for several hours.

Glue the balsa strips R8 flush to the fuselage sides at the bottom.

Now glue the wing supports made of plywood R6 flush on the top of the fuselage sides. Take care to remove any glue that may escape in the slots for holding the wing bolts.

In the canopy area, glue the plywood strip R7 flush with the fuselage, again paying attention to left and right.

Frames R1 to R5 have a small notch on the top. The servo board R3 is marked on the leading edge, as are the 4mm plywood parts (accessories bag). Now glue the two M5 nuts into the 4mm plywood parts of the wing bolts R11 and R12.

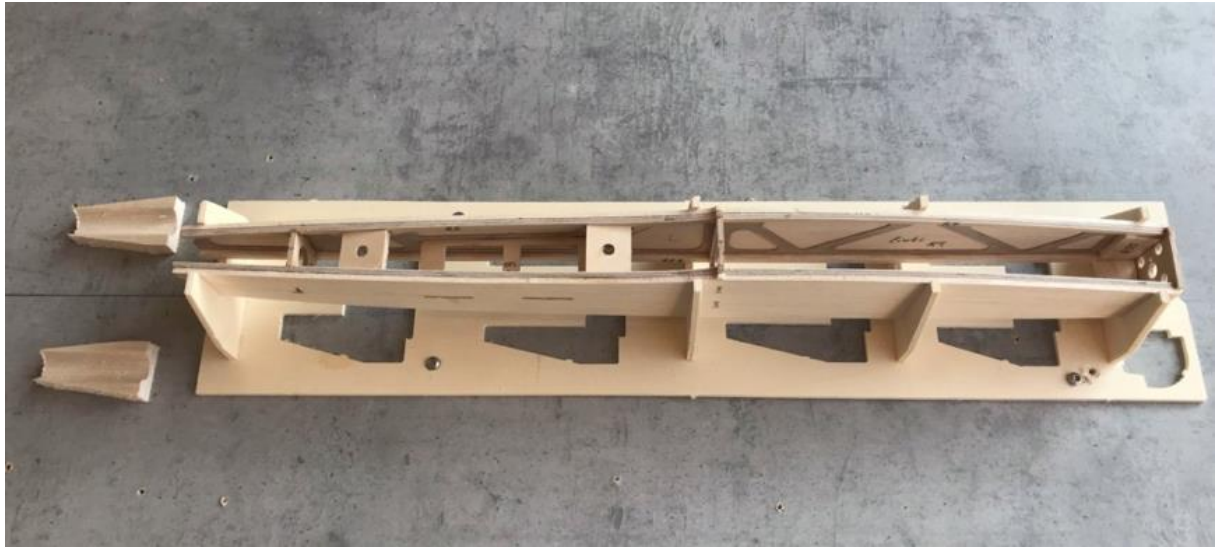


Part R25 behind the motor bulkhead

Two servo boards are included in the kit, one servo board with cutouts and one without. The servo board with cutouts is intended for the HEPF H47 (rudder) and the KST X06 (elevator). The second servo board without cutouts is intended for servos similar in construction, these can be fitted individually.

Now the fuselage can be test-fitted together.

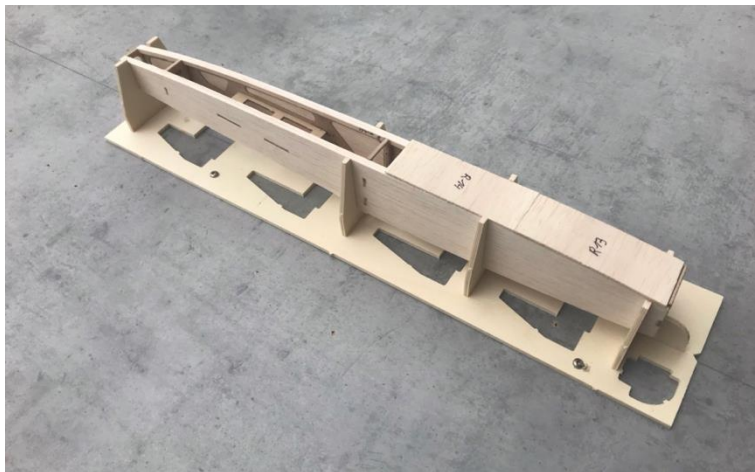
The fuselage sides are assembled with all formers and the wing bolting and plugged into the fuselage slipway.



Tip: We screw the fuselage slipway to our building board!

This ensures that it lies cleanly and the hull can be built up without distortion.

When all parts fit together properly in the slipway, they can be glued. Important here: frame R5 must not be glued yet. In the same way, the parts of the wing bolts R11 and R12 are only inserted into the slots provided for them, but not glued yet.



Now the hull boat can be taken out of the slipway and inserted with the bottom side facing upwards.

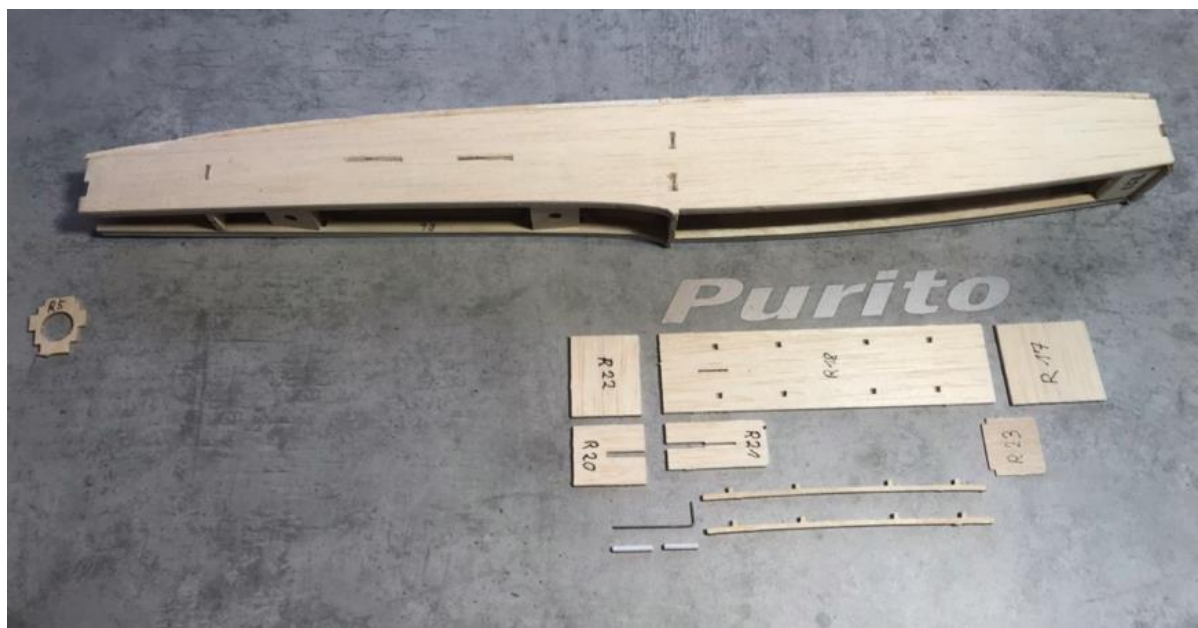
This is followed by the lower fuselage planking. We start with part R13, which is glued to the front of the fuselage (at the motor bulkhead). Important here: part R13 is slightly beveled on one face due to the side draft.

Therefore, make sure that the slanted side matches the motor bulkhead. Then parts R14 to R16a can be glued in place. For part R16a, make sure that the fuselage bulkhead R5 is not glued down.



Now parts R25 are glued to both sides of the fuselage, part R26 should be glued to the bottom of the fuselage and part R27 to the top of the fuselage, centered between the two parts R25 (see picture). The parts R25-R27 are there to fit the fuselage to the spinner later.

On the top of the fuselage, glue the balsa part R17 between the canopy opening and the engine bulkhead, here the wood grain runs crosswise.



Be careful here: part R17 is again beveled on one side due to the engine side pull. Glue the two symmetrical plywood parts R19 into the canopy R18 in the holes provided.

Make sure that the canopy reaches the necessary bend.

Tip: We carefully harden the slot in canopy R18 with liquid super glue. This prevents pressure marks in the balsa wood caused by opening and closing the canopy.



The plywood part R23 is glued inside the canopy to the fuselage tip center, serving as a tongue. Glue the balsa part R21 to the end of the canopy between the plywood strips. Bend a steel wire into L-shape and glue it together into a Bowden cable into the inside of the canopy as a fastener.



Then glue part R20 centrally on the fuselage planking R22 and fit it together with the canopy in the canopy opening in the fuselage.

Glue a piece of Bowden cable into the slot of R20 as a counterpart for the locking mechanism. Tip: when gluing the Bowden cable into R20, place the canopy approx. 0.3mm underneath. The goal is to position the bottom of the canopy slightly higher above the building board than the counterpart of the latch (part R22).

Now the latch can be pushed into the breach position, put on the piece of Bowden cable and glue it with R20.

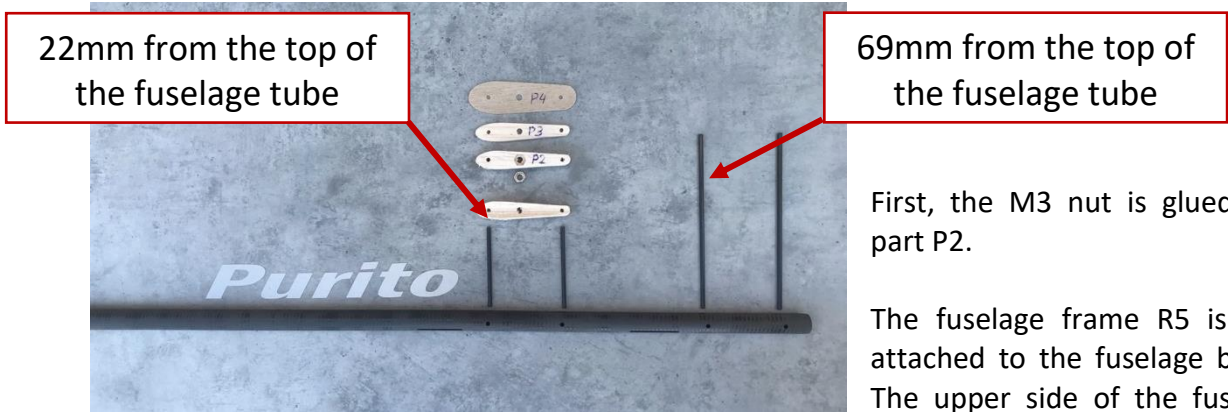
By underlaying the canopy with 0.3mm, a tighter fit is created so that the canopy fits neatly against the fuselage. Now part R22 can be glued to the fuselage.

Finally, the fuselage is roughly sanded together with the canopy.

Fuselage tube and pylon:

The fuselage tube made of CFRP can be wet smoothed with water sandpaper. We recommend a grit of 400 or finer here.

You will need: the 4 solid carbon rods with a diameter of 2mm, 2 each for the elevator and rudder (accessories bag). Also, the parts P1 (10mm balsa), P2 (8mm balsa), P3 (3mm balsa) and P4 (0.6mm) plywood) and the M3 nut.



First, the M3 nut is glued into part P2.

The fuselage frame R5 is now attached to the fuselage boom. The upper side of the fuselage

tube is the side with the cutouts for the Bowden cables. Insert the 4 carbon rods, the two shorter ones are for the pylon, these protrude about 22mm upwards from the fuselage tube. The carbon rods for the rudder protrude approx. 69mm from the fuselage tube. Pay special attention that the carbon rods are aligned with the axis center of the fuselage. Otherwise, the finished tail will not be parallel to the fuselage axis. Tip: as shown in the picture, we align the 4 carbon rods all parallel on a wooden board and fix them with a weight. Then the hull boom can be aligned exactly at 90 degrees to the individual carbon rods. You should take the necessary time here, because the clean alignment of the carbon rods for the tail unit has a significant influence on the flight behavior of the model.

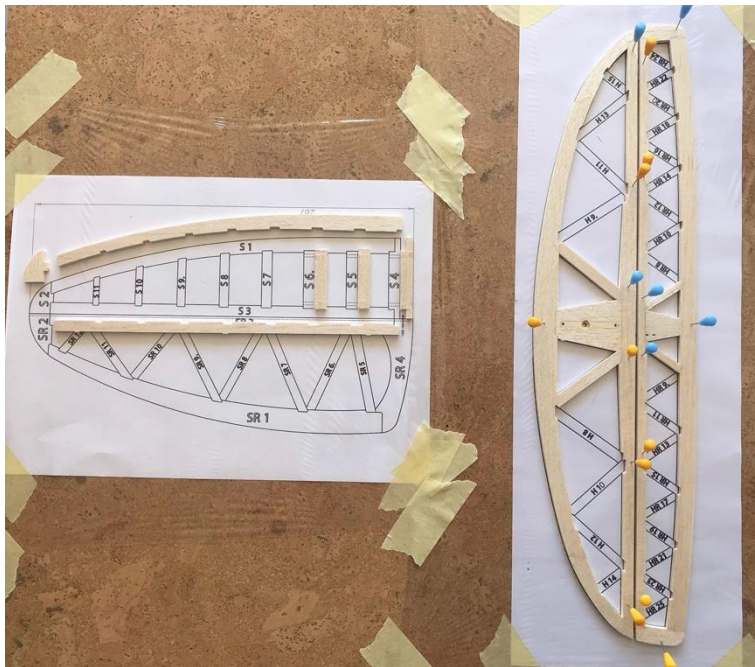
When the carbon rods are correctly aligned, they can be glued in place.



The pylon part P1 can now be fitted and glued in place. For component P2, make sure that the M3 nut points downwards. Attach and glue the P2 and P3 components as well. Only part P4 must not be glued yet, because this will be done later with the elevator. The carbon rods that protrude from the top of the elevator pylon should be shortened to 4.5mm (so that they no longer protrude when the elevator is screwed on)

Carefully grind the ends of the 4 carbon rods that now still protrude from the bottom of the fuselage boom flat. Make sure that the fuselage tube itself is not damaged by the grinding. Even minor damage will weaken the fuselage boom considerably.

Rudder and elevator:



The 4mm balsa board with the parts for the elevator and rudder are needed for building. The reinforcement part made of 4mm poplar plywood is in the accessories package. Additionally there are 3 parts (S4-S6) for the rudder on the 8mm balsa board.

For the elevator, first press the 4mm plywood part from the accessory package flush into part H2 and then glue it in place. The struts of the elevator have a bevel or a small rounding on one side. This shows the correct position and alignment in the rudder.

We assemble the elevator as follows:

- First, we staple the parts shown on the protected construction plan (household foil) and glue them with a drop of thin super glue.
- After that we insert the remaining struts and glue them in the same way

The same procedure is to be used for the rudder.

Here, too, we first staple the outline together and then work our way up from the bottom.

Tip: harden the holes in the rudder to accept the pins. To do this, insert a greased 2mm drill bit into the hole and apply a drop of liquid super glue to it.

The construction of the tail unit is also explained in detail in our 4th tutorial: <https://www.youtube.com/watch?v=F4erVqr0to4>

At the end we put the rudder on the fuselage tube and screw the elevator on the fuselage pylon. To do this, we apply a little white glue to the fuselage pylon and glue the P4 support extension to it.

Again, make sure that the angle of elevator and rudder is exactly 90 degrees.

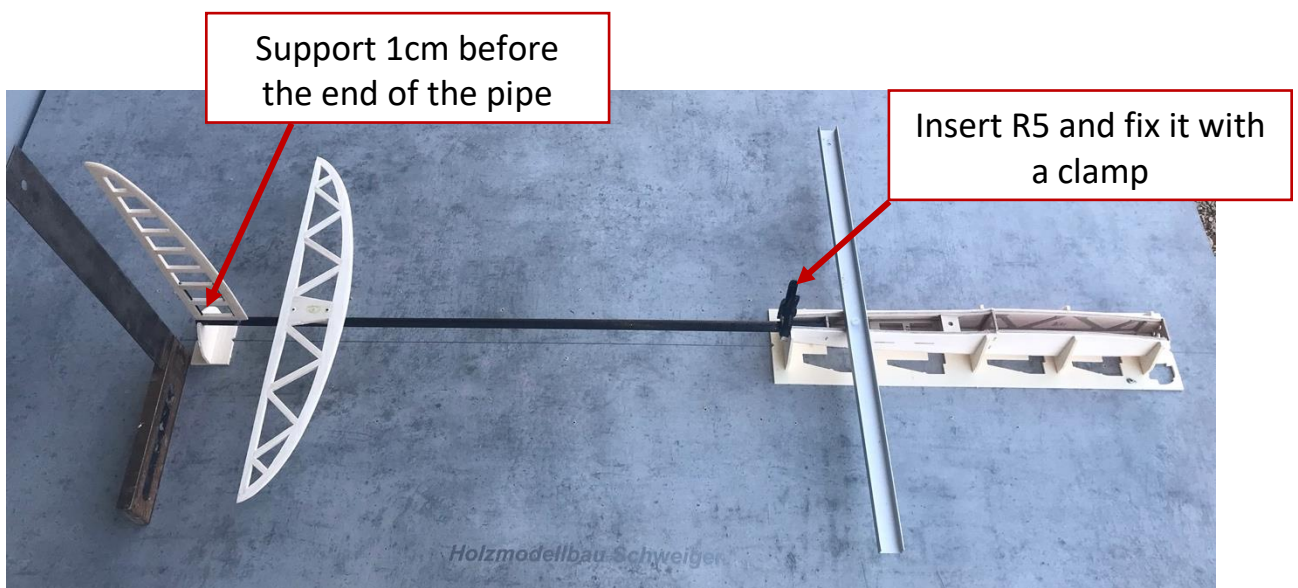
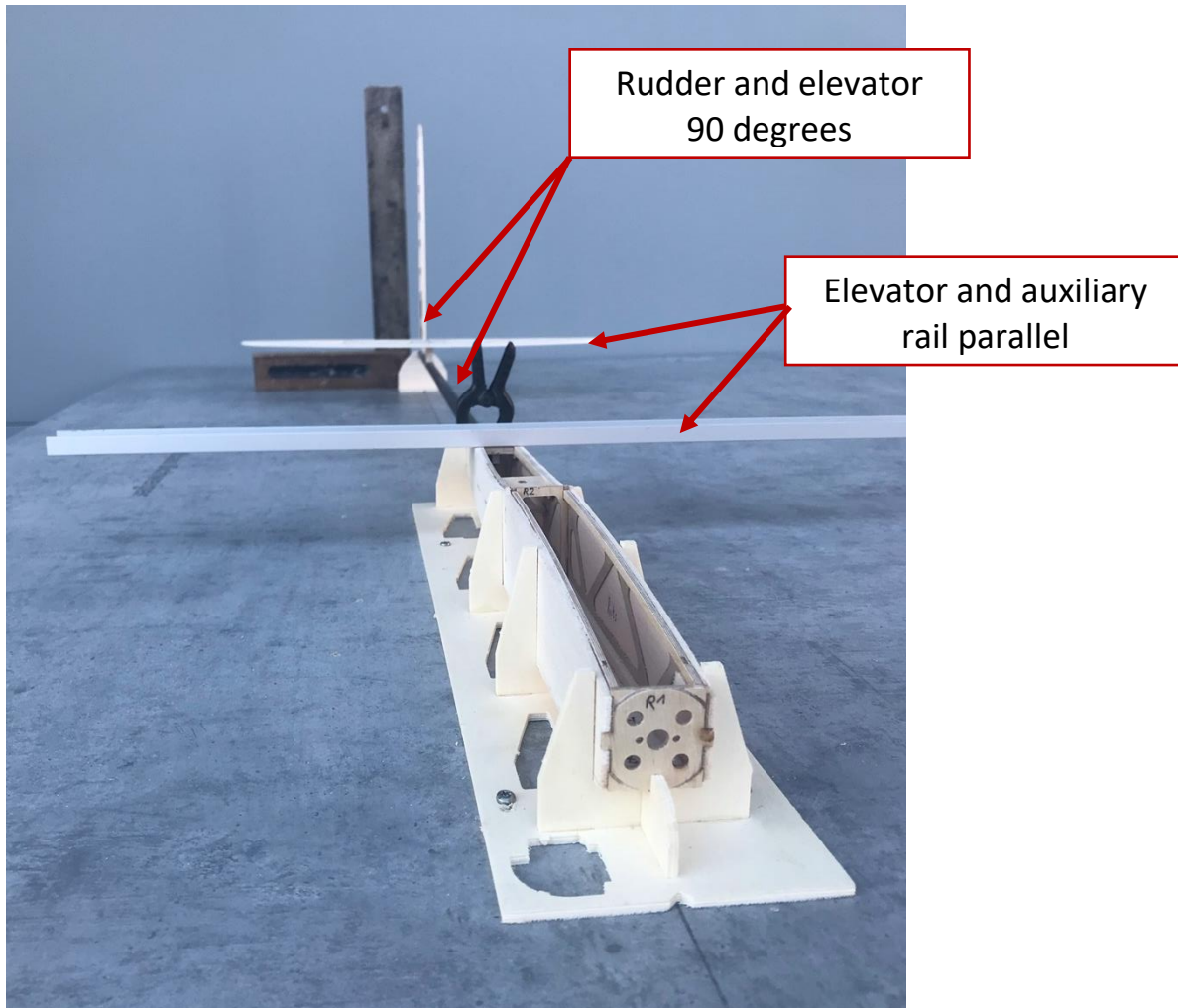
Tip: when gluing, a lightly greased M3 steel screw helps to prevent it from sticking in the thread.

We will go into more detail about sanding the tail plane in a later point.

Assembly of the fuse:

Now the fuselage tube can be joined to the fuselage boat.

The wing support is checked once again for protrusions to ensure a flat support surface for the wing center section.



A straight line is drawn on the building board, extending along the entire length of the hull. The fuselage tube is inserted into the fuselage boat so far that it protrudes 2mm from frame R4.

The frame R5 is inserted into the rear of the fuselage boat. 1cm before the end of the fuselage boom the support made of 3mm balsa is inserted.

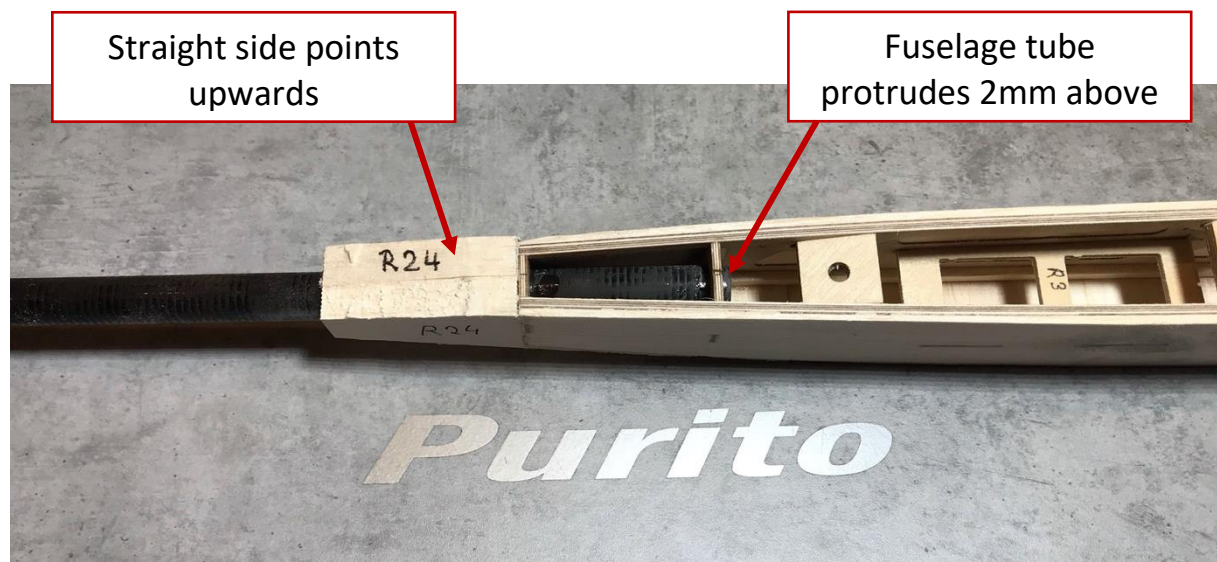
On the rear surface screw connection, a straight strip with a length of approx. 40cm, in an angle of 90 degrees to the fuselage center line is screwed on (this serves us as an assistance for the alignment).

Now all parts can be aligned, parallel to the drawn line. The fuselage tube lies neatly in the holder, the fuselage lies flat in the fuselage slipway.

The elevator lies parallel to our screwed-on auxiliary rail. The fuselage side panels are pressed to frame R5 with clamps. Before gluing, check again for correct alignment.

The fuselage must lie without tension in its slipway and end support.

Only a correctly aligned fuselage ensures optimum flight characteristics.



The final work on the hull now includes the transition from the hull boat to the hull tube, which is done with the two parts R24. These are fitted to the end of the fuselage boat and glued with the straight side facing upwards.

Sanding of fuselage and tail unit:

When sanding the fuselage we start as just mentioned with the transition from the hull boat to the hull tube. While doing this the hull tube should be covered with tape to avoid damage caused by grinding. **Attention:** if the CFK tube of the fuselage is damaged by sanding a predetermined breaking point is created at this position.

Firstly the end of the fuselage is adapted to the contour of the fuselage. We use a 150 grit sanding board (as shown in the picture below). **Tip:** Sanding boards can also easily be built from the balsa residues, to which we stick the sandpaper.

In order to get smooth curves on the desired fuselage edges we first grind 45° phases. These phases are easier to control for evenness and help us to maintain a clear radius.

When the desired fuselage shape has now been created all wooden parts are sanded again with a finer sandpaper (grain approx. 240) to get a smoother surface.



Tip for sanding the tail unit:

We stick a piece of sandpaper over the entire length of the tail unit on a wooden plate.

The tail unit is placed on top of this, as can be seen in the picture.

As a result the tail unit can't slip away and can now be sanded with another sanding batten.

Thereby remaining super glue spots can be removed from the surface.

After that an auxiliary line is drawn in the middle on the elevator and rudder along the trailing edge.



As you can see in the picture, we put the rudder on an 8mm thick plywood. When sanding the rudder with a sanding board, make sure that the sanding board rests on the trailing edge of the tail unit and the edge of the table. So we grind the trailing edge to a point from both sides (approx. 1mm) up to our auxiliary line. In contrast to the trailing edge, which we have just sharpened to a point, we are grinding the leading edge of the tail units round.

For this we grind a 45° phase on both sides of the leading edge of the tail unit which takes up about a third of the wood thickness. This phase in helps us to grind an even curve over the entire edge curve. When sanding the rounding make sure that a rounding actually occurs at the end. A tapered leading edge of the tail unit would affect the flight characteristics negatively.

At the end only the bevel for the rudder deflection is missing. With the elevator the bevel is on the underside of the rudder with the rudder on the left side, where the control horn will later be located.

The slope in the elevator must be sufficient to achieve a downward deflection of at least 12mm. The rudder must have a deflection of at least 45 degrees in both directions.

We also explain the grinding of the tail unit in detail at the end of our 4th tutorial:
<https://www.youtube.com/watch?v=F4erVqr0to4>

Installation of the pushrod (Bowden) tubes:



To achieve a secure gluing of the Bowden tubes in the fuselage tube, we proceed as follows:

A 0.8mm steel wire is inserted into the bowden tube which must be about 2cm back at the rear end of the Bowden tube. This protrusion of the Bowden tube over the steel wire is important that the steel wire doesn't stuck in the Bowden tube later.

The Bowden tubes are placed into the fuse tube and fixed to the inside wall of the fuse with the help of magnets.

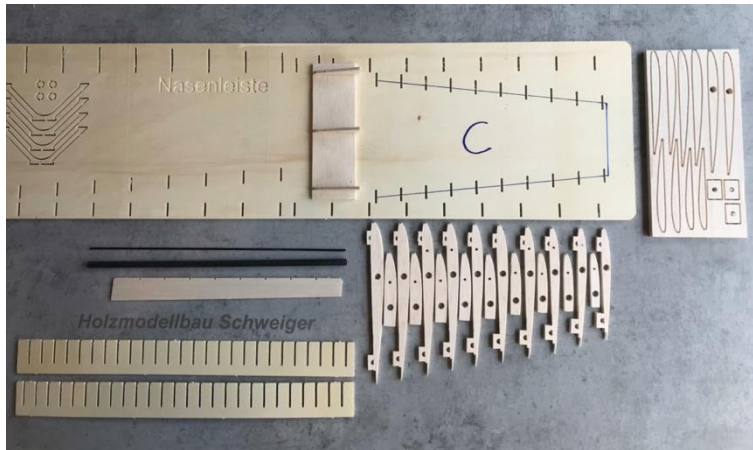
Tip: the position of the Bowden tubes at the end of the fuselage boom is already given by the milled openings. In the fuselage it is important to ensure that the Bowden tubes are designed to match the used servos.

Now approx. 15 drops of liquid superglue can be dripped along the Bowden tube into the inside of the fuselage tube. The superglue runs down the Bowden tube to the end of the fuselage tube and glues it over its entire length. To do this the fuselage must also be held vertically when gluing.

Note: it is advisable to put a piece of newspaper on the floor as the superglue can drop out of the pipe.

Description wings:

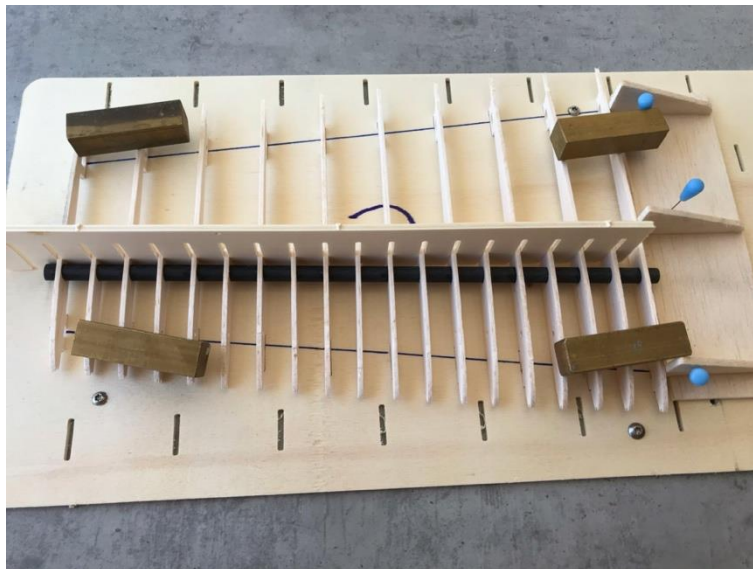
We will start with panel C:



On the picture you can see the needed parts: Base plate, matching ribs for part C, edge bow, 5 degree stop, end bar, comb, 7mm CFK tube (spar) and the 2mm CFK tube (leading edge).

I lightly sand the CFK tubes with 200 water sandpaper and clean them with a degreasing agent. The retaining webs from the ribs are to be removed as cleanly as

possible after cutting. This saves a lot of sanding work in the end and the profile is preserved exactly.

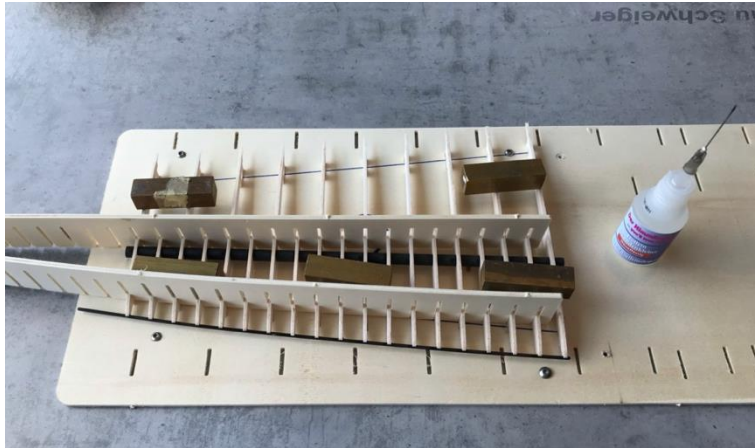


One more note about the base plate: The foot at the end strip of the rib determines the position.

Afterwards, the ribs of part C can be placed on the cut-to-length CFK tube (7mm diameter, 262mm length). The CFK tube should still protrude by about 7mm at the edge bend. The ribs are aligned with the combs. Then they can be inserted into the template for the feet of the ribs in part C

(please make sure that the leading edge points in the right direction).

Important here: The building aid must lie flat on a straight building board (preferably screwed on directly). Now make sure that the alignment is correct and that the ribs are fully inserted in the template. The rib C1 is placed with the stop on a slope of 5 degrees.

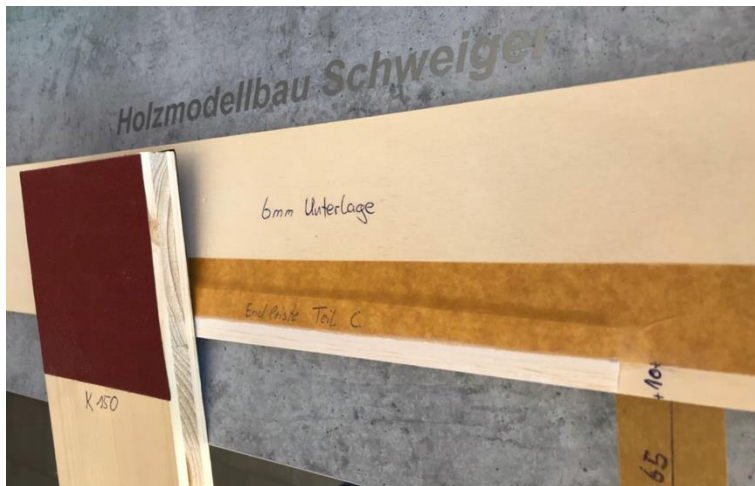


At the end we check again the correct alignment of all ribs and glue all whole ribs (not the half-ribs) to the tube. Tip: for correct alignment we use weights to fix the wing part neatly.

We use a thin liquid super glue for gluing.

For the leading edge we use the 2mm CFK tube, which is carefully inserted into the cutouts provided for it.

After that, the half-ribs can also be neatly aligned and glued again with the comb.



The end strips are ground before installation. To do this, place the first and last ribs on the end strip and mark the end of the ribs on it.

Our two markings are now glued on with masking tape at the same distance. Here, the end strip should be flush with the edge on a plywood. Tip: We use as a rule of thumb 1mm underlayment corresponds to about 1cm distance from the

edge of the table. So in our case, with an underlay of 6mm, this corresponds to a distance of 6cm between the end strip and the edge of the table.

Tip: When the end strip is almost finished sanding, remove it from the carpet pad and soak the back 5mm with liquid super glue and then finish sanding. After soaking, the end strip should only be carefully sanded once more so that you don't take away too much material. We recommend a thickness of 1mm at the end.

If you now turn to the second end strip, make sure that you need a left and right end strip.



For the end strips (sash part A,B,C), sanding is performed on a base of 6mm at a distance of 60-65mm from the edge of the table. This distance is the same for all end strips of the wing.

The finished ground end strip is fitted flush onto the ribs from behind, at the bottom. This is done with the intention of a tight fit. As you can see in the picture, the wing part is shimmed 2mm in the front (under the feet of the ribs) and

8mm in the back, so that the end strip lies neatly in the profile.

We also explain end strip sanding in detail in our 1st tutorial:

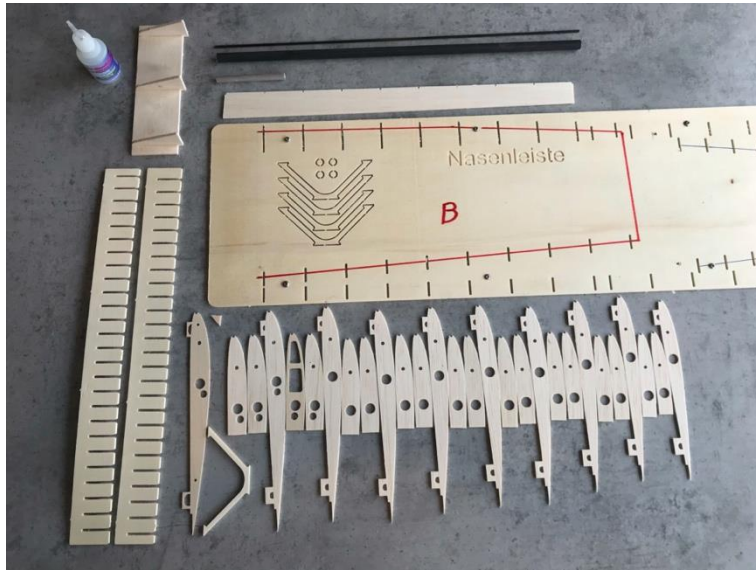
<https://www.youtube.com/watch?v=hPf9JKf5TbM>



The parts for the edge bow (1-5) can be found in the 8mm balsa board. These can be glued together according to personal taste, we use an offset at the end strip of about 2mm. Tip: protect the building board here with a piece of household foil, place the parts of the edge bow with the straight underside and glue them together.

The glued edge bow is attached to the protruding carbon spar and adapted to the wing shape. First, sand the edge bow and then glue it to the wing ear.

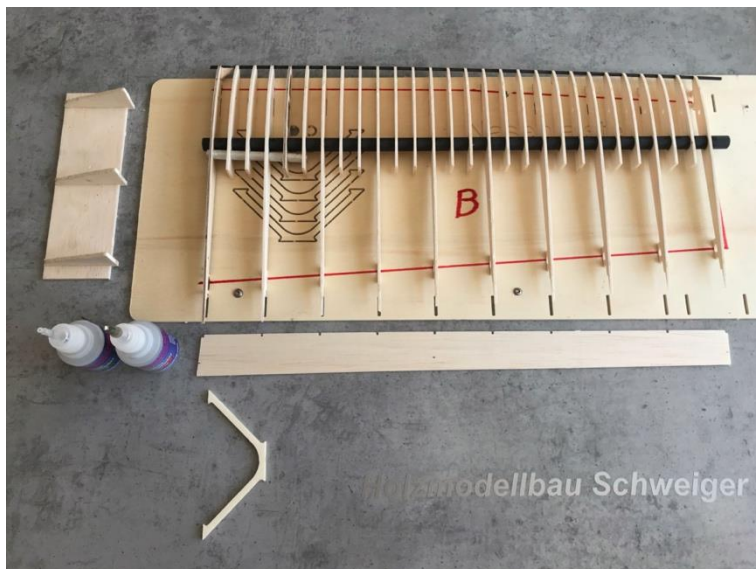
When building the second wing part, make sure that this part is built mirror-inverted! (left and right wing ear, turn base plate for this).



The wing panels B are built up in the same way as the wing panels C.

The only difference is that here, a 7mm aluminum tube must be glued in as a surface connector, too. Also, make sure that both the root rib and the end rib are slanted 5 degrees.

Important: grind the aluminum tube of the wing connector before gluing it in order to create a rough surface. This is the only way to ensure secure bonding. In addition, the aluminum tube is closed with a small plywood circle from the base plate.



In this picture, the wing mating and the small reinforcement on the leading edge are already glued in place.

Caution here: the leading edges in panel A and B are 2.5 mm thick. (In contrast to panel C: here it is only 2mm thick).

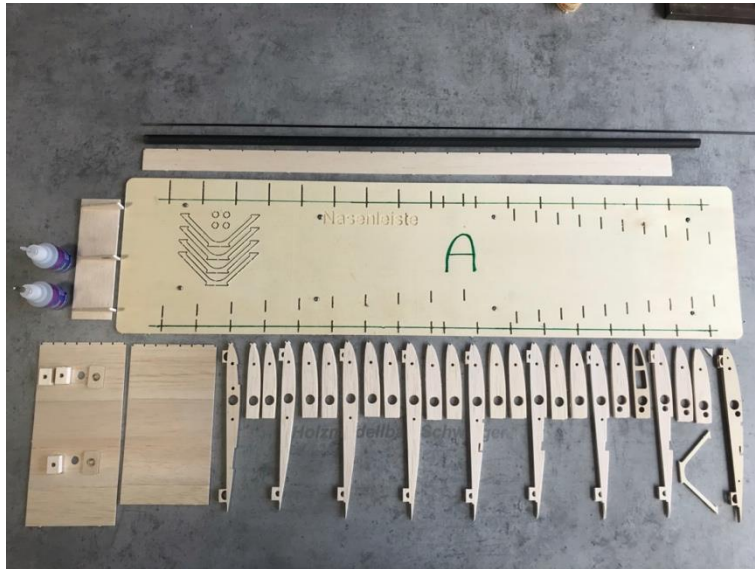


The wing part B is again underlaid at the leading edge with 2mm (under the feet of the ribs) and at the trailing edge with 8mm. This allows the end strip to be glued on without distortion. At the end, the large reinforcement between rib B1 and B4 is glued in place.

The reinforcements are made of 3mm poplar plywood. These reinforcements will help us later to string the wing without distortion.

Wing panel A:

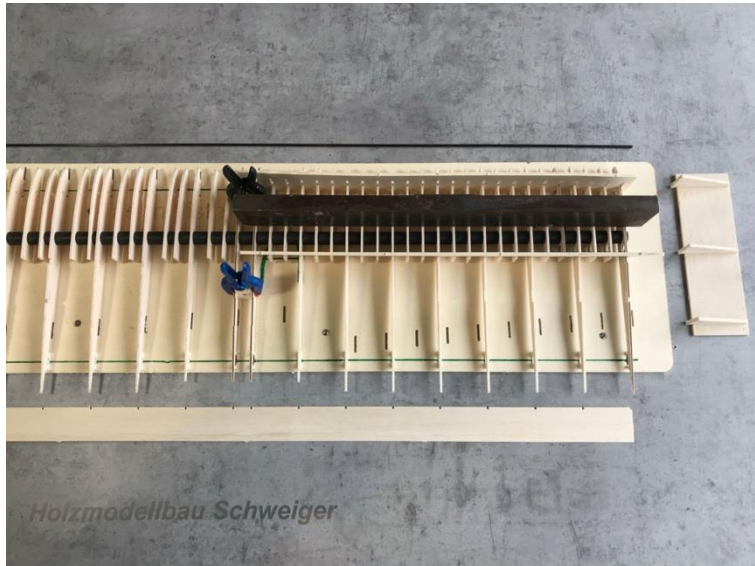
All ribs are carefully cut out from the building board and cleaned. We start in the center with ribs A1 (2mm plywood). These are threaded onto the cut-to-length CFK tube (12mm diameter, 695mm length). Then the remaining ribs follow in order of designation. All ribs are inserted into the template together with the two end ribs A25.



Tip: take enough time with such a large number of ribs to align them neatly with the combs on the base plate. The end ribs A25 must again be inclined 5 degrees with the template.

The gap between the two ribs A1 in the center is larger than the gap of the remaining ribs. As a result, the comb does not fit into this gap either. In order to align the ribs at a 90 degree angle to each other, we clamp the relining to the surface screw A2V (8mm balsa board) between

the ribs using a clamp. Thus, the two ribs are fixed vertically.

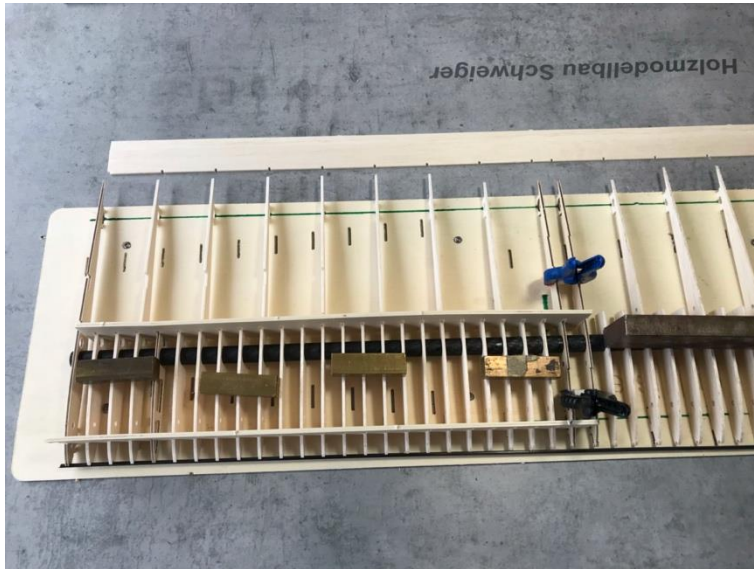


Now the remaining ribs can also be aligned. They are then glued to the spar. After this step, the leading edge (CFRP tube 2.5mm) can be attached to the front. Note that the comb must be shortened by one field to align the ribs. This is because the root rib is now at an angle of 5 degrees and thus the comb no longer fits over a complete half of the center section.

To fit the leading edge now, we place one comb just behind the leading edge and the other just behind the spar. This allows the ribs to be aligned at 90 degrees to the spar. We weigh down the ribs with weights to push them all the way into the base plate.

Now we start to press in the leading edge at the root rib A25. Rib by rib, the leading edge is now threaded towards the center.

Tip: Once approx. 15 ribs have been threaded on, the leading edge can be glued to the root rib. This simplifies further threading.



After that, the two plywood pieces A1V (for the surface screw connection) can be placed. These belong in the recess of the plywood ribs A1. The top side is marked by the recess for the screw head.

Then glue it in place. The aluminum plug-in tube is closed again on one side with the plywood circle and also glued in place.



The next step is the border for the flaps in the wing. The parts KF1-KF2 from the 3mm, and the two strips KF3 from the 2mm balsa board are needed. KF3 can be found on the balsa board of the ribs (part A). Note here that there are two different versions of KF3: one with the cutout for a servo frame, and one without the cutout. The parts are inserted into the surface in the recesses provided for this purpose and glued. The short KF2 strips are always glued to

the center of the wing (see picture), otherwise there is no room for the airbrake. Important here: as shown in the picture, KF1 is glued lying towards the leading edge and standing towards the trailing edge. The center section should remain on the base plate for this build step to prevent possible warpage. We have removed the center part from the base plate only for the picture.

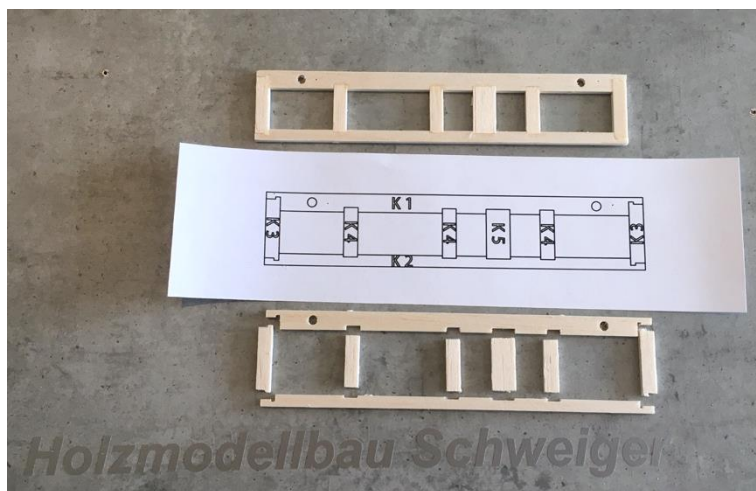
The ground end strip is glued to the wing as in part B. To do this, take the center section from the base plate and place it under the feet of the leading edge strip with 2mm and on the trailing edge strip with 8mm. Then glue the end strip to wing part A.



The component A2V is located on the 8mm balsa board and is glued under the plywood part A1V and pierced flush. Tip: insert a drill with a diameter of 5mm through the balsa blocks A2V when gluing so that the holes are exactly on top of each other.

The upper planking (1.5mm balsa) is adjusted to the leading edge and shortened by about 2-3mm at the end. The shortened end of the planking is sanded at an angle to match the profile.

Tip: we sand about 13mm wide for this and the trailing edge down to 0. When the planking matches the profile of the center section, it is tacked to the leading edge. Then quickly apply a thick super glue to the two plywood ribs and the end strip. The planking can now be



pressed on, along the remaining ribs we glue the planking from below with thin super glue. Now all support feet and the protruding tubes at the root ribs can be removed. Depending on how the center section is to be removed, the cables for the servos can now be routed. Assemble the parts for the airbrakes on the plan and then glue them together with liquid super glue. Then fit the airbrake

into the recess in the center section.

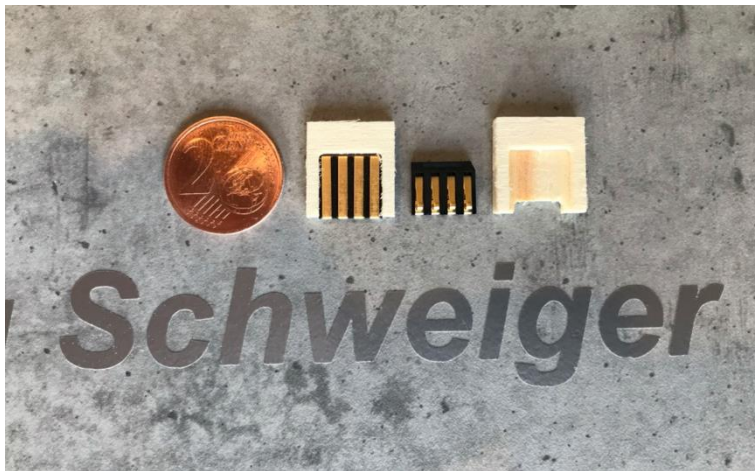
Finally, the magnets (diameter 4mm) must be glued to the underside, flush in the holes



provided for them in the airbrake. The flap is inserted into the wing. The magnets can now be placed on the underside of the KF3 component. The magnets now align themselves. This means that the remaining magnets from the underside of the wing can also be glued. The magnetic attraction force is thus already sufficient in this version. If a higher attraction force is required, the magnets can be embedded a little deeper.



Should our solution be used for the flap opening, a servo arm extension is required. For the servo arms we recommend our GFK extension, which is available as an accessory together with the matching servo frames.. We also have a video for the functional mode:
<https://youtu.be/d9o5HwRrMTI>



We use a 5-pin spring contact for the power connection to the fuselage. This is also available from us as an accessory. As you can see in the picture, these accessories also include milled plywood parts that fit the spring contact accurately into the wing mount.

Soldering experience is required for this design.

In the next step, the lower planking of the center panel can be attached. To do this, the planking must be adjusted to the leading edge and glued in place. When the planking neatly matches the profile of the wing, it can be glued to the underside of the ribs.



To prevent twisting of the wing ears on the center section, the accessory package includes dowel pins with a diameter of 2.5mm made of CFK. These pieces are slightly sharpened with sandpaper and inserted into the wing center part. Now the ear can also be pinned on, but with a small gap to the root rib.

Tip: we put a 2mm balsa rest between the middle part and the ear and fix them together with two clamps. The ear can now be neatly aligned with the center section on the underside. The best way to tell if the two parts are exactly aligned is to look at the underside of the wing. If this is the case, the pins are glued to the inside of the root rib (middle part). Now the ear should be easily removable. To further secure the pins, there are small plywood washers on the rib board. These are also glued to the inside of the root rib (center section), on top of the CFK pins.

If these connections fit neatly, the wing parts B and C can now be glued together. For this purpose, use the milled, 2mm GRP connector in the accessories package. The connector is fitted into the CFK tubes and then glued vertically.

The model is now ready for assembly. The final steps include screwing the wing onto the fuselage. To do this, the lower planking must be drilled through at the location of the wing screws. Tip: again, these edges can be hardened with liquid super glue.

Once the wing is screwed to the fuselage, all angles from the wing to the tail unit are checked again. If these angles match, it is important to glue the still loose wing screw connections in the fuselage (4mm plywood pieces). This step is especially important because the glued wing bolts contribute significantly to the stiffness of the fuselage.

Before covering, make sure that all support feet and retaining webs of the milled parts are cleanly removed and that no unevenness interferes with the profile.

When covering the wings, it is particularly important to stretch the film evenly on both sides of the model. It is also important to ensure that both sides of a wing are subjected to an even tension.

If this is not the case, the wing will twist in itself and thus negatively affect the flight characteristics of the model.

We recommend ORACOVER light foils for covering the Purito.

When the model is finished covering, the GFK rudder horns must be glued into the milled holes provided for this purpose. The longer rudder horn is for the elevator, the shorter one for the rudder. The linkages are to be attached in the outer holes of the rudder horns, since in such a way an optimal rudder deflection can be achieved.

You can now also screw in the launch hook and install the remaining RC components.

RC components:

We used the following components for our test models:

- Drive: Hacker A10 with gearbox
- Regulator: Pichler Pulsar A-15
- Battery: 3s 450 mAh
- Elevator servo: KST X06
- Rudder servo: Hepf H47 or KST X06
- Airbrake servos: Hepf H47

Of course, other components can be used, but then the motor bulkhead or servo board may have to be adjusted.

Basic settings before the first flight:

- Center of Gravity: for the first flight, a center of gravity of about 75mm (measured from the leading edge of the wing) should be selected.
- Rudder deflections: Elevator +/- 1cm, rudder 45 degrees, airbrakes maximum deflection 90 degrees (add a little elevator to the airbrakes about 10% of the total deflection).

Note: for the first flights, light hand throws are advisable to find the correct rudder settings. The building instructions give you a suggestion how to assemble the model. However, if you have any suggestions or ideas for improvement, we would be happy to receive feedback from you.

We wish you a lot of fun with your finished E-Purito and a good flight all the time!

