Supervisor meeting

Wednesday, 7th of September 2016

Vicon

- Access and introduction for vicon room done.
- Vicon system is fast enough for stability control.
- The information for stability control must be revived by the controlling unit at a rate of 5-10 Hz for stable flight.

Hardware

- Control externally and access to internal measurements is possible with the older quad rotor.
- New platform is also an option, either educational or hobby.

Project Scope

- Distributed systems are two separate systems interacting.
- On board local stabilization control is an option.
- Information can be passed down from the quadrotor (rotor speed, angles, etc).
- Significantly easier to control it with a remote than flying between coordinates.

Meetings & Reading Material

- Send material 24 hours in advance.
- Usually meetings on Wednesdays at 11.00.
- The entire report must be sent every time along with pages to be reviewed.
- Mail subject should contain group-number.

Worksheet & Paper

- The paper should be 6-8 pages.
- When writing the paper, assume that people are at a very high level of knowledge.
- The worksheets do not have to look nice.

Miscellaneous

- Reading material: Anders will provide some student reports.
- We should think of how far we want to go with modeling.
- The coordinate system rotates with the quadrotor.
- The "global" coordinate system is called inertial.

- The "local" coordinate system is called body.
- Z-axis pointing down (up is negative).
- The shape of the wing is called airfoil.
- Primarily pushing air: Newtonian.
- Bernoulli effect is caused by the shape of the airfoil.
- Propeller speed is what we need to control and airfoil dynamics can be neglected in near equilibrium flight.
- When moving sideways some z-axis-thrust is lost, which means you have to throttle up.

Next Supervisor Meeting

Wednesdays, 21st of September at 11.00