

# Lab 13 – Flight Readiness Check (half-lab)

## Unified Engineering

30 Apr 09

### Procedure

- Finish getting your airplane ready for flight
- Demonstrate flight readiness on or before Friday, May 8.

### Demonstration

- Perform a brief controlled flight during the May 8 flying session (or earlier), with or without payload, or ...
- In the lab, show that your aircraft exhibits all of the following:
  - Airframe is structurally sound
  - Landing gear is functional
  - CG is near the correct location (per Lab 11 notes)
  - Geometric decalage is correct, roughly  $2^{\circ}$ – $4^{\circ}$
  - Dihedral is reasonable
  - Control pushrods are reasonably slop-free and buckle-resistant
  - Motor and control surfaces can be actuated by your transmitter

### Grading

A successful flight will receive the maximum 5 points.

A successful lab demo will receive at most 2 points.

### Schedule

The May 8 flying session will start at 7pm at the Johnson indoor track. Ending time will be no later than 9pm, although we will likely finish earlier if things go smoothly. Don't show up at 8:50pm, because you may find yourself alone in the gym.

In addition to obtaining the lab grade, you should use this session as an opportunity to practice flying, and to debug your airplane.

You may (and are encouraged to) perform the flight readiness check at any practice flying session before May 8.

Reminder: The UE Flight Competition will be on Tuesday, May 12, 7-11pm, in the Johnson indoor track. Invite your friends to cheer and spectate.