



FINAL YEAR PROJECT REPORT

WEIGHT LIFTING HEXA-COPTE

**In fulfillment of the requirement
For degree of
BEE (Electronics)**

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WEIGHT LIFTING HEX-COPTER

ABSTRACT

The military use of unmanned aerial vehicles (UAVs) has grown due to its ability to operate in hazardous locations while retaining their human operators at a safe distance. Larger UAVs also provide a cost-effective, reliable platform for long-term, recognition, as well as weapons. They have grown up to become an indispensable tool for the military. The question of our project was whether unmanned aerial vehicles also had utility in military as well as commercial and industrial applications. We postulate that unmanned aerial vehicles can serve more tactical operations such as looking for a town or a building for positions of enemy. UAVs, on the order of a few feet to a meter in size, should be able to handle the military tactical operations, as well as the emerging commercial and industrial applications and our project seeks to validate this hypothesis.

The objective of this project is to develop an environment friendly device that can deliver objects and parcels from one place to another. This report explores different techniques used for delivering the parcels from one place to other. Different techniques involved are manual controlling using Radio Controller and by predefined flight path using Global Positioning System (GPS). Our device uses the GPS module that sends data on Mission Planer software of the flight operation. This project will help to deliver an Emergence Aid to places where it is difficult for people to reach with in required time. It can deliver Emergency Aids/help during Military operations in battle field. The device has a smart flight controller that uses its sensors: accelerometer, barometer and gyroscope to maintain the flight and to keep the system in stable position during flight. The powerful brushless DC motors are capable of carrying a parcel of weight about 5 to 6 kg, depending on wind pressure in the atmosphere.

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