Nice 2000

3d-printz Original

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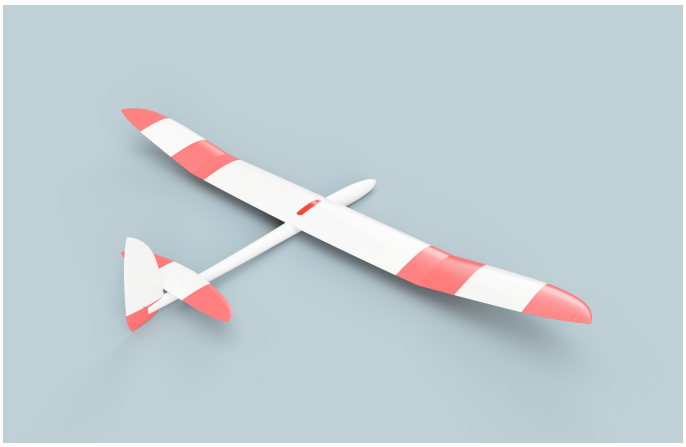
...hinterlässt EinDruck !

AUW: 850-950g
Span: 2000mm
Airfoil: Aquila
CG: 50mm
Wingload: 24-27g/dm²



additional material:
RC-equipment
Bowden
CA medium & thick
Cutterknife
Sandpaper (80-120)
8mm carbontubes
(1000mm, 775mm, 185mm)
3x plasticscrew M5
3x nut M5
4x Neodymmagnet round 10x2mm

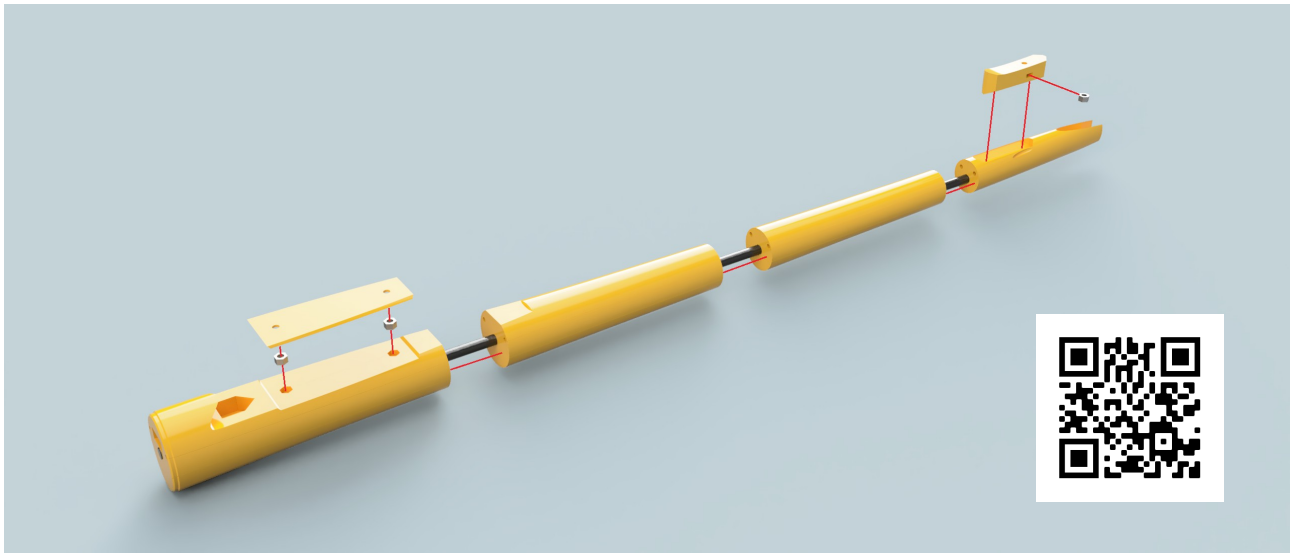
Elektronics:
RC Receiver 6-8 Channel
Battery (3S Lipo 2200mah für Elektro)
4x Microservos
optional Motor – f.e. Racerstar BR2212

Foreword
The "Nice" is simply nice. With its low wing loading it is a very easy to fly glider. Thanks to its four flaps, it is perfect for extended thermal flights or relaxed floating on slopes. Due to the low wing loading and the airfoil, the Nice can be flown extremely slowly. If you are looking for landings in the hand, you can also program the crow position to slow down the model even further. Simple aerobatics are also possible with the Nice, although that's not what the classic sundowner is all about. The Nice is aimed at all those who are looking for a versatile glider for long, relaxed flights.

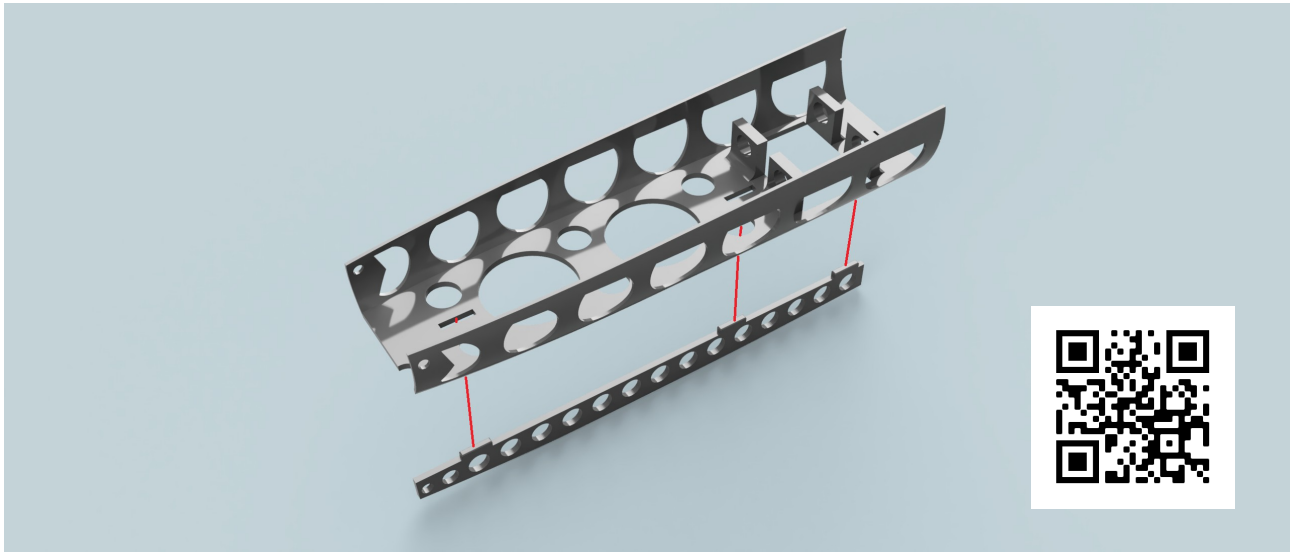
Build

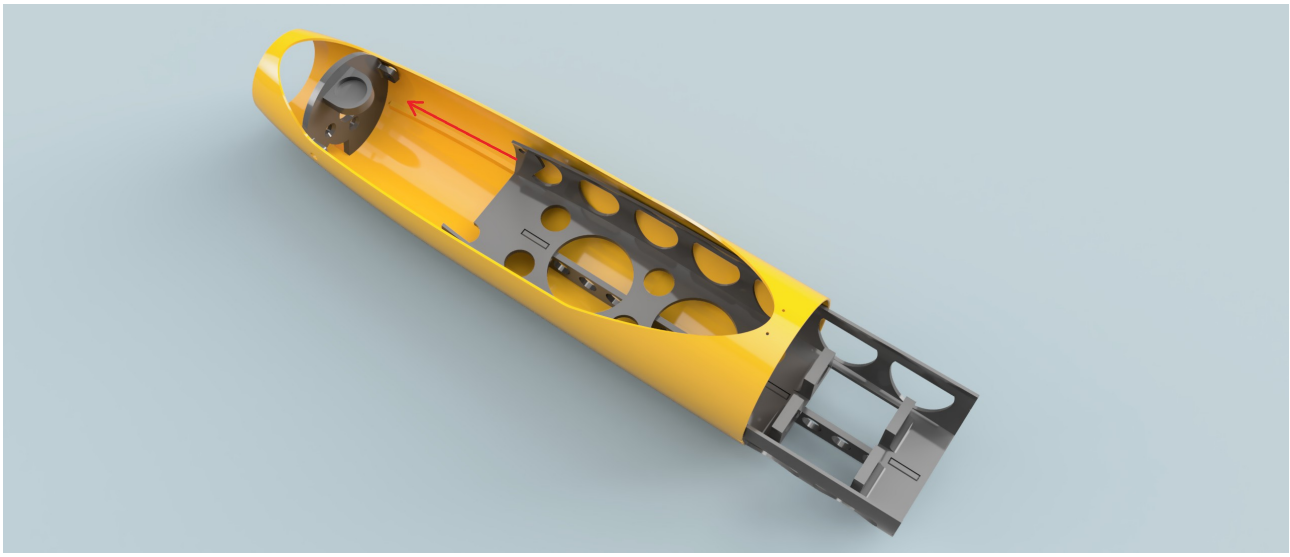
Fuselage

The heart of the fuselage is an 8mm carbon tube with a length of 775mm.
The parts Fus2 - 5 can be pushed onto the carbon tube and glued flush with CA - make sure to pay attention to the alignment. It is advisable to insert the Bowden cables into the channels provided in advance in order to have additional guide rails. Gluing the carbon tube to the fuselage is not necessary! The tube ends flush with Fus2. https://youtu.be/vjD1EowaAx8
Insert two M5 nuts into the designated moulds in Fus2 and glue the joint plate to Fus2, making sure you cover a large area with the CA. Then check the pylon for correct alignment (El_middle serves as a reference) and glue it to Fus5.



Glue cockpit and cockpit1. Then fix the motormount in Fus1 with two pieces M3x8mm and suitable nuts, push in the cockpit for testing purposes and then glue it flat to Fus1. Motorholder is used as a stop, but should not be permanently glued.
Video: https://youtu.be/0hcpaxl10hE

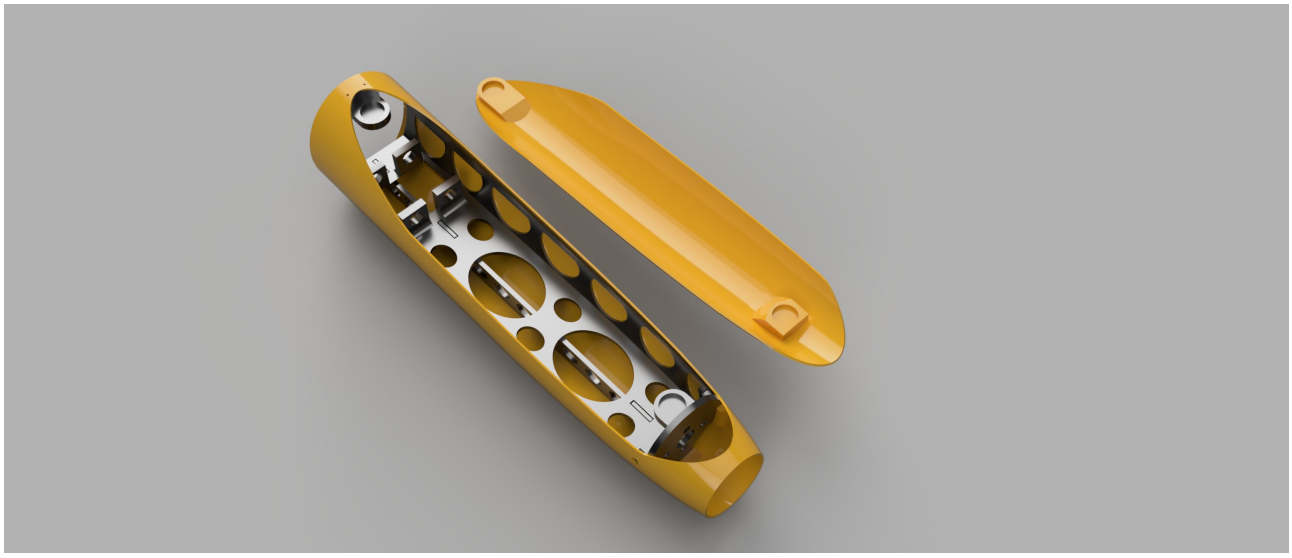




Then glue Fus1 to Fus2 - pay attention to the markings on the side of Fus1 to ensure perfect alignment. The cockpit part should also be glued with Fus2 to ensure high stability.

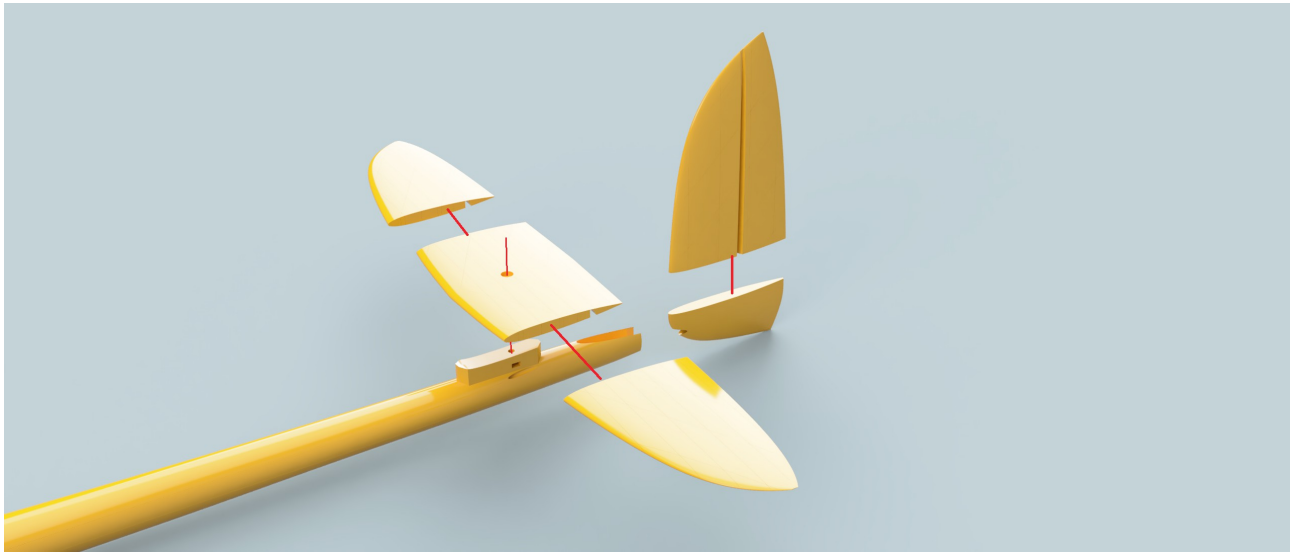
https://youtu.be/GXxlM2EG5qk

To finish the front fuselage area, fasten the magholder with screws, join the canopy together with superglue and glue the magnets into the recesses provided.



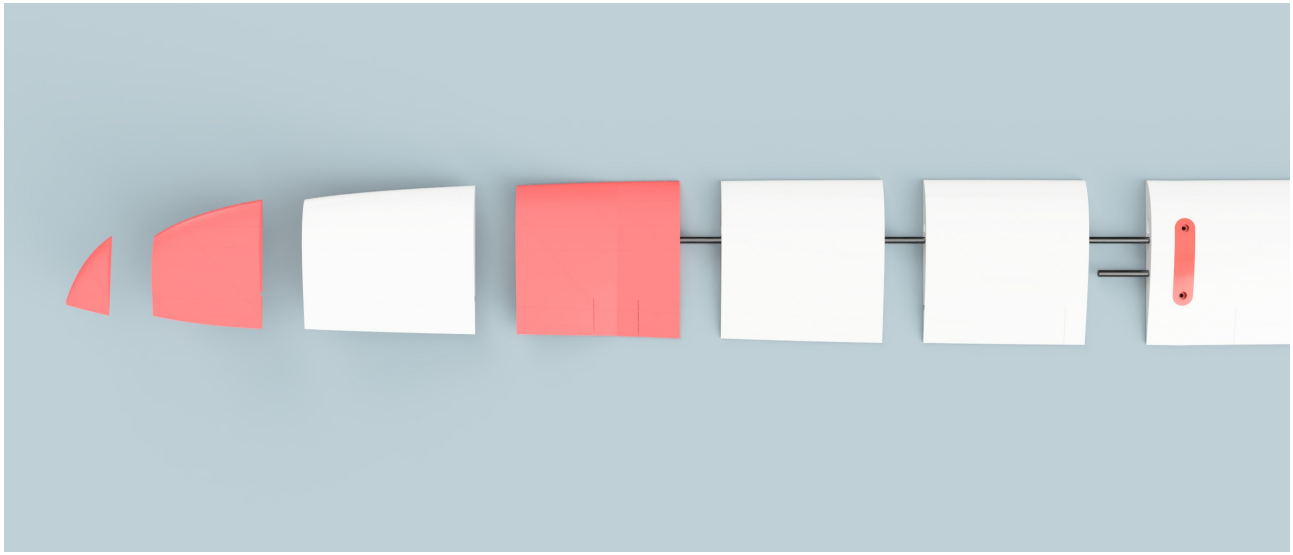
Stabilizer

First glue the rudder to the skid, making sure that no glue gets onto the movable rudder surface. Then put the rudder on the protruding part of the 8mm carbon fuselage tube and check for fit. Now the fin can be glued extensively with Fus5. Glue the parts El_right, El_middle and El_left together, not forgetting the controllsurface. The Elevator is secured with an M5 plastic screw which threads into the M5 nut located in the pylon.

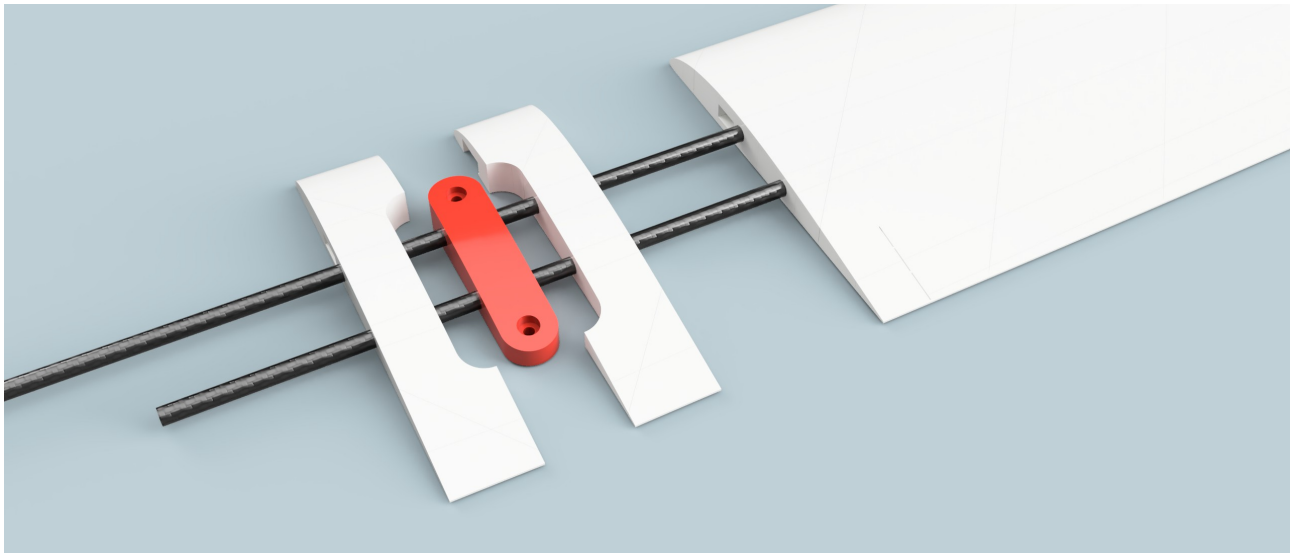


Wings

The wings are joined by a 1000mm long 8mm carbon tube in the front and a 185mm long 8mm carbon tube a little further back. When assembling the wings, make sure they are glued flush. The carbon tube serves as a guide.



First glue wing1 – 5 and wingtip of one side together – !do not glue to the center part to get a divisible wing!
Then glue the middle part of the wing, consisting of WingsmiddleL & R and Joiner:



Now one of the wing halves can be glued to the center section.

Finally, depending on whether all flaps are to be used or not, remove the small tabs between the wing and aileron or flaps and sand them free with a thin file or a piece of sandpaper and make them move smoothly by repeatedly moving them up and down. The wing is attached to the fuselage with 2 M5 plastic screws!

Electronics

The Nice is designed for 12mm servos, just like Savöx SH-0264MG or SG 90 or any other servo with similar dimensions. For full controll you will need 6 of them.

Battery: 3S Lipo, 2200mah, 25C
Motor:
Racerstar BR2212 1400KV
...or similar
ESC: any Micro ESC with BEC, 20A (make sure to choose a small one)
Prop: Foldingprop 8.5x7.5 (you can choose a printable one)

Throws

With the recommended CG at 50mm behind the leading edge you can use these throws as a basic setup:

Aileron: +/- 20mm
Elevator: +/- 10mm
Rudder: Maximum
Camber (Thermik): -3mm
Speed: +2mm
Butterfly/Crow:
Flaps -25mm
Ailerons +20mm
Elevator -2mm

Please test the Butterfly/Crow in a good height before you try to land with it!

Center of Gravity

The right center of gravity is essential for comfortable flight behavior. This is precisely why it should be dialed in individually. The initial value can be assumed to be approx. 50 mm behind the leading edge. If more performance and more agile flight behavior is desired, the center of gravity can be shifted further back, but the throws should then also be adjusted.

Please note that the center of gravity and the throws have to be chosen by the pilot himself for each Nice built - the values given here are only guidelines!

We wish you a lot of fun with your Nice!