

Dear modelling friend,

Congratulations on your purchase of the **Foxtrot**. This kit was developed with the most modern means and precisely laser-cut and CNC-milled from high-quality materials. Thanks to the precise construction of the plug-in connections, the model has a high degree of strength and makes assembly much easier. Even a model builder with little experience can assemble this great model in a short time.

We mainly use thin liquid instant glue. We recommend gluing individual parts such as the wing spars of the motor spans and the deck ring with epoxy resin.

The **Foxtrot** is an extremely good-natured glider with very good flight performance.

### **Contents of the construction kit**

The kit comes with all parts for the shell of the aircraft.

Additionally required:

- RC system with at least 6 channels
- Complete electric drive, motor, controller, folding propeller and 40-42mmØ spinner.
- Covering (e.g. Oracover)
- Thin instant glue, epoxy resin, white glue

Drive recommendation:

The motor must not exceed 30 mm Ø it must be front mounted and provide between 600-1000gr. thrust.

Hacker A20 EVO with 3S LiPo

X-Max X28L encapsulated external rotor from Staufenbiel  
DYMOND MASTER HQ 2838 or 2832 from Staufenbiel ESC  
and propeller according to manufacturer's recommendation.

Recommendation Servos:

Hitec HS-82MG  
Flap HS-55

Recommended rudder settings (measured at the rudder end)

Elevator: +/- 25-20 mm  
Rudder: +/- 30-30 mm  
Aileron: +/-15 /12 mm

### **Technical data**

Span: 2700 mm  
Length: 1220 mm  
Weight: 1100 - 1'400 g  
Profile: S 3021 mod.

Have fun building!



## Tips and tricks

To begin with, a few tips on building the model. Please read carefully and during construction it is advisable to refer to these tips from time to time.

Due to the sophisticated plug-in system, and labelling of the parts, it is almost impossible to make mistakes when assembling the Foxtrot. We also recommend that you first connect the joints with only 1-2 drops of thin super glue. Then make sure that everything is in order and only then glue the component completely.

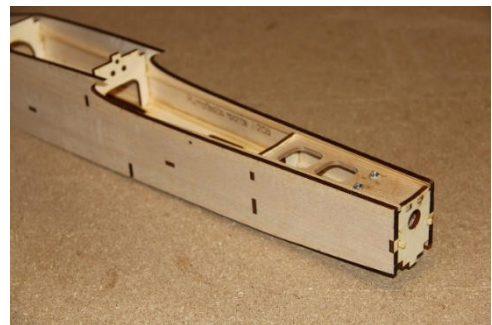
Since the thin instant glue can penetrate the entire joint, you must work on a base that can be removed from the components when the glue penetrates. Household foil, baking paper are helpful here, or you can also stick an adhesive tape on one side before gluing and glue from the other side. Then quickly remove the tape again.



The interlocking also creates an extremely stable cell, which gives the hull excellent stability!

This allows the hull to be built up without distortion.

The wing attachment sits firmly in the fuselage due to the serrations.



A 0.5mm GFR reinforcement is glued on to strengthen the wing attachment. This way the forces around the screws are transferred well into the wing. The transitions can be sanded for optical reasons.



**ATTENTION:** The fuselage side parts differ in the recess for the motor span. This determines the camber and pull for the motor. The markings on the side panels must be on the inside!

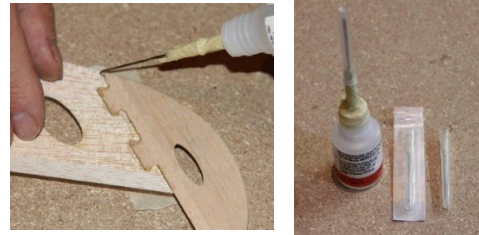


The centre of gravity is at 89mm from fuselage cut-out. The holes on the side of the fuselage are used to determine the centre of gravity.

This can be easily adjusted using the centre of gravity scale provided in the kit. The aircraft should tilt slightly forward.



In order to be able to apply the thin-flowing instant glue in just the right amount, insert a spray needle onto the Bottle. The needles for syringes are available in every pharmacy. Here you can see well how the needle sits on the bottle. Please attach carefully and secure everything with tape. If the needle becomes clogged or too dirty, simply burn it out with the lighter. **Please follow the manufacturer's instructions.**

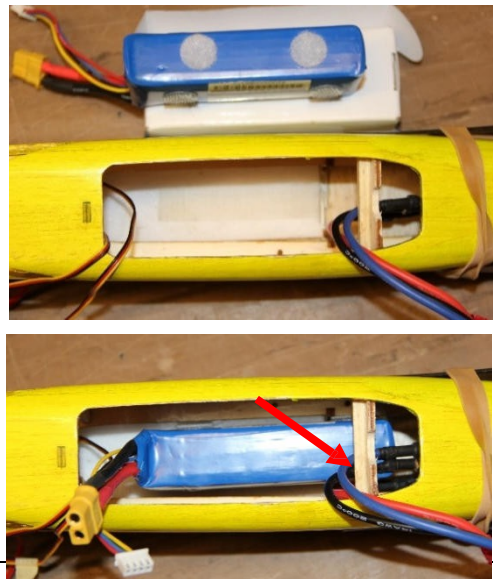


The 6mm depron goes into the nose of the fuselage to thicken the bottom and make it flush with frame 3. Please glue on with white glue.

The Velcro strip goes on the Depron and the two counterparts on the Lipo.

This way we get a good hold for the lipo

Markings can be made on the lipo to restore the centre of gravity when changing the battery.



## Warranty and liability

If a part is damaged during delivery, we will of course replace it. All parts can also be reordered. Together with the corresponding parts list and the no. it should be no problem to describe and order the required part. Unfortunately, we cannot give a guarantee on the aircraft.

Since the manufacturer and seller have no influence on the proper construction and operation of the models, any liability is excluded.



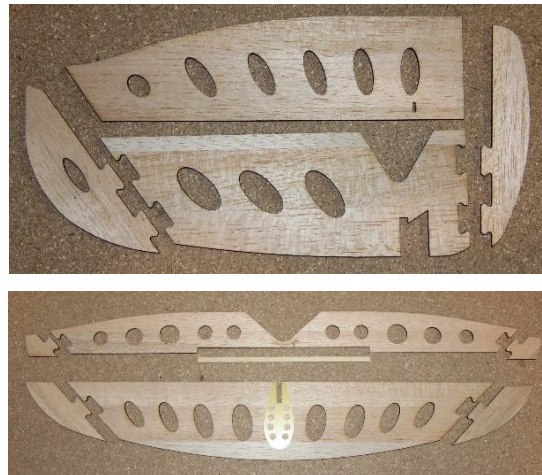


## Building the tailplane and rudder

The first finished components in 15-20 minutes!

Put the wooden parts together and glue them with super glue.

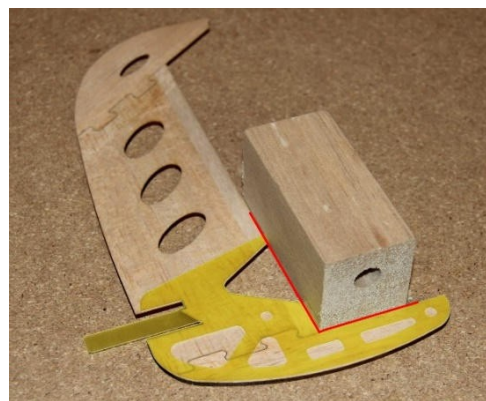
Since the thin instant glue can penetrate the entire joint, you must work on a base that can be removed from the components when the glue penetrates. Household foil, baking paper are helpful here, or you can stick an adhesive tape on one side before gluing and glue from the other side. Remove the tape quickly afterwards.



The rudder is reinforced **on both sides with** 0.5 mm GRP.

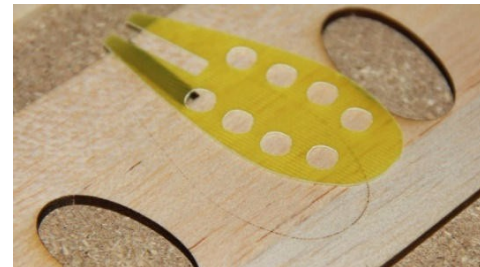
**Attention:** Align the GRP with an angle or block on the **inside of** the rudder and dot it into the recesses with instant glue.

Then lift the GRP at the edges, insert the glue and bring it back into position. **Be careful of the** glue that comes out when pressing on.



The elevator also receives a GRP reinforcement for later attachment to the carbon rod.

The position for the GRP part is marked on the elevator. Also glue this with instant glue.

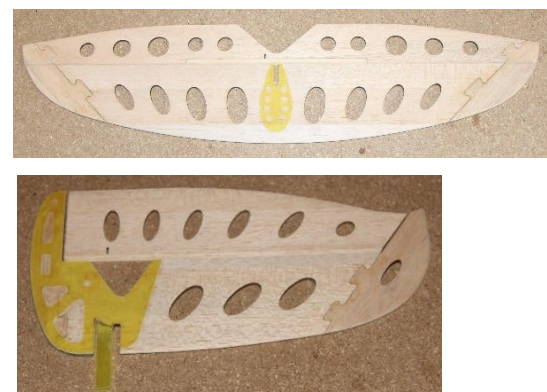


For better aerodynamics, sand the leading edge of the rudders round. Sand the ends of the rudder fins (rear) evenly on both sides to an angle of about 1 - 1.5mm.

On the elevator and rudder

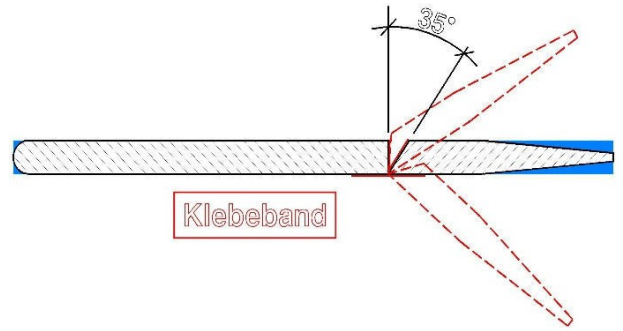
**The hinge edge** must be ground at an angle of 35° to achieve the necessary deflection of the rudder.

Sand the surfaces of the finished parts with fine sandpaper (220 grit or finer) using a sanding block.



In the drawing you can clearly see how this is done with front round and is meant to be slanted at the back. The blue areas are to be sanded away.

The 35° slope can also be seen in the drawing, the two rudders is to be sanded and taped to the fixed part.



## Mounting the tail units to the carbon tube.

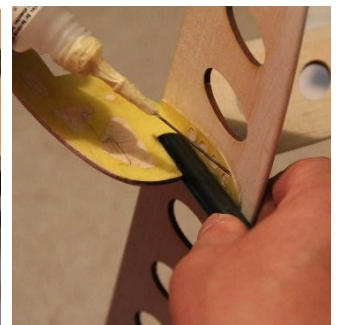
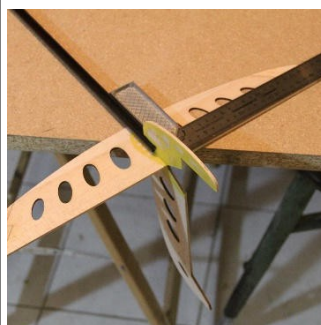
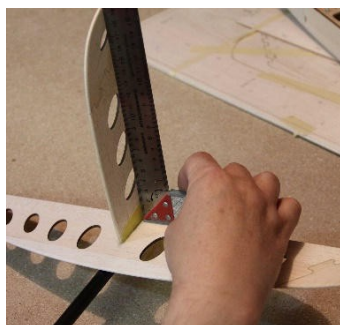
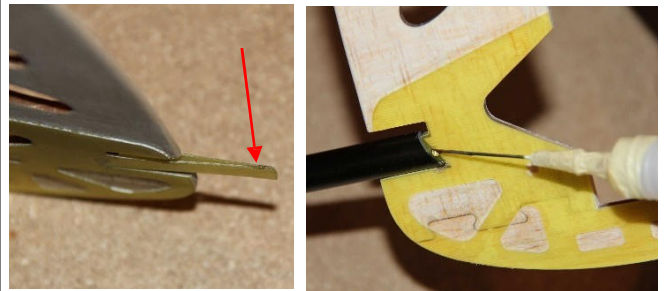
First glue the two **GRP tabs** on the rudder with a drop of instant glue.

Put the whole thing together and align it flat on the table then underlay it with the 4mm thick fuselage cover. This gives us a rudder aligned with the fuselage tube. Secure with a little super glue. After drying, check again and then fix the tabs in the tube by letting super glue flow into the tube at the edges of the tabs.

Now thread the tailplane into the slot. It should not be too tight to push it into the slot, otherwise please rework it a little. Align the tailplane with the tube and the rudder using an angle.

It is **important** that you press the elevator, i.e. the GRP plate on the elevator, against the carbon tube when gluing to guarantee that the EWD is correct.

We will continue with the assembly of the rudder guide in the carbon tube and the assembly to the fuselage later.





## Hull structure

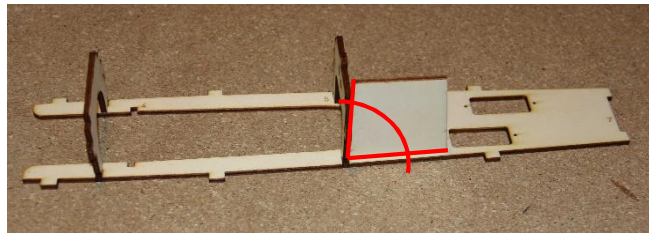
We start with one of the few milled parts. All routing curves must be filed square with a needle file (see arrows). Fitting into ribs 7 and 8

Carefully drive the enclosed drive-in nuts into the board with a hammer. Secure with a little glue.



Insert frames 3 and 5 into servo board no.10 on a straight surface, align at 90° and dot with instant glue. Do not glue to the base!

The kit also comes with a plywood angle gauge with the angles needed for construction.



Thread the servoboard together with frame 7 into one side of the fuselage (labelling inside) and fix it with two three glue dabs between frame 5 and 7.



Carefully attach the other side panel and also secure it provisionally between frames 5 and 7 with glue dabs. On the motor side, as can be seen in the picture, the side parts are **not yet** glued to the curve of the servo board



Push the finished wing mounting board with the drive-in nuts downwards together with former 8 at the fuselage end into former 7 and glue it to the fuselage sides from below. If the corners on the wing mounting board have been sanded well, the last former 8 is flush with the fuselage sides. Otherwise it must be reworked again.



Carefully press the side parts to the curve of the servo board using a screw clamp or similar and glue. For a secure connection, allow to dry a little longer (2-3 min).

Instead of a screw clamp, a larger rubber band can also serve well. If you want to work with your fingers, be careful. On the skin it really only takes seconds. With the necessary caution, however, this is a good and sensitive option.

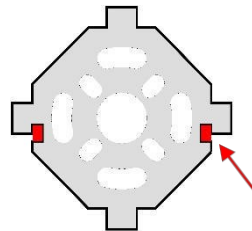
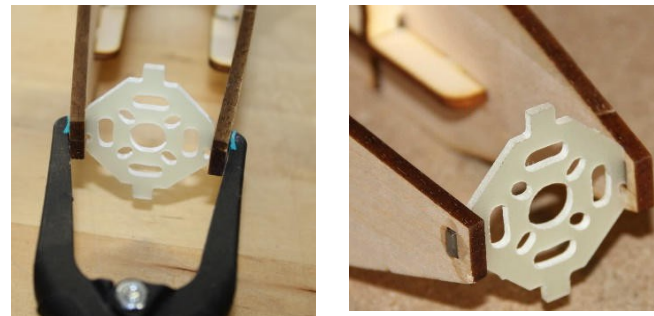


Insert the motor bulkhead into the recesses in the side panels and press together using a clamp or similar. If one side needs to be bent more than the other, you should coat it with warm water from the outside. Here, too, super glue is sufficient for the first glueing.

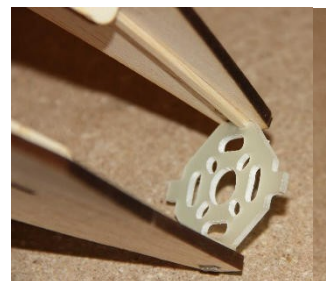
Allow to dry a little longer (2- 3 min) for a secure bond.

The sides provide the side pull for the motor, but it makes sense to use the cover provisionally to align the motor camber before glueing. Do not glue it in place, only to align the motor camber.

**ATTENTION:** The additional recesses at the edge of the motor bulkhead (red) must be made at the sides of the side panels and at the bottom of the motor bulkhead.



Break the edges of the 2 x 3 mm pine strips slightly with sandpaper, if necessary sharpen the end to be inserted slightly and guide it from span 8 through the recesses in the middle of the entire fuselage length and through the recesses in the side of the motor bulkhead and glue it. As an aid, press a couple of clamps against the curve of the fuselage sides and glue them in place. Sand flush at frame 8.





Also insert the top 2x3 mm pine strips through the recesses from frame 8 to frame 3 and glue them. Afterwards sand flush with frame 8. Make sure that the strips do not protrude beyond the fuselage sides in the rear area where the wings will rest.



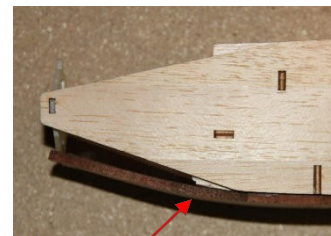
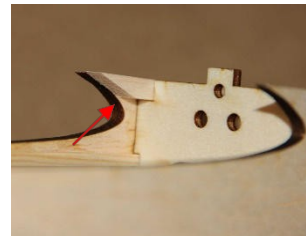
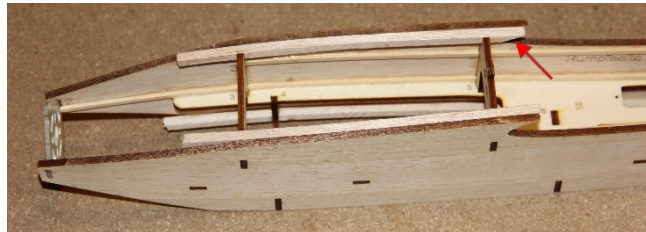
Frame 4 and 6 can now be inserted from the underside into the sides up to servo board no.10. If everything fits perfectly, it can be glued.



In the area of the lid, glue the 5x5 mm balsa strips flush with the sides, beforehand, in the area of the wing receptacle, adjust to slopes and to the sides.

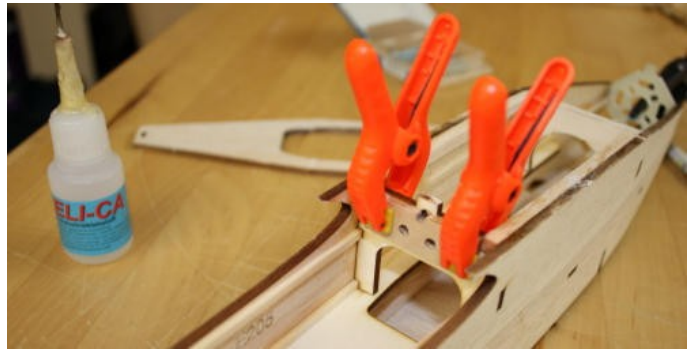
The 5x5mm balsa strips on the fuselage bottom must also be glued flush with the sides along their entire length. At the transition to the motor bulkhead, the balsa strips must be lightly sanded round so that the floor fits more nicely around the curve.

Now that the fuselage is still open, all parts can be glued again abundantly with thin-flowing instant glue. Apply the glue cleanly in all corners with a needle.





Centre the reinforcement of the wing mount on the 4 mm holes and glue.



Then the 2 parts of the fuselage bottom can be glued together and glued to the fuselage.

First glue to the motor bulkhead with the 5x5mm balsa strips flush with the fuselage sides and when the glue has had 2-3 min to dry.

Attention as always, labelling on the parts on the inside of the fuselage.



Sand the fuselage cover on the underside at the wing mount, approx. 1 cm deep and tapering to 1.5 mm in thickness, and only then glue it to the fuselage and the motor bulkhead.

The final fit is adjusted later based on the wing.

After attaching the base and lid, glue all the edges well from the inside and outside with thin instant glue.

Here we will later sand a generous rounding and so we have the opportunity beforehand to bring the glue cleanly into the corner and onto the 5x5mm balsa strips on the inside.

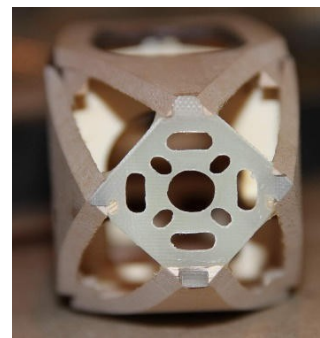
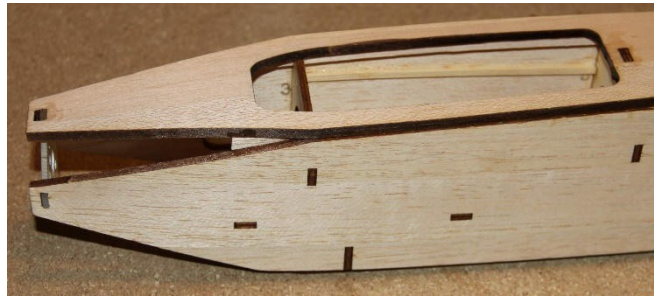


So now the first sanding work begins. The **open triangles** are sanded down to the motor bulkhead. This way the 6mm balsa pieces lie cleanly.

It is also easy to see why the 5x5mm balsa strips extend beyond frames 2 and 3, as this gives us a little more gluing surface.

Now the 4 pieces of balsa can be glued to the nose of the fuselage.

Here the motor bulkhead has already been reinforced from the inside with epoxy resin before sanding. This is possible again before attaching the fourth block.



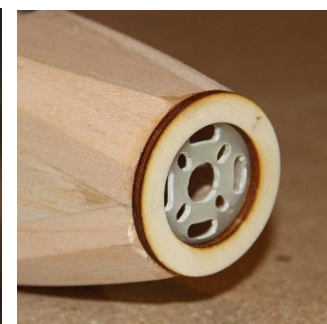
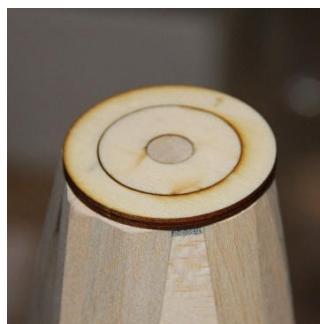
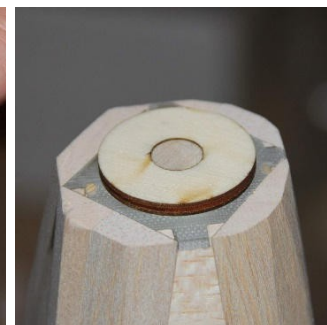
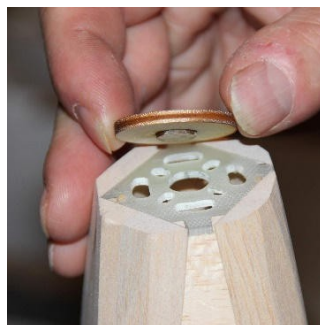
Grind the four balsa pieces flush with the motor bulkhead

Then the spacer ring can be glued centred to the motor bulkhead using the assembly jig.

The assembly gauge consists of a 3mm poplar ring and a 4mm balsa filler. This balsa protrudes the poplar ring by **1 mm** and is used to centre the spacer ring. Glue both together to form a jig and place it on the motor bulkhead.

Now the spacer ring can be glued on centred.

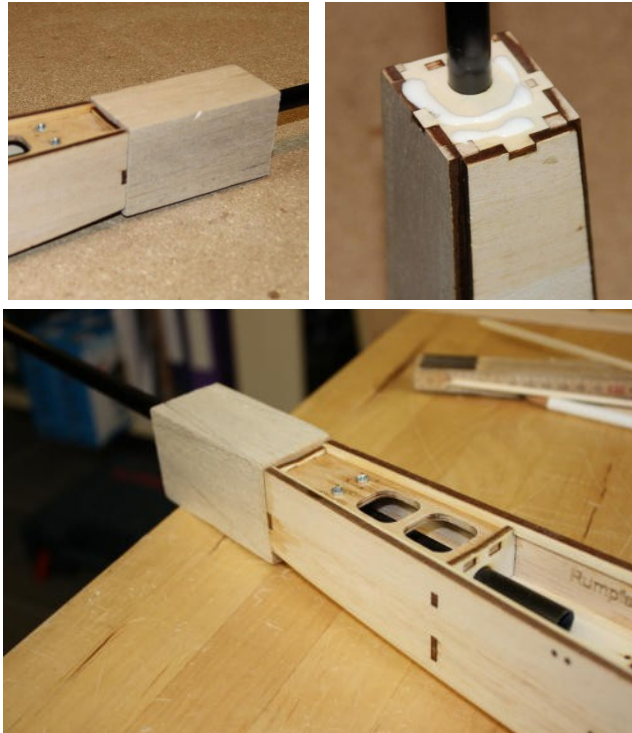
**Attention:** When gluing on the spacer ring, do not glue on the gauge.





Fit the tail block to the fuselage with the carbon tube attached. So that the wings fit on top of each other.

**ATTENTION:** Do not glue on the carbon tube! You do that later!  
Coat the surface with a little white glue, push the block on and align it. Now fix it from the outside with instant glue and pull out the carbon tube while the white glue is still wet. Clean any glue residue from the carbon tube.

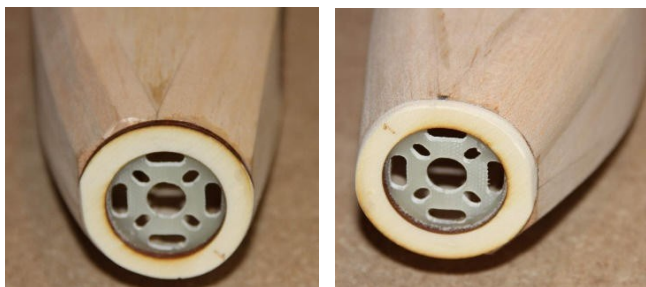


The fuselage is now generously sanded.

The 45° from the balsa blocks at the front can be transferred to the top and bottom of the corners to be rounded on the fuselage.  
After that, the rounding can be started.



Carefully align the nose with the spinner using the spacer ring.  
It may be necessary to temporarily mount the motor to put on the spinner to get an accurate fit.



Pull the curve in the upper area up to the wing recess.

Down to the end of the fuselage.



The curvature of the **tail block** from the carbon tube to the wing is smaller.  
The tail block itself can be individually adjusted.



Glue the fuselage lid together as shown. The positions are burnt onto the inside of the lid.

Insert the plastic tube that is too long together with the metal pin so that the metal pin sticks out at the top.

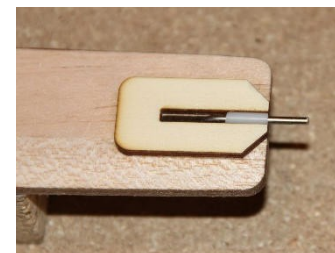
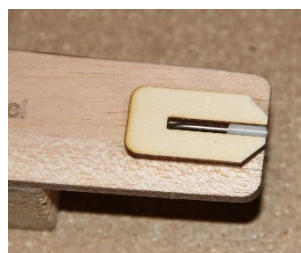
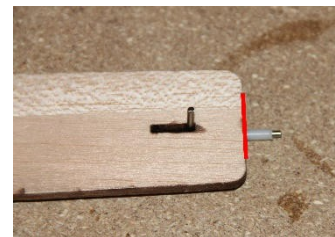
**ATTENTION:** Do not glue the metal pin in the plastic tube!

That is why the plastic is still too long.

As illustrated, hold the lid at an angle so that the instant glue runs away from the metal pin. Press everything well onto the lid.

After the glue has hardened, we cut the plastic **flush** with the lid using a sharp knife. This creates a neatly glued guide.

We need the second plastic tube in the fuselage and glue it **flush** with the lid opening.



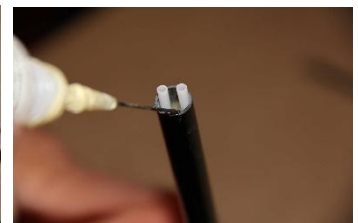
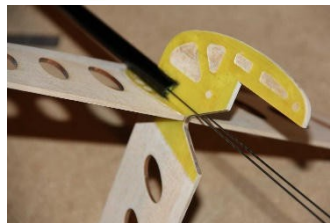
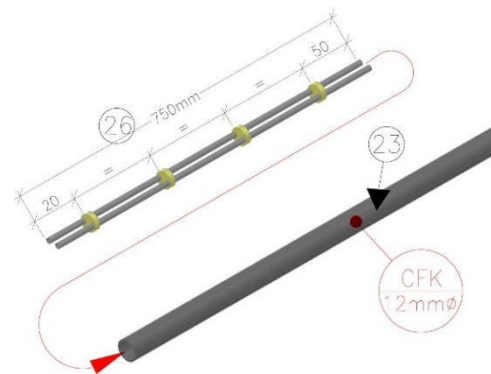


## Assembly from the rear

First, glue the two guide tubes to the brackets.  
The dimensions of the distances are on the parts list sheet of the fuselage.  
Make sure that the glue is applied **as straight as possible**, otherwise it could be difficult to insert it into the carbon tube.

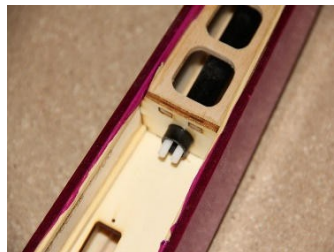


As you can see on the parts list sheet of the fuselage, the linkage is retracted from the front. To ensure that the two wires are really routed past both sides of the elevator, we first insert the wires on both sides of the elevator from the rear. Now the glued guides can be threaded onto the protruding wires at the front and carefully push them as far as they will go. Then the guides should still protrude about 1 cm beyond the tube at the front. The guides do not protrude at the back. Now the whole thing just needs to be fixed in place by gluing the last bracket to the tube.



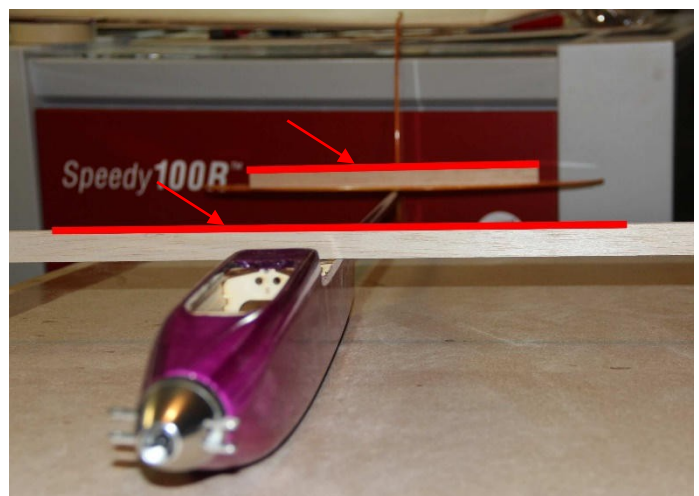
Insert the carbon tube into the fuselage and **5mm** beyond frame no. 7.

Place something straight and parallel (wood scraps/ruler...) in the area of the wing intake and check by eye whether the elevator is really parallel to it.



If everything fits, secure it to frame 7 with a drop of glue.

Now hold the fuselage vertically with the nose downwards and dribble in a generous amount of instant glue from behind the balsa block. After the glue has hardened, also glue to the frames from the hull side.

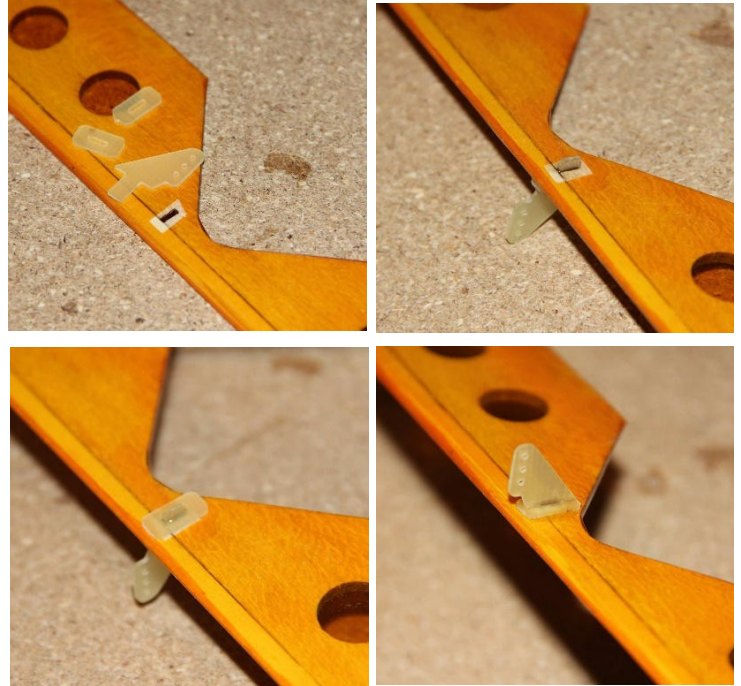


After stringing the individual parts, the rudder horns are now mounted.

To make a good connection between the rudder horns and the wood, we cut a small piece out of the covering, on both sides of course. Then everything is put together and glued.

The thin super glue will run well into the joints and make contact with the wood. Be careful when holding it by hand. Then also glue from the outside

**It is important to ensure that the** rudder horns are not glued in the wrong way round. One is needed on both sides of the carbon tube.



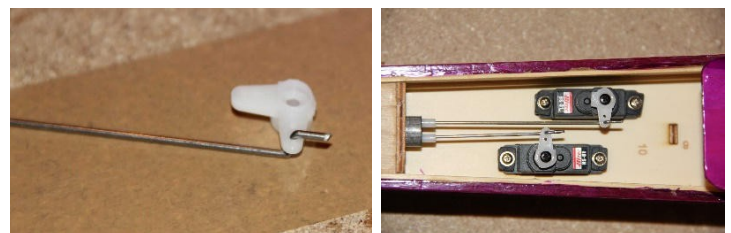
It is **important** that the elevator is attached first with hinge tape. Only then attach the rudder, otherwise the elevator cannot be threaded in.

In the photos the linkage is already mounted on the rudder horns.



Insert the already angled 1.2mmØ rods into the servo arm and from below Drive in.

It is **important** that the servo arms are square when the elevator and rudder are in neutral position.





## V-tail

First glue the parts together. Stick them together on baking paper and drizzle with thin super glue on both sides.

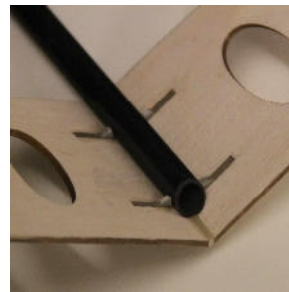
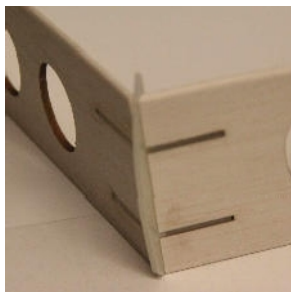
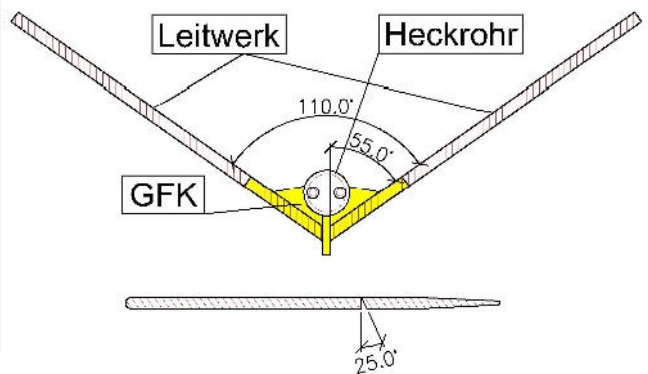
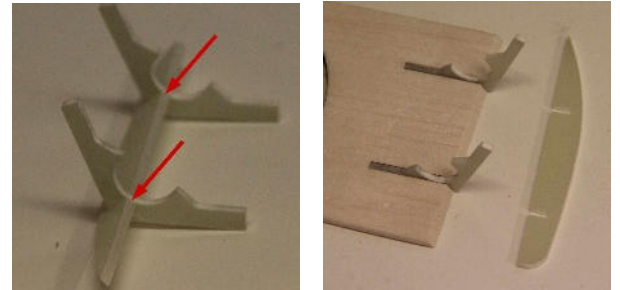
Then grind all parts over. The rudders are bevelled  $25^\circ$  to the left and right. Taper to the rear on both sides. Since the rudders are struck at the top, the downward deflection achieved in this way is easily sufficient.

Lightly machine the GRP parts until the curvature fits on the slide. The two fixed tail units are each ground by  $55^\circ$ .

The cut-out for the GRP mount is a little too deep. Deliberately, so that there is a little leeway to find the right angle.

Here is the section through the V-tail with the GRP mount and the view of the tail tube with the two guides in it. Below, the section through a rudder with the  $25^\circ$  slope for the deflection and the taper to the rear.

Pictures before and after gluing. Make sure that the rudders are parallel to the tail tube. Allow 7-10mm to protrude at the back.



The rudder horns included in the kit are not glued in until after covering. Here they are temporarily inserted. Attached at the top, the linkages run straight into the tail pipe.

The GRP beams are covered with the triangular strips and closed.

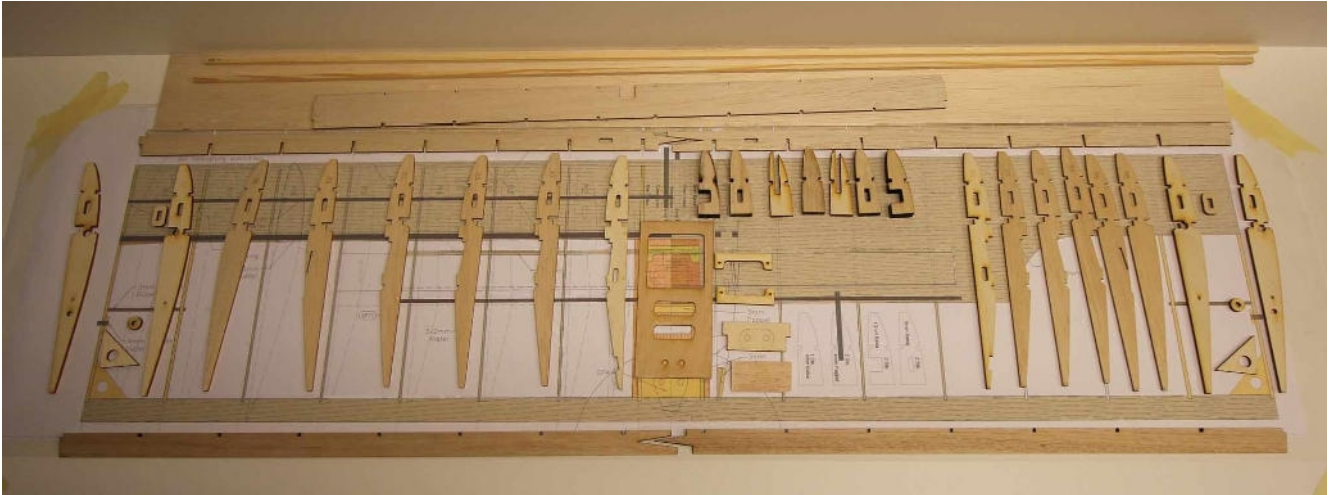


## The centre wing

Before the first glue application, the rolled plan must be cut at the markings and fixed neatly on a straight surface.

The size of the board should be at least 1050x280mm.

We protect the plan with baking paper from the roll to be able to separate the glued neatly from the plan. You can find this in almost every kitchen or grocery shop.



Here is an impression of the parts we will be installing for the inner wing first.

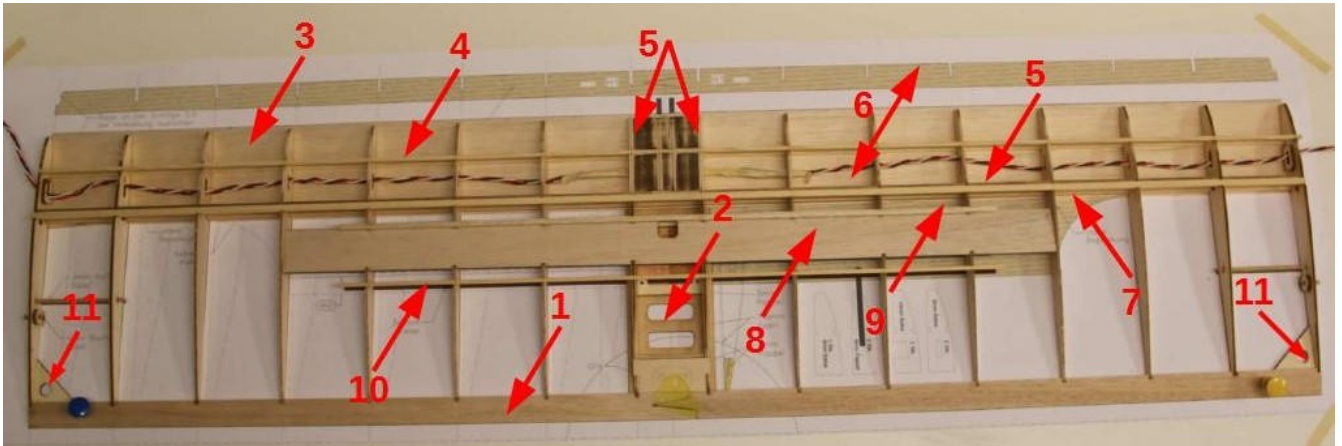
- 2-part end strip ( glue in advance and straight
- Bottom planking 1000x74x1.5mm balsa
- Servo board 141x65x1.5mm Lock.
- End strip piece 50x25x5mm balsa and poplar reinforcement
- 2 pcs. Poplar screw bridges for servo cover
- Balsa filler pieces for mounting mandrel 2x poplar 4mm /2x10mm/2x8mm and 1x 6mm balsa
- Div. numbered ribs R1 - R8 3mm poplar and 2mm balsa
- Reinforcement triangles poplar
- 2-part latching 2mm balsa (glue in advance and straight
- Auxiliary spars 2 pcs. 1000x3x3mm pine
- Main spars 2 pcs. 1000x5x5mm pine
- Balsa strip 1 pc. 500x5x5mm
- Pine strip 1 pc. 500x3x2mm
- Floor at flap cut-out. Balsa 2mm

Not on the photo but also for the middle wing, the following parts will be installed later.

- 2-part upper planking
- Poplar ring as reinforcement and 4mm beech dowel as securing for wing twisting
- 4mm beech dowel 75mm long as reinforcement against the pull of the ironing foil
- Servo cable fitting piece to secure the servo cable
- Screw reinforcement
- Brake flap 493x30x5mm
- Nose strip 1000mm balsa

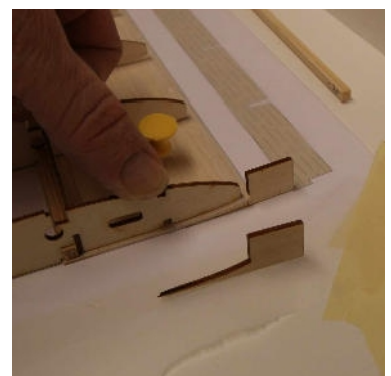
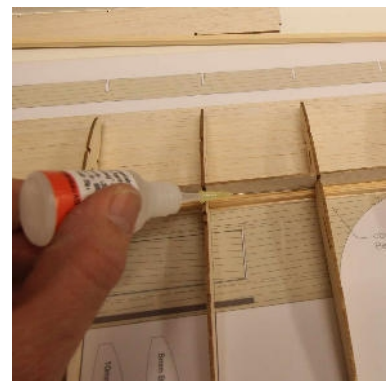
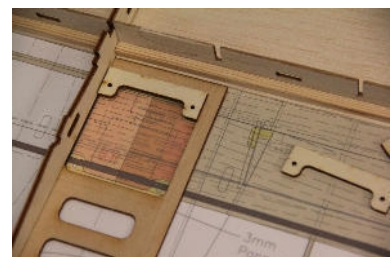






First glue the two-part end strip and the latching and then you can start.

- 1.) Align the end strip neatly on the plan and fix it in place.
- 2.) Put on servo board
- 3.) then also push on and fix the lower planking.
- 4.) Don't forget the 3x3mm lower jaw strip. First just put it on.
- 5.) Now insert one of the middle ribs into the already glued
- 6.) and at the same time also plug in the
- 7.) Main spar 5x5mm pine with threading.  
Place the whole thing on the lower planking and do not forget to thread in the small 3x3mm pine auxiliary spar.
- .. ) Thread on all the remaining ribs and align them exactly.  
The planking and the pine strips are just a little too long. Therefore, be careful before applying the first glue.
- ) Now you can dot with thin super glue.



**Tip.** A needle placed on the glue bottle helps a lot. Do not press

the ribs down too much at the back.

They must fit at the top with the end strip.

The spars are also glued in this way. The thin glue penetrates incredibly deep into the joints. Therefore, be **careful** with your fingers, eye and clothes.

The manufacturer's instructions must be observed.

In the front area, the planking must be pressed up against the ribs. We solve this with the little helpers.

- 8.) now the bottom of the flap can also be inserted
- 9.) The balsa strip 500x5x5m
- 10.) and the small 500x3x2mm pine strip
- 11.) The cardboard corners also come as reinforcement



To cope with the forces of wing assembly, first glue in a piece of end strip so that the poplar piece is flush with the ribs.

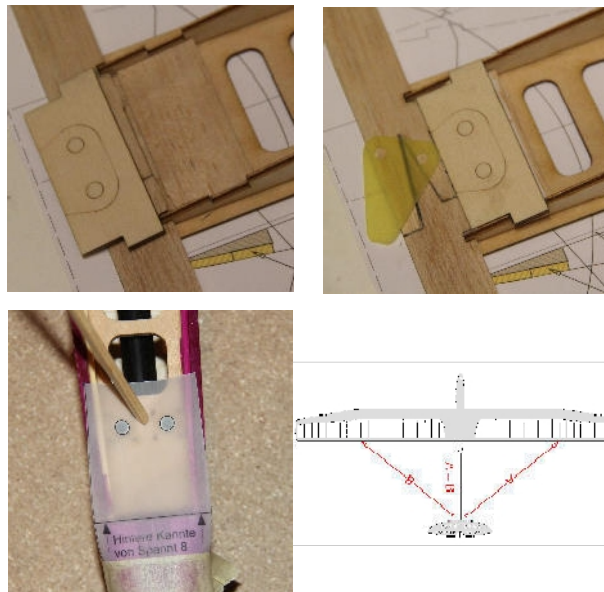
The GRP part will be put on later.

Not until the centre wing can be screwed onto the fuselage.

There is a transparent sheet in the kit which can be used to transfer the holes from the fuselage to the wing.

- Glue onto the fuselage
- Check / mark holes
- Place the sash underneath, align, measure and transfer the holes.

The cleanly aligned wing thus gets the exact position.



After the roughest part of the middle wing has been completed, there is still some minor work to be done before the upper planking is fitted.

It is important to install the balsa blocks that hold the sash mounting pins and transfer the forces into the sash.

The order is on the plan. Glue the whole thing well.

Then insert and glue the two upper spars.



The supply lines to the servos must also be installed before the upper planking. For a secure hold, the small frame is included, which fits onto the plug sleeve and can thus be glued securely.

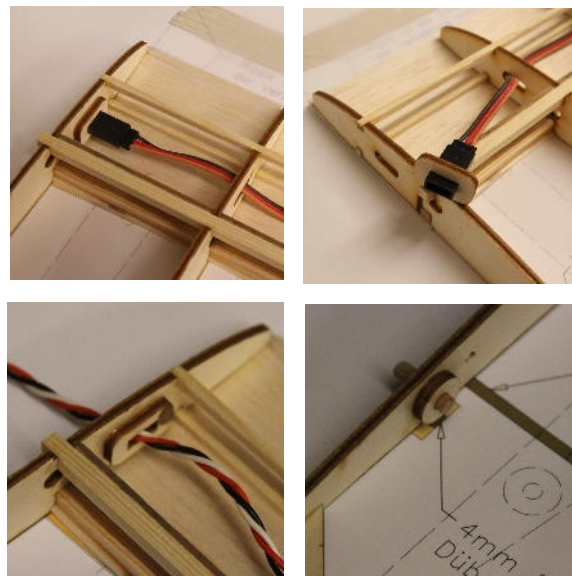
It is also possible to pull in only one cable and glue the connector from the outside.

The dowel will also be used later on the outer rib to prevent twisting.

**But only mount later**

The outer rib is still sanded to the outer wing and the dowel would be in the way.

Now insert the 75mm long 4mm beech dowel for rib reinforcement into the two ribs R7 and R8 and glue.

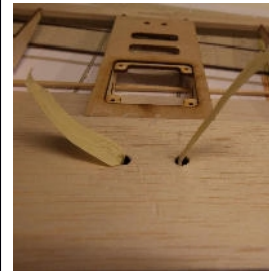
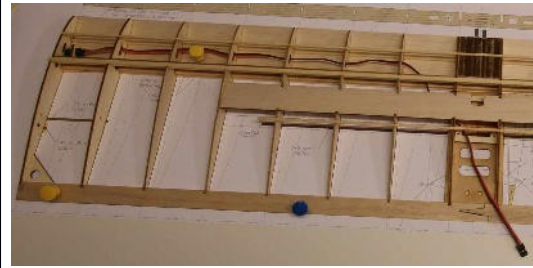




If a ready-made cable is used, it can be pulled to the centre through the prepared hole in the latching and rib R1.

However, there is also the option of only using the cable out of the wing through the prepared balsa blocks far forward. To do this, holes must be made in the lower planking. And the cables for applying the upper planking must also be pulled back again. So that the wing rests neatly on the underlay.

I solved this with adhesive tape.



Once all the fittings are in place, the top planking can be fitted. Check everything beforehand and carefully sand over if necessary.

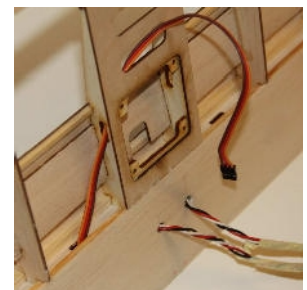
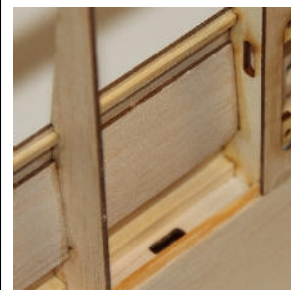
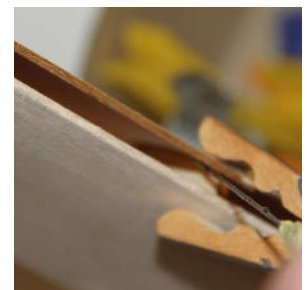
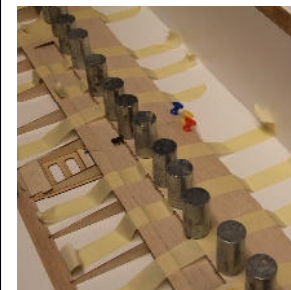
Due to the open construction of the wing, not everything has to be glued right away. I glue the balsa insert at the flap, the main spar up to the small auxiliary spar and the wing spar mount with white glue.

Fix with pins or weights and pull the front part down with tape. Since the planking does not have to be pressed all the way down to the ribs, there is less risk of warping.

I glue the whole front part of the ribs and the run-out of the planking to the back later with super glue after the white glue has hardened. Carefully press the planking to the ribs with staples and insert your instant glue into the corner with the needle.

Here too, be **careful of** your fingers. It can happen that the glue goes through the planking.

Everything can also be glued at the bottom afterwards. The two cable routing options are clearly visible.

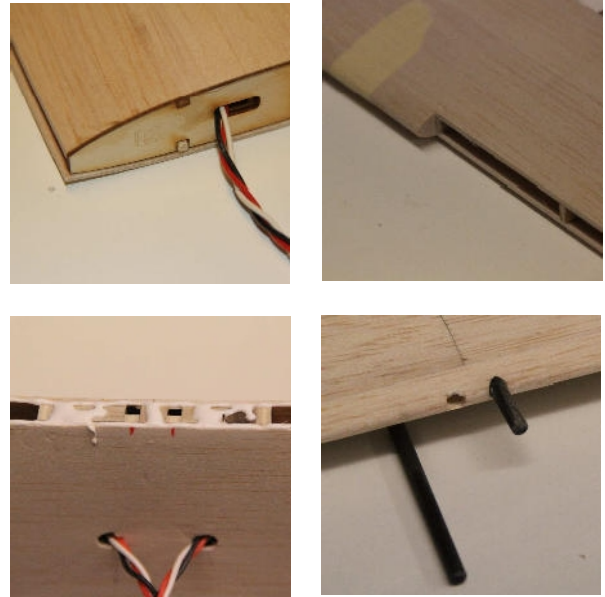


After the wing planking has dried thoroughly, the planking in the nose area must be **carefully** sanded down to the ribs.  
To do this, I lay the wing flat on the table and sand at right angles to the ribs.

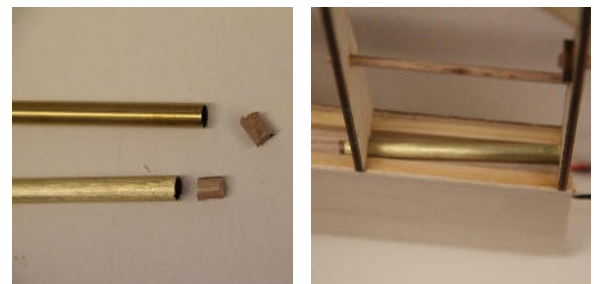
In the picture on the right, the nose is provisionally glued on to show how far it should be ground.

It is easier to sand the planking to the leading edge than to sand the whole leading edge.

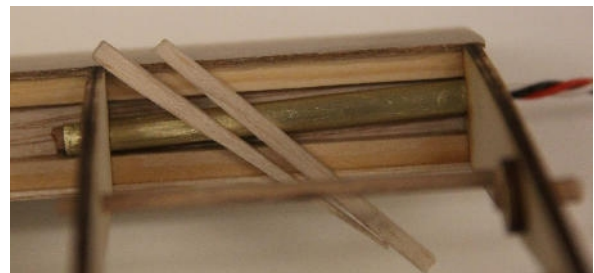
The two mounting pegs should not be forgotten. You can make the holes beforehand or just mark them and drill them later. But don't drill too deep or you will lose the right fit in the two poplar ribs.



The wing joint must be sanded before gluing. In the photo above, before sanding, below the wing joint is sanded.  
Close the joint on one side with the beech cone.

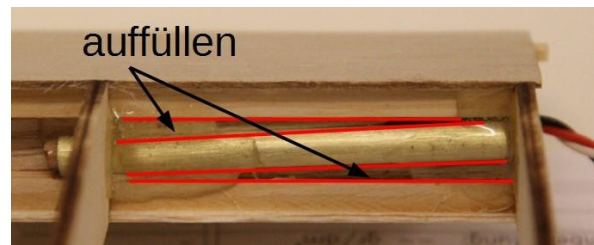


Small wedges are also included to help close the gaps to the spar and save glue.



All good a resin.

So now all that remains is to sand down the centre wing.





## The flap installation

The servo used should not be thicker than 12mm and should not exceed a height of 24mm.

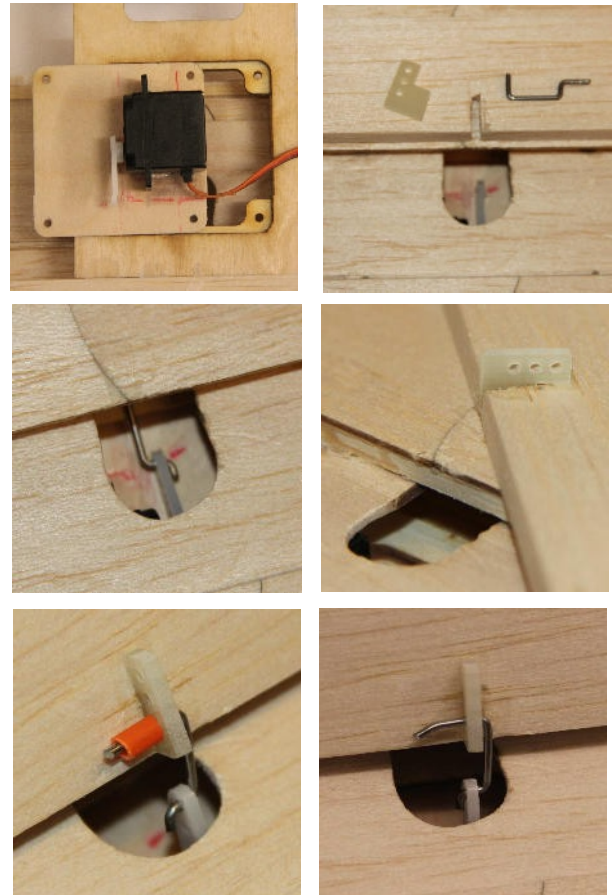
Mount the servo far forward so that the arm protrudes far into the opening and allows a 90° linkage to the flap.

Make a slot in the flap for the rudder horn.

There is also a prepared wire enclosed which is intended for the first attempts.

The wire can be secured with a short tube or just a drop of glue.

There is no great demand on the accuracy of the guide. There is only on or off.

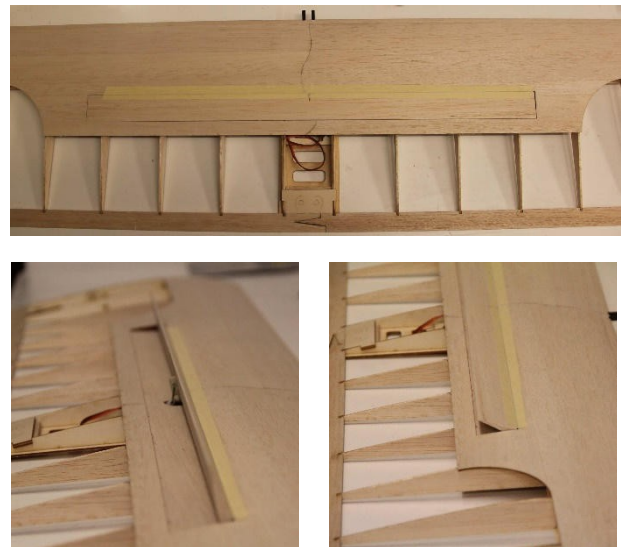


The flap needs a little air for the covering. Anything can be used as a hinge - we suggest fixing the flap with tape after ironing.

The deflection can be adjusted according to the application and must be flown by adding altitude according to taste.

A 90° rash certainly helps to slow down

15°-35° pushes the aircraft downwards, which can be helpful during a landing approach.

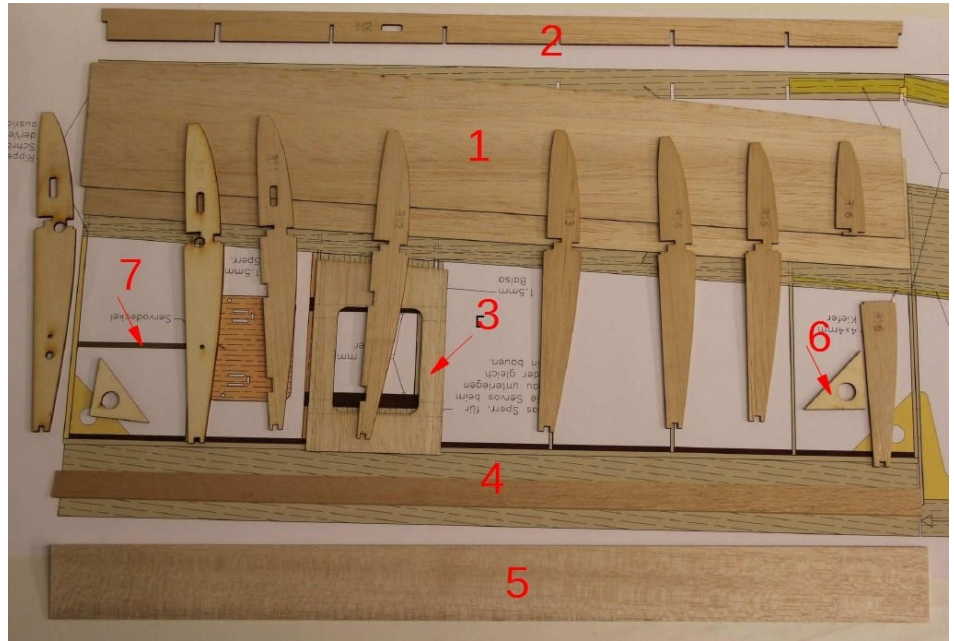


## The outer wing part 1

- 1.) Planking
- 2.) Casing 2mm balsa
- 3.) Servo mounting board
- 4.) Sash finish strip
- 5.) Aileron
- 6.) Reinforcement corner
- 7.) Beech dowel ribs R9 - R16

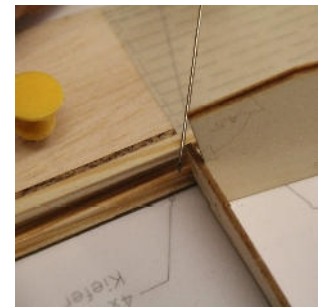
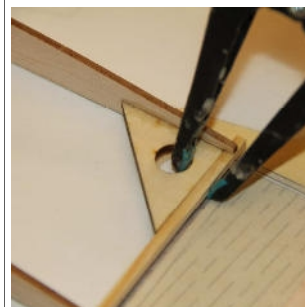
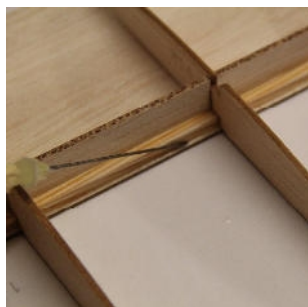
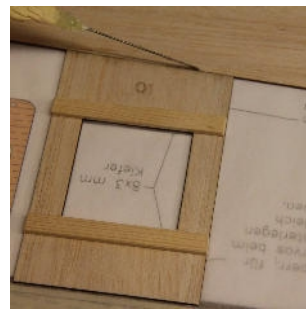
not in the photo:

- 4x4mm Jaw
- Mouldings 3x3mm
- Jaw Moulding Nose
- Mouldings



We start again by attaching the individual parts to the plan protected by baking paper.

- Fix the planking and servo board and glue the joint. Glue the 8x3mm strips.
- Then the ribs can be fitted together with the latching and the lower 4x4mm pine strip on the planking and aligned.
- Good to see how the ribs can be pushed to the planking.
- When everything is neatly aligned, you can start gluing.
- The overhang of the planking helps to guide the needle cleanly in the corner (picture 1).
- Also a possibility of glue application, pull the forming drop over the edge ( picture 2)
- Align and glue the 3x3mm pine strip together with the reinforcing corner at the rib end.
- Attach the outer ribs using the gauge.





After carefully attaching the half rib R16, the planking can again be lifted to the ribs with the help of the small wedges for gluing.

The beech dowel and the cable for the servo are still missing. Or a cord can be pulled in to pull the cable through later.

Sand the wing carefully and only lightly. Again, glue only the spar with white glue. Fasten well and watch out for slipping.

I fix the planking with a few drops of instant glue.

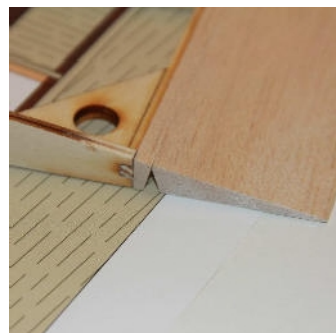
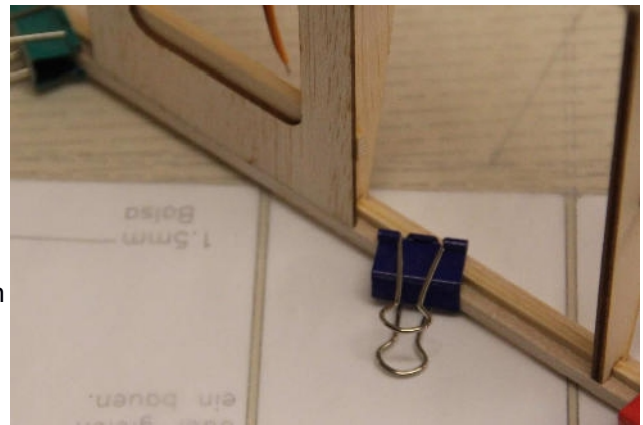
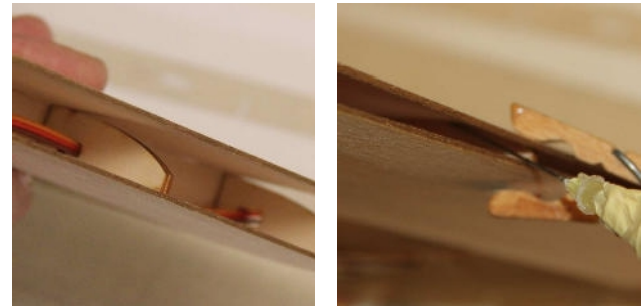
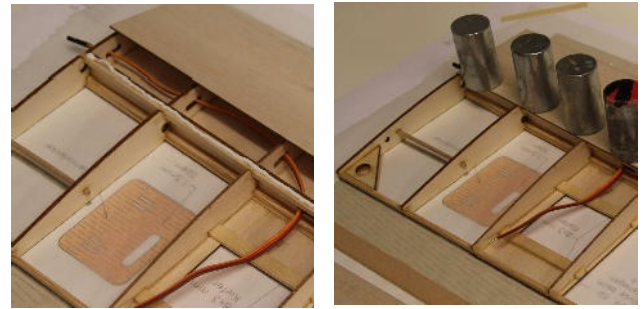
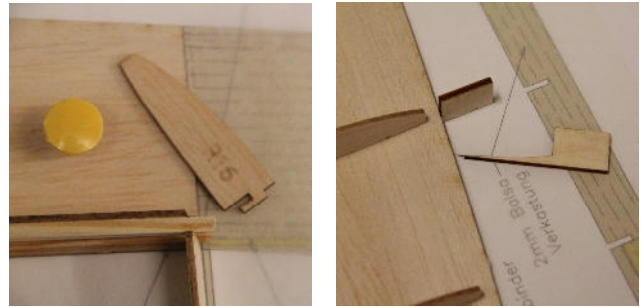
Of course, there are various techniques for applying the second planking. I like to use the one described here.

Glue from the front deep into the wing. The glue should run all the way to the latch.

To finish off the wing and transition to the aileron, the 10x4mm balsa strip must still be attached. Take the skirting flush at the bottom because the angle to the ribs is 90°.

Protect the top of the ribs with 2-3 layers of tape and fit the moulding to the rib profile.

The end rail and the aileron still have to be sanded at an angle. Here the aileron is hinged at the top.

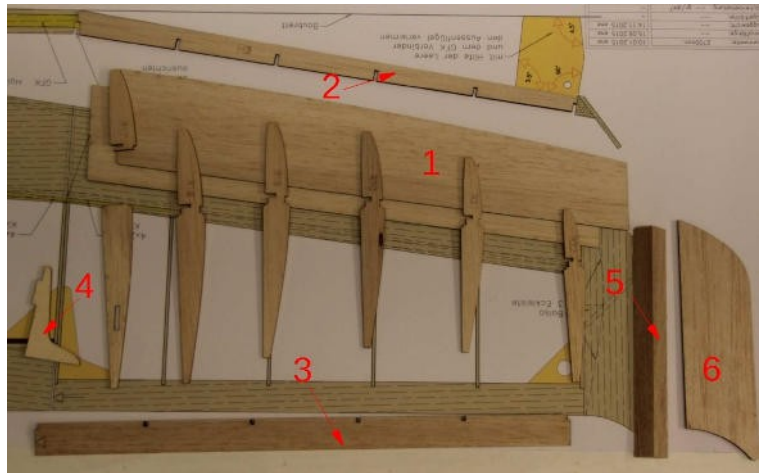


## The outer wing part 2

- 1.) Planking
- 2.) Casing 2mm balsa
- 3.) End strip
- 4.) Reinforcement corners
- 5.) Winglet
- 6.) Triangle bar

not in the photo:

4x2mm Jaw  
Mouldings Nose  
Mouldings



We start again by attaching the individual parts to the plan protected by baking paper.

- Align and fix the planking and the end slat on the plan.
- Subsequently, the ribs together with the latching and the lower 4x2mm jaw strip can be plugged together on the planking and inserted into the end strip.
- Since the ribs run at an angle to the latching, the cut-out is slightly larger so that there is not too much tension.
- Here too, make sure that the ribs are not pressed down too much when gluing. Just flush at the top.
- Align the ribs R17 with the gauge and glue them.

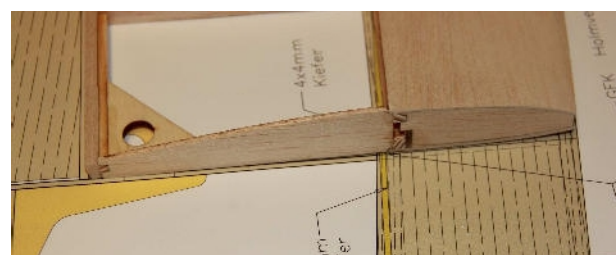
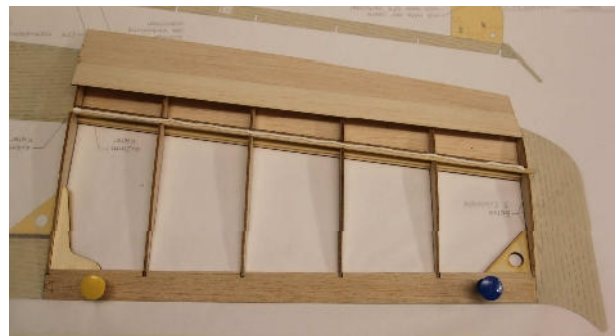
The gluing of the upper planking is done as described before.

Once both outer wings are glued and dry, the outer ribs can be sanded. Pine strips, planking everything nice and flush.

Finish off with the triangular strip on rib R22. Lay the wing flat on the building board, apply a little white glue and also press the triangular strip onto the table.

Attach the triangular strip so that the winglet later also looks upwards.

Here, too, I secure with super glue in the places where no white glue comes out.





# Foxtrot 2.7 QUER

## The leading edge on the outer wings

Of course, all three mouldings can be applied together with white glue. But...

This does not simplify the sanding of the leading edge, and there is also a greater risk of distorting the wing.

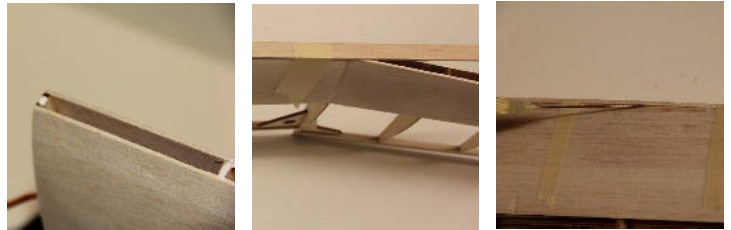


### Our proposal

Apply a dab of white glue to the ribs, then place the first strip on top and fix it lightly with adhesive tape.

It's still too wide and too long, but that's nothing, on the contrary.

This way we have a nice stop to guide our attached needle and put the glue exactly where it should be.



The next strip is also attached in the same way. Cut the bevel and off you go.



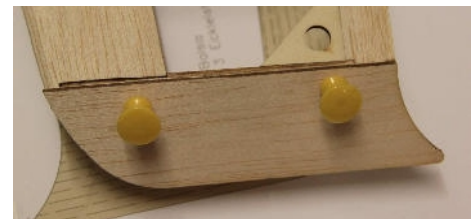
After drying, the first layer is also sanded flush with the planking.

Whoever has a small plane will plane first. But there is not much to sand away. The planking can again be protected with tape.



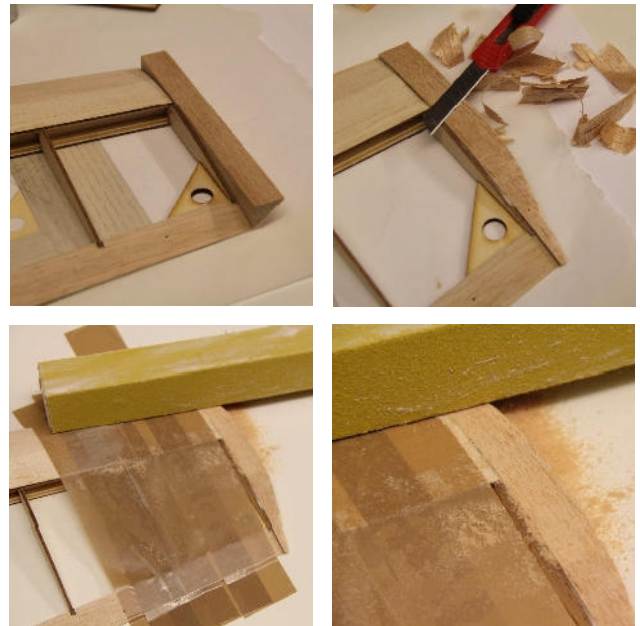
All three layers are glued and sanded one after the other. Alternately overlapping in the wing bend brings stability and the second glue some hardness in wood.

The winglet is still missing on the outside. This is aligned with the rib. Fix it with pins and then glue it on. A little white glue and back into the holes of the needles. Fix with instant glue where no white glue comes out and if so, clean immediately. Sand everything together with the leading edge. Outer wing ready ☺



# Foxtrot 2.7 QUER

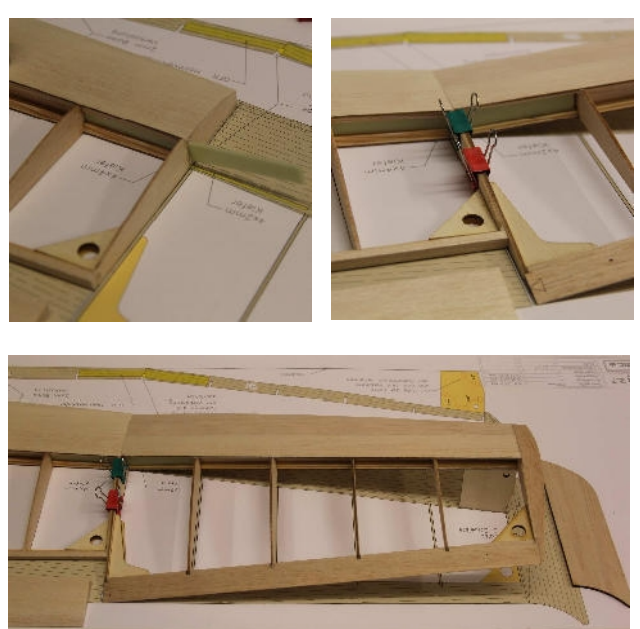
Sanding the triangular strip is no witchcraft either.  
Carefully cut away what needs to be cut away with the knife as close as you dare.  
After that I secure the wing with cheap package tape. 2-3 layers.  
Sand carefully with a sanding block. Short pulls approximately the distance between the ribs.  
If the tape is about to be sanded through, touch up immediately.  
This is how we get closer to the desired shape.



The worst is over.  
Now the wing planking on the nose must be sanded back to the ribs.  
As with the centre wing, we place the wing parts on the building board and sand at a 90° angle up to the ribs.



It already comes to the first wedding  
The two outer wings are put together for the first time.  
To do this, fit the GRP connector individually into the wings.  
It is not tragic if the connector to the spar has a little air. This is filled with epoxy resin.  
Align the wing tucked together on the plan and again use the blank to keep the wing bend accurate.  
If this fits without exerting pressure on the GRP connector, the wing can be glued.  
Apply 30 min. epoxy glue to the sanded GRP connector and the rest with white glue.  
After drying, the gap between the GRP and the spar can be closed with epoxy.

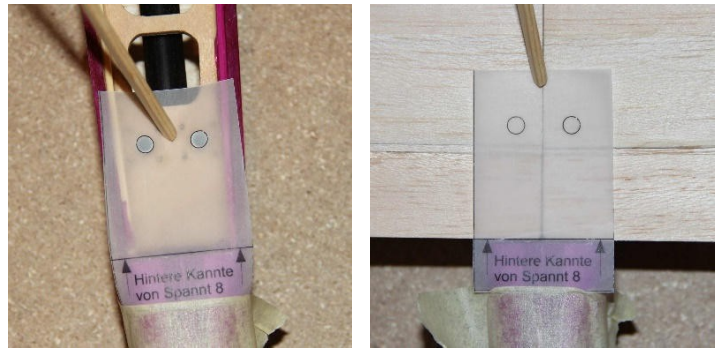




## Wing assembly

For wing assembly, glue the drilling jig made of transparent paper onto the fuselage.

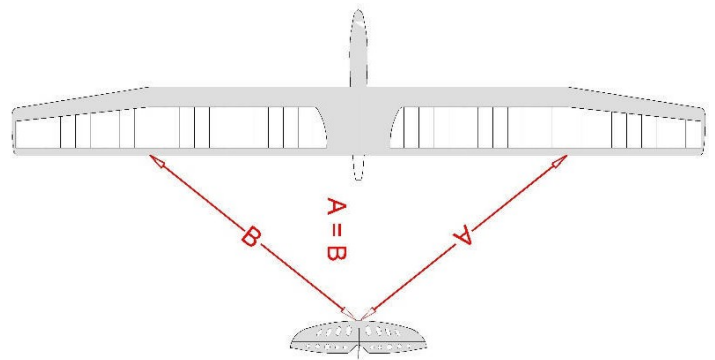
The line and the reference to the edge of the fuselage are intended as an aid. It is **important** that the holes match. Now put the wing on the fuselage.



The wings must be precisely aligned before drilling.

Attached to the fuselage at the front and to both sides at the back, as shown in the drawing, measure towards the tail unit.

Using the drilling jig, transfer the holes to the wing and drill carefully with a 4mmØ drill bit.



Assemble the wing again with the GRP reinforcement plates. Check the mass to the rear again and correct if necessary.

Align the reinforcement plates and glue them on well.

The wing is so enormously robustly mounted on the fuselage.

However, an extra helping hand (or two) is very helpful in this work.

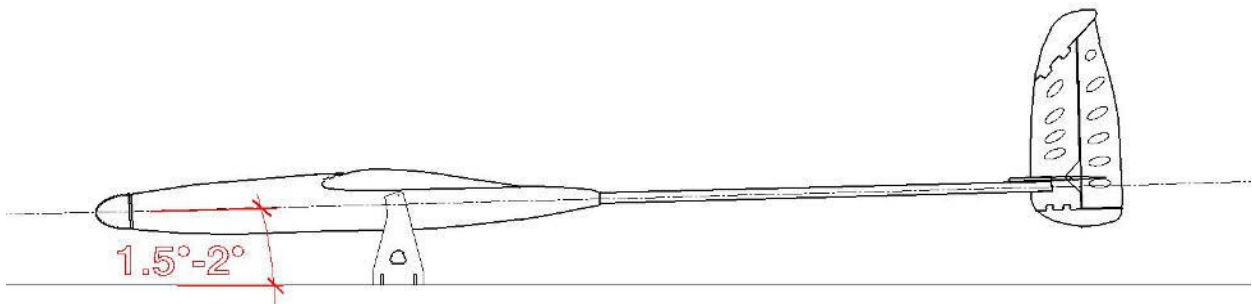


## Theses

The model is ironed according to individual wishes and creative ideas. Some models can be seen on our homepage [www.cad2cnc.ch](http://www.cad2cnc.ch).

## Adjust centre of gravity

Adjust the centre of gravity by moving the battery or, if necessary, using trim lead. The glider should tilt slightly forward, as shown in the photo.



We are happy to present photos of your **Foxtrot** on our homepage. If there is a short comment, that would be great.

Thank you very much!

Have fun flying the cad2cnc TEAM

