Homework #1

Kurt Jackson

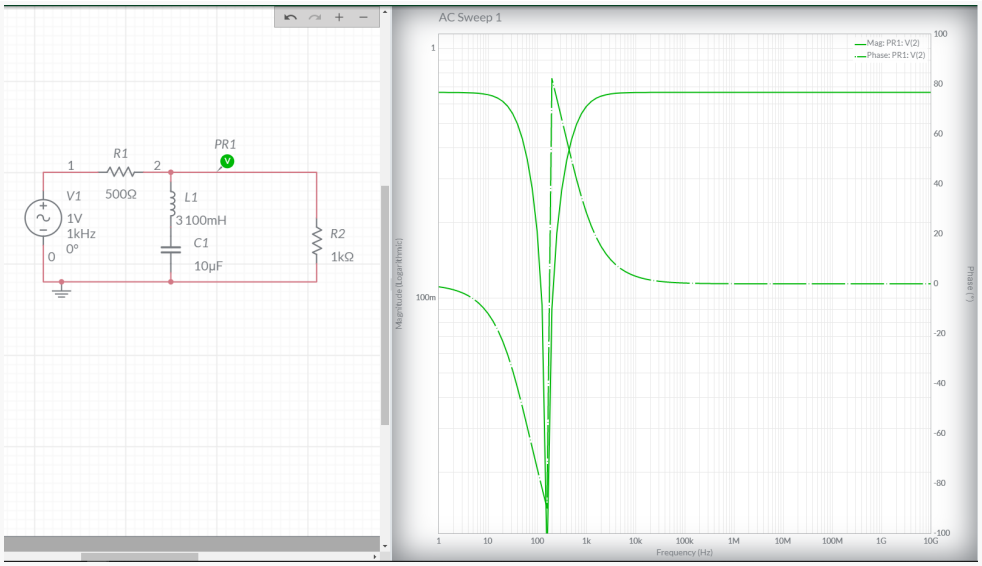
1) The photo below is from Oshkosh 2021, I'm standing under an aquatic biplane. I'd say it lends to the rhythm: curious Kurt.

2) The longest engineering problem I worked on was a statics project.
    a) **What was the original question asking?** The question asked us to make a system of three cables to support a floating wind turbine like the one below. Though the ground was made of tiles, each tile had a different price and cultural significance(eg. a Cemetary). We would thus have to make and evaluate different proposals and defend the proposal that we thought worked best for the community.

b) **How many pages did you fill?** The math portion of the group project ended up being 5 pages of which I did 2 or so. The defence of our solution ended up being 8 pages of which I wrote 2.5-ish.

c) **How often did you have errors the needed to be erased/re-written?** ALL THE TIME. Statics is very unforgiving and the smallest error in a system of equations or mislabeled force can leave you with a completely useless “solution.”

3) The most data-dense graph I’ve worked on was in an EE lab



The graph shows a Bode plot for an RLC circuit at point V(shown on left). The dotted line’s Y-axis shows the phase change for every AC frequency between 1hz and 10Ghz. Secondly, the solid line’s Y-axis shows the change in voltage for every frequency between 1hz and 10Ghz