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**Research Paper Instructions:**

You will submit a 7–8-page paper (not including the title, abstract or bibliography pages), in current APA format on the history and development of a specific series of jet transports. For example, the B-737, the A380 or another aircraft that interests you.  Please look at it from inception to current iteration.  At least 5 academic resources such as books, online resources, journals, and articles must be used. Please see the attached rubric for specific grading policies and procedures.

**Transcript From 3 min video:**

I know for many of us the concept or thought of electrical systems can be a scary or even in comprehensible area to study you know we joke sometimes with our students here that how electrical systems work is simply magic. Well that doesn't quite describe it there is a lot about electoral systems that we just simply don't know magnetism for instance is just a theory we don't know how that works we just know the principles by which it operates we still can't see electron flow we can't see electrons yet we still know how they were principally. It's important for us to understand electoral systems due to the fact that aviation is expanding so rapidly and it's advancements in electronics the board behind me is a very simple basic electoral system that we train on here at the school of aeronautics But if you go into any modern airliner cockpit you'll see glass cockpits radios heads up displays any number of electronic advancements that are just expanding and growing rapidly so therefore it's important for us to really know and understand how the system works. I recently went to a continental diesel engine school and the instructor said that before us any mechanic work on these engines make sure he grabs his computer before he grabs his tools because that engine works primarily off of the fade axis and which was a computer that ran everything so you can see the transition that's happening within aviation to where electronics is taking over more and more systems and I know sometimes that can be a scary thought especially as pilots we like to know that there's some physical connection between us and the aircraft but more and more that's not happening there's fly by wire where all the control surfaces are controlled electronically even engines are controlled electronically as well as we will discover as we learn about Herman engines. I visited a Pratt and Whitney test Bay where they tested their engines before they shipped them out and it was really easy to swap the engines out because all they had to do is connect an electoral connection that's how they operated the engines so it's important for us as pilots as mechanics to really understand these electronic systems not so that we can remain afraid of them but the so that we can understand them and so that we don't have an overreliance on the systems but a real grasp of how these systems works. I know that as you read and as you study this topic throughout this this week and this module that it's a whole lot of information sometimes an overload but I hope that you apply yourself and really try to grasp the material that's presented it's important for us not only as pilots mechanics but as the jobs that God has placed us and I hope as you learn as you work in your fields that you'll really strive for excellence and this is a part of that sometimes we get caught up in trying to be perfect and perfectionism but if we strive for excellence then every failure is really an opportunity to become excellent over striving for perfection every failure means we just can't obtain perfection anymore to strive for excellence even if we fail even if it's a tough topic understand really try to grasp it and understand it so that we can be the best pilots mechanics that God made us to be.