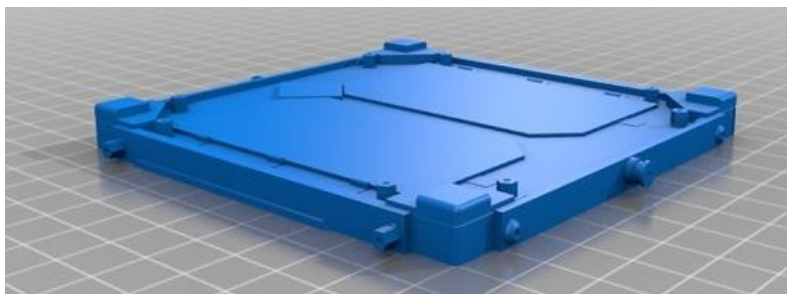
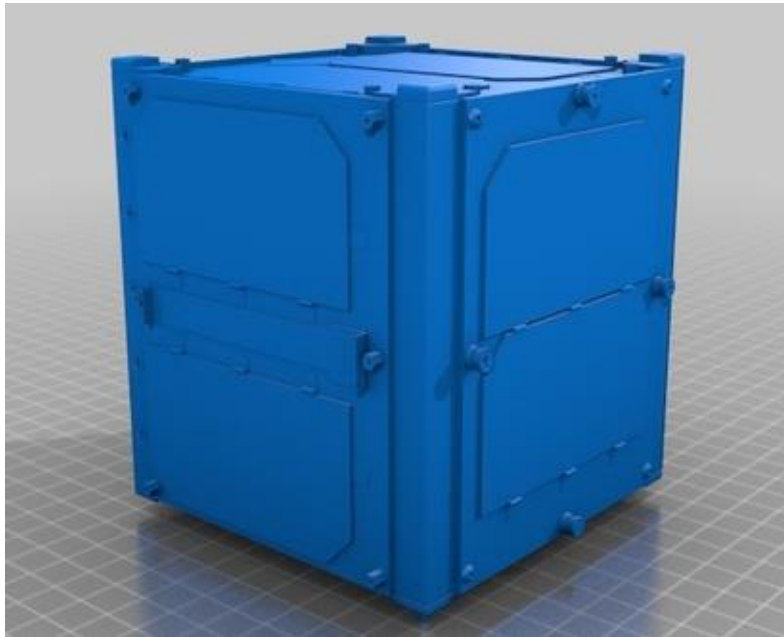


3D Printing of a 1U Cubesat

June 5th 2018 Matthias DD1US Rev 1.0

Hello,

Sometimes I am giving presentations about Amateur Satellite Service. When I recently found ready-made 3D print files for Fox1B/RadFxBat at www.thingiverse.com/thing:2678597 I decided to get one printed and have it passed around in the audience during such presentations. Here are pictures of the 3D-files of the 10cm x 10cm x 10cm satellite:

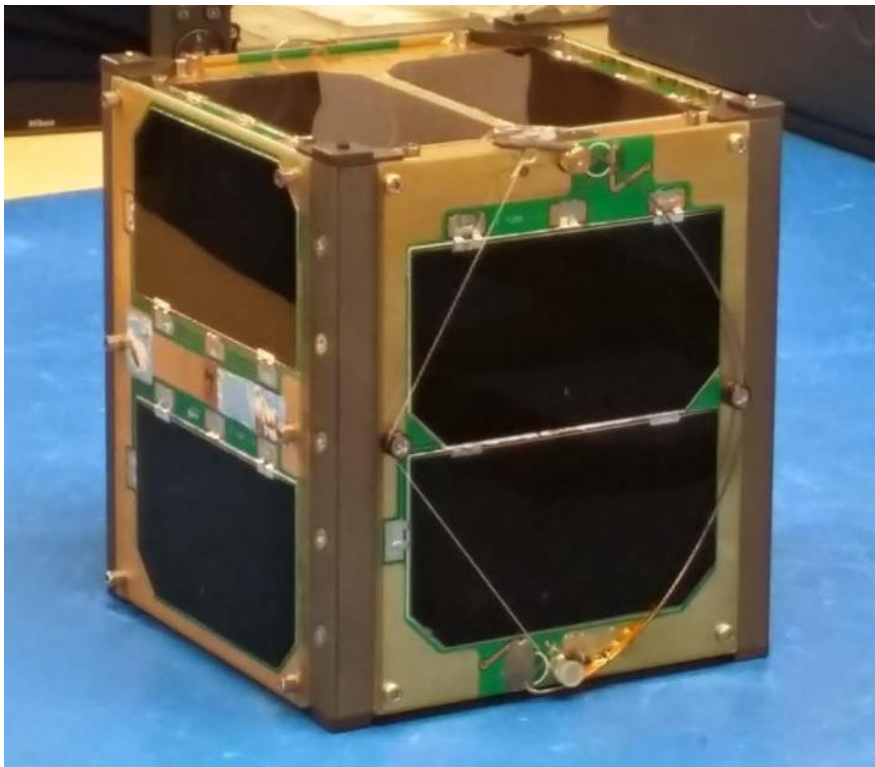


Many thanks to “MustBeArt” for generating the 3D files and making them available free of charge.

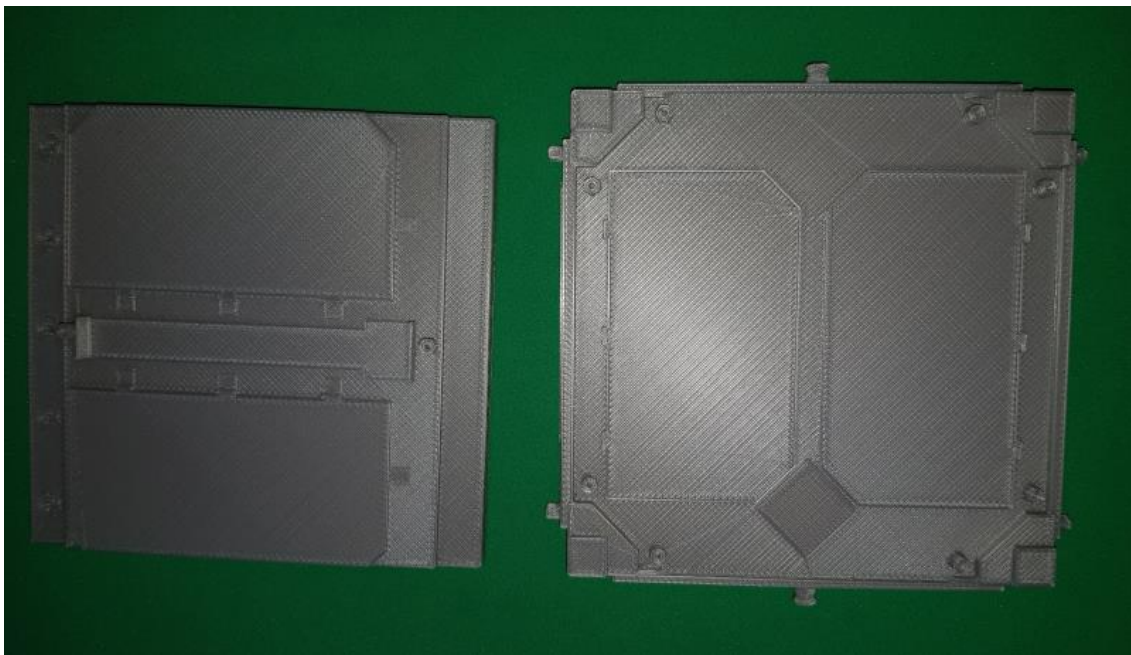
Fox-1B RadFxBat AMSAT
OSCAR-91 Scale Model by
Published on November 30, 2017
www.thingiverse.com/thing:2678597



Here is a picture of the original flight unit of the 1U Cubesat Fox1B:



As I had already very good experience with the service of 3D-Druckservice Damberger (<https://www.ebay.de/usr/3damberger>) I sent the files by Email to Monika and Marcus. As usual, they quickly responded with a nice quote and proposed to print the parts for the satellite in an aluminum-like color. I accepted and only a few days later I received the 3D printed parts in a very nice quality. Here you can find a picture of two of the six parts as I got them from the 3D-Printservice:

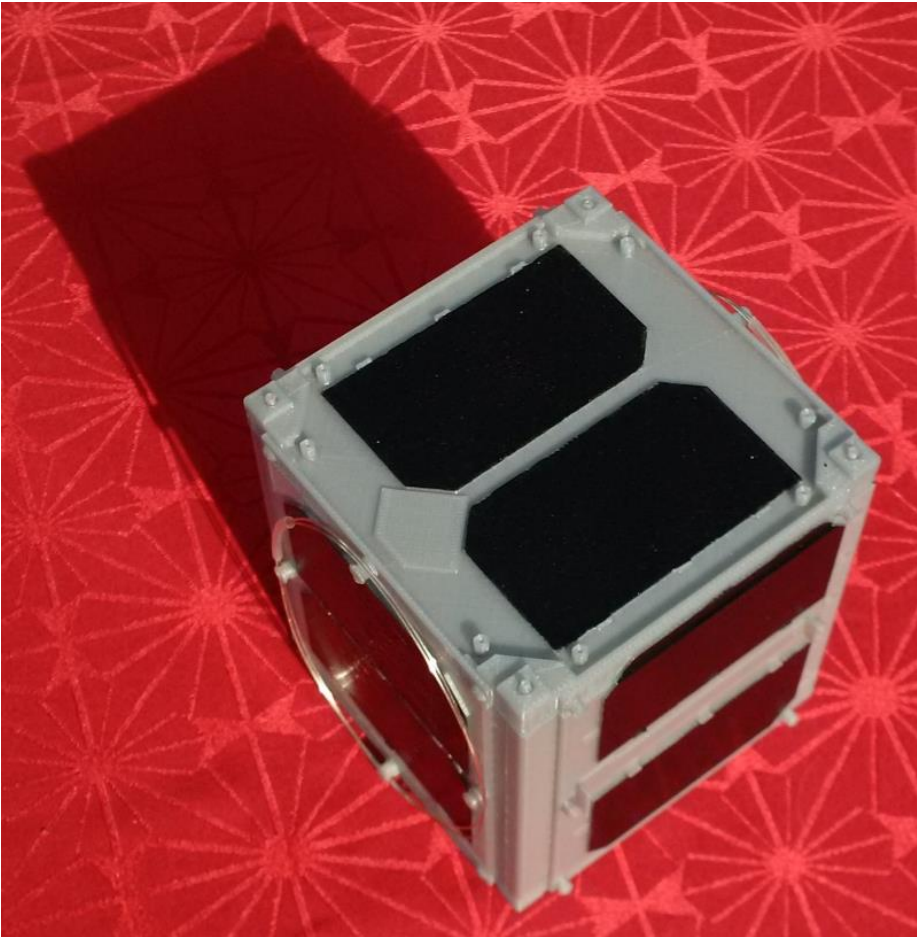
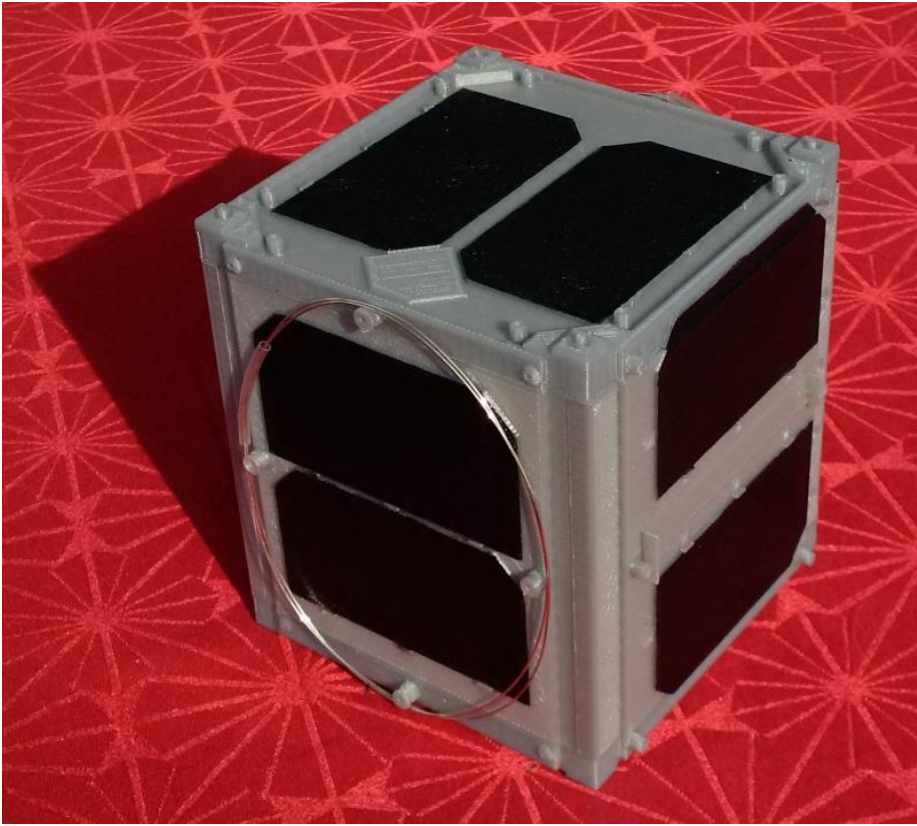


Next, I assembled the parts with superglue. I decided to fill in a wooden construction and some lead-shot in order to have the demonstrator the same weight of 1.33kg as the flight unit.

Here are some pictures of the finished demonstrator:



As you can see I decided to paint the solar cells black and attach a some wire to show how the antennas are rolled up duing deployment.



If you have any comments or questions please send them to the Email address given below.
Many thanks in advance for your feedback.

Best regards

Matthias

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