

# MOSES Flight Software Operation Manual

Roy Smart, Jordan Maxwell

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# 1 Starting the MOSES Flight Computer

1. Turn on EGSE #2
  - (a) Log into account (**Unknown**) with password: `letmypeoplego`
  - (b) Run the program `MOSES_SERVER.sh`
    - i. Connect the uplink com port to `/dev/ttyS5`
    - ii. Connect the downlink com port to `/dev/ttyS4`
    - iii. Confirm that the IP server port is set to port 10000
  - (c) Run the program `MOSES_CLIENT.sh`
    - i. Navigate to **File** → **Connect** and connect to the server.
  - (d) Press **CTRL + ALT + T** to open the bash shell window. This window will be referred to as Terminal #1.
    - i. Enter the command `sudo minicom -s`. If needed, confirm the `sudo` command with the previous password, `letmypeoplego`.
2. Turn on EGSE #1
  - (a) Press the button to toggle the KVM switch to move keyboard control to EGSE1
  - (b) Log into account **Brandon**, with password (**unknown**)
  - (c) Start the Labview analog TM software (**Path Unknown**)
3. Confirm that the Agilent **Model # unknown** is turned on.
4. Power up Power supply #1 (PS1)
  - (a) Press the button labeled **Recall** twice on the face of PS1 to recover the appropriate voltage/current settings.
5. Press the button labeled **CC Power** on the timer/uplink deck to turn on the flight computer.
6. Toggle the KVM switch to return to EGSE2
  - (a) Terminal #1 should be showing output on the screen. This is the bootup sequence of the flight computer.
    - i. Once the bootup sequence is complete, Terminal #1 should be prompted with a login. Use the username **root** and the password is just one space, as in " ".
  - (b) Press **CTRL + ALT + T** to open another instance of bash. This window will be referred to as Terminal #2.
    - i. Open an ssh tunnel by entering the command `ssh root@(IP address unknown)`. If the system can't find the flight computer at that IP address please see the section below labeled **Locating IP addresses using NMAP**.
      - A. Log into the flight computer using the same passwords as before, username **root** and password one space, " ".
      - B. Open the flight software log using the command `tail -f /moses/ramdisk/moses_log.txt`
7. The flight software is now ready to begin taking exposures.

## 2 Using the MOSES Instrument

### 2.1 Taking Exposures

### 2.2 Activating the Shutter without the ROE

### 2.3 Advanced Usage

## 3 Troubleshooting

### 3.1 Locating IP addresses using NMAP