

## Final HAWC Shift Questions List

1. Enter your name so that it is clear who is on shift and is reporting the current status of the HAWC detector and instruments
  - Confirm with last shifter that you are now on shift
  - Potentially helpful links for shifter (with some instructions):
    - [http://private.hawc-observatory.org/wiki/index.php/HAWC\\_Shift\\_Guide](http://private.hawc-observatory.org/wiki/index.php/HAWC_Shift_Guide)
    - [http://private.hawc-observatory.org/wiki/index.php/HAWC\\_Data\\_Taking](http://private.hawc-observatory.org/wiki/index.php/HAWC_Data_Taking)
  
2. Are the main (TDC) and Scalar DAQs running? Has the main DAQ been functioning properly in the past 24 hours? Any critical temperature issues? Most recent run number? Record statuses (on/off) and run number, and add any comments/abnormalities/issues.
  - Link: <http://hawcmon.umd.edu/hawcmon/dashboard/dashboard>
  
3. Check the current status (i.e. voltages/currents) of the HV. Any comments/abnormalities/issues?
  - Link: [http://hawcmon.umd.edu/hawcmon/dashboard/ems\\_hv\\_page](http://hawcmon.umd.edu/hawcmon/dashboard/ems_hv_page)
  
4. Check the current status (i.e. voltages/currents) of the LV. Any comments/abnormalities/issues?
  - Link: [http://hawcmon.umd.edu/hawcmon/dashboard/ems\\_lv\\_page](http://hawcmon.umd.edu/hawcmon/dashboard/ems_lv_page)
  
5. What are the average rates for both 8" and 10" (HQE) PMTs? How many of each PMT are running (or how many bad tubes are there)? Record rates and numbers and add any comments/abnormalities/issues.
  - Link: <http://private.hawc-observatory.org/hawc.umd.edu/site/run-monitor/online-plots/>
  - For individual PMT rates: [http://hawcmon.umd.edu/hawcmon/dashboard/multi\\_scaler](http://hawcmon.umd.edu/hawcmon/dashboard/multi_scaler)
    - Typical rate for 8" PMT: ~30kHz (A, B, or D tubes)
    - Typical rate for 10" PMT: ~60kHz (C tubes)
  
6. What is the status of the disk space? Record the amount (GB) and percentage used of TDC and Scalar disks. Any comments/abnormalities/issues?
  - Link: [http://hawcmon.umd.edu/hawcmon/dashboard/ems\\_disk\\_page](http://hawcmon.umd.edu/hawcmon/dashboard/ems_disk_page)

7. Check the weather/temperature status. Any comments/abnormalities/issues?
  - Link: [http://hawcmon.umd.edu/hawcmon/dashboard/ems\\_weather\\_page](http://hawcmon.umd.edu/hawcmon/dashboard/ems_weather_page)
  - For local weather: <http://www.wunderground.com/personal-weather-station/dashboard?ID=IPUEBLAA3>
  
8. Are all the doors closed?
  - Link: [http://hawcmon.umd.edu/hawcmon/dashboard/ems\\_door\\_page](http://hawcmon.umd.edu/hawcmon/dashboard/ems_door_page)
  
9. Check the status of the crates. Any comments/abnormalities/issues?
  - Link: [http://hawcmon.umd.edu/hawcmon/dashboard/ems\\_crate\\_page](http://hawcmon.umd.edu/hawcmon/dashboard/ems_crate_page)
    - **NO DATA HERE YET**
  - Currently there is information on some of these plots:  
[http://hawcmon.umd.edu/hawcmon/dashboard/ems\\_page](http://hawcmon.umd.edu/hawcmon/dashboard/ems_page)
  
10. Check the status of the GTC. Any comments/abnormalities/issues?
  - Link: [http://hawcmon.umd.edu/hawcmon/dashboard/ems\\_gtc\\_page](http://hawcmon.umd.edu/hawcmon/dashboard/ems_gtc_page)
  - **NO DATA CURRENTLY AVAILABLE**
  
11. What are the input/output voltages and the temperature of the UPS? Record these and add any comments/abnormalities/issues.
  - Link: **NO LINK/DATA CURRENTLY AVAILABLE**
  
12. Check the status (on/off) and temperature of the HVAC. Any comments/abnormalities/issues?
  - Link: [http://hawcmon.umd.edu/hawcmon/ems\\_plot\\_page?type\\_id=19](http://hawcmon.umd.edu/hawcmon/ems_plot_page?type_id=19)
  - **NO DATA CURRENTLY AVAILABLE**
  
13. Check the water levels in the tanks for any leaks or unstable levels. Any comments/abnormalities/issues?
  - Link: [http://private.hawc-observatory.org/hawc.umd.edu/internal/water\\_level/](http://private.hawc-observatory.org/hawc.umd.edu/internal/water_level/)

14. Check the following plots (good/bad) and record and comments/abnormalities/issues:

- **Trigger Rate:** [http://private.hawc-observatory.org/hawc.umd.edu/site/run-monitor/online-plots/current\\_subrun/rateComparison.png](http://private.hawc-observatory.org/hawc.umd.edu/site/run-monitor/online-plots/current_subrun/rateComparison.png)
- **Current TDC Errors:** [http://private.hawc-observatory.org/hawc.umd.edu/site/run-monitor/online-plots/current\\_subrun/rateVTime.png](http://private.hawc-observatory.org/hawc.umd.edu/site/run-monitor/online-plots/current_subrun/rateVTime.png)
- **Edge Hits:** [http://private.hawc-observatory.org/hawc.umd.edu/site/run-monitor/online-plots/current\\_subrun/nHit.png](http://private.hawc-observatory.org/hawc.umd.edu/site/run-monitor/online-plots/current_subrun/nHit.png)
- **nTanks:** <http://private.hawc-observatory.org/hawc.umd.edu/site/run-monitor/online-plots/nTanks.png>
- **nChannels:** <http://private.hawc-observatory.org/hawc.umd.edu/site/run-monitor/online-plots/nChannels.png>
- **nHits:** <http://private.hawc-observatory.org/hawc.umd.edu/site/run-monitor/online-plots/nHits.png>
- **Zenith Angle:** <http://private.hawc-observatory.org/hawc.umd.edu/site/run-monitor/online-plots/zenithAngle.png>
- **Azimuth Angle:** <http://private.hawc-observatory.org/hawc.umd.edu/site/run-monitor/online-plots/azimuthAngle.png>
- **Reconstructed Core:** <http://private.hawc-observatory.org/hawc.umd.edu/site/run-monitor/online-plots/CorePosition.png>
- **nFit:** <http://private.hawc-observatory.org/hawc.umd.edu/site/run-monitor/online-plots/nFit.png>

15. Submit a log entry with summary of your shift including any issues that you noticed or that occurred during your shift as well as the status of the HAWC detector (mainly the HV, TDC, Scalar, and EMS statuses). If they have not already contacted you, contact the next shifter to confirm start of their shift.