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Topic: Evacuation and Post-Crash Survival: Interior Arrangement

Title: Evaluation of Egress from Side-Facing Seating with Deployed Inflatable Safety Equipment

Abstract

This research project was developed as part of an effort to address questions arising from special conditions concerning side-facing seats on transport category airplanes and to examine any effect airbags used for occupant crash protection might have during an egress event. This report examines the history of proposed use of airbags on airplanes through the special conditions and briefly examines the current state of research relating to side facing seats. The experimental trials developed for this project were designed to look at an initial worst case scenario involving multiple sets of overlapping airbags and what, if any, impediment they might pose to an egress event. This study found no statistically significant difference in egress times with the airbags present than those trials that did not contain airbags in the passageway, though there was a slight delay thanks to their introduction.