

## **An Analysis of the Impact of Technical Communication on Aviation Risk Mitigation in the Context of Aircraft Maintenance Operations in Sri Lanka**

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Aviation safety plays a vital role in the airline industry including aircraft maintenance operations. The equilibrium between safety and productivity is inversely proportionate as additional efforts on safety have an inverse impact on operational efficiency. Therefore, a major attribute that decides the operational effectiveness of an aircraft maintenance establishment is decided on how effectively it can handle the equilibrium between safety and productivity. Accordingly, this paper empirically evaluates the impact of technical communication on aviation safety through the theoretical framework of aviation safety management in the context of commercial aircraft maintenance operations in Sri Lanka. A conceptual framework is formulated with independent variables addressing written and verbal communication, information understanding, and employee engagement and safety risk mitigation being the dependent variable. The statistically tested hypothesis reveals positive strong support for all three independent variables with the dependent variable. So, in conclusion, it is understood that high emphasis needs to be paid to improving written and verbal communication, active employee engagement towards communication feedback systems and relatively lesser significance to be paid to information understanding processes as such systems are already well established within the aviation industry.

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