2.12 Software Defined Radio Weekly Status Report

April 3, 2019

Submitted by: James Bell

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

Team Members:
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Red Current Project Status

We have the receiving side of the radio working with duel sided AM modulation. I do not know if this means the radio will be working with single sideband signals or not as I do not know how to generate that type of signal on the function wave generator.

We are also postponing working on the transmit until the we have identified why the combiner toroid is eating all the power of the signals out of the mixers and collected all of the information possible for the final design review next week.

Individual Updates (Activities Completed, Activities Planned)

James	Research modulation of SSB Signals, collect data for FDR, and work on documentation.
Zachary	Research why combiner toroid is eating all the power in the transmit system and attempt to correct the issue.
Samuel	See about improving gain on the 20-meter band through the radio frequency amplifier to meet minimum of gain of 12.

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

Deliverable	Due Date	Status
Demodulation of SSB Signal Testing	4/1/2019	Done
Relay Implementation for transmit	4/5/2019	In Progress
Transmit Code Implementation	4/17/2019	In Progress
Microphone implementation	4/10/2019	In Progress

Sponsor and Faculty Advisor Meetings/Calls Held & Planned

Who	Last	Topic(s)	Next
Mr. Welker	4/3	Weekly Meeting	4/10