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Air Shroud Used to Minimize Air Current Influence for Cargo Liner Testing

The purpose of the initial cargo liner air shroud study was to reduce the test result disparities among labs by implementing an air shroud around the test sample to reduce the influence of localized air currents, which could improve test result repeatability and reproducibility. An interlab study was conducted involving eight separate labs. The results showed an improvement in test repeatability and reproducibility. There were some issues at three of the labs where the sample mounting frame was interfering with the fitment of the shroud. Since then, the shroud was redesigned to address the fitment issues. Testing on the redesigned shroud was performed at the FAA Technical center and other labs to ensure the new shroud design does not impact the performance of the shroud. The results of those tests will be included in the presentation.

Air Shroud Used to Minimize Air Current Influence for Seat Cushion Testing

Similar to the cargo shroud, the purpose of the seat cushion air shroud study was to reduce the test result disparities among labs by implementing an air shroud around the test sample to reduce the impact of localized air currents, which could improve test result repeatability and reproducibility. The shroud was designed, constructed and tested at the FAA Technical Facility. Initial test result showed an improvement in repeatability while not increasing the severity of the test. Separate labs participated in an interlab study in which a shroud and test samples were provided by the FAA. The presentation will include the results of this study.