1. **Power on Rack instruments**

- ☐ Confirm 2 USB drives are plugged in
- ☐ Confirm aircraft rack power is on
- ☐ Rack power *(push in breaker on back strip)*
- ☐ IF Box
- ☐ TX Switch on IF Box is down
- ☐ Confirm *(with RAF tech)* time server is up
- ☐ Archiver computer *(upper left button)*

2. **Pod Power**

- ☐ Request power to pod in the order below:

Right breaker -> Left breakers

- ☐ Power on Transmitter CMU
- ☐ Confirm 'Power Valid' is green on CMU

3. **Start up Archiver computer**

- ☐ Unplug & plug in the USB for keyboard
- ☐ Log in *(user: HCR user/passwd:sun-dog)*
- ☐ Open a Terminal
- ☐ `'start_all'` command at prompt
- ☐ Confirm 2 USB drive status

4. **Xchat**

- ☐ Click on Xchat icon
- ☐ Change username *(type: /nick <name>-gv)*
- ☐ Join additional channel *(type: /join #name)*

5. **Start up RDS computer**

- ☐ Open another Terminal in Archiver
- ☐ SSH into RDS *(simply type 'rds')*
- ☐ `'start_all'` command at prompt

6. **HCR GUI**

- ☐ Double click ‘Start HCR GUI’ icon
- ☐ Double click ‘Start HawkEye 10Hz’ icon

7. **C-migits Initialization**

- ☐ Check Cmigits is in ‘Fine Alignment’*
- ☐ LED light turns green when done

(‘Air navigation’ is displayed when initialization is completed.)*

8. **HCRDRX**

- ☐ Double click ‘Start hcrdrx.ops’ icon
- ☐ Double click ‘View hcrdrx.log’ icon

9. **Motion Control**

- ☐ Confirm TX Switch is in down position
- ☐ Home the Drives using HCR GUI
- ☐ Confirm Home Drives dialog – click ‘ok’

10. **Transmitter**

- ☐ Click 'Filament' on HCR GUI *(~2.5 min)*
- ☐ Confirm the Ops Mode – Bench-Test

11. **PI HawkEye Display**

- ☐ Open a terminal
- ☐ `'ssh -XY hcr@hcr-router'` *(sun-dog)*
- ☐ `'start_HawkEye.10hz &'`

12. **Noise Source CAL**

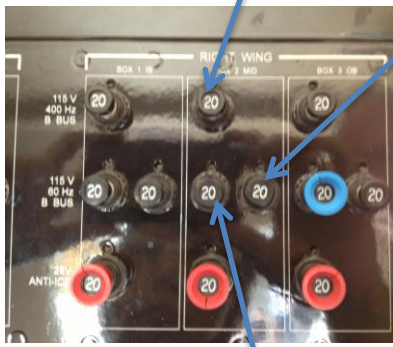
- ☐ Click GUI 'Request High Voltage' button
- ☐ Change Ops Mode – Noise Source CAL*
- ☐ Calibration for 5 minutes
- ☐ Change Ops Mode – Bench-Test

*(*NSCAL only works with High Voltage On)*

13. **Configure Ops Mode & Transmission**
☐ Perform this section ONLY when taxiing.
☐ Confirm Cmigits status light is **green**
☐ Confirm HCR is pointing **up**
☐ Click GUI 'Request High Voltage' button
☐ Set Request Ops mode to 'Tx-V, Rx-HV'
☐ Flip **up** TX Switch to transmit
(CMU may require power cycle when RS232 comm. is lost)

14. **Archiver Status Monitor**
☐ Double click on 'View archive.log' icon
☐ Verify the data writing status on GUI
☐ Check the USB3 drives are keeping up

HCR Breaker Location



Shutdown Procedure - Radar
☐ Click on GUI 'Request High Voltage'
☐ Click on GUI 'Filament'
☐ Click on 'Stop hcrdrx' on final approach
☐ Perform steps below ***after*** landing
☐ '`stop_all`' in RDS terminal window
☐ Close HawkEye display
☐ '`sudo poweroff`' on RDS *(sun-dog)* *(Execute after logs completed)*
☐ Close HCR GUI window
☐ Power off IF Box
☐ Power off CMU
☐ Pod power is now safe to remove

Shutdown Procedure - Archiver
☐ Look at 'View archive.log' status
☐ Verify the last time-series file was copied. *(Compare time stamp of last file)*
☐ '`stop_all`' command at prompt
☐ Shutdown Archiver computer

Configure HCR to Scan
☐Click ‘Change Scan Mode’ button
☐Select ‘Pointing’ Tab
☐Set HCR to point at 0 deg
☐Click ‘Ok’ to confirm changes
☐Select ‘Scanning’ Tab
☐Input scan parameters
☐Click ‘Ok’ to confirm changes

Configure HCR to Pointing from Scanning
☐Click ‘Change Scan Mode’ button
☐Select ‘Point’ Tab
☐Input Pointing parameter
☐Click ‘Ok’ to confirm changes

Noise Source CAL – in flight*
This assumes HCR was in transmit mode:
☐Change Ops Mode – Noise Source CAL
☐Calibration for 5 minutes
☐Change to Ops Mode
(The beam pointing angle is irrelevant to NSCAL. There is no need to change any setting on pointing)*