"Views of Maintenance Fatigue Based Mostly on FAA Empirical Studies"

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Abstract
Since 1999 the FAA has conducted a number of studies establishing that fatigue is a likely performance issue in maintenance. This presentation summarizes three studies and also reports on a number of open-ended comments collected from various industry personnel over the past year. The first study, completed in 2001, collected over 50,000 hours of data using actiwatches worn by maintenance personnel in airline and independent aircraft maintenance facilities throughout the US. Two surveys, from 2006 and 2007, assessed human factors and fatigue challenges as viewed by the international aircraft maintenance industry and by FAA Airworthiness Inspectors. Based on the collected fatigue data and the opinion of many industry personnel this presentation offers a clear view of perceived and real fatigue challenges in maintenance.

Main Points

- 50,000 hours of Actiwatch data, collected in 1999-2000 showed that the maintenance workforce do not get sufficient rest
- 82% of industry respondents to a 2006 international survey of aviation maintenance organizations said that fatigue is a safety issue
- 83% of FAA inspectors responding to a 2007 human factors survey said that there should be a regulation related to duty time for maintenance personnel
- There are many industry narratives describing events and near events where maintainer fatigue was an apparent contributing factor.

A copy of Dr. William B. Johnson's biographical information and presentation slides are provided in Appendix B.