Consensus Standards: Opportunities In Crashworthiness and Cabin Safety

The FAA and other leading civil aviation authorities are currently proposing significant changes in the regulations governing the design of small airplanes. This presents a unique opportunity to enhance and improve small aircraft crashworthiness and cabin safety standards via the incorporation of new technologies and design concepts in a more streamlined and timely manner. This paper discusses the current small airplane requirements, which have been in place for many years. It then proposes and discusses possible areas of development, such as system, rather than component level, design standards for crash safety, the incorporation of numerical analysis as an economical tool for improved performance and, ultimately, the incorporation of performance based standards as used by the automotive industry.

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