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High Consequence Safety Research and Policy: The US Airline Application

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High Consequence Safety Research and Policy: The US Airline Application

Abstract

The implementation of safety programs in Flight **Operations has been successful since the Federal Aviation** Administration formally introduced Safety Management Systems (SMS) procedures in 2000. This research explores the changes and improvements that are made in maintenance programs where an SMS is formally implemented.

In the United States it is legal for children under the age of twenty-four months to fly in commercial aircraft on the lap of a parent or guardian, while being unsecured or unrestrained. Throughout the history of aviation safety there have been no improvements, regulations, or laws put in place to ensure the safety of our Nation's youngest fliers.

The Policy Research Construct (PRC) will be used as a proposal for the development of advocacy for regulatory change. Through Policy Research, recommendations can be made to improve safety and create formal regulatory changes to make SMS mandatory in all aviation maintenance programs operating within the United States.

Lap Children

The FAA currently recommends that children be secured in a child restraint system (CRS) for the duration of the flight, to ensure the safety of young children. A CRS is defined as a hard-backed child safety seat that is government approved for both motor vehicles and aircraft. There are two FAA approved CRS devices that parents can use: government approved infant car seats and the CARES Harness.



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Safety Management Systems

SMS are a standardized approach for organizations to oversee the safety program utilized by an operation.

Currently only Federal Aviation Administration Part 121 Regularly Scheduled Air Carriers (Airlines) are required to maintain an SMS in their organization. The implementation of SMS is voluntary for non-121 Operators including: FAA **Part 145 Aviation Maintenance Repair Stations**



Policy Research Construct

The Policy Research Construct (PRC) is implemented by conducting research and analysis on an existing social problem, in order to provide policymakers with actionoriented recommendations for fixing the problem.





SMS Research Outcomes

The intended policy outcome for Safety Management Systems is the requiring of FAA Part 145 Maintenance Repair Stations by the Federal Aviation Administration. The goal is to improve and maintain safety culture in aviation maintenance organizations, and to preserve the safety of aircraft and the flying public.

Intended Lap Child Outcome

The intended policy outcome would include regulatory change that makes it illegal for children under the age of twenty-four months to fly without an approved child restraint system in their own seat. It is time to make air travel safe for our nation's youngest travelers.



References

Federal Aviation Administration (2017). Safety Management Systems. Retrieved from

https://www.faa.gov/about/initiatives/sms/explained/compone nts/

Lu, C., Kirschner, J., Bowen, B. D., & Bowen, E. E. (2012). Advancing a qualitative-based research construct: Methods and applications. Ethnographic and Qualitative Research Conference. Las Vegas, NV.

McDonald, N., Corrigan, S., Daly, C., & Cromie, S. (2000). Safety management systems and safety culture in aircraft *maintenance organisations* doi://doiorg.ezproxy.libproxy.db.erau.edu/10.1016/S0925-7535(00)00011-4

Spooner, C.; Kobayashi, T.; Greenman, C.; Bowen, B.; Blocker, K. (March 2019). Aviation Safety, Quality, and Economic Impact: A Policy Research System. Clute International Academic Conference. Denver, CO.