Donald P. Shiley School of Engineering
EGR 491/591 Telescope Design, Fall 2019
Assignment 5 – Design Project, Functioning Design

As a class, we have completed two prototypes. Now it is time to take what we have learned and apply it to designing and constructing a functioning prototype – one that hopefully will satisfy the criteria we have established.

Two of the critical Knowledge Gaps we have identified are:

1) Where on the OTA (optical tube assembly) will we place the focuser?
2) Where on the OTA will we place the altitude bearings (where is the CG of the OTA)?

These are critical KG's because if we get them wrong, the telescope will not satisfy essential criteria. They also involve more than one project team.

Here are your individual assignments:

1) Determine how we should answer the above two KG's.
2) We will have a final design review in class on Tuesday where each team will present their final design details to the class. The class will decide to give approval or make suggestions for modifications to each piece. Bottom line: each team should be ready to construct their piece immediately if the class approves.
   What should you be doing to prepare for that? Continue to work with your teammate on your individual piece and be ready to discuss complete design details to the class. This may involve more background research, doing testing, creating drawings, construct a more refined prototype, etc. Details will vary from team to team – but each team need to be able to communicate to the class what the final design of their piece is so that the class can have a meaningful discussion and be able to make a meaningful decision. **The details should be sufficient so that another team can fabricate your design without any further input from your team.**