

AVIATION SAFETY - INVESTIGATION

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WHAT IS SAFETY ?

Safety is the control or management of recognised hazards to achieve an acceptable level of risks

A hazard is a condition that might cause (is a prerequisite to) an accident or incident

► What is an Accident?



MAY BE DEFINED AS;

- ▶ An unforeseen/unfortunate/unexpected and unplanned event or circumstance
- ▶ undesirable outcome

WHY CONDUCT INVESTIGATION?

- ▶ learning experience, (for accident prevention)
- ▶ Legal and regulatory requirements
- ▶ Moral obligations
- ▶ allocation of responsibility (blame, financial liability, and legal liability)

INVESTIGATION OBJECTIVE

- ▶ The sole objective of the investigation of an accident or incident shall be the prevention of accidents and incidents. It is not the purpose of this activity to apportion blame or liability.

REPORTING OF ACCIDENTS AND INCIDENTS

- ▶ **1. Mandatory reporting**
- ▶ the owner, operator, pilot-in-command, crew members, operator of an airport, air traffic controller, or any other person having knowledge of an accident or incident shall report to the Authority and provide as much information as soon as possible and by the quickest means available.
- ▶ [Ministry of Transport and Infrastructure-reporting of accidents.htm](#)

- ▶ **2. Voluntary reporting**
- ▶ [Ministry of Transport and Infrastructure-Voluntary Reporting.htm](#)

CREDIBILITY OF ACCIDENT INVESTIGATION

- ▶ The investigation authority AAID, is functionally independent from other State aviation authorities (KCAA & KAA) plus other entities that could interfere with the conduct or objectivity of an investigation
- ▶ Investigators shall avoid actual and potential conflicts of interest

- ▶ **Conflicts of Interest;** Investigators shall not directly or indirectly have an interest in or be an owner, shareholder, director, officer, partner, or otherwise
- ▶ (a) be engaged in an aviation undertaking or business; or
- ▶ (b) have an interest in the manufacture or distribution of aircraft or aircraft equipment or components

INVESTIGATION PROCESS

- ▶ Systematic processes conducted for the purpose of accident prevention which includes the gathering and analysis of information, the drawing of conclusions, including the determination of causes and/or contributing factors, and when appropriate, the making of safety recommendations.

INVESTIGATION PROCESS

- ▶ Gathering of factual information
- ▶ Analysis of information
- ▶ Drawing of conclusions
- ▶ Determination of Causes/Contributing Factors
- ▶ Safety Recommendations

IMPORTANCE OF INVESTIGATION

- ▶ Provides investigation signposts
- ▶ Clarifies the sequence of events
- ▶ Converts opinion into facts
- ▶ Tests hypotheses
- ▶ Facilitates analysis
- ▶ Justifies/underpins recommendations

EVIDENCE

- ▶ Evidence is any piece of information that aids the investigator and the report reader in understanding the causes of an occurrence under investigation and/or supports arguments presented in the report that identifies issues to be addressed to minimise the risk of recurrence.
- ▶ The purpose of an investigation is to establish **WHAT** happened, to determine **HOW** it happened, define **WHY** it happened, and make safety recommendations based only on the analysis of **EVIDENCE**

CATEGORIES OF EVIDENCE

- ▶ **people**; crew, survivors, emergency responders, maintenance crew, peers, colleagues, management, contractors, eye witnesses
- ▶ **physical**; the site, Wreckage, recorders, memories, witness photos, ATC tapes, Radar tapes, CCTV, mobile etc.
- ▶ **documentary**; COA, COR, COM, tech logs, load and balance sheets, pax/freight manifest, crew licences, crew training records, crew log books, navigation sheets operation manual, maps, charts, and notes

STAKEHOLDERS IN AN INVESTIGATION

- ▶ Regulator/government,
- ▶ Operations/infrastructure providers,
- ▶ Maintainers, ICAO
- ▶ Training providers,
- ▶ Other operators, accident investigation bureaus, AIBs, and the Insurers.
- ▶ The involved parties include : families/relatives, news media, emergency responders, travellers, third parties.

END OF THE PRESENTATION

THANK YOU!

- ▶ Any questions/remarks?
