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Future challenges of accident investigation — Some insights from the 33rd ESReDA Seminar

Are safety investigations pro-active?

John Stoop[a, b], , Sidney Dekker[b]
[a] Delft University of Technology, Faculty Aerospace Engineering, Delft, The Netherlands
[b] Lund University, School of Aviation, Ljungbyhed, Sweden

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Abstract

This paper elaborates on the debate whether safety investigations are obsolete and should be replaced by more modern safety assessment approaches. Despite their past performance, in particular in aviation, accident investigations are criticized for their reactive nature and the lack of learning potential they provide. Although safety management systems are considered a modern method with a more prospective potential, they too are hard to judge by their quantitative performance. Instead of measuring both concepts along the lines of their output, this contribution explores the origin, context and notions behind both approaches. Both approaches prove to be adaptive to new developments and have the ability to shift their focus towards learning and cognition. In assessing their potential, accident investigations prove to cover a specific domain of application in the risk domain of low probability and major consequences, fulfilling a mission as public safety assessor. In order to make optimal use of their analytic and diagnostic potential, investigations should mobilize more complex and sophisticated scientific theories and notions, in particular of a non-linear nature. Consequently, they are neither reactive, nor proactive, but provide a specific approach to safety issues.

Highlights

► Differences between accident investigation and safety management. ► Their role as niche tools in safety enhancement. ► Their relation to non-linear decision making.

Keywords

Accident investigation; Human factor; Methodology; Safety management system

There are no figures or tables for this document.

Corresponding author at: Delft University of Technology, The Netherlands. Tel.: +31 183637484; fax: +31 183630216.