# UHF Transceiver Testing

Kyle Muehlenthaler

## Setting up Putty

- Connection type: Serial
- Serial line: COM[X] (Where [X] is the COM port you connect the UHF Transceiver to)
- Speed: 115200

- In the "Terminal" tab, "Local echo:" should be set to "Force on" (This is to allow typing in the putty window)
  - "Local line editing:" should be set to "Force off".
    (This will stop the LF from being appended and confusing the UHF Transceiver)

## Setting up Putty- continued

- Under "Connection- Serial" make sure the following are correct:
  - Speed: 115200
  - o Data bits: 8
  - Stop bits: 1
  - Parity: None
  - Flow control: XON/XOFF

- (Optional) under Session and Logging we can set all output to be sent to a file for us to look over later. "Session- logging:" set to "All session output"
  - o log file name: you should browse and place the file where you want to be able to access it to avoid searching for it later.

## Connecting to the UHF

- The UHF system requires a "load" on the MMCX UHF Antenna port. This is done by screwing an antenna from a walkie talkie into the cord leading from that port.
- Grab a usb to mini-USB cable and plug in to your computer and the mini usb port on the transceiver. This will supply the UHF the necessary power to communicate over UART.



#### Send ESTTC commands

The list of all commands are listed on "ESTTC Protocol for UHF Transceiver Type II" document:

- Device Address is hex value 22
- Avoid writing to the UHF with a hex value 13, this could cause parse errors.

Example: Default write/read

ES+W22FB[LL][B...B] [LL] is number of bytes to be written. (<=0x62) [B...B]is the value to be written in ASCII format

Setting and displaying Frequency

ES+W[22]01[FFFFFF][NN] [FFFFFF] is the fractional part and NN is the integer divider