

Table 1: HRS detector long checklist part A. Completed by . Date .

1	<input type="checkbox"/>	The air cooling in the detector hut is operational
2	<input type="checkbox"/>	Fresh air flow is turned on for PMTs on S0, S1 and S2m detectors, P \geq 0.5 inches
3	<input type="checkbox"/>	Each of the cooling fans (9 of them) is working in the electronics relay racks
4	<input type="checkbox"/>	The cooling fan is working on the VME crate
5	<input type="checkbox"/>	The cooling fan is working on the Trigger Supervisor crate
6	<input type="checkbox"/>	Each of the cooling fans (4 of them) is working in the FastBus relay rack
7	<input type="checkbox"/>	The cooling fans are working on the VDC level translator panel
8	<input type="checkbox"/>	The cooling fan is working in the VME slow control VME crate
9	<input type="checkbox"/>	Power to the front-end discs is turned ON for the S2m and cooling fans are operational.
10	<input type="checkbox"/>	The control of the MLU (VME) unit for the trigger is operational (via GUI)
11	<input type="checkbox"/>	The control of the HV crate for the detector is operational (via GUI)
12	<input type="checkbox"/>	The internet connection to each of the three FastBus CPUs is operational (via GIU)
13	<input type="checkbox"/>	The internet connection to the VME CPU is operational (via GIU)
14	<input type="checkbox"/>	The internet connection to the Trigger Supervisor CPU is operational (via GIU)
15	<input type="checkbox"/>	All high voltage and signal cables in the detector hut are secured
16	<input type="checkbox"/>	The VDC gas flows are turned on at a level of 30 in the flowmeters
17	<input type="checkbox"/>	The flow is seen from the exhaust bubblers/flowmeters
18	<input type="checkbox"/>	The power supply is turned on for the VDC amplifier cards (+5V, 10A)
19	<input type="checkbox"/>	The level translators (+5V and -5V), and the threshold control (+3V, 0.1A)
20	<input type="checkbox"/>	The VDC HV power is set at 3.5 kV and the leakage current is below 0.01 μ A

Table 2: HRS detector long checklist part B. Completed by . Date .

21	<input type="checkbox"/>	The VDC leakage current trip level set to below 100 μA in HV GUI? .
22	<input type="checkbox"/>	The Straw chamber gas flow is turned on at a level of 45 in the flowmeter
23	<input type="checkbox"/>	The pressure on the gauge is about 0.2 inches.
24	<input type="checkbox"/>	The power supply is turned on for the amplifier cards and the threshold control.
25	<input type="checkbox"/>	The AC power of the level translator box is ON.
26	<input type="checkbox"/>	The Straw chamber HV power is set at 1.6 kV and
27	<input type="checkbox"/>	the leakage current on each of the six lines is below 0.001 mA.
28	<input type="checkbox"/>	the straw chamber leakage current trip level set to below 200 μA on HV GUI ?
29	<input type="checkbox"/>	Power to the front-end discs is turned ON for the S2m and cooling fans are operational.
30	<input type="checkbox"/>	The S2m HV power is set at 1.6 kV settings and the current at each of the 32 channels is <1 mA.
32	<input type="checkbox"/>	The S2m scaler rates are below 2 kHz in each of the 32 channels.
33	<input type="checkbox"/>	The S0 HV power is set at 1.8 kV settings and the current in both channels is <1 mA.
31	<input type="checkbox"/>	The S0 scaler rates are below 2 kHz.
34	<input type="checkbox"/>	The Gas Cherenkov, GC, CO2 flow is turned ON at the level of 50 at the flowmeter.
35	<input type="checkbox"/>	The GC HV power is set at 1.6 kV settings and the current at each of the 10 channels is <1 mA.
36	<input type="checkbox"/>	The GC scaler rates are below 10 kHz in each of the 10 channels.
Date	Check performed	Check approved (B. Wojtsekhowski)