CSC TX Test

System Name: Critical Systems Computer Comms

# Aim:

Test AFSK functionality on the Critical Systems Computer

# Authors

Thien Nguyen

Tester 2

# Relevant Drawings and Documents:

\Electrical Design Files\Tray 2\CSC\CSC.prjpcb

Github Repository: https://github.com/bluesat/csc-software

Drawing3.pcbdoc

# Equipment:

* Soldered CSC PCB
* Digital Oscilloscope
* Laptop with Terminal
* USB-TTL232 Cable
* Kantronics Modem
* USB-Serial Converter

Add a diagram or picture here

# Procedure:

1. Burn the test image onto PCB using USB-TTL232 cable
2. Establish a terminal via a COM port on the laptop through the USB-TTL232 cable
3. Observe output on terminal and ensure that all UART debug messages are successfully being printed. Note results
4. Connect Radio TX output to Oscilloscope. Observe whether or not a modulated output is being successfully generated. Note results.
5. Connect Kantronics modem to laptop via a USB-Serial Converter and establish a terminal via a COM port
6. Connect Radio TX output to Kantronics Modem and connect modem to computer via USB-Serial converter.
7. Observe the output on the terminal from the Kantronics modem. Ensure that output matches the output from the UART debug messages. Note results
8. Repeat steps 4-7 adding the satellite on-board TX radios and groundstation receivers into the link (as per figure below) and note results.

CSC

Satellite TX Radios

Groundstation RX Radios

Laptop

Kantronics Modem

# Results:

Add a diagram of results and results table here

# Analysis:

Click here to enter text.

# Conclusion:

Click here to enter text.