L ☐ R ☐ HRS detector long checklist part 1. Completed by . Date:

| | Checked ↓ | Needs attention ↓ | |
|---|---|---|---|
| | | | **Upstairs** |
| 1 | ☐ | ☐ | The air cooling in the detector hut is operational |
| 2 | ☐ | ☐ | Each of the cooling fans in the NIM crates (3 per crate) are working |
| 3 | ☐ | ☐ | The cooling fan is working on the VME crate |
| 4 | ☐ | ☐ | The cooling fan is working on the Trigger Supervisor Crate |
| 5 | ☐ | ☐ | The cooling fan is working in the VME slow control VME crate |
| 6 | ☐ | ☐ | The cooling fans are working at the VDC Threshold Control |
| 7 | ☐ | ☐ | Each of the cooling fans in the back of the racks are working (3 units with 3 fans) |
| | | | **Downstairs** |
| 8 | ☐ | ☐ | Each of the cooling fans (3 of them) are working in the FastBus relay rack |
| 9 | ☐ | ☐ | The cooling fans are working on the VDC level translator panel |
| 10 | ☐ | ☐ | Power to the front-end discs is turned ON for the S2m and cooling fans are operational |
| 11 | ☐ | ☐ | Fresh air flow is turned on for PMTs on S0, S1 and S2m detectors, $P \approx 0.5$ to 1 inches |
| 12 | ☐ | ☐ | All high voltage and signal cables in the detector hut are secured |
| | | | **DAQ** |
| 13 | ☐ | ☐ | The internet connection to each of the three FastBus CPUs is operational (via GUI) |
| 14 | ☐ | ☐ | The internet connection to the VME CPU is operational (via GUI) |
| 15 | ☐ | ☐ | The internet connection to the Trigger Supervisor CPU is operational (via GUI) |

L ☐ R ☐ HRS detector long checklist part 2. Completed by . Date:

| | Checked ↓ | Needs attention ↓ | |
|---|---|---|---|
| | | | **VDC** |
| 16 | ☐ | ☐ | The VDC gas flows are turned on at a level of 30 in the flowmeters |
| 17 | ☐ | ☐ | The flow is seen from the exhaust bubblers/flowmeters |
| 18 | ☐ | ☐ | The power supply is turned on for the VDC amplifier cards |
| 19 | ☐ | ☐ | The threshold control for the VDC is turned on (+3V, 0.1A) |
| 20 | ☐ | ☐ | The level translators for the VDC are turned on (+5V and -5V) |
| | | | **High Voltage** |
| 21 | ☐ | ☐ | The control of the HV crate for the detector is operational (via GUI) |
| 22 | ☐ | ☐ | The S2m HV power is set at 1.6 kV settings and the current at each of the 32 channels is $< 1$ mA (HV GUI) |
| 23 | ☐ | ☐ | The S0 HV power is set at 1.2 kV settings and the current at each of the 32 channels is $< 1$ mA (HV GUI) |
| 24 | ☐ | ☐ | The GC HV power is set at 1.6 kV settings and the current at each of the 10 channels is $< 1$ mA (HV GUI) |
| 25 | ☐ | ☐ | The Shower HV power is set at 0.8 kV settings and the current at each of the channels is $< 1$ mA (HV GUI) |
| 26 | ☐ | ☐ | The VDC HV power is set at 3.5 kV and the leakage current is below 0.01 $\mu$A (HV GUI) |
| 27 | ☐ | ☐ | The VDC leakage current trip level set to below 100 $\mu$A in HV GUI |
| | | | **Scalers** |
| 28 | ☐ | ☐ | The S2m scaler rates are below 2 kHz in each of the 32 channels |
| 29 | ☐ | ☐ | The S0 scaler rates are below 2 kHz |
| 30 | ☐ | ☐ | The GC scaler rates are below 10 kHz in each of the 10 channels |
| 31 | ☐ | ☐ | Post all pages of the Scaler GUI to the HALOG |
| 32 | ☐ | ☐ | The Gas Cherenkov, GC, CO2 flow is turned on at the level of 50 at the flowmeter by stairs |
| 33 | ☐ | ☐ | The fans are working for the beamline electronics |

| Date | Check performed by | Check approved (B. Wojtsekhowski) |
|---|---|---|
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