

Application No. 205: Assemble model aircraft with magnets

Author: Alfonso Martín Sánchez, Béjar, Spain

Flexible assembling without glue

Mr. Sánchez sent us detailed instructions for assembling a model aircraft with supermagnets.

If your Spanish is better than mine, please check out the PDF with a lot of additional information (only in Spanish).



pdf file, 650 kB

For everyone else, a shortened and simplified version follows here.

Since I frequently assemble model aircrafts, I know for certain that they all have to be repaired sometimes. Since the parts are normally glued together, repairs on the inside are very difficult.



Then I had the idea of connecting the various aircraft parts with magnets - they are strong, but you can separate them again easily.

The whole structure becomes more flexible because it is not glued together - and that extends the lifespan of the aircraft immensely.

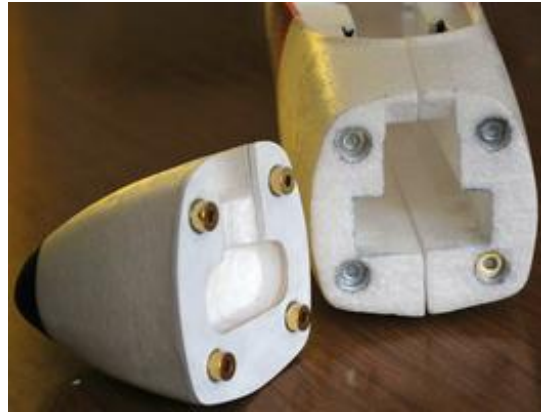
With a small Dremel (multifunction rotary tool) you can drill holes of any size and depth into the material. Diameter and depth should fit with the used magnet.

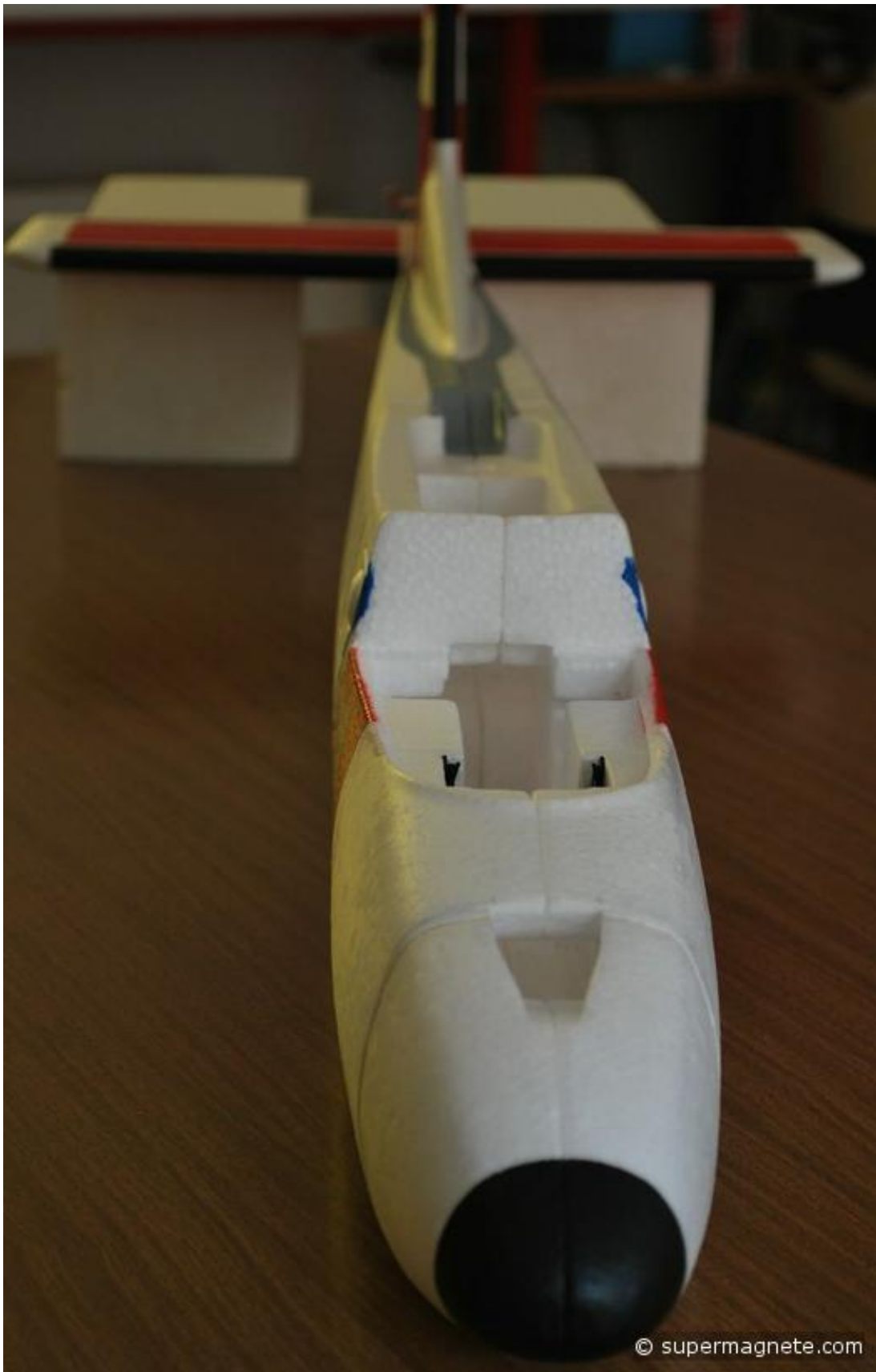


For the body of the aircraft that supports the wings I used disc magnets S-08-05-N (www.supermagnete.de/eng/S-08-05-N), for all smaller parts I used the weaker disc magnets S-08-03-N (www.supermagnete.de/eng/S-08-03-N).



For the front part of the aircraft I glued 4 magnet rings R-10-04-05-G (www.supermagnete.de/eng/R-10-04-05-G) on the tip. I made four indentations in the body and glued four washers into it.





So, the body parts stick together firmly and are still flexible.

I used 3 S-08-05-N (www.supermagnete.de/eng/S-08-05-N) on each side to connect the wing parts, because the adhesive force convinced me.



Once also the wings are well connected and attached to the body, you can devote yourself to the small things (windows, inscription, etc.)



I hope that other model making fans like this application and that it animates them to try out this new way of connecting.

Articles used

S-08-03-N (www.supermagnete.de/eng/S-08-03-N)

S-08-05-N (www.supermagnete.de/eng/S-08-05-N)

4 x R-10-04-05-G (www.supermagnete.de/eng/R-10-04-05-G)

Online since: 17/03/2009

Have you found an interesting use for our super magnets? Send us a description! If we publish it on our website, you will receive a **supermagnete voucher with a value of EUR 30**. Further Information: www.supermagnete.de/eng/project_terms.php

The copyright for the complete content of this website (text, photos, videos, documents, etc.) lies with the author or with supermagnete.com. The content of this website may neither be copied nor otherwise used without our explicit permission.