

EE 492 Weekly Report | Dec15—02 | Week 8 10/19/2015

Project Title: Human Dielectric Equivalent Model	
Advisor: Jiming Song	Client: Honeywell
Members (roles): Stephen Nelson (Team Leader), Cory Snooks (Communications Leader/Webmaster), Andrew Connelly (Webmaster), Jacob Schoneman (Concept Holder).	

Weekly Summary:

We found that the oscilloscope works on measurements for low frequency, but it introduces huge inconsistencies at our target frequency of 21 MHz. We found that we have no support from the Center for Non-Destructive Evaluation as far as using their test equipment goes. We also found that we don't have support from the Industrial Design Fabrication Lab. We are moving ahead with ordering materials. We are going to try to set up testing time on the network analyzer with Dr. Niehart, but he told us that we probably won't be able to get permittivity measurements from the network analyzer. We should be able to get the S parameters by setting up a parallel plate capacitor and measuring it as a one port network. Then we can get the Z parameters from the S parameters.

Meeting Notes:

We would like to have access to the impedance analyzer with a dielectric probe to take measurement on materials. Andrew must have a working cylinder model by the next Monday meeting.

Pending Issues:

Finding test equipment that can operate at our frequency range.

Plans for Next Week:

Continue research, testing, and phantom construction. Continue to develop HFSS model.

Individual Contributions (This Week):

Jacob Schoneman: 5 hours
Cory Snooks: 5 hours
Andrew Connelly: 4 hours
Stephen Nelson: 6.5 hours

Total Contributions for the Project:

Jacob Schoneman: 112
Cory Snooks: 131.5
Andrew Connelly: 106.25
Stephen Nelson: 155