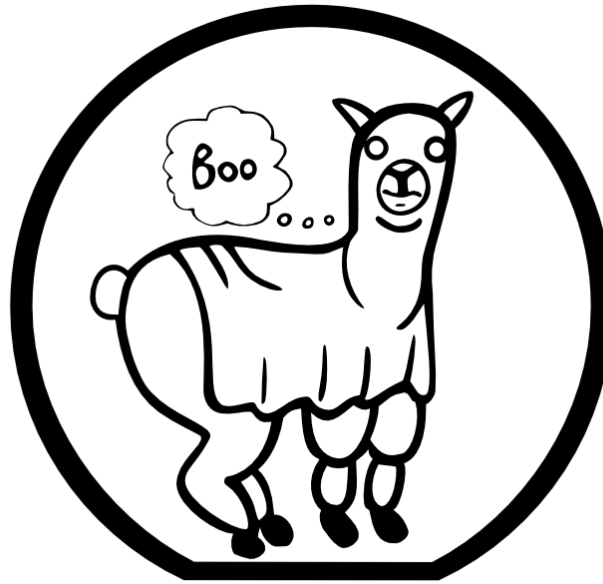


BLACKCHAT INCOGNITO MESSAGING SYSTEM

Alpaca Security Solutions



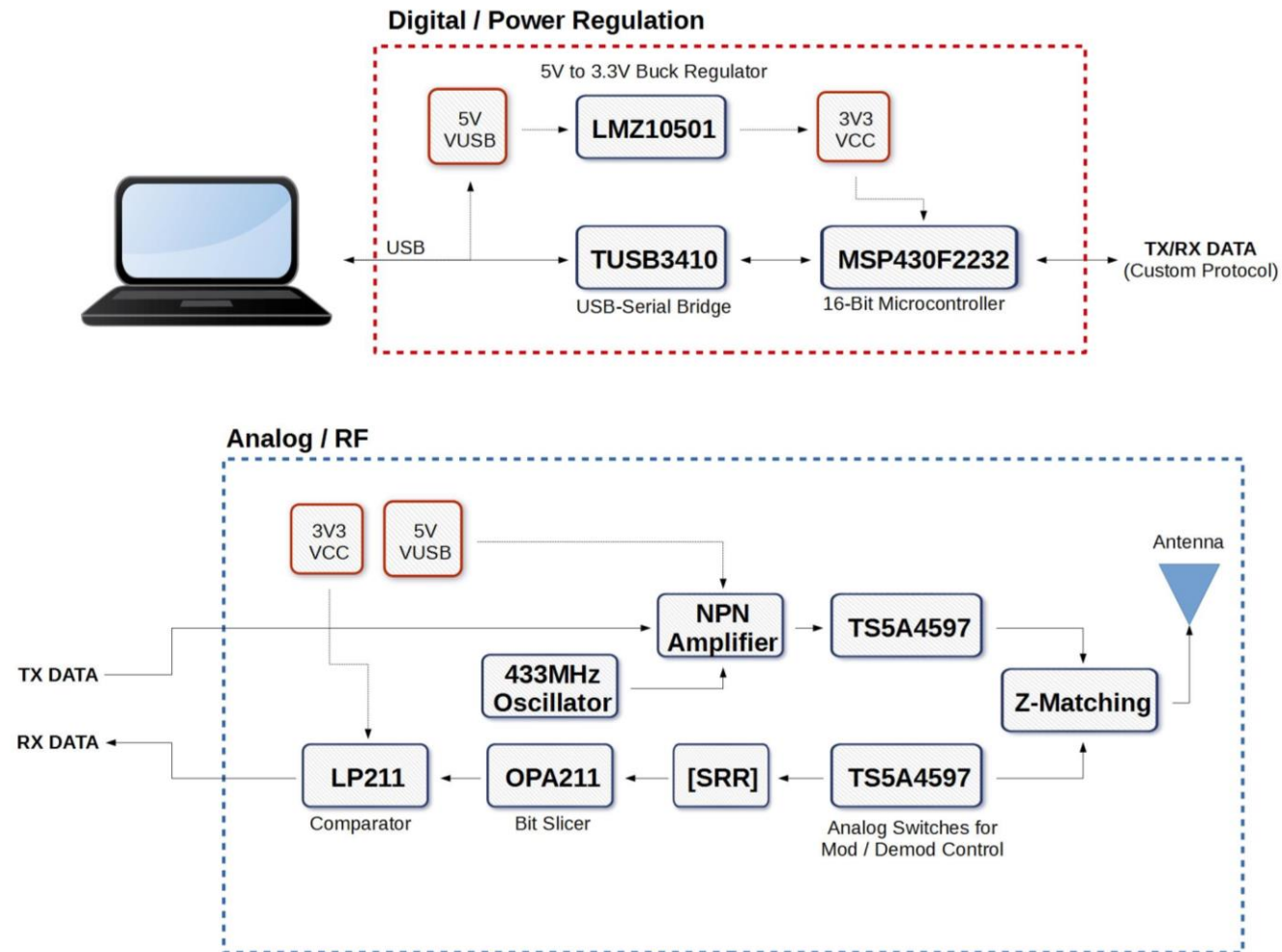
*completely
invisible*

Patrick Lloyd
Russell Crowe

SYSTEM LEVEL

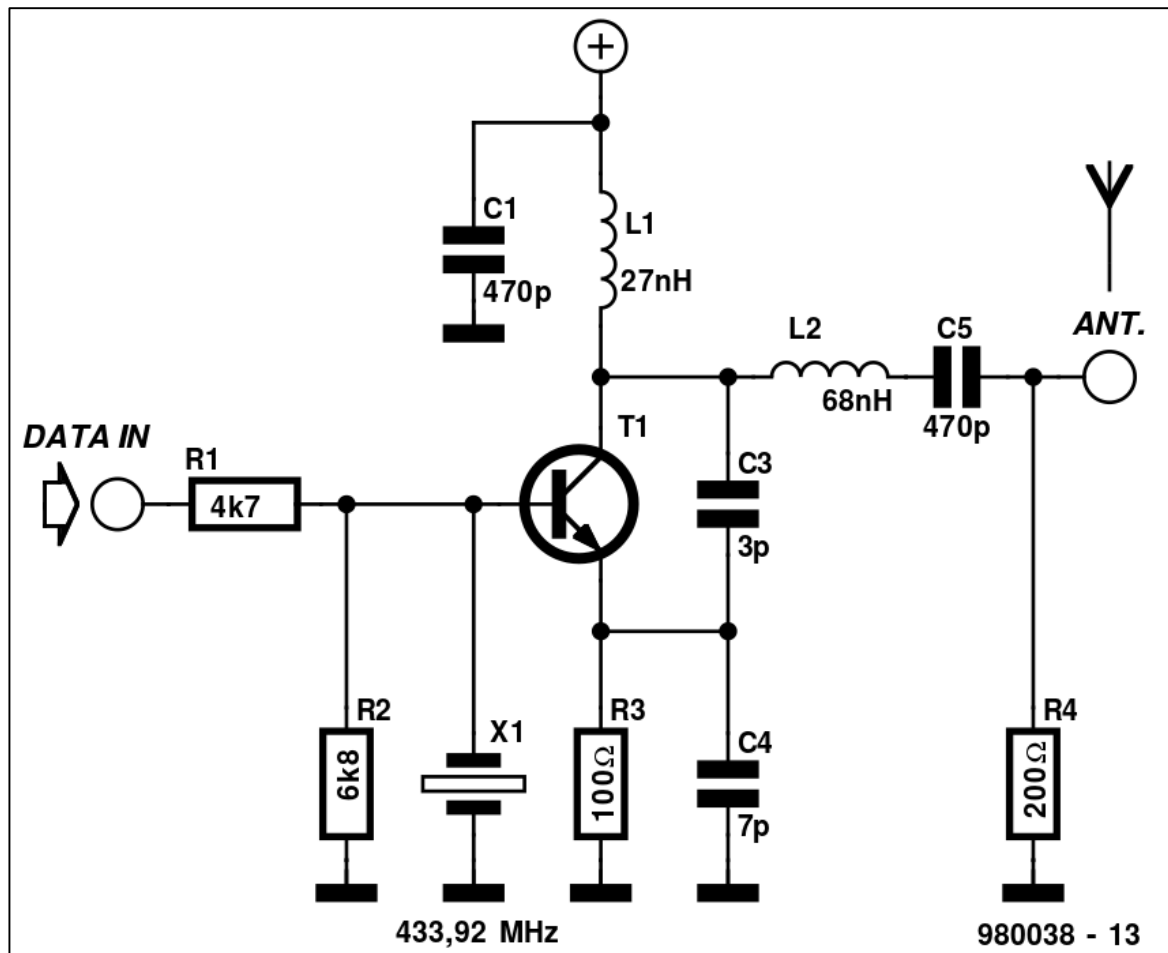
- **External USB device for wireless text messaging**
 - MSP430F2xxx processor
 - AES-128 encryption
 - Portable Linux interface
- **Discrete RF transceiver**
 - 433MHz ISM band
 - OOK modulation scheme
 - Super-regenerative receiver
 - <10mW broadcast power

HARDWARE – TOP LEVEL

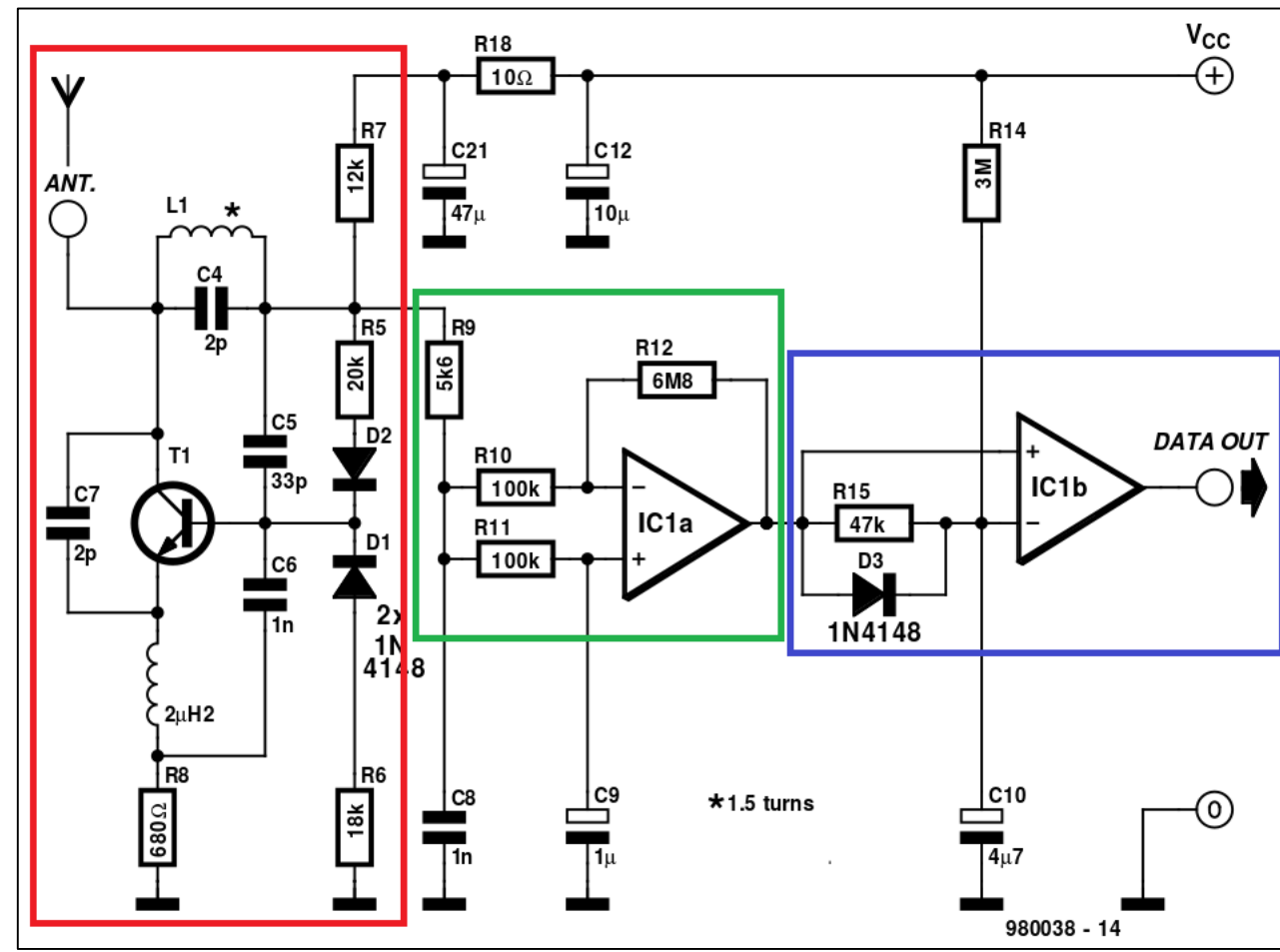


HARDWARE - RF

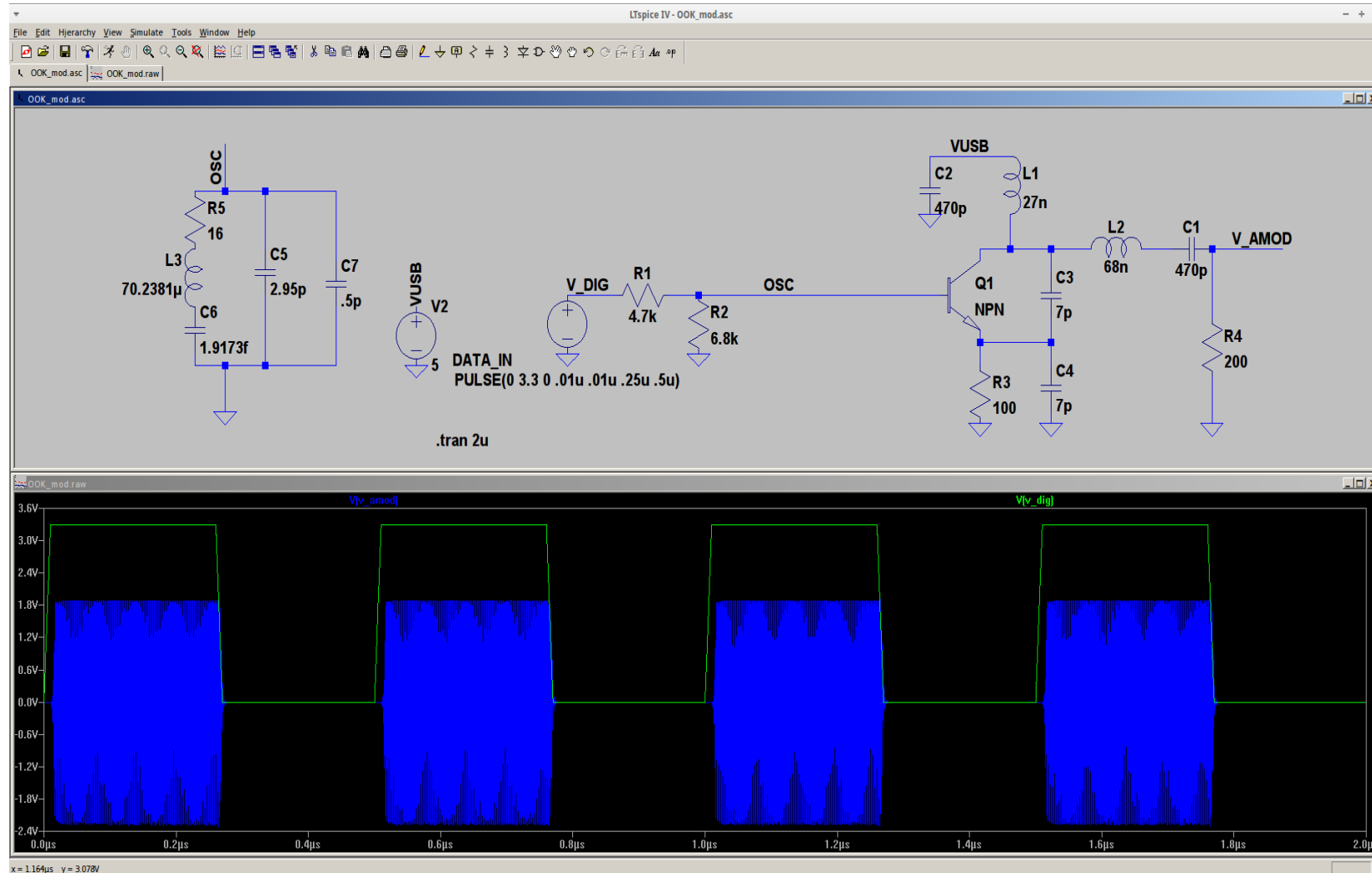
Modulator



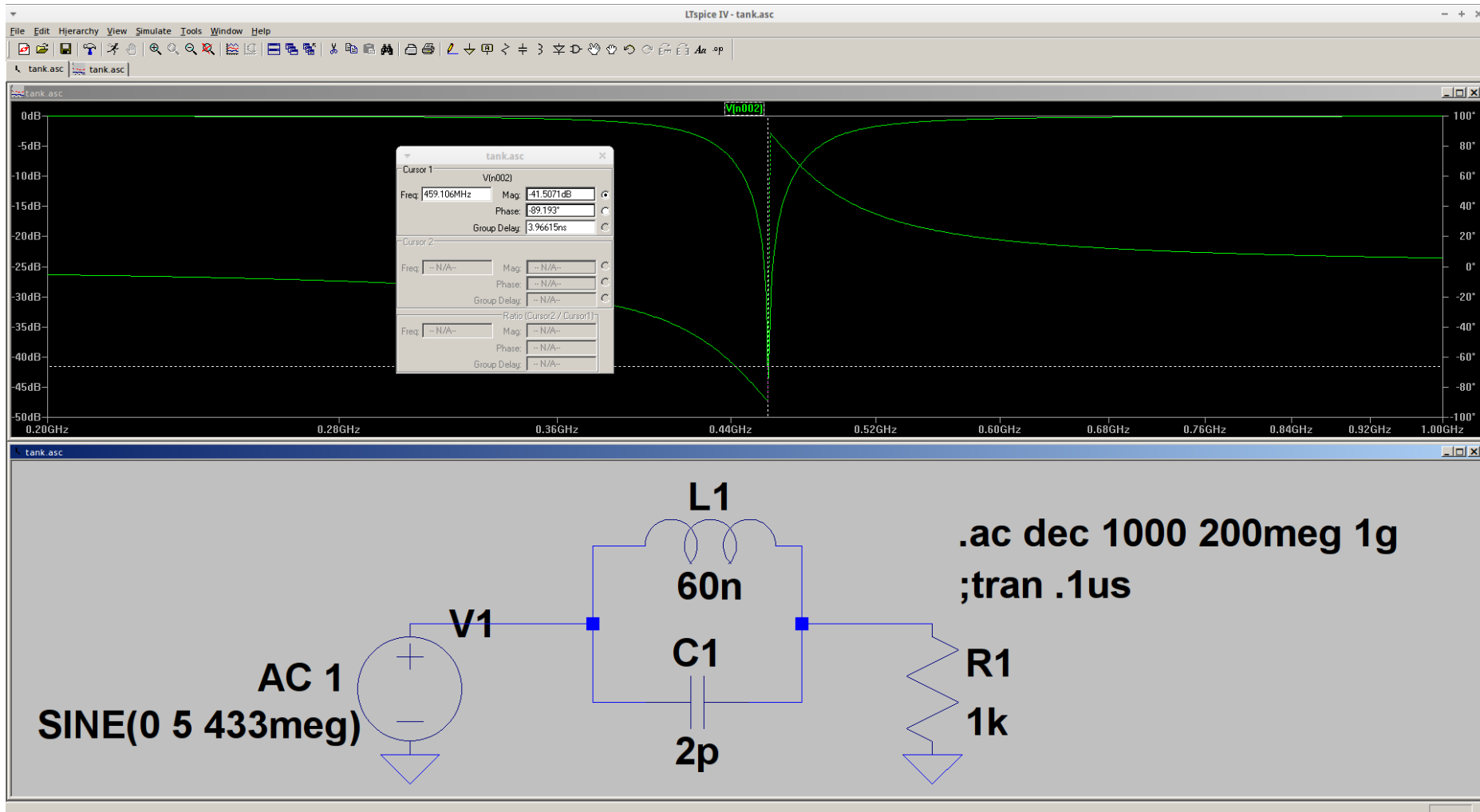
Demodulator



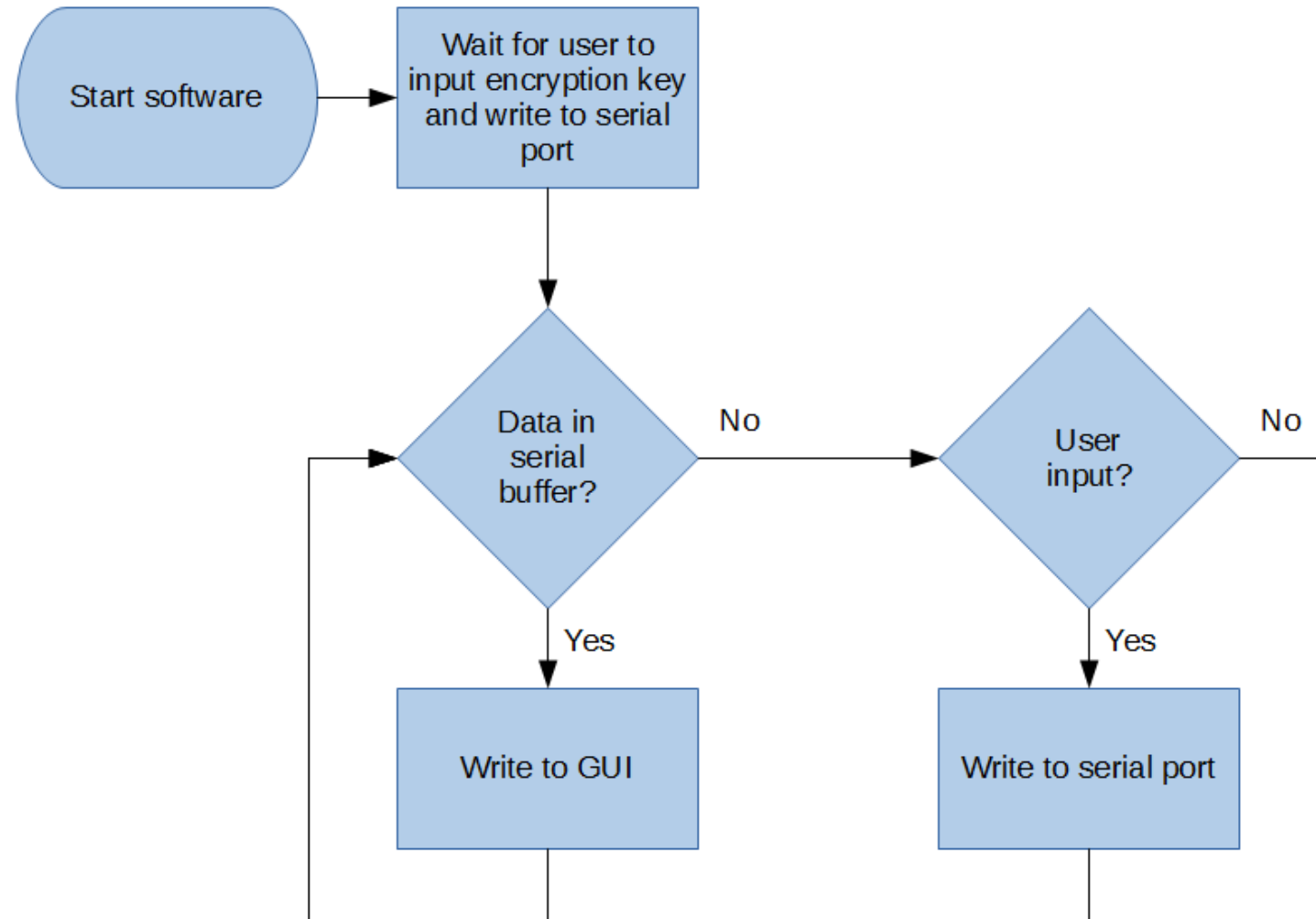
SIMULATIONS – MODULATOR



SIMULATIONS – LC TANK



SOFTWARE



DIVISION OF LABOR

	Russell	Patrick
PDR	(\$)	(\$)
Transmitter	(#)	
Antenna		(^)
Receiver		(*)
Firmware	(@)	
uC-TRX Interface		(-)
Laptop Software	(&)	
uC-Laptop Interface	(!)	
Final Board Design	(%)	(%)
Testing & Validation	(\)	(\)
Stretch Goals	(+)	(+)

GANTT CHART

[illegible]



STRETCH GOALS

Near

- 3+ module communication
- More discrete form factor
- Cross platform (Windows compatibility)

Far

- 2.4Ghz transceiver with more robust modulation scheme
- Forward error correction
- Plausibly deniable filesystem



QUESTIONS?