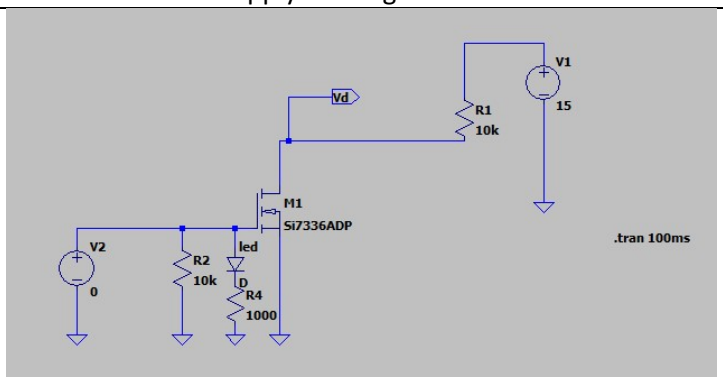
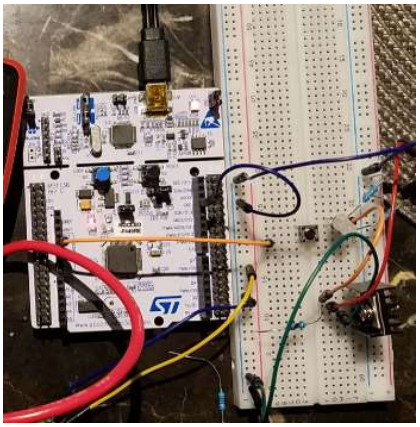
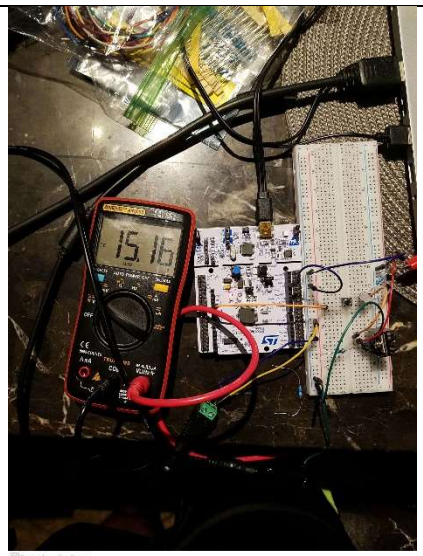
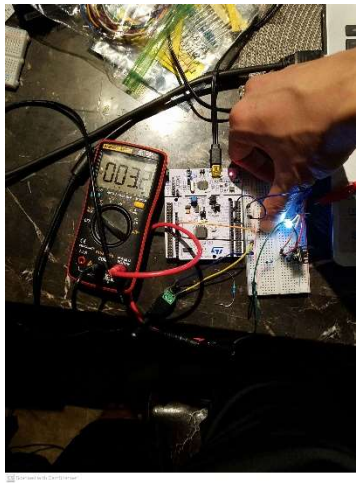
TNC Testing Form (REV1)	
Leaf on the Tree	MOSFET
Device Under Test (Testing Tree Number):	1.2.4
Date:	11/1/20
Person(s) Conducting Experiment:	Kobe Keopraseuth
Signature:	
Experiment Purpose:	The purpose of this experiment is to ensure that the MOSFET is operating correctly. We are using the MOSFET as a switch to pull 15V, coming from the radio, to ground. This will tell the radio that the TNC is transmitting and the radio can stop transmitting.
Experiment Procedure:	We will implement the circuit shown below and input 15 V with a pull-up resistor, to act as the radio's 15 V. Then we will use a tactile switch to switch the MOSFET on and off. A voltmeter will be used to make sure our drain to source voltage becomes very small when the MOSFET has high signal input at the gate.
Equipment Settings / Software Settings (w Revision):	We use a breadboard to hook up the circuit shown below and a dc power supply for the 15 V. We used LTspice for designing the circuit. We use 3.3V reference to supply to the gate.
Testing Diagram / Picture:	 **Circuit** 

Data Points:	 **MOSFET Off**  **MOSFET on**
Pass / Fail:	Pass
Interpreted Notes:	As can be seen when a low signal is inputted into the gate, then the MOSFET's drain to source is 15 V. As can be seen when a high signal is inputted into the gate, then the MOSFET's drain to source is 3.2 mV, which should signal the radio to stop transmitting.
Recommendations for Modifications:	None