

6th International Conference of Engineering Against Failure



Session description

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Title of the session: Safety Aspects in Aircraft Design

Objectives: Very often based on lessons learned from aircraft accidents, design methods and processes for compliance demonstration with applicable standards have been established that are able to increase the level of safety for the occupants. The topic of the session covers progress with respect to the "classic" structural design aspects for crashworthiness, such as structural integrity and energy absorption characteristics of the airframe, efficient restraint systems, minimized environmental hazards from loose or sharp objects, and reduced post-crash hazards from fire, smoke and fumes. Beyond these traditional crashworthiness considerations, and in view of new trends in aircraft design, the session also includes novel features of innovative propulsion systems such as electrical, mechanical, chemical and functional safety of electric power trains or of fuel cells and the related storage and on-board handling of hydrogen. Finally, the session is also open to operational aspects, for instance recovery systems or human factors.