

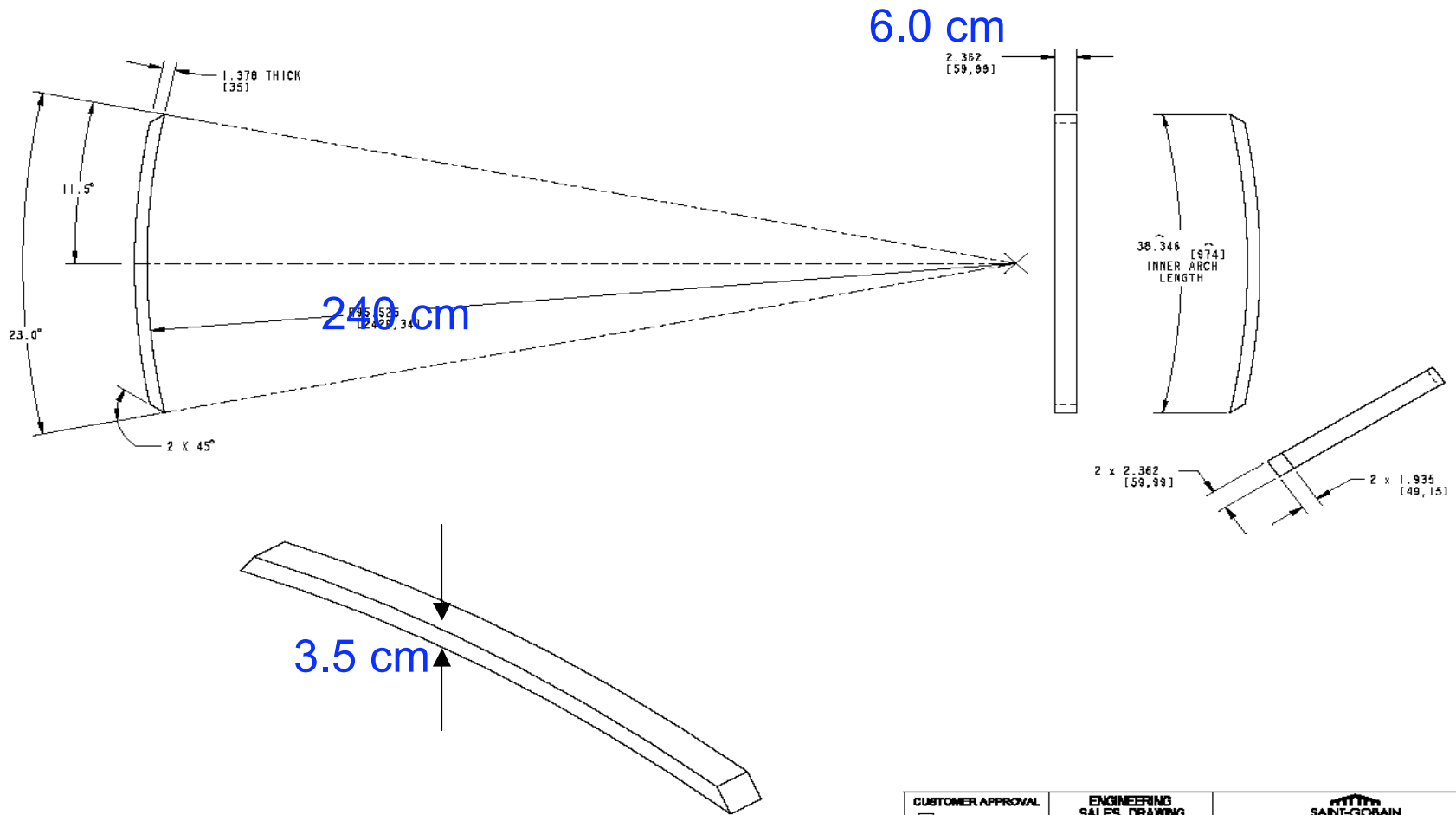
# Lucite Cerenkov Hodoscope Status


A. Ahmidouch, S. Danagoulian  
SANE Working Group Meeting, Oct 26, 2007

1. Detector Status
2. Electronics
3. Schedule

# Lucite Cerenkov Hodoscope

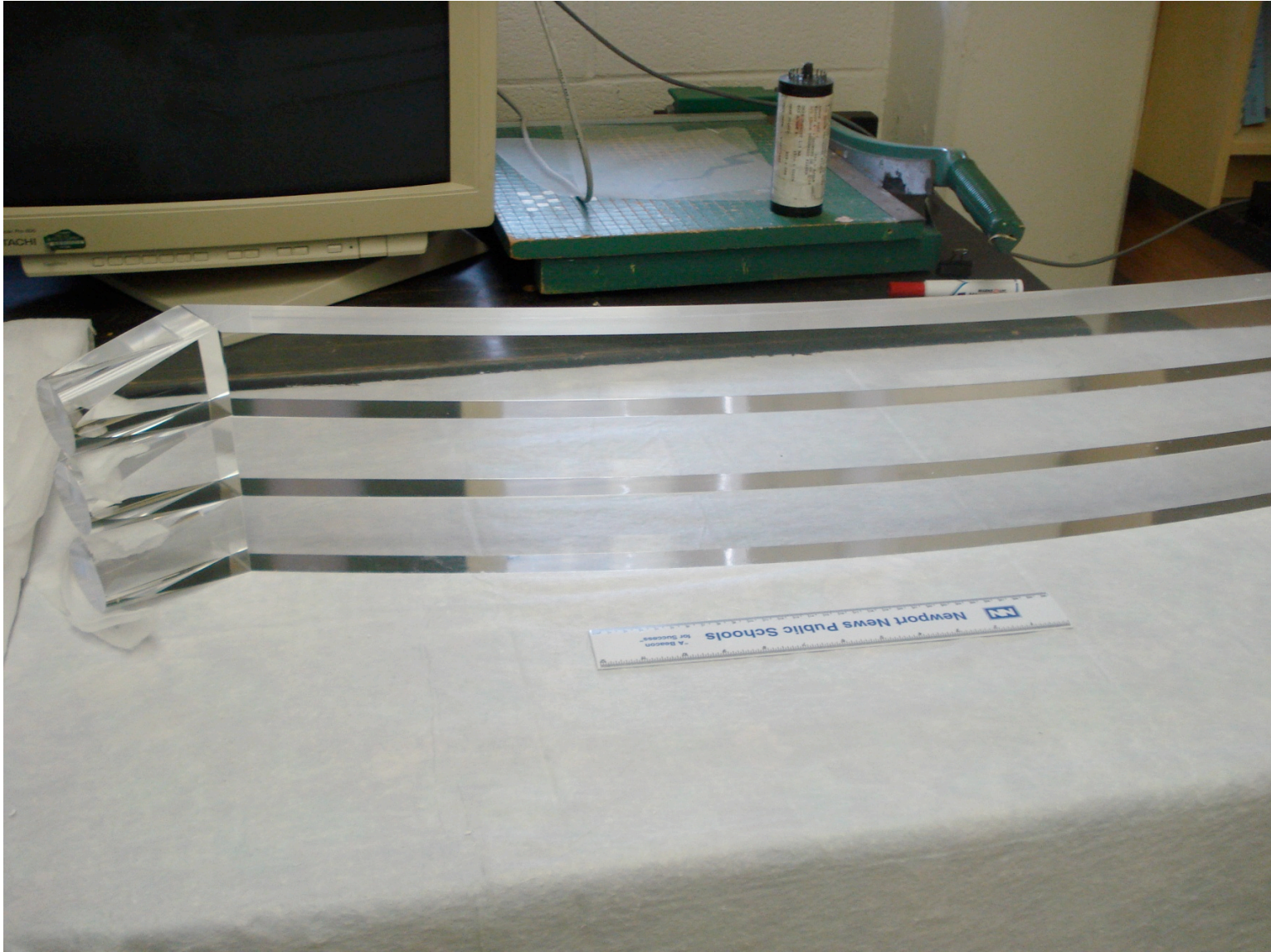
28 BC-800 bars: 3.5 x 6.0 x 96.7--91.5 cm<sup>3</sup> curved



<b>CUSTOMER APPROVAL</b> <input type="checkbox"/> APPROVED <input type="checkbox"/> APPROVED AS NOTED	<b>ENGINEERING SALES DRAWING</b> DO NOT SCALE THIS DRAWING THIS DRAWING IS IN ACCORDANCE WITH THE DRAWING	 <b>SAINT-GOBAIN</b> CRYSTALS 12948 Clearmont Rd., Menasha, WI 54952
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## Specs:

- 28 Lucite bars: BC-800,  $3.5 \times 6.0 \times 96.7\text{--}91.5 \text{ cm}^3$ ,  $n=1.49$ ,  $\text{Beta\_threshold} = 0.67$ , propagation of C-light by total Internal reflection.
- Curved to 240 cm, Normal incidence from target
- Edges cut at 45 deg (avoids reflections)
- Light guides ( $4.9 \times 6.0 \text{ cm}^2$ ) to 4.9 cm (circular)
- 2" PMTs: Photonis xp2268, 1.5 mm mu-metal







## Status:

- 6 detectors ready
- (4 students involved) -- Will finish all remaining detectors (22) by mid Nov.
- PMT assembly?

## Electronics

60 (56+ 4 spares) channels of:

- Discriminators (16-ch. Lecroy 4413), available from LEGS/BNL
- Splitters available at JLab
- Amplifiers “
- TDCs “
- ADCs “
- Delay cables (need to be ordered)



## Schedule of Tasks

- Prototype 1 construction July 2006
- Prototype 1 cosmic tests July 2006 – March 29, 2007
- SOS Hall test (1), E05-017 March 30 – July 13
- Prototype 2 ordered/received Feb 22 / June 14, 2007  
(3 Lucite bars and 6 light guides)
- 60 XP2268 PMTs & bases June 21, 2007
- Mu-metal order July 2007
- Frame design March 1st – June 14, 2007
- Receive all 28 Lucite bars July 26, 2007  
& 56 light guides
- Full construction July 26 – December 20, 2007
- Detectors on frame December 30, 2007
- Lucite Detector ready January 2008
- GepIII test October 2007 / March 2008

