Prop-plane

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Prop-plane is an absolutely unique flying vehicle. The idea is to combine advantages of a plane and a helicopter. Prop-plane is much faster, more maneuverable and more economical. Moreover, it can hover in one point. The prototype does not require any runway to take off or land. It takes off vertically and then flies forward like an airplane. Prop-plane has two propellers on both sides of the fuselage which rotate in opposite directions. It also has wings which can be easily folded. First, the engines are perpendicular to the ground, and the wings are folded which allows the prop-plane to take off vertically. When the prop-plane is at a certain height, one engine turns parallel to the ground and the other gets back into the fuselage, while the wings turn parallel to the ground. Then the prop-plane continues flying like an airplane. It is noteworthy that the engines can rotate not only parallel to the fuselage but perpendicular to it. It makes the aircraft more maneuverable. It is expected that the prop-plane will be able to fly at a speed of up to 300 km/h, carrying an adequate load of up to 2kg. Note that a quadcopter of the same size will fly the distance of 15-20 km, whereas the prop-plane will fly 100 km due to the use of wings. Next, I am going to enlarge this model to the size of an airplane to make it applicable in different rescue missions and for carrying people and heavy loads.

Awards Won: