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# AFI PLAN RASG-AFI AIG Project

## AIG WORKSHOP – Cir 298

Cotonou, Benin

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## Guidance material

# Training Guidelines for Aircraft Accident Investigators (Cir 298)

This guidance for the training of investigators is being revised by the Accident Investigation Panel



## Cir 298 -- Introduction

- Aircraft accident investigation is a wide scope activity.
- Investigator-in-charge needs to manage the activity for efficiency.
- Investigators need regular recurrent training.
- AIG/99 recommended guidance for investigator training.



## Terminology

Prominent for the Circular:

- **Accident investigator** - A person engaged in the investigation of aircraft accidents, incidents and other aviation safety hazards.
- **Investigator-in-charge** - A person charged, on the basis of his or her qualifications, with the responsibility for the organization, conduct and control of an investigation.



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## Background experience for investigators

- Different structures in States for accident investigations and related training for investigators.
- Investigators need considerable experience in aviation as foundation on which to build investigation skills.
- Investigation of small aircraft accidents requires both operational and technical skills.



## Background experience for investigators

- Knowledge, skills and experience needed:
  - understanding of the depth of investigation;
  - knowledge of aircraft accident investigation techniques;
  - understanding of aircraft operations and the relevant technical areas of aviation;
  - ability to obtain and manage the relevant technical assistance and resources required to support the investigation;
  - ability to collect, document and preserve evidence;
  - ability to identify and analyse pertinent evidence; and
  - ability to write a Final Report.



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## Background experience for investigators

- Personal attributes:
  - integrity and impartiality;
  - ability to analyze facts in logical manner;
  - perseverance in pursuing inquiries;
  - tact in dealing with people.



## Training guidelines - General

- Levels of knowledge, experience for specific task -- training commensurate with their responsibilities.
- Several phases of training – initial training including basic accident investigation course supplemented by specialty courses, on-the-job training.
- Formal courses to complement on-the-job training – presented by experienced instructors in certain areas of investigation.
- ICAO does not endorse investigator training courses presented by universities, manufacturers, training institutes, AIAs, etc.





## Training guidelines – Phase 1 initial training

- Objective to familiarize new investigators:
  - administrative arrangements;
  - Initial response procedures; and
  - investigation procedures.



## Training guidelines – Phase 2 On-the-job training

- After initial training.
- Practice procedures and tasks covered in initial training.
- Familiarize with:
  - investigative tasks at accident site;
  - collection of factual information; and
  - analysis of information and development of Final Report.



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## **Training guidelines – Phase 3**

### **Basic accident investigation courses**

- Basic investigation course as soon as practicable.
- Content as included in Chapter 4.



## **Training guidelines – Phase 4**

### **Advanced accident investigation courses and additional training**

- Advanced investigation courses as appropriate.
- Additional training – aircraft type courses to cover new technology both for engineering as well as pilots.
- Seminars such as ISASI and others.



## Basic Accident investigation course guidelines

- Breakdown of topics that should be covered:
  - General introduction
  - Accident notification procedures
  - Investigation management
  - Investigator's equipment
  - Accident site safety
  - Protection of evidence
  - Initial action at the accident site
  - Information gathering techniques
  - Communication and recording media



## Accident investigation course guidelines

- Witness interviews
- Recorders
- Examination of relevant maintenance documents
- Fires and explosions
- Survival aspects
- Structures
- Systems
- Aerodynamics
- Power plants
- Rotary wing aircraft



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## Accident investigation course guidelines

- Organizational information
- Human performance
- Determination of the flight crew's suitability for the flight
- Methods of analyzing the factual information gathered
- Report writing
- The news media and public relations.



## Advanced course or specialty courses

- Recommended topics for advanced courses:
  - Preparing for group leader or investigator-in-charge during major investigation
  - Organization of a major investigation topics – family assistance, media relations, cataloging large wreckage, managing security and safety at site, preparing briefings for members of governmental, military cooperation, liaison with law enforcement authorities.
- Topics for specialty courses to augment skills:
  - Helicopter investigations, gas turbine engines, survival aspects, fires and explosion, human factors, etc.
  - Systems courses for example – GPS, EFIS, complex systems in aircraft, etc.





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# Questions ?

