

Fly&Charge

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Imagine you're using a quadcopter and the battery is getting low. Wouldn't it be cool to charge it during the flight? Without sockets in the sky? We have even something better: induction of high-voltage lines! No need to stop your flight, just Fly&Charge!

It seems that the battery life of quadcopters is still the critical part for different missions, so we propose to charge it or at least save it's capacity by powering up from electromagnetic fields during the flight - wirelessly from electrical lines! We created a scheme to transform alternating current (from the electromagnetic induction of power lines) to direct current to load the batteries.

Worst moment: we created a perfect coil we put all our hope into - and when we tried to connect it, it didn't work at ALL. Best moment: When we realized that not the coil but the multimeter was defect. We even generated enough electricity to lit a small lamp using inductivity - the proof that our concept works!



Knowledge & Ressources:

We have basic knowledge of electrical engineering and a lot of curiosity and motivation! It's important to not give up if something is not working!