



## Zenith Aircraft CH 801

The Zenith Aircraft STOL CH 801 is designed as a SUV (Sports Utility Vehicle) aircraft. While it may not be pretty or fast, it was designed from the beginning with utility features in mind. Mainly, that means the ability to start and land on very short fields with payloads up to

450kg combined with easy construction and maintenance.

The CH 801 is based on the successful CH 701 from 1986 and shares its basic capabilities and features, while having seats for four instead of two people, greater dimensions and a higher speed.

Like its predecessor, the CH 801 was designed as a kit, which makes it very affordable. One can either order a complete kit, that features all the parts or a basic kit, which features only those

parts, that a homebuilder can't construct at home, such as the cowl, the engine and all the equipment.

In spite of its simple structure that allows the CH 801 to be built by aviation enthusiasts at their homes, it was still designed as a rugged and sturdy plane, allowing it to land even on unprepared landing strips, which makes it a true sports utility aircraft, that can land almost anywhere: From gravel strips to soccer fields, to the beach or a glacier.

This is owed to a number of features, such as the special high-lift wing with fixed slats, a flaperon (which combines aileron and flaps into one) and inverted horizontal stabilizers. Its large wheels and fixed landing gear allow landing on rough terrain.

Another special aspect of the CH 801 as of other kitplanes is its "Open Design", that allows builders to modify parts where they see fit. The most important aspect here is that the CH 801 was designed to work with a number of different engines, even though the standard engine for the CH 801 is the Lycoming 360 4-cylinder engine.

The CH 801 can be equipped with amphibian floats, which are available from a sub-company of Zenith, Zenair floats. The floats are available as complete floats or as a kit for builders. These floats increase the versatility of the CH 801 even more.

Its ability to land in many different places, even where space is scarce and the ground is rocky, in combination with a payload that is higher than that of typical "Funplanes" and the low cost in purchase and maintenance make the CH 801 a perfect bushplane.

The CH 801 can be found in all kinds of remote areas in the bushplane role, flying for small companies or charity organisations. The aircraft being a kit is very helpful, because it not only allows the plane to be assembled on location, but also allows the operator to easily make repairs when needed, without having to return to the factory.

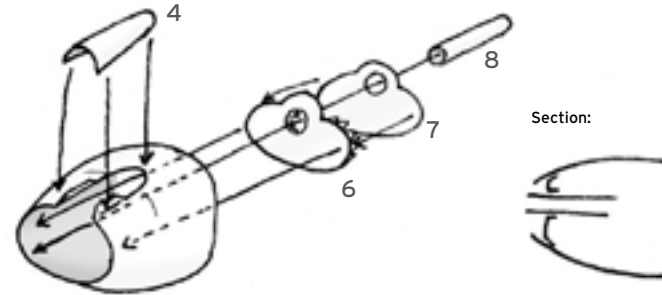
Medicine On The Move is currently building a CH 801 in Ghana to be used for bringing much needed medicals and supplies to remote areas that are hard to be reached on the ground.

These are the instructions for the 1:60-version. Make sure you have the right model plans.

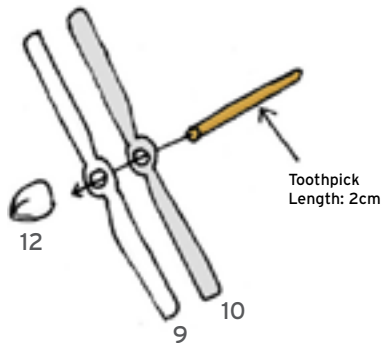
1. Glue the cowling together



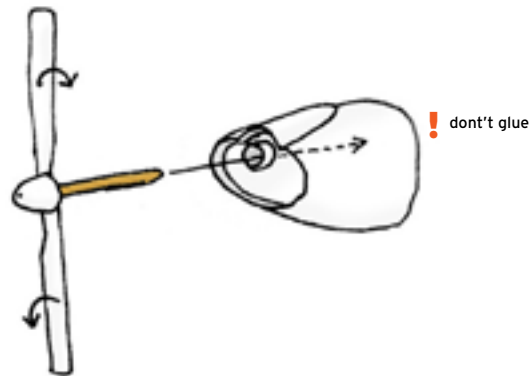
2. Attach the upper fairing, and install the engine plate and engine shaft



3. Build the Propeller and Spinner and glue them on a toothpick as an Axis.



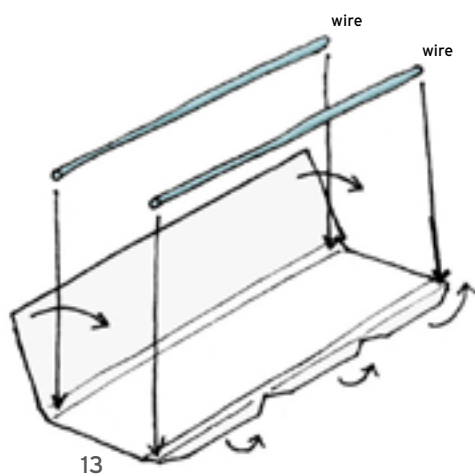
4. Push the Propeller through the engine shaft. Don't glue!



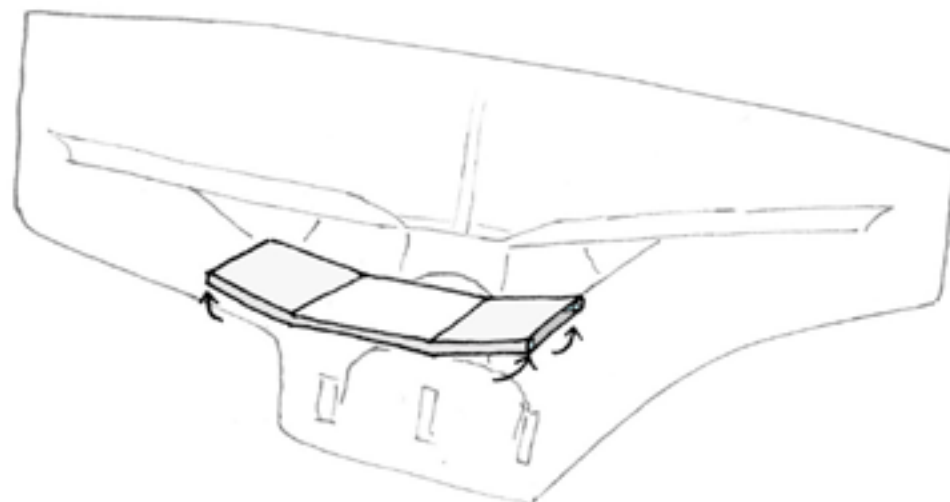
5. Glue the shaft hub on the protruding toothpick



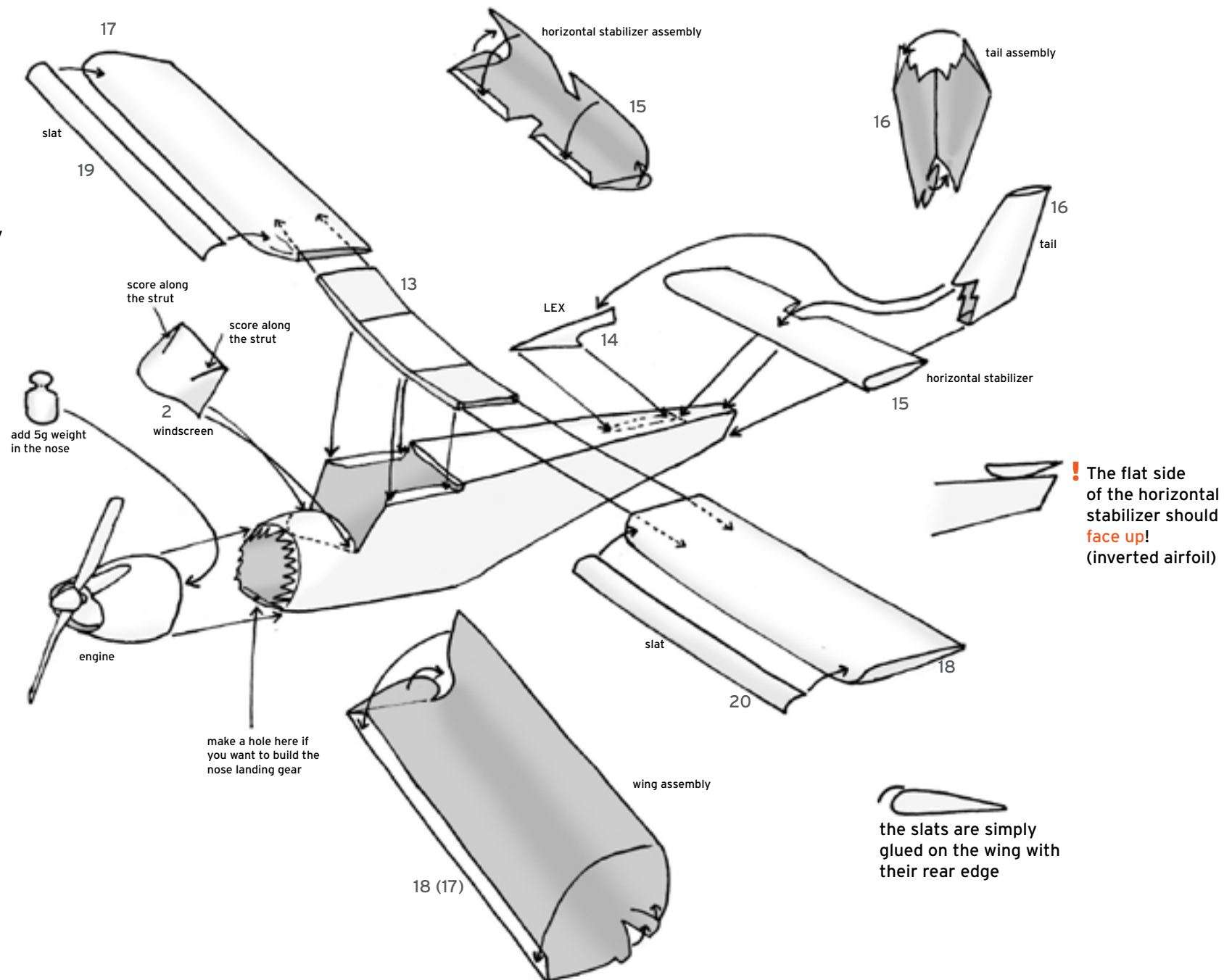
6. Glue two wires in the edges of the wing center section



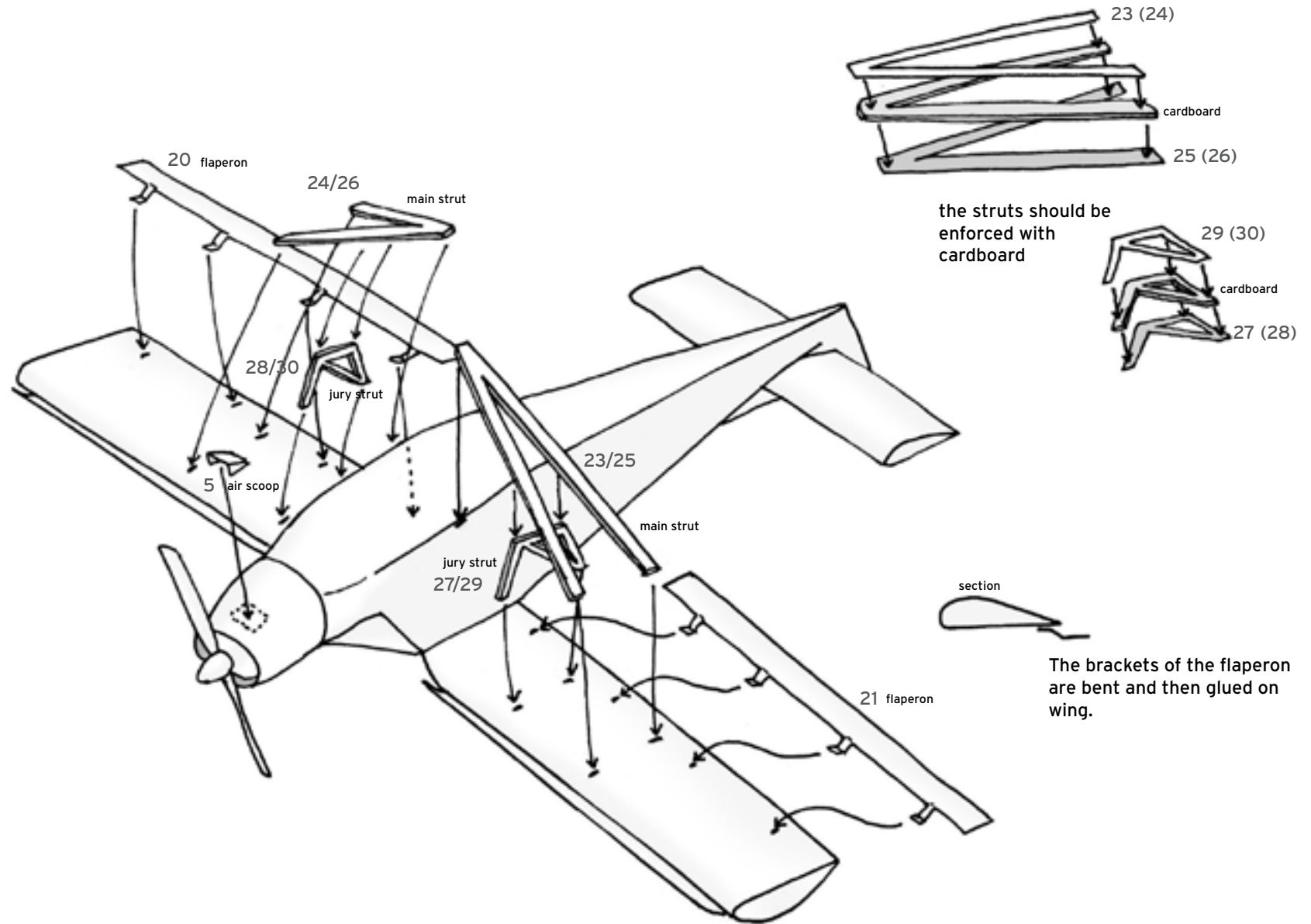
7. Bend up the edges of the wing center section to create a dihedral (upward angle of wing), according to the drawing on the page



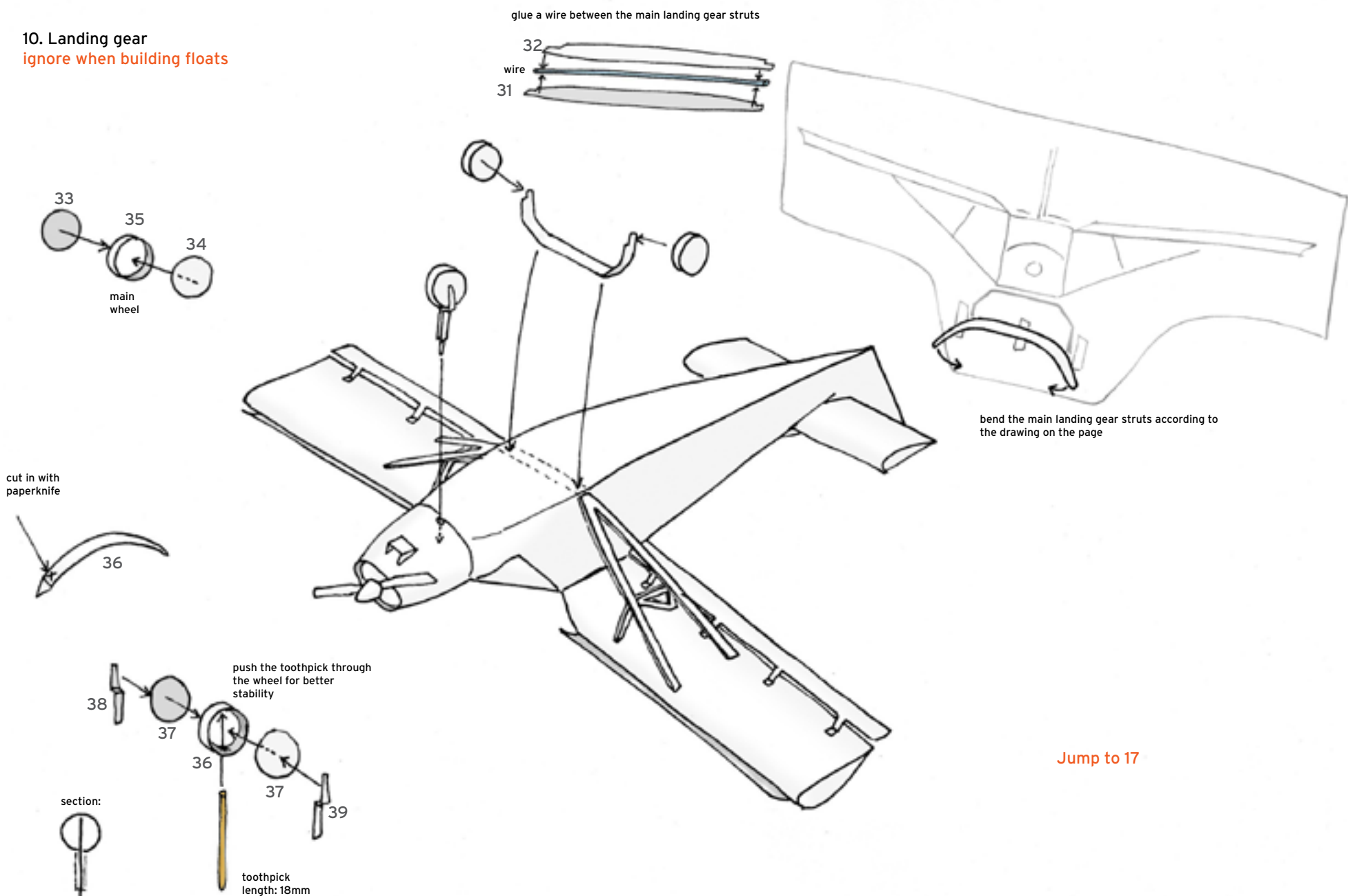
## 8. Main assembly



9. Lower detail

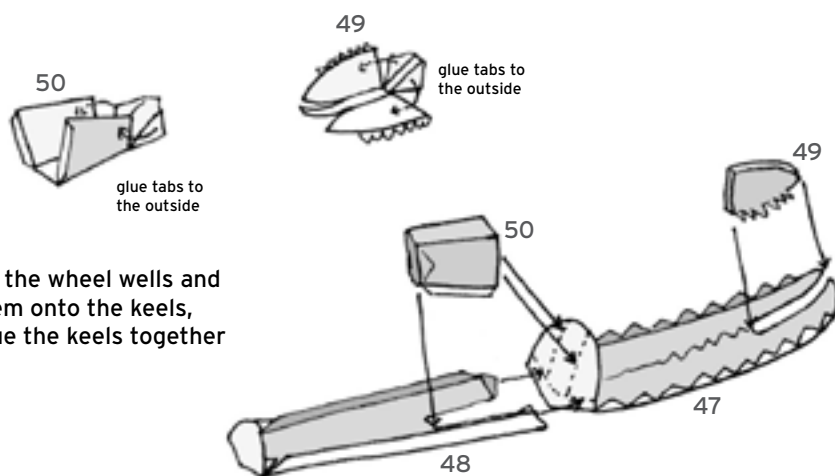


10. Landing gear  
ignore when building floats

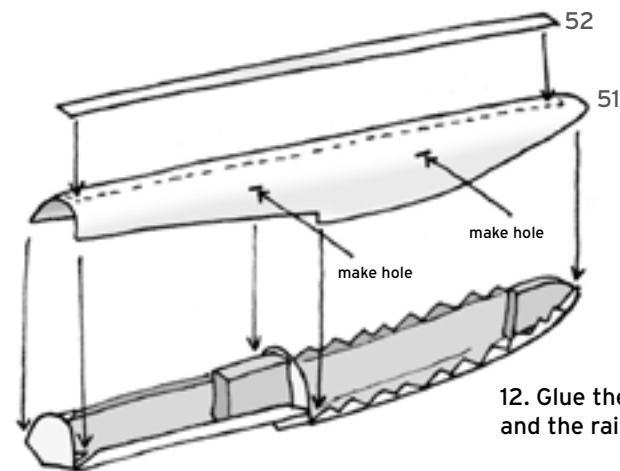


Jump to 17



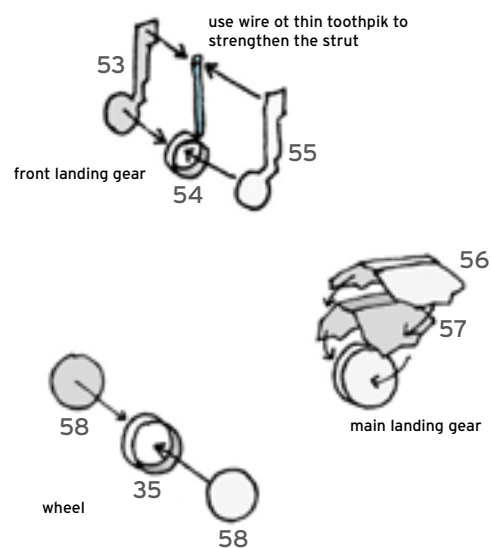


11. Build the wheel wells and glue them onto the keels, then glue the keels together

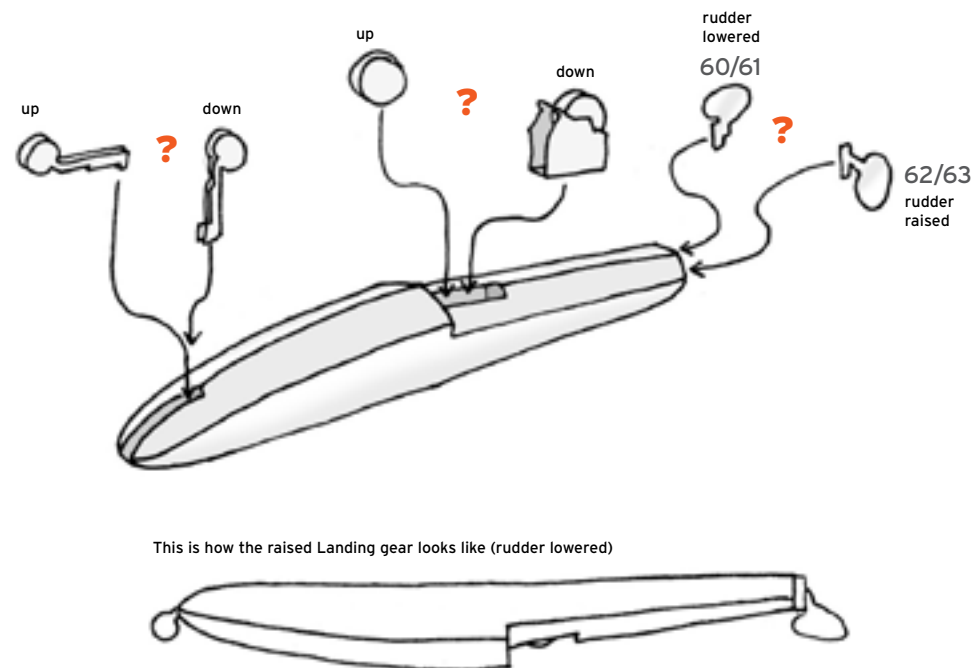


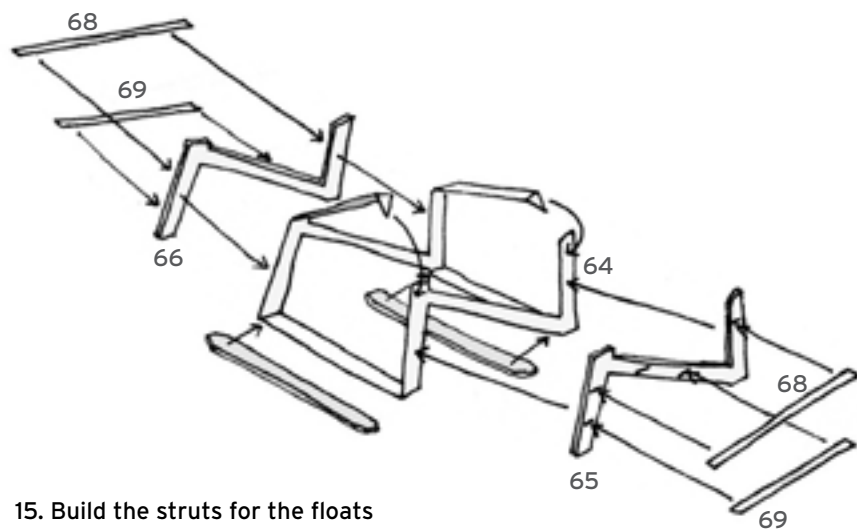
12. Glue the hull on the keel and the rail on the hull

13. Build the landing gear



14. Install the landing gear and rudder

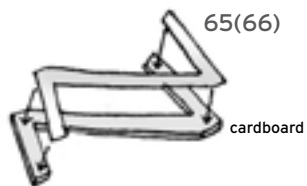




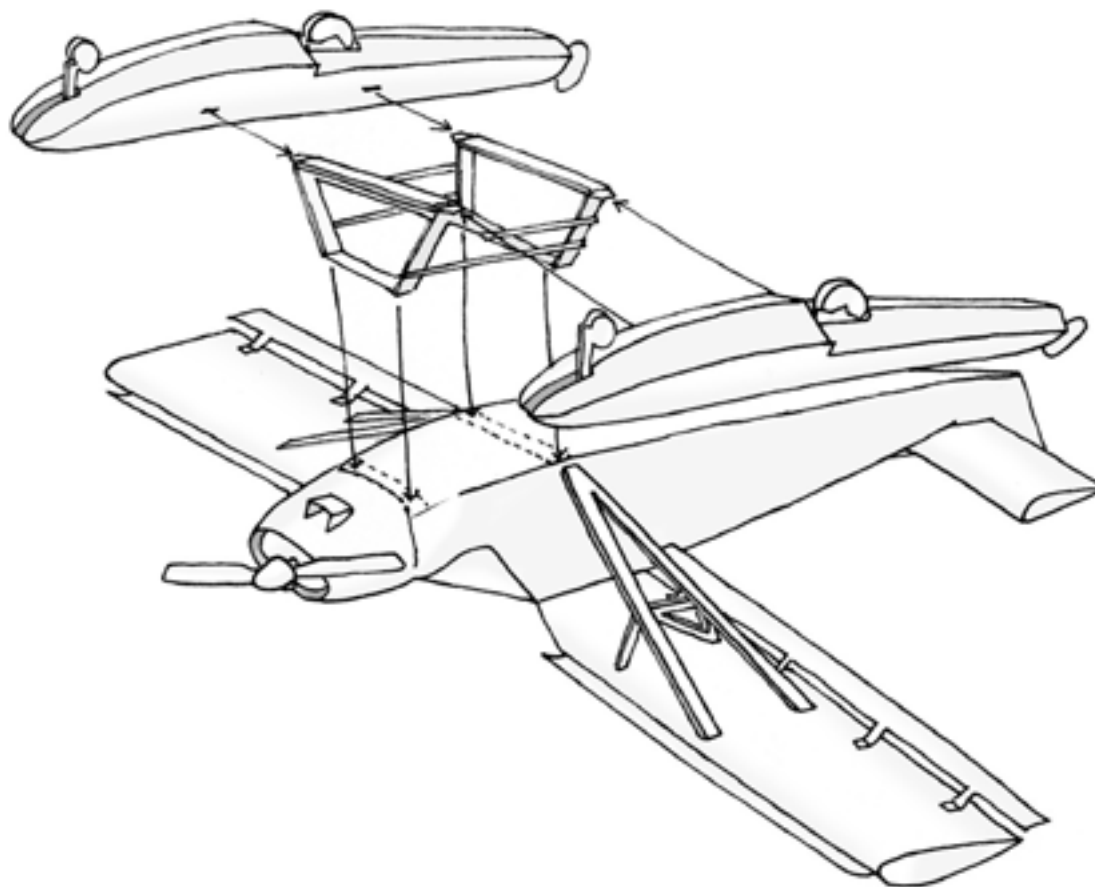
15. Build the struts for the floats



the struts should be  
enforced with  
cardboard

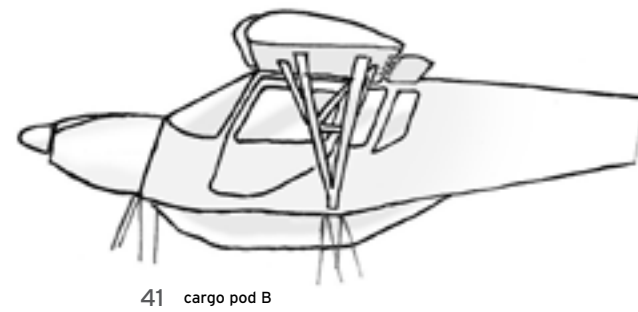
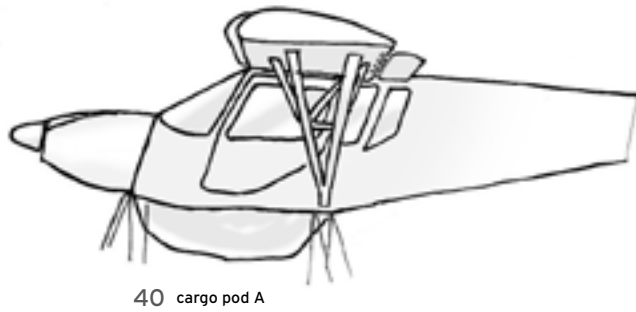


16. Install struts and floats

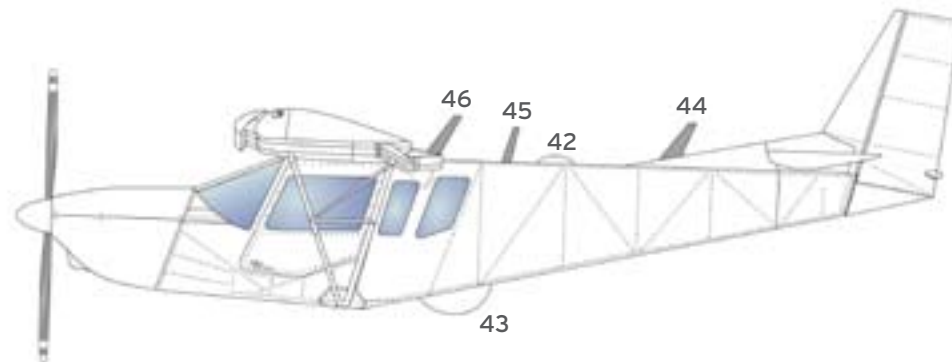




17. Cargo pods (optional)



18. Additional antennas (Kenya Wildlife and Kustwacht versions)



If you enjoyed building this model, please consider to give a donation to,  
volunteer at or get involved with



**Medicine on the Move**

**It's for them that this model was originally designed.**

They do really wonderful work. They are working and operating aircraft to bring much needed medical help to those in need living off the paved roads.

Inform yourself here:

<http://www.medicineonthemove.org/>

A handwritten signature in black ink, reading 'Christoph Stahl'. The signature is fluid and cursive, with the first name 'Christoph' and the last name 'Stahl' clearly distinguishable.

Christoph Stahl, Designer