IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 2, Issue 6, May 2022
Impact Factor: 6.252

Design and Analysis of a Conceptual WIG Craft

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Abstract: *Crafts flying close to the ground benefit from the enhanced efficiency due to decreased induced drag and increased lift from ground effect. The Wig Craft has a speed advantage and efficiency over conventional marine ships and aircrafts. This led us to the idea of using a novel design concept in Wig Craft for various applications. This design concept is an integration of Blended Wing Body configuration and a Box Wing Body Platform. The model was created by exploiting the novel design and the analysis was successfully carried out. Wherein we strived to increase the meshing quality which was then continuously refined in the iterative computational framework provided by the Ansys. The flow properties such as pressure, velocity were measured and visualized. This study of ours will help in future Wig Craft endeavours.*

Keywords: Blended Wing Body, Box Wing Body, Ground Effect, Novel Design, Wig Craft

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