CLAS12 Light Threshold Cherenkov Counter (LTCC)

WBS 2.4.2.2.4.2

**LTCC Labor - Readout**

**Activity ID** – 242242164

**Activity Name** – Dividers Modifications Implementation

Budget amount: 4 m-w mtechs

The budget includes the installation of the divider modifications.

This estimate is based on communications with Vladimir Popov, the author of the modifications already implemented in the HTCC PMTs.

**Activity ID** – 242242169

**Activity Name** – New Patch Panel Fabrication

Budget amount: 2 m-w mtech

The activity accounts for the work necessary to build the new patch panel for the LTCC detector.

The work estimate is based on previous experience.

**LTCC Labor – Sagging Test**

**Activity ID** – 242242245

**Activity Name** – Simulation of Sagging Test

Budget amount: 0.6 m-w scientist

The simulation of the sagging test include positioning of the laser(s) probes and detection of the mirror focal points.

This estimate is based on previous JLab experience.

**Activity ID** – 242242255

**Activity Name** – Procurement Sagging Test Tools

Budget amount: 0.2 m-w scientist

The budget includes the purchase of the tools for the sagging test

This estimate is based on previous JLab experience and discussions with the engineering staff.

**Activity ID** – 242242260

**Activity Name** – Manufacture Sagging Test Tools

Budget amount: 1 m-w machine shop

The budget includes the fabrication of the tools for the sagging test

This estimate is based on previous JLab experience.

**Activity ID** – 242242265

**Activity Name** – Transport Counterweight to TED

Budget amount: 0.2 m-w tech, 2 techs

The budget includes the transportation of the CLAS counterweight tool to TED high bay area. The transportation requires two tech, one with crane certification.

This estimate is based on previous JLab experience.

**Activity ID** – 242242270

**Activity Name** – LTCC Sagging Test

Budget amount: 1.4 m-w tech, 3 techs, 0.3 m-w scientist

The budget includes the test of the LTCC mirror sagging. 3 techs are required (1 crane operator).

This estimate is based on previous JLab experience.

**LTCC Labor – Refusrbish (1 sector)**

**Activity ID** – 242242275 to 242242325

**Activity Name** – LTCC Refurbish (1 Sector)

Budget amount: 60 m-w tech

The scope of work of 1 sector refurbish includes:

* Remove upstream and downstream windows
* Remove all mirrors, PMTs, WC and magnetic shields
* Remove patch panel
* Install temp frame support
* Mark Cut line
* LTCC cut and smooth
* Install rear brace
* Install nose addition
* Drill PMTs, mirrors holes
* Refurbish mirror spine
* Mount all mirrors, WC and PMTs
* Mount patch panel
* Install windows