

# Zero „Fatty“



***From the Fatty Season:***



# ***building instructions***

***The model of the Zero as a "cartoon variant" is part of the Fatty Season, which is available here in the shop. The models are simple in construction and allow a quick construction progress. The wing for example, consists of only a few components. The selected "KF" profile thus facilitates the construction. The P40 can be started well from the hand. It can also be installed a retractable landing gear.***



## ***Technical specifications:***

- ***Span: 800 mm***
- ***Hull length: 680 mm***
- ***Weight: about 800 grams (depending on engine, EZFW and battery selection)***
- ***Motorization: BL: DT 750***
- ***Controller: 25A***
- ***Propeller: 12 - 13 inches***
- ***Battery selection: 3 S - 1300 mAh***
- ***RC function: Elevator / Rudder / Aileron and Throttle***

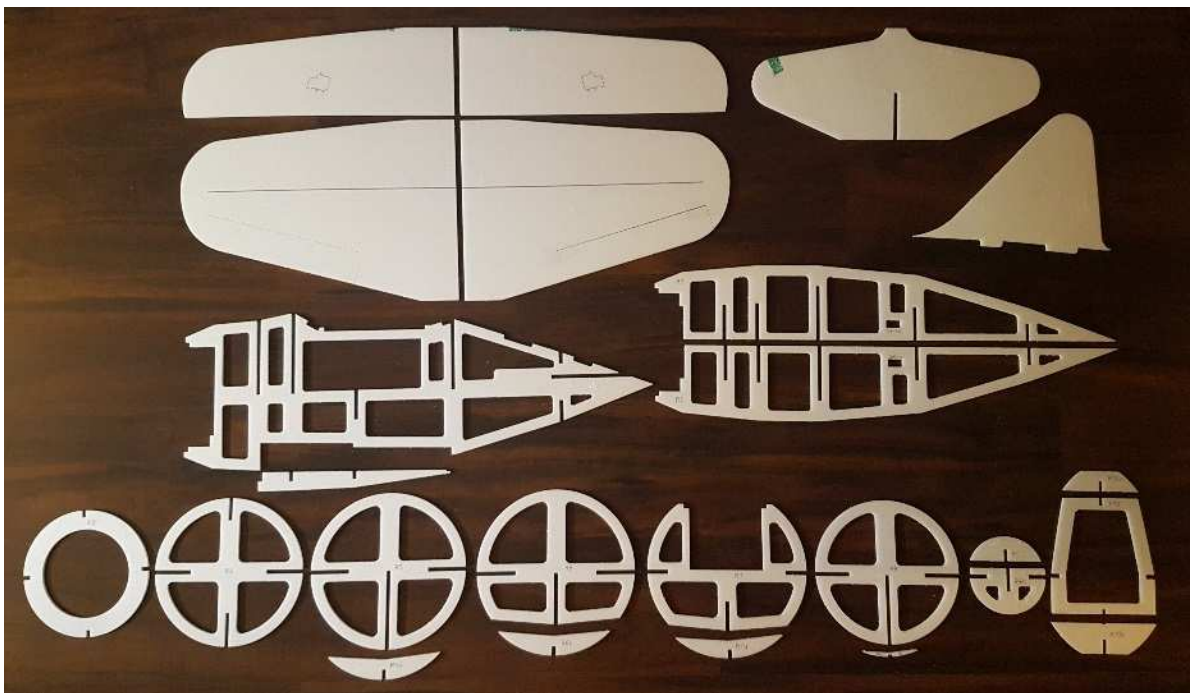
**Note on the instructions:**

**Unfortunately, not all detailed pictures of all stages of construction exist. Nevertheless, the construction is simple, since the structure is self-explanatory.**

**The missing pictures will be added later, some of them will be used by other models.**

**The Depron components are precisely cut using a CNC machine. Positions of all adjacent components were also marked CNC and labeled. This ensures that all adjacent components can be easily adhered to the exact fit.**

**Please note: PVC Canopy you must order separate in the Shop.**



**The manufacture of all components and the completeness of the kits were carried out by hand and conscientiously. If you notice any inaccuracies or missing parts, please contact me to be able to offer the most satisfactory product to you and the following customers. [info@scale-parkflyer.de](mailto:info@scale-parkflyer.de)**

**General:**

**The building material DEPRON is a very light building material that is normally used in house construction. In DIY stores it can be found in wallpaper departments under the name "Wallpaper isolation" as insulation layer under the wallpaper. Due to its low weight (for example 10X10 cm of 6 mm Depron weighs 2 grams) and its stability makes it ideal for the construction of "slow flyers" up to weight classes of well over 3 kg.**

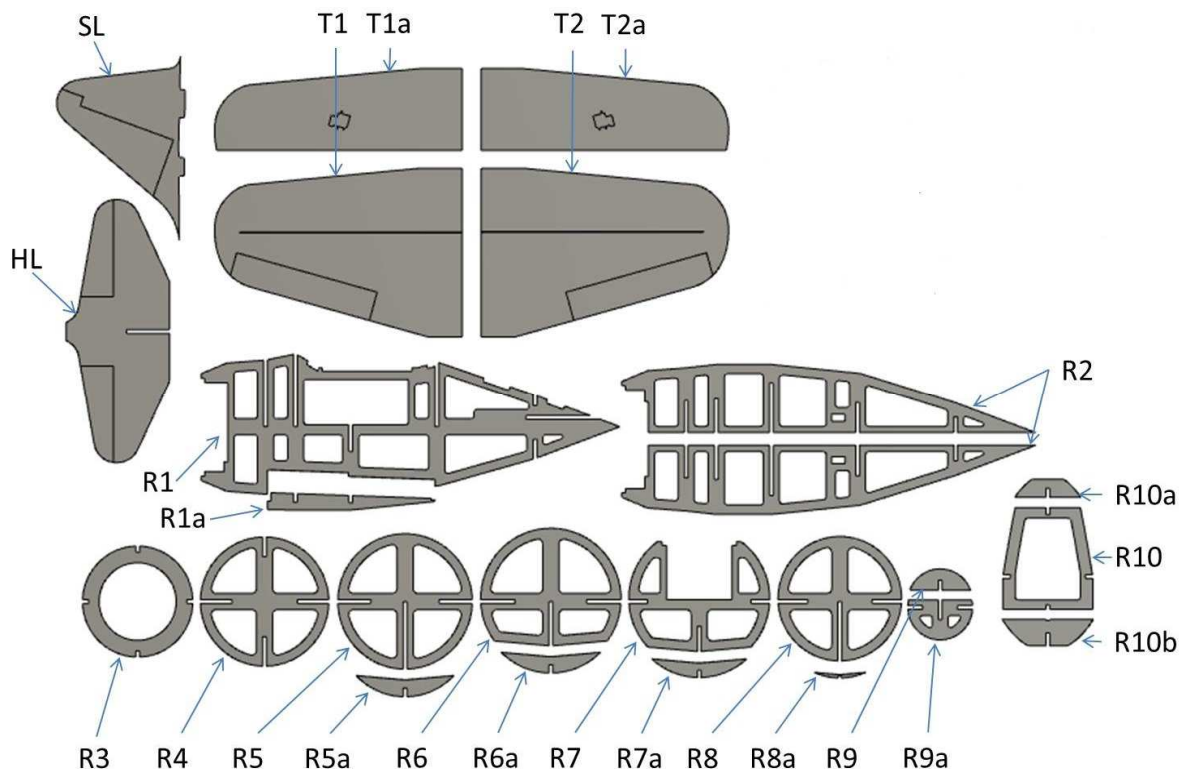
***For example, Depron has achieved a justified place on the model airliner for several years.***

***Depron can be cold-formed over a table edge with the palm of your hand. The grinding of corners and protruding edges works well with fine smeared paper. When cutting Depron you should use a sharp knife with a narrow blade. When bonding Depron-Depron is very good UHU-Por, unless it is under tension during bonding, or in conjunction with other materials, or the bonding is a higher load. Since you take the proven epoxy resin. To fill gaps and unevenness is excellent "modeling putty" of "Moldofil" from the hardware store. The toothpaste-like paste can be very well trowel into the Depron gap and after curing hardly harder than Depron.***

**necessary building materials:**

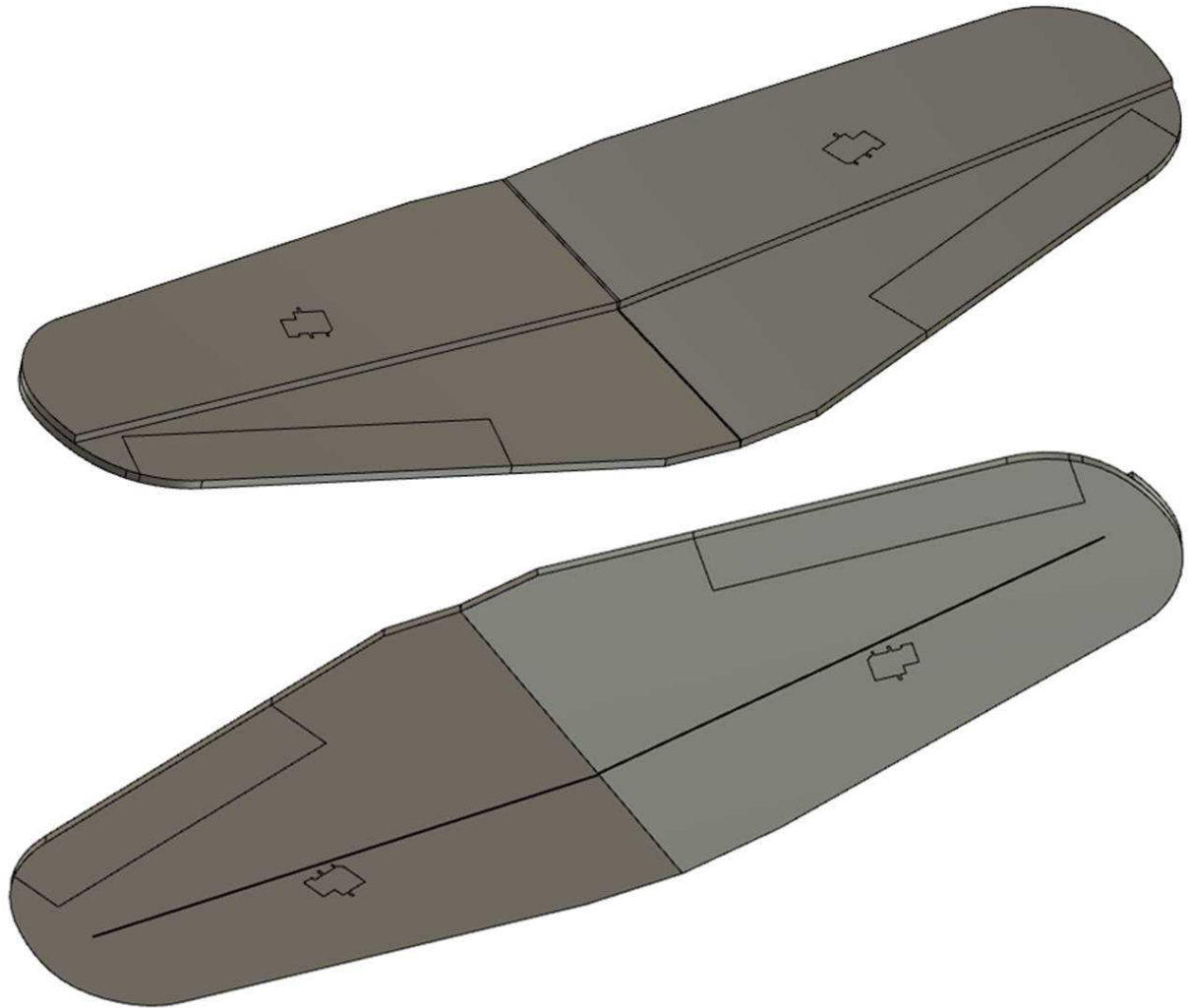
**In Depronteilesatz all necessary Depron components are to be found. All additional necessary building materials such as stiffening materials (CFRP, wood ect) or adhesives or RC components are not included!**

**The parts list:**



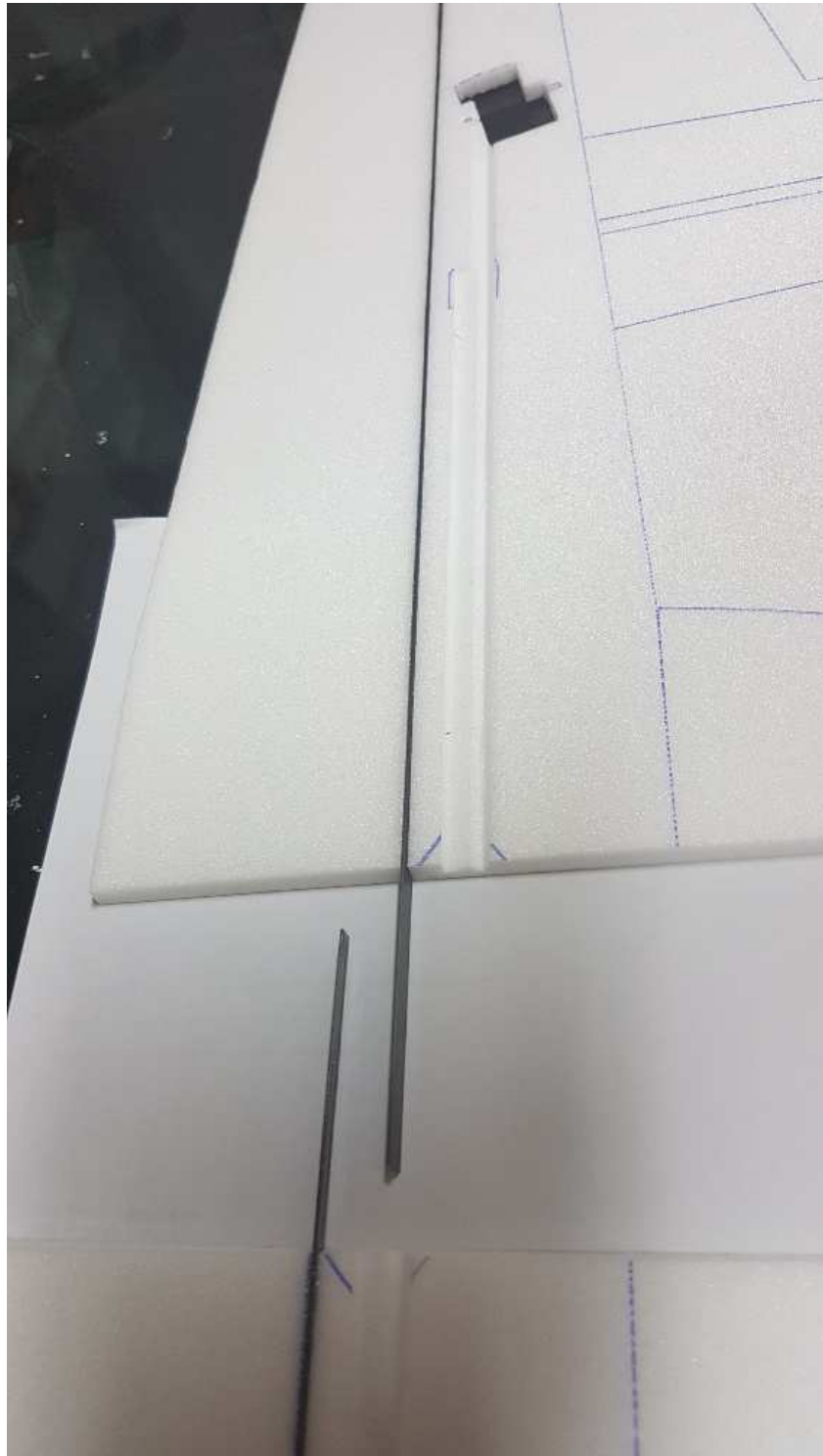
## **Building instructions:**

### **Structure of the wing:**



**1. Cut out the slot for the stiffening (6x0.5 mm CFK rod, better 8X0.5 mm CFK) from the lower wing with a cutter knife according to the marking. Glue the CFRP rods with oversize, see picture flush with the underside. The overhang serves to ensure that both CFRP rods can be adequately glued together.**

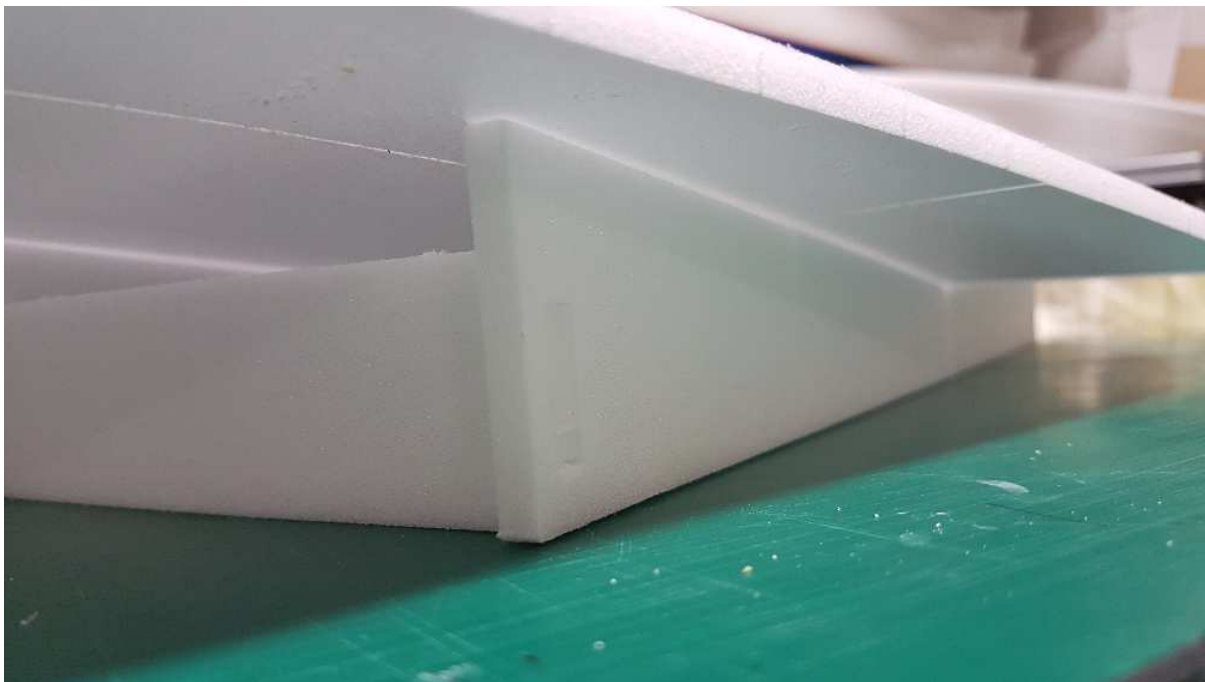


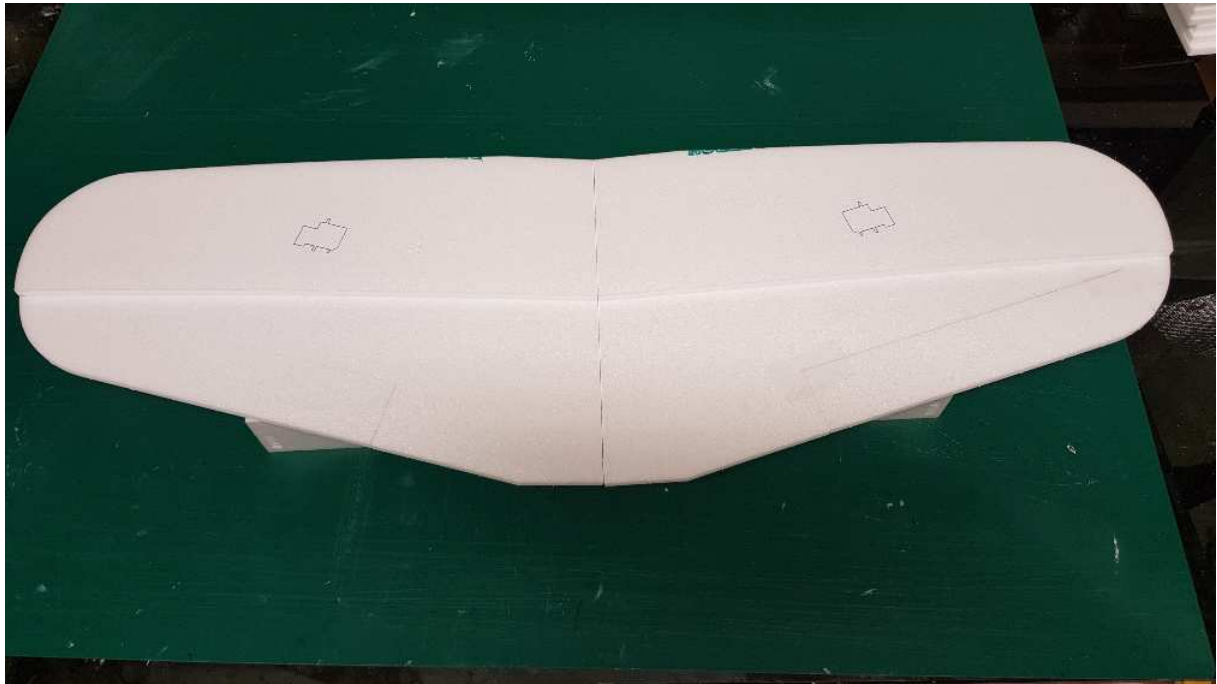


**2. Put the heling together.**

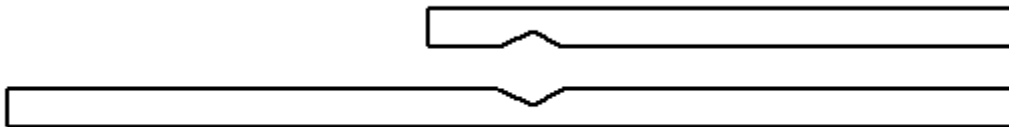


**3. Put on the lower wing halves and grind the connection joint until they fit neatly and the protruding CFRP lies against each other.**

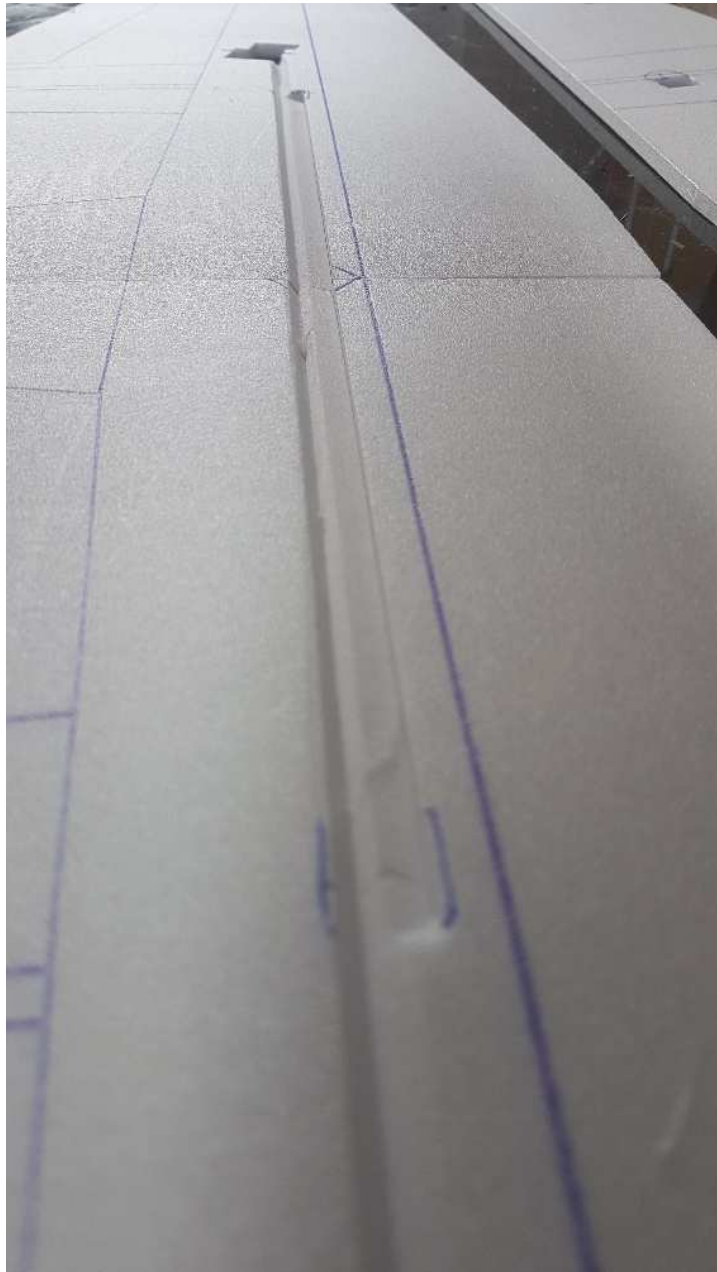




- 4. Align both wing halves on the heling and glue them together. Make sure that both CFRP rods are glued together.**
- 5. Prepare aileron servos including cable extension. A notch in both wing parts serves as a cable duct. Notch both wing parts until the cables pass through without pressure.**



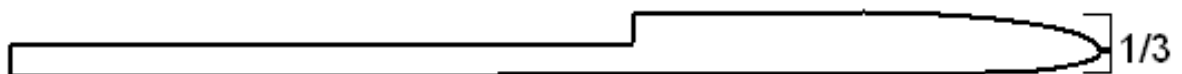




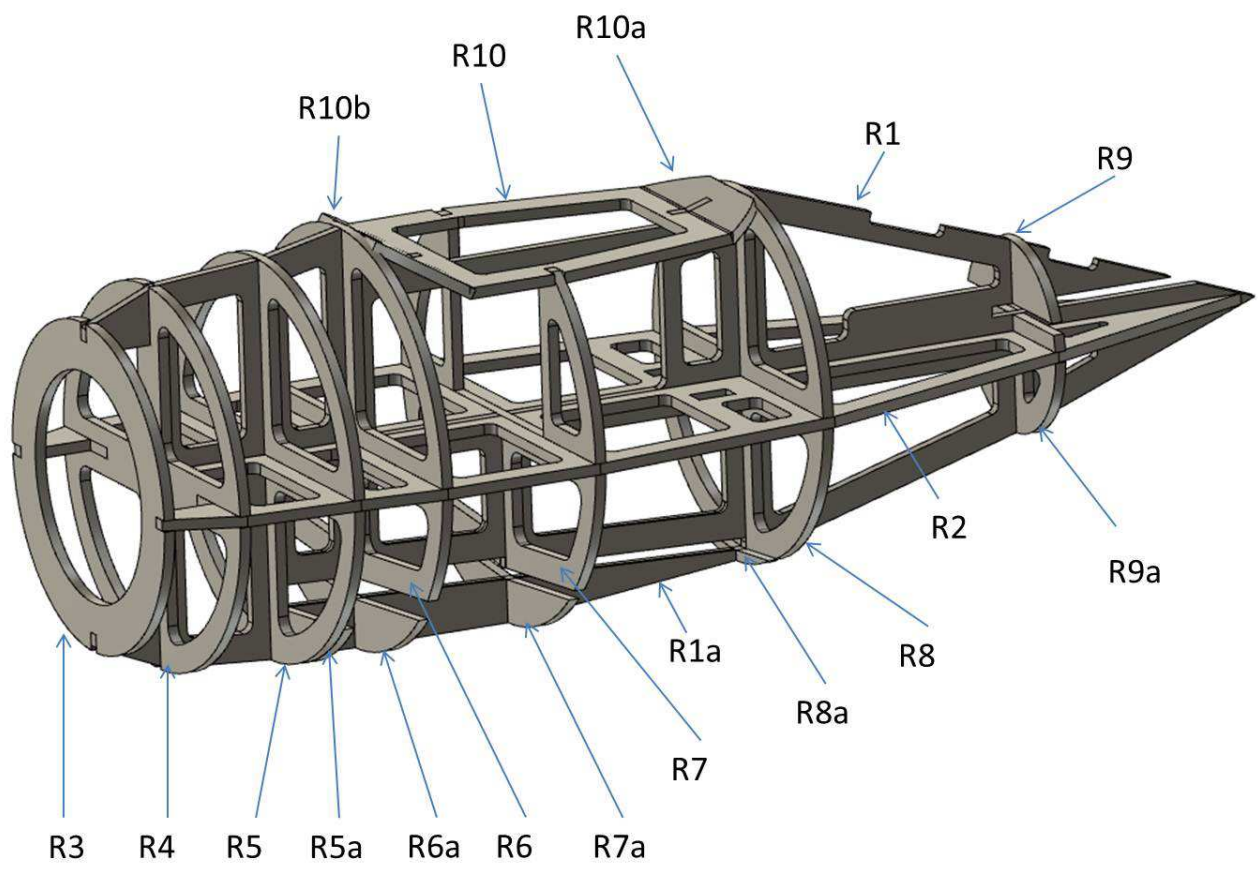
**For example ( P38 )**

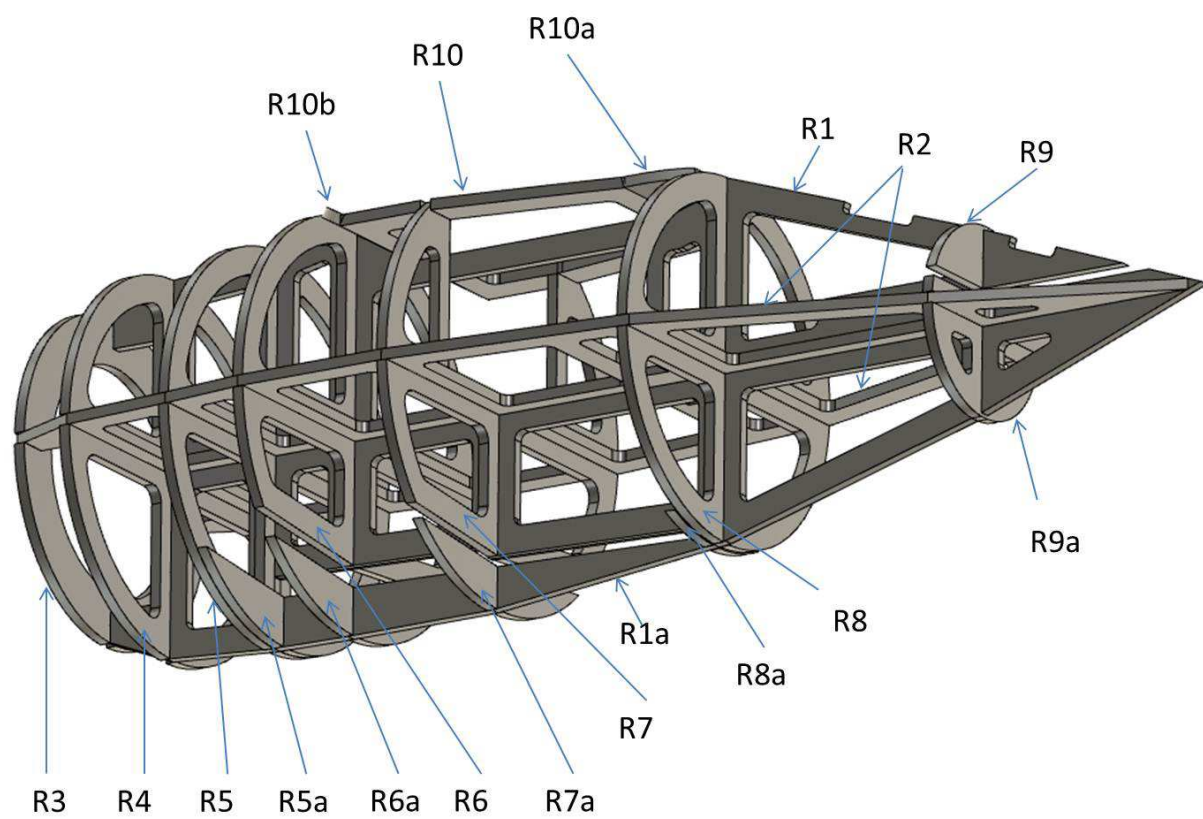
**6. If a CFRP wider than mm was used, also cut the slot in the upper half of the wing. Put on the upper wing half and grind the connection joint until they fit together. Now glue the upper wing parts onto the underside of the heling.**

**7. Sand the leading edge as follows:**

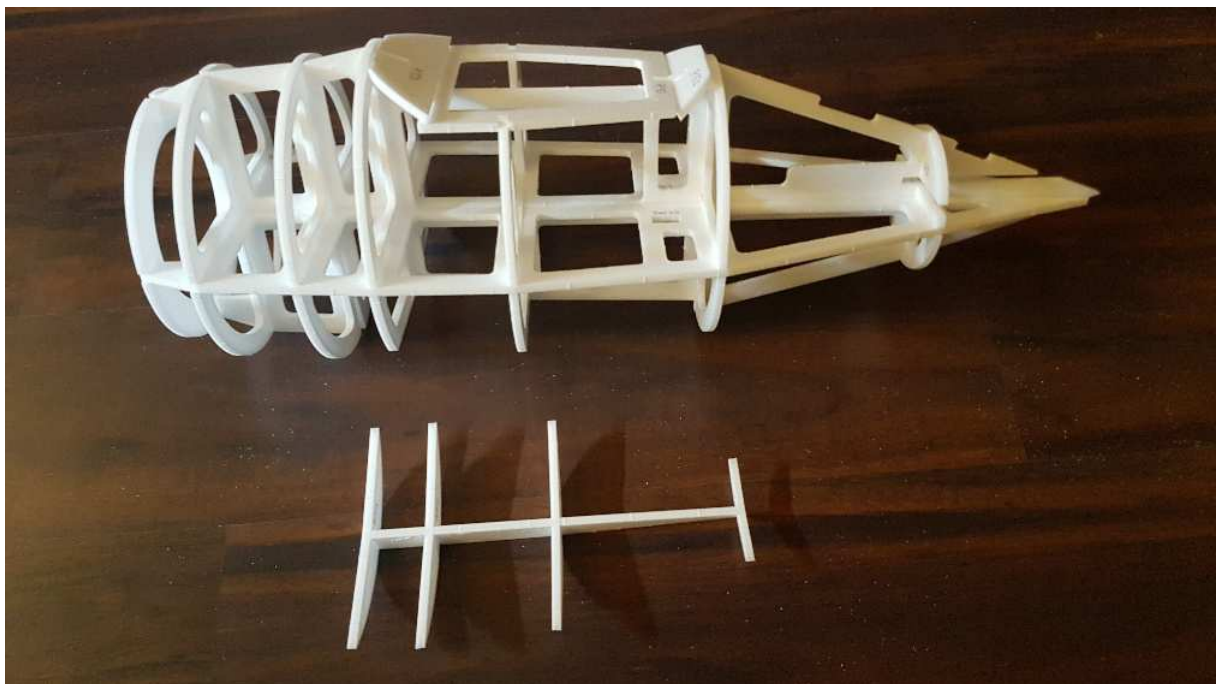
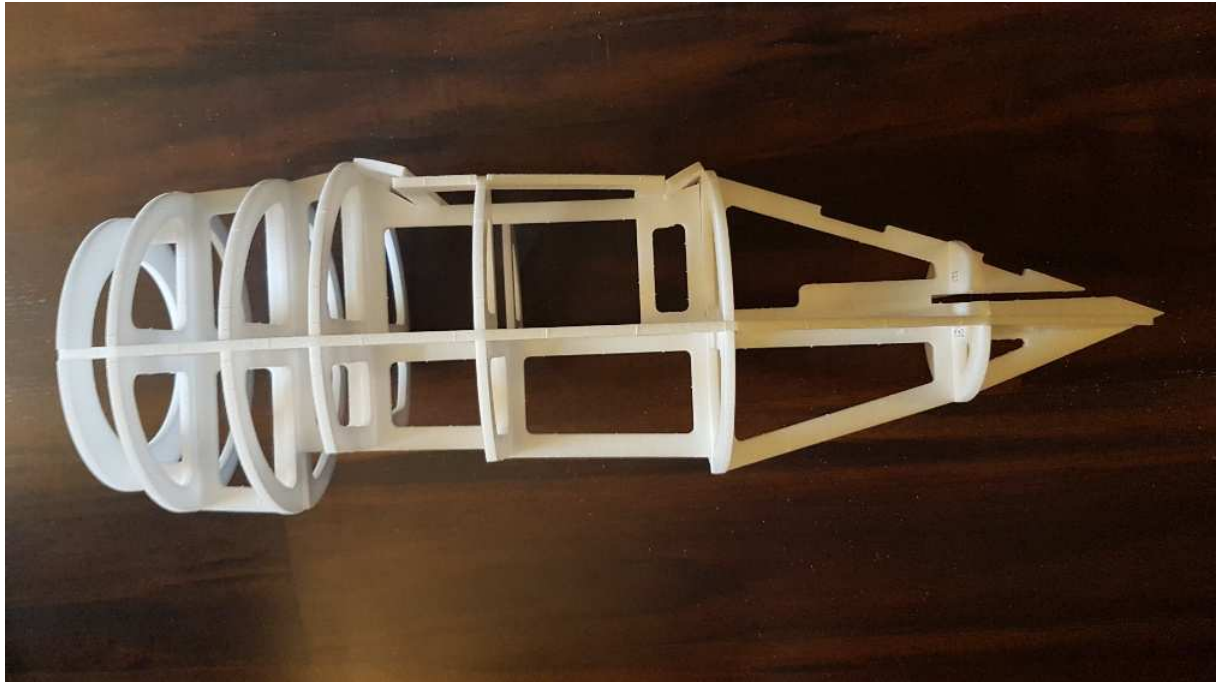


### **Fuselage assembly:**



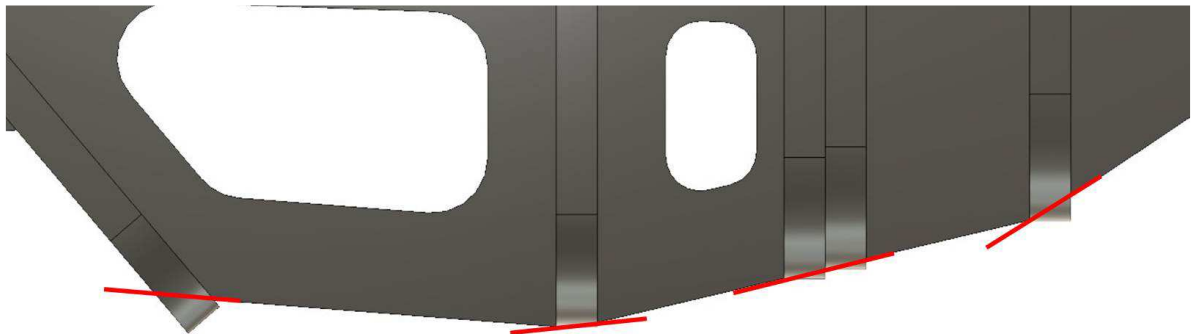


8. Insert all frames into the fuselage side part R1. As soon as all frames are inserted, the stringers R2 can be attached to the side.
9. If everything fits, everything can be glued.





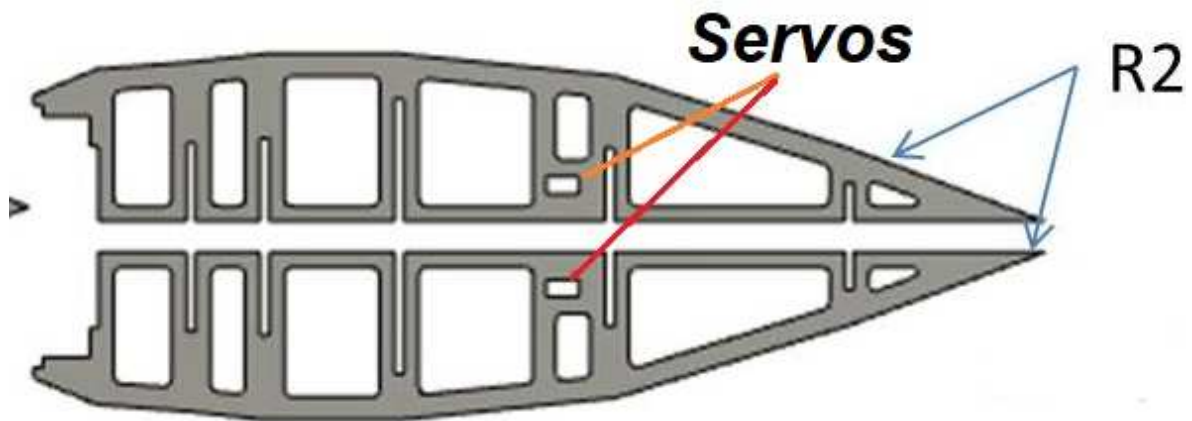
**10. After bonding all components to each other, sand the planking edges.**

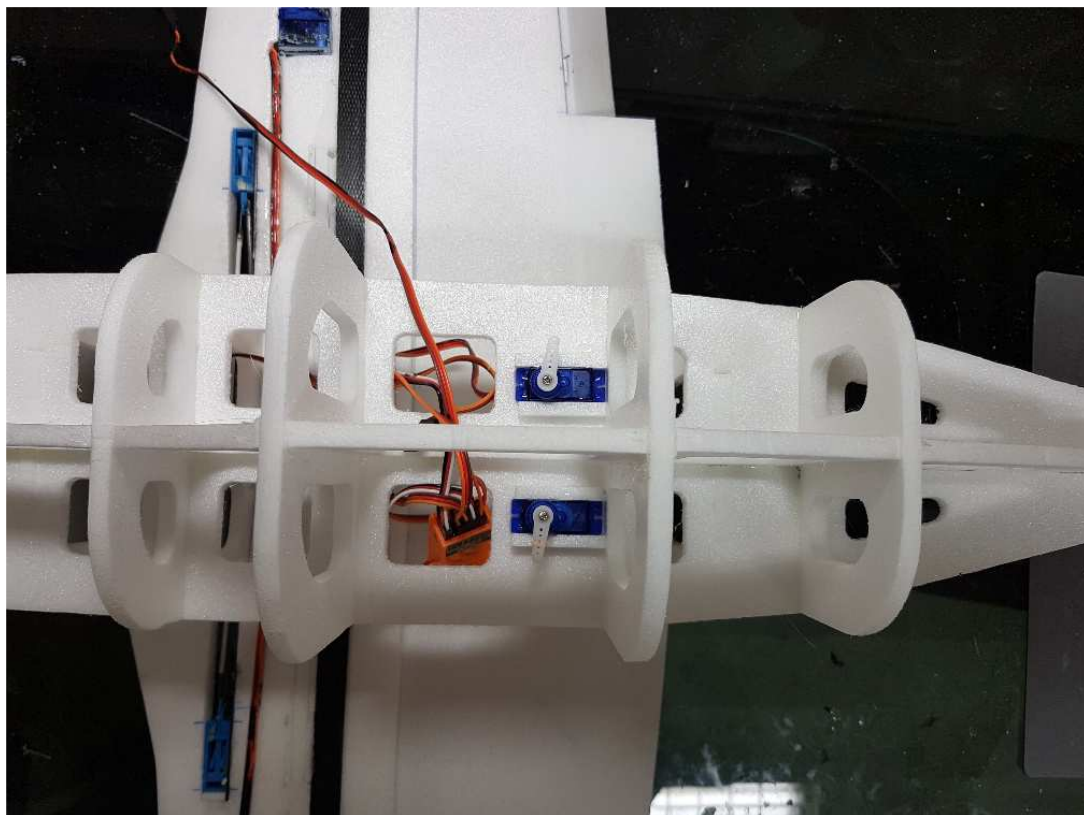


Überstehende Spanten abschleifen. Bild Exemplarisch - Gilt überall.



**11. Insert the side / elevator servo below the cabin opening, prepare the Bowden cables. For the course of the Bowden cables, temporarily install the tail unit and push the Bowden cables through the frames.**





**For example ( Mustang B )**

**12. Remove the tail assemblies.**

**13. Insert the engine into the fuselage stringers using the engine mount. This can be installed with plywood, GRP or CFRP stiffeners. Since the "Fattys" like to go on the nose when landing, the stiffening can be built into the fuselage so that it doesn't loosen later in the depron.**

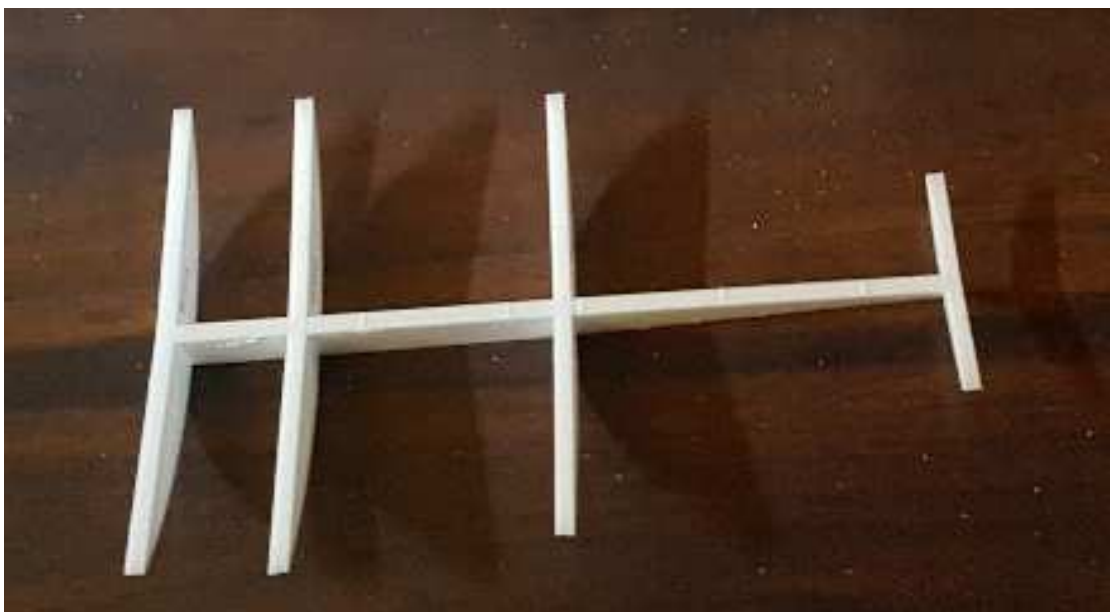


**For example ( Mustang B )**

**14. Adjust the wing to the fuselage, align it geometrically and glue it.**

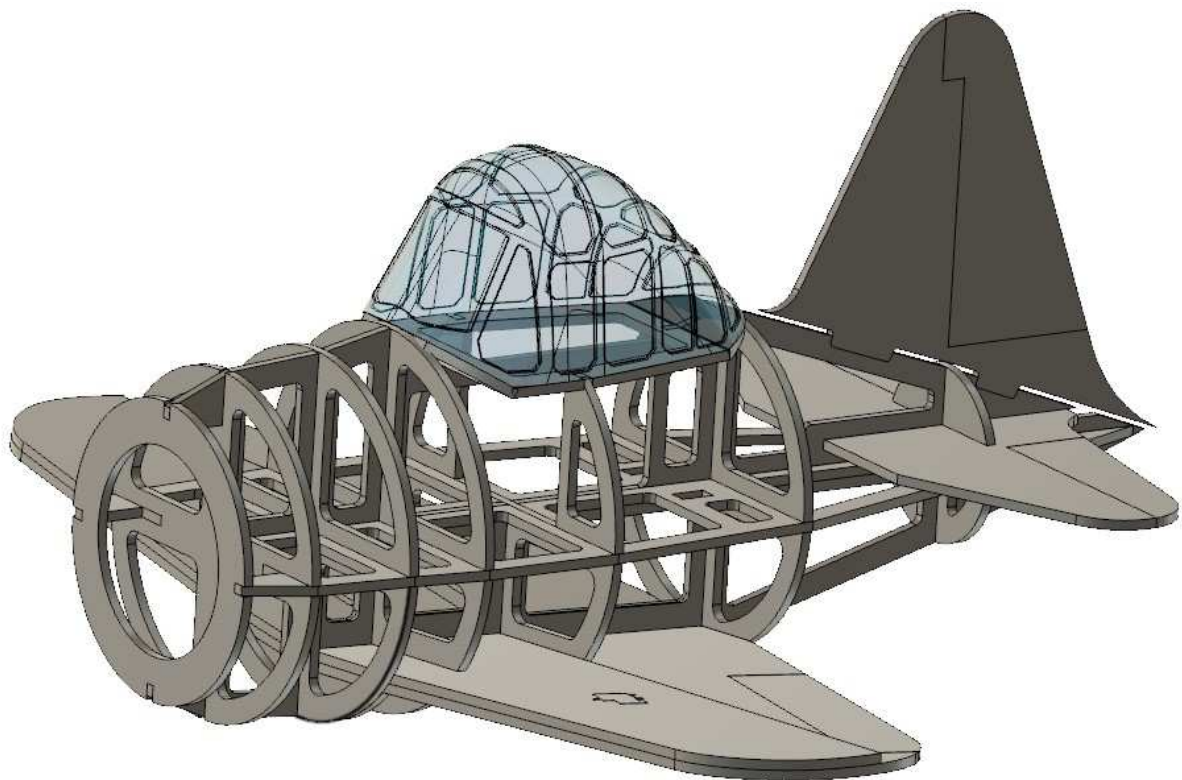
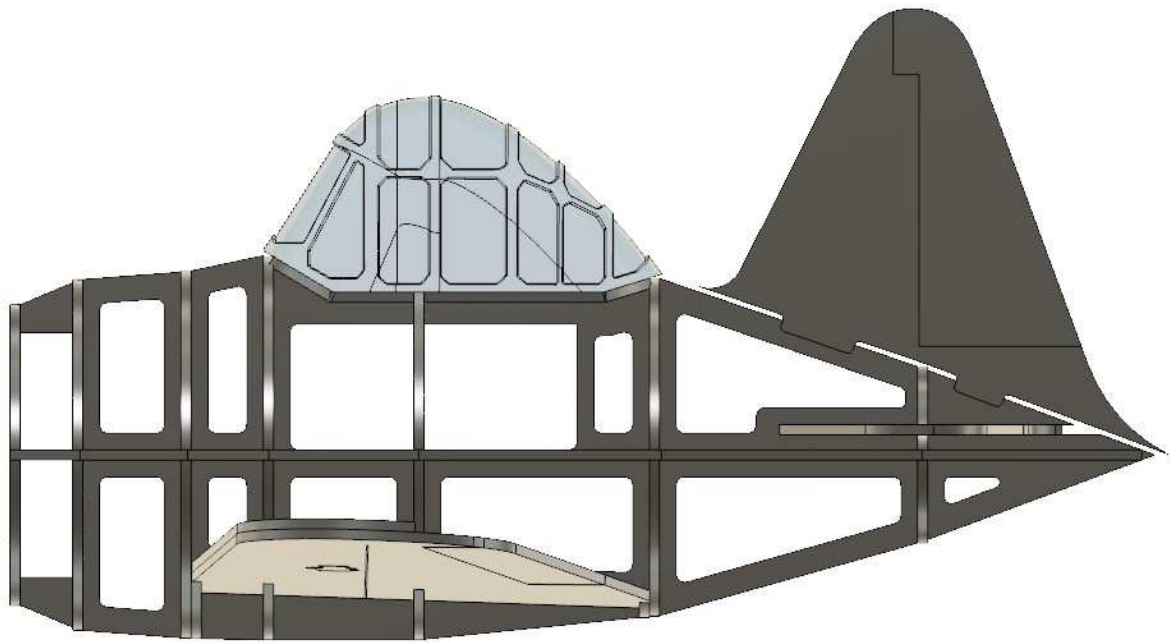


**15. Glue R1a together with the fuselage frame segments R5a to R8a and glue them under the wing.**

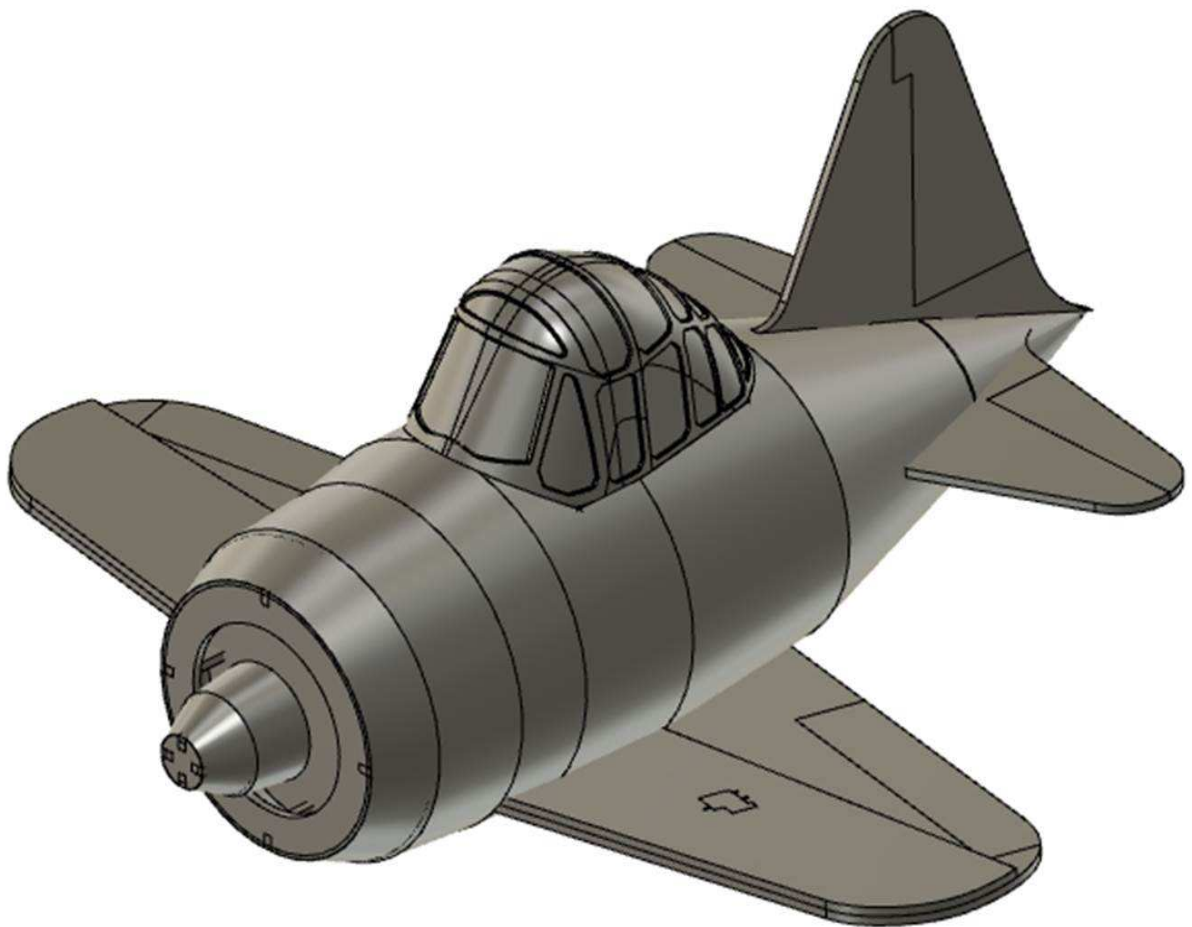
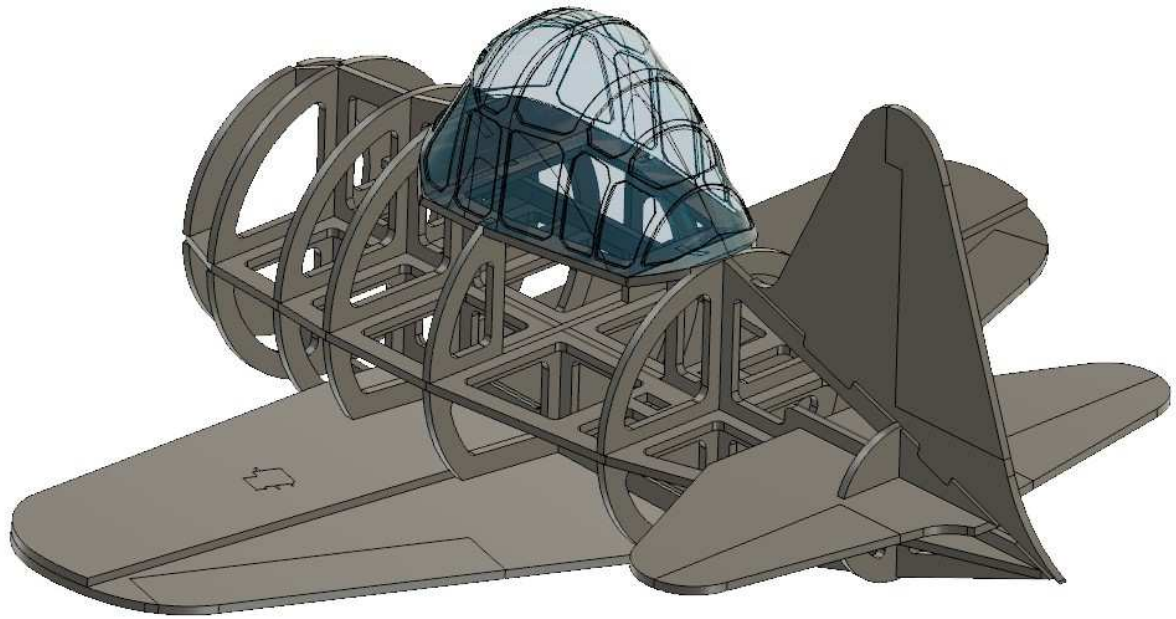


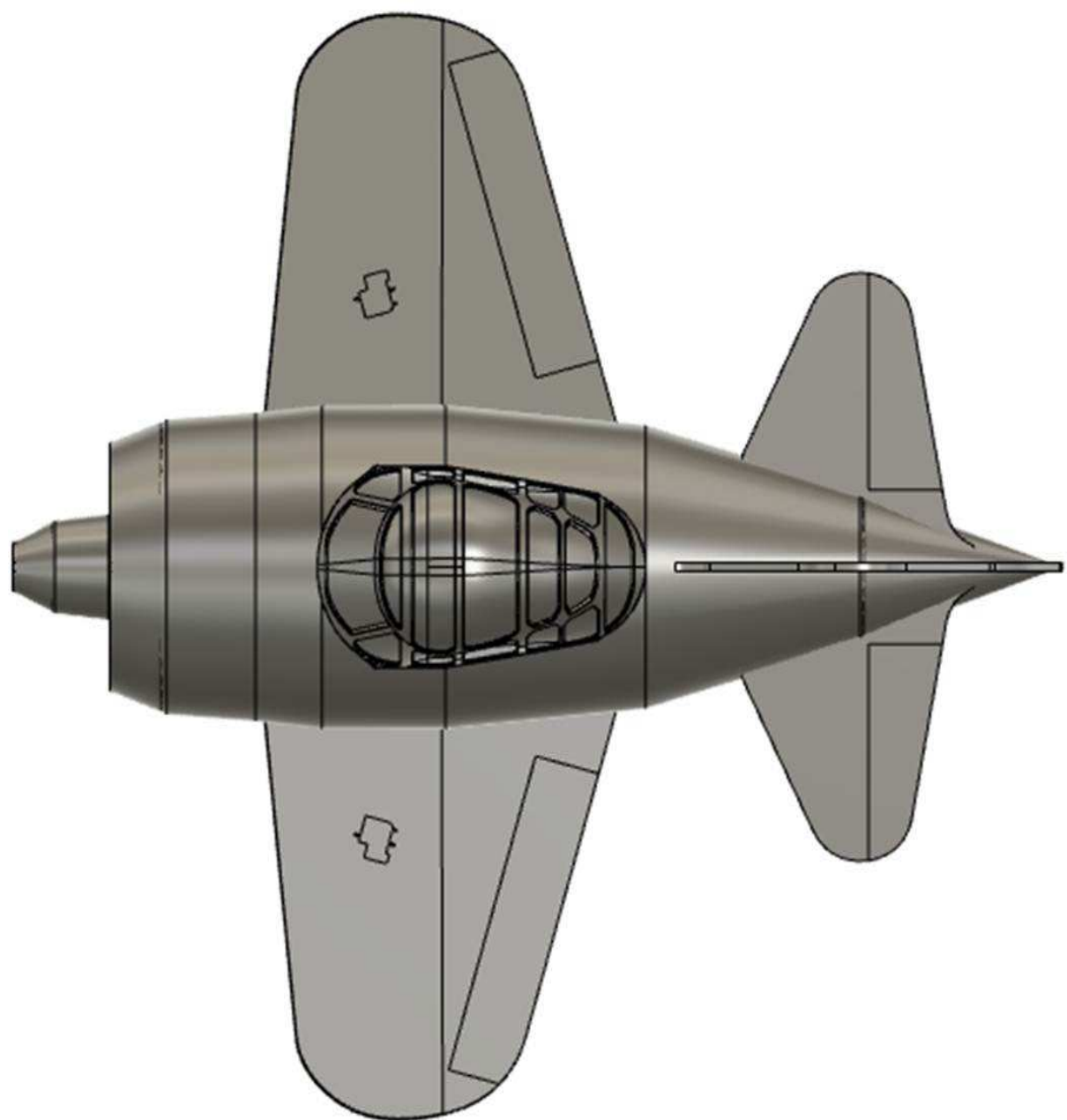
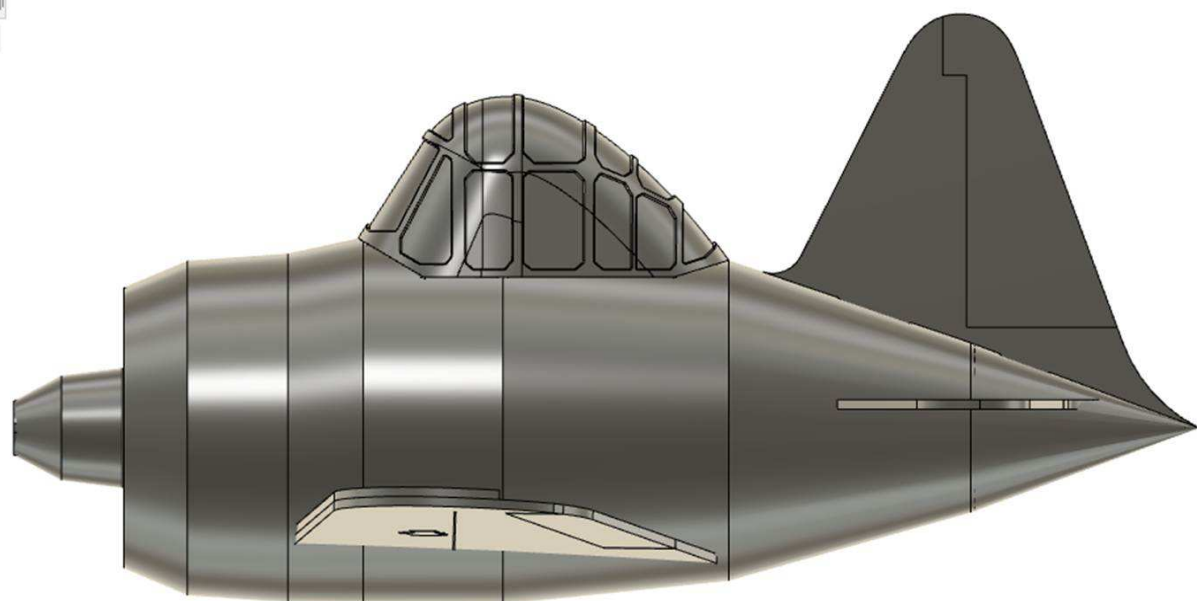


## 16. Planking the fuselage:









**It is advisable to plank from frame to frame. It is important that the Depron is pre-bent with the "more unstable" bending side of the bending contour. The best way to do this is to carefully deform the Depron over the edge of a table with the heel of your hand.**

**Of course, larger areas of the fuselage can be covered up to the entire hull side in one go, depending on the knowledge of the planking.**

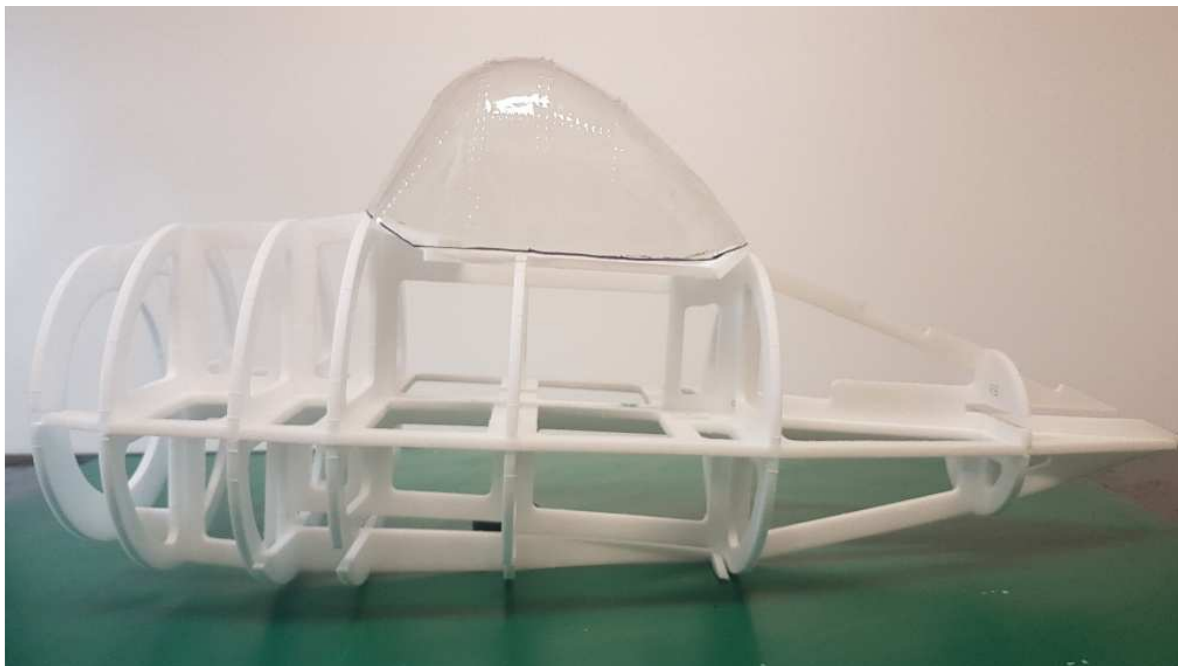
**For example**



**Prinzipbild P38**

**17. Tail units: Connect the elevator to each other using CFRP or wooden tubes. At the end of the planking, insert, align and glue the tail units. If you like, you can use a CFRP rod in the vertical tail for better stabilization.**

**18. Adjusting the canopy: The PVC canopy to be ordered separately in the shop should be stabilized with a depron frame and can be held on the fuselage with magnets.**



**19. Now the model can be completely sanded. For adhesive gaps, "Modelier" "Moltofill", a type of paste for touching up plaster, can be used optimally to fill the gaps. After curing, the material is hardly harder than Depron and you have a clean shell in your hands.**





For example ( Piper 15 )



**RC system:**

- **Battery:** Insert the battery into the fuselage via the access to the canopy and secure it against slipping.
- **Rudder deflections:** height 20 mm, side 20 mm, ailerons 25 mm.
- **Center of gravity:** The center of gravity is 70 mm from the front edge of the wing.

**5.** For the finish, I recommend "Hobbyline" water-based paints. Depron, lightly sanded, can be rolled very smoothly with a soft paint roller. If you want to achieve a little more stability, you should apply parquet lacquer from "Aqua Clou" (water-based) and apply several coats with sanding. This makes Depron more firm and somewhat more stable.



**Building inquiries, advice, feedback or suggestions:**

**I would be happy if I would receive a feedback from you via email about construction, impressions or photos for the customer gallery to be viewed in the shop.**

**Of course I help with construction problems by phone or email. I would be happy to call you back by email.**

**Always a good flight with your new model.**



**Frank Seuffert**

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## Warning!!

Before you fly the R/C model it is essential to read the operating and building instructions in full. This sheet is part of the operating instructions. Please keep it in a safe place for further reference. If you ever sell the model make sure to pass on this sheet to the new owner together with the model. A remote controlled model aircraft (model plane) is not a toy. It is not suitable for children under 14 years of age unless they fly under strict supervision of a knowledgeable adult. Since the manufacturer and his agents have no control over the proper assembly, operation and maintenance of their products, no responsibility or liability can be assumed for their use. Correct assembly, safe operation and proper maintenance are the responsibility of the builder and the flyer.

**Attention:** Any rotating components on model aircrafts (propeller, main and tail rotor blades) are an ever present danger of injury to operators and spectators. This radio-controlled model aircraft is a technically complex device, which must be built exactly in accordance to the building instructions and operated and maintained with care by a responsible person. Failure to do so may result in a model incapable of safe flight operation. All fasteners and attachments must be secured for safe operation. Do not make any alterations.

### **General Safety Rules for flying an R/C model aircraft**

**NEVER** ignore the local and national regulations for operating model airplanes. Contact local authorities, hobby shops, R/C clubs or the Academy of Model Aeronautics.

**NEVER** fly without appropriate liability insurance.

**NEVER** get near the model airplane with the propeller or main rotor spinning. Keep a safe distance of at least 10 ft. Ask spectators to clear the scene and stay away at least 35 ft. Be aware that rotating propellers and rotor blades are very dangerous and can cause serious injury.

**NEVER** fly your R/C model near or over crowds, playgrounds, streets, rail roads, airports, power lines or hospitals/radiology practices.

**NEVER** start and fly with unsafe and questionable equipment.

**NEVER** fly if you don't feel confident with your equipment, your location or your capabilities.

**ALWAYS** fly at approved flying fields and obey field regulations.

**ALWAYS** follow frequency control procedures. Interference can be dangerous to all. Prior to turning on your R/C equipment at the flying site make absolutely sure that the frequency you are going to use is not being occupied by someone else. In such case make appropriate arrangements with the others flyer(s).

**ALWAYS** perform each time before your first flight a range check of your radio equipment. With the transmitter switched on and its antenna collapsed, the receiver need to receive full signal at least over a distance of 30 yards.

**ALWAYS** familiarize yourself with your radio equipment. Check all transmitter functions before each flight. Do not only make sure that the servos move, but that their movements are correctly coordinated and are moving in the proper direction as well.

**ALWAYS** keep a safe distance from the propeller or rotor while starting the motor.

**ALWAYS** stay behind your model airplane when the engine is running.

**ALWAYS** keep in mind: Safety First! Loosing your model airplane will cost you some money for replacement parts, but your and others health is not replaceable.

**ALWAYS** ask an experienced R/C pilot for assistance in trimming the model and in receiving flight training under his supervision.

**ALWAYS** follow all recommended maintenance procedures for model, radio and motor.

**ALWAYS** check your R/C model for any worn, broken, damaged or loose parts. You are ultimately responsible for the maintenance of your R/C model and its accessories.

**ALWAYS** follow carefully the instructions, which have been supplied with your batteries, in particular, when you are using Lithium-Ion or Lithium Polymer batteries.

**ALWAYS** use the motor/engine recommended for the aircraft and do not exceed the revolutions per minute (rpm) it is designed for. Otherwise the propeller or the main and tail rotor blades may exceed their maximum permissible rpm and may get torn apart. Fragments of the propeller/rotor may get ripped off, flying away at high speed.

**ALWAYS** make sure that your batteries have been fully charged, otherwise proper function of your equipment will not be guaranteed.

**ALWAYS** avoid abrupt movement of the control stick while the model is in flight

**ALWAYS** use only the specified number of battery cells. Otherwise the motor and/or speed controller may be overloaded, may get damaged and/or causes radio interference or fire hazard.

**ALWAYS** have an eye on the wind and weather conditions and changes.

**ALWAYS** look for a wide and open flying area, especially if you are a beginner. You will need the space.

**ALWAYS** keep an eye on your co-flyers.

**ALWAYS** be considerate of the environment you are guest in.