

### Co-op Program Overview

The Cooperative Program at TSC's Huntsville, AL facility seeks highly motivated students who are pursuing a degree in Electrical Engineering. These students shall excel academically and exhibit a true passion for their work while demonstrating a positive attitude. During this experience, students convert theory into practice as they apply classroom knowledge to practical work situations, as well as gain knowledge and skills, which will enhance future coursework.

Our co-ops commit three semesters to TSC by either an alternating or parallel work schedule with their school schedule. These three semesters offer students the opportunity to clarify their academic focus and test their career interests and goals. Many of our experienced engineers were at one-time TSC co-ops and it's our goal to continue in this tradition.

Our co-ops shall have an interest in analysis and design of RF/microwave sensors and systems including but not limited to radars/sensors, missile seekers, and communications systems. They will also have a strong desire to learn theoretical background in the following areas:

- RF/Microwave Systems/Subsystems
- RF/Microwave System/Subsystem Test Equipment
- Electromagnetic Fields & Waves Theory and Analysis
- Antenna & Antenna Array Theory & Analysis
- Radar & Communication System/Subsystem Analysis
- Radar & Communication System Signal Processing

### Co-op Work Description

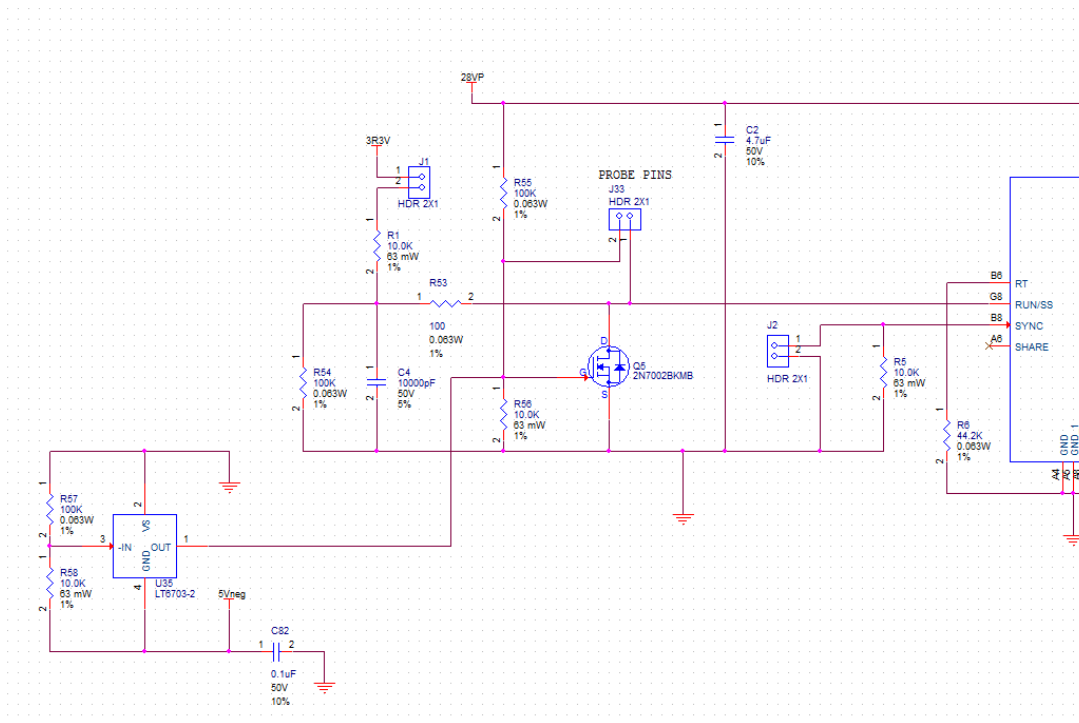
The co-ops' primary role is to support the full time engineering staff with their tasks. Co-ops are given opportunities to get hands on, practical work experience to help them further excel at, appreciate and understand the application of their college coursework. As the co-ops gain more experience and coursework they are able to take on more responsibilities and further aid the engineering staff. Listed below are some of the job related responsibilities for the co-ops at TSC, Alabama Operations.

- Data analysis and identify post flight or mission data processing
- Military defense systems field test support

- Acceptance testing of RF/microwave components
- Assisting with electronic component test procedure development
- Circuit modeling using computer aided design tools
- Mechanical modeling using computer aided design tools
- System modeling and design verification
- System integration and testing
- Statistical component failure analysis

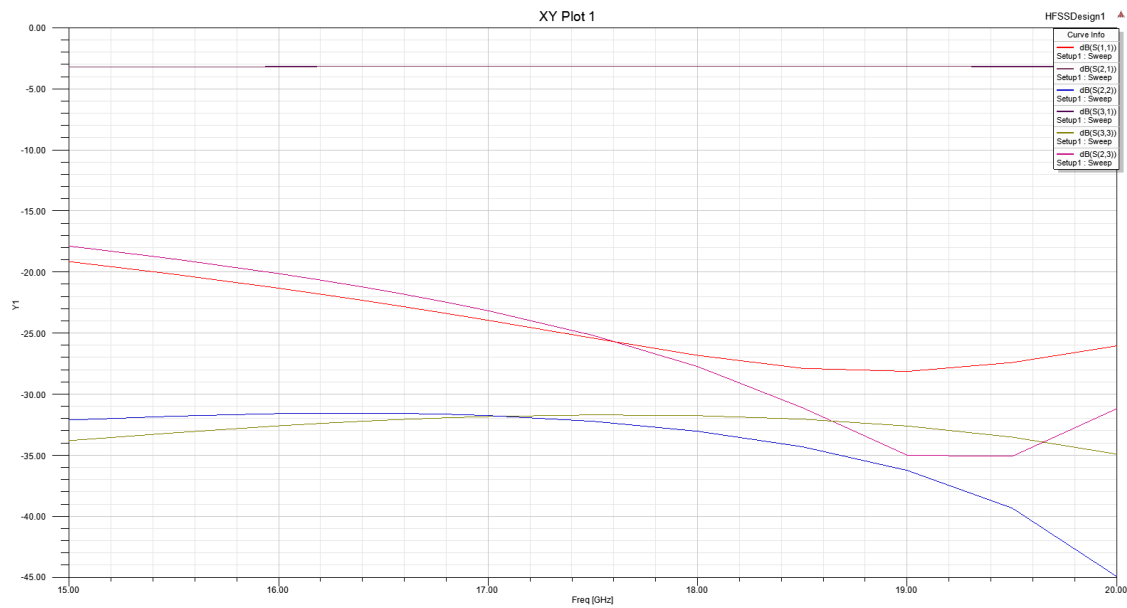
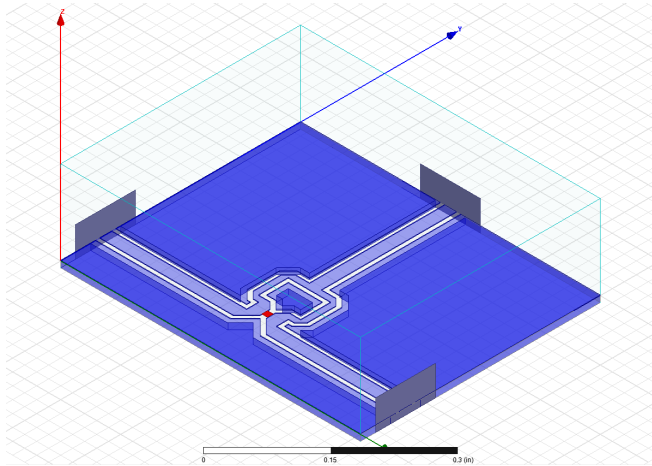
During their work experience, our co-ops will learn how to use many useful computer aided design tools such as MathCad and/or Matlab, Autocad, Orcad, and HFSS.

*OrCAD schematic*



## HFSS

(High Frequency Structural Simulator)



During their work experience, our co-ops are taught how to use test equipment to test hardware.

### Co-op Experiences

"The voice of experienced Co-ops..."

- 1) Working at TSC, Alabama Operations during the summer was spectacular. The company is involved in several activities that make it a great place to gain experience and thrive in the engineering world.

My internship gave me the opportunity to work with and learn from intelligent and experienced engineers who are more than happy to share their knowledge. Going in at the beginning of summer, my MATLAB skills were at a beginner's level and my experience with antenna's and radar analysis was limited to undergraduate coursework. By the end of my internship I feel a lot more comfortable with my programming capabilities and most importantly, I have discovered a passion for this type of work. TSC, Alabama Operations, is a great place to work and I would highly recommend it to anyone.

#### Professional / Personal Development

- Public Speaking – prepare and present an end of semester summary of what the co-op worked on and learned during the semester.
- Work ethic
- Leadership skills
- Time Management
- Critical Thinking
- Problem Solving

#### Co-op Benefits

Holidays, accrual of vacation and sick leave, 401K, ESOP

#### Co-op Eligibility Criteria

- Applicants must be enrolled in an accredited university and be in good academic standing.
- Applicants must be U.S. citizens and will be required to obtain a security clearance.

*Eligibility does not guarantee placement. Placement is competitive. TSC AL is an EOE company encouraging qualified veterans and individuals with disabilities to apply.*

#### Contact Us to Apply

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