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SeaQuest / E906 Shift Alarm System NOAH KITTS, Abilene Christian University — SeaQuest, Fermilab E906, is a fixed target experiment that measures the Drell-Yan cross-section ratio of proton-proton to proton-deuterium collisions in order to extract the sea anti-quark structure of the proton. SeaQuest will extend the measurements made by E866/NuSea with greater precision at higher Bjorken-x. The continuously running experiment is always being monitored. Those on shift must keep track of all of the detector readouts in order to make sure the experiment is running correctly. As an experiment that is still in its early stages of running, an alarm system for people on shift is being created to provide warnings, such as a plot showing a detector's performance is sufficiently different to need attention. This plan involves python scripts that track live data. When the data shows a problem within the experiment, a corresponding alarm ID is sent to the MySQL database which then sets off an alarm. These alarms, which will alert the person on shift through both an audible and visual response, are important for ensuring that issues do not go unnoticed, and to help make sure the experiment is recording good data.

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