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Radio Control Airplane

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Abstract: An RC aircraft, also known as an RC plane, is a type of model aircraft that can be controlled remotely using a hand-held transmitter and a receiver installed within the craft. Constructed using lightweight and high-temperature composite materials, the aircraft is designed using SOLIDWORKS software. To further enhance its lightness, depron foam material is also utilized. During flight, the transmitter's joystick positions are transmitted to the receiver, which moves the appropriate servo motors to control the aircraft's direction by adjusting its control surfaces. The primary objective of the project was to showcase the design, construction, modification, and performance testing of the custom-built RC aeroplane

Keywords: RC Plane, Transmitter, Receiver

REFERENCES

- [1]. Literature review of drone: https://www.google.com/webhp?sourceid=chr omeinstant & ion=1&espv=2&ie=UTF-8#q= literature+review+of+drones
- [2]. Lungu, M., & Lungu, R. "Automatic control of aircraft lateral-directional motion during landing using neural networks and radiotechnical subsystems", Neurocomputing, 171, 471–481. -2016.
- [3]. Reece A. Clothier, et al, "Modelling the risks remotely piloted aircraft pose to people on the ground", South Wright St, MS 130, Hampton, VA 23681-2199, -2004.
- [4]. alok sinha, et al, "Design and condtruction of RC plane with landing gear"
- [5]. Muhammad Ahsan Iqbal, et al, "Design of self powered surveillance RC aircraft", Vol 5, Issue 2, February 2020
- [6]. Şeyma Akyürek,et al, "Design of a Flight Stabilizer for Fixed-Wing Aircrafts Using Loop Shaping Method". [7]. Katherine C et al, "RC aircraft and controller", US Patent 8,380,368, 2013.
- [8]. Pradyumna S V,et al,Design and Fabrication & Analysis of a High Winger Conventional Tail Radio Controlled Airplane, International Journal of Engineering Research and General Science Volume 3, Issue 4, July-August, 2015
- [9]. M.norsell, et al, "On Modeling RCS of Aircraft for Flight Simulation", IEEE Antennas and Propagation Magazine 56(4):34-43 ,2014.
- [10]. S.R.premkartik kumar et al, "Design and analysis of a new airfoil for RC aircrafts and UAVs",april 2018. [11]. Andrew Deschenes, et al, "Design, Construction, and Testing of RC Aircraft for a Hybrid Propulsion System", 4 7 January 2011.
- [12]. Anne.M.zelnio et al, "A Low-Cost Acoustic Array for Detecting and Tracking Small RC Aircraft", DSP/SPE ,2009.

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