



## Lego Mosquito XEL (image for Reference)



by Witheredboi

I have no idea why, but I had a random urge to build a rideable helicopter as small as I could. Looking at online designs, it seems as though no one else has tried this, which I find kinda weird.

Anyway, I settled on the Mosquito XEL, which is an ultralight aircraft designed to be constructed from kits that can be basically shipped to your doorstep and then flown without license (not sponsored lol).

This thing is TINY, especially compared to the official Lego Technic ultralight copter. On top of that, it can in fact hold a single figure inside.



Also, you can leave the windscreen off if you like, since the Mosquito Air, a similar aircraft with no fiberglass shell, also exists.

The cover image is my main point of reference.

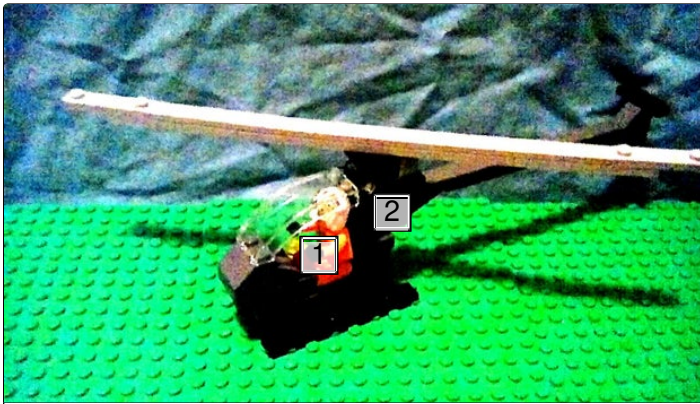
### Supplies:

Whatever you can get a hold of.

That goes for a majority of Lego projects. If you don't have a specific piece, try a substitute.



1. These images are mostly for comparison.

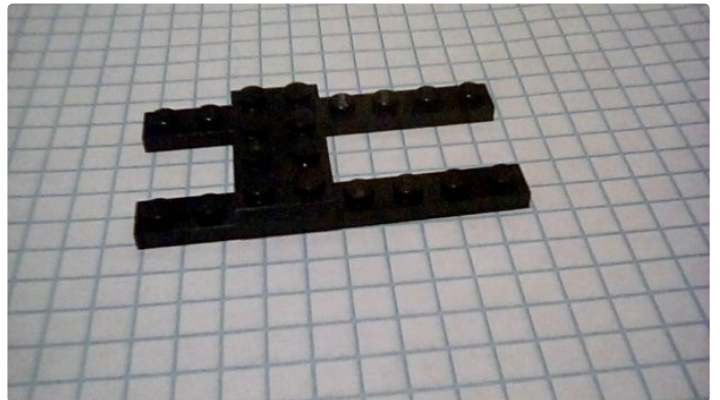


1. A poor attempt at "better" background lol
2. Also note the terrible editing



## Step 1: The Legs

These are just there to hold it up.

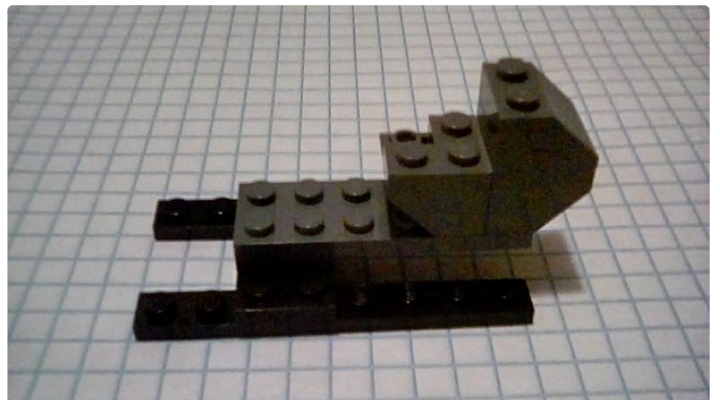
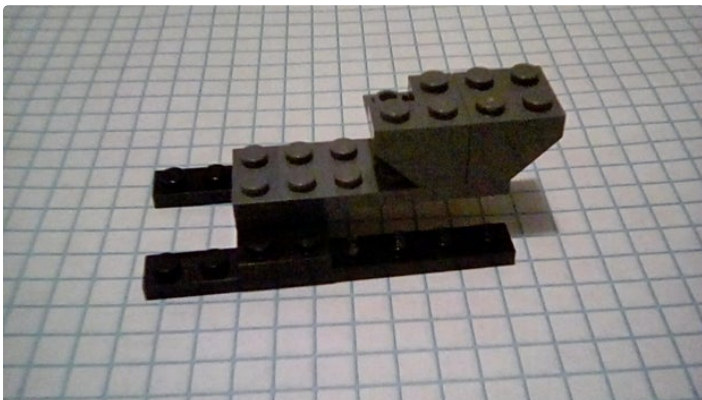
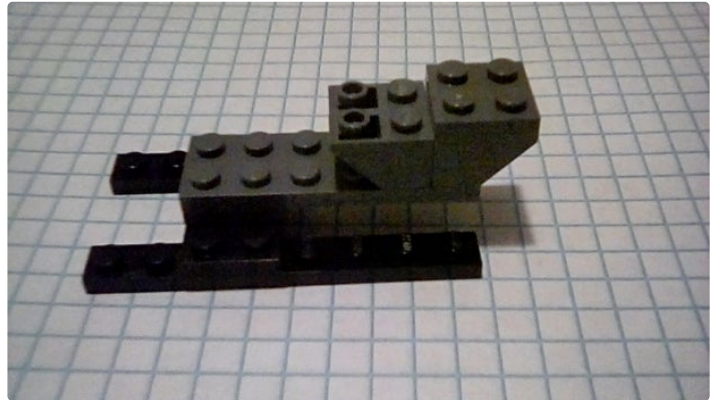
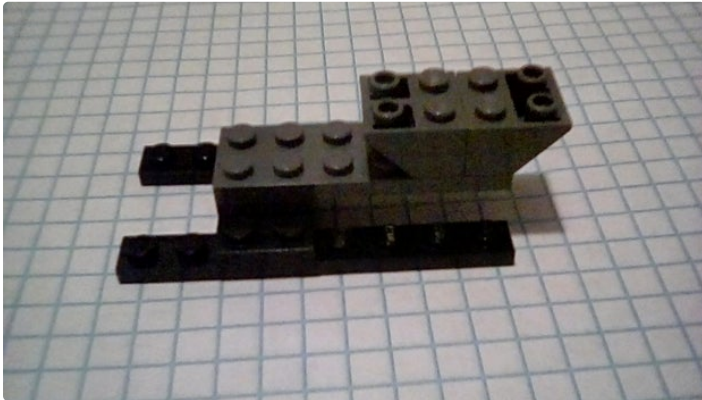


## Step 2: The Fuselage/cockpit

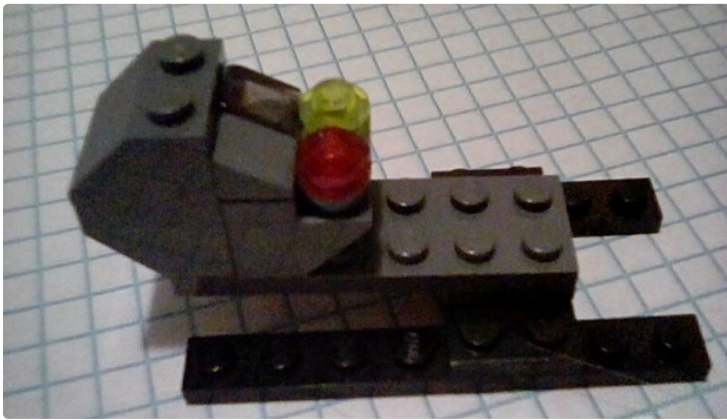
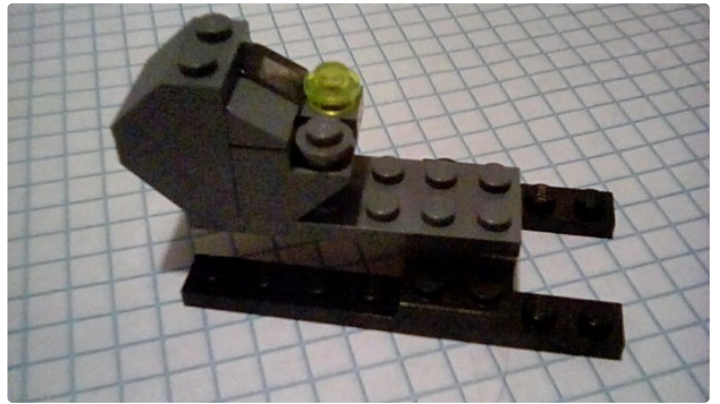
This was the base of the entire build, and I managed to nail this part first try when assembling, a miracle considering I



had to repeatedly modify the tail and rotor/prop.



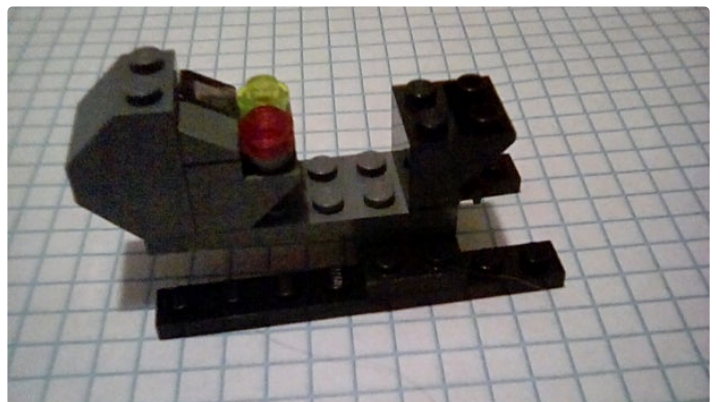
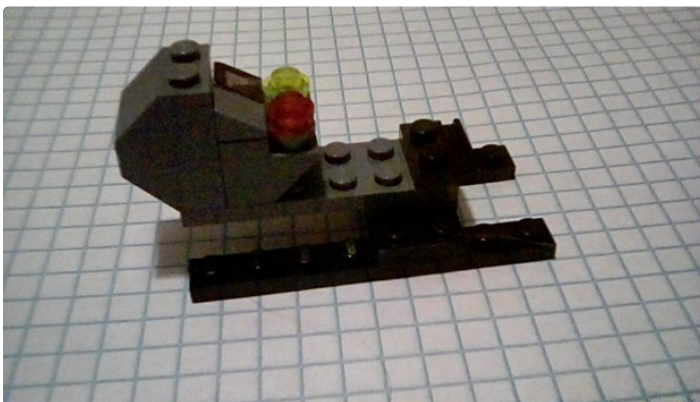




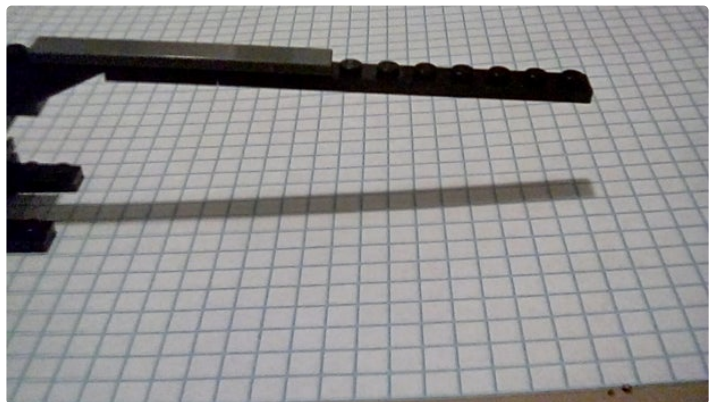
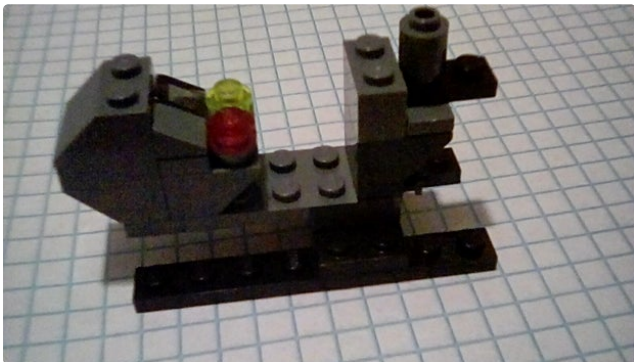
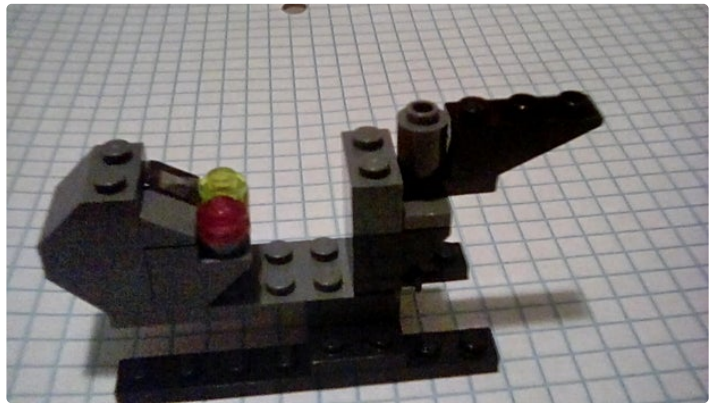
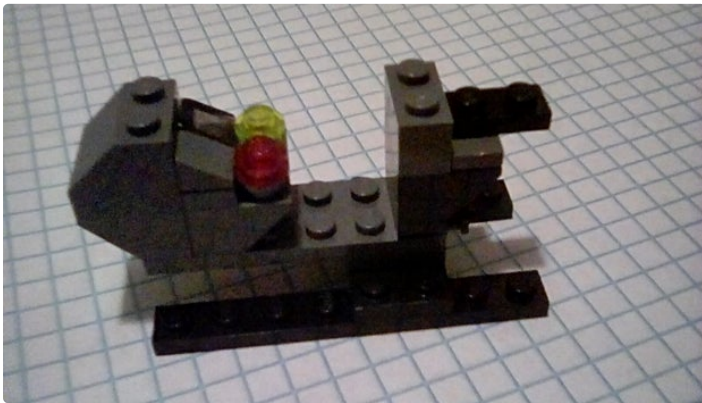
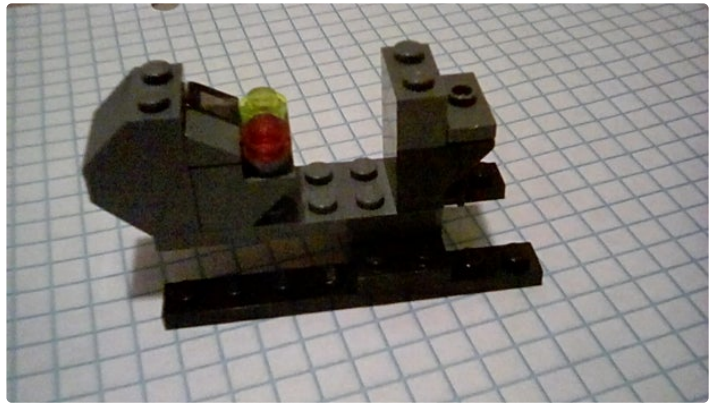
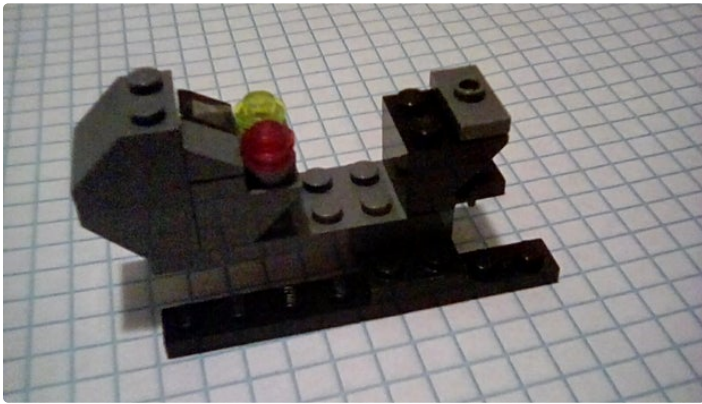
### Step 3: The Tail

This was, oddly, the hardest part to get right, mostly because its length was always off. I fixed it by laying the copter on top of the schematic side view of the copter (Yeh i went full tryhard on this one lol).

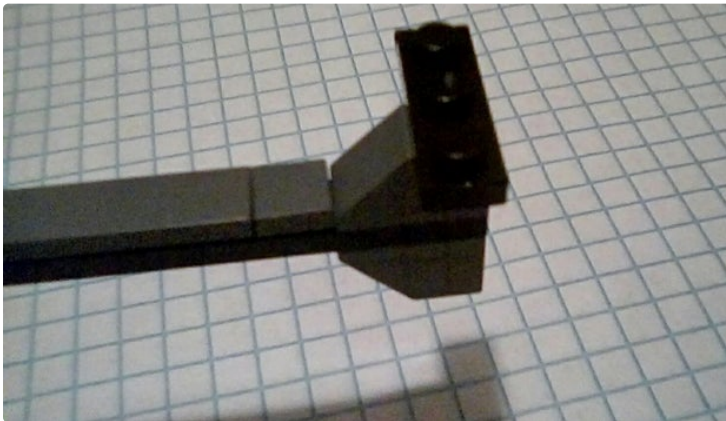
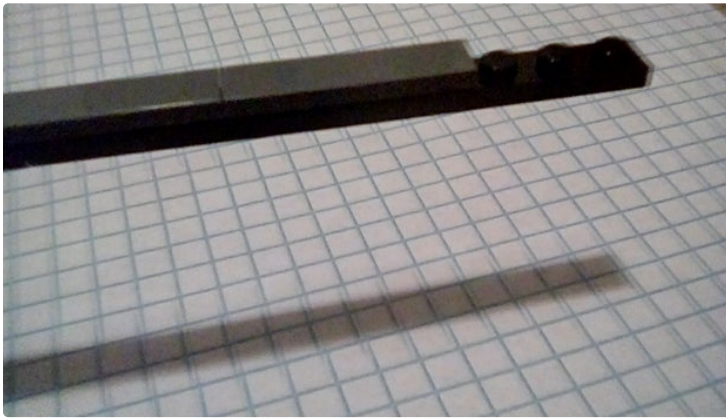
You can add a tail rotor if you want to. Guess without it it would be more of an XER (XE Rotorless).









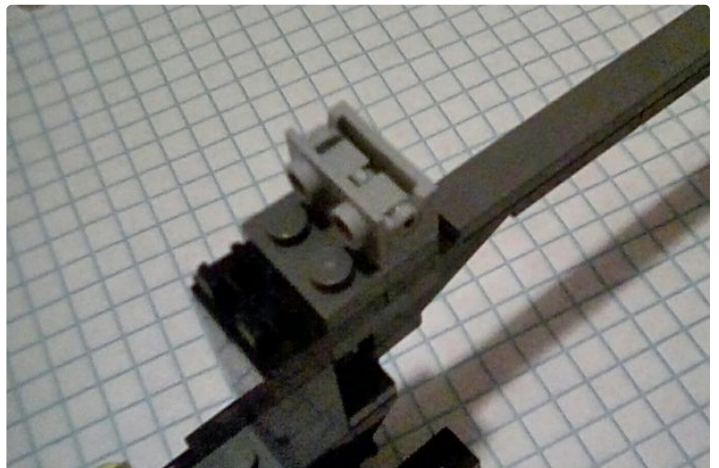
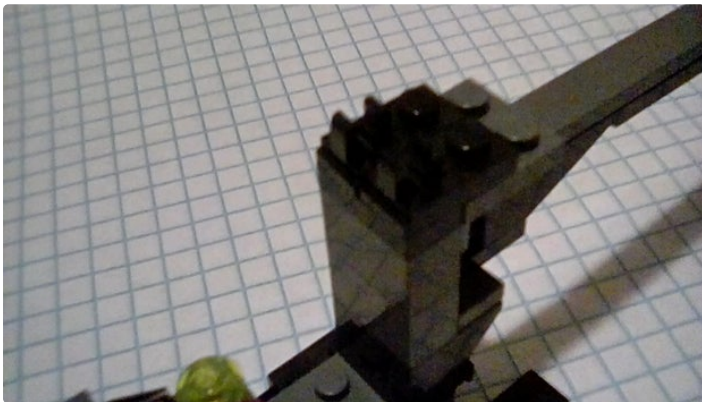
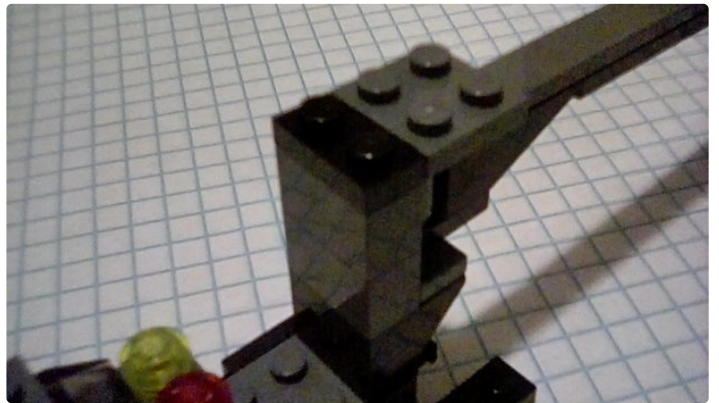
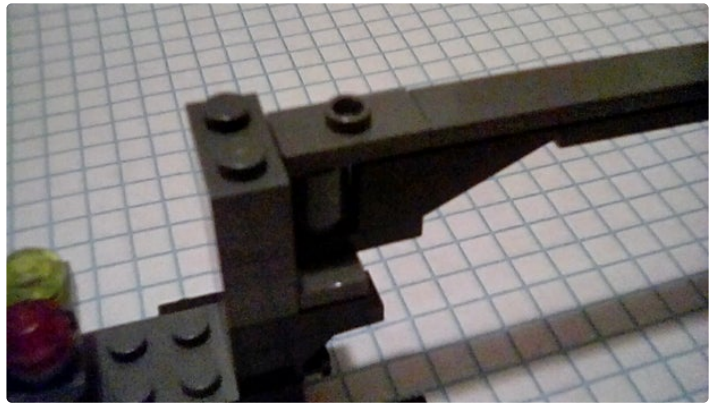
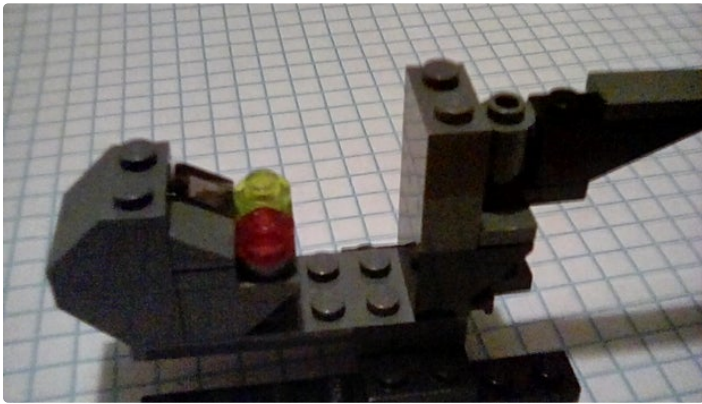


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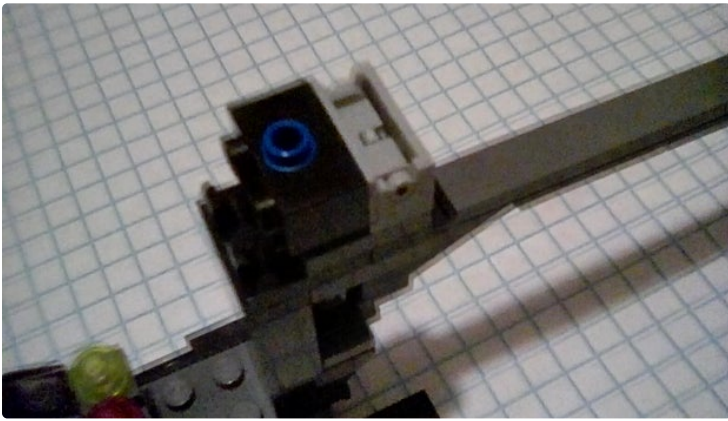
#### **Step 4: Continuing the Cockpit/body Pod**

This continues until the 'motor' is added. It makes the tail more solid and adds a spine to the body.





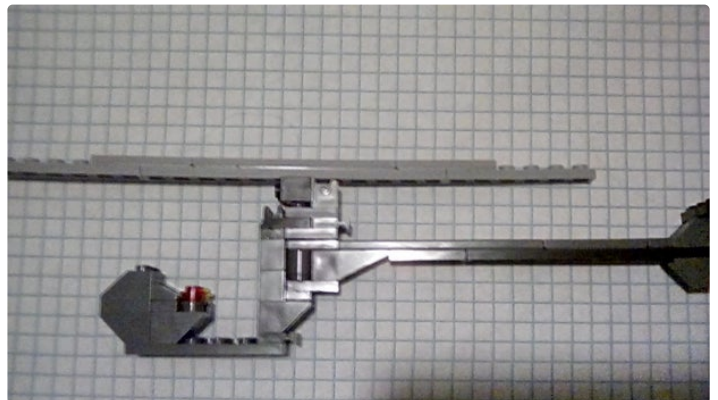
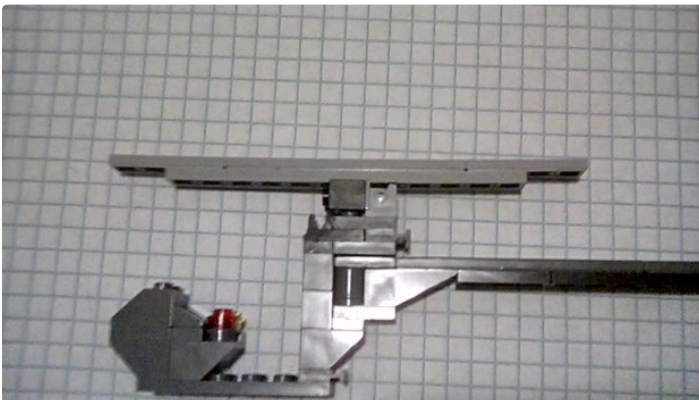
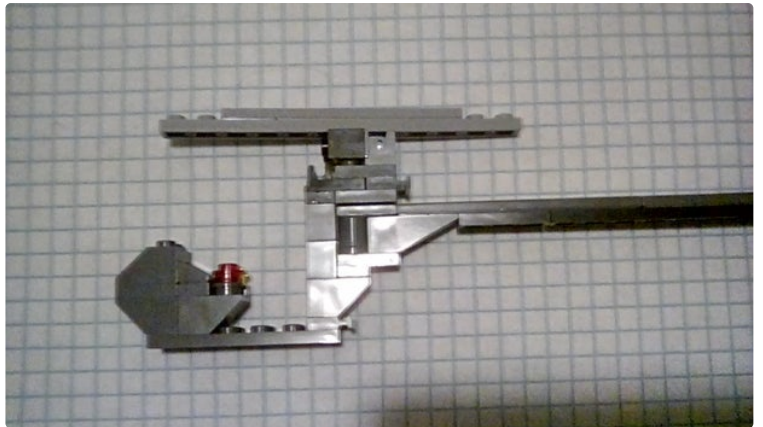
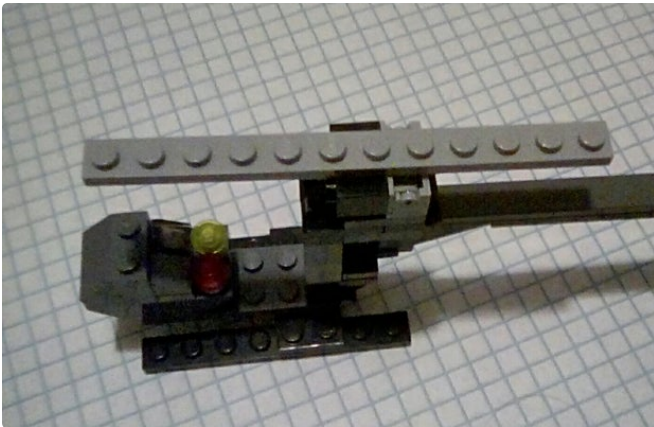




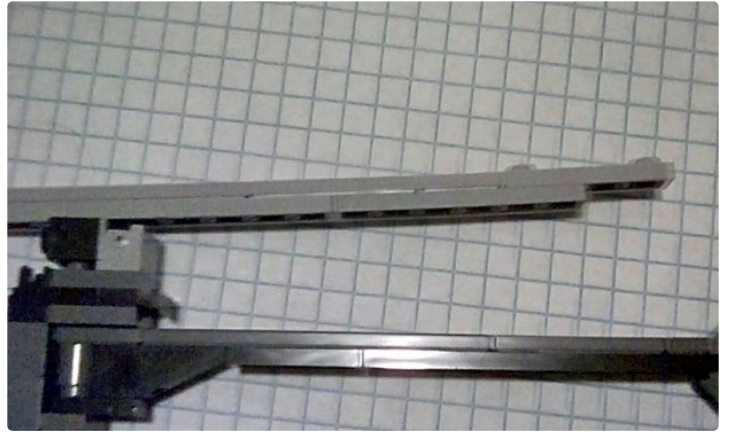
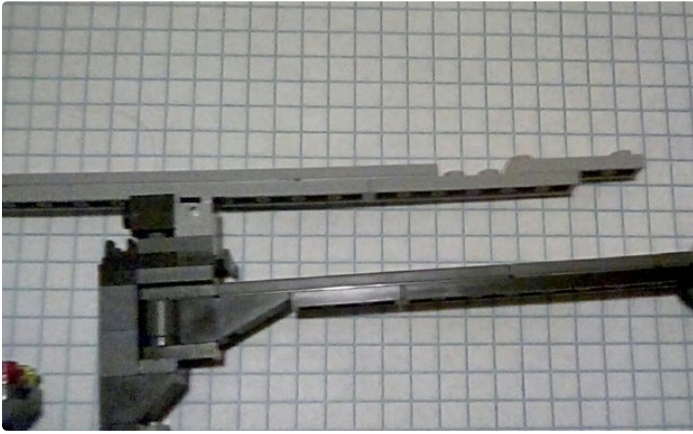
## Step 5: The Main Rotor

The rotor was simpler in design than the tail, but still hard to eyeball, so I solved that problem in a similar fashion to the tail.

I also smoothed out the motor unit.



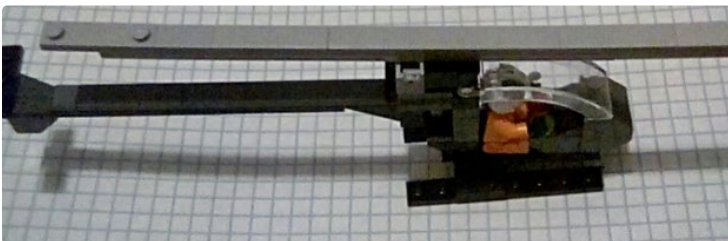
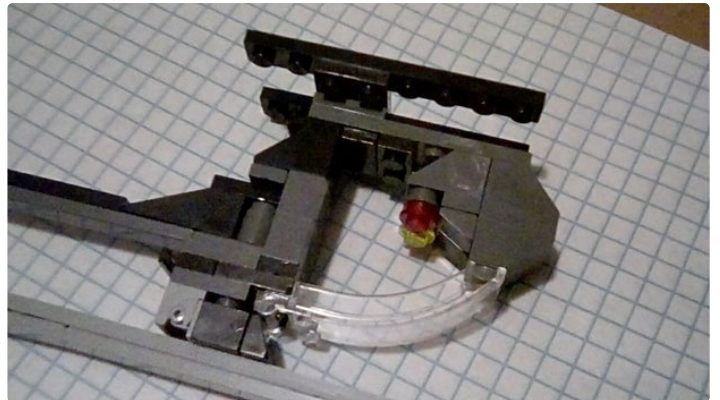
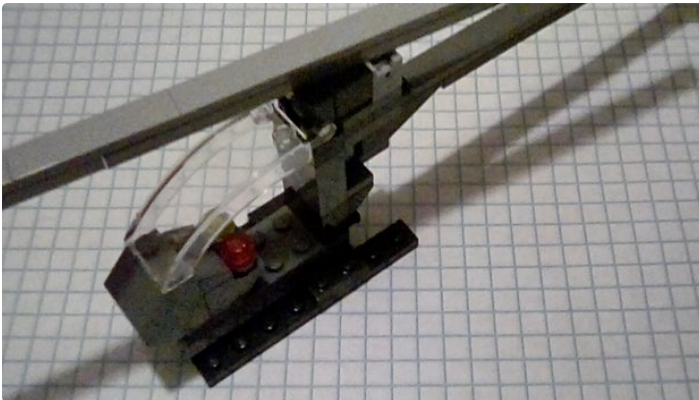




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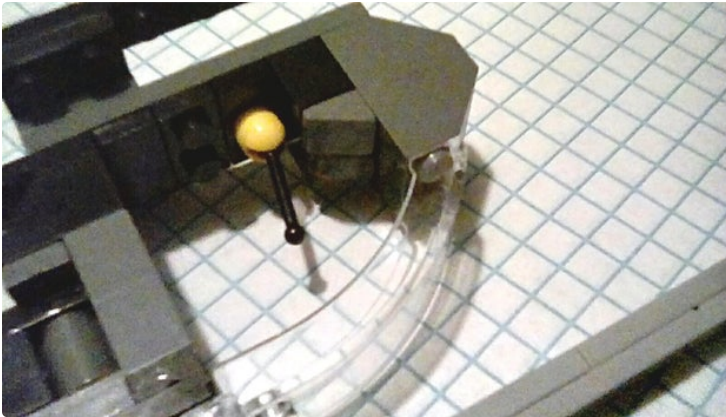
## Step 6: Finishing Things Off

Add the windshield, if desired, by folding up the rotor and clipping it in. Seating may also be added as shown.



## Step 7: Optional

Here is another possible cockpit design, but it makes the model more backheavy and the joystick/lever is hard for the minifig to actually hold.



While it is, indeed, possible to make a smaller one, the windshield piece (Which I inexplicably couldn't bear to separate from this particular project) would be useless, and in general the model would look less polished.

Post your model in the I Made It! section if you have, especially if you manage to make it smaller!



I would also like to mention that there have been smaller helicopters produced by Lego, but they tend to have custom pieces, and are often not proportional.