

Design and Analysis of Solar Powered Plane

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Abstract : This paper summarizes about the design and optimization of solar powered unmanned aerial vehicle. The purpose of this research is to increase the range and endurance. It can be used for environmental research, aerial photography, search and rescue mission and surveillance in other planets. The ultimate aim of this research is to design and analyze the solar powered plane in order to detect lift, drag and other parameters by using cfd analysis. Similarly the numerical investigation has been done to compare the results of earth's atmosphere to the mars atmosphere. This is the approach made to check whether the solar powered plane is possible to glide in the planet mars by using renewable energy (i.e., solar energy).

Keywords : optimization, range, endurance, surveillance, lift and drag parameters

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