



AIRWORTHINESS FORUM

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City University London

Reliability Availability Maintainability & Safety (RAMS)

How can a simple reliability issue become a flight safety risk?

A critical review of AMS Accident

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Reliability in Airline Operations



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| <p>Generator</p> <ul style="list-style-type: none"> • Design (Inherent) • Production standards • Installation | <p>Trailing Edge Flaps</p> <ul style="list-style-type: none"> • Design (Redundancy) • Components • Operation (Usage) | <ul style="list-style-type: none"> • Component + System Reliability • Preventive + Predictive Maintenance |
|---|--|---|



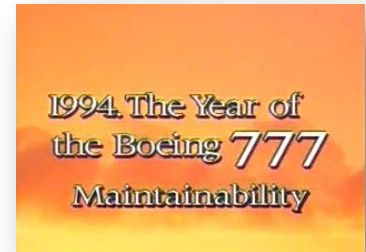
How is dispatch reliability calculated?

$$\text{Dispatch Reliability} = \frac{\text{Landings - Delays}}{\text{Landings} + \text{Cancellations}} \times 100 \text{ (in percent)}$$

How is operational availability calculated?

$$\text{Operational Availability} = \frac{\text{Total Time} - \text{Total Downtime}}{\text{Total Time}} \times 100 \text{ (in percent)}$$

Source (Calculation Formula): www.easa.europa.eu



Risk Management

The Weakest Link



Hazard Identification Risk Assessment Risk Control / Mitigation



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<http://prezi.com/lmmfvrufewxy/ifa-airworthiness-forum-12-sep-2012-rams-tk1951/>