Blue Origin Flight

Python Listener: SPARTA Sequence of Events

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T-700

- Turn on power for the IPC
    - Channel 2
    - Channel 3
- MicroPC boots up and logs in
- Windows Task Scheduler starts:
    - DSP continuous sequence
    - Ethernet listener
    - ***SEE IF YOU CAN START TWO CONTINUOUS SCRIPTS AT THE SAME TIME WITHOUT THEM CLASHING FIRST!***
- IPC sends a message containing spacecraft time to Python
    - That triggers Python to fetch it's own PC time
    - Logged and used for comparison

MECO

SEPARATION: n2 seconds from **1/6 G**

- Once Python receives the **SEPARATION** signal from the IPC, it should begin a 'seconds' counter
- There should be an set expected elapsed time of when we'll reach **CRUISE**
    - 'until_cruise' is what we'll call it
    - So we take 'until_cruise' and subtract 'n2' from it to get our expected remaining time until the flight gets to **CRUISE**
        - ***Set the timer at that expected value***
- If the **CRUISE** signal is received before the seconds counter ends, omit the counter and go directly to **CRUISE** instructions
    - Otherwise, just move on after the counter ends

CRUISE: n1 seconds from **1/6 G**

- Once Python receives the **CRUISE** signal from the IPC, it should begin a 'seconds' counter
- There should be an set expected elapsed time of when we'll reach **1/6 G**

        - ‘until_16’ is what we’ll call it
        - So we take ‘until_16’ and subtract ‘n1’ from it to get our expected remaining time until the flight gets to **1/6 G**
            - ***Set the timer to that expected value***
- If the **1/6 G** signal is received before the seconds counter ends, omit the counter and go directly to **1/6 G** instructions
    - Otherwise, just move on after the counter ends

1/6 G

- IPC sends signal to start the VST rotation and logging
    - Duration should be a static stepper motor position/time

END OF CRUISE

- Probably power everything off?