November 17, 1998 LG

To: Hank Crawford, Krista Marks, Bob Minor, STAR Trigger people
From: Leo Greiner

Re: STAR Trigger Hardware documentation system proposal

Hi,
I am using the upcoming CTB review as an opportunity to put together a documentation system for the various STAR trigger subsystems. I'm hoping that the format and areas shown below can be used to encompass the documentation needed for the subsystems. I've also included an example of how I envision the CTB documentation. I intend to post the documentation tree as shown on the web. Please get back to me with comments and changes. thanks

1. Requirements
2. Context diagrams
3. Interfaces
4. Simulations
5. Schematics / Drawings
6. Software
7. Testing

CTB Example

1. Requirements
    a. Requirements document
    b.
2. Context Diagrams
    a. CTB 0.0
    b. CTB0.1
    c. CTB0.1.1
    d. CTB0.1.3
    e.
3. Interfaces
    a. Slow controls interface
    b. Level 0 interface
    c. TCD interface
    d.
4. Simulations
    a. multiplicity
    b. eta-phi distribution
    c. hits in slats
    d. etc.
    e.
5. Schematics / Drawings
    a. Trays
        1. TRG001-E-1 CTB Tray
        2. TRG002-E-1 CTB Tray Top
        3. TRG003-A-1 CTB Foot
        4. TRG004-A-1 CTB Tray Support End
        5. TRG005-A-1 CTB Tray Support Left
        6. TRG006-A-1 CTB Tray Support Right
        7. TRG007-A-1 CTB Light Guide
        8. TRG008-A-1 CTB Eta 0.0-0.5 Scintillator

    9. TRG009-A-1 CTB Eta 0.5-0.97 Scintillator
    10. TRG022-A-1 CTB Insertion Fixture, Cross Piece
    11. TRG024-E-1 CTB Insertion Fixture, Assembly
    12. TRG033-A-1 CTB Tray Stop
    13. TRG071-C-1 CTB Insertion Fixture, Rail Section
    14. TRG097-E-1 CTB Assembly
    15. LBL-CTB tray-1 CTB Tray End Plate
    16.
  b. Cables
    1. CTB Cable Layout, Labeling Scheme, and Cable Map Document
    2. LBL-CTB cable-1 STAR LBL CTB cable routing and composition schematic
    3. LBL-CTB CDB pp-1 STAR LBL CTB Patch Panel
    4.
  c. CDB
    1. CTB Block Diagram
    2. CTB Digitizing Board (CDB) Block Diagram
    3. CDT top
    4. CDB_Integrator
    5. CDB_LED
    6. CDB VME Interface
    7. CDB Timing Diagram
    8. CTB Special Trigger Path scenario
    9.
  d. PMT Base
    1. CTB PMT base electrical schematic

6. Software
    a. control
    b. offline
    c.
7. Testing
    a. Test Results from LBL Base for the Hamamatsu R5946 Photomultiplier Tube for use in the Central Trigger Barrel in STAR.
    b. CTB LBL Base Test Results
    c. Rice PMT Test Results
    d. Rice SLAT Test Results
    e. Rice Tray Test Results
    f. CDB Test Document
    g. CDB Test results
    h.