**8/25/19**

· Officer meetings weekly

o For Design Updates/discussion/announcements/questions/concerns/etc.

o Keep meeting minutes and post them to the drive so we can keep track of goals/topics discussed

o Each team should give a quick status report

§ Goals from last week that have been met

§ Working items

§ Goals for next week

· Gannt Chart – Tentative

· Sub-teams & Members

o Try and break up workload amongst your team

§ Chief Engineers should be driving the design process: support from sub-team members

§ Ultimately each Team Lead is responsible for their team’s design

· Keep open communication with your team and check up with them throughout the week if you’re worried about meeting a deadline

· Make sure your members have their notifications on

· Utilize slack for answering questions from your members, especially the younger ones

o If you’re letting sub-team members do CAD work… Make sure they are making revisions of existing parts or assemblies and saving out new ones so old stuff isn’t lost (for items that will be used in full plane assembly)

§ Save as filename.rev(#) or something along those lines

§ For all assemblies, save as .zip files if uploading to the drive

· Chief Design Hours

o Help promote inter-team dialogue to make sure the design keeps moving forward

· Chief Engineer Duties

o Tail

§ Airfoil selection

§ Stabilizer placements (distance from Center of Gravity for vert. & horz.)

§ Aspect ratios

§ Angle of attack for horizontal stabilizer

§ Size of control surfaces & required deflection angles

§ Vertical placement of horizontal stabilizer in respect to wing (downwash consideration)

§ Servo placement & mechanism

§ CG will come from Wing which will drive weight requirements of tail

· Maintain stabilizer placements & adjust weight accordingly through either design changes or material changes

§ Determine loads on tail under take-off, cruising, and landing conditions

· Will drive structural requirements

o Wings

§ Airfoil selection

§ Overall weight

§ Take-off & landing distances

§ Allowable wing size

§ Angle of attack

§ Aspect ratio

§ Size of control surfaces

§ Workbench/fluent Analysis

· Winglet development

· Drag reduction

o Frictional

o Induced

o Center of Pressure

o Exterior shape optimization

· Placement of CL in respect to CG

o There will need to be heavy communication between teams on this

o Wing team will need to determine the distance of the CL to CG

§ It will be the job of each Team Lead to keep accurate records of where point masses/distributed loads are

§ Structural Integrity of wings under load (take-off, cruising, rolling, and landing)

o Electronics

§ Prop selection

· Explore heavy vs lightweight (inertia)

§ Determine all masses of components in the power plant

§ Dynamic testing

· Different servo requirements with throttle in flight

§ Full circuit testing

· Simulate flight duration and different conditions to ensure sufficient power throughout duration of flight

o Fuselage & Structure

§ Mass Locations of major components

§ Fuselage-Wing connection

§ Location of wing (where does CL & CG need to be)

§ Fuselage-Tail connection

§ Landing gear system

§ Mounting of electrical components

§ Passenger bay\*?

§ Payload bay\*?

· GBM monthly

o Power point style – each Team Lead presents a quick update slide on what their team’s been working on

· Schedule sub-team meetings ASAP → sending out email to potential new members with instructions on how to join slack channels

· Aero 101 tbd, aiming for this week