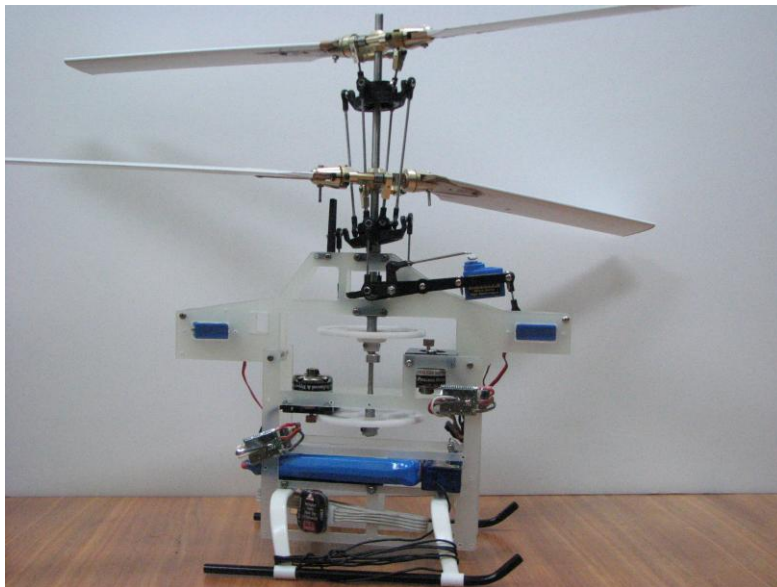


# KU-Loiter MAV with Rotary Wings

Bae-Soon Kwan, Min-Gyu Chun and Kwang-Joon Yoon  
Smart Robot Center in Institute of Intelligent Vehicle & System Tech.  
Dept. of Aerospace Information Engineering, Konkuk University,  
1 Hwayang-dong, Gwangjin-Gu, Seoul, Korea

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We designed a small flying robot with co-axial rotary wings. It consists of two rotor blade sets, electronic speed controller, electronic motor, RF receiver, a gyroscope, and lithium polymer battery, etc. We chose a co-axial rotor system to solve anti-torque rotation problem. Also, small flying robot with about 470mm diameter rotors has a camera to capture and transmit video images. The total weight of the designed flying robot is about 450g and it can fly about 10 minutes.



## 1. System properties

### The Vehicle

Name : KU-Loiter  
Weight : 450g  
Rotor Dia. : 470mm  
Propulsion : 2 Electric Brushless Motor  
Endurance : 10 minutes

### Transmission system

- 2.4GHz analog transmitter for the video downlink. (80mW)
- 72MHz RC transmitter for safety RC Link. (100mW)