SRN: PES1PG22CS016

The article discusses the concept of autonomous personal air vehicles (APAVs), specifically focusing on electric vertical take-off and landing (eVTOL) aircraft. It explains how eVTOLs use electric power to operate multiple motors that power the propellers for takeoff and landing, wings for gliding, and large batteries to store energy.

These aircraft can travel up to 150 miles on a single charge, fly at speeds up to 200 miles per hour, and do not require runways. The basic components of eVTOLs are batteries, electric motors, and sensors like LIDAR, radars, ultrasonic, and electronic controllers.

Machine learning is highlighted as a critical aspect of eVTOL development, with various applications mentioned. Machine learning can be used to forecast weather patterns, traffic congestion, and optimal landing locations, enabling people to travel quickly by air.

Transporting people and cargo between areas not currently or easily served by surface transportation or existing aviation modes is the goal of AAM, a new concept in air transportation utilizing electric vertical takeoff and landing (eVTOL) aircraft

It can also be applied to create a system capable of intelligent, real-time dispatching and routing decisions for aircraft, which can reduce customer ride time and costs. Furthermore, machine learning can also be used for precision landing and air traffic control automation.t.

The article also discusses the potential market for eVTOL in agriculture, emergency medical services, and logistics. When creating successful products, manufacturers should consider factors such as cost, distance, and charging, which have an impact on design. Manufacturers should also monitor and make necessary adjustments to improve the product over time.

Harshita Bhayre
05/04/23