FlyNet Team Minutes

1 September 2015 11:00AM – 12:00PM

Recorded by: Drew Ellison

Attending: Drew, Austin, Steve, Matt, Bryce, Taylor, Tyler, Prashant

Dr. Frew gave intro to team (his first attendance to our group meeting)

He also gave overview of problem statement from customer (slides joe tanner gave)

UTRC encountering difficulties internally for budget 🡪 unclear funding source

Funding source will ultimately dictate what the project scope is (and citizenship requirements)

Project will build on last year

Additional clarification given by Dr. Frew:

* Indoor flying
* Quadrotors
* No requirement on platform
* Localization and navigate
* SLAM may be an option
* No prior info on map
* No specification on map
* Better control
* 10 – 30 minute endurance, ask customer
* Modeling of quadrotor dynamics
* We should start flying previous drones

Dr. Frew suggests looking into COAs for drones in the case that UTRC wants outdoor flight, however, he believes that we should approach it with a focus on indoor flight.

Type of target to track is still ambiguous, assume using some type of imaging processing.

The requirement on tagging can be interpreted on sending target position to ground station, we should clarify with customer.

Assume 1 target for search/track/capture however, there can be other targets moving that are no/low threat.

Budget is at a minimum of $10k

Be aware of the 3DR new program called 3DU for universities while looking into platform decision.

Do a trade study on platforms

Probably should focus on endurance of the quadrotor with regards to payload

FlyNet can start buying hardware and software if needed using a budget that Dr. Frew will provide.

Telecon with customer will occur tomorrow, 9/3/15. Those attending will include Drew, Austin,

Frew gave lots of legal talk on COAs. He is trying to get a 333 exemption blanket COA for our quadrotors which would give us the ability to fly anywhere in the US up to 200 ft and would allow us to fly on the business field.

Brian Argrow’s project will most likely want to collaborate with us at least on hardware.

Dylan Stuart is the PM for that team, Austin and Drew should contact them and stay in touch.

Dr. Frew can organize lectures on any specialty topics that the team feels unsure about.

Action Items:

Trade study on hardware

Go through vicon tutorial and be able to pull vicon data

Pull Data off of a flying vehicle