1. Connect to Handheld Remote Machine (this is the Ground Station from now on)
2. Connect to OBC/UHF Remote Machine (this is the Satellite from now on)
3. Make sure both Ground Station and Satellite applications are up to date by pulling from the master branch
4. Prep whatever screen recording program you plan to use on both the ground station and satellite
5. On the Satellite, power the pumpkin board with the power supply
6. Flash the most current software to the OBC using System Workbench 4 STM32.
7. Power off the power supply
8. Open the Ground Station application on the Ground Station computer
9. Connect to the Handheld radio on the Ground Station
10. On the satellite, power on the power supply. The following events should take place without interaction
11. The OBC is powered on
12. The OBC simulates from handoff to NASA until power on of OBC
    a. Prints “RBF inserted”
    b. Prints “Handoff to NASA… Loading into P-Pod
    c. Prints “Kill switch depressed”
    d. Prints “RBF removed”
    e. Prints “Kill switch released (EPS power on)”
    f. Prints “Entering Main()”
13. OBC starts a 1 minute timer and waits, simulating the 30 minute period of inactivity following deployment from ISS
14. OBC turns on other modules in Satellite
    a. Simulates turning on UHF transceiver by printing “Commanding EPS to enable Output 5 (UHF transceiver)”
    b. Simulates turning on SDR by printing “Commanding EPS to enable Output 3 (SDR)“
    c. Simulates turning on Boost board by printing “Commanding EPS to enable Output 1 (boost enable)”
15. OBC simulates deployment of magnetometer by printing “Commanding ??? to deploy the magnetometer”
16. OBC simulates deployment of antenna by printing “Sending 0x1F (deploy all antennas with algorithm 1) to I2C slave address 0x33 (antenna)”
    a. It would be wise to then read the states of the UHF antenna and then deploy via algorithm 2 if needed
17. OBC will send commands to the UHF transceiver to configure the beacon text and period “Hello, Earth! I am ISU’s CySat-I” with period of 1 minute
18. OBC will send a command to the UHF transceiver to enable transparent mode
19. OBC will send a command to the UHF transceiver to enable the beacon
20. OBC will simulate beginning the detumbling sequence by printing “Beginning detumbling sequence”

21. At some point after step 18, the Ground Station will receive the beacon being sent by the Satellite. At this point, the beacon should send a “Beacon Shut Off request” command as described in the Ground Station | CySat Packet Protocol documentation.
22. At some point following the previous step, the OBC will receive the “Beacon Shut off request” command.
23. OBC will turn off the beacon
24. OBC will send a “Beacon shut off response” command
25. The Ground send an “Initial Health Check Request” command
26. OBC will run initial health checks (8-bit good/bad flags for each subsystem) and compile them into a response
    a. The EPS, ADCS, and SDR will simulate their health checks (meaning they assume all good)
    b. The OBC and UHF Transceiver will run their health checks
    c. All health checks will be compiled and put into an “Initial Health Check Response” command
    d. OBC will send packet to Ground Station
27. Ground Station will receive initial health checks and display them to the user
28. Ground Station will send a “Enter Main Operating Phase request”
29. OBC will receive this and send a “Enter Main Operating Phase response” packet in return
30. OBC will enter the Main Loop
    a. The OBC will print “Main operating loop entered”
31. This concludes the “Mock” mock launch