2.12 Software Defined Radio Weekly Status Report

February 20, 2019

Submitted by: James Bell

Course Instructor: Mr. Welker
Faculty Advisor: Dr. Stapleton
Sponsor: Texas State University

Team Members:
James Bell [PM]
Samuel Hussey
Zachary Schneiderman

Yellow Current Project Status

The micro-controller and the audio shield have come in and we are working on the code for the project. We have discovered the RF splitter has an 80% loss of voltage putting it well below what is needed to pass in to the mixers, which is something we are going to have to work on and study as the RF splitter and combiner may both have this loss characteristic and it will be a serious problem.

Individual Updates (Activities Completed, Activities Planned)

James	I have built a 7-volt power regulator to operate the mixers appropriately, tested said identified a problem with the RF splitter/Combiner components and have been doing research on the issue. I intend for this to be fixed before Wednesday next week.
Zachary	Finished NE612 board, just need to interface with clock generator. Got LCD screen working as well as the rotary encoder.
Samuel	Redesigned, tested, and constructed 20m and 80m bandpass filters. Implemented and tested with current system.

Upcoming Deliverables (course and project due in next 2 to 3 weeks)

Deliverable	Due Date	Status
Bandpass Filters	2/13/2019	Completed
Mixer Circuit	2/20/2019	In progress
Speaker Circuit	2/20/2019	In progress
LCD for Teensy	2/20/2019	Completed
Encoder for Frequency Selection	2/20/2019	Completed

Sponsor and Faculty Advisor Meetings/Calls Held & Planned

Who	Last	Topic(s)	Next
Mr. Welker	2/13	Weekly Meeting	2/20
Dr. Stapleton	2/20	Possible solutions to extreme voltage lose on bifilar toroid splitter and combiner.	2/21