Title: - Remote controlled disk bicopter

Features:

We are planning to make a disk shaped powerful bicopter and if time permits we will develop it into an automated bicopter by adding a camera through which it can sense and avoid the obstacles in its path.

Project Implementation:

- We have a design in our mind and we will make necessary changes to it as per feasibility as we proceed doing our project.

Week 1

- Discussing and designing the basic assembly and electrical assembly etc…
- Ordering of the components
- Discussing how to properly implement the translation of bicopter

Week 2

- Working on the construction of wings ,the fuselage(the basic structure of the bicopter) and other base parts
- Test checking the structure and studying keenly about the parts

Week3

- Finishing the construction of mechanical assembly
- Working over the electrical part
- Working over techniques required to change direction of bicopter

Week 4 and Week 5

- Debugging the prototype and fixing the problems
- Finally complete the construction of bicopter with necessary improvements
- Test flight and making improvements as per results and problems

Components to be used and the estimated cost:

- ESC
- Motor (brushless outrunner)-A2212-KV1400 (59 grams)
- Servo motor-2 no's
- LiPo 2S battery
- Gears and propeller
- Radio controlled transmitter and receiver (probably take it from aero club)

For extra features-AVR microcontroller, sensors

Estimated cost is around 5000

Learning:

Understanding the aerodynamics of co-axial bicopter, its working and basic concepts of flight design.