

Introduction of ramp-LOSA at KLM Ground Services

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Abstract

Airline ground operations are subject to the conflicting demands of short turn-around times and safety requirements. They involve multiple parties, but are less regulated than airborne processes. Not surprisingly, more than a quarter of all aircraft incidents occur on the ground. These incidents lead to aircraft damage and associated costs, risk of injuries, and can potentially impact in-flight safety. KLM Ground Services has targeted platform safety performance as an area for improvement. However, existing safety awareness programs have had limited effect. A direct link between safety culture surveys and safety performance has not been established, and therefore these are insufficient to give adequate feedback on interventions. Newly developed by the Texas University are the Line Operations Safety Assessments (LOSA), first targeted at cockpit operations. Variants are available since October 2010 for the platform and maintenance environments. The research group for Aviation Engineering at the Amsterdam University of Applied Sciences has used the original platform LOSA material and tailored these to the specific circumstances at KLM. Results to date show that with these modifications, platform LOSA is a useful tool to quantify safety performance and to generate trend data. The effect of safety interventions can now be monitored.

Background

Ramp Line Operations Safety Assessments (LOSA) are part of an audit system developed for airport ground operations (i.e. activities on the so-called platform or ramp) based on the cockpit LOSA system (ICAO, 2002; FAA, 2006). Cockpit LOSA has been effective in identifying areas to target to improve safety, triggering a 70% reduction of checklist errors and a 60% reduction in unstable approaches (Gunther, 2006). Both cockpit and ramp LOSA build on the threat and error management model (Helmreich et al. 1999) and adopt standard LOSA guidelines: peer to peer observations, anonymity, confidential and non-punitive data collection, voluntary participation, trusted and calibrated observers, union cooperation, systematic observations, secure data collection repository, data verification roundtables, targets for enhancement and feedback to workers. Ramp LOSA tools are available on the FAA website (FAA, 2010) in the form of a threat and error management model, threat and error codes, observation forms, software and training material.

In D. de Waard, N. Merat, A.H. Jamson, Y. Barnard, and O.M.J. Carsten (Eds.) (2012). *Human Factors of Systems and Technology* (pp. 139 - 146). Maastricht, the Netherlands: Shaker Publishing.