

MEETING AGENDA

Topic:

Thursday, October 11, 2018

Meeting called by: Team

Attendees: Ethan Smith, Brandon Beaudoin, Flagstaff Flyers

Please bring: Laptop, Notebook, Relevant research

Location: Thorpe Senior Center

Objective: Meet the Flagstaff Flyers

Minutes 10-11-18

Flagstaff Flyers meeting begins at 6:30 PM

Board members start meeting by reading minutes from last meeting and taking care of administrative tasks.

The meeting is rather short to make room for conversation of how they will help the NAU Solar Plane capstone team.

Members of the club lent advice heard out the plan that is currently being considered and offered advice.

- Website to find electric motors – Great Planes
 - RPM/Volt = Kv
 - Use a big prop on a smaller motor -> voltage for the motor and higher amperage draw
- Start propeller selection by looking at what folding props are available
 - This is because folding props aren't made in as many varieties as the solid prop
 - Graupner USA or Soaring USA
- Hinge resource (ailerons, elevator, rudder)
 - Horizon Hobby
- Suggested putting panels on top of the wing for ease of installation and room for servos inside airfoil profile.
- Run wires through tail boom
- Recommended to NOT use carbon for anything other than spars
 - Increases the complexity of the building process
 - Harder to source material
 - Special cutting techniques needed
 - Special adhesives needed
 - Strength increase is not needed
- Possible resource, *Aircraft Design* by Daniel Raymer
 - Sourced and put into books folder for reference
- Design for 3*G*FS
 - Due to launching forces, wind gusts, harsh thermaling
- Shoot for a target weight of 7 lbs
 - Figure was given as a starting point from experts in model aircraft construction
- Task flow diagram was confirmed to be organized in an efficient order

Meeting ended around 7:45 with casual conversation and the Flyers showing one of their planes as well as one in construction.