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Operational Issues

“Method to qualify carry-on child restraint systems intended for use in aircraft and practical application”

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Part II: Renate Hueckel, “Child Restraint Systems and Lufhansa“

In 2001 TUV Rheinland completed their research on the situation of passive safety for children on board aircraft, which had been conducted by order of the Bundesministerium für Verkehr, Bau- und Wohnungswesen (German Ministry of Transport, Building and Housing). Results proved that children up to the age of 6 or 7 years are not or at best not sufficiently protected in the event of accidents that can otherwise be survived by adult passengers.

Consequently, the German aviation authorities addressed German airlines regarding the introduction of appropriate child restraint systems. Within Lufthansa a working group was founded in order to find a solution that could be implemented on all airlines belonging to the Lufthansa Group.

The working group soon discovered that finding a solution would not be as easy as expected. Passengers seats with integrated restraint systems were not available and child seats for automobiles were not (yet) suitable for use on aircraft or at worst could not be attached to the passenger seat. In addition, it was apparent that one system alone would not be sufficient in covering all relevant age groups. The biggest challenge, however, was logistics: how many systems would an airline need to provide for how many children of which age? None of our passenger data were a reliable source of information. Further examination of the subject matter led to more questions: which passenger seats resp. which seat arrangements on board were suitable for child restraints? Should an airline provide systems or instead allow passengers to bring their own restraints on board? Who is responsible for affixing the restraint to the passenger seat? Which consequences needed to be considered regarding liability?

In joint meetings with the Luftfahrtbundesamt (German Federal Aviation Association) and TUV Rheinland a possible solution was eventually developed that has by now reached the stage of implementation: the qualification procedure. This procedure both satisfies parents' need for more safety for their children and facilitates the operational possibilities of airlines. According to this procedure a qualified institution measures the individual aircraft layouts and passenger seats of an airline, in order to have a basis for selection of appropriate child restraint systems. The airline then chooses the restraint systems it wishes to qualify and applies for qualification with an institution authorized by the LBA. After completion of qualification the airline is officially notified of the qualified seating positions per aircraft layout.

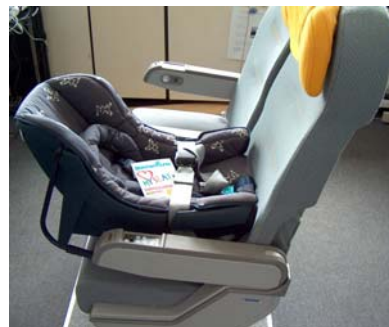
Participation in this procedure is on a voluntary basis, which applies not only to the airline itself but also to passengers. A participating airline may also provide child restraints in addition to allowing parents to bring their own on board. Lufthansa has decided not to provide child restraints, due to the fact that this would cause extreme logistic difficulties. Lufthansa has applied for qualification with TUV Rheinland and has chosen the following four child restraint systems:

weight class < 10 kg



Maxi Cosi Mico

weight class < 13 kg



Storchenmühle Maximum

weight class 9 -18 kg



Römer King Quickfix

weight class 9 – 25 kg



Luftikid

After completion of the qualification process and after implementation of necessary in-house modifications (integration into electronic reservation and check-in systems) Lufthansa will publicly announce the official date of introduction (target date: summer of 2005).

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