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UAV IMPACT SIMULATION AND ANALYSIS ON THE BASE OF EQUIVALENT AIRCRAFT PERFORMANCE

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ABSTRACT

The future of technology is dependent on UAVs; the forecast is that they will bring about a new era in the market and revolutionize the technology in most aspects of life. Most UAVs are being used by commercial entities such as agriculture, logistics and infrastructures [**Error! Reference source not found.**]. The trend in technology is mainly on increasing endurance, payload, advancement in the symbiotic interaction between man and drones and putting a solid ground and principles for the safe handling of UAVs. However, that being the case, the airborne collision safety between nose section aluminum component part of a transport aircraft and the UAV under different aircraft flight conditions, taking into consideration a detailed background analysis of the aircraft performance is taken into account in this paper and help get a clear depiction of the results simulated under ABAQUS/EXPLICIT2020 software.

KEYWORDS: UAV (drone),Impact, Aluminum, Airworthiness, Simulation, FEM analysis.