RADIO AMPLIFIER:

* Should we build or buy?
  + Buy is quickest, but depends
    - Build need maybe 4 things (LoRa module(or eqv. RF Source w/ CSS or FSK modulation scheme), RF amplifier, RF Receiver, ADC(depends on receiver output))
    - All parts must work at required frequency
    - Use spreadsheet in folder Calculator for rough approximation of usable range
      * Powers should all be in dBm
      * If stated in dB, assume in dBm (otherwise + 30)
      * Assume dBi ~= dBm
  + Additional parts include accelerometer (to know where to map)
* What frequency band are we using?
  + (Any Band under ISM; popular ones 433M, 868M, 915M, 2.4G)
  + Avoid any used by GPS (might be illegal cause interference)
* What is the gain should we be using?
  + Highest available, but also depends on sensitivity (lowest possible)
* What is the return loss - what is this, and its effects
  + Idfk, but for now main sources of loss are water (hard to calculate) and free space path loss (estimated in calculator)
  + Anything in the GHz range operates poorly in humid conditions
  + Lower the Frequency, the farther the range. Higher the frequency, lower the range, but higher resolution(important for imaging)