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Manufacturing Scintillator Tiles for the STAR Forward Hadronic Calorimeter[1] LILIAN MCINTOSH, Abilene Christian University, STAR COLLABORATION — Over the last 20 years, Relativistic Heavy Ion Collider (RHIC) experiments at Brookhaven National Laboratory have studied the strong interaction through collisions between subatomic particles and nuclei. As the only running experiment at RHIC, the Solenoidal Tracker at RHIC (STAR) plays a leading role in providing information regarding proton structure, properties of the constituents, and their interactions. The STAR Forward Upgrade will enhance its capabilities by creating new low-angle subsystems, including a forward hadronic calorimeter system (HCal). The HCal will enable new low-angle measurements at STAR, including forward jet, dijet, and hadron-in-jet production. The manufacturing of plastic scintillator tiles for HCal is shared between Abilene Christian University (ACU), Ohio State University, and UCLA. ACUs manufacturing process entails cutting, milling, and polishing each tile. This process has been designed and tailored to the facilities and specifications of the material. The details of ACU's manufacturing process and the current status of the manufactured scintillator tiles will be presented.

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